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Heroes, not of their own accord
(An examination of the publicity concerning
the United States astronauts from 1959 to 1972)

by

Perry Michael Whye

A Thesis Submitted to the
Graduate Faculty in Partial Fulfillment of
The Requirements for the Degree of
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Signatures have been redacted for privacy

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INTRODUCTION

When the United States of America decided to send men into the black sky of space, the men selected were those who were qualified to go. But when those men accepted their positions, they also had to accept many things that went along with the occupation of being an astronaut, no matter how much they did not care for them--fame, adulation, hero-worship, people naming their children after them and their spacecraft, parades, speeches before governments, meeting heads of state--and trying to maintain their own lives as they had known them before becoming astronauts.

The men had been chosen as astronauts because of their proven capabilities in relation to flight, not because of the public image they might portray. Yet these men found themselves being used by others in order to bolster their own images. The "others" were many and included the National Aeronautics and Space Administration (NASA), magazines, the United States of America, their home towns, their alma maters, plus many more organizations and groups. And in some cases, the astronauts used their occupations in order to boost their chances for obtaining jobs after leaving the astronaut corps.

The portraits of the astronauts as being some sort of supermen or demi-gods were not fostered by the men themselves but by others. The media created the images of men that were larger than their real selves. The Public Affairs Office (PAO) of NASA was, in essence, to act as a type of resource library for the media, having material available for their use. The PAO was never supposed to actively push the astronauts into the spotlight.

These areas have been discussed here and there in the media but no single cohesive record has ever been made about the publicity of the astronauts. The purpose of this thesis is to look at how the PAO and several American magazines displayed the astronauts to the American public. No attempt will be made to include how newspapers, radio and television publicized the astronauts. Discussing the media as a whole would be too broad a topic although they will be discussed to some

degree within this thesis.

The National Aeronautics and Space Act of 1958 spelled out how NASA was to inform the public. In part, it read:

The aeronautical and space activities of the United States shall be conducted so as to contribute...to the expansion of human knowledge of phenomena in the atmosphere and space. The Administration shall provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof. (54: back cover)

Obviously a public relations office would be required in order to fulfill this charter and NASA set about creating one. The public relations office would have the task of showing NASA to itself through internal communications and newsletters, and to the country and the world through news releases and accommodating the media's desires. NASA needed public opinion in order to survive because its funding was determined by Congress. In 1970, NASA Administrator Dr. Thomas Paine explained that "an agency such as ours is completely dependent on public opinion and Congressional support." Thus, in order to remain intact, NASA had to make itself look good to the people. (159: April 27, 1970)

On the other hand, the magazines had no directive from the government to make the United States' manned space flights appear good. They reported what they saw. Yet some magazines seemed to be occasionally caught up in some sort of excitement and they passed it onto the nation and the world for everyone to see.

The thought of sending machines and rockets into space was exciting in itself but the thought of putting men amongst the stars was practically unbelievable. It was something that humanity had dreamed of throughout its history. The technology required to put forth such an effort was also almost beyond belief, but not everyone could readily understand the language of the technicians who made the flights possible. Their reports were cold ink upon paper accompanied by thousands of seemingly meaningless equations, graphs and charts. But there was one thing that everyone could understand and identify with; that was the man who was going to lie in the top of a rocket, the man who

was going to soar weightlessly above the heads of all others he had left behind, the man who was going to gaze upon the first footprint ever left by a human upon another celestial body. The story was not the millions of miles of wires in the rockets, not the capacities of the fuel tanks that held liquid oxygen and hydrogen, not the computers that spoke numerical languages all their own: it was the man who everyone thought was important and idolized, and the media brought its attention to bear upon this type of man who had been labeled "Astronaut." It was he who could sell NASA to the United States and the United States to the world.

THE BEGINNING

Until the United States sent men to orbit the moon, it seemed as though the Americans were always behind the Russians in everything related to space. The Russians had put up the first satellite. *They* had orbited the first animal around the earth. *They* had fired the booster that put the first man around the earth. *They* had the first multi-man spacecraft in space. *They* had even hit the moon first with a satellite. It did not matter that it had crashed; it had hit the moon which was something more than what *we* had done. *They* had done just about everything first until *we* sent Apollo 8 around the moon that Christmas Eve in 1968. It was then that the crown of the king of the hill changed hands.

From the orbital track circling the moon, the astronauts of Apollo 8 sent televised pictures to earth, showing their accomplishment to everyone whom they had left a quarter million miles behind. To the people on earth, those men were the new American heroes.

When the astronauts came back to earth, they held a news conference telling the members of the mass media from all over the world about their adventure. They wrote individual articles for an issue of Life magazine. They were ushered on tours throughout the United States and the world. They were famous: they were the first men to the moon. Heads of state honored their visits. Special sessions of governments listened to their words.

The men had been chosen to do a job and they did it. For that, thousands of people lined parade routes to see them pass by in the open top automobiles. There had not been an accident during the flight that required any great heroism on the part of any one of them. Yet there had been suspense if their equipment was going to work properly when called upon to perform. The men had done the job required of them-- circle the moon and come home to prove that the manned machines worked correctly.

The crew of Apollo 8 did not go to the moon through their own efforts in the manner in which Charles Lindbergh had crossed the Atlantic

Ocean by himself 41 years earlier. Not only had they sat at the top of a towering Saturn V rocket when they were launched but also on top of one of the greatest supporting forces ever assembled for a peacetime effort. Because they were the most visible part of the organization, i.e., the people actually making the trip, they were the center of attention. Thus, for doing what had been asked of them by the rest of their organization, they were made heroes, something they had not asked for, but which was inevitable in the nature of their task. They could hush governmental bodies listening to them but they could not tell anyone that they were not heroes. The image of them as heroes had been instilled into practically everyone's minds but that had not been done by the astronauts. It was something that the astronauts could not shake no matter how much they might have wished to do so.

They had been made into heroes long before they had been selected as astronauts. The relationship of the media and the space efforts had begun years before Alan Shepard fired off the pad for his 15-minute sub-orbital flight. To study this relationship, it is necessary to look at the history of the space program of the United States before any astronauts were involved in order to see the evolution of it and the media's attempts to report what was occurring.

The United States started experimenting with large rocketry immediately following World War II when many of the German scientists who had worked on Hitler's V-2 rocket program were brought to America. No emphasis was put upon the knowledge of these scientists by the Truman Administration as it was felt by the country's leaders at that time that, until 1965, America's deterrent force would consist of manned bombers and air-breathing missiles evolved from the German V-1. From the spring of 1946 until late 1951, more than three score V-2s were put together from components captured by the U.S. Army and launched from the White Sands Proving Grounds in New Mexico. They were heavily instrumented for research in the upper atmosphere and were not intended to insert any

satellites into orbital flight nor for intercontinental delivery of nuclear payloads (54; p19).

In 1946, the Air Material Command of the Army Air Forces awarded a study contract for a long-range missile to Consolidated Vultee Aircraft Corporation (Convair) and, by the summer of that year, Convair had the designs for what was called "an Americanized V-2" although it was labelled "HIROC." This plan was scuttled in 1947 when the Truman Administration and the 80th Congress, consisting primarily of economy-minded Republicans, gave the newly-created Air Force the option of having funds for either its fighter-interceptors and long-range bombers or for the long-range missiles. The Air Force chose to eliminate the missile program although the test vehicle was nearly complete. The Convair engineers then used what was left of the original contract and conducted several static firings and three partially successful launchings. By early December, 1948, the program vanished with the last whiff of smoke when the final test was finished (54: p22).

Although the Air Force had become a separate service, the Army continued on its own missile program, viewing rockets as an extension of long-range artillery. In 1950, the Army moved its rocket group to the Redstone Arsenal near the town of Huntsville, Alabama. It was there that this group, headed by Dr. Werner von Braun, the most prominent of the Germans, developed a battlefield missile which was a derivative of the V-2. It was called the "Hermes C 1." Some changes were made and eventually the Hermes was renamed for its birthplace, "Redstone." It was made to be highly mobile for field deployment, stood 70 feet tall and had a diameter of six feet. Although it was designed by the Army, contracts were let for its manufacture by Chrysler Corporation (54: p21).

While the Army was busy in Huntsville, the Air Force resumed efforts on its intercontinental missile program once more because of a change of thinking within the Truman Administration. One element causing the change was the exploding of a nuclear device by the Soviet Union in 1949; the other was the Korean War. Because of these events, the appropriations for

U.S. weapon research soared and the missiles were on again, although still conservatively for the Air Force. Convair was awarded the contracts in January, 1951 and the project became known as "Atlas" (54: p22).

The Eisenhower Administration assumed control in January, 1953, but the attitude towards the efforts of the missilemen remained virtually the same as it had been during the Truman years. The missile work continued slowly. In August, 1953, the first Redstone that had been manufactured at Huntsville took off on the series' maiden flight. It flew only 8000 yards from the military's test range at Cape Canaveral, Florida (54: p21).

Meanwhile, on the other side of the world, the Russians were working hard on their missile efforts. They were the first of the allies of World War II to use rockets on a large scale, primarily as a type of artillery to soften up areas intended for penetration by Russian troops. But soon after the war, the Russians turned their minds to developing longer-range missiles because of the situation in which they found themselves. They were ringed by countries friendly to the United States, and the U.S. had its B-29 bombers--planes with a proven capability for carrying nuclear payloads--stationed at bases in those countries. With the means to hit only those bases, the Russians desired something that could carry the war home to the American continent, a long-range weapon. With this in mind, the German rocket engineers that the Russians had captured were put to work, as Stalin said, to make "an effective strait jacket for that noisy shopkeeper, Harry Truman" (54: pp18-20; 32: pp18-20).

It was probably in 1954 that the Russians were beginning to work on a multi-stage missile project. Two years later, Nikita Krushchev was able to warn the world that Russian missiles with nuclear warheads would "soon" be able to hit any patch of ground on earth (54: pp18-20).

In the United States, the Air Force did not care for the Army's attitude of design and development completely within the government's facilities and the Air Force continued to let Convair and its subcontractors handle the majority of its rocket engineering. Even a private missile research firm, Ramo-Wooldridge Corporation, was hired to

oversee the systems engineering of the ICBM program for the Air Force. However, all the missile boosters in the U.S. were going for military purposes and, if the scientists, who were running out of relatively inexpensive rockets for their experiments, wanted to shoot heavier payloads into space, they would have to wait until the military also had a need to put up a comparable load. Between 1954 and 1955, the Army and the Navy proposed a joint effort to put a satellite into space but the Department of Defense shot down the plan, telling the Navy that it alone was to work with the civilian scientists. The Army was to do nothing. In August, 1955, the United States announced that it would launch a series of "small, unmanned earth-circling satellites" during the International Geophysical Year, which began on July 1, 1957 and would last for 18 months. The information gathered from the satellites would then be turned over to the scientists of the IGY for examination. The statement was a two-edged sword. First, it gave the U.S. scientists the go-ahead to put a satellite in space but it also kept the scientists bound to using the non-military missiles. The reason was simple. If the scientists were to publicly reveal everything about their experiments, in accordance with the 1955 statement, and if they were using military boosters, they would have to compromise U.S. military secrets. Therefore, the Navy Vanguard Project, designed as a scientific civilian effort, was the only program underway to put a satellite in space (164: p8; 54: pp20-29).

In 1956, Secretary of Defense Charles E. Wilson announced his policy defining the "roles and missions" of the services in regards to how they were to split up the missile assignments. The Air Force would have jurisdiction over any land-based missiles that had a range of more than 200 miles. This promptly put the Army's Redstone missile out of the Army's control. The Navy was to continue working only on intermediate range shipboard missiles, its Polaris submarine missile program and the Vanguard Project for the civilians (54: p25).

Actually the Army was able to hold onto its Redstones but only

through the use of a ruse. The Army group changed the name of its projects to "Jupiter" and said that it was helping the Air Force with its project of the same name. Apparently the name change worked because von Braun was allowed to continue his Army work. On September 20, 1956, von Braun and his associates launched a "Jupiter-C" missile (really a modified Redstone) but instead of filling the upper stage with propellant, which would no doubt have the capability of putting a satellite in orbit, they had to fill it with sand. The Army general in charge of the group, General John Medaris, had been held personally responsible by the Pentagon to make sure that "no accidents" happened, such as a satellite going into orbit and beating Navy's Vanguard to the punch. Despite the success of the Jupiter-C launching, officials in Washington were not pleased and the orders came down through the Secretary of the Army: destroy the upper stages of the remaining Jupiter-Cs. However, the minds who devised the first ruse of changing names now devised another trick. They would agree to destroy the upper stages but they intended to let time do the job for them. Eight of the Redstones were then placed in a warehouse at the Redstone arsenal to await a chance for future use. Their time would come in a little more than a year (8: p17; 178: pp45-48).

It was during 1956 at the Geophysical Year Conference in Barcelona that the Russians made their formal announcement that they, too, were going to launch a space vehicle during the IGY. An informal announcement had taken place the previous year when Russian aeronautical and astronautical expert Leonid Sedov told the world, a few days after the U.S. declared its space intentions, that the Russians were working in the same direction but with larger and heavier payloads than what the Americans had said would be their goals. At that time, most of the Western observers had cast aside Sedov's statements as being Russian braggadocio. In June 1957, the Soviet press announced the frequency on which the first Russian satellite would transmit its signals. By late summer, many American Sovietologists were making outright predictions that the Russians were about to launch a satellite and they were guessing the

date would be September 17, 1957 to honor the centennial of the birth of the grandfather of Russian rocketry, Konstantin Tsiolkovsky.(54: pp28-29).

On August 26, 1957, Tass, the official voice of the Soviet Union, declared that the Russians had successfully launched a "super long range distance intercontinental multi-stage ballistic rocket." An American general, upset at this news, supposedly remarked, "We captured the wrong Germans" (54: p28).

A little more than a month later the Russians scored their first big space triumph over the rest of the world. Apparently using the same booster as they had in August, which was obviously a military rocket, they launched the first man-made satellite into orbit on October 4, 1957. With its radio transmitting a beep-beep-beep to tell everyone that the Soviets were first in space, Sputnik I revolved around the earth once every ninety minutes.

To the American public, Sputnik I was a threat and a shock. Never before had the American homeland been subjected to such a possible demonstration that war could be brought there by a foreign power. Gone was the security of the oceans that flanked the American continent. No Nazi bombers had ever appeared in the skies of the United States. The only damage done to the continent during World War II was by a few shells fired from a Japanese submarine and by some balloon bombs, which had been released in the Japanese islands and carried to America by the jet stream. The humiliating beep-beep-beep of Russia's satellite was clearly telling the Americans that the Soviet Union possessed the ability to bring the war home to them if the Russians so desired.

In its October 14, 1957 issue, Newsweek told the American public that the Russians had achieved three objectives with its 184-pound satellite: 1). They had beaten the U.S. in "keen scientific competition" to put up a satellite; 2). They had impressed the world that had thought of the Russians as being technologically backward; and 3). They backed up their earlier claims that they would launch a satellite (122: October 14, 1957).

The public was critical of the Eisenhower Administration yet the public had reason to blame itself. In a poll taken by the University of Michigan's Survey Research Center for use by the National Association of Science Writers in April, 1957, participants were asked if they had ever heard of satellites or artificial moons. Only 20% of the respondents said that they had, 26% had a vague notion and 54% said they did not know anything about such terms (12: p50).

Former President Truman, forgetful of how his administration had treated the missile programs, signed a letter written by the Democratic National Committee charging the Eisenhower Administration with "complacency" and "failure" by letting the Russians fire their satellite into space first (122: October 21, 1957).

In a press conference on October 9, 1957, President Eisenhower made his first public remarks since the Russian space shot five days earlier. He seemed to have an ambivalent attitude towards the Russians success. To newsmen, he said that he congratulated the Russians for their achievement and then added that "our satellite program has never been conducted as a race with other nations. Rather, it has been carefully scheduled as a part of the scientific work of the International Geophysical Year" (164: p8).

At the same time, Eisenhower said that "the effect of Sputnik does not raise my apprehension, not one iota." But Eisenhower must have been affected somewhat because at a secret meeting of the National Security Council, held shortly after Sputnik I, he asked for a two percent increase in the \$38 billion budget of the Defense Department. He said the increase would be used for a build-up of the missile programs. (122: October 21, 1957).

But within the ranks of the Eisenhower Administration there was some disagreement on how the people there viewed Sputnik. The Undersecretary of State, Christian Herter, said he thought that the Russians had accomplished an "amazing feat." Other officials tried to play down the effects of Sputnik. Deputy Secretary of Defense Donald Quarles stated

that "the Russians have in fact done us a good turn, unintentionally, in establishing the concept of freedom of international space" by orbiting Sputnik over the airspace of all the world's countries which proved that they had approved the principle of Eisenhower's Open Skies Policy. Clarence Randall, a White House aide, called Sputnik "a silly bauble...in the sky." Secretary of Defense Wilson told reporters that Sputnik was a "neat scientific trick...nobody is going to drop anything down on you from a satellite while you're asleep, so don't worry about it" (12: p16).

But the public did not believe everything told to it by the men who attempted to play down the Sputnik launch. The news had been a page one item on newspapers across the U.S. The only newspaper that was an exception was the Milwaukee Sentinel where the World Series of Baseball, which was being held in Milwaukee, occupied the top spot. Letters in the October 21, 1957 issues of Newsweek and Time showed the concern of Americans. While a few people still referred to the shot as a publicity stunt by the Russians, most were frightened by the implications. A poll taken six months after the launch showed that 91% of the Americans had heard of Sputnik; of those, 33% believe that the U.S. was in some type of space race. Another poll showed that 61% of the Americans believed that the next object in space would have "Made in USA" stamped on it (178: p49; 111: October 4, 1957).

Even a British newspaper, the London Express, had faith in America, stating that eventually the Americans would catch up to and surpass the Russians' space efforts. Therefore, said the Express, no one should worry; in effect, the newspaper was saying: "The Yanks are coming, the Yanks are coming." The London Daily Mail printed a cartoon showing Krushchev standing atop a prostrate world and pointing proudly to his moon in the sky and the Mail printed a note that while, "It is agreed that Russia's victory is chiefly psychological and dangerous as a propaganda weapon.... ...there is no reason to fear that Krushchev will take bigger steps... (12, p46; 159: October 21, 1957).

Obviously, the Russian premier was thinking along the same lines.

Before the satellite had been launched, he had made threatening moves towards Syria. Those actions disturbed Eisenhower and, in an unprecedented move, Secretary of State John Foster Dulles invited the Soviet Foreign Minister, Andrei Gromyko, to his private residence to discuss the situation. Unfortunately, the date, set before Sputnik, was October 5, the day after the launch. At that meeting, Dulles told Gromyko that the U.S. would go to war if Turkey was attacked, but he noticed his words had little impact upon the Soviet Minister (12: p47).

The next day, Tass announced that the Russians had exploded a powerful hydrogen bomb at high altitude. This, coupled with Sputnik, apparently gave the Russians a reason to rattle their sabers. Members of NATO received threatening letters from Krushchev telling of nuclear destruction by ballistic missiles if they allowed the United States to continue to base its military forces on their soils. Even the U.S. was threatened in the same manner after Eisenhower told the nation that he was considering armed intervention in Lebanon's trouble with the United Arab Republic (backed by Russia) if the trouble persisted. Years before, Stalin had told his Politburo that someday "an intercontinental rocket could change the fate of war." In 1957, his words sounded as if they were coming true (12; pp47-51).

There was resentment in the Pentagon, too, because more had not been done earlier by the Americans. Lt. General James M. Gavin, a proponent of space exploration, said that there was "deep and widespread anger... in some quarters that our scientists had not done better....This degree of ignorance of what the Soviets were capable of doing, with no apparent comparable capability on our part, was totally unacceptable to the American people..." (12: p45).

At the Redstone Arsenal, on the night that Sputnik I found its way into orbit, von Braun was having supper at the Officers Club with then-Defense Secretary Designate Neil H. McElroy. A phone call took von Braun away from the table and when he returned, he told McElroy the news of the Russian shot. Von Braun pleaded to be given permission to

launch a satellite, using one of the eight missiles in the warehouse McElroy preferred to wait 90 days rather than to try a launching immediately. Finally, on November 8, 1957, von Braun received the official orders for his rocket group to proceed with their project, code-named "Orbiter" (8: p19).

Something that might have changed the minds of the administration, which had not wanted the military to put any satellites into orbit before the civilians did, was the launching of another Russian satellite. On November 3, Sputnik II took to the skies carrying a live dog, named Laika. The satellite was radioing back telemetry that Laika was alive and well. Now, the criticism poured down upon Eisenhower's Administration. He moved up a national address on space and science, by a week and was privately shaken by the news. Vice-President Richard Nixon wanted to beef up the U.S. Information Agency in order to counter the Russian propaganda concerning the space shots. Even critics of Sputnik I, who had claimed that the first shot was nothing more than a heavy radio transmitter, fell silent with the news that Laika was living in space (122: November 11, 1957, November 11, 1957).

The Russians, too, received some protest from animal lovers when it was learned that the Russians were not going to bring Laika back alive but let her slowly die in space since there was no way for a satellite to return safely at that time. The transmissions from Sputnik II fell quiet days after the launch, signalling that Laika had passed away. The Russian stories about the satellite did likewise (122: November 18, 1957; 159: November 18, 1957).

But the protest aimed at Eisenhower was far harsher, despite the fact that the President had not only given McElroy the go-ahead to let von Braun's team work on their project but also ordered an acceleration of the Vanguard Project. Senate Majority Leader Lyndon Baines Johnson (D-Texas) ordered special Congressional hearings to study what had gone wrong with U.S. space efforts. The space programs had been a favorite subject of the Texas senator since 1949 when he had served on a committee

studying them and he would continue to be instrumental in their direction throughout his political life. Into the hearing room came many prominent people to testify before Johnson's committee. Among those who spoke were Dr. Edward Teller, the father of the H-bomb; General James Doolittle, chairman of the Scientific Advisory Committee; General Curtis E. LeMay, commander of the Strategic Air Command; and von Braun. The picture painted by the witnesses before the senators was one of confusion. Those who testified pointed their fingers at everyone else and at other organizations; no one wanted to be blamed along with the Eisenhower Administration. But the hearings had only begun when the U.S. was hit with another setback. This was one of its own making (12: pp49-54; 178: p54).

On December 6, 1957, the Vanguard Project attempted to launch its satellite in full view of the world, in keeping with Eisenhower's public policy. At the end of the countdown, the combination Viking-Aerobee-Hi rocket rose about four feet off the pad and the first stage blew apart in a ball of fire. The nose cone, containing the satellite, fell 75 feet away from the pad, splitting the 3½-pound sphere like an egg. To a woman reporter who saw it later after the fires were out, it was like a wounded animal beeping pathetically. She suggested that someone kill it to put it out of its misery (98: December 16, 1957).

The explosion on the Vanguard pad caused the government to search for scapegoats. It was regarded by many to be a national disaster and who had reported it to the nation but the media? They had been tipped off about the launch by the Navy and reporters had swarmed into the launch vicinity at Cape Canaveral, much to the dismay of the members of the launch team. It seems that the idea of inviting the media had originated with Murray Snyder, the Assistant Secretary of Defense for Public Affairs, who said he was only responding to Congressional pressure for less secrecy about the Vanguard program since it concerned no military secrets. McElroy thought Snyder's idea was good and he passed it along with his approval. So did the White House. But all levels of

government denied having anything to do with the publicity that had been built up before the launch. The Navy Public Information Officer (PIO) at the Cape who had helped to play up the launching was fired from his position for inviting the media to watch the disastrous launch. Newspapers in other countries called the fizzle heard 'round the world by various labels: "Dudnik, Kaputnik, Flopnik, Stayputnik," and many more. While Russia sent the U.S. condolences, its representatives in the United Nations offered the U.S. representatives technical assistance if the Americans wanted it. It is presumed that the U.S. refused the offer (163: December 16, 1957; 122: December 16, 1957).

Because of the blame laid upon the media, reporters at Cape Canaveral began to suffer. Many of the sources that reporters had used before the Vanguard launch were now dried up. Local police, acting at the request of the base commander, Major General Donald Yates (who had worked with Eisenhower during World War II), kept photographers away from vantage points overlooking the base. During these early shots, Ralph Morse, a photographer for Life, had set up his camera with a long telephoto lens in a deserted house five miles north of a launch site and the police swooped down on him. Pointing out that he was on private property, Morse convinced the police to leave him alone. The next day, Morse returned to the site and so did the police. This time, Morse's argument failed to sway them since they now held the title to the land in their hands; it had been sold overnight and Morse was swept away (98: April 2, 1965; 122: February 15, 1958).

Faced with the tactics of General Yates, members of the media found their hands tied. There was little or no information coming out of the Cape that they could report. But then Yates gave them a break. He told them he would make a deal. He would give them advance information and schedules of launches only if they would not report about the interservice rivalries nor publish any advance news about the launches. The general did not want another public buildup such as what had happened during the Vanguard fiasco. The reporters checked with their editors on

Yates' conditions and those who agreed were given credentials to report at the Cape. Even the members of the media apparently did not want things botched up a second time because more criticism would be thrown at them. Life appeared to be editorializing when it said that the U.S. should take a cue from the Russians and not announce any missile launchings until after they had taken place. Despite the agreed upon restrictions, there was a minor slip-up which the media took upon themselves to correct before Yates cut them off completely. What had happened was that Darrell Garwood of the International News Service had sent a wire story to the effect that another Vanguard attempt would take place on either January 23 or 25, 1958. Immediately the United Press' Charles Taylor, acting under orders from his New York headquarters, filed another story, clarifying the INS article. Taylor wrote that another missile launching, "possibly a Vanguard," was scheduled for late January. Yates never took any action regarding the slip. The media had vindicated themselves (98: December, 16, 1957; 122: February 15, 1958).

In January, 1958, a Jupiter-C, one of the eight missiles that had been stored in the warehouse at Redstone, arrived at the Cape and was erected on its launching pad at night to prevent it from being seen by the prying eyes of newsmen. When daylight arrived, the missile and its gantry were shrouded with tarps to protect against the photographers who were stationed miles away on the beaches. It may seem that Yates was going back on his word but this author thinks otherwise. No doubt the reporters who had agreed to his terms knew about the missile but Yates still had to contend with those newsmen who had not accepted his conditions and might report occurrences at the Cape to the public. Because of this possibility, Yates ordered the secret moves surrounding the preparations. The blackout was almost complete. Only one reporter, Chris Butler of the Orlando Sentinel, reported anything about the missile being set up at the Cape (97: p60; 8: pp24-26).

Gordon Harris, a Public Information Officer at the Cape working for

the Army group, was allowed to prepare a special press release kit about the upcoming mission. Harris recalls in a letter:

Joe Jones...set out for [Dr. James] Van Allan to get the dope on his experiment which was the most important discovery of Explorer I [the name of the satellite to be launched by the Jupiter-C and was designed to detect radioactivity around the earth]. Together we assembled a kit of 100 double-spaced pages, describing the rocket (with security limits), the mission, experiments, etc. Jet Propulsion Laboratory of Cal Tech, an Army contractor, assembled the satellite and also prepared publicity material plus a 16mm color film. I reviewed the JPL input and the Pentagon went over our product plus JPL's. Defense censors removed the term "Army" from our copy wherever possible. When we finally got approval, we reproduced about 200 copies for hand out after a successful launch. They were hand carried to our quarters at the Cape.

...Air Force had set up a viewing site on the Cape for the first time for Vanguard--same area would be used by press watching the Army launch.

Army's information people in the Pentagon and I urged Medaris to put an information type in the blockhouse. He would talk over an open phone line to a guy at the press site, who would relay info to the press, and to a large Pentagon room where military and civilian personnel would assemble. Medaris had Dr. Kurt Debus, launch director, place a three-legged stool beside the phone and headset just outside the firing room. He put me on the stool with the admonition, "If we hear one peep, out you go!" So I reported what occurred during the last two hours before liftoff--giving names of key blockhouse players, etc., etc. The press did not hear my voice directly.... But no one put any restrictions on what I said (70b).

Harris was ordered to keep his voice calm and cool though. This was a precedent for the later, much-publicized "Voices" of Mercury Control, Gemini Control, Apollo Control and Mission Control (8, p26).

On January 31, 1958, 84 days after von Braun had been given permission to launch his missile, the modified Redstone bore through the atmosphere putting the 31-pound Explorer I into orbit. At that time, the U.S. did not have the tracking network that it had in the mid-sixties and after launch, there was no confirmation of orbit for about 90 minutes when the radar at the JPL in California detected Explorer I coming over the far horizon. It was 1 a.m., February 1 when officials connected with the shot held a press conference at Patrick Air Force Base near the Cape.

As the missilemen walked down the aisle, 200 reporters stood and applauded their efforts. The officials told the reporters practically all they knew about the mission and the press kits were distributed to the members of the media. Two hours after the launch, President Eisenhower told the nation that the United States had orbited a satellite successfully. During his speech he also took a slap at the Soviet Union by announcing that the information gathered from Explorer I would be immediately turned over to the scientists of the IGY, something that the Russians had yet failed to do with their information from Sputniks I and II. Eisenhower avoided saying that the launch had been accomplished by the Army as he still considered satellite launches to be a civilian task. But everyone knew who had put up the missile. If they did not, the next issue of Newsweek clued them in with a picture of the missile on its cover; the photograph showed the Jupiter with the darkly-painted word "ARMY" clearly stenciled on its white side (122: February 10, 1958; 8: p26; 98: February 10, 1958; 70b).

The February 10, 1958 issue of Newsweek contained seven pages describing the U.S. shot in comparison to the five it had carried about Sputnik I in early October. The U.S. had a space triumph and now the media could spread the word about it as much as they wanted.

On March 17, 1958, Vanguard finally achieved orbit and its signals confirmed what scientists had always thought but had been unable to prove; the earth was not a perfect sphere. On March 26, Explorer III joined the other two U.S. satellites in orbit (Explorer II had failed on March 5 when a fourth stage failed to ignite) (54: p30).

Through the scientific use of its satellites sending back information about the space surrounding earth, the U.S. was creating a first for itself. It was a small bit of salve for the wounded egos of many Americans. The general populace became much more aware of the space programs, if the entries in the Reader's Guide to Periodical Literature are an indication. In the 1955-57 issue, the Guide listed only 57 entries under the category labelled "Space Flight." There is

no section on space vehicles or astronauts. In the next issue, 1957-59 "Space Flight" had 278 entries, of which 52 discuss flights to the moon; the word astronauts had not appeared, but "Space Vehicles" contains 15 articles. In the 1959-61 edition, 274 entries fill the "Space Flight" section and, of those, four discuss flights to Mars, three about shots to Venus and 59 deal with moon flights. Now, 309 listings are shown under "Space Vehicles," taking up nearly four pages. Only one appears under "Astronauts" and that is a reference. By the 1961-63 issue, the Guide had eight of its pages devoted to "Space Flight," seven-and-a-half to "Space Vehicles and 68 headings under "Astronauts." If a person was to judge from the Guide alone, it would be possible to say that after Sputnik the press had caught the fever of going into space. It was the next frontier.

NASA

Contrary to what some people may believe, the National Aeronautics and Space Administration was not created solely to support manned space flight nor did it come out of nowhere. NASA was born in 1958 through the legislative efforts of many people but it was also part of the evolutionary process of a much older organization.

That older organization came into existence under circumstances in 1915 that were similar to those of 1958. As the European powers were busy battling each other, it was easy to notice that the United States had lost the edge of aerial leadership that it had had until 1908. As a measure to regain that lead, a research group was created with the title of "The Main Committee." Its name reflected the thinking of President Woodrow Wilson who desired not to give any of the Europeans the idea that America was abandoning its neutrality. At the first meeting of "The Main Committee," the 12 unpaid men who made it up decided to change the name of their organization to the "National Advisory Committee for Aeronautics (NACA)" (54: p8).

As NACA established itself, it became more concerned with aerodynamics rather than trying to research new means of propulsion for airplanes or the construction of materials for airframes. Through this type of research, NACA gave the U.S. air superiority in all fields during the decades of the twenties and thirties. This was because NACA was not only helping the military but also civilian aircraft manufacturing firms and the National Bureau of Standards. Because of its efforts, NACA developed a high reputation for originality and thorough research and that reputation would follow it until 1958 when the former "Main Committee" would become yet another name with another purpose that might have been beyond the comprehension but not the dreams of the twelve originators who had started NACA on its way in 1915 (54: p6).

During its first five years, NACA depended upon the military to provide test facilities and, in 1920, the committee moved into its own accommodations at Langley Field, Virginia. By 1939, NACA was still

relatively small for a governmental agency. There were no more than 550 employees and the budget topped four and a half million dollars. With World War II on the horizon, a person might think that NACA would have been busier in its research but President Roosevelt was trying to appear neutral. Only nine months before Pearl Harbor was attacked, NACA's chairman ordered research begun on jet-powered propulsion systems. NACA started to grow beyond the limits of Langley. It acquired two more plots of ground to conduct its research; one was near Cleveland, Ohio, and the other was 40 miles south of San Francisco at Moffett Field. When the war came, instead of conducting original research, NACA was now busy "fixing" and "cleaning" the designs that the armed forces of the U.S. had pushed into use posthaste without much testing (54: pp6-10).

When the war ended, NACA was experimenting with faster types of propulsion systems and, in order to gain information about the effects of high speed flight upon materials and aerodynamic designs, the agency started using small missiles that were launched from its Wallops Island Station off the Virginia coast. This pilotless research area of NACA was headed by Dr. Robert R. Gilruth who was later to become the director of NASA's Manned Spacecraft Center for eleven years (54: p10).

In 1952, the country was at war again, this time in Korea, and NACA found itself relegated once more to "fixing" and "cleaning" the designs that the Air Force and Navy were already using. While working with the military on those projects, NACA's Committee on Aerodynamics, possibly the most influential of the divisions within NACA, made a decision on June 24 that NACA should set up a study group to look at "space flight and associated problems." Two years later, NACA approached the Air Force and the Navy with plans for creating a high speed plane to study the upper atmosphere. What NACA wanted was a tripartite relationship; the Air Force and Navy would supply the finances, NACA would act as the overall technical director and the Air Force would be responsible for finding a contractor along with supervising construction and design. The project would ultimately become known as the X-15. This was still not

enough for some of NACA's planners. They felt that NACA should pursue a course of study designed to look at the problems of flight through the speed necessary to escape the earth's gravitational pull--25,000 mph--an undreamed-of speed for that time. Definitely, someone at NACA was thinking of the agency becoming involved in work in outer space (54: pp56-58).

However, so was the Air Force. General Thomas S. Power, the commander of the Air Force's Air Research Development Commission (ARDC), advocated a project, labeled as the X-20, or Dyna-Soar (for Dynamic Soaring), which was to be a step beyond the X-15. The X-20 would be "eventually capable of useful intercontinental military and commercial transport and cargo operation." The real purpose of getting the X-20 study going was because once the study was underway and could show something to higher officials, then getting money for the "general technical work" would be easier. In late 1956, ARDC sent an invitation to NACA asking for its cooperation in studying the program with the Air Force. NACA accepted the terms, being careful to not allow the research for the Air Force to stop NACA's own research programs on outer space (54: p69-71).

The next year, about a week after Sputnik I took to the skies, Secretary of the Air Force James H. Douglas appointed a committee of 55 academic and corporate scientists to "propose a line of positive action" for the Air Force regarding space exploration. By the end of October, the committee reported that the Air Force, naturally, should be put in charge of all activities related to space. The Air Force kept pushing for its future in space; on December 10, 1958, four days after the Vanguard fiasco, Lt. General Donald L. Putt, the Air Force Deputy Chief of Staff, ordered a "Directorate of Astronautics" to be set up within the Air Force under the leadership of Brigadier General Homer A. Boushey. But this action ran into opposition from the very beginning when officials within the Pentagon, including Defense Secretary McElroy did not like it. The New York Times reported that Defense Department

officials were referring to the Air Force's actions as trying to "grab the limelight and establish a position." Only three days after Putt's "Directorate" had been set up, it was cancelled because of the opposition to it (54: p73).

The X-20 project continued despite the loss of the Directorate of Astronautics and it, too, suffered a setback but one of smaller magnitude. The NACA researchers realized that the spacecraft was far too heavy for the boosters that were then available and suggested that the Air Force look to other means for the time being to place a man in earth orbit. The alternative called for a wingless spacecraft, which some in the military referred to as "the man in the can" project. Once again, NACA found itself in the position of helping the Air Force instead of working totally independent with its own ideas. Paul Haney, who was to become of one NASA's more notable PIOs during the sixties, observed, that during those years, NACA was a "mechanical handmaiden to the Air Force" (66; 54: p72).

Apparently there were those in the nation who did not feel that the space efforts were proceeding in a correct fashion. In mid-October, 1957, the American Rocket Society called for a civilian agency to take charge of U.S. space activities. The following month brought another request for the same suggestion, this time from the National Academy of Sciences. On January 23, 1958, the Senate Preparedness Committee, which had been set up by Lyndon Johnson to investigate why the U.S. was lagging behind Russia in space, produced a summary of its findings. Among the 17 recommendations was one implying that a space agency should be formed. By April, 29 bills or resolutions had been introduced in Congress in regards to the formation of some sort of organization to manage the nation's space tasks (54: p77).

In early February, 1958, Eisenhower's Administration was trying to solve the problem. At the time, NACA had the attitude that it did not expect "more than its historic niche in Government-financed science and engineering." The people in NACA were working for the space role but they still wished to retain their "mechanical handmaiden" role with the

military; all they wanted was a bigger lump of the space research.

On March 14, NACA took on more research when it aligned itself formally with the U.S.A.F. to work at drawing up plans for manned orbital flights but this was a plan by NACA officials to simply obtain sanction for the work that its scientists had been working on anyway through the past years for their own agency (54: p86).

On April 2, 1958, Eisenhower delivered a message to Congress calling for the organization of a "National Aeronautical and Space Agency" which would evolve out of NACA and take responsibility for all space activities except those associated with military projects. He stated that the authority of that organization would rest with one man as its head and he would be advised by a 17-member "National Aeronautics and Space Board." The "Board" was something akin to the original "Main Committee" of NACA but the most important thing about the proposal was that the President wanted the power of the agency centralized in one man and not spread out to a committee as NACA was then using for its control. In the same message, Eisenhower directed NACA and the Defense Department to review the projects which were under the control of the Advanced Research Project Agency (ARPA), an agency that had been set up in February, 1958, by McElroy to manage all of the existing projects. The committee of NACA and Air Force officials was to determine which of ARPA's projects would be transferred to the new and upcoming NASA. The representatives on the committee, including some from the Bureau of the Budget, agreed on all aspects of their discussions except one--who was to take charge of manned space flights. On the same day that Eisenhower made his suggestions to Capitol Hill, the Air Force Chief of Staff, General Thomas D. White, was at work on another plan to benefit his service. That day he received approval from the Joint Chiefs of Staff for an Air Force manned space venture. There is an ironic twist here. There was a high possibility that NACA would become NASA because of the bills before Congress yet NACA continued to help the Air Force with its news plans coming down from General White as well as the plans for the X-20 Dyna-Soar project (54: p90-91).

When the bill was being discussed in Congress, it became apparent that the agency would ultimately be a civilian one and that its nucleus would be formed from NACA. That was almost evident by the amount of NACA's work that was related to space; by early 1958, more than half of NACA's research was dedicated to space flight. Many of the NACA employees preferred to work on the space efforts as an independent agency but there were also those on the committee who did not care to be by themselves but wanted to keep doing what NACA had always been doing, performing research for the military (54: pp84-85).

The Air Force was still continuing on its own projects though. During April, 1958, various officials within the Air Force's ARDC were working on what was called "Man in Space Soonest (MISS)," which was actually a four-part program. The first part was to put a man into orbit through various steps. The second phase was to duplicate the first step but more intensely with more sophisticated spacecraft capable of enduring fourteen-day flights. The third aspect involved unmanned lunar landings and missions to provide reconnaissance for the fourth phase when men would land on the moon. The final year in this time table was set for 1965, far shorter than what actually happened. The estimate of the cost came to about \$1.5 billion, about sixteen times less than what it would finally cost the U.S. for the entire effort to put man on the moon. The idea was imaginative. Later it became true in pretty much the same way of the Air Force proposal, but this version was very naive in relation to the time and money it would take before astronauts would walk upon the moon's surface (54: pp92, 96).

On April 30, 1958, the Convair people showed up on the scene once more with their missile program that had been on and off since 1948. This time it was proposed to the Air Force that the service use Convair's Atlas as the launch vehicle for the manned space shots. Lt. General Samuel Anderson, commander of ARDC, recommended against it because he did not respect how one of Convair's associates had done its work and, upon Anderson's advice, General LeMay dropped the proposal. But time would

prove best for Convair, like it had for von Braun's Redstone, and, eventually, the Atlas was accepted by the Air Force for the MISS program and various other satellite shots along with NASA's Project Mercury (54: pp92-96).

On July 16, 1958, both Houses of Congress passed the bill sent to them by Eisenhower. Despite the passing of that bill, NASA was not told that it had the man-in-space program and, because of that omission, MISS was still given a chance for survival. In an attempt to insure that the Air Force would hang onto the man-in-space aspect of the space programs, ARPA suggested that the Air Force scale down its budget requests if that service expected to continue with its wishes. But two days after the bill passed, NACA Director Hugh Dryden played his cards to Eisenhower's Science Advisor, James R. Killian, and gambled for the right to take the man-in-space projects. Dryden's message read, in part:

The assignment of the direction of the manned satellite program to NASA would be consistent with the President's message to Congress and with the pertinent extracts from the National Aeronautics and Space Act of 1958...(54: p101).

Although Dryden wanted the manned projects for NASA, he also wanted to avoid a head-on clash with the Air Force leaders who still desired to keep MISS alive (54: p101).

The Air Force made a last ditch stand for the green light on the manned orbital aspects of MISS on July 24 and 25, 1958, when ARDC made a series of urgent appeals to the Secretary of the Air Force, the Air Staff and the non-military ARPA for funds for MISS. The ARPA Director, Roy Johnson, was not swayed by the appeals and held off with his approval, saying that the members of the Eisenhower Administration were not yet convinced of the military's need to be in space. Johnson knew that if Eisenhower signed the bill, which he gave indications of doing, then NASA would be given \$40 million. It would thus be foolish, reasoned Johnson, to give the Air Force another \$50 million, which is what it was requesting through ARDC, to do essentially the same thing that NASA had in mind (54: pp97-98).

Finally, President Eisenhower, on July 29, 1958, signed the bill that brought NASA into existence. However, there were some changes in the bill that had occurred during the time from when he had sent the bill to Congress and when it was returned for his signature. The large 17-member advisory board had been whittled down to a five-to-nine member National Aeronautics and Space Council. The revisions also called for a "National Aeronautics and Space Administration" rather than an "agency" and the "Administration" was to be headed by a team of two people, and administrator and a deputy. A civilian-military liaison committee was added to NASA, the members of which would be appointed by the President. This committee would insure the exchange of information between the space administration and the armed forces. Other amendments allowed the organization to hire a number of people through means other than the civil service roster and NASA was instructed to "cooperate with other nations and groups of nations." And then there was one phrase which determined the future of NASA's public relations,

The aeronautical and space activities of the United States shall be conducted so as to contribute...to the expansion of human knowledge of phenomena in the atmosphere and space. The Administration shall provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof (54: Back Cover).

These changes were made primarily through the efforts of Senators Lyndon Johnson, Styles Bridges, the ranking Republican (New Hampshire) on Johnson's committee, and Democrat John W. McCormack (Massachusetts), who was the House Majority Leader and the Chairman of the House Select Committee on Astronautics and Space Exploration (54: p98).

Eisenhower, acting on the advice of Killian, decided not to select Dryden for the number one seat of NASA. There were many who considered the apolitical chairman of NACA to be the best choice but Eisenhower picked a solid Republican, T. Keith Glennan, to be NASA's first administrator. Glennan had been the President of the Case Institute of Technology in Cleveland at the time of his nomination and had been a member of the Atomic Energy Commission. With Glenn as administrator, Dryden would be

the overseer of NASA's technical and scientific endeavors. As designed by the bill, NASA would also absorb the more than 8000 employees of NACA as well as that organization's \$100 million budget. In addition to those items, NASA would also assume control of the Vanguard and Explorer projects (but the Army would hold onto von Braun and his associates until 1960), and various other projects related to the Army's and Air Force's programs. Another \$117 million came from the Defense Department where this money had been allocated for purposes related to space. Still, the bill never did say who was going to take charge of the man-in-space venture (54: p99)

Under Eisenhower's Administration, the Air Force was allowed to continue working on its Dyna-Soar project in conjunction with NASA but MISS was taken away from Air Force control. True to his words about separating the military from the civilians in relation to his "space for peace" line of thought, Eisenhower gave the nod to NASA to start thinking about putting a man in space through its own efforts. The date when Eisenhower made this decision is not recorded but it is thought to be around August 18, 1958, three weeks after he signed the bill.

About a month and a half from the time Eisenhower told NASA that it could assume control over putting a man in space, NACA finally became NASA on October 1, 1958. There was no great occurrence to mark the day for the employees. They simply left NACA one night and, when they returned to their offices the next morning, they found themselves working for NASA, a research organization that, for the first time, was working for itself and not someone else.

THE ASTRONAUTS

Only one month after NASA was created, its aeromedical experts met at Langley and drew up plans for obtaining pilots for its man-in-space program, as of yet unnamed. The plan called for the services and representatives from private industry to nominate a pool of 150 men for pilot selection. From this group, six would be chosen. A month later, on December 22, 1958, NASA Project A, announcement No. 1, was drawn up as a draft invitation for people to apply for the civil service position of research astronaut-candidate "with a minimum starting salary range of \$8330 to \$12,770 depending upon qualifications." The title for the project at the time of this announcement was "Project Astronaut." Many qualifications followed in the statement but the whole idea was changed, when, over the Christmas holidays, President Eisenhower decided to limit the selection to military applicants only. His reasoning was that since military pilots were already cleared for security purposes, they would conveniently satisfy all security conditions. The qualifications were pared down to seven items:

1. Age, less than 40
2. Height, less than 5 feet, 11 inches
3. Excellent physical condition
4. Bachelor's Degree or equivalent
5. Graduate of test pilot school
6. 1500 hours total flying time
7. Qualified jet pilot (54: pp131-137).

Even though the announcement for applications on December 22 referred to the program as "Project Astronaut," there was discussion within the ranks of the officials at NASA and Washington as to what the name of this project should be. "Project Astronaut" was preferred by Robert Gilruth, now the Director of the Space Task Group (STG) for manned space flight, as it emphasized the man in the spacecraft but Gilruth was eventually overruled by others who did not like the title, thinking that it would draw too much attention upon the personality of the astronauts involved in the programs. For that reason, the project was renamed "Project Mercury," which was suitable because of the symbolic associations

that went along with the Olympic messenger's image. The media did not seem to pay too much attention to the selection of "Mercury" as a project name. In the New York Times the announcement of the name was buried in a story about the selection of a rocket engine for the moon flights (120: August 12, 1960).

Project Mercury began to pick up speed during the early part of 1959. It received top priority from Congress and Eisenhower which made it unnecessary to shop for the lowest bidder for parts. This priority rating also brought new attention to Mercury. In Cape Canaveral, the rockets assigned to NASA were now to have the words UNITED STATES painted to their sides. Glennan hoped that the military services would follow suit but they retained their names on the sides of their launch vehicles (54: p136).

Meanwhile, astronaut selection was going through several steps. One hundred and ten men were found suitable for application; five of them came from the Marines, 47 from the Navy and 58 from the Air Force. This list was slimmed down to 69 by the middle of February, 1959. Two weeks later, the number was down to 36 men and, of those, four withdrew from the competition. The remaining 32 were given tests determining their mental and physical abilities and, to alleviate any fears that they might have had, the applicants were told that their parent services were never going to see the results of those examinations, something the men who were rejected felt might affect their future when they returned to flying with the military. Then the number dropped to 18. Gilruth then ordered the selection board to pick only seven men to be the final choices and the board complied with his wishes. The men who survived the final cut were called and asked if they still wanted to stay with NASA; there were seven affirmative replies. Gilruth forwarded his recommendations of the seven through the channels up to Glennan and the administrator approved (54: pp159-183).

NASA's Director of Public Information, Walter T. Bonney, had been head of the Public Affairs for NACA for nine years before transferring to NASA along with most of the other NACA employees. He knew what the

future held for the men who had been selected as the nation's first astronauts and he warned Glennan that NASA should expect a lot of fanfare to develop around the men. Bonney then asked the Air Force for one of its more reputable PIOs, Lt. Colonel John A. "Shorty" Powers. Bonney wanted Powers to work with the astronauts and his choice seems to be well thought out. Powers had been a pilot with the Air Force since World War II and he had also flown missions during the Berlin Airlift and in Korea before becoming an effective public relations officer for the military. Some of Powers' earlier tasks in the area of public relations had been to soothe the nerves of a public concerned about the new sounds of the jet age, including sonic booms. When the space programs entered into history, Powers was assigned to the Air Force projects and it was there he was working when he was reassigned to NASA, initially for a period of three years (14; 54: pp62-63).

Walt Bonney needed Powers and many other personnel to cope with the upcoming increased publicity that would accompany Project Mercury and the astronauts. Bonney wrote, in a letter to NASA Historian Eugene Emme:

It was absolutely impossible to announce, in advance that the U.S. was going to send men into orbit in an open program, and then expect no public or press attention -- especially when the Russians had announced they were doing the same thing, but behind closed doors (14)

At a meeting of the astronauts, before they were announced to the public, Powers was introduced to them. Even though he really did not know them very well at that time, he could sense what was going to happen once their names were made public. He warned them that they had better call their relatives and close friends to warn them of the "impending onslaught of media people probing for their relationships and digging for nice little anecdotes...." The astronauts at first chose to believe that such a thing would not happen to them. Only one of them had had any previous experience with the media when he had set a speed record for jetting across the U.S. a few years before. Powers told them that shortly after the announcement of their names to the

public, it would be only a short time before the press moved in on others whom the astronauts knew. One of the astronauts, Lt. Commander Walter M. Schirra, Jr., of the Navy, did not particularly want to call his parents in Hawaii. Powers, knowing of the Honolulu Advertiser from past experience, bet Schirra a steak that, within an hour of the announcement, the Advertiser would have reporters asking Schirra's parents about his childhood. Powers does not remember collecting the steak but he remembers that his prediction was accurate (126).

Powers tried to explain the future of the astronauts to them at that meeting and more that followed. Powers writes, in a letter to the author:

I was able...to make the troops understand that (a) The American people needed a psychological lift at that particular time. Sputnik was whirling around with its maddening beep-beep. (b) People all around the world seemed in a state of shock and/or disbelief that the Soviets had flown the first artificial satellite while America floundered in its own introspection. And finally, (c) People of all countries had been reading science fiction, much of it involving men travelling in space, for hundreds of years. Americans, in particular, had a built-in thirst for fulfillment of all those science fiction dreams combined with the identification of new national heroes. They the astronauts never did really accept the hero bit because they felt they were simply doing their job as an extension of what all of us had been doing for a number of years--and that was the extension of the flight envelope (126).

On April 9, 1959, the seven men were introduced to the public for the first time at a press conference presided over by Glennan. The men were to be called "astronauts," for in the same manner that aeronauts and aquanauts had sailed two types of oceans before them, the astronauts were to go somewhere that no one else had been before. The press looked at the astronauts dressed in civilian clothes and tended to forget that they were actually military test pilots. The words spoken by the astronauts were no great, profound statements. They appeared to look like the average, white American male who was married, had a family to look after and held a degree. There was nothing surprising about them other than the fact that they were not surprising (54: p160).

The men who were introduced as astronauts were: Lieutenant Colonel John H. Glenn, Jr., who was the only representative from the Marine Corps and was the ranking officer among the astronauts; Lieutenant Commanders Schirra and Alan B. Shepard, Jr., with Lt. Malcom Scott Carpenter of the Navy, and from the Air Force came three captains: Donald K. "Deke" Slayton, Leroy Gordon Cooper, Jr., and Virgil I. "Gus" Grissom. They were officially assigned to duty with NASA as test pilots, which was another way of saying that they were astronauts (54: p164).

The words of Powers were coming true relatively fast, according to Captain Grissom's wife, Betty. She had been shopping at a local grocery store near their home when the first reporter-photographer team found her in the aisles. They had gone to her house to look for her shortly after hearing the announcement, did not find her there and, upon asking the neighbors where she was, headed for the grocery store. They were from Life. Because she did not want to create a scene in the store, Mrs. Grissom invited them to the house. Shortly after they sat down, the doorbell rang and another news team pushed into the house. Mrs. Grissom wrote of the incident later:

After that, it was a continual stream of writers, photographers and television crews..... What do the boys think...? How does it feel to be the wife of a hero...? Are you proud of your husband husband...? One reporter, so eager to transmit his interview... set up his typewriter on the trunk of his car in the driveway and began tapping out his story.... Where had they come from, this mob of reporters? What lines of communication had vectored them into position to strike so quickly with word and camera? It was almost frightening that the privacy of an ordinary person could be violated so swiftly and thoroughly" (59:pp61-64).

Henry Still, who later co-authored the book Starfall with Mrs. Grissom, writes that Captain Grissom did not appreciate the treatment his wife and sons had received at the hands of the press that first occasion and, in their reluctance to deal anymore with the media, Gus and Betty Grissom "gave the impression of hostility to the press, whereas in actuality they did not feel their personal lives were important or should be bared to the world. This mistake caused newsmen to bear down harder on Gus, and he avoided interviews whenever possible

He simply did not realize he had been named a cold war diplomat to the world as well as ambassador to space" (59: p62).

The men who were called astronauts were becoming more popular than some of the NASA officials had envisioned. They had renamed the project from "Astronaut" to "Mercury" to take the emphasis off the men but it seems as though that effort was a failure. Jim Grimwood, a NASA historian, writes:

Perhaps it was inevitable that the "crew-pool" members of the STG were destined for premature adulation, what with the enormous public curiosity about them, the risk they would take in space flight, and their exotic training activities. But the power of commercial competition for publicity and the pressure for political prestige in the space race also whetted an insatiable public appetite for this new kind of celebrity (54: p160).

Powers was asked more questions about the men than about what was going to put them in space. Most of the questions were rather simple, which dictated the type of answers Powers had to give. The reporters wanted to know what the astronauts ate for breakfast, who among them had been Boy Scouts, who came from Ohio, what did their wives think of all this commotion, what were they really like? As Grimwood states, "Such questions provoked many to abandon asking how these seven came to be chosen and for what purpose they were entering training" (54: p164).

Mrs. Grissom observes:

NASA and other government officials were equally amazed by the furor in the press. To some it was downright embarrassing. The astronauts were not intended to become a personality cult... (59: p163).

About a month after the astronauts were selected, Walt Bonney drew up a policy that would, over the years, be the cause for much debate amongst the media and government officials. He knew that the Public Affairs Office (PAO) of NASA would handle the technical aspects of what the men were doing but there was also a personal side to the stories of the men and he wanted to clarify how the astronauts were to handle such dealings.

POLICY CONCERNING MERCURY ASTRONAUTS

The Mercury Astronauts have been detailed to NASA by their respective military departments pursuant to an agreement approved by the President which makes them subject to the regulations and directives of NASA in performance of their duties.

It is recognized that the experiences of the Mercury Astronauts through all phases of Project Mercury, from the commencement of training to accomplishment of orbital flight, will be of great interest to the public. NASA has therefore adopted the following policy on disclosure of information concerning the experience of the Mercury Astronauts:

1. All information reported by the Mercury Astronauts in the course of their official duties which is not classified to protect that national security will be promptly made available to the public by NASA.
2. Public information media will be granted frequent accessibility to the Mercury Astronauts for the purpose of obtaining information from them concerning their activities in Project Mercury. The timing and conditions of interviews with the Mercury Astronauts for this purpose will be controlled by the NASA Director of Public Information so as not to interfere with their performance of official duties. During such interviews, the Mercury Astronauts will be directed to disclose all information acquired in the course of their activities in Project Mercury, except information classified to protect the national security.
3. While detailed to NASA for duties in connection with Project Mercury, the Mercury Astronauts
 - a. may not, without the prior approval of the NASA Director of Public Information, appear on television or radio programs or in motion pictures;
 - b. may not, without the prior approval of the NASA Director of Public Information, publish or collaborate in the publication of writing of any kind;
 - c. may not receive compensation in any form for radio, television, or motion pictures appearances, or for the publication of writing of any kind, which involve reporting to the public their performance of official duties in any phase of Project Mercury; and
 - d. may not endorse commercial products.
4. The Mercury Astronauts are free, singly and collectively, to make any agreement they see fit for the sale of their personal stories including the rights in literary work, motion pictures radio and television productions, provided such agreements do not violate the foregoing restrictions (148).

On May 8, 1959, Bonney submitted the policy statement to the White House for the President's staff secretary, General Andrew J. Goodpaster, to look at. It arrived on Goodpaster's desk after receiving the

endorsement of John A. Johnson, the General Counsel for NASA. Johnson wrote a note accompanying Bonney's policy statement that the Department of Defense had no "clear-cut" regulations of this type upon its personnel but it was understood that the Defense Department was considering a policy similar to this one for military personnel on missions "of extraordinary public interest." Therefore, if NASA was questioned about the policy, wrote Johnson, then NASA should state "our policy in this situation is consistent with the DOD policy" (81; 71).

Johnson also recommended that the astronauts should be informed if the policy was accepted by the White House and, after that, then the media were to be told the conditions. Goodpaster approved of what had been laid before him and a race far below the heavens of space was about to begin (81; 71).

Bonney's reasoning was this:

I could see it coming. That we'd have seven astronauts each peddling his story to seven different magazines or seven different publishers. Which would mean instead of working as a team, they'd all be jockeying for position. Because the man who made the first flight would be worth \$100,000 and the rest of them would be worth \$500. So I went over and saw Leo D'Orsey" (8: p32).

C. Leo DeOrsey (written as D'Orsey by some people) was a prominent Washington, D.C. lawyer who represented Arthur Godfrey and Edward R. Murrow among other show business and sports figures. At Bonney's request the lawyer took the job of representing the astronauts in negotiating the sale of their personal stories, if someone wanted to buy them (8: p32).

Colonel Powers writes of the situation as it was then:

The astronauts worked for the government and their activities carried out in connection with that employment would be reported in great detail and in a timely manner. But their personal lives were their own property to expose or dispose of as they saw fit.... From the NASA point of view, we urged the seven and Leo to set up a situation in which we could eliminate the personal profit motive from the competition for a seat in a spacecraft and, simultaneously, give the men and their families a firm basis for maintaining the privacy of their homes and personal lives. The policy for separation of the personal from the official was stated officially

and publicly by NASA at the time Leo was identified as the legal counsel--which he did, by the way, at no fee or expense to the astronauts or their families or the government! He never got a dime (126).

Powers is correct. It is well-documented in various papers that DeOrsey was never paid anything for working with the astronauts.

Bonney went to the astronauts, who were now stationed at Langley Field, and talked to them about organizing themselves as a unit to sell their personal stories. He did not want to see "John Glenn write for Life, Alan Shepard for Look and Gordon Cooper for the Post and their wives for various women's magazines." He told the men, "Now look, you can do it any way you want. But this is what I think you ought to think in terms of" and they agreed (8: p32; 26: May/June, 1973).

In late May, the seven astronauts and DeOrsey signed an agreement naming him as their lawyer and setting the conditions for how they were to operate together. It reads:

AGREEMENT made this 28th day of May, 1959, among MALCOLM SCOTT CARPENTER, LEROY GORDON COOPER, Jr., JOHN HERSCHEL GLENN, Jr., VIRGIL IVAN GRISSOM, WALTER MARTY SCHIRRA, ALAN BARTLETT SHEPARD, Jr., and DONALD KENT SLAYTON (hereinafter referred to as MERCURY ASTRONAUTS) and C. LEO DeORSEY (hereinafter referred to as AGENT).

Witnesseth:

Whereas the above mentioned MERCURY ASTRONAUTS have volunteered to participate in Project Mercury of National Aeronautics and Space Administration; and

Whereas the above named MERCURY ASTRONAUTS have been selected after exhausting testing, to engage in this project; and

Whereas the above-named MERCURY ASTRONAUTS have valuable rights to their personal stories of their ballistic and orbital flights in connection with this project as well as personal stories pertaining to all phases of this project; and

Whereas they agree that a joint effort for the sale of such rights appears to be the most practical approach; and

Whereas they agree that representation on their behalf in this connection should be obtained.

Now, Therefore, in consideration of the mutual covenants of the parties hereto, it is agreed as follows:

1. The MERCURY ASTRONAUTS have selected C. LEO DeORSEY to represent them in the sale of the rights.
2. The MERCURY ASTRONAUTS transfer all of their personal rights, in and to their personal accounts of the ballistic flights and the

orbital flights made by them in connection with Project Mercury, as well as personal rights in the literary work, motion picture, radio, or television productions, including personal appearances for compensation (other than those in line with their official duties) to C. LEO DeORSEY of Washington, District of Columbia, as their agent, with all rights to contract in their behalf as in his sole discretion he decides if for the best interest of the MERCURY ASTRONAUTS. Said DeORSEY will be guided by the policy concerning MERCURY ASTRONAUTS, copy of same is attach hereto.

3. C. LEO DeORSEY will distribute the proceeds equally to the MERCURY ASTRONAUTS, or their designees, immediately after receipt by said C. LEO DeORSEY. Should any of the ASTRONAUTS withdraw from the project voluntarily, before termination of same, his share shall be forfeited in all amounted to be distributed thereafter, and shall be divided equally among those remaining. The rights of the withdrawing ASTRONAUTS shall be the property of those remaining in consideration for the payments made to him prior to withdrawing.

4. It is distinctly understood that this includes the rights of the person or persons selected and who make the flight or flights in connection with this project.

5. Said C. LEO DeORSEY agrees to serve the MERCURY ASTRONAUTS without compensation and will also personally defray all expenses incurred by him in this project.

Signed and sealed this 28th day of May, 1959,
(Signed by the seven astronauts and DeOrsey) (148).

Powers writes of what happened during the following summer months:

Leo then announced--with our approval--that the personal story was available for sale to the highest bidder. At that time both Walt and I worked very hard to reiterate the stated NASA policy and to establish firmly our plan to report the official program in minute detail as promptly as humanly possible and in total openness. At that point, the battle was joined. The wires and some of the major papers across the country howled like stuck pigs, even though they too had an opportunity to bid on the story (126).

How many publications actually bid on the personal stories is not really known. Bonney told historian Emme that the Saturday Evening Post considered looking into the bidding. Ed Diamond, a science editor of Newsweek at that time, said in a conversation that Newsweek never considered bidding and believes that Look entered into the competition. Only one magazine was known to enter into the arena to buy the astronauts' personal stories and that was Life, the picture child of Henry Luce. It

has been recorded by historian Grimwood that Life was the "highest" bidder for the stories. Several other publications also use the term. Powers uses the term in writing about NASA and the media but the then-editor of Life, Edward K. Thompson (later editor of the Smithsonian) writes that "Life never said it was the highest bidder. Ask NASA, which had to approve the bids" (157; 126; 54: p237; 14; 31).

There are other sources that say Life won the contract for the personal stories not just because of the money it offered to the astronauts but because of the job it could do in helping to publicize NASA. Life was well-equipped, some say the best equipped, magazine (it could publish a story within a week of the time that it happened) in the business. As can be expected, Luce's fantastic image builder was well-respected by the government since it could be utilized to display its space efforts (178: p137; 26: May/June, 1973).

Whatever was the case, Life was awarded the contract to publish the personal stories of the astronauts. On August 24, 1959, Life told the world what it had accomplished in a two-page spread written by then-Publisher Andrew Heiskell. Under the headline that "THE ASTRONAUTS' OWN STORIES WILL APPEAR ONLY IN LIFE," Heiskell's opening statements read:

When one of these men becomes America's first space voyager, you will read his personal story. And furthermore, the lives of these seven men--and their wives--will lend between now and the day on which one of them becomes the first American--perhaps the first human being--to orbit in outer space, will in itself be one of the most absorbing dramatic human stories of our time. Life--and Life alone--will bring you that personal story in the words of the men and the women involved (98: August 24, 1959).

Neither NASA nor Life announced what the contracts had been sold for but Life's news brother, Time, in an issue that came out the same week, spilled the beans. The astronauts were receiving \$500,000 for their stories, said Time. This figure was not reported officially until about two years later. In that same issue, Time explained the contracts to the American public, saying:

...newspaper chains, magazines and radio and television networks and television networks bombarded NASA with bids for exclusive rights to the great adventure story.... The men early decided on the seven-way split on the common sense ground that only one man could be first up, the other six will probably follow him (159: August 24, 1959).

Two things are interesting about the Time article. One is that Time claimed that NASA was "bombarded" with bids, which is something a researcher would have trouble proving to be true. It was also stated that the astronauts had been told by DeOrsey to negotiate separately for television and movie rights. It might not seem significant that Time was the magazine to announce the exact amount that Life was going to pay to the astronauts since Time is in the same parent organization as Life but a person should remember that they were still two very separate magazines with separate staffs. Leo Janos, once one of Time's Houston Bureau chiefs, recalls that Life would not share information with the staff of Time, sometimes causing the Time staffers to resort to raiding the files of Life's offices and trying to pry information out of Life's editors and reporters (79).

Dora Jane Hamblin, who wrote stories for Life primarily during the Apollo era (she also wrote some during Mercury), recalls in a letter:

Time and Life did, particularly in New York, treat each other as competitors despite common parenthood. In bureaus, because they were small, we often shared information but back at home base some files were limited to one magazine. This was the case with astronaut materials--it was Life that paid, and Life alone which received the "exclusive" materials on the men and their families. Time, of course, covered the space program the same as other media but its reporters were excluded from the "inside the home" and "personal stories" of the astronauts. The rigidity with which this rule was applied varied depending upon who was in Houston. During my era, which was Apollo only, I did often dispense tidbits to Donald Neff, the Time guy at the time--because I liked him, found him a fine and honorable journalist who never tried to break the Life contract (some Time guys did), and because he helped me with some of the technical stuff.... I did not show Neff my files to Life, but I would feed him a few items of "color" about the guys and their families before each flight. He was scrupulous about never revealing where he got his color (64).

Amy Musher, of the Editorial Offices of Time, replying for the editors, wrote in 1977:

Although the contracts Life signed with the original seven astronauts were exclusive with Life, some of the information was shared with Time. They also shared some information about the astronauts from other sources, but because the format of the magazine was different, the coverage was accordingly different.

As for Time's reporting the dollar figure of the Life contract, we considered it an appropriate story for our Press section. This information was not "hushed up" by Life; it was provided to us by our sister publication for the...story (115).

The contract with Life not only afforded the astronauts and their families money along with added publicity for them and NASA but it also gave the astronauts something else--privacy. Because of the contracts, the astronauts could simply refuse to talk to any reporters (except those from Life) who were asking questions about the astronauts' personal experiences. It was a beautiful shield. Mrs. Grissom writes of the wives of the seven men: "I really hate to think what would have happened if we didn't get that publication money. I don't know if the wives would have been trying to outdo the other ones to get to the press. I really don't know what would have happened" (59: p220).

Dora Jane Hamblin writes in a letter:

...I do not believe that the contract blocked other magazines from writing effectively about the astronauts or the program.... I think the contract did enable almost all of the wives to ward off importunate reporters and to keep their private lives more private. It was a good shield for them, and it was used as a shield by the men when it came to "family life" type of interviews. But they always remained available to the general press for interviews about their work (64).

NASA could run interference for the astronauts when they were at work but the space administration could do nothing to protect their wives from the reporters. This is where the contract possibly worked best as a shield. Mrs. Grissom had been asked by a reporter from a publication other than Life if the contract was worthwhile and she replied yes, because it helped her to avoid having to conduct numerous interviews; if she allowed one outside interview, then she would have to give hundreds

more. She explained further:

From the viewpoint of the seven, this was a fair and ideal arrangement. NASA had approved because it precluded a situation in which the men might have gone off in individual directions in response to competitive bidding for individual story rights. The astronauts probably were the hottest "property" in publishing and Life magazine's ability to crow about its "exclusive" stuck like gall in the throat of every other newspaper and magazine publisher in America. They complained bitterly and turned their reporters loose on NASA. The press would seek out any flaw in the space program and publicize it in photo and print. It may have been this fortunate "mistake" that helped keep the space program as honest as it was" (59: p65).

Obviously, the Life contracts also caused NASA, Life and the astronauts and their families another problem that Mrs. Grissom referred to: criticism by the rest of the media about the arrangement. Most of the media cried foul. NASA pointed out that everyone had had the chance to bid for the stories but Life had won. That point is somewhat debatable. Life had won all right but had it really outbid others, if there had been any others? DeOrsey's price for opening bids was \$500,000, exactly what Life paid. The highest bidder had bid only the beginning price, which leaves some room to doubt that there had been any bidding at all. This is not to say that there were some shenanigans, just that no one else had bid on the stories. Therefore, NASA was correct; everyone else had had their chance and had not taken the astronauts and DeOrsey up on the offer, thus the media should not complain about the contracts.

Alfred Friendly, who was then the managing editor of the Washington Post, complained that "the story of what Mercury astronauts do in Project Mercury belongs to the public. It cannot be sold by anyone to anyone" (26: May/June, 1973).

Walt Bonney came back with the defense that Friendly was right, as stated by the official policy released the previous May. The astronauts had to tell all the world what happened *officially* during their flights but they did not have to say one word about their *personal* feelings if they chose not to do so. But the astronauts had chosen to tell their

personal stories to Life for a price and NASA defended the decision as being totally appropriate. As far as many people in NASA's PAO were concerned, the contract took a load off their backs since they would not have to manage the private lives of the astronauts (26: May/June, 1973).

Some of the media said that NASA had made a blunder in its relations with the press. Jay Holmes writes in his book, America on the Moon,

Although the project gained the benefit of regular publicity for the astronauts in one magazine, the contract had the effect of discouraging favorable publicity elsewhere. Magazine and newspaper editors, who are subject to the same frailties as the rest of the human race, often took the attitude that a favorable story about Project Mercury would have the effect of advertising a regular offering of an opposing magazine. As a result, the majority of popular magazines ignore the subject of men in space except for an occasional article (73: p79).

Holmes appears to be correct. A number of technical and aviation magazines carried many articles about the technological aspects of the space ventures but not that many general circulation magazines wrote about the astronauts, those being primarily (not in any order), Life, Newsweek, Time, National Geographic and U.S. News & World Report. Look and the Saturday Evening Post offered the American public very little about the program, all the way through the moon flights.

Astronaut Alan Shepard describes his view of the situation in a letter:

...NASA and the U.S. Government are not in the business of promoting people and the molding of images. I am sure there have been notable exceptions...it would be a disservice to the public if every Federal agency turned to Madison Avenue to provide support for its particular project. Therefore NASA tried to be as impersonal and dispassionate as it could be in presenting the need for man in space and the tremendous technical benefits which have helped, are helping and will help our society....

However, back in 1959, a wise man in NASA recognized that most reporters could never understand technology, interpret it properly or make it sound exciting. Those who did would be big at Aviation Week but that would never sell the American people or Congress. The relationship with Life was viewed as an outstanding way of publicizing the individuals and generating support in a way

which a Federal agency could never do directly, legally or practically. The subsequent in-fighting of the competitive media only enhanced the results...!

Our lawyer suggested that purely personal observations, if expressed at all, be reserved for Life. Most people followed this suggestion realizing that it helped fulfill the contract, created more conversation among competing media, and therefore, more copy and interest (145).

Shepard also seems correct. There were many articles in the magazines and the newspapers about the contract, hence more publicity for NASA and the astronauts.

Thomas O'Toole, a reporter from the Washington Post who wrote many articles on space, criticized many of the press for the way they wrote their stories. He said that the stories that were written about the astronauts were done only while the missions were going on or had just finished, which was fine, but the writers neglected to follow up on the missions with later stories about what the missions had accomplished on the technological end. O'Toole finds this omission to be a great detriment (124).

While the official, and real, position of Life and NASA was that Life was only going to print the personal stories, somehow the word had not been transmitted to the advertising department of Life. On September 9, 1959, in an issue of the New York Times, an ad, taken out by Life read:

The editors of Life take great pride in announcing that the personal stories of America's Astronauts will appear only in Life. The conquest of space has been one of man's most persistent dreams since he first looked up and saw the stars. Now these seven brave men have embarked on that great adventure.

Beginning today, their own stories...in their own words...will be published exclusively by Life....(120: September 9, 1959).

The key word was "exclusive" and the rest of the media registered strong protests. So did NASA. Powers writes, "Life's promotional advertising gave us the fits when it gave every indication that the only place the public could really get the astronaut story was in Life--which, of course, was not true." However, Life apparently believed it retained

the right to call its astronaut stories "exclusive" not only during those years but even after the magazine folded. A book, The Best of Life, containing many photographs from all the years that Life existed, was published in 1972 by Time-Life Corporation and, on page 120 of that book, it is still claimed by the editors that the stories written by the astronauts for the magazine were "exclusive." Life was told, but it never comprehended or blindly tried not to comprehend, that its stories were not "exclusive." Whatever was the case, the battle with Life and the rest of the media was to last several years, practically until both the moon program and Life faded into history.

The contract that caused all of the fuss follows:

AGREEMENT, dated this 5th day of August, 1959, between LEO DE ORSEY and TIME INCORPORATED, a New York Corporation (hereinafter referred to as Time).

It has been officially announced by the National Aeronautics and Space Administration that, in connection with its Project Mercury, the Astronauts, numbering seven men, have been selected, after exhaustive testing, to engage in experimental space flight. Time wishes to obtain the rights in and to the personal accounts of the ballistic flights and the orbital flights made by the Astronauts, and rights in and to the personal stories of their wives and families in connection therewith. Mr. DeOrsey has informed Time that he owns said rights and has submitted to Time a copy of an agreement between him and the Astronauts and their wives authorizing him to negotiate the sale of said rights.

It is therefore agreed between Mr. DeOrsey and Time as follows:

1. Time shall have all rights of every kind throughout the world in and to the personal stories of all ballistic and orbital flights made by the Astronauts during the course of and in connection with Project Mercury. Likewise, Time shall have all rights of every kind throughout the world in and to the personal stories of the respective wives of the Astronauts in connection with their experiences and life during the course of Project Mercury.

2. As soon as convenient after the execution of the agreement, Time will assign a writer from its publication LIFE to visit with and observe the family life, training, social, and professional incidents of the Astronauts prior to the ballistic and orbital flights and, immediately after said flights, to spend a

reasonable time with the Astronauts to obtain their personal impressions of their flights. It is understood that at no time shall the Time writer interfere with the training and conditioning of the Astronauts preparatory to their space flights.

3. In general, each personal account or story of the seven Astronauts will consist of biographical material of the individual Astronaut and his family and the experiences encountered by the Astronauts and their families during the course of their training and during the ballistic and orbital flights. However, it is agreed that Time will not publish any material which may be deemed restrictive or secret by the officials of the National Aeronautics and Space Administration or by the Defense Department.

4. Because of the widespread public interest in Project Mercury and the experiences to be encountered by the Astronauts and their families, it is recognized that the wives of the Astronauts may be approached to write articles for media other than those published by Time. In the event that such offers are made and such articles are written or collaborated in by the wives of the Astronauts, such offers may not be accepted nor such articles published without the prior written consent of Time.

5. Time may use photographs of the Astronauts and wives and families and such biographical data as it deems fit in connection with promotion and advertising instituted by Time with respect to their stories.

6. In consideration of the foregoing, Time will pay to Mr. DeOrsey on account of the Astronauts up to an aggregate of \$500,000 under the following conditions:

- (a) \$105,000 upon the execution of this agreement;
- (b) \$140,000 upon the successful completion of the first ballistic flight;
- (c) \$175,000 upon the successful completion of the first orbital flight; and
- (d) \$80,000 when it is announced by the National Aeronautics and Space Administration that Project Mercury is completed.

7. Immediately upon publication of the manuscript of the Astronauts' stories in book form by Time or its authorized agents, Time will assign to Mr. DeOrsey the copyright in said work for the purpose of his selling television and motion picture rights to said work. From the sale of said television and motion picture rights, Mr. DeOrsey shall pay to Time the sum of _____ (\$00,000) plus ten percent (10%) of the net proceeds of said sale. However, it is understood that in no circumstances shall the television rights in said work be exercised earlier than ninety (90) days after the

publication of the work in book form nor shall the motion picture rights be exercised earlier than one hundred eighty (180) days after publication of said book.

8. Time shall have the right to produce and use a reasonable amount of motion picture footage of the Astronauts and their wives and families in connection with the publication of their stories by Time with the approval of Mr. DeOrsey, and such approval shall not be unreasonably withheld.

9. The National Aeronautics and Space Administration has recently announced a policy of public information and general press coverage with respect to Project Mercury and the official activities of the Astronauts. The interpretation of said policy by the officials of NASA will greatly influence the type of story or stories that Time wishes to publish. If at any time during the course of Project Mercury, in the judgment of Time, it is decided that the value of the personal stories of the Astronauts and their wives is badly impaired or lost, Time may terminate this agreement by paying to Mr. DeOrsey on account of the Astronauts the sum of _____ (\$00,000).

10. It is recognized by Time that Mr. DeOrsey is acting on behalf of and solely in the interest of the astronauts and that he has no personal interest in the proceeds to be paid him hereunder by Time. It is therefore understood that he shall not be liable personally to Time for the performance of this contract other than that he will be appraised of any disputes that may arise between Time and the Astronauts relating to the performance of the contract, and his corporation may be sought by Time to help settle such disputes.

11. This agreement shall be construed under the laws of the State of New York.

IN WITNESS WHEREOF, the parties hereto have executed and delivered this agreement on the day and year first above written.

ACKNOWLEDGED AND AGREED TO:
(signed by Leo DeOrsey and Robert T. Elson for Time, Inc.)
(160).

It should be noted what the contract said, other than what has already been discussed in this paper; for all purposes, Life was entitled to preflight and postflight briefings by the astronauts and their families so Life could obtain stories about their personal feelings; that

Life could not interfere with the astronauts' official functions; that NASA and the Defense Department virtually had a clause giving them the right of censorship (something that would be used by NASA in the future); that none of the astronauts nor their wives could write anything for publications other than those owned by Time, Inc., unless approved by Time, Inc.; that Time, Inc., could break the contract if NASA went too far with its official policy written in May, 1959; and that Life could send reporters into the homes of the astronauts before and after the flights, not during the missions. Perhaps the most notable item about the pay is to realize that it was not broken down chronologically but rather by how NASA was going to conduct its program. Each astronaut would receive \$15,000 as soon as the contract was signed; \$20,000 when Alan Shepard went on his fifteen-minute flight in May, 1961; \$25,000 when John Glenn returned from his three orbits and \$11,428.87 when Project Mercury was announced as being finished in the summer of 1963. Each astronaut would earn nearly \$71,500 over a period of four years on top of his regular service salary which was supplemented by flight pay, as are all flight personnel in the military.

Starting in the fall, Life published a series of stories by and about the astronauts. The stories that were written about the men were largely done by Don A. Schanche, who later went to work with the Los Angeles Times. Some other stories were written by Loudon Wainwright. Both men claim, as does Edward K. Thompson, that there was never any editorial direction to the writers of Life as to how they were to portray the astronauts. The stories that Life's writers wrote did not have to be approved by NASA nor the astronauts; the only stories that had to be approved by NASA and the astronauts were those written by the astronauts to make sure that the stories contained nothing official which had not been released by NASA previously; otherwise Life might indeed have an exclusive story (165; 136; 158).

During the fall of 1959, the stories written by the astronauts dealt mainly with the training that they were going through, describing

how they felt about the entire procedure. Cooper wrote of his personal background and described the difference between ballistic and orbital flights. Schirra wrote about the astronauts and how they related among themselves: "We avoided getting into arguments of a personal nature but we've never avoided arguments of a technical nature." Glenn took the Life readers through the Mercury spacecraft verbally and complained about the selection of the first man in space: "As to how far in advance of the first flight the man should know he's going, I'm not in agreement with the argument that says word should be delayed until the last possible moment.... ...we're all big boys now." Shepard made notes of the psychological testing: "I'm not my own favorite subject and it has always been difficult for me to analyze my feelings" (98: September 14, 1959).

The wives got into the act in another issue of Life, telling the world what they thought of the whole Mercury affair, their husbands being astronauts, the families' attitudes towards fame and other aspects. Renee Carpenter broke the news that when her husband had been called and asked to volunteer for astronaut duty, he was at sea so she volunteered him (98: September 21, 1959).

But all of those articles and the subsequent ones by Life, tended to paint the astronauts as a group of super Boy Scouts, with fresh faces, dedicated to their work and who did everything right. It was a portrayal that Christopher Kraft, the flight operations director for Mercury and the following programs, described as such in an interview:

This was good for the program but it was tough on the men. They were like the Saturday afternoon football heroes and it became difficult for them to survive this. Their image was important as it kept the program appearing good; their image was the highlight of the program (93).

Don Schanche gives his view in a letter:

...the deal Life made with NASA and the seven individual created a strong bias toward the "Boy Scout" image, because all pieces under the astronauts' bylines had to be approved by them as individuals, as a group and by Shorty Powers and whomever happened to be in charge at the moment in Washington.... The astronauts did not resent the Boy Scout image, but were the main architects of it, as Alan Shepard, above all, will recall.

Frankly, I couldn't blame them at the time and don't now. They had a Life man (during my time, at least) with them virtually all the time, at home and on the road, and it would have been difficult for normal, robust test pilots to manage any kind of normal lives if they had to worry constantly about every indiscretion observed (136).

Loudon Wainwright also has his impressions of the image of the astronauts, which he records in a letter:

...the astronauts were co-conspirators in the production of stories that made them look like Boy Scouts and all alike. They may not have admired the results, but they fought hard, with very few exceptions to keep the material free of wrinkles and distinct personal flavor (165).

During this time, Powers was exposing the astronauts to the media but insists he was creating no images for the public. He writes:

The very nature of the work generated all kinds of images in the minds of the media beholders. It was the kind of work restricted to only seven people in the whole country although there were many, many members of the military performing many of the same kinds of tasks in one way or the other. During my tenure, my effort was to bring the media into the training or flight situation at the site of the training to both demonstrate the activities where possible and to explain what we were doing and why. If it was image building to expose seven particularly healthy, curious, intelligent, gung-ho test pilots at work, I plead guilty....

In addition, if anyone told him [an astronaut] how to act, it certainly wasn't me. My only position in this regard was to try to train them to recognize media representatives by name, to answer questions as directly and clearly as possible. I did, however, let them know that I needed to know if they got arrested or got themselves involved in any other kind of situation so that I could at least be prepared to be responsive to media query (126).

Schanche comments about Shorty Powers and his relationship with the astronauts and the media:

Shorty helped to teach them, but Glenn, Shepard and Schirra were pretty good at PR before Mercury. Glenn was a record-setting test pilot of note, with two wars and a lot of press conferences behind him, and Al and Wally had been much the same route although less intensely. Carpenter was a natural. Cooper never learned (in my time); Deke Slayton was always Deke, which was his best PR, and Gus Grissom, bless his soul, learned slowly.... In my view,

Shorty was extremely valuable to NASA and the astronauts--he kept both out of a lot of trouble a less skilled practitioner couldn't have handled--but he tends to exaggerate his role as a teacher (136).

Powers might not have been creating any images; most evidence seems to back his statements. But some areas of NASA besides the astronauts were also grabbing the attention of the public. These included the technology of the program and various members of the primate family. On May 28, 1959, the same day that the astronauts agreed to have DeOrsey as their lawyer, two small monkeys were placed in the nose cone of a Jupiter-C and fired off a launching pad at the Cape for a short 15-minute flight through space. One of the monkeys which had been scheduled to go on the trip had caused a problem for NASA before the launch. The NASA PAO had announced that one of the monkeys was an Indian-born rhesus (the other was a squirrel monkey). Immediately the Indian Embassy warned Washington that millions of members of the Brahman religion might find it offensive that one of their religious symbols was being blasted into space. Washington ordered a change in the monkeys and NASA found a Wisconsin-raised colony of rhesus monkeys, several generations removed from their Indian homeland, from which one was picked to go on the flight. Not wanting to have a personality cult develop around the monkeys, NASA officials simply named the monkeys Able (the Wisconsin-born rhesus) and Baker (the squirrel monkey) (54: p156).

The flight took the monkeys 300 miles high at a speed of 10,000 mph and they were recovered safely by the Navy 1500 miles downrange from the Cape. At that time, NASA was using coded transmissions for its messages. The ship that picked up the monkeys had a powerful voice transmitter but its coded transmitter was having difficulty that day. The questions kept going out from the Cape, "Are the monkeys alive?" but the coded answers were garbled and difficult to understand. Finally, the order went out to forget the code and the question was asked again. The answer came back immediately, "Yes, yes."

That raised a dilemma for the officials on the land. Did the message mean that both monkeys were alive or that the radioman on the

ship had been overly enthusiastic? Two officials discussed the situation. "If we go in there," said one referring to the press room where the media were waiting, "and say both of them are alive, and one of them is dead, what then?"

"Well then," came the answer. "The goddamned thing will just have to have died after we got the message."

Actually, both of the monkeys were alive and well. They were brought back to land where they were examined. But Able was killed when a civilian doctor improperly removed the electrodes embedded under his skin. The stuffed body now resides in the Smithsonian Institute. Baker resides comfortably at the Marshall Space Center (which was then the Redstone Arsenal) in a colony of monkeys (8: pp35-36; 54: p156).

The next year was a relatively quiet one for the astronauts. They kept writing for Life about their personal ideas and the rest of the press kept complaining. But 1960 was a year for testing missiles topped with Mercury spacecraft and for politics.

On July 29, 1960, a Mercury spacecraft rode atop an Atlas missile for what was designed to be a suborbital test of the launch vehicle and the spacecraft. About a minute after liftoff, the missile blew up. At first no one knew if either the missile or the spacecraft had caused the accident and speculation was kept down. Two months later, the official report came out, blaming the Atlas. An interesting note is that NASA tried to salvage something out of the wreck in its report. It stated that while none of the main objectives of the spacecraft had been met, that 1). the spacecraft had remained structurally intact until it hit the water; 2). the instruments had functioned fully during the flight (only one minute long); and 3). there had been some vibration of the spacecraft but it was non-destructive in nature (54: p277-278).

Unfortunately, NASA had also picked the day of the launch to announce that NASA was drawing up plans, codenamed "Apollo," to send men to the moon. Obviously the announcement should have been timed

for another day but a person could also look at the announcement as showing NASA's determination to continue despite setbacks.

Another setback occurred on September 26, 1959, when another Atlas, this time carrying a lunar satellite, failed severely. This began to cause some apprehension amongst the NASA officials about using the Convair product as a launch vehicle yet a third Atlas had successfully flown 9000 miles for a bull's-eye landing in the Indian Ocean on September 19, 1959 (54: pp270, 285).

As for the trip to the moon, Eisenhower came close to telling the nation that there would be no more man-in-space flights to anywhere once Mercury was completed but he was guided away from this statement by Glennan who knew what damage a statement of that sort would do to NASA. So Eisenhower diluted his message to say that he was rejecting Apollo for the present. When someone told the President that giving money to the space programs was worth the investment, drawing an analogy to Queen Isabella's funding of Columbus' trip to the New World, Eisenhower bluntly replied that he was "not about to hock his family jewels" for such causes. Then his administration chopped down NASA's request for money for 1962, taking out all the beginnings of the Apollo program. As far as Eisenhower was concerned, going to the moon would not prove a thing such as advancing the prestige of the United States. There are some people today who think that Eisenhower was smarter than what many people of that day thought (178: pp72-73).

But the Democratic opposition did not care for Eisenhower's thoughts about space. That party's presidential candidate, Senator John F. Kennedy, chose to make space into a political issue. He was calling for a "New Frontier" which did not totally relate to space but space was included as what he saw as his frontier to be conquered. He said that Eisenhower had disgraced the nation by letting the Russians score several firsts, that there was a "missile gap" in which *they* had more missiles than *we* did, including missiles for peaceful space exploration. In Oklahoma City, Kennedy declared that "I will take

my television black and white. I want to be ahead of them in rocket thrust." At Pocatella, Idaho, he attacked the Republicans for "letting the Russians be first in space...first around the moon and first around the sun.... I think it is up to us to reverse that point" (149: p114-115).¹

What Kennedy may or may not have known was that the missile gap was turning towards the Americans' favor. While the Russians had been concentrating on few missiles with large 57-megaton warheads to scare the Americans into submission, America had been building a number of missiles with smaller warheads which put the U.S. ahead of the Russians and in a far superior position in the ICBM race (32: p28).

Republican contender Vice-President Nixon met the challenge by defending the record of the Eisenhower Administration. He even wrote some comments on his thoughts about space for the magazine Missiles and Rockets but only some weeks after Kennedy had done the same thing; both had been invited by the editor to do so. As is known, Nixon lost the election by a very slim popular vote margin and it is regarded that the space race was not a deciding factor as it figured little in the televised debates or elsewhere (54: p284-285).

On November 21, 1960, the media were ready to cover the launching of the first Mercury spacecraft that had been mated to a Redstone missile (coded MR-1 by NASA for Mercury-Redstone, Number 1. The Mercury-Atlas series would be known as MA.). At nine in the morning, the engine of the Redstone started but suddenly cut off after the rocket had risen no more than five inches. The rocket settled back down at a 23-degree tilt amidst the exhaust and everything that followed this turned the launch into a comedy of errors. The computers told the spacecraft's escape tower that it was time for it to jettison, so the escape rockets fired, sans spacecraft, 4000 feet in the air and landed 400 yards away.

¹A petty point here but the Americans orbited a satellite around the sun first, by accident, when Discover I missed its planned target, the moon, and, by laws of nature, swung into solar orbit.

Then the drogue parachute popped out of the top of the Mercury spacecraft three seconds after the escape tower had fired off. Next came the main parachute followed by the reserve parachute. Finally, the spacecraft's sensors told more circuits that "this is the end of the ride" and, as planned if the spacecraft had landed in the sea at the end of a successful flight, the spacecraft started spurting out green sea dye. To PIO Paul Haney, "...it looked like Mrs. Murphy's washing machine gone berserk" (66).

To find out what had gone wrong with the rocket, Haney went to one of the control officers, a military man, in hopes he could then explain to the media why the launch had failed. The launch officer, who was not accustomed to announcing that anything had been launched unless there was "fire in the tail," (that is, unless the missile had been successfully launched. If there was no fire, there would likewise be no announcement) could not understand Haney's request. "What do we have to tell the press anything for?" he asked Haney. "It didn't launch" (66).

The eventual explanation was that there had been a mix-up with two electrical plugs attached to the rocket's tail (54: P296).

Just a few weeks later, the shot was not only rescheduled but reclassified as MR-1A, since there was already an MR-2 in the works. That date was December 21, 1960 and everything worked perfectly.

Four weeks after Kennedy was elected, Walter Bonney left NASA. In his place as Director of Public Affairs moved Shelby Thompson. Thompson and Paul Haney, who actually worked with the PAO in Washington but went to the Cape for the launches, drew up plans to create a news pool for Project Mercury. Bonney had been against this thought and so were others in NASA's hierarchy. When Haney presented the formalized plan to Glennan in January, 1961, the NASA Administrator accepted it. The plan was for a pool of three reporters to be put in a critical spot covering the launches. One of the people would be from the magazines, a second from the newspapers and the third would be representing the electronic media. Together they would send messages to the rest of the media which were to be gathered in a central spot. Glennan asked some

of the others in the NASA hierarchy for their opinions and discovered that he and Thompson were the only people voting for the pool's implementation. Since Glennan cast the biggest vote, the plan was stamped, "O.K. T.K.G." and the pool was a reality in time for MR-2 (66; 67).

Another aspect related to NASA's public information was the genesis of the "Voice of Mercury Control." Whereas Gordon Harris had spoken to an intermediate at the press site during the launch of Explorer I, plans were now laid for the PIO in the control room to speak directly to the members of the media over a loudspeaker. The middle man was gone. The precedent set by Harris had now become set procedure. Still, the media were not permitted to monitor live talk within the control room and that rule would hold for many more years (66).

Before the launch of MR-2 there was much speculation that the Mercury spacecraft would have a chimpanzee as a passenger. In order to hide any confirmation of that rumor from the media, Cape officials quartered the rocket engineers and technicians on the Cape grounds so they would have no contact with the reporters. However, someone forgot to tell the medics of the mission who signed in at the local motels. The Cape officials had to confide in the media again: there was indeed a chimpanzee going in the spacecraft and not a human as some reporters had heard in some rumors being circulated around the Cape (8: p35).

Ham, the chimpanzee, was the third aspect of MR-2 that dealt with NASA's publicity in a manner similar to the Able-Baker shot 20 months before. The Associated Press later reported:

The space agency was concerned about public reaction to the flight of a chimpanzee. If the animal were lost, it could arouse bad feelings, especially among animal lovers. If the chimp received prior publicity, became sort of a personality, the ill effects would be heightened" (8: p37).

Even the name of the chimp was important to NASA. He had originally been named Chang but that was changed to Ham (for Holloman Aeromedical School at Holloman Air Force Base, the chimp's home) because NASA wanted to avoid the anger "of every Chinese laundryman in

America" (8: p37).

The launch, on January 31, 1961, was nearly perfect. There was an unexpected boost by the escape rockets firing a bit prematurely to leave the spacecraft, causing the spacecraft and Ham to fly a bit faster than planned. Instead of going only 115 miles high, Ham reached an altitude of 157 miles above the earth and landed 132 miles further downrange than had been calculated. Sixty miles from the nearest ship, Ham lay in the spacecraft getting pummeled by waves. STG officials decided to dispatch Navy helicopters to the scene rather than wait for a ship. When the helicopters arrived, the crews found the spacecraft taking on water and sinking. When the spacecraft was picked up, it was estimated that about 8000 pounds of water were onboard, almost a premonition of another flight yet to come. However, Ham was okay. He had performed the tasks assigned and taught to him at Holloman, pulling certain levers when certain lights lit on his control panel in order to prevent himself from receiving mild electrical shocks. When he was brought back to the Cape, he was wearing a jump suit and diapers, "looking as cute as heck," one person remembers (54: pp312-316; 8: p37).

On February 21, 1961, the second Mercury-Atlas combination (MA-2) roared off the pad at Canaveral, duplicating what MA-1 was supposed to do before that missile had blown up. MA-2 performed perfectly and Robert Gilruth "became a young man again." At a press conference later that day, Gilruth told the press that the flight had been "very successful" and then pulled out an announcement to finish the day. In alphabetical order, he told the newsmen the names of the three astronauts who were being considered for the first manned flight for Project Mercury. They were Glenn, Grissom and Shepard (54: p322).

Gilruth's statement, followed by a photograph of the three men on a Life cover, caused some hard feelings among the other four astronauts. The men had always considered themselves to be operating as a team, specifically from the days when Bonney had banded them together for publicity purposes. But now Gilruth was dividing them into *us* and *them*

groups, something that none of the astronauts cared for, particularly when Life flashed its cover shot. Gilruth tried to soothe the feelings of the remaining four astronauts by telling them that they were in prime contention for later missions, including the best of them all--the first orbital flight. Whatever the feelings of the astronauts were, they kept to themselves. As Wally Schirra commented years later in an interview, "There are certain matters that we regarded as family matters among the astronauts and, like a family, there are certain things we don't talk about (140; 59: p80).

During February, von Braun talked with his chief of public information about the way that the press had conditioned the American public into believing that the astronauts would not ride a spacecraft until everything was 100% perfect regarding their survival. "There is not such a thing!" said von Braun, and he stated that future press releases should tell the public that there "is a risk" but one that was no greater than flying new aircraft. After von Braun made his statements, his information officer, Bart J. Slattery, met with Colonel Powers, representing STG, and Paul Haney, of NASA Headquarters, to plan information about future flights so as to avoid "over-emphasis or over-optimistic assumptions relating to future manned flights" (54: p328).

On March 24, 1961, another Mercury-Redstone took to the skies. This was not classified as MR-3 but MR-BD as it contained a boilerplate mold of the Mercury spacecraft and the flight was intended to test the missile, not the spacecraft. Other things were tested as well. A rescue crew sat 1000 feet from the launch site in an armored personnel carrier, as might be required during a manned launch, to see if the crew could stand the noise and vibration. At 12:30 p.m., the MR-BD lifted off the pad and the whole configuration hit the Atlantic 307 miles away, and sank. The sinking was part of the plan. The test revealed that all the major booster problems had been worked out and now the Mercury-Redstone combination was ready to fly with men on board (54: pp328-330).

THE FIRST MEN IN SPACE

While the Americans were shooting monkeys, empty spacecraft and satellites into space, the Russians were not sleeping. On the day after MR-BD's flight, the Soviets announced that they had launched and recovered the fifth of their Korabl Sputnik series, this one containing a dog named Zvesdochka, or Little Star. On March 28, the Russians had a display at the Soviet Academy which consisted of the puppies of the dog Strelka who had been in space during the summer of 1960. Along with the pups were four other dogs which had been into space and recovered successfully. On April 10, 1961, rumors reached the ears of foreign correspondents in Moscow that the Russians had placed a man in space but no one in the Soviet hierarchy was saying anything officially yet. That same day, at Langley, there was a report that at least 50 more chimpanzees would have to be shot into space by the Americans before a man was put up. Gilruth remarked that if that were the case, then the Mercury program should move to Africa (54: pp330-331).

The evening of April 11, 1961 found President Kennedy at the baseball stadium in Washington, D.C., to throw out the first baseball of the major league season. After watching the Senators play the Chicago White Sox, Kennedy went home, via the high speed motorcade, leaving the rest of the fans to cope with the snarled traffic around the stadium. When Kennedy arrived at the White House, Major General Clifton, who was responsible for seeing that the President obtained intelligence reports promptly, asked the President if he wanted to be awakened during the night should the Russians launch a man into space; there were reports that the event would happen that night. Kennedy said, "No, give me the news in the morning," and retired (149: pp110-112).

Tass, the official Russian news agency, broke the news early in the morning hours:

The world's first space ship Vostok with a man on board, has been launched on April 12 in the Soviet Union on a round-the-earth trip. The first space navigator is Soviet citizen pilot Major Yuri Alekseyevich Gagarin. Bilateral radio communication has been established and is maintained with Gagarin.

The time of that message was 9:07 a.m., Moscow time, or 1:07 a.m. in Washington, D.C. At 1:35 a.m., the phone rang in the home of Pierre Salinger, President Kennedy's press secretary. The caller was Dr. Jerome B. Weisner, JFK's special assistant for science and technology. He told Salinger that U.S. intelligence had said that Gagarin was in space. Weisner asked if anything should be said yet; Salinger said no, not until the Russians reported the flight.

At 2 a.m., the New York Times called Salinger. The Times reporter had heard Radio Moscow and he wanted to know if the report was true. Salinger told him that he would have to wait for confirmation from Weisner before he could say anything.

Gagarin landed at 10:55 a.m., Russian time, but Radio Moscow chose not to announce his landing until 12:25 p.m., Moscow time, which was 4:25 a.m. in Washington. At 5:30 a.m., Weisner called Salinger to tell him that it was true; Gagarin had become the first man in space (149: p112; 159: April 21, 1961).

During those same early morning hours, a reporter called Shorty Powers at his home near Langley to obtain his reaction to the news. As it was reported in Time, Powers replied, "If you want anything from us, you jerk, the answer is that we were all asleep." Paul Haney and Chris Kraft state that Powers used much more powerful adjectives than "you jerk" when he addressed the reporter (159: April 21, 1961; 66; 93).

Powers' version of the incident is this:

I had had a typically rough and long day. I had ended up entertaining some media people at the Officer's Club at Langley (the only place where booze was available in dry Virginia) and picking up the tab, of course, out of some mythical expense account. I finally got home and...stretched out on the couch in my den and fell asleep. I thought I had the program all put to bed for another day. I was aroused by the phone ringing. I picked up the phone and heard a gent identify himself as representing the United Press who then asked me if I knew that the Russians had sent a man into space. I allowed as how I did not know of such an event. He assured me that the story was true and went on to say he wanted a comment from me, one from Bob Gilruth and one from each of the astronauts and that he wanted those comments

in twenty minutes. I admit my comment, "Don't you know it's three o'clock in the morning, you jerk? If you want something from us, tell them we're all asleep." And he put it on the wire verbatim. I might say that it was one of the very few times I was quoted completely accurately. I was, of course, castigated by nervous bureaucrats in Washington--but after a few days was vindicated by the realization on the part of many that my comment meant more than even I had intended. The U.S. had indeed been asleep at the technology switch (126).

It is understandable why Powers reacted as he did with the requests that were laid upon him and, more than likely, anyone else who was in his position at that time would have reacted likewise.

Mercury Flight Director Kraft said in an interview years afterwards that hearing the news of Gagarin's flight was the lowest point of his career with NASA. He added, "Powers' quote at 3 a.m. was correct. We were asleep..." and Kraft did not mean in bed either. He meant the entire nation had not been aware of what was happening (93).

Seconds after awakening that morning, Kennedy called Salinger and asked about the Russian space shot. Yes, said Salinger, they had done it. Then Kennedy gave Salinger permission to call the media and read a prepared statement congratulating the Russians (149: p113).

James E. Webb, the new Administrator of NASA who had been appointed by Kennedy to replace Glennan in February of that year, appeared on national television that morning at 7:45 to extend his congratulations to the Soviets for their achievement and, while expressing NASA's disappointment at not being first, he assured the nation that Mercury was progressing without being herded into posthaste action by the Soviet shot (54: p332).

In New England, reporter Doug Gray of Time hustled Soviet astronomer Leonid Sedov into a blue Cadillac for a trip to New York City from Providence, Rhode Island. Sedov had planned to fly the distance but Gray wanted a scoop for his magazine and, impressing the Soviet scientist with the Cadillac, changed his mind about how to go to New York. Gray talked to Sedov for several hours, gleaning information from him for a Time article (159: April 21, 1961).

Time woke up cover artist Boris Chaliapin at 8 a.m. to tell him the news along with the fact that the editors wanted a new cover for the next issue, due on the presses that night. Although a cover picture usually took three days to complete, Chaliapin completed the painting of Yuri Gagarin in 12 hours. He used photos supplied to him by Time, and showed the Russian cosmonaut with a Mercury spacecraft in the background as the hammer head of the traditional hammer and sickle of the Soviet Union. Chaliapin could not have known what Gagarin's spacecraft looked like; it was never revealed until 1965 (159; April 21, 1961).

That afternoon, Kennedy called a press conference and congratulated the Soviets and Major Gagarin. Then Kennedy said, "Our Mercury man-in-space program is directed towards the same end." During that press conference, Kennedy also emphasized that the de-salinization of ocean water was more important than spaceflight. He was beginning to sound a bit like the man whom he had replaced. In a message to Krushchev, though, he suggested that the U.S. and the Soviet Union work together with their space programs (164: pp22-23; 159: April 21, 1961).

As before, Congress did not take the matter lightly. The next day, Webb and Dryden, who had been re-appointed as the Deputy Administrator of NASA, were roasted by the House Space Committee as they attempted to explain why the U.S. was behind the Russians. It was the Sputnik debacle again. It was the very thing that Eisenhower had done and now his critic, Kennedy, was on trial by the public. As Powers wrote, the Kennedy people came down on him for his 3 a.m. statement but his words had proved true. The letters to the editors of Time and Newsweek in their issues of April 21 and April 24, 1961, respectively, were almost duplicates of those sent to the magazines in October, 1957. Time carried a story about a rumor trying to discount what the Russians had done, saying that the son of a famous Russian aircraft designer had orbited the earth three times and crashed with serious injuries before Gagarin was sent up. There was also a remark in Time by an official of the Mercury program that "if somebody at the top two years ago had

simply decided to push it" the U.S. would have had the first man in space. Newsweek wrote that, in 1959, a Russian magazine had mentioned that Russian pilots were training for space flight and, even after Gagarin's flight, the Soviets had not mentioned anything about any other cosmonauts. There was also a slap at the U.S. from Gagarin, which was echoed by Krushchev: "Now let the capitalist countries catch us." As Newsweek pointed out, not since Lindbergh had any nation been captivated by one man; now the Soviet Union was such a nation with such a man. He appeared before the Soviet Presidium at the Lenin-Stalin tomb, an event which was televised live not only to Russians but to all Europeans and taped for later showing on U.S. networks. It was a time for introspection by the Americans again. Kennedy agreed with Gagarin, saying, "We are behind... the news will be worse before it is better, and it will be some time before we catch up" (159: April 21, 1961; 122: April 24, 1961; 54: pp332-335).

Thomas Wolfe, in Rolling Stone years later, describes how the press reacted to John Glenn's statement, made in response to a question about the Russian success "'Well, the Russians just beat the pants off us, that's all.'" and the reporters would scramble for the phones and teletypes, 'Did ya hear what he said? Did ya hear?'" (131).

Kennedy took the blow heavily. He had attempted to use space as a campaign topic and he had not lived up to what he had promised. According to Hugh Sidey, the Washington correspondent for Time, when Kennedy assumed office, he appeared to know little about space and seemed "less interested in it." An advisor told Kennedy, "If we aren't first on the moon, we had just as well give up." When Gagarin rode his Vostok spacecraft around the earth, the administration of the New Frontier knew that the United States could no longer rely upon its superior equipment to impress the world; the nation had to do something for prestige. A NASA official delivered a warning to the Democrats: "Kennedy could lose the 1964 election over this" (149: pp99-118).

Kennedy took action a couple of days after Gagarin orbited the

earth. On the evening of April 14, he summoned his closest advisor, Theodore Sorenson, Dr. Weisner, Webb, Dryden, David Bell (the Director of the Bureau of the Budget) and, for some reason, Hugh Sidey. Perhaps the Time reporter was there because he was a close friend of the Kennedys or perhaps Kennedy was trying to impress the reporter with his knowledge of space. If the reason was the latter, then Kennedy failed because, in his book John F. Kennedy, Sidey paints JFK as being largely ignorant of what was happening in outer space.

Kennedy sat with the six men in the Cabinet room. The President was not in his usual position but occupied the seat of the Secretary of the Interior. Kennedy wanted to know what the nation could do. "Can we go around the moon before them?" asked the President. "Can we put a man on the moon before them...? When will Saturn [a rocket designed for travel to the moon] be ready? Can we leapfrog [one program ahead of another]?"

Dryden answered by saying that the U.S. could put together a crash program to place men on the moon but the cost would be high--\$40 billion. The political Webb made a misjudgement when he tried to praise the President, saying, "We are doing everything we possibly can, Mr. President. And thanks to your leadership and foresight we are moving ahead now more rapidly than ever...."

Kennedy cut him off. "The cost," he said, with a wave of the hand. "That's what gets me."

After some more discussion, Kennedy decided to hold off any decisions at that moment. He said:

When we know more, I can decide if it's worth it or not. If somebody can just tell me how to catch up. Let's find someone--anybody. I don't care if it's the janitor over there, if he knows how. There's nothing more important" (149: pp84-85, 91, 118).

But Kennedy had other things on his mind besides the space program. The Communists were forcing a coalition government in Laos, which was a loss for the U.S., and three days after Kennedy had met with the small group that evening, a group of Cuban exiles landed at the Bay of Pigs

on Cuba's southern shore in an attempt to overthrow that country's Communist leadership. That mission failed and it was pointed out that the nighttime invasion, the first in modern history, had been backed by the U.S.A. That, coupled with the situation in Laos, was not weighing easily on Kennedy's mind.

When Kennedy had assumed office in January, he had appointed his Vice-President, Lyndon Johnson, as the head of the National Aeronautics and Space Council, since that had been Johnson's area of interest for so long. Now, on April 19, Kennedy and Johnson held a private 45-minute discussion and Edward Walsh, Johnson's chief space advisor, believes it was then that Kennedy decided to do something with the space programs on a prestigious scale. The next day, the President sent Vice-President Johnson the following statement:

In accordance with our conversation, I would like for you, as Chairman of the Space Council, to be in charge of making an over-all survey of where we stand in space.

1. Do we have a chance of beating the Soviets by putting a laboratory in space, or by a trip around the moon, or by a rocket in space, or by a trip around the moon, or by a rocket to land on the moon, or by a rocket to go to the moon and back with a man? Is there any other space program which promises dramatic results in which we could win?

2. How much additional would it cost?

3. Are we working twenty-four hours a day on existing programs? If not, why not? If not, will you make recommendations to me as to how work can be speeded up?

4. In building large boosters, should we put our emphasis on nuclear, chemical or liquid fuel, or a combination of those three?

5. Are we making maximum effort? Are we achieving necessary results?

I have asked Jim Webb, Dr. Wiesner, Secretary McNamara [of the Defense Department] and other responsible officials to cooperate with you fully. I would appreciate a report on this at the earliest possible moment.

John F. Kennedy

Despite the fact that when he was campaigning, he had spoken of the U.S. being in a space race with the Russians, Kennedy never said anything like that in public as President except for one occasion on the

day after he had sent Johnson the April 20th directive. On that day, at a press conference, Kennedy told the newsmen gathered around him, "If we can get to the moon before the Russians, we should" (178: p87).

But Kennedy was not the only political person thinking along those lines. In July of the previous year, the Democratic-controlled House Committee on Science and Astronautics proposed a schedule that was more accelerated than what NASA was thinking: "NASA's ten-year program is a good program as far as it goes, but it does not go far enough.... A high priority program should be undertaken to place a manned expedition on the moon in this decade." The last sentence of the Committee's report would be heard again in the future, coming from another source to whom it would be attributed in history books (178: p71).

Johnson, upon receiving Kennedy's note, set about meeting with a number of persons from the military, NASA and private industry. When he was through, he had what he and Kennedy wanted: an agreement from all of them to go to the moon. For some reason, the public was never consulted nor were any polls taken to determine if the nation wanted to undertake such an effort. A Gallop poll, taken after Kennedy announced the decision to go to the moon in late May, found that 58% of the American population was opposed to having such a project. Even the nation's scientists were not totally overwhelmed by the thought of going to the earth's captive planet. Ed Welsh, Johnson's assistant on the Space Council, said, "If the scientists had had any influence, the space program would have been about one-third the size it has been" (178: p89).

Wiesner, Kennedy's science advisor, was ordered to dream up something like desalinization or feeding the hungry, "which could be done on earth... [but] would be as good as space in propaganda terms," remembers Wiesner, a man who had been invited to some meetings concerning space but who was rarely listened to by the government officials. Knowing that there was no hope for anything short of the moon for Kennedy, Wiesner told the President that he should never refer publicly to the

moon venture by man as being scientifically useful. After Kennedy told the nation that the U.S. was going to the moon, he took Wiesner's advice and never said anything more about science and the moon (178: p89).

The media was busy writing and saying many things, not so much about Kennedy but about who was going to take the first manned ride into space from Cape Canaveral. Since March 25, the press had been speculating that John Glenn would be the man. Actually, unknown to the media until much later, the person chosen was Alan Shepard, who had been picked by Robert Gilruth in late March. The only others who knew at that time were the other astronauts, Webb and Dryden (48; 54: p349).

The publicity of the manned shot was mounting, especially after Gagarin's flight, but in the back of everyone's mind was the memory of the large public buildup before Vanguard I blew up on the pad only two-and-a-half years before. Senators John J. Williams (R-Delaware) and J.W. Fulbright (D-Arkansas) had the opinion that the flight should be postponed from its announced date and then carried out under a cloud of secrecy; they did not want another publicized failure in case something went wrong. However, not all of Congress felt this way. Most of the representatives on Capitol Hill preferred to stick to the American tradition of allowing the media to cover events of a large and popular nature. It was also in the back of the Congressmen's minds that the Russians had been conducting their shots in secrecy and were receiving international criticism for not having a more "open" program (54: p350).

Kennedy did not want the event televised live to the nation because he was still worried about another failure being broadcast to the world and Gilruth had to go to bat to allow the television networks to cover the launch. With others backing him, Gilruth said that there was no way to keep the media out of the event and not make the media mad at the Kennedy Administration and NASA for the rest of time. Kennedy relented and the television cameras were set up to transmit the image live across the nation. But the media still did not know who the astronaut was. Gilruth felt that if he let the media know who the man was, Shepard

would have been subjected to undue pressure and excessive publicity that would accompany the announcement (48).

On May 2, the first countdown began for MR-3 but it had to be canceled when inclement weather caused a delay of at least 48 hours. Only then did Shepard's name become known to the public when he left the hangar where he had been suited up. The press howled loud and clear; they had wanted Glenn to be the first man. A number of reporters complained to Washington about the choice. Some said that the only reason Shepard got the nod was because he was a Navy man, as had been Kennedy. Gilruth defended his choice which, he said, was based upon advice from his medical, training and technical assistants. He was also not about to change his mind because of the media (48; 54: p350; 137).

There were 480 newspeople at the launch site, spewing out 83,000 words a day to an expectant nation. Haney had his press pools working again but there were some newspeople who complained that the pools were oriented towards the electronic media. New York Herald-Tribune's Senior Editor Earl Hubell wrote up a "Petition of Wrong-doings" and passed it around for other print media representatives to sign. Eventually the print media reporters were allowed to send some of their own along with the radio-television crews. There were ten pool sites but trouble developed as not all of those people in the pools were faithful to their agreements and filed "exclusive" reports from their pool positions for their own parent organizations. Nevertheless, some of the media still worried about something else--another Vanguard I happening and that they would be blamed for a fiasco again (66; 48; 122: May 15, 1961).

The members of the media received press kits prepared by NASA PAO that described the shot, what it was supposed to accomplish and how it was going to be done. Those kits had been assembled by Haney and Powers one night when they had sat down and hammered out on typewriters everything they knew about Mercury that they felt would be useful to the media. The kits contained about 12,000 words and were issued only a few days before the launch. At about the same time, Powers assumed control of

the "Voice of Mercury Control." Like what had happened during MR-2 on a limited basis, Powers would broadcast to the reporters over a loudspeaker from the control room. This would cause very little delay, at least less than that to which the reporters were accustomed (66; 54: p350; 122: May 15, 1961).

During the days before the launch, the media also had some unexpected fun from astronaut Gordon Cooper. NASA had arranged for him, in a space suit, to show the reporters how the first astronaut would approach his rocket. In full view of the media, Cooper walked towards the gantry, grabbed a girder and then mockingly screamed, "No! I don't wanna go!" The members of the media thought the scene was quite hilarious. NASA did not and neither did the officials in Washington (159: May 24, 1963).

On May 4, the countdown started in the evening hours and continued, with planned holds, through the morning of the fifth. At 1:10 a.m., Shepard awoke and had breakfast with members of the operations team, his physicians and his backup astronaut, Glenn. He entered the transfer van to go to the pad at 3:55 a.m. On the way over, he had his suit purged of oxygen and Gordon Cooper, no longer joking, briefed him on the flight status. Shepard, though, felt like joking as he talked with Gus Grissom. Shepard ran through the list of items it takes to become a good astronaut: courage, intelligence and four legs. "Why four legs?" asked Grissom. Because NASA thought it would be too cruel to send up a dog, replied Shepard (54: pp350-351; 19).

When Shepard left the transfer van at the gantry, he was photographed from only a few feet away by Life photographer Morse, who was no longer being chased off deserted property by the police in the Cape area. Shepard appeared to be not the least bit bothered that his name had become known to the nation; as Paul Haney put it in words later, the astronaut thought the secrecy had been "kinda neat and didn't care if the public knew who he was or not" (33; 54: pp350-351).

Before sunrise, he entered his spacecraft, named "Freedom 7" and was sealed inside. Contrary to what some people may have concluded, Freedom 7 was not chosen as a name related to the seven astronauts.

Shepard said that he decided upon the name because the spacecraft was the seventh one manufactured by McDonnell Corporation in St. Louis and it was atop the Number 7 booster for the beginning of what was supposed to be seven flights. "What better name or call-sign could I choose than Freedom 7?" asked Shepard of an interviewer years later (54: p342).

In Washington, the mood was one of apprehension. The President had been meeting with the National Security Council and he canceled the session for a short while to adjourn to his personal secretary's office to watch the launch on television. The members of the Council stood gathered around Mrs. Evelyn Lincoln's desk, watching the live broadcast which was to begin only two minutes before the launch but had been on for some time because of the holds. Vice-President Johnson opened a telephone line directly to NASA Administrator Webb "to try to be closer to the soul of the project." Sidey writes of the men's feelings:

As Shepard waited for the end of the countdown...the New Frontier in Washington was frankly nervous. A disaster on the launching pad would further discredit the bruised administration. But there was no choice.... Project Mercury had to go ahead (149: pp57-158).

Shepard appeared to be very calm about the long holds that were delaying his launch. At one time he called to the controllers, "I'm cooler than you are. Why don't you fix your little problems and light this candle?" But there are indications that Shepard was not all that cool. He had been in his spacecraft for over four hours when the last hold was passed and there had been no relief for him. The urine collection device was considered to be rather primitive and, either because of that or because of the tenseness of the situation, his underwear became wet. But, according to NASA historians, "the suit air regenerating system worked very well" (59: p86; 54: pp350-352).

At 9:34 a.m., before a television audience of 45 million people in the U.S., Alan Shepard left the American soil as no man had done before. The statistics of the flight are simple enough to record: the flight lasted only 15 minutes and 22 seconds; of that time, he was weightless for about five minutes; Shepard was subjected to a gravitational pull

causing him to weigh more than 12 times his normal weight; he flew 116.5 miles high at a maximum speed of 5180 mph; landed 302 miles downrange from the Cape; and, during the flight, he had looked for stars and found none but he could recognize land masses below him. But of all the statistics concerning his flight, one fact appealed to the American public: Shepard was the first American in space (54: p341).

Leaving the spacecraft in the water, Shepard was taken by helicopter to the deck of the aircraft carrier Lake Champlain where he received a round of applause from his fellow Navy men. He then went into seclusion with a medical team. There was an interruption and Shepard was summoned to the flag-bridge. He found a telephone waiting for him; President Kennedy was on the other end of the line, calling spontaneously to congratulate Shepard. No doubt, Kennedy was relieved that the New Frontier now had a success to its credit (54: p361).

Sidey describes the impact of Shepard's flight as a "gentle, cooling rain in a drought.... The country had a hero and for the moment, Laos and Berlin and Kennedy and Krushchev were all forgotten. Alan Shepard was the man who counted" (149: pp157-158).

NASA had a similar view, according to the official history: "Although the seven member corps of astronauts had combat records and test-pilot experience to their credit, one of them at last was truly a hero and not just a celebrity" (54: p361).

Gilruth collected formal congratulations that were pouring in from all over the world for Shepard and passed them around for his staff to see. The messages had come from kings, scientists and everyday people. It was a refreshing difference from the year before when the STG Director had passed around only one favorable story.

NASA was also being praised about another aspect of the flight--the lack of secrecy surrounding it. The Russians were taking a beating on the international scene because of the massive publicity that had taken place concerning Shepard's shot. A number of Turkish journalists called upon the Soviet Consul General for a comment after

they had viewed the films of Gagarin's and Shepard's flights. "In the Shepard film," the journalists told the ambassador. "We followed all phases of his flight, but in yours, we followed only Krushchev. Why don't you show us your spaceflight too?" Tass replied that the Russians were "mainly interested in the people's excitement and reaction. This is what we wanted you to see." Krushchev was reportedly upset by Shepard's flight; even though it was less of one than Gagarin's had been, it was greater in terms of publicity than Shepard had received (54: p361).

Time had cover artist Boris Chaliapin busy again for its next issue and when it arrived on the newstands, there was a painting of Shepard against the black-blue sky of space on the cover, without his spacecraft and looking a bit dazed. An advertisement by B.F. Goodrich was placed near the story of Shepard's flight; it showed an "astronaut" wearing his B.F. Goodrich space suit while preparing for launch. Other ads related to the space efforts of U.S. industry were beginning to crop up in many magazines, such as Time, Life, Look, U.S. News & World Report and Newsweek (159: May 15, 1961).

Newsweek did not print a cover picture of Shepard on the May 15, 1961 issue; instead there was a photograph of Caroline Kennedy. But plenty of material inside that issue let the readers know about the space flight. Its story about "Test No. 108" or MR-3, as Shepard's flight was also called in official terminology, contained an acronym that was used seven times in the text and that acronym came to be associated with Shepard and all flight since that time: "AOK" (122: May 15, 1961).

The phrase came from the Voice of Mercury Control. William Shelton, a writer for many publications and author of many books on the space age, writes, "'AOK,' reported Colonel Shorty Powers over the loudspeaker. 'Astronaut Shepard reports all systems AOK'" (144b: p146).

Shepard never did say such a thing, nor, possibly did Powers mean that Shepard had said it, even though it may have sounded like that is what Powers meant. The phrase had been in use around the space port for

several months. Documents written four months before Shepard's flight contain "AOK." NASA historians write that the term came about because the letter "A" is very distinctive and easy to hear over the somewhat static-ridden communications channels and it added some emphasis to what may have been a hard-to-hear "OK." But, whoever started the use of "AOK," it was Powers who gave it widespread use (54: p575, fn 37).

Because of his use of the term, Powers brought the wrath of Shepard upon his head. As Paul Haney describes the situation, Shepard did not like to be upset by what the Navy commander considered to be someone below him and even more so because Shepard did not like anyone "who tried to compete with what he thought was to be his thing." According to several sources, the contempt of Shepard for Powers continued for a long time. At a gathering held years later, Shepard reportedly waited until Powers had a bit too much to drink and then publicly humiliated the colonel by asking if he was feeling "AOK?" (66; 144a).

Shepard, perhaps, might have been better off if he had simply accepted what Powers had said as coming from his own lips rather than to complain about someone he considered to be stealing the spotlight from his flight. The magazine writers seem to have regarded the phrase as coming from Shepard but his complaints about Powers have led to tales about the Navy commander's pettiness. If Shepard had kept his mouth shut about the affair, this author possibly would never have had reason to discuss it in this thesis.

Not only did Shepard resent Powers but it appears that he also resented the media. To many people, Shepard appeared icy calm and some of the writers were ready to attribute that to his upbringing in New Hampshire. But William Shelton tells of a time when, at the Cape, Shepard walked into a bar where there were 14 journalists whom Shepard knew. He chose to ignore them and sat by himself instead of socializing with them. He resented the presence of the Life reporters and photographers in his home during his flight but he allowed them in to

fulfill the obligations of the contract that earned him \$20,000 when he came back from space. The authors of Journey to Tranquility describe Shepard as "a tough, prickly character, [who] had the timeless arrogance of the fanatical pioneer." At the early press conferences, Shepard insisted on fielding all of the questions thrown at the astronauts by reporters, putting his fellow companions ill at ease since they realized they were looking rather dumb. They were never considered to be a talkative group anyway. Shepard's attitude towards them might have been shaped when it was announced that Shepard was the man for the first U.S. flight and the media demanded that Glenn be the first media to go into space. There was some disagreement, anyway, between Shepard and Glenn as to how the astronauts were to conduct themselves and maybe the media's favoritism towards Glenn heightened Shepard's feelings. This is speculation. Perhaps the reasons go further back than what has been written here. Shepard discusses some of his feelings in a letter to the author: "I apologize if my personality shows since it has nothing to do with the success of manned space. The fact that some find it interesting and some don't is only of academic interest" (145; 144; 71; 178: pp141, 144).

Judging from the tone of his letter (part of which was reproduced earlier in the thesis), it would seem that Shepard did not regard the man as being an important element to NASA's public image and that he preferred to have nothing to do with the press as his contribution to NASA's public relations policy. Unfortunately, as students of Watzlawick's communications theories know, one cannot not communicate; thus Shepard's silence may have been interpreted by the media as being hostility.

But, for a while, Shepard was the hero in the eyes of the nation. With the rest of the astronauts in attendance, he journeyed to Washington D.C. on May 8, 1961 to receive NASA's Distinguished Service Medal from President Kennedy. After the Rose Garden ceremony which had been attended by many government and NASA dignitaries, Shepard travelled down Pennsylvania Avenue for a parade that had been announced only a short

time before. Hugh Sidey refers to Shepard as "the man who triumphed when this country needed a triumph." Veteran Washington Post reporter Eddie Folliard, who had attended Washington's parades for nearly half a century, delivered his judgment as to how Shepard's parade, albeit on short notice, was the largest he had ever seen. About 250,000 people turned out that spring day to see the astronauts. As Folliard wrote, "I think these people are genuinely hungering for a hero. It's been so long" (149: p159).

The press supplied the public with many stories about space now and Congress sensed that the public was caught up in the mood for space exploration. The men on Capitol Hill started thinking about increasing the dollars earmarked for NASA; they wanted to be on the good side of their constituents (54: p362).

In the May 12, 1961 issue of Life there appeared a news story about Shepard's flight accompanied by another story written by his wife, Louise. It seems as though, according to Tom Wolfe, that the Life reporter who had been in the Shepard household during the mission to write the magazine's story had had some difficulty. Writes Wolfe in an issue of Rolling Stone, "Louise was doing all right but one of the Life people got so nervous, so upset, he started throwing up. He was a wreck.. Pretty soon Louise and everybody else are trying to help this guy out, bring him around so he will be in shape to get her reactions" (131: January 4, 1973).

In the next week's issue of Life, the personal story by Shepard was published. It was a chronology from the time that he started his training until he finished his flight. The story, as read years later, does not appear to have any unusual qualities but, as Paul Haney points out, a person must remember the times during which this article and subsequent ones by the other astronauts appeared. At those times, says Haney, the articles were considered "quite something" and were sought out by many readers. It would appear, therefore, that Life had played its cards correctly and had the public buying its publication. Yet, there were signs of disharmony between Life and Shepard because of his

reticence to allow a reporter and a photographer into his home. Life claimed that the astronaut was not holding up his end of the agreement (98: May 19, 1961; 66; 146).¹

It would appear that Shepard was correct in being strict about having any reporters and photographers in his house during the flight. The contract had specified that Life could "observe the family life...of the Astronauts prior to the...flights and, immediately after said flights... (Section 2 of the 1959 contract)." The contract also stated that "each personal account or story of the seven Astronauts will consist of biographical material of the individual Astronaut and his family and the experiences encountered by the Astronauts and their families during the... flights (Section 3 of the 1959 contract)." Nowhere in the contract is it stated that the Life representatives could have access to the family during the flights, only before and after; it was up to the astronaut and possibly his wife (Section 4 of the 1959 contract), to provide accounts of what happened in the household during the flights (160).

Life was not the only publication to run a personal story about the first U.S. manned space flight. U.S. News & World Report carried two "eyewitness" accounts in its May 15, 1961 issue; one report was done at the launch site by one of the magazine's reporters while the other story was written on the deck of the aircraft carrier Lake Champlain. National Geographic, in its September, 1961 issue, which was already underway at the magazine's headquarters in May, contained a story written by the astronauts' personal physician and a story written by Shepard. The article by Shepard was not a breach of the contract with Life; what the editors of National Geographic had done was to use the remarks made by Shepard at his post-flight press conference where he described his flight to the public, as was required by Bonney's policy of May, 1959. The photographs used in that issue of National Geographic were mainly supplied to the magazine by NASA but there were also several shot by the magazine's own photographers--Dean Conger and Luis Marden. There was even

¹Life also had a similar problem with Gus Grissom during his Mercury flight in July.

a photograph, on the page used by the editors for their comments, of Conger on a plane with Shepard, after the astronaut had returned to earth, shaking hands. Paul Haney says that the National Geographic photographers shot many worthwhile photographs, as is evident in the September articles, but Haney adds that some of the NASA photographers resented the presence of outside photographers doing what the NASA photographers considered to be their work (118: September, 1961; 66; 163: May 15, 1961).

In all, during 1961, there were only eight articles listed in the Reader's Guide to Periodical Literature under Shepard's name. Four of those stories appeared in Life (one of which was written by him); one in National Geographic; one in Time; one in U.S. News & World Report; and the other in Newsweek (127: March, 1961-February, 1962).

There may not have been much about Shepard in the magazines on an overall basis in relation to his flight but the media was carrying the message to the people about the space efforts of the U.S. Kennedy sensed that the population was eager to carry forward the attack on space. He may not have known how much the Americans wanted to do with space; if the public wanted to send men to the moon or still further beyond but, on May 25, 1961, he committed the nation to a goal. He appeared before Congress that day to deliver a "Special Message to the Congress on National Urgent Needs." Excerpts from it follow:

...if we are to win the battle that is now going on around the world between freedom and tyranny, the dramatic achievements in space which occurred in recent weeks should have made this clear to us all, as did the Sputnik in 1957, the impact of this adventure on the minds of men everywhere who are attempting to make a determination of which road they should take.... Now it is time... for a great new American enterprise...to take a clearly leading role in space achievement, which in many ways may hold the key to our future on earth....

Recognizing the head start obtained by the Soviets...and recognizing the likelihood that they will exploit this lead for some time to come in more impressive successes, we nevertheless are required to make new efforts on our own. For we cannot guarantee that any failure to make this effort will make us last. We take an additional risk by making it in full view of the world, but as shown by the feat of astronaut Shepard, this very risk

enhances our stature when we are successful....

I believe that this nation should commit itself to achieving the goal before this decade is out, of landing a man on the moon and returning him safely to the earth. No single space project in this period will be more impressive to mankind, more important for the long-range exploration of space; and none will be so difficult or expensive to accomplish....

But in a very real sense, it will not be one man going to the moon.... ...it will be an entire nation....

...all of you have lived through the last four years and have seen the significance of space and the adventures in space and no one can predict with certainty what the ultimate meaning will be of mastery of space (164).

John Barbour, of the Associated Press, writes about Kennedy's feelings about space, which seem to have changed after Gagarin's flight, "To John Kennedy, the competitor, faced with Communist threats in Southeast Asia, with shameful defeat in Cuba.... ...the moon was a goal, something the eye could see" (8: p2).

Edward Diamond, then Newsweek's Science Editor, describes the atmosphere that prevailed:

Eisenhower was a general and he always knew that the generals always wanted more, more, more and he said, "No!" With Kennedy, the mood was, "The Russians are coming! The Russians are coming!" And this gave way to the sudden buildup of the military.... Kennedy was dedicated to whip everything and this was before everything went sour like Vietnam and riots and other things. Everything was go, go, go. We had Robert Frost reading poetry to us and John Glenn making us feel good. It was a fantastic time.... We didn't need any instructions as to how to write our stories. Everything was "Beat the Russians!" It was all very go, go (31).

The "go, go" spirit kept NASA moving too. A second Mercury spacecraft was resting atop another Redstone missile at the Cape in preparation for another manned shot in mid-July. The spacecraft, the eleventh from McDonnell Aircraft Corporation, contained some modifications which made it different from Shepard's Freedom 7. One of those changes involved the hatch design. The official history of Project Mercury, entitled This New Ocean, devotes almost an entire page to the description of this new hatch, perhaps because of what happened at the

end of the mission. Shepard's hatch had weighed 69 pounds and was activated by a latch mechanism. The hatch on Capsule No. 11 contained explosive charges but weighed only 23 pounds, an important consideration for later orbital versions of the spacecraft, which No. 11 almost was except for a few items. The explosive hatch could be activated quickly by the astronaut but he had to first remove a locking pin from knobbed plunger that was six to eight inches from his right arm as he lay in his contoured couch. When the plunger was hit by the astronaut's fist, it would cause the hatch to be jettisoned at least 25 feet away from the side of the spacecraft (54: p368).

On July 15, 1961, Gilruth confirmed reports that Air Force Captain Virgil "Gus" Grissom would fly the second manned U.S. shot and that Glenn, once more, would be the backup pilot. Apparently Gilruth harbored no more reservations about keeping the names of his pilots from public knowledge before a launch even though he had given the news on short notice.

The launch had been scheduled for the next day but bad weather forced a 48-hour delay and the media, along with the workers at the Cape, stood down. Finally, on July 21, MR-4, christened Liberty Bell 7 by Grissom, roared off the pad. Essentially the mission was a repeat performance of Shepard's flight with only minor differences. The flight of Liberty Bell 7 went smoothly all the way from launch through splashdown with only a few things slipping behind schedule but nothing caused any great disruption to the plans.

The spacecraft heeled over on its left side when it hit the water and then righted itself. To Grissom, it appeared watertight as he lay in it, being bounced around by the waves as the helicopters flew to where the spacecraft floated. Awaiting his pickup, the astronaut pulled the locking pin from the hatch mechanism and rested in his couch. Through various accounts, which he wrote for many publications, Grissom describes what happened:

I was lying on the couch, waiting for the helicopter's call to blow the hatch. I was lying flat on my back at this time and turned my attention to the knife in the survival pack, wondering

if there might be some way I could carry it out with me as a souvenir. I heard the hatch blow--the noise was a dull thud--and looked up to see blue sky out of the hatch and water start to spill over the door sill (144b: p177).

Grissom was lucky that he had already unstrapped himself from his couch after landing. Realizing what had happened, he quickly hauled himself out of the sinking spacecraft to fall into the water without his helmet. There was a watertight seal near the neck of his space suit but, unfortunately, there were also a couple of valves for his air supply, which he had left in an open position. So, as he watched his spacecraft sink, he found himself sinking as well. Angry and scared, the astronaut started looking for help. One of the crewmembers of a helicopter saw the captain's predicament and threw him a "horse-collar" rescue sling. As soon as he was aboard the helicopter, Grissom put on a life preserver. He had had enough for one day.

The other helicopter, attempting to save Liberty Bell 7, was having difficulty. The helicopter could carry only 4000 pounds but now the water-laden spacecraft weighed 5000 pounds, threatening to pull the helicopter down with it. With no choice, the helicopter pilot let the spacecraft loose, allowing it to sink in waters more than 15,000 feet deep.

What was perhaps the most agonizing aspect of the spacecraft sinking is that 1000 feet away from the scene was an Air Force plane carrying an inflatable collar that pararescueman Master Sergeant Nick Kilmus said could have held up the spacecraft and kept it from sinking. But the Navy never called upon the Air Force for help and the sergeant could only watch the spacecraft sink (98: June 18, 1965).

The media reported the incident to the world, which was another indication of the openness of the U.S. space program. Although the tone of the articles about the mishap showed sympathy for Grissom, there were some people in private quarters who felt that the accident was a result of Grissom's carelessness. As Shelton puts it, Grissom had been on somewhat cordial terms with the press until that time, then he became "furious" after the sinking and antagonistic towards the media. Grissom

denies that the sinking affected him although he said the spacecraft was "the first thing I've ever lost in my life." Through the rest of his life, the fate of Liberty Bell 7 followed him.¹ Eventually, during Gemini 3, when given the chance to name that spacecraft for his second flight, Grissom chose "The Unsinkable Molly Brown" as his way of showing that he was not affected by the loss of his first spaceship. The NASA officials were not amused by his choice of names for Gemini 3 and they asked for an alternative. Grissom then suggested "Titanic." "Molly Brown" remained the name for Gemini 3. There are some people, such as Robert Gilruth, who believe that the name choice "shows how deeply it [the sinking of Liberty Bell 7] got to him" (48; 98: July 28, 1961).

As for Grissom's relations with the media, he describes his view in a book written by him but published after his death in 1967:

This whole thing [writing a book] may come as sort of a jolt to the press crew who've covered our country's space programs from the beginning. To some of them, I'm known as Gloomy Gus or the Great Stone Face because I tend to clam up at press conferences. But trying to field questions from a bunch of hard-nosed, experienced reporters is a lot tougher than sitting down in front of a typewriter" (61: p.xi).

Henry Still, coauthor of the book Starfall with Mrs. Grissom, comments in the book about Grissom, writing, "...spending time with representatives of the press [was something that] Grissom considered a waste of time, distracting him from more important work" (59: p62).

On the same day as the sinking of Grissom's spacecraft, he received a call from President Kennedy, something which was to become practically a standard procedure between all astronauts and their presidents in the future. Kennedy also had picked the day to sign a bill for NASA's expanded funds, not to be confused with his request of May 25. NASA was seemingly cursed with having good news announced

¹Grissom's best piece of evidence that he had not fired the hatch was the lack of a bruised right hand. The other Mercury astronauts who flew orbital missions with the explosive hatches suffered skinned right hands when the plungers kicked back after being hit: witness a photograph in Life, March 2, 1962, clearly showing Glenn with bruised knuckles, something that the cutline to the photograph explains.

on days when there was also some bad news, such as the announcement of Project Apollo on the same day when the first Mercury-Atlas launch blew up in 1960. There would be similar occurrences throughout the manned space flights to the moon.

When Kennedy made his remarks about the NASA bill, he also spoke about the open publicity around the mission. "It's significant," he said. "That this flight was made before the eyes of the watching world, with all the hazards that that entails." It was also a significant switch for a President who had not wanted the first launching of the Mercury series televised because of a fear of failure. Kennedy was learning the value of having an open space program (164: p27).

On July 28, 1961, Grissom's personal story appeared in Life. In that article, he gave his version of the sinking, which is almost identical to every other description he gave for other publications and writers. Maybe because of the mishap, Grissom's Life article seems more interesting than the one that Shepard had written and it may have been the first chance for the public to read what Grissom had to say about the incident, other than his official report, which had already been made public.¹ What Grissom wrote in Life appears to be a condensation of the official report, which is what Shelton used in his book. Following his article in that issue was a story about his wife's view of the mission. In total, there were just as many stories written about Grissom's mission as there had been about Shepard's flight. Two of the articles appeared in Life; two more appeared in Aviation Week and Space Technology, a technical magazine concerned with the world of aviation; two more in U.S. News & World Report; one in Time; and one in Newsweek (127: March, 1961-February, 1962; 98: July 28, 1961).

While the loss of his spacecraft may have affected him and some

¹Although coincidences run throughout NASA's history, Time was slightly prophetic when a footnote to the May 12, 1961 story about Shepard's flight pointed out the hazards of water landings by the astronauts. The footnote told of a Navy high-altitude balloon project that also landed on the water one week before Shepard's flight and that one of two Navy balloonists participating in the mission drowned when their gondola sank.

others, it did not interfere with the Progress of Project Mercury but accelerated it somewhat. The NASA officials considered that MR-3 and MR-4 had gone so well that they cancelled the remainder of the Mercury-Redstone flights, MR-5 and MR-6 after some prodding by the astronauts. This meant that the next flight would be an orbital mission. All hopes of that mission, planned for three orbits, beating the Russians at a multi-orbit record were dashed on August 7, 1961 when Russian cosmonaut Cherman S. Titov successfully completed a day-long, 17-orbit flight. As was becoming the habit of NASA, the space administration also had an announcement--that the earliest date for a U.S. manned orbital mission had slipped back to January, 1962. A third announcement that day came from Congress, which was better than what either the Russians or NASA had said, as far as U.S. space-watchers were concerned. Congress had approved \$1,671,750,000 for NASA's 1962 fiscal year. It was a significant jump for NASA. In 1958, it had received only \$220 million; in 1959, \$325 million and in 1960, between \$600-700 million. Now, for the first time, NASA had cleared the billion dollar mark on its way to the moon. As Ed Diamond put it,. everything was "go, go."

FOUR MORE FOR MERCURY

On September 13, 1961, another Mercury-Atlas unmanned missile (MA-4) took to the skies for a successful three-orbit flight, making it only the second MA test out of four to succeed. Although the flight was considered so good that Gilruth made mention that a man could have survived it, there was no astronaut or even a chimp aboard. All that had been in the spacecraft was a "crewman simulator" designed to duplicate the life support requirements of a human if an astronaut had been there instead. During the press conference that followed the flight, Mission Director Walter C. Williams said that the next flight, MA-5, would not carry a man either but probably another chimpanzee. Some of the media apparently chose not to listen to Williams and started to speculate that a man would be on the flight that was scheduled for later that fall. NASA Administrator Webb did not like the idea of sending up another chimp and sent a note to the members of the STG asking if another unmanned shot was really necessary in light of the fact that the Russians had already orbited two men compared to none for the U.S. A Washington reporter took notice that Kennedy's advisors did not like the thought of another flight with a simian onboard because of possible Soviet and domestic ridicule (54: pp381-390).

To stop the rumors in the media, Paul Haney told the public that, "The men in charge of Project Mercury have insisted on orbiting the chimpanzee as a necessary preliminary checkout of the entire Mercury program before risking a human astronaut" (54: p397).

Meanwhile, halfway across the country from the Cape, NASA was moving ahead in another area. Six days after MA-4, Webb announced that NASA's STG would be moving its headquarters from Langley Field to Houston, Texas where a new Manned Spacecraft Center (MSC) would be built upon a 1000 acre tract of land leased to the government by Rice University.¹ Criticism, as can be expected in such a situation, popped up immediately with cries of political influence. This would seem plausible.

Vice-President Johnson was a native Texan as was the U.S. Representative

¹The value of the nearby land shot up after the announcement. Land which had been \$300 per acre was up to \$10,000 if it was near NASA grounds.

for Houston, Albert Thomas, who headed one of the subcommittees for the House Appropriations Committee; and Olin E. "Tiger" Teague of the House Science and Technology Committee which dealt with NASA, although his district was to the north and west of Houston. NASA denied that the site selection had been political. The official history of Project Mercury points out that the site near Houston was selected on ten points:

...availability of educational institutions and other facilities for advanced scientific study, electrical power and other utilities, water supply, climate, housing acreage, proximity to varied industrial enterprises, water transportation, air transportation and local cultural and recreational resources (54: p390).

The day after Webb made his announcement, members of the STG flew to Houston to acquire 100,000 acres of office space to temporarily house the STG until the new MSC was complete. When the STG left Langley it reassembled in Houston, if reassembled is the word, because the Manned Space program's headquarters was scattered throughout eleven buildings in Houston's east side and maps were a necessity for anyone trying to find their way around the headquarters. Eventually, NASA set up an information relocation center in its Houston PAO in order to assist the STG employees who were relocating to Houston from Langley (54: pp390-392).

For a while it was a tale of two cities. Newport News, Virginia was bitter about the loss of a major industry and Houston was welcoming the new organization with Texas-style celebrations. Local business leaders of Houston sent representatives to Virginia to expound upon the virtues of the Texas coast to the employees at Langley. The first office of the STG would move into Houston in October, 1961 and it would be another year before the move to the temporary quarters was complete. Many more months would pass before the new facilities southeast of the city were finished and the NASA employees could transfer to them (54: pp390-392).

There were some people in Texas who tried to make the most of NASA's coming to Houston. Houston real estate man Frank Sharp offered the astronauts \$245,000 worth of free homes located on the western side of Houston. This seemed to be a nice gesture on the part of the Houston

Home Builders Association. The astronauts' lawyer, C. Leo DeOrsey, tried to figure out a way to handle the deal. Glenn says:

Leo stewed over this one for a couple of weeks trying to get some official advice. He couldn't get it, so he accepted the offer on our behalf and then the roof fell in and everyone who had been noncommittal jumped on Leo's back (178: p46).

There are a couple of explanations as to why the deal fell through. One suggestion is that Glenn caused the collapse of the offer. He had been in Washington to try to explain the gifts to some NASA executives and it appeared that he was winning the case for the astronauts. But there was one item that did not appear to be logical; the new MSC was on the southeast side of Houston, about 30 miles from the Sharpstown subdivision in which the houses were located. What then, one NASA official asked of Glenn, did the astronauts intend to do with their new homes? Glenn answered, "Well, we don't intend to live in them because they're too far away from the Center. We'd reckon to keep them a year and then sell them." The NASA officials were not too impressed with Glenn's statement (178: pp146-147).

Another possible reason for the collapse is given by writer Henry Simmons who says that a Washington reporter, John Finney, "got hot about the deal, called the White House and asked, 'Aren't you concerned about this?' Later it was reported that, 'The White House is looking into the deal,' and it fell through" (150).

Whatever caused the fall, the astronauts had to refuse the offer for the free homes, worth about \$35,000 apiece. As Shorty Powers put it, the astronauts were still very naive in the business world and they had to be protected. But later, they would strike out on their own and at least one would become a millionaire by investing wisely the money earned from Life (178: pp146-147).

The move to Houston was not the only thing on NASA's mind as other areas continued to function. As Haney states it, Project Mercury was virtually run out of an airplane during the moving process. On October 27, 1961, a Saturn I of von Braun's creation was launched. It stood

163 feet tall and let loose 1.3 million pounds of thrust when its engines were ignited. By comparison, the Atlas being used for Project Mercury had about a million pounds less thrust than did the Saturn I. Because the noise of the launch had been anticipated in advance, the Audubon Society of Brevard County, Florida (surrounding the Cape) had asked the Air Force to warn away some rare birds which nested around the launch pads. A few days before the launch, some Air Force men managed to flush out 21 of the rare spoonbills, a type of stork, and the Audubon Society expressed its appreciation for the cooperation. The noise was also anticipated by the humans and the Air Force public affairs officers at the launch site, Lt. Colonel Ken Grine and Major John Whiteside, passed out earplugs to the members of the media who had come to watch the launch (54: p398; 97: p188).

The media surmised that a descendant of the missile that left the Cape that October 27 would someday be the launch vehicle to carry men to the moon. But that was still many years away and was still a dream to many people (54: p398).

Two days after the Saturn I was launched, three chimpanzees and 12 medical specialists arrived at the Cape to join the colony of two other chimps and their handlers who were already there. Of the primates, the one called Enos was the one selected to make the venture on MA-5. Enos' qualifications read almost like that of an astronaut as Captain Jerry Fineg, Chief Veterinarian for the mission, described Enos as a "quite cool guy and not the performing type at all." Enos had not come to NASA via the circus route as did the other chimps and he was capable of handling more complex procedures than Ham of MR-2 fame had been able to accomplish. Enos was to ride in a Mercury spacecraft in a pressurized couch-container of sorts that had a series of levers and lights within its confines. The tasks for Enos were four-fold: the first problem was one where he had to turn off a series of lights with two levers, otherwise he would receive a series of mild electrical shocks; the second was having to pull a lever no sooner than 20 seconds after seeing a green light so that he could

receive a drink of water, but no shocks were to be given if Enos reacted too quickly, his punishment would be only a lack of water until the test repeated itself a short time later; the third portion of the tests also had no penalty but the chimp could receive a banana pellet if he pulled a lever exactly 50 times; and the fourth test would be to select the odd sign from groups of circles, triangles and squares in order to avoid receiving shocks. These tests were not to be conducted continuously to allow Enos to relax for short periods during the flight (54: p401).

On November 29, 1961, Enos was launched atop MA-5 for what was supposed to be a three-orbit flight. However, some of the automatic flight controls began to act erratically after an essentially good first orbit (Enos nor any other chimp had control over the spacecraft) and Flight Director Chris Kraft decided to bring Enos back down at the end of the second orbit (54: pp402-406).

Enos was possibly happier than any of his ground-bound human controllers about coming back to earth early. His psychomotor tests had been running well for the flight but the fourth set of tests started to fail after the first orbit had been completed. Because of that man-made error, Enos was shocked on the bottom of his feet at least 79 times even though he pulled the correct levers. As John Barbour of AP writes, Enos went a bit crazy because of the malfunction and almost tore his couch-container apart. But this is not the reason why Kraft ordered the space flight cut short by an orbit. The medical records show that Enos' body temperature may have gone up anyway because of his frustration, not because the environmental controls were acting up too. Whatever was the case, Enos was plenty mad when he returned to earth. "Enos was not nasty beforehand," remarked one NASA official but when Enos was returned to the Cape from the recovery area, he was contained in a strong cage and not brought out for the media to see for some time, according to Barbour. When the reporters started clamoring to see the chimp, the military officers who had brought him home seemed reluctant to fetch him. Finally a sergeant was ordered to bring Enos out into view. When Enos was

gingerly brought out, the members of the media applauded and smiled at what one reporter called a "four-legged, hairy, ugly thing...showing his teeth." The fact that Enos was showing his teeth possibly scored a coup for the PAO as the reporters thought Enos was smiling. Actually he was ready to amputate the closest human hand held near him. Fortunately, nothing like that happened. The press described Enos as being better behaved than had been Ham, who had become upset after his flight when the flashbulbs and lights of the television crews had frightened him, causing him to become so unruly that it took three handlers to calm him. But Enos just "smiled" through his session with the press, convincing everyone he was "happy." It was good public relations for NASA (54: pp406-407; 8: pp37-38).

At the press conference following MA-5, the media sat through the technical descriptions of the mission and then a reporter asked: who will fly the MA-6 mission? No one thought that there would be an answer since Gilruth announced the names of the previous astronauts just before their launches. But this time Gilruth told the reporters that Glenn was the prime pilot for the next mission and Scott Carpenter was the backup pilot. As if that was not enough, Gilruth then said that Deke Slayton was the main astronaut for the MA-7 mission and Wally Schirra would act as the backup astronaut in case Slayton could not go. It was a welcome change from the previous method of announcing who was going on what flight but, to a degree, it also brought along what Gilruth had initially feared before Shepard had been launched: "pressure and hoop-lah" by the media (54: p407; 48).

According to writer Tom Wolfe, the astronauts did not know how the public was going to react to Glenn's flight. The men thought that Shepard's flight was the mission to have a lot of public attention, not Glenn's. But Glenn saw things differently. In Life he wrote, "I knew the pilot of a successful orbital mission was going to get a lot of attention." Because of this, Glenn was concerned about the attention he was receiving and complained to President Kennedy, saying that the

attention which the nation had focused upon him was distracting the public from the real essence of the flight, that is, the scientific value of MA-6. But the President played down the personal attention that the astronaut was receiving, telling the colonel that, in the public's eye, Glenn and the flight were inseparable. Glenn tried to water down the importance of his flight in relation to the others by saying that MA-6 was nothing more than a "Look, ma, I'm here," kind of thing and that the following flights would be more important. This and other attempts to shift the spotlight away from Glenn failed (8: p44; 98: March 2, 1962; 131: January, 4, 1973).

Glenn was not the only person who realized how the media was handling his flight. So did Colonel Powers, then head of Project Mercury's PAO. Several months before the original launch date, Powers and his staff had prepared a "Public Information Operating Plan," which gave estimated dates by which certain parts of the mission were to be accomplished. Powers then advised the members of the media which areas they might want to report as sidebars to their stories about the mission. This also gave the reporters a better understanding of the mission so they could pass that information along to their audiences. The Mercury PAO also had news release handouts ready for the media as well: these covered practically all parts of the mission such as what the astronauts would eat for breakfast on the morning of the launch as well as a technical description on how the attitude controls of the Mercury spacecraft worked (54: p419).

On December 5, 1961, NASA Headquarters sent notice to magazine and newspaper editors that the space administration was ready to accommodate up to 400 reporters who desired to cover the launching of Glenn from Cape Canaveral. The exact date of the launch was not mentioned in the notice and the only indication of when it would occur was that the launch would happen "either late this year or early the next." On December 7, 1961, NASA dampened everyone's spirits by announcing that there was no longer hope that MA-6 would be launched before New Year's Day. That announcement

came as a bit of relief to some though; the personnel of the recovery forces were then allowed to go on Christmas leave, something that they had been worried about if the flight was attempted during December (54: p419).

It was also in December that D. Brainerd Holmes, in charge of the Manned Spaceflight Office in NASA Headquarters in Washington, put Apollo on a timetable for development and created a change in the way the PAO was operating. From this time on, the public relations of NASA would be run by an Assistant Administrator for NASA's Public Affairs. Under him would be the Office for Public Information and the Office of Technical Information and Education. Below the Office of Public Information would be the Public Affairs Office for Manned Spaceflight. There, the direct lines of control stopped. At each of the nine NASA centers, a Public Affairs Office was set up under the immediate control of the centers' directors; and under each PAO at the centers would be a Public Information Office. The PAOs and PIOs of the MSC, Marshall Space Center (formerly the Redstone Arsenal at Huntsville), Cape Canaveral and Goddard Space Flight Center (in Greenbelt, Maryland near Washington, D.C. which provided support of manned missions as a backup control in case Langley could not handle the missions for some reasons. Later Houston would control the missions but that would not be until 1965) were under the indirect control of the PAO for Manned Spaceflight in Washington. For a chart illustrating the relationship of the offices, see Appendix A (67).

While the Public Affairs of NASA was reorganizing itself, Powers was moving his PAO to Cocoa Beach to establish a news center off the military premises of the firing range. Some of his men were to pass out fact sheets to the newsmen, others were to photograph the launch and other aspects of the mission and still more were supposed to take technical questions from the reporters and ferret out the answers for them. At the news center, advisories were also prepared for the newsmen--these reports gave the correspondents the progress of the mission as the time for the intended launch came closer. But instead of the anticipated 400 reporters,

up to 600 appeared, many clad in colorful beach attire. To some people, the atmosphere around the launch was like a circus; the reporters were tanning themselves on the beaches and interviewing important officials connected with the flight, gobbling up whatever Powers reported and the result was thousands of words per day pouring from the Cape to the rest of the world (54: p420).

Reporters came not only from the U.S. but also from 13 other countries. The Voice of America was preparing to broadcast the flight in 36 languages throughout the world and it would also prepare a film of the mission for distribution through 107 countries in 41 languages. Never before had a scientific event been covered in such fashion.

On January 23, 1962, the launching of MA-6 was postponed on a day-to-day basis because of the weather. Then the people gathered on the beaches on the morning of January 27. At 20 minutes before ignition, Walter Williams, the mission director, cancelled the launch because of the weather again. The new date was now February 1. The media held on and on January 30, a defect was found within the missile systems and the earliest date possible became February 13, which was announced to the media on January 31 (54: p420).

The reporters were at wits' end because of the delays. They had gone to the Cape expecting to be there only for a short time and did not think about doing any real in-depth stories. As Powers recounted years later, the delays proved to be beneficial. News about what hat Glenn's wife, Annie, was wearing were beginning to become old and the reporters found themselves finally having to understand the technicalities of the mission in order to provide stories that would satisfy their superiors. Another reason for the improved stories was so that the reporters could justify their expense accounts while on somewhat of a Florida vacation. For many of the newsmen, the two-week wait was too long and they left the "sick bird," as Walt Williams called it, in the care of its technicians (54: p420).

Many of the media were upset by the delay for another reason. It

was costing them money. Estimates for each day's delay cost the broadcasters about \$50,000 in addition to the \$2 million that they had already spent. For the print media, the costs were not so great but they could be crippling as well since their losses were about a third of what the broadcasters were having to spend. It would not have been surprising to have heard that a publication folded because of the expenses incurred while waiting for the shot (54: p592, fn32).

In Arlington, Virginia, across the river from Washington, D.C., a small ruckus had taken place near the Glenn home on January 27. Inside the Glenn household with the invitation of the family was Life's Loudon Wainwright, who the Glenns thought to be more of a friend than a writer, although having him there also helped to fulfill the terms of the Life contract. When the news of the cancelled flight came through the media, the Glenn family felt a sense of sadness along with the rest of the nation. So did Vice-President Johnson. He wanted to drop by the Glenn home and express his consolation to the Glenn family in a time of disappointment and frustration. The Vice-President wanted to be accompanied by a television crew to film the event but one thing was in the way--the writer from Life. Johnson wanted Wainwright out (no doubt, so did the television people) and Mrs. Glenn said no, Loudon was her friend and he was going to stay put. Wainwright, seeing the situation that was developing, offered to go but Mrs. Glenn said no again, he was a friend of the family's and he should not be pushed out by anyone, no matter who it was. She also pointed out that the contract with Life gave him another reason to remain in the house. There the Vice-President sat in his limousine a couple of blocks away, waiting for the Life writer to leave. Intermediaries did not take Mrs. Glenn seriously because of her lisp but she held her ground, keeping Wainwright in the home, which was surrounded by other reporters on the outside. Johnson's aides, seething by this time, bent some arms at NASA and had a call placed to Glenn, who had come down from his spacecraft after being in it for five hours. As Glenn was having the suit taken off him, he took the phone and talked to his wife about the problem.

Then, he responded in a way that must have sent Johnson's assistants climbing the walls in anger. "Look," Glenn told his wife. "If you don't want the Vice-President or the TV networks or anybody else to come into the house, then that's it as far as I'm concerned and I'll back you all the way" (131: January 4, 1973).

Johnson retreated from Arlington, leaving Wainwright in the Glenn home. For the time being, it was Life--1, Vice-President Johnson--0. Then NASA Administrator Webb jumped into the fray. He was incensed about Wainwright's presence in the home and called Glenn. First, Webb told Glenn, the Vice-President wanted to pay a private visit to Mrs. Glenn to express his sorrow about the postponement (which seems odd in the light that Johnson had television crews ready to march in with him) and, second, if there had been an accident at the Cape, the Life crew (a photographer had been along with Wainwright) would have been recording the Glenn family in a moment of anguish, which then might have been spread across the pages of Life for the world to see. Webb wanted an explanation. Glenn fired back that Wainwright and the photographer were friends of the family and that, if the Glenn family wanted them to be there, the men from Life could stay there. Webb then called Life editor C.D. Jackson and stated his strong conclusion "that it was not in the public interest to have a Life writer and photographer in the Glenn home during the flight." Jackson also fought back with an explanation that Life had been "pushed around" by NASA and that the magazine had not received its money's worth (how a person can figure out what Life estimated it should receive for its dollars is a rather hard thing to calculate unless one uses column inches, perhaps). Jackson also stated that Life had done everything "above the board and in the open, and the only reason that Life had the contract was because [the editors] were willing to put the money on the line." Jackson persisted, saying that NASA had constantly made the astronauts available "to the press, for television appearances, etc., in such a way that everything had been in the public domain with practically nothing left for Life. The Administrator backed down. The score was now Life--1,

Webb--0 (26: May/June, 1973).

Jackson's last point is something to study. According to the policy of May, 1959, NASA had the right to disclose everything about the public aspects of the missions and to make the astronauts available to the media for interviews while they were at work and at press conferences. Indeed, that left little for Life to handle. But Life was the one who said it had the "exclusive" stories, not NASA. NASA had a policy that the Life articles which were written by the astronauts could not contain anything that had not been officially released about the technology of the missions since the mechanics were not personal information. Because of this, the "personal" stories were held up by NASA (but not those written by Life's staff writers) until after the post-flight press conferences so that Life could not scoop anything that might have been said by the astronauts at those press conferences. But in the situation between Wainwright and Vice-President Johnson, Editor Jackson was apparently in the right; Wainwright had been invited to the house as a friend and a reporter (which was Glenn's viewpoint) and, thus, did not have to be approved by NASA, only the Glenn family.

After the flight had been cancelled on January 31, Glenn, like the reporters, went home for a few days with his family. While in Arlington he stopped across the Potomac and visited President Kennedy, answering many "semi-technical questions about the plans and systems for the orbital flight" (54: p421).¹

When February 13 rolled around, the media apparently still did not believe the launch was going to take place as the weather was bad again. Only one-third of the previous number of newsmen bothered to assemble that day. For their trouble, they were given a briefing by Powers, who had been joined by Haney from NASA Headquarters, two Air Force officers who were connected with the launch operations of the Atlas launch vehicle and a representative from McDonnell Aircraft Corporation, which manufactured the spacecraft. The weather continued to be inhospitable for a launch until February 19, when the skies cleared. Immediately, the

¹It is not believed that Glenn visited Vice-President Johnson during this return visit to Washington, D.C.

operations crew began a countdown that would last for just over ten hours.

At 6:03 a.m. on the morning of February 20, 1962, Glenn entered his spacecraft, which had been named in a family contest as Friendship 7. Somehow it suited Glenn's image. Miles from the gantry and the Atlas stood 50,000 spectators on the beaches; some had been there since the first attempts and had organized temporary trailer towns complete with mayors of some sort. Across the nation, another 100 million people watched their television sets, more than twice as many as had watched Shepard. The reasons for the increased number of viewers may be that the long wait had aroused the national interest or that the media had done a good public relations job on the man that many of them had been backing for so long.

Glenn had been at the top of the missile before and wondered if this time the launch would continue until the end. He remembered years later that he waited for the voice of Walt Williams to come through his headphones telling him the mission was postponed once more. But Glenn never heard Williams that day. Instead another official told Glenn, "We're on automatic sequence." According to Glenn, "I was beginning to get a little surprised. This thing was getting serious. The initial reaction was to reply, 'Wait a minute, let's not carry this thing too far. If we're not careful this thing is liable to light....'" (117; Kennedy Space Center Story: p208).

At 9:47 that morning, the wisps of liquid oxygen that shrouded the missile were replaced by the flames of power which hurled Glenn into orbit. As the missile climbed, Shorty Powers, back in his position as "The Voice of Mercury Control" apparently forgot about the now-old "AOK" acronym and cheered out for the public to hear, "Glenn reports all spacecraft systems go! Mercury Control is go!" (54: p426).

As he streaked around the world, Glenn turned his spacecraft about to face backwards and became the first American to witness a sunset while flying higher than 100 miles. Mercury's official history reads, "Awed, but not poetically inclined, the astronaut described the moment of twilight simply as 'beautiful.'" In the shadow of the earth, Glenn

looked for stars, found them and also a bright spot on the earth below-- the citizens of Perth, Australia had turned on their lights for Glenn to see. As he appeared over Hawaii, the spacecraft's attitude controls began to suffer the same malfunction that had forced Enos' MA-5 down early. Now came the chance for man in space to prove his worth (54: p426).

Meanwhile, on earth at Arlington, Virginia, Loudon Wainwright sat with the Glenn family again with Life photographer Michael Rongier at his side. Five thousand people gathered in New York City's Grand Central Station to watch a giant television screen showing aspects of the mission. When a department store in Atlanta had opened for business, 150 people stampeded inside, not to buy goods but to rush to the television sales area so they could watch the launch. Brandeis Department store in Omaha, Nebraska had no business as there were no customers. It was nearly the same everywhere (8: p47; 26: May/June, 1973).

It was during Glenn's first orbit when the ground controllers noticed that a signal coming from the spacecraft was indicating that the heat shield was loose, meaning that it might separate upon reentry. Glenn was not told about this possibility yet he became suspicious when he was asked by every ground station that he passed over to make sure that the landing bag deployment switch was turned off. At the same time, he was occupied with keeping the spacecraft in the correct attitude during the flight, which had been a problem with Enos's Mercury spacecraft. Although Glenn was not informed about the trouble with the heatshield, the rest of the world knew because of television and radio (54: p430).

The second orbit was performed without any further difficulty and during the third orbit there was even some time for Glenn to joke with Gordon Cooper, who was stationed at Murchison, Australia tracking station. Glenn told his ground-based partner that the three orbits should qualify him for his Marine requirement of at least four hours of flight per month. Then, when Friendship 7 passed over Hawaii he received an order to put the landing bag deployment in the automatic mode and, if a certain light came on, then Glenn was to retain the retro-rocket package

¹The trouble with the attitude controls was totally independent of the trouble with the deployment of the landing bag.

in hopes that its straps would hold the heatshield in place until aerodynamic pressure would take over after the straps were burned away during the fiery reentry. Only then did Glenn, through his own calculations of the orders which he had been receiving in relation to the deployment of the landing bag, realize the situation (54: pp429-431).

Upon hearing the news of the possibly-loose heatshield, Senate Majority Leader Mike Mansfield (D-Montana) dismissed what was left of the Senate and retreated to hear further news about the mission's progress (8: p52).

Over California, the retro-rockets fired as programmed and the astronaut felt as though he was almost going back to Hawaii because of the "kick" he was given. Upon feeling the first sensations of gravity beginning to work on him, Glenn ejected the retro-package and a strap and other flaming chunks of the package flipped by the window of the spacecraft. As he entered the atmosphere, the superheated air became ionized through natural process and cut the radio communications. The world waited because no one knew what the outcome was. Eventually, Glenn's voice came through to Mission Control: "Boy, that was a real fireball" (54: pp431-432).

Friendship 7's parachutes popped out at 28,000 feet instead of 21,000 feet but that was okay with Glenn, who had begun to think that his spacecraft might begin to tumble in the air of earth. A few thousand feet lower, the heatshield finally let loose, as it was supposed to do, and the landing bag dropped into place to cushion the shock of the spacecraft hitting the water. After the spacecraft hit the water, 40 miles short of its intended recovery zone, it was brought aboard the Navy destroyer, Noa, with Glenn still inside of the spaceship. Warning the sailors to stand clear, Glenn hit the plunger of the hatch mechanism, receiving bruised knuckles in the process, and the hatch blew off the side of the spacecraft, allowing the Navy men to help the astronaut leave his dark Friendship 7. Outside of the spacecraft, Glenn received a phone call from President Kennedy. The President had to shout, as did Glenn,

because of the bad connection and, when Glenn thought the conversation was finished, he hung up, leaving Kennedy still talking until he realized that the Marine colonel had left the line. Then, he hung up his phone in the Oval Office (149: p289).

The millions of people who had been watching their television sets through Glenn's recovery now turned them off but the interest did not die there. The flight was only the beginning of a love affair between John H. Glenn, Jr., and his nation. When the astronaut was heading for Grand Truk Island, postmasters, who had received sealed packages from the Headquarters of the U.S. Postal System earlier that year, now received orders to open those packages and sell the contents. Overnight, stamps showing Friendship 7 bathed in sunlight on one side above a blue and gold world appeared on envelopes across the U.S. Congratulations poured in from all nations. The usually staid Tass gave Glenn a 71-word description for its readers. Radio Moscow, after blasting the U.S. for detaining better relations between the Americans and Cuba, told Russian listeners that Glenn had orbited the earth and added a footnote that his' flight came ten months after Gagarin had done the same thing. Yet the Russians jammed the Voice of America which could have told the Russians the same news live during the mission (8: pp54-55).

In India, the national election took a back seat to Glenn's flight which became the prime interest of the information disseminators there. South American newspapers reported that the space gap was closed or almost closed. The African press expressed a sense of relief that the balance of power had shifted towards the United States. In Europe, the press mentioned that the U.S. had kept the entire flight free of politics and had not used it to try to sway neutral countries nor those opposed to the U.S. Krushchev sent word that he would like to see a joint U.S.-Russian coalition work on space travel, which Kennedy welcomed (54: p434; 8: p57).¹

¹It was not until May, 1972 that President Richard Nixon and Russian Party Chairman Alexei Kosygin signed an agreement to perform a joint mission. That mission, called Apollo-Soyuz, flew July 15-24, 1975 and involved three American astronauts and two Soviet cosmonauts.

At home, the magazines and newspapers were giving the astronaut wide coverage. Many magazines praised not only Glenn but the leadership of the Mercury program. Aviation Week and Space Technology, while praising the guidance of Gilruth, blasted Life and the astronauts by writing about the "leaders of this technical team who did their work on civil service pay and sold no serial right to national magazines" (10: February 26, 1962).

To some later writers, the flight of Friendship 7 seems to have marked the end of an era. Tom Wolfe describes it best: "Glenn's flight was the peak of One Nation under God and REACH FOR THE STARS.... ...[his] flight was a unity of brotherhood, space exploration, purity, national unity, spirit of adventure, uplift of the American soul..." (131: January 4, 1973).

What Glenn had visualized before the flight was now coming true; he was receiving a lot of attention. On February 26, he and his family journeyed to Washington, D.C., where, with Vice-President Johnson (who apparently had forgiven or respected Mrs. Glenn for standing up to him) alongside of them in an open car, they travelled in a parade for which 250,000 people turned out, despite a cold rain. After the parade, Glenn went to Capitol Hill. As he entered the joint session of Congress being held especially in his honor, the first astronaut to orbit the earth was introduced by Fishbait Miller, the doorman of the Senate, who called out "Mr. Speaker, Lieutenant Colonel John H. Glenn Junior of the United States Marine Corps." Glenn started to speak and noticed his 15-page speech was out of order. Quickly he found the first page and, as he described the event many years later, "the first time anyone in the audience started to clap, I let them have full rein until I got the pages reorganized." For 20 minutes Glenn spoke to the hushed audience delivering a speech that had been written by him and other members of his family. He swept his eyes through those gathered in the galleries and saw people who had worked on the flight. He introduced them to the legislators. At one point, he did not want to go on with his speech until

he saw that Walt Williams was properly introduced. Tears glistened in the eyes of many there and when Glenn finished his speech, applause rained upon him from all who were present. When Glenn left the Capitol Halls that day, he was destined to return but not as a visiting astronaut (98: March 9, 1962; 54: p435; 8: p58; 117: Kennedy Space Center Story, p210).

On March 1, Glenn and his family, with Johnson still in attendance, went to New York City where the mayor had proclaimed that day to be "John Glenn Day." At Glenn's invitation, the other astronauts and their families came along too. The ticker tape parade was like none before. Tons of confetti poured down on the men who rode in the convoy of open convertibles. The photographers of many magazines could not get a clear shot because of the paper that filled the air. As Tom Wolfe writes, the astronauts were "bowled over" by the people of the Big Apple. The astronauts had not expected such a turnout of people who were crying, waving flags and hanging over the expressway railings to get a glimpse of the men. Some of the astronauts were impressed when they looked at the curbs and saw them filled with shoes, shoes, shoes. That night the entourage went to see the play "How to Succeed in Business Without Really Trying." When the astronauts entered the theater, the audience received them with a standing ovation. The next surprise came when the astronauts realized that the lines of the show had been rewritten here and there with references to their space flights. Of that day, Wolfe writes, "That parade for John Glenn was the final act of innocence for America;" after that, the nation edged into the "police action" in Vietnam, which would eventually absorb the entire nation in a mood far different than the one in which Glenn had left it (131, January 4, 1973; 54: p435; 98: March 9, 1962).

The next day, Glenn went to an informal reception held in his honor at the United Nations. Following that, he returned to his hometown of New Concord, Ohio, on March 3 and, in a town which usually had a population of 2300 people, 75,000 eager fans greeted the astronaut and his wife.

As Annie Glenn observed, "It doesn't seem like he's my man. Now he's everybody's hero."

Life put on the works for Glenn. Matter of fact, it had been doing so since its December 8, 1961 issue when there was an article about Glenn being the first American chosen to orbit the earth which was followed by another issue (February 2, 1962) which contained a biography of the new American "hero." In the March 2, 1962 issue of Life, a ten-page article by Wainwright of what had happened in the Glenn household during the flight was published along with photographs of the mission. On March 9, 1962, Life came out with Glenn's personal story of the flight of Friendship 7. That issue also contained stories about his trips to New York City, New Concord, to Capitol Hill and an article about his daughter, Lyn. Because of his flight, Glenn and the other astronauts earned another \$25,000 in their bank accounts from the vaults of Life.

If Al Shepard and Gus Grissom had been considered to not be too receptive to NASA's public relations, Glenn was just the opposite. As writer William Shelton spoke about him, "Glenn was perfect for Shorty Powers." The head of the Mercury PAO got Glenn out of the astronaut office and into the field on public relations trips across the country. Although these trips were to help bolster the image of NASA, they were unintentionally forming the hero image of Glenn as well--something which the other astronauts did not appreciate. Wally Schirra came out publicly to state that Glenn should quit his appearances, get back to his job at NASA and return to being an astronaut rather than some sort of public figure (144; 159: October 25, 1968).

Glenn never felt as though he was that much of a hero to anyone. A few years after his flight he was interviewed by the Italian journalist Oriana Fallaci. He told her:

Heroes, superman, nonsense. I feel absolutely normal myself, absolutely ordinary. And, consequently, I really cannot understand what people see in me that's interesting. Like when they ask me: how does it feel, John Glenn, to be a star? I truly don't feel like a star. Yet it seems inevitable that they should think of me

as a star, a superman, a hero.... The fact is that people are always fascinated by anything new, new work, new explorations, especially if one risks losing his life by them (41).

On March 14, 1962, in a conversation with Administrator Webb, President Kennedy seemed to agree with Schirra that the parades had to stop. In a memo, dated March 21, 1962, Webb told Gilruth, among others:

In a discussion...with President Kennedy, he made it very clear that he felt that in our space program we were running behind the Russians, that he hoped we could preserve the public impression that our astronauts are at work for the next flight with all their energy and vigor and that the parade celebrations and so forth were behind us. He expressed some concern that even an /astronaut's/ appearance such as that at Gridiron would not be regarded as a special occasion, and approves specifically the actions we are taking with the Department of Defense to establish procedures under which schedules and arrangements are to be submitted through channels and agreements reached in line with the policies of the two agencies.

I explained the policy we have with respect to technical meetings, with a few efforts at the motivation of youth towards science and technology and careers in related areas, and also the NASA-sponsored technical meeting at Seattle in May. I also pointed out that in order to preserve the appearance of the whole program and the group, we had suggested Shepard for the magazine-publishers meeting and Grissom for the editorial writers, and the President agreed this was O.K. but hoped we would hold all of this to a minimum and do no more of it unless it were absolutely necessary.

In discussing the program beyond the three-orbit Mercury, I pointed out we should try to set up a governmental program of insurance or other recognition of the hazards and nature of this program and thereby preclude any further arrangement such as the contract with Life magazine. The President authorized me to prepare a program that would take care of the kind of things the Government should do in this case and agreed that we should avoid the appearance that the protection of these men and their families had to be taken care of by some private arrangement.

Therefore, I hope Gilruth and Cox /the author has been unable to determine who Webb is referring to here/ can meet at some appropriate time to consider the arrangements for the next astronauts group and make recommendations. I am particularly anxious that these arrangements be carefully examined by both Dr. Dryden and John Johnson /NASA's General Counsel/ to be certain that we foresee all opportunities and problems and establish in advance procedures for handling these.

Jim Webb (172).

This memo brings up the subject of insurance and seems to imply that Life was supplying life insurance for the astronauts, which, for those who have studied the relationship of Life and NASA will know, did happen but actually at a later time. Until 1963, no publications offered the astronauts any kind of insurance. What Webb is indicating here is that the money given to the astronauts by Life offered the men a means to buy greater premiums than they could have other bought with the pay of the their regular military salaries. Jack Riley, of the PIO in Houston, and Haney state that, during those early years, the astronauts had the option of buying government insurance which was offered to them under the same terms that any pilots in the military were offered.

In the meantime, another storm of sorts was brewing at NASA. On the day after Webb had met with Kennedy about the aforementioned memo, NASA made an announcement that Deke Slayton would not be making the flight on MA-7 because of an "erratic heart rate." He had been replaced by Scott Carpenter (which seems odd since Wally Schirra was Slayton's backup pilot). The announcement caught many journalists off guard, especially those who had been producing stories about Slayton's background for their publications. Immediately, the questions arose as to how any astronaut, touted to be the perfect human, could have a heart condition and not have it known by the doctors. To further complicate the matter, Gordon Cooper threatened to quit the astronaut corps if Slayton was grounded. Slayton was not grounded from flights in the earth's atmosphere but was prevented from participating in space flights (54: pp440-441).

Actually, the doctors had known of Slayton's condition for some time as it had been monitored by doctors as he whirled around in a centrifuge in August, 1959. Worried about the condition in 1959, the astronauts' physician, Dr. William Douglas, consulted with the Chief of Cardiology Service at the Philadelphia Navy Hospital and was assured that it would not affect Slayton during his duties as an astronaut. Apparently Douglas was not totally satisfied and he next went to the Air Force School of Aviation Medicine with Slayton where a member of the staff there voiced the opinion

that Slayton should not be assigned to a flight and who wrote a note to Webb years later stating that view. In the fall of 1959, Douglas informed Gilruth about Slayton's heart who, in turn, informed NASA Headquarters. Douglas then informed the Air Force Surgeon General but was told by the Surgeon General's office that he was to take no action. Slayton's file became a dormant case and, in November, 1961, the captain was selected for MA-7 (54: pp440-441).

In the first part of 1962, Webb remembered the memo from the Air Force doctor at San Antonio and he ordered a review of the case. Dr. Douglas convened a board to look over the situation and they pronounced Slayton fit for the flight. Then Webb referred the case to three nationally known heart specialists who said that if an astronaut with a heart that did not "fibrillate" was available, then that astronaut should be used for the mission (54: p441-442).

At a later press conference, Slayton refrained from naming the three civilian doctors who had suggested that he be replaced. Douglas then returned to the Air Force when his three-year tour of duty with NASA was up. Some newsmen thought that this was an act of bitterness--they had known that Douglas had been pulling for Slayton all of the time and did not know that the doctor had sat in on the reviews concerning the astronaut. Although he was taken off the roster for flights, Slayton retained the title "Astronaut." In September, 1962 he became Coordinator of Astronaut Activities at MSC. He never did lose his desire to get into space. Even a year-and-a-half after Mercury was finished and Project Gemini was underway, Slayton still had his hopes, which he told to a newsman: "I've never been grounded and I'm not now. I still hope to get my chance to go beyond the atmosphere" (54: p442).¹

While the Slayton problem was being handled by NASA, officials of the Kennedy Administration were taking a look at the Life contract.

¹Slayton finally flew on Apollo-Soyuz, July 15-24, 1975, as the Apollo docking module pilot for the mission.

Theodore Sorenson writes in his book Kennedy that the President "did not approve of the rights granted them by his predecessor to make large profits through the exploitation of their names and stories while in military service" (26: May/June, 1973).

Apparently Kennedy forgot that he had been in the government's service as a senator from Massachusetts when he wrote his book Profiles in Courage, which, no doubt, brought some money into the senator's pocket from the sales.

On April 17, 1962, Walter Sohler, Assistant Deputy General Counsel for NASA, wrote a memo about a meeting that day between several officials of NASA and the Department of Defense. It read in part, "It is NASA's intention not to approve contractual arrangement of the Life magazine variety in the future.... In this way, no segment of the press can be said to have been placed in a privileged or exclusive position" (26: May/June, 1973).

That memo may have induced some heart attacks in the hierarchy of Time, Inc., but the policy stated by Sohler never went into effect because of problems that could not be handled well. Some technicians at the Cape earned more than the astronauts. There were some suggestions that the astronauts could be released from the military and become civilian employees like X-15 pilots Neil Armstrong and Joe Walker, who were then receiving \$16,000 and \$18,000 a year respectively. But those incomes did not compare with what the current astronauts were earning. Glenn was the highest paid at \$13,800 a year for a lieutenant colonel with flight pay but he had also earned \$60,000 from Life by that time and stood to earn another \$11,000 when Mercury was finished. Thus, for four years' work performed between 1959 and 1963 (when Mercury finally ended), Glenn earned somewhere in the neighborhood of \$125,000 whereas Armstrong earned only half that amount. Even the low end of the astronaut pay scale during those years was respectable. As a captain, Gus Grissom was paid about \$105,000 for those same four years when the Life payments are included with his salary. Why would an astronaut

want to become a civilian and give up the Life arrangements at the same time?

Preparations were underway for Carpenter's upcoming MA-7 but the astronauts were also beginning to "man the barricades," as Sherrod wrote in a review of the history of the relationship between Life and NASA, published in the Columbia School of Journalism Review during the summer of 1973. On May 3, 1962, Administrator Webb made a note that the astronauts had made contact with Vice-President Johnson at his Texas ranch near San Antonio where they complained to him that "they had been cut from behind in connection with the Life contract" when they heard the intended death knell of their very lucrative source of money.

In early May, Glenn had to take time off from his duties of helping Carpenter for his flight and from the astronauts' battle for their Life money. Cosmonaut Gherman Titov had arrived from the Soviet Union on a goodwill tour of the U.S. and Glenn was to be his host. The following story, related by Haney, illustrates some of Glenn's concern about publicity for NASA and the United States.

Glenn had been showing Titov around the country and no matter what Glenn showed the cosmonaut, the Russian would always tell Glenn that there was something bigger in Russia. This irritated Glenn and he remarked that the Americans had something the Russians did not--barbecue. Later, at a reception at the Russian embassy one evening, Glenn was going through a reception line and, when he stood near Titov, the cosmonaut told the surprised Marine colonel that the Russians were coming--to Glenn's Arlington home that night for a barbecue. Realizing the bad publicity that might result if he backed down, Glenn beat a hasty retreat for his home. He sent out friends and a neighborhood policeman for food and rushed about gathering braziers for the roast. As Glenn was doing this, Haney and others from NASA were leading the Russians to Glenn's home via a very circuitous route to give the astronaut more time. When the convoy finally pulled to a stop in front of the Glenn home, the barbecue pits were going full roar and Glenn was photographed greeting Titov at the

front door as if that was an event that happened every day.

Then the paint of the carport ceiling caught fire from the heat of the grills and, with no translations needed, the people attending the intended roast formed a bucket brigade to douse the flames. Included in the chain of bucket carriers was Soviet Ambassador Andrei Dobrynin. After the fire was out, Titov conceded to Glenn that the astronaut was right: the Russians did not have anything quite like the barbecue Glenn was hosting. "But tell me," Titov asked of Glenn, "is it always necessary to set the house on fire for this thing you call barbecue?" (66).

When Titov left the U.S., Glenn possibly breathed a bit easier and resumed his struggle alongside the other astronauts against NASA's hierarchy, who wanted the contract to be non-existent in the future.

In the middle of the fray surrounding the contract, Scott Carpenter left the earth on May 24, 1962 at 7:45 a.m., ending the smoothest countdown to that date in Mercury's history. Down the way from the Cape was Carpenter's family in a beach house watching the launch; it was the first Mercury family to do so during the series. The previous families had remained at their homes in Virginia during the shots and monitored the progress of the men's flights from there. At the beach house was Life photographer Ralph Morse and a writer from the magazine, attending to the family and watching the moves of the Carpenter household. The interest in the flight seems to have been somewhat down from Glenn's flight as 40 million people chose to watch Carpenter go on what was essentially a duplication of what Glenn had done (54: pp447-448; 98: June 1, 1962).

As Carpenter soared into orbit, he was amazed by the clarity with which he could see details on the earth below. He spoke of seeing a boat on a river by following its wake and also of seeing a truck on a dusty road. The astronaut also told of the uselessness of the periscope in the Mercury spacecraft, preferring that on longer flights it should be taken out to make more room for fuel, water and oxygen. The temperature in his suit started to rise and, although he told the ground controllers that he

was comfortable, he made several attempts to lower the suit's temperature. Carpenter also stood his spacecraft, Aurora 7, "on end," that is, with its nose pointed towards the earth, and he found the view "exhilarating." Then began the "tragi-comedy" of the flight, as the authors of Journey to Tranquility called it. Instead of behaving like the stoic astronaut all seven had been painted to be, Carpenter chose to take the tourist route and burn his fuel on needless maneuvers, so much in fact that flight director Kraft threatened to order to him to return at the end of his first orbit. Carpenter slowed down his motions but not enough. Wasting his fuel, he kept maneuvering about as he was enthralled at the sights of the space sunsets and sunrises. At one time he told the controllers to hold off obtaining his blood pressure (which he had to tell them) as, "I've got a sunrise to worry about. I've a beautiful sunrise through the window. I'll record it so you can see it" (54: pp446-449; 178: p148; 122: June 14, 1965).

Carpenter later wrote in the book We Seven about his initial revolution around the earth:

It was on this first pass...that I used up a lot of my fuel. I kept trying to move the capsule around from one position to another so I would not miss anything and so I would be in a better position to take pictures (19: p333).

By the time the second orbit was finished, Carpenter was far behind the flight schedule because of his excitement about the views that were confronting him as he revolved around the earth. His forgetfulness led to several complications with the flight plan. The main problem was that he had forgotten to switch off the automatic controls when he started manually maneuvering the spacecraft, thus expending twice as much fuel as called for, so that by the end of his second orbit the fuel tanks held less than half their allocations, far short of what had been intended. With little fuel left, Carpenter began to plan for his reentry. In doing so, he stowed some equipment and bumped the cabin wall. Immediately a shower of frost particles flew from the outside of the spacecraft. This ended a question that had arisen during Glenn's flight when that astronaut

had seen what he termed "fireflies" accompanying his Friendship 7. From Carpenter's action, it was deduced that the "fireflies" or "frostflies" were caused by frozen particles of urine that had been dumped overboard, forming what was to be called by later astronauts as "Constellation Urinus." But there was something else more important than looking at the "frostflies" outside his window and that was looking at his fuel gauges. Positioning for reentry, Carpenter had 40% of his fuel left, which was good considering the amount he had burned up during the first two orbits. But as he prepared to come back to earth, he again forgot to fly with either the automatic system or the manual systems and, consequently, he practically drained the manual fuel tanks dry while leaving himself only about 15% fuel in the automatic system's tanks. Worried about this, he had to be twice reminded by Gus Grissom to put down his helmet's faceplate to seal his suit. Nevertheless, the views still offered Carpenter some relief from his plight; he called out, "I can make out very, very small farm land, pasture land below. I see individual fields, rivers, lakes, roads, I think. I'll get back to reentry attitude." Clearly, Carpenter was a person who was visually oriented rather than mission oriented (178: p148; 54: p454).

On his way down, ground controllers listened to Carpenter's wails about his fuel supply. "I hope we have enough fuel," he cried as the reentry began. One NASA official, upon hearing the pitch of Carpenter's voice, wondered aloud, "Does he think he is changing his sex?" (178: P148).

Having fired his retro-rockets manually since the automatic system for that function was not working properly, Carpenter had triggered them three seconds late and overshot his landing site by 250 miles (which was actually better than if the faulty automatic system had tried to fire the retro-rockets) (54: p454).

As soon as Carpenter hit the water, the recovery forces knew where he was but the media did not know and they immediately made this into a news event, playing upon the heartstrings of millions as the U.S. now had a "lost astronaut." Life photographer Morse photographed Mrs.

Carpenter in various states of agony as she listened to television and radio announcements about the unknown state of her husband's fate. The thought of a misplaced astronaut conveniently removed all thoughts from the public mind that Carpenter had botched up what would have been a relatively easy flight.

Carpenter knew it would be some time before anyone would get to him and he wanted to leave the now stifling interior of the hot spacecraft as it rode up and down with six-foot ocean swells. Instead of opening the side hatch and encountering the same trouble that Grissom had, Carpenter chose to remove some paneling and exit through the neck of the spacecraft (which was an alternate way to leave) to inflate a life raft and await the recovery forces (54: p456).

The tragi-comedy continued. A private Piper Apache from Puerto Rico appeared and its pilot photographed Carpenter in his life raft. Upon landing in Puerto Rico, the pilot had his film confiscated. He "had violated the airway zones," record NASA historians (54: p456).

Then, out of Carpenter's range of vision, an Air Force plane dropped two pararescuemen who popped up near Carpenter's raft, surprising him. They inflated two more rafts. The astronaut offered them some of his space food; the men declined his offer but they did drink some of his water. Without a radio to tell anyone about Carpenter's condition, the three men bobbed around in their rafts. Two more containers were dropped from the planes; one was a life raft which burst upon hitting the water and the other contained no radio, just a battery, causing one of the frogmen to make some comments that Carpenter later declined to repeat to newsmen (54: p456).

Meanwhile, the media were making an issue of the interservice rivalry. The pilot of another Air Force plane, an HU-16 Albatross amphibian, told NASA that he could land and pick up the astronaut but NASA said no, wait for the Navy. Actually, the decision at NASA was not on the basis of which service would do the better job but on the thought that the Albatross might break apart in the choppy water. That decision

was made by Rear Admiral John L. Chew who based his opinion on past experiences. Finally, three hours after arriving in the water, Carpenter was plucked upwards by a helicopter and taken to the aircraft carrier Intrepid, where he landed a little more than an hour later.¹ The traditional phone call from the President came and Carpenter told him that he was sorry for not having aimed better on his reentry. At the beach house near the Cape, Morse photographed Renee Carpenter laughing at the news that her husband was safe. After the recovery of the astronaut, she told the press, "We [the wives] often feel emotionally drained and we tend to fall back on such words as happy, proud or thrilled and we feel so much more" (8: p60; 54: pp457-458).

That "so much more," though, was reserved for Life which contained an article that showed all of her moods during the mission. A week after her story, Life printed the astronaut's personal story (98: June 1, 1962, June 8, 1962).

The events that happened following the flight almost repeated those which had happened after Glenn's flight, despite President Kennedy's desire to play down the astronaut's achievement in the interest of science. Soviet Premeir Krushchev cabled congratulations to Carpenter. But flight director Kraft, in an interview years later, admitted that at the time he wanted to be sure that "Carpenter never flew again" because of how the astronaut had handled the flight. In spite of Kraft's feelings, Carpenter was awarded NASA's Distinguished Service Award at the Cape by Administrator Webb. Then he returned to his home town of Boulder, Colorado, where he spoke to the university he had never graduated from (Carpenter was the only astronaut without a college degree) and he facetiously remarked to the Boulder crowd that his reentry qualified him to complete the course in heat-transfer, which was the only course that he needed to complete years earlier to graduate from the college of engineering at the University of

¹Not only could the Air Force have beaten the Navy but so could have a tramp steamer which was closer than any other ship, but NASA, aware of what type of public image that could create, refused to consider such a thought (178: p148).

Colorado (91; 54: pp458-459).

The next day, he was driven through the streets of Denver where 300,000 people turned out to see him. He also went to the White House to meet the President and from there went to New York City where, at the Waldorf Astoria, former Presidents Herbert Hoover and Harry Truman stood with him in a reception line. To the former resident of Colorado, the post-flight activities were something to behold but his mind had never left space. In his official report, Carpenter wrote, "...I anxiously await another mission." It was never to come. Kraft held true to his words and eventually Carpenter found himself flying what NASA personnel term an LSD--a Large Steel Desk. Then he suffered some injuries in a motorbike accident in Hamilton, Bermuda, which also limited his chances for further flights. Years after his flight, he was assigned to the Navy's Sealab project. He became practically the first man to explore the inner and outer reaches of earth. In 1968, he left Sealab as well, content to leave future explorations to others. The latest known occupation of Carpenter is that he is in the wasp breeding business in California where his wasps are used as a form of pest control for valuable crops (54: pp458-459; 178: p149; 91).

But while the flight of Aurora 7 still engaged the world's interest, the men who were lined up on both sides of the issue surrounding the Life contract quickly resumed battle. During the summer of that year, Life's editor, Edward K. Thompson, was invited to a meeting with Webb and several other high governmental officials. At that meeting, Webb asked Thompson to later write him a letter, explaining what the Life editor thought were the major points of their discussion. The majority of Thompson's letter of July 13, 1962 to Webb follows:

We first reviewed the benefits to the astronauts and to NASA from Life's coverage of Project Mercury. It was agreed that the benefits included substantial protection to the astronauts and their families both from a monetary standpoint and from the standpoint that they were relieved of constant requests by many members of the press during their arduous training program. The fact that they had sold their personal stories to Life was recognized by the rest of the press--I'll admit not with unalloyed delight.

With respect to NASA, it was agreed that Life assigned competent and trained journalists to do the stories which were published. Life's coverage of Project Mercury was constant and included many stories not covered solely by the contract with the Astronauts. This resulted in well written, knowledgeable stories published in a magazine of several million circulation, which is read by approximately 30,000,000 people each week in the United States. NASA was, therefore, provided with intelligent, well written and highly educational coverage of its projects, including Mercury.

Moreover, the articles published in Life were serialized throughout the world in the most noted magazines and newspapers published overseas. It is not possible to determine the exact number of people who became acquainted with Project Mercury through the publication of the Life serials, but it is estimated that approximately 50,000,000 to 70,000,000 people (in addition to Life's U.S. audience) had the benefit of reading the stories published in Life.

We discussed the possible embarrassments to NASA's programs resulting from Life's publication of the Astronauts' stories. You generously pointed out that at no time did Life interfere with press coverage in interviews or otherwise of the Astronaut's official stories. The general press, therefore, was able to obtain well rounded coverage, interviews, photographs, etc. You stated that you had been interviewed by various members of the press and that objections were made to the exclusivity of the Life contract. I pointed out that Alfred Friendly, on behalf of the American Association of Newspaper Editors, investigated suspicions that Life was getting unauthorized official material, denied to others, as a result of the contract. His conclusions gave Life's editorial department and NASA a clean bill of health, although he did cite one case where Life's promotional department overstated what we were getting.

We then discussed arrangements which possibly could be made with the current Astronauts and those selected for Projects Gemini and Apollo. While the number of Astronauts participating in these projects is still undetermined, it was estimated that there would be approximately twenty in number. Although it was recognized that there may be a problem with one or two of the new group, it was decided that it is possible that the new group and the old would act together as the current seven Astronauts did to share whatever monetary benefits might be forthcoming in realization of the sale of their personal stories.

It was suggested that if the group did manage to get together and pool their interest in the sale, an agent be appointed to represent them to accept bids from the general press for their personal stories. This would be competitive bidding, and in no way would Life seek a preference in connection therewith, and of course all bets would be off if the White House promulgates new rules.

There are several ways suggested for this:

- (a) A bid on the personal stories of the Astronauts in each project in which they are engaged;
- (b) Bids on the various flights in which the Astronauts will participate; and
- (c) A bid on a time limit basis to cover the personal stories of the activities of the Astronauts during that period of time.

It was not decided which would be the best formula.

We discussed what governmental prohibitions there may be to the Astronauts selling their personal stories on this basis. It was agreed that the same right of review by NASA be in effect in any publication of the Astronauts' stories. Mr. Johnson [NASA's General Counsel] stated that, on the basis of current governmental rulings, there was no illegality involved in the Astronauts selling their personal stories in a manner related above. It was decided, however, that any policy that would be adopted by NASA would be discussed with the White House....

I will be in touch with you to see if, after Life's experience in Mercury, we can contribute anything more to shaping up the new programs, in which we are interested as Americans as well as journalists.

Edward K. Thompson (158)

At the time of this writing, this author has no materials concerning what Administrator Webb's reactions were to this letter. As Mike Collins, a later astronaut, wrote about Webb, the Administrator of NASA "was dead set against it [the contract], and had so ruled. It was a closed issue until John Glenn caught President Kennedy's ear..." (24: p52).

Glenn did that only a few days after Thompson sent his letter to Webb. Kennedy, who according to biographer Sorenson, "personally liked Glenn immensely" and invited the astronaut to spend a weekend with the Kennedys at their Hyannisport retreat on Cape Cod. During a couple of days of water skiing and relaxing with the First Family. Glenn was asked by Kennedy what he thought of the pending White House refusal to permit any contracts of the type that then existed between Life and the astronauts. Glenn spelled it out for the President and his brother, Robert, who was then the U.S. Attorney General, in the following manner:

The astronaut contract did not have anything to do with Project reporting, official information or flight experiences. What it did cover was the personal background of each man, his family, his children and their attitudes, his church relationship,

his childhood remembrances, and his by-lined personalized "human experience" view of the mission outside of normal scientific and project reporting. In other words, these were the interesting sidelines to the real historical accomplishment of each flight.

To know these details and feelings of each man and his family, it was obviously necessary that we open our homes and private portions of our lives to reporters to whom we would otherwise deny access. As with other people, we looked upon our "homes as our castles" and did not feel we had the obligation to open our homes to a random public parade of reporters unless there was another reason for it. However, I was certainly willing to do that if I could be recompensated for the trouble enough to know that my children could be guaranteed an education I could not otherwise afford or we could enjoy some of the things we did not have on the basis of straight military pay scales. I did not deny the old argument that a soldier going into combat might share an equal danger with astronauts but I felt that if there was enough interest in that soldier's home life, background, childhood, etc., to reporters, then he too should have the right to receive compensation for opening his home, his family, and his innermost thoughts to public scrutiny that would not otherwise be available. The difference was that this was a new project, a new human experience, in which the world was tremendously interested. A sideline or adjunct to history in this completely new area of human experience would probably be lost to the future if there was no contract.

I stressed repeatedly that this in no way interfered with official reporting or experiences on the flight. That was government and public property, obviously. The personal story of each man and his family was the only thing for sale. In other words, the right to come across my front door step and expect reasonable free access to details therein was the only thing at issue.

President Kennedy said this was certainly the first time he had ever really understood what the contract covered. He agreed this made sense and guessed they should reconsider their previous decision (50).

Within the government there existed an ad hoc committee composed of several high officials of NASA and the Department of Defense, including Hugh Dryden; Robert Gilruth; Walter Williams; John Johnson; O.B. Lloyd, Director of Public Information for NASA (after having headed NASA PAO from February, 1961 until December, 1961 following Shelby Thompson, who had left in early 1961 after spending only four months in that position); B. Brainerd Holmes; and Walter Lingle, special assistant to the administrator for public affairs (the new head of the

the PAO of NASA was Dr. Hiden T. Cox, who had replaced Lloyd). Also believed by the author to be on that committee was Cyrus Vance of the Defense Department. It was Lingle who drew up a paper, dated July 26, 1962, for the committee, mindful that not many people favored the extension of the Life contract. In this paper he pointed out that there were some advantages to the contract, saying that: 1. the contract had handled the astronauts well, gave them money for their stories and the astronauts loved the "uncritical stuff" that Life printed about them; and 2. excepting the contract, "It is probable that a great deal of the material about their families...would not have appeared at all...; this has been of real value to our public affairs program" (26: May/June, 1973).

On July 30, the committee had before it the recommendations of Colonel Shorty Powers. He said that the astronauts were more managable as a group than individually--which was more advantageous in dealing with the media; that the contract eliminated competition for flights because of the stories that might have otherwise been associated with those missions; that NASA controlled what the astronauts were writing; and that "the inclusion of the wives in the contract eliminated the problem of the Government having to 'manage' their affairs" (26: May/June, 1973).

On August 30, 1962, Lingle and several others from NASA went to meet Kennedy, who was backed by his advisors, Sorenson, McGeorge Bundy and Pierre Salinger, the White House Press Secretary. At the beginning of the meeting, the President stated that he "felt the astronauts should be permitted to continue to receive some money for writing of a personable nature inasmuch as they seem to be burdened with expenses they would not incur were they not in the public eye." He added that "there should be strict control of their investments...[citing] the proffer of homes in Houston as an example that should be avoided in the future." Although they were opposed to the idea, the President's advisors and his press secretary gave in, saying only that the present policies should be "tightened up" (26: May/June, 1973).

As one of those present there, Richard Callaghan, one of Webb's

assistants, made notes of the four items that Kennedy wanted covered:

1. to make available to the media a more comprehensive presentation of the official aspects of manned space missions at press conferences;
2. to give the press more access to NASA installations and personnel, which included the astronauts, as long as this expansion of coverage did not interfere with NASA's operations;
3. to edit the astronauts' personal stories closer than had been before; and
4. to keep publishers from claiming that they have "exclusive" material from the astronauts for publication (26: May/June, 1973).

On September 16, 1962, the media was let in on this decision by the government. Interestingly enough, O.B. Lloyd told the press that the decision did not mean a change in NASA's policies about the astronauts selling their personal stories, which was in direct opposition to everything that NASA had stated in the spring of that year. In a story in the Washington Evening Star, William Hines wrote that none of the astronauts nor Colonel Powers were on the ad hoc committee and that the people on the committee had heard from various members of the media, including Turner Catledge, managing editor of the New York Times; Don Schanche, of Life (who wrote the original articles about the astronauts in 1959); and an unidentified radio and television network president. It was not known if the media's representatives agreed with the committee or even with each other on the final decision. Hines described the new policy as being basically the same as the one drawn up by William Bonney in May, 1959 but with some changes which included: 1. that all interviews with the astronauts would now be controlled by NASA Headquarters in Washington rather than by Colonel Powers in Houston; 2. that a second news conference with the astronauts would be held after their flights--at this conference, the media would be represented by a pool of their members who would meet with the astronauts "in a more relaxed atmosphere" rather than at a regular press conference with bright lights and many reporters (Hines noted that this type of "more relaxed" interview was possible even before this new policy. All that a reporter had to do previously

was to contact NASA and ask to obtain an interview with the astronauts "on an exclusive basis." Hines continued, "Such an exclusive interview can still be obtained under the new policy provisions."); and 3. that no publication can use the term "exclusive" in relations to stories written for it by the astronauts (167: September 17, 1962).

It might seem contradictory that Hines mentioned that reporters could request "exclusive" interviews yet no publication would be allowed to claim that it had an exclusive story written for it by the astronauts--until the wording is examined closely. Hines meant that interviews with the astronauts could be labelled as being "exclusive" although the stories that were written by the astronauts (not the interviews given by them) could not be called "exclusive."

Hines also reported about the section of the policy statement regarding future investments made by the astronauts. He quoted that section in his article and added some further explanation:

"No investments will be made which might create the impression that any participant in this program placed in a position from benefiting from the activities or decisions of NASA itself." Mr. Lloyd said the intent of this provision was to prevent situations from arising where "it might be implied" that conflict of interest exists. In future, he indicated, the NASA Administrator or a designated official will scrutinize all astronaut business deals in advance of their consummation (167: September 17, 1962).

The issue of the contracts with publications for the personal stories of the astronauts had finally been ironed out. Even though there were still those people in the government and in the media who opposed the idea of allowing government employees to sell their personal thoughts as astronauts now clearly had the right to do so and still do at present. Since that date, there has been no significant change in NASA's policy regarding the subject.

Although the contract issue may seem to be a large event during the summer months of that year, it was not of great importance in comparison to the main mission of NASA. After Carpenter's flight, some Congressional leaders and members of the media were speculating that the next Mercury

flight should and would be an all-day flight designed to pass the mark made by Titov earlier in the year. Clearly, prestige was on the minds of the lords of Capitol Hill and the media. But NASA would have none of it. On June 27, 1962, NASA Headquarters announced that the MA-8 mission would be launched possibly in September and would last no more than six orbits. Named as the primary astronaut for the mission was Wally Schirra and his backup was Gordon Cooper (54: p460).

About a month after the announcement, Schirra began training specifically for the mission. He continued to work in the simulators, as did Cooper, throughout August. Then, on August 11, the Soviet Union, with its customary lack of prior announcement, launched another cosmonaut into space. As Major Andrian Nikolayev orbited the earth, NASA officials read the reports about his mission. The next day, the space "gap" became a "gulf" as Vostok IV was also successfully launched with Lt. Colonel Pavel Popovich as its pilot. Shortly after the launch of Popovich, Nikolayev reported that he could see Vostok IV in the airless environment with him. Western observers noted that the two cosmonauts flew as close as three miles and as far apart as 300 miles. Those observers also listened in on the conversations between the cosmonauts and deduced that a rendezvous was at hand, although there was never an attempt to do that as it turned out. On August 15, the men landed only six minutes apart and Nikolayev now claimed the world record for time in space with a total of 64 orbits, or more than 95 hours flight time in the weightless void (54: p462).

Some NASA officials discussed the possibility of adding more maneuverability to the Mercury spacecraft, something that would require at least 400 additional pounds of equipment and fuel. Flight director Kraft observed that the extra weight might prevent the Atlas missile from placing the spacecraft into orbit and, beside, some people wanted to know, what would the astronaut rendezvous with? An answer came back suggesting the astronaut could come close to one of the passive Echo satellites. Gilruth and his lieutenants then scratched the thoughts of a maneuverable Mercury spacecraft from everyone's minds and went back

to work on Schirra's flight (54: p462).

During the preparations for MA-8, NASA announced on September 17, 1962, that nine more astronauts were to join the ranks of the others who were already known to the public. On the day of the announcement, Powers introduced the veteran astronauts to the media first, starting in the reverse order of their flights. When he came to Shepard, Powers said, "And finally, this is Alan Shepard, the man who's been screaming for years, 'But I was first!'" The audience laughed but all the reporters saw on Shepard's face was a cold, hard expression.

Powers went on to introduce the nine new astronauts to those present and those watching on television. They were: Neil A. Armstrong, Frank Borman, Charles "Pete" Conrad, James A. Lovell, Jr., James A. McDivitt, Elliott M. See, Thomas P. Stafford, Edward H. White II and John W. Young. Four were from the Air Force, four from the Navy and one, Armstrong, was a civilian. The names of virtually all of them were destined to become well-known to the American public through the media. Armstrong was to be cast into the role of being, perhaps, the most remembered astronaut of all time. Another, See, would die in a plane crash only weeks before he was to be launched. Gilruth called the second group of astronauts "the heart of our program to the moon" (54: p602, fn 50; 22).

The naming of the second group caused a bit of a problem for the media. Now they had to differentiate between the veterans and the newcomers. In a logical manner, the first group became known as "The Original Seven," "The Seven" and "The Mercury Astronauts." The second group became known as almost anything that the media labelled them.

After that press conference, Schirra flew back to the Cape to prepare for his flight. Among the astronauts, Schirra was known as something of a fun-loving practical joker. Despite remarks that he did not relate well to the media, Schirra seems to have the personality that, even if he did not get along with the media as was reported, he was admired just the same. One writer described him in the following manner: "Hollywood would dream you up, stern, perfectionist, handsome, ladies

sigh, men envious..." (155: December, 1968).

As for his pranks: during a physical, Schirra tinted the water of a five-gallon jug with iodine and handed it to a nurse, saying it was his urine sample. Another time, some medics had been following Schirra around during a training session in which he wore his helmet and space suit. Knowing that the medics were always eager to collect samples of anything, Schirra gave them a beaker full of beer, also claiming that it was urine, "and it threw the medics off for three days," remembers Glenn. Schirra also wisecracked that he did not care to be launched atop a rocket that was built by the lowest bidder for the government (117: Kennedy Space Center Story, p209).

Schirra spoke of his humor years later in an interview:

You need some levity to break the tension around the work. Most of the people who were working with us were nervous about things. That's because they didn't know everything about what we were doing and, since I knew more than they did, I could joke about it.... To communicate with people, you have to be friendly (140)

Perhaps because of Schirra's sense of humor, people responded to him in kind. When he arrived at his spacecraft, Sigma 7, for launching on the morning of October 3, 1962, the astronaut found an automobile ignition key hanging from a safety latch. Then, while stowing his gear, he felt in the "glove compartment" beneath the instrument panel for his astronomical charts and felt something soft to the touch. Schirra discovered that someone had put a steak sandwich onboard--something that was very welcome after being on a bland diet for weeks--but he knew it was contraband and, with assumed sorrow, he handed it to a technician who was standing near the hatch (54: p472).

Hours after he was sealed in, Schirra was launched at 7:15, culminating a countdown that was even more perfect than Carpenter's had been. When the rocket kept propelling him higher and higher, more than it should have, Schirra ended up in an orbit that was 176 miles high at a speed of 17,557 miles per hour, faster and higher than any astronaut had gone before (54: pp472-486).

The flight was the most perfect of the flights to that date. During his six orbits, Schirra carried out a variety of tasks during the mission: letting the spacecraft take care of itself by putting its flight attitude controls in the automatic mode ("Chimp configuration," Schirra told ground controllers); making observations of tests being performed on the dark side of the earth with flares (Schirra saw nothing but lightning); and to conserve his fuel as tightly as he could. When he accidentally shot out two percent in a quick maneuver, Schirra apologized to those on the ground for "my boo-boo." Like Carpenter, he found himself impressed with the views from space but he was not overwhelmed. It seemed to Schirra that he was no higher than he had flown in a jet; "Same old deal, nothing new," Schirra told debriefers later. "Might as well be in an airplane at 40-50 thousand feet altitude" (54: pp472-486).

As Schirra flew over the U.S. for the fourth time, Glenn passed along a notice that, during that pass, Schirra's voice was going to be carried live over radio and television networks. A person must remember that at this time Shorty Powers still had to pass along commentary from the control room because live transmissions from the astronauts to their ground controllers were not yet permitted. With Glenn acting as his second man, Schirra chatted up a storm on which the U.S. public could eavesdrop.

Schirra: Just came out of a powered-down configuration where we had the ASCS inverter off. It came up in good shape and will stay on now for the rest of the flight. The amps and volts are reading properly.... I'm coming towards you inverted this time, which is an unusual way for any of us to approach California, I'll admit.
 Glenn: Roger, Wally. You've got anything to say to everyone watching you across the country on this thing? We're going out live on this.

Schirra had already been told by Glenn that he was live but the space-borne astronaut seemed to ignore that since he continued with his technical chatter. Now he changed his conversation. Note the difference after Glenn reminded him about the live transmission.

Schirra: That sounds like great sport. I can see why you and Scott like it. I'm having a trick now. I'm looking at the United States and starting to pitch up slightly with this

drifting rate. And I see the moon, which I'm sure no one in the United States can see as well as I right now.

Glenn: I think you're probably right.

Schirra: Ha-ha. I suppose an old song, "Drifting and Dreaming" would be apropos at this point but at this point I don't have a chance to dream. I'm enjoying it too much.

Glenn: Things are looking real good from here, Wally.

Schirra: Thank you, John. I guess that what I'm doing right now is sort of a couple of Immelmans / an aerobatic looping maneuver / across the United States (54: pp472-486).

Schirra ended his talk with or to the U.S. there and continued his conversation with Glenn in private, telling him that he was fascinated by the view of the airglow--sunlight bouncing off the top of the atmosphere at the fringes of the world below him. Later, he relaxed from the regular chores of his flight and exercised with a bungee cord during his fifth orbit. Towards the end of his sixth orbit, Schirra completed his retrofire without the aid of ground controllers and he noticed that he had slightly more than half of his fuel supply remaining. On the way down through the atmosphere, the Navy commander noted that the superheated air around him glowed green (Carpenter had noticed this too) and then he saw a three-foot strap whip by the window, causing him to exclaim, "My gosh, that's the same thing John saw" (54: pp472-486).

As he streaked through the air, the sailors on the ships below heard several sonic booms and then saw a white contrail. Schirra waited until he was at 15,000 feet before he popped his main parachute out and he then settled into the waters of the Pacific Ocean within view of the ships' crews and the reporters who were also on the ships. It was the most perfect landing to that date. Schirra was within 4.5 miles of his target. Someone at NASA who knew Schirra remarked that the aircraft carrier Kearsage, which was to pick up the astronaut, was possibly the one who was more than likely 4.5 miles out of position (54: pp472-486).

When Sigma 7 had hit the water, it had gone "way down" and then bobbed to the surface. Schirra elected to remain in the spacecraft and asked for a whaleboat to come out from the carrier to tow him to the

Kearsage's side. When the spacecraft finally arrived alongside, a line was attached to Sigma 7 and an aircraft crane hauled Schirra onboard the ship's aft starboard elevator. Once he was safely aboard, Schirra hit the plunger, skinned his knuckles and exited the spacecraft that had been his home for the past nine hours. As he left the deck, the old question that all astronauts hated was yelled out to him by some reporters: "How do you feel, Wally?"

Schirra casually flipped a hand in the air and said fine. He appeared to be tired to the reporters but examining physicians said that the astronaut was not overly fatigued. There were some unusual symptoms that crept up during the examinations, although, which had not appeared in the other astronauts. Schirra's blood pooled in his feet and legs when he stood. His pulse also went to 100 heartbeats per minute when standing and only dropped to 70 when he lay down. By the next morning, Schirra was back to normal (54: pp472-486).¹

For three hours, Schirra was welcomed by the leis of Honolulu when he arrived there and then he flew to Houston for further debriefings and a press conference. From Houston, Schirra went to his hometown of Oradell, New Jersey for a parade and then to Washington, D.C., to receive NASA's Distinguished Service Award. The ceremony in Washington might have been a little shorter than the previous ones but this was not because Kennedy was frowning upon public activities. The President was more occupied with other types of missiles than the type which had propelled Schirra around the world six times. What happened in the middle of October, 1962 possibly educated more Americans about missiles than had the entire space program because it was then that Kennedy found himself confronted by offensive missiles stationed in Cuba by the Soviet Union.

The Cuban missile crisis took the headlines for many days and news of NASA was put in the background. In mid-November, NASA released an

¹Schirra was obviously feeling fine soon because shortly after the flight he sent the government a bill for his flight, computed on a so-many-cents-per-mile basis, which came to a few thousand dollars. NASA fired back a bill to him for the cost of the booster, which was a few million, and Schirra dropped the facetious matter.

announcement about the next manned mission--the astronaut to fly in MA-9 would be Gordon Cooper and he would be backed by Shepard. According to Time, NASA officials "had been reluctant to give him [Cooper] his chance. They tabbed Cooper as something of a complainer, as unpredictable, and as indifferent to building the 'public image' demanded of the astronauts" (159: May 24, 1963).

Cooper had a love for fast cars (so did Grissom who was fond of speeding down the roads and highways and, together, the two men had an interest in an Indianapolis racer) often travelling at speeds in excess of 100 mph. Some of the other astronauts were similar. Cooper's fondness of speed would cause some headaches between him and NASA officials in the future and he was remembered as the astronaut who jokingly screamed, "I don't wanna go!" when demonstrating to newsmen before MR-3 how an astronaut would approach his spacecraft. There were reports that Shepard might fly instead of Cooper but those rumors were squelched when Schirra promised to make a "public ruckus" if Shepard was assigned to the flight (159: May 24, 1963; 59: p138).

There had also been some discussions that Cooper's flight was not necessary. Some observers mentioned that NASA should quit Project Mercury while it was ahead, saying that the reputation of Mercury was good, so why ruin it if Cooper's mission failed? Others argued that it would severely tax the resources of the Mercury team if its members had to cope with an all-day flight. But NASA officials pointed out that when Mercury had begun in 1959, the STG had set a target of an 18-orbit mission and that is what they still wished to accomplish, no matter if it did fall short of Russia's records for total number of orbits by a single person. On November 9, 1962, the senior staff of the MSC decided to increase the number of orbits to 22 from 18; immediately the staff of Gilruth, which was still scattered all over the east side of Houston, began to work harder on the plans for MA-9, scheduled for late April, 1963. For NASA, it was the beginning of the end for the first American space program. Already, plans for future flights by two men in one

spacecraft, to be called Gemini, which, some years before, had been inserted between Apollo and Mercury.

Cooper called his spacecraft Faith 7 and that raised some eyebrows around the image-conscious space administration. "Suppose that, for some reason, we lost the capsule at sea," said one NASA official. "Then it would come out reading something like 'The United States today lost Faith....'" But the name stuck (167: April 19, 1963).

Inside the spacecraft, some 183 changes were being made in the days before the flight. The 76-pound periscope, after much downgrading by previous astronauts, was finally removed. There were additions to the amounts of liquids that would be carried for the cooling systems, the fuel tanks and for the drinking water. Also, a load of cameras came onboard, including, for the first time, a television camera. While it may be thought by many Americans that Apollo 7 was the first spacecraft to beam television signals back from space, Cooper's slow-scan television camera was actually the first equipment devised to transmit images to earth from a spacecraft (54: p490).

Because of all the changes in Faith 7, Cooper pleaded some ignorance with reporters. The media had complained that NASA had "muzzled" the astronaut but, on February 8, 1963, he appeared before a press conference. He admitted that he could not explain all of the difficulties that Convair was having with his Atlas booster and he tried to make the reporters understand that the mission would last only as long as it went okay "for as long as twenty-two orbits" (54: p490).

Another aspect of Cooper's flight is that he bought life insurance for the mission. It was the first time any of the astronauts had bought a commercial policy in connection with a flight. Aetna Casualty and Life Insurance Company announced in the spring of 1963 that it had sold \$100,000 life insurance policies to each of the Original 7 astronauts and the company was planning to insure the nine new astronauts as well. NASA historians commented that the fact that someone was willing to insure Cooper gave proof that people had faith in the missions. As can be

expected, the premiums were no doubt high but one Aetna official described the rates as "similar to rates for other unusual occupations." But they were not the highest, being comparable to those "of steeplejack climbing." As with all life insurance companies, the astronauts had to take physicals before they were issued their policies. The thought of them doing so seems rather superfluous (168: May 9, 1963).

While NASA was preparing for the last Mercury shot, so were certain members of the media. It must be remembered that the 1959 contract which Life had signed with the astronauts was good only through the end of Project Mercury and now that the end was in sight, Field Educational Enterprises Corporation, publishers of World Book Encyclopedia, began to show interest in acquiring the personal stories of the astronauts. Field had not thought of the acquisition on its own but only when it was approached by Jim Godbold, who had been the photographer director of National Geographic. Godbold had drawn up long-range plans in 1962 to obtain the rights to the astronauts' personal stories up and through the moon landings but his thoughts were not for himself. He was looking for any publisher who might be interested in his plans. It was in October, 1962 that Godbold approached the editor of the Chicago Sun Times, saying that Field should approach the astronauts about forming such a contract with them. Field's executives liked what Godbold was trying to market and hired him away from National Geographic. In April, 1963, Field's President, Bailey K. Howard, told the world that he was offering the 16 astronauts \$3.2 million for their personal stories over the next eight years. This would amount to \$25,000 per astronaut per year--not taking into consideration that there might be other astronauts added to the operations of NASA during those years. What Field hoped to glean off the astronauts would be resold to other organizations as well as be used in Field's publications. The contract intended to cover stories written by the astronauts for newspapers, magazines, books (including stories written for children's books) and appearances for films, television shows, radio broadcasts and recordings. Field offered Life the U.S. and Canadian

rights to the stories for \$800,000. Field would retain the rights for foreign syndication. In addition to this, Field would also ante up another \$5000 per astronaut to buy each a \$100,000 life insurance policy (26: May/June, 1973).

The contract may have sounded like heaven to the astronauts but for NASA and the critics who had originally attacked Life's 1959 contract, the \$3.2 million proposal was just too much. The howl from the media went up immediately. The chairman of the Senate Space Committee, Senator Clinton Anderson, asked Administrator Webb to clarify the government's position on the matter. The President of the Associated Press, Ben McKelway, told Webb, "somehow the way this thing is developing is wrong from the standpoint of the country." A number of newspapers shared the same opinion and battered NASA in their columns (26: May/June, 1973).

The media is not the only place that there was a conflict going on. The men who handled the public affairs of NASA were having a problem too. Just before Cooper was to be launched, the new assistant administrator for NASA's public affairs, Julian Scheer, came on deck.¹ Scheer came to NASA from North Carolina with a newsman's background. He had been a reporter for years and had covered the Mercury shots along with other reporters. Roy Neal, of the National Broadcasting Company for whom he had been covering space missions for years, says that Scheer came to NASA to take over the PAO and also to perform a hatchet job on Colonel John A. Powers. The clash seemed inevitable. Scheer had always thought that Powers had favored the electronic media throughout the years (so did many people in the print media, yet Powers had been cleared of all charges by the American Society of Newspaper Editors which had investigated Powers' handling of the media) and several people in the hierarchy of NASA wanted to see Powers go for a variety of reasons, some of which might have been

¹Scheer had been a consultant to NASA since November, 1962 and replaced Dr. George L. Simpson, who had served as the head of the PAO from September, 1962 to March, 1963 (although he remained with NASA until November, 1963). Haney writes that Simpson returned to his old job of teaching sociology at the University of Georgia "with head shaking and slobbering slightly after an unnerving year or so in Washington" (67; 123a).

jealousy from not being exposed to the media enough to suit their egos.
(126; 119b; 137)

The new head of the NASA's public affairs asked Powers for a copy of the flight plan for the MA-9 mission so Scheer could make copies to give to the print media. Scheer said this was only fair since the electronic media already had copies of the plans. Powers was in a trap. He knew that the network people had the plans, obtained through various means, but Headquarters had prohibited him from distributing any flight plans to anyone. Therefore he was helpless even though he asked to release the flight plans, according to Neal. Because of this, Powers refused to give Scheer the plans, saying that Scheer would have to issue a direct order to him if he wanted those plans.(137; 119b; 126).

"I order you," said Scheer

Powers' reply was curt. "Fuck you. I quit."

"No," shot back Scheer. "You're fired" (137).

Powers' version of the situation follows:

I had access to the flight plan and recommended that I be permitted to release the flight plan, or at least a sanitized version of it. The response from the management was--"Hell, Shorty, these guys will be second guessing us all the way from lift-off to splash if you do that." I finally persuaded the power that be that I had to provide at least an outline of significant events which I did. At the same time, I found that certain people were being wined and dined primarily by network television people and in the process had been persuaded to give copies of the complete flight plan to the nets on a covert basis. Naturally the net people had to brag about having the plans to others which brought down the wrath of every other media on the scene upon my balding pate. It was perhaps one of the most difficult situations with which I was confronted in the program. None of the management people would admit to having handed the flight plans out, the network people wouldn't tell me where they got them and management would not authorize me to make a general release of the flight plan (126).

Neal says that the firing of Powers was part of the struggle between Houston and Washington to see who would control the manned space flights. One part of this struggle concerned the public information and where it originated. There were powers in Washington that preferred for

all of the news of NASA to be announced in Washington rather than in Houston. Another part of the struggle was illustrated by Neal in a conversation:

While the missions were going on, George Mueller [who succeeded D. Brainerd Holmes as the head of the Office of Manned Space Flight] was holding meetings in Washington to make in-flight decisions. Kraft wanted control in Houston because his people were the ones who had worked through the development and training and they knew what was going on, not the people in Washington.... It was a power battle. Kraft won the right to control the flights from Houston. Powers lost (119b).

The fact that Powers lost was not too well-received by others in the Mercury group, especially Gilruth, who still considers Scheer's actions "not very smart." Gilruth complained to Scheer that MA-9 could not go on without Powers and insisted that Powers be reinstated (48).

Scheer, in an interview years after the incident, said:

Gilruth was [upset]. He was saying that the flight couldn't go on without Powers. Gilruth accused me of this because there a public affairs man was not at the console [of the Voice of Mercury Control]. I thought, 'This is ginger-peachy.' I couldn't imagine how one man could stop the launch (137).

According to Haney, Gilruth was so upset that Scheer was "fucking around with my command" that when Haney introduced the two men at a restaurant, Gilruth threw a punch at Scheer for an opening statement (66).¹

Once everything cooled down, Powers was back on the job after being fired, rehired, quitting and rejoining several times over the period of a few days (Haney describes this time as being very trying and the author believes him). Yet, it became apparent to Powers that he could not handle the "Voice" by himself since the flight was going to last up to 22 orbits which would be about 34 hours. Powers had never trained anyone else for the position so, three days before the launch, Haney decided to help Powers as the second "Voice," even though he had no experience with announcing under broadcast conditions (66).

¹According to the chain of command, as set up by D. Brainerd Holmes in late 1961, Scheer was crossing direct lines of command by firing Powers. The relationship between Powers and the Headquarters PAO was only an indirect one so it would seem that Gilruth had every reason to be upset with Scheer's actions.

Cooper began his 22-orbit, 34-hour-and-20-minute flight at 8:04 a.m. on May 15, 1963. Like other astronauts, he could pick out very minute details on the earth, 100 miles below. Cooper saw smoke from chimneys and could determine which way the wind was blowing below by watching the drift of the smoke. He could also see very thin country roads winding through the countrysides. His flight included the first satellite to be launched from a manned spacecraft. It was a six-inch sphere that contained strobe lights. Launched during his third orbit, the small, flashing satellite was not immediately viewed by the astronaut but on his fourth orbit he spotted it and realized that he indeed had launched a subsatellite. As Cooper remarked about it later, "I was with the little rascal all night." In addition to that satellite's lights, he was able to see another strobe, rated at 44,000 watts, that was on the ground in South Africa as part of an experiment for his mission (54: pp494-502).

After conducting a variety of experiments, Cooper took a six-hour nap during his 10th to 13th orbits around the earth. When he awakened, he noted that he did not feel disoriented by sleeping in space. Later, during his sixteenth orbit, Cooper called down to earth to express his greetings to a meeting of African leaders gathered in Ethiopia. He was also busy shooting photographs for a definite purpose: the planners of Apollo wanted some photos to aid in the designing of that project's guidance and navigations systems (54: pp494-502).

Cooper attempted to use his 10-pound television camera to show the public what space flight was all about but the image was not good. One journalist described the scene: "To most viewers, it was barely possible to pick out Cooper's helmeted face because of the inadequate lighting in the capsule and the slow-scanning technique." The image was acceptable on the monitors at mission control but when it was retransmitted to the networks, the scene disintegrated into mush (122: May 27, 1963).

Towards the end of the mission, during the 21st orbit, there occurred a short circuit that left the automatic stabilization and control system without electricity. Without this system, Cooper would

have to position the spacecraft very accurately by himself in order to fire the retro-rockets and return to earth. Then the level of carbon dioxide began to rise in his suit, causing him to remark, "Things are beginning to stack up a little" (54: pp494-502).

Using a scale which had been imbedded into his cabin window for assistance, Cooper positioned the spacecraft in a 34-degree pitch-down attitude and, with the assistance of Glenn, via radio, the astronaut fired the retro-rockets. There was no question that, without a man at the controls, the spaceship would have been lost. But, as it was, Faith 7 plummeted through the friction of air and landed safely in the warm waters of the Pacific (54: pp494-502).

In the same manner as Schirra, Cooper waited to leave the spacecraft until he was aboard the deck of the Kearsage. His landing was also as accurate as Schirra's. Said Cooper, "Right on the ol' Bazoo" (98: May 24, 1963; 54: pp494-502).

But before he left the spacecraft, Cooper was examined by a physician as he lay in his couch. When he stood, it was noticed that he too was suffering from the same effects as had Schirra and he was also dehydrated from the flight, having lost seven pounds since launch (54: pp494-502).

After going through the physicals and debriefings required of all returning astronauts (including a meeting with some writers from Life), Cooper left for public appearances and parades in such places as Honolulu, Cocoa Beach, Houston and Washington, D.C. Following the parade in Washington, Cooper found himself in the same position as Glenn had been the year before--in front of a joint session of Congress to whose members he read a brief prayer he had written while flying through space. Then he was off for a ticker tape parade in New York City (neither Schirra nor Carpenter received one in the Big Apple) where he was greeted by one of the largest crowds ever. Over 2900 tons of tickertape fell on the motorcade and, if the weight of paper is used as a basis for determining which parades are successful, then Cooper did well. Glenn

held the record at 3474 tons, General McArthur came in second with 3249 tons, Cooper third and Lindbergh fourth with 1750 tons (when NYC was much smaller) (54: p501).

Henry Luce, the head of Time, Incorporated, whose favorite project was space, showed his colors for NASA when Time printed, "Had Faith 7 had not a man aboard, it would have burned.... ...[which is] a dramatic rejection of any argument that machines alone and not men will be the key to the future explorations of space" (159: May 24, 1963).

Upon Cooper's return, he and the other Mercury astronauts started lobbying for another Mercury flight that would have been even longer than Cooper's had been. At his post-flight press conference, Cooper spoke of NASA's ability to "elongate this [his] mission." When Cooper and his fellow astronauts were in Washington, they met with Kennedy and argued for MA-10, which would help kill the 18-month void between Mercury and Gemini and also would provide more medical data. But Kennedy said that he should not make the decision. The President preferred that NASA hold the responsibility in deciding the fate of the intended 72-hour, 48-orbit flight that would cost the U.S. taxpayers another \$10 million. It is not known if the astronauts were bucking for a flight for their remaining astronaut, Slayton, or were simply trying to have another flight.

On June 12, 1963, after consultations with his advisors, Administrator Webb announced, "we will not have another Mercury flight," as he sat before a meeting of the Senate Space Committee. Project Mercury had come to an end.¹

¹With the end of Project Mercury came the end of the 1959 Life contract after another \$80,000 had been paid to the astronauts upon Webb's announcement.

SUMMARY OF THE MEDIA AND NASA PAO DURING PROJECT MERCURY

When Project Mercury commenced in 1959, none of the astronauts apparently thought of themselves as becoming public figures and celebrities. As Shorty Powers stated, the men only thought of themselves as pilots of another sort who were extending the flight envelope. They did not appear to anticipate the media being at their doors within hours of the public announcement of their names but they learned rather rapidly. They learned that they had to maintain an image of sorts and that maintaining those images helped to maintain their employment (i.e., NASA) because NASA was and is dependent upon public support. In 1973, the American public realized that even a President can be toppled when the public support is eroded by disbelief.

Not unpredictably, the astronauts came across to the public as heroes. The authors of Journey to Tranquility have their opinion about what generated this hero worship:

The first and most truly heroic phase of the space age ended in the summer of 1963. [The years] were, to the public eye, the years of the astronaut; a period when this strange new breed of man was established as something larger than ordinary human life, with gallantry and nerve beyond the common experience.

This was partly due to the sheer novelty of the Original Seven and the ruggedness of some of the character among them. But partly too, the nature of the Mercury program was responsible. Somehow one man in a capsule, alone in the totally unfamiliar void, more easily acquires heroic status than two or three men facing the ordeal together. By himself, he bears some resemblance to the old adventurers, opening their solitary paths through jungles and deserts.... The last flight of the Mercury series...was the last appearance of the astronaut-as-superman (178: p158).

The fame of the astronauts spread like wildfire. Nothing like this had ever happened before with any project in the world. Because of the increasing publicity which grew almost explosively, most of NASA was caught unprepared. There was one part of NASA that was not caught unaware by what was happened and that was the Public Affairs Office staffed with men like Powers, Haney and Bonney. Don Schanche, who wrote the first articles about the astronauts in Life, writes:

NASA PIO under Walt Bonney definitely did not bumble. It was grossly understaffed, but professional. After Bonney left, it stumbled with growing pains for a while, but managed remarkably well during my time /1958-1960/. Individuals, especially Paul Haney and Shorty, were open and honest with me at all times, and very quick to respond to my needs. It wasn't just the Life connection, because they handled matters the same way with me later when I was at the Saturday Evening Post (136).

Many of the media were anxious to get to this new type of men who reporters were playing up as heroes. Howard Simon, who was then a reporter and later became the managing editor of the Washington Post, says that the first astronauts were like the first child of a family; like that initial child, the men were given a lot of attention and this overwhelmed them to the point of being abnormal. This could be expected since the media were interested more in the men than in the technology of Project Mercury (151).

Unfortunately, the seven astronauts were cast into a general mold by the media. Witness the following confusing words which appeared in a 1959 issue of Life: "Though they were picked from the same general mold, the seven astronauts are seven individuals.... But individual differences are subordinated to the main interest of all" (98: September 15, 1959).

The astronauts did not think they came from the same mold at all. In an interview in 1976, Deke Slayton said:

As a career field, the astronauts were homogeneous. The first groups were test pilots. They were all alike even though they were from different countries. They are all individuals but their career lumped them all together (152).

Even in their book, We Seven, which the Original Seven astronauts wrote for Simon and Schuster, a subsidiary of Time, Incorporated, one of the men described that they would often make trips together to various contractors who were working for NASA and to different centers of NASA. This tended to make the astronauts look as though one of them could not think without the other six being near him and possibly also cast them into a mold of all being the same. In the book it was written that:

We tried to avoid going around like a patrol of Boy Scouts or "those Seven Little Dwarfs from Mercury." We tried to behave, instead, like seven vice-presidents of a company (19: p92).

Gordon Harris, the PIO who broadcast the launching of Explorer I to a fellow PIO at the press area and acted as a type of preliminary Voice of something-or-another, offers his opinion about the media and the astronauts:

I believe the mags, TV and press generally went overboard on the first group of astronauts. Some of the excess is understandable. After all, these were the first Americans--and for a while some thought the first men--scheduled to fly into space. They were good copy because they were articulate, highly trained pilots and competent officers in their own right. The media seemed to forget they were human beings and as such might not be 100% perfect, without spot of sin, etc., etc. The public wanted desperately to identify heroes, no question about that--maybe a reaction to the Cuban mess, I don't know. JFK seemed to encourage the hero treatment--applying it personally to guys like Glenn. And NASA did nothing to discourage it; on the contrary (70b).

Although it seems that NASA did nothing to discourage the hero cult from being built around the astronauts, the refusal to put down this cult, was, in essence, an agreement to it. A number of people have commented that the astronauts were never instructed on how to behave, yet at the same time others claimed just the opposite. Paul Haney states that he had heard that Powers had pulled rank on the astronauts occasionally to have them do some things but this cannot be substantiated (the only astronaut that Powers might not have outranked would have been Glenn, who was the same rank as Powers but still might have been behind him in date of promotion). Powers writes, "...if anyone told them how to act, it certainly wasn't me" (66 ; 126).

Robert Gilruth, Director of the MSC during those years, said in an interview that the only instruction he ever gave to the astronauts on maintaining a certain image was to never refuse a request for an autograph. Gilruth explained that the reason for giving the order was because when he was a youngster, he had been upset when Charles Lindbergh had driven by in a car with the window shades pulled shut, disregarding the people wanting to see him; Gilruth did not want anybody to suffer

the same feelings if the astronauts held the same attitudes (48).

Maybe because of the lapse of time, some of those people involved may have forgotten about a letter written by Gilruth to the astronauts in late 1962, following the introduction of the second group of astronauts. There is nothing damaging in this letter which would indicate that the officials would have anything to hide. It seems rather forthright and innocent (especially the second paragraph), spelling out how the astronauts were to regard their actions in front of the public.

The Administrator of NASA has announced a policy which permits astronauts or those selected for astronaut training to make contracts for the sale of stories of their personal experiences and those of their families, including rights in literary work, motion pictures, radio and television productions, provided such agreements do not violate certain stated restrictions and are approved by the Administrator of NASA.

I am sure that you are fully aware of the public position which each of the astronauts occupies because of the intense interest throughout the world in our nation's manned space flight program. I am also sure that you realize, just as I do, the necessity for refraining from any activity which might possibly raise questions of propriety or bring discredit on the program or on anyone closely identified with it. It is imperative that we do everything possible to avoid even the shadow of a doubt concerning the motives of the astronauts, the propriety of their actions, or any possible conflict of interests concerning them.

For this reason, if any astronaut should become a party to a contract of the kind referred to above, it is requested that he give the most careful consideration to these necessities, and also keep them in mind in considering the form of any investment he may make.

The very existence of such a contract will inevitably draw public attention to all investments made by the astronauts, regardless of whether the funds involved are derived from the contract or from some other source. In particular, it is my hope that no investment will be made which might create the impression that any participant in this program is placed in a position of benefiting from the activities or decisions of NASA itself.

I trust that you will guide your conduct accordingly and that in case of any doubt you will not hesitate to seek my advice (49).

Obviously, Gilruth's letter reflects more upon the thought of the astronauts becoming involved with contracts but the thought of their public behavior is noted, not so much in how they are to behave in public

but in what they might do that could become public information and might be misinterpreted by the media. Gilruth wrote of investments and this covered many things. The news of the houses in Houston that had been donated to the astronauts brought criticism upon the astronauts as did the news in late 1962 that the astronauts had pooled their Life earnings and bought a motel, "The Cape Colony," near Cocoa Beach. It had opened in time for Schirra's shot and became the media center for that mission. Although the astronauts did not allow their names nor photographs of them to be used in the publicity for the motel, the business became well-known because of their ownership. Again, the criticism apparently had its effect and the astronauts backed out of the motel business (10: July 25, 1963).

Wally Schirra offered his views upon the investments made by the astronauts during those early years:

The first astronauts had no preparations for becoming heroes. Powers helped us out but the person who helped us a lot was Leo DeOrsey, our attorney. He kept us clean and said, 'Don't mess with testimonials.' We paid taxes and played it straight all the way.

We were offered the houses in Houston...and we gave those houses away but we invested in the motel legally with our money but the press raised such a fuss that we had to back out of the ownership of it.

It seemed as though a person can't be a hero and make money too (140).

Whenever investments are mentioned, the name of Alan Shepard must invariably come into the discussion. Most of the astronauts probably had investments here and there, as do many Americans, but Shepard was the one whose investments were best known. Arriving in Houston, Shepard linked up with a car dealer, Bill McDavid, whose dealership was the third largest in the world and who also supplied the astronauts with cars at cost prices. McDavid took over the ownership of a bank in Daytown and, as his nephew, Dan Boone, describes it (McDavid is now dead), his uncle "was smart enough to know Alan wanted to get in on the same kind of financial matter, so he brought him in. Shepard, of course, had some notoriety and this was a situation where they had to be careful not to capitalize on his public image" (178: p143).

Although they did not try to "capitalize" on Shepard's image, the name drew a response nevertheless. Boone continues:

At the time he [Shepard] went into the business, the First National Bank in Daytown had reporters from Life and Time [possibly the first publications to know / and, hell, television cameras and the works. So they got public notoriety for their bank and they had stock offers and people writing from all over the country wanting to buy stock. So that was a \$20 million bank in Daytown and...all of them recently made a ton of money out of it. I know Uncle Bill made a half million dollars at least (178: p143).

With the help of the President of the Daytown bank, Lee Brazefield, Shepard then bought controlling interest in the Fidelity Bank and Trust Company in Houston, something he later sold to McDavid. Eventually America's first astronaut in space also sold his interest in the Daytown Bank. With some of the dollars they had earned from their investments, Shepard and McDavid bought a \$200,000 private airplane. Together, they flew to several auto dealership conventions held in Detroit and Las Vegas. Shepard also became involved in the oil business; four of the six wells he invested in came up wet. He was also the only astronaut not to buy a home in the area near the MSC, preferring to live in an apartment near downtown Houston for a while and later buying a \$150,000 home near the exclusive River Oaks section of Houston--a suburb with broad streets where the houses are recessed far from the pavement behind brick and steel fences and where large, lush trees covered with moss stand over limousines parked in the drives are not an uncommon sight (178: p143).

Shepard, the first astronaut-millionaire (who had earned only \$141.38 for his 15-minute flight as flight pay), was said to be resented by others in the astronaut corps because of his lifestyle but also for other reasons that are to be explained later. It seems that Shepard did not really care what the public image of him was made to be; just as long as he kept his dealings above board and stayed clean in all that seems to have concerned him. But there were others in the Original Seven, especially Glenn, who preferred to maintain a good image for the public.

Tom Wolfe, who wrote an article for Rolling Stone about the

astronauts and used a so-called "Inner Voice of the Astronauts" as his narrator, states:

He [Glenn] was arguing that we had to cut out the crazy sky-jockey day-to-day living...of which there was plenty.... ...and some of us would say, "What the hell, John. We're here to do a job and on this job we have to set a terrific example, you're right about that. But what we do on our own time is our business, not the American people's." And the argument would drone onabout how we were also going to be in a position to wield power and how people might follow us blindly, and so we had an obligation to keep this power under check at all time The American people looked at all the insane, spastic rockets blowing up and then at us and said, "Those are brave lads. They haven't resigned yet...!" One reason that John was already so concerned about our national image however, was that he probably just assessed he was going to be chosen for the first flight (131: January, 1973).

It seems as though the astronauts belonged in two groups on how they thought their public image should be. On one hand was what might be called the good-guy set of Glenn, Cooper and Carpenter (who, one NASA official said, looked upon Glenn as a mother-father figure). Glenn was the type who did not smoke, drink nor swear and was a person with whom the American public could identify easily. This caused Glenn to earn the title of "Mr. Klean" from some of his fellow astronauts. Said Glenn of the astronauts: "There was no escaping our role as symbols, particularly for young people, our nation's future." (178: p141; 39: January, 1973).

On the other end of the scale from Glenn was Shepard, attended closely by Grissom and Slayton. They seemed to have the attitude that they were there only to do their jobs. If the media wanted something from them, then let the media try, was the apparent attitude. Schirra seemed to float around between the two groups, perhaps being the most human of them all. At times he griped about the publicity yet he understood the necessity for it; some reporters disliked him yet others related well to the easy-going astronaut of Sigma 7 (178: P141; 39: January, 1973).

There were rivalries. Schirra wrote that there were arguments concerning the technology but the quarrels were never on a personal nature.

Slayton says, "We put a big premium on who got the first flights in Mercury and I'm afraid the competition was a bit keen at times." There existed indications of personal disagreements. Schirra does not care to talk about what he calls "family matters." Some people say that the biggest rivalry of all was between Glenn and Shepard, which began when Shepard was chosen for the first flight, continued when the press called for Glenn to go instead of him and increased further when Glenn became the first hero in America after many years of the U.S. not having one. NASA and New York City gave Glenn a ticker-tape parade--something that did not exactly endear him to the hearts of Shepard and Grissom. The rivalry went on for years, even when President Johnson gave a dinner for past and present astronauts at the White House following Apollo 8's orbits around the moon; Glenn was absent and one excuse for his not being there was that the plans for the dinner were drawn up in Houston in the office of the man who was in charge of all the astronauts--Alan Shepard (98: September 27, 1963; 178: pp141-142).

One thing that seems to have complete agreement among the astronauts is that they like the money from Life. The contract with Life caused much argument among the media, the government and NASA but it held together through the Mercury program until the time when Mercury finally came to an end. The contract offered the astronauts more than money but it is worthwhile to study the monetary impact of the contract. The astronauts were celebrities existing on the pay scales of military officers, which at that time, ranged from a little over \$8000 to \$13,700 per year. Public relations duties for NASA took them away from their homes and families in addition to the times that they were away because of the duties associated with their missions. The astronauts had to buy civilian clothing and stash their uniforms away (this was done in accordance in keeping the appearance of NASA as being a civilian agency but they still had to buy their uniforms, as do all military officers. Only enlisted personnel are issued clothing.). The life of celebrities could have drained the financial reserves of the astronauts quickly if

they had not had the money from Life. Tom Wolfe writes, "...a Mercury astronaut...on top of the world but the [telephone] bill staggers you...fifty dollars! America's first astronauts were the most poverty-stricken VIPs in the country." Gordon Cooper states, "The Life money is all that kept our heads above the water." Reporter Jerry Bledsoe wrote in Esquire, "Everybody thinks the astronauts were so wealthy. It was a bunch of baloney" (131: January 4, 1973; 39: January, 1973).

As noted earlier, some of the astronauts, notably Shepard, did put away their money and use it wisely. Some, perhaps, did not. But some Americans obviously thought that all who were connected with the astronauts became rich too. The thought of the astronauts as being rich comes as no surprise; it would seem that all celebrities are rich and since the astronauts were celebrities, they were supposed to be rich. Even later astronauts thought about this facet of being astronauts when they entered the program over the next several years following the end of Mercury (77: p187).

Colonel Powers writes that people seemed to think he also prospered because he was so closely associated with the astronauts and was virtually as famous. He also describes the life in general for the men of Mercury.

We all paid dearly for our participation in the U.S. man-in-space program in terms of total loss of privacy and, at least in my case, financially. I did not have a Life contract and survived on the relatively meager salary of an Air Force Lt. Col. with travel expenses being paid at the rate of \$11.00 per diem. Management and the White House did everything but order us to wear civilian clothes so we got no clothing allowance. In terms of personal stress on family relationships--total commitment--which is what we and all of the others in the manned spaceflight team had--meant gross neglect of family affairs--wives [were] left home to cope with children and society by themselves etc. took its toll. It cost me a family. It (the program) did indeed change my whole life. After I left the program, the opinion of most people seemed to be that somehow or other I had amassed a fortune through my participation in the program and that I should therefore travel to their conventions and such and give of myself freely...without ever receiving any return (126).

The astronauts, even with the money from Life, were not especially wealthy. Glenn could not afford to buy life insurance for his flight, but

the astronauts' lawyer, Leo DeOrsey, wrote out a check on his account that would be given to the Glenn family in case the colonel did not return. The check was for \$100,000.

Mrs. Grissom writes:

One man, who had no connection with the space program except friendship, put it this way.... "You know what they got paid? Their military pay. That's it and the amount they got from Life magazine was peanuts compared to what they were entitled to. The guys were hurting and everybody's crucifying them..." (59: p65).

The astronauts were not the only persons concerned with the money. Jerome S. Hardy, formerly of Time and Life, comments about those early years from the viewpoint of the editors of Life:

As publisher of Life, I was present when we made that controversial contract with the astronauts. I was instrumental in organizing the first tour of business executives of the space program. I winced at the bills which came in as we continued to cover the space program, as I guess no other medium in the country did. I think I can say, not boastfully, that Life did as much to glorify the space program during the Sixties as anyone (9: March, 1971).

Hardy's statement brings up another point about Life's coverage. Did that magazine really contribute anything of value to Project Mercury? Many people said that Life did contribute since it showed the men while also showing some of the technology involved with the missiles and spacecraft of the program. Robert Gilruth feels this way:

Life was a big, big plus for us. It gave the astronauts privacy yet it let the public into their private lives.... / Life / was a good thing. It gave us the best possible exposure. It was a friendly, powerful magazine that showed the astronauts with their best foot forward.¹ And the dollars it gave the astronauts helped them cope with the extra expenses (47).

Flight director Chris Kraft offers his comments about the coverage of the astronauts:

The magazines and NASA created the American hero out of the

¹Haney says that reporters from competing magazines agreed with this viewpoint.

astronauts. This was good for the program but it was tough on the men. They became something like the Saturday afternoon football hero and it was difficult for them to survive. Their image was important to everyone. They were the highlight of the program (91).

The picture painted by the editors and writers of Life is considered very one-sided. The authors of one book give their opinion:

Given the Life treatment, astronauts have emerged from the beginning as lovable, freckled heroes with sons on the college football team, reassuring commercials for white teeth, God and baseball hats.

The only trouble with Life's interpretation was the lack of life breathed into its subjects. There was also much irritation among reporters who took a dim view of the astronauts' doors being banged in their faces when the American taxpayer was spending \$24,000 million to go to the moon. But that was a minor problem by comparison with the fact that all astronauts began to sound alike; machine-men cheerfully facing torture, danger and perhaps death for their country.

In fact this picture did them little justice. Some of the Original Seven astronauts were far more interesting than that. As test pilots, they were uniquely well qualified for work which demanded bravery, stability, endurance, team spirit and a sharp mind in blurred conditions. But they were also flesh and blood (178: p140).

Years after he left office, Administrator Webb told this author in an interview that he liked Life (more than likely after his initial anger with it) because of its international issues, which did much to promote the U.S. space program abroad (170).

Life was also proud of the way that it could have the news, the photographs and the personal stories about the astronauts out to the newstands and in the mailboxes of its subscribers. Editor C.D. Jackson wrote an editorial following the flight of MA-9, saying, "With almost newspaper-like swiftness, Life gave 7,000,000 readers across the nation a unique view of Cooper's triumph. No other magazine attempted to do it so swiftly after the event. None could" (98: May 31, 1963).

Apparently, sometimes neither could Life. The second group of astronauts were selected in the summer of 1962 and introduced to the public on September 17 of that year but it was not until September 27,

1963, a whole year later, that Life finally carried a story on the type of men these new astronauts were. It has been said that the rest of the press was \$500,000 behind Life but it can be said that Life was sometimes a year behind the events, at least in this case.

Because Life had a virtual monopoly on the private lives of the astronauts, its writers also had the inside track on knowing what the men were really like. But it appears that they might have been less than candid in covering the astronauts and their families. Wolfe's Inner Voice of the astronauts talks again:

The Life writers were with us so much, they were like part of the family.... I'm sure they wanted to make things as smooth as possible for us like everyone else. Even if they could have printed candid accounts of our personal lives, I'm not sure they could have brought themselves to do it if they thought it might have shaken us, given the atmosphere that prevailed at the time" (131: January 4, 1973).

Writer Don Schanche of Life, who penned the first articles on the Mercury astronauts, tends to agree, saying that, since there was a Life reporter usually with the men everywhere they went during the early years, it would have been hard for the astronauts to have lead normal lives "If they had to worry about every indiscretion observed" (136).

The thought that the Life reporters might have been a little less than honest about the astronauts may be right. There seems to be, in fact, in most magazine articles through mid-1963, a hero cult built around the astronauts. There is very, very little written about anything that any of the astronauts might have done which was wrong. Criticism of them, aside from that about their acceptance of the Life contract and their investments, is almost non-existent. None of the magazine writers or editors that this writer has communicated with has mentioned about receiving any instructions on how to write their stories about the astronauts. It should be remembered that the entire country was in a mood, as Ed Diamond said it, of "Go, go!" Some writers have said that they knew of wrong-doings that some of the astronauts did that might be frowned upon by the public but the writers considered what the astronauts

were doing in space was far more important than what they were doing on the ground. Wolfe comments again: "There was no way [] that Luce, the head of Time, Inc., was going to permit [] anything...get into Life that presented us as anything but cleancut Brave Lads or our wives as anything but Primly Stable" (131: January 4, 1973).

Don Schanche does not believe that Luce was behind the initial creation of Brave Lads and Primly Stable: "It was not Luce who thought of them as "his boys" but Edward K. Thompson, then managing editor of Life. Luce only met them once during my term ('58-'60) at a cocktail party in New York three months after they were named. Maybe he got interested later" (136).

The PAO of NASA was not going to present the astronauts as Brave Lads but then NASA was not trying to present any image of them at all except as men who were hard at work. Powers maintains that he created no images, that he just opened the doors and showed the astronauts as they were to the media. Powers had a difficult time in the beginning. There had been nothing like Project Mercury in the past that anyone in the PAO could draw upon for guidance. Powers' first office was next to a boiler room and had pipes running across his ceiling and along one wall. Powers also had no staff for the PAO of Project Mercury; he was by himself at the outset. The members of the PAO of both Mercury and NASA found themselves in an unenviable position--they had to inform the public about the space program yet protect the astronauts from the pressures of the members of the media who were constantly wanting access to them (126; 39: January, 1973).

One way that some of this pressure was alleviated was through the introduction of Friday morning interviews. Deke Slayton had started this in 1962 when he was head of the astronaut corps. The rules were simple; the reporters contacted the PAO to request the interviews and the astronauts would be available on Friday mornings to meet the reporters. The astronauts would be inaccessible during the rest of the week (except to Life but that was only while the astronauts were at home) unless there

was a scheduled press conference. Other rules were that the astronauts were not to wear their uniforms since NASA's appearance was to be that of a civilian governmental agency and that the reporters were to be accompanied by members of the PAO during the interviews. Jack Riley, of the PIO in Houston, says that the presence of the PIOs during the interviews was "primarily to keep the records straight as a witness. Some guys wanted to make sure that they were not misquoted by the reporters." Riley added that the PIOs were not there to intimidate either the reporters or the astronauts. Undoubtedly, their presence might have cut short any off-the-record remarks made by the astronauts. As can be expected, reporters did not take too kindly to having a public affairs person with them while talking to an astronaut.¹ The practice of having a PIO present for the interviews was finally stopped in 1968; after that time, they only sat in on an interview when they were requested to be there (152; 129; 69: p202).

Powers admits that there were mistakes on the part of those people working for him but he also points out that the members of the media made mistakes too. He writes, "In many cases where they could not comprehend what we were telling them, they chose to fabricate their own stories" (126).

The astronauts did not care to have the media continually chasing them for interviews. Powers continues:

I saw occasional fits of temper and frustration on the part of the astronauts over what they felt was interference with their business and invasion of privacy. At the same time, I was well aware of the role and function of the media and of our responsibility in government to report our activities. It was often a very delicate balance and there were occasions for friction but usually they /the astronauts/ took out their frustrations on me rather than on members of the media group.... The one single and

¹Actually, the PIOs were required to be present at interviews of all NASA personnel, not just the astronauts (129).

very rigid guideline was that I could never do anything which would in any way interfere with the pilots' preparation for or conduct of their flights. And that includes psychological interference as well (126).

The PAO had the responsibility for portraying other people in Project Mercury and NASA besides the astronauts. There were many people behind the scenes who were just as important, if not more important than the astronauts. Gordon Harris writes of how these other people were sometimes treated by the different PAOs:

I distinctly remember Haney telling Scheer at one of our Washington meetings that he had to get publicity for his boss, the flight controllers, etc., etc. The name of the game seemed to be to play down von Braun, boost the astros (who were becoming more difficult to live with from the PR standpoint) and the JSC leadership. Haney did a good job in that respect (70b).

Powers also comments upon the same subject, promoting the people at NASA other than the astronauts:

Few, if any, media people were interested in talking to the Gilruths, Fagets or Pilands or others. The reasons for that attitude were two-fold: On the one hand, the public could identify with the guy who would eventually have to sit on the hot seat of the spaceship as opposed to the brain which produced the bird in the first place; second, the media people were just not prepared for the technical aspects of man-in-space and the engineers and technicians had never been called on to explain their work in layman's terms (126).

There was also the problem that many of the people in NASA had come from a background where they had no need to deal with the press and had been accustomed to keeping their mouths shut because of the previous secret projects they had worked on. But some of these people, once they realized what was going on around them, also strove for personal recognition in the media. Those who wanted this recognition achieved it by arranging to have personal backgrounds written up on them and passed along to the members of the media. In addition to this, the members of the industries which supported NASA also wanted to make sure that they were noticed by the public. Ads concerning U.S. space efforts by private industry suddenly blossomed across the pages of magazines when the U.S.

entered the space race. It was as if overnight many companies in the U.S. suddenly linked up with the nation's space programs but these same companies would avoid the limelight whenever something would go wrong. The best example of this is to observe North American Rockwell's behavior following the Apollo fire in the early spring of 1967--to be covered in detail later in this thesis (126).¹

The PAO had its troubles from outside and within. First, the relationship with Life never ceased to cause headaches for the members of NASA's public relations staff. Life ran the word "exclusive" in one of its stories again after it had been told not to do that and Haney insisted that the editor, Ed Thompson, remove it. Thompson did not want to as the magazine was due on the newstands the morning following Haney's visit. Haney insisted and again Thompson said no, explaining that he could not stop the publication of that issue because he had authority to make decisions within a certain cost limit and stopping the presses to change some plates was above that cost. Therefore, either Luce or C.D. Jackson would have to decide. As it turned out, the plates with the forbidden word on them were scrapped and Life appeared one day late that week. This was a rare occurrence though (66).

Powers, during the Mercury years, and later Haney, had the responsibility of reading the material which the astronauts wrote for Life to make sure that nothing technical was included in the stories that had not been discussed with the rest of the media. Haney said that if a story revealed that an astronaut's child had thrown up, then that was fine but there was to be nothing technical slipping through under the previously mentioned basis. Haney also remembers that sometimes the relationship between the staffers of Life and NASA took on comical proportions, such as the time when one Life employee did not want anything to make it appear that Life was in collusion with NASA concerning the personal stories; the man would instruct Haney to leave

¹North American Rockwell was the manufacturer of the Apollo spacecraft involved in the fire.

the stories in the plant basin of a lobby of a certain building. Later, the Life employee would steal into the building to pick up the envelope containing the stories and hope that they had not been seen (66).

In 1959, Alfred Friendly, managing editor of the Washington Post, had blasted NASA for allowing Life to make a contract with the astronauts. NASA later invited him to review the situation and he reversed his decision about the matter. He wrote in the Bulletin of the American Society of Newspaper Editors:

Life's story was more complete, more interesting, and better presented than stories on Project Mercury presented elsewhere. But--unless there are some shenanigans not now evident--it appears to have done it by the expenditure of money, manpower, space, brains, and ingenuity, rather than by favored or indiscriminatory treatment. Nothing in the story seems to be in violation of NASA's policy. And, except for the question...about federal employees writing for pay about the work they are already being paid for, there would seem to be no grounds for complaint that NASA acted unfairly or in a discriminatory fashion (26: May/June, 1973).

But not all publications agreed with Friendly. Until the last vestiges of the Life contracts disappeared in the early 1970s, opponents of Life would continue to blast away at those involved with the contracts.

Life was not the only pain in the neck for NASA's PAO. There was also a war between the electronic and the print media. As mentioned, Julian Scheer accused Powers as favoring the electronic media, something which Powers denies on an overall basis.

One incident that brought accusations of favoritism upon Powers' head happened during one mission. The colonel describes the situation:

...I gave a 30-second warning of an impending announcement / to the electronic media and not the print media / from Mercury Control. We solved that by simply requiring the networks to pipe that alert to the press stand--something I should have thought of but didn't. Mr. Patterson of the Atlanta Constitution was the leader of that ill-conceived and unnecessary hassle (126).

Roy Neal, of NBC News, in an interview, remembered some of the competition with the following thoughts:

In most cases, the electronic media was far better staffed and prepared better to roll with the news when it happened. The print

media didn't have to get the news out exactly when it happened. The mainstay of the print media would be the wire services.

An example of this was Shepard's flight during which I was the electronic pool producer. We wanted communications from the recovery ships of the splashdown and the Navy couldn't guarantee this. So we installed two types of radios out there at our expense. One was the production circuit for our own closed channel communications and the other one was broadcast for direct transmission from the ship. Later, when Kennedy called Shepard...on the ship, the President preempted the communications circuits / except those of the electronic media pool / and we all listened in. Even Powers had to listen in on this since it wasn't on his communications loop. The print media asked about this afterwards.

So I, Haney and Powers talked to them. We told them we had built a / communications / truck / which picked up the transmission from the ship and re-channeled them to the public / because of our requirements to get the news out as it happens, which was something they didn't have to do immediately except to their editors. The truck had not been built by NASA at government expense. This calmed the waters (119b).

And finally, there was trouble within the ranks of NASA's news handlers themselves. There was a furious change of command of the PAO from late 1960 until March, 1963 when Scheer took over. Bonney, who had been in charge of NACA's public information office for nine years when NASA was formed, stayed there only until November, 1960. According to Paul Haney, Bonney said, "he had so much scar tissue from the U2 thing six months earlier that he wanted out and quick."¹ Next came Shelby Thompson who was the Acting Director from November 15, 1960 until February, 1961. Following him was O.B. Lloyd who remained in the head position until December, 1961 but remained with NASA doing other activities until 1969. Dr. Hiden T. Cox lasted only until June 30, 1962 as the Assistant Administrator for Public Affairs. O.B. Lloyd returned to the top spot to plug a gap of two months until Dr. George L. Simpson arrived to take charge on September 1, 1962. Simpson was the last person before Scheer arrived, who assumed command on March 21, 1963.

¹Gary Francis Powers had been shot down by the Soviet Union while flying over Russia on a spy mission in an American U2 reconnaissance airplane which was supposedly being used for a peaceful NASA project. The first press release by NASA simply said that the plane was missing while on a mission over Turkey. This is what Haney is referring to because it later became evident that the U.S. was guilty of spying.

Scheer would remain in the top position of the PAO until halfway through the Apollo missions. Having someone in the head office who was going to stick around for longer than six or nine months possibly soothed a few nerves among the staffers who worked in the public affairs office (67; 123a).

But other nerves were soon frazzled. The confrontation between Scheer and Powers took place. Scheer did not believe that the members of the PAO should be in front of the media but, rather, they should show the media around and stay behind the scenes. This was the beginning of the downfall of Colonel Shorty Powers (137).

Powers came to NASA from the Air Force in 1959, at which time NASA had only four centers: Cleveland, Edwards AFB (California), Langley and Goddard. Haney comments on the PAO at the beginning:

The PIO was virtually non-existent. It was done mostly in and from Washington. Everything else was classified or the centers acted like it was. About 1960, Huntsville came along. The Cape was set up as a center the same year.... In the late fifties, Langley had been in existence for more than 40 years and I don't think it had ever issued a press release.... ..manned space had 90% of the money and 190% of the interest. From a bureaucratic point of view, it was wisest to treat all center PIOs as equals, at least for pay purposes (67).

Although the pay of the PIOs was equal, the amount of exposure that each obtained was something else with Powers definitely having the most exposure to the public of all the PIOs and that was because of his position as spokesman for Project Mercury. The description of the colonel are many and varied. Some people respected him highly, other despised him. He was a remarkable man and quite often a controversial one. The American public identified with Power's voice, which Saul Pett of AP described as being, "deep, resonant, portentous...with its slight touch of Armageddon and tight-lipped restraint..." (32: p89).

Haney says that Powers was "an embarrassing, dynamic person...who was on stage all of the time," which clashed with Scheer's beliefs that his personnel should remain out of the picture in relation to NASA's projects and other personnel who made the news. The relationship between

Powers and Haney was a "tempestuous one," to use Haney's words. Haney was working for the PAO in Washington as the head of the Public Affairs for Manned Spaceflight and Powers was at Houston (or at Langley while Mercury was still there) as the head of Mercury's PAO. There was no direct line of command between the two men. Haney said that Powers often tried to go around him by going to Gilruth and having the head of the MSC agree with him on things that Haney did not like. There was a time, Haney remembers, when he and Powers were communicating over the telephone daily and, by the end of the day, they usually forgot what they had discussed in the morning. To alleviate this problem, they resorted to using teletype machines so they could have a written record of what they discussed. In one session, when the two men were not seeing eye-to-eye, the symbols above the numbers on the upper-case shift were flying through the teletype lines (obviously the men did not care to use expletives in their typed discussions). Finally, Haney typed out a message and no reply came back from Powers. Haney typed out a question asking Powers what was wrong. Still, there was no answer. Haney says he then typed out, "'Come on, you little *,' or something to that effect and then the telephone rang." The caller was Powers who announced, "I don't have a teletype." He had become so irritated that he had thrown the machine out of his office (66).

Chris Kraft recalls that there were times when Powers would accompany him to press conferences, offering advice and coaching Kraft on how to conduct himself with the reporters. At times, says Kraft, "Shorty gave me hell about my speeches," and the flight director adds that he never resented Powers for the advice. Kraft remembers that there was one thing that Powers told him which was occasionally helpful: "He taught me to say 'shit' when I didn't want the television cameras on me anymore [during the press conferences]" (93).

Whatever was the case against him, in the summer of 1963 Powers was fired from his position as the head of the PAO of Project Mercury. "That was a lousy kind of trouble," remembers Gilruth. "To fire someone

in the public eye" (48).

Powers was not fired from the military and NASA in the total sense of the word. He was transferred to another position, one less visible to the public. But the New York Times took notice of this and gave Powers' transfer page one treatment. However, when D. Brainerd Holmes, the man responsible for starting Project Apollo, left NASA abruptly only weeks before Powers was transferred, the New York Times had given his leaving only passing notice (32: p89).

Powers writes that he has never known the exact reasons for his dismissal from the MSC post, something he was bitter about. It was mentioned to him that he would become a "special assistant" to Gilruth. Powers states, "Obviously, I was being told that I was being installed in a closet where I would have no function." But the colonel had another seven to eight months left to serve in order to be eligible for 22 years of military service. Because of this, he accepted the position under Gilruth (126).

Powers remained in Houston for a short time longer but, he writes, "apparently someone in Washington decided I had too many friends in the media and industry and couldn't be trusted in Houston and stay quietly out of the scene. So I was summoned to Washington...." This was done at the request of Scheer, who says that he wanted Powers there with him, despite warnings from many people that Powers "would stab me in the back," says Scheer. "If he did anything damaging behind my back, I don't know about it" (126; 137).

Webb had a talk with Powers upon his arrival in Washington. The essence of that talk, says Powers, was a sermon on the mount regarding how all things change. Powers was then put in charge of the design and construction of the U.S. Space Park at the 1964-65 New York World's Fair. Scheer said that Powers' efforts on that project were "excellent, first rate." In May, 1964, after being the Voice of Mercury Control, being a public information officer for the Air Force Ballistic Missile Program and doing a variety of other functions throughout his military life,

Colonel John A. "Shorty" Powers retired quietly (126; 137).

Despite the initial confrontation between Scheer and Powers, there are several reasons to believe that Scheer was not the person who really wanted Powers out of the picture. Haney attests to this view and Scheer says that a majority of personnel in the upper echelons wanted Powers fired. In all aspects, it appears that Scheer tried to help Powers out of NASA in a manner that was far easier than some people would have liked to have seen him leave. Scheer's actions of easing Powers out possibly helped to prevent worse publicity for NASA than what Powers' firing from MSC had already caused (66; 137).

Powers was almost joined by Haney in May, 1963. After Cooper's flight, Haney decided that he wanted to leave his job and go on to better things. International Business Machine was offering him a position as the Director of the Federal Systems area, a new field of IBM. The offer paid well, about \$30,000 which was twice as much as Haney was earning at NASA but he decided he would stick with the government for a short time more (which actually lasted until 1969) (66).

With Powers out of Houston, Webb asked Haney if he wanted to go there to take over the PAO of the MSC. Haney, who had not been seeking the position, agreed and left for Houston in the last quarter of 1963. But he made so many trips back to Washington for conferences at NASA Headquarters that he felt as though he had never left the Capitol City. Because of that, Haney maintained his memberships in several clubs and continued to hold onto his Washington, D.C. area credit cards (66).

When Haney arrived in Houston, the attitude of the nation towards space was beginning to change. Wolfe states that the parade for Glenn was the last moment of innocence for Americans but, more accurately, it might have been around the time of Cooper's flight. Glenn's parade was the bigger one, true, but Cooper's came at the end of this nation's first program designed to ultimately put men on the moon. The end of Project Mercury seemed to be the end of our space exploration in the romantic sense of the word "exploration." After Cooper returned from space,

perhaps before, the nation knew that it had the capability to put a man in into space and recover him successfully. It seems to be that the nation was like a child with a new toy--the first time around, the toy is exciting but, after awhile, it is just another toy to be put back in the box with the others.

Schirra's flight might illustrate this point more clearly. When he was launched, there was trouble for some people in deciding what they were going to watch on television that day because the flight of MA-8 was being shown on two of the networks while the third network carried the World Series of Baseball. At the end of the mission, during the recovery, the televised pictures of one network showing the recovery of Schirra were cut into to show parts of the World Series. This seems to indicate a switch in the mentality of the network executives who might have thought that the public was becoming tired with space flight.

When Project Mercury was begun, it stood out from the rest of the government as being an effort that was totally civilian--peaceful in nature. But as time went on and the nation became more involved with that far corner of the world called South Vietnam, the entire government was dragged into the arena for criticism. This included NASA, although NASA had nothing to do with the war except to offer distractions from it occasionally through the future years.

President Kennedy died in November, 1963. Perhaps that was the end of America's innocence. It certainly was the end of the Camelot years and the beginning of the barbecue era. No one knows what would have happened had Kennedy not been assassinated; there are too many "ifs" to consider before offering speculation on that. Whatever, when 1963 finished its 365-day life span, some of the gleam of NASA seems to have faded slightly. It would still remain for some more years until a fire at Cape Kennedy (renamed by President Johnson for his predecessor only days after the assassination) would force a nation to re-evaluate what it was doing. Through it all, though, the astronauts would remain a

special breed of men, far separate from the rest of the human race, as they were portrayed by the media. There was something about them that never failed to attract attention.

THE INTERIM YEARS

There was almost a two-year gulf between the last Mercury mission and the first Gemini flight, manned by Gus Grissom and John Young. Although it may have appeared to the public that Gemini began only after Cooper returned from his orbits, the second U.S. space program had actually been in existence as a concept since 1959 (and in name since January, 1962). Gemini, named after the constellation which represented the twins of astrology, seemed to symbolize, to NASA planners, the two-man crews of the spacecraft. The program was primarily concerned with three areas of study: 1. the effects of long-range and long-lasting missions upon the machines and the men who would pilot the spacecraft; 2. the techniques of rendezvous and docking procedures which were necessary for later Apollo missions; and 3. the development of a program that was more complex than Mercury and would require more team work to make the program work (this would then be evaluated for use during the Apollo program). The two years of waiting were filled with technological development within the space administration and there were also developments of another nature as well (55: p14).

Shortly after the end of Mercury, Administrator Webb wrote Field President, Bailey K. Howard, about the contract proposed in the spring of 1963. Webb suggested that the \$3.2 million contract was unacceptable in part, because "the impression of emphasis on personal gain or commercialization...would not contribute to the nation's interest but would work against it" (26: May/June, 1973).

Webb may have been influenced by the pressure exerted on him by the media, as described earlier, and he might have listened to his people within NASA. Webb's Assistant Administrator for Technology Utilization and Policy Planning, George L. Simpson (formerly head of the PAO), had written a memo to Webb on April 24, 1963, saying that the contract "has many dangers. It is a contract for general exploitation. This is rare and not desirable to government employees" (26: May/June, 1973).

There were two other points that were not in Field's favor as seen

by NASA. One was that Field had desired an eight-year contract including a separate set of contracts to cover the wives of the astronauts (that suggestion did not originate at Field but with C. Leo DeOrsey who mentioned this thought to Howard in a letter dated April 17, 1963).¹ John Finney of the New York Times attacked this concept several times and Field eventually dropped the thought. The second item fouling the proposal was that Field had offered a flat fee for the astronauts plus royalties from what Field would sell. NASA did not mind the flat fee but the space administration balked at the thought of royalties as this might encourage some of the astronauts to perform sales work to give promotional assistance for Field (32: p95; 29; 10: July 25, 1963).

On July 9, 1963, Field announced that it was backing out of the negotiations. The reason given by Field for the withdrawal was that NASA had not accepted an "unreasonable delay" clause in the documents, i.e., that NASA would have to pass on the stories to Field within a certain amount of time after receiving them from the astronauts--this was so Field could receive the stories while the events were still news. NASA's only reply to this charge was to say that it was only a minor dispute. The space officials did not say what their biggest disagreement was (159: July 19, 1963).

Shortly thereafter, Webb gave Field another crack at getting the contract by sending Howard a letter saying that there was still a chance. The Field President replied on July 17, 1963, indicating that he was willing to accept Webb's offer by proposing a new contract which was scaled down from the first proposal. Field now wanted only the rights to the astronauts' personal stories to use in books and newspapers. This also gave an "invitation" to Life to stick its nose into the bargain as it could represent the magazines and Life jumped into the pool. Together, Life and Field formed a partnership and submitted their

¹DeOrsey continued to represent only the Original Seven astronauts. The second group now had Harry Bratten, of Philadelphia, working for them as their counsel.

proposals to NASA. In mid-September, 1963, NASA accepted the new terms and, for \$520,000 per year for four years, the two journalistic corporations could have their cake and eat it too (26: May/June, 1973; 52).

Each of the corporations wrote a contract with the astronauts and through their lawyers Bratten and DeOrsey. The contracts were virtually identical with minor exceptions. In looking at them on an overall basis, the contracts spelled out that Time, Inc., would have the right to publish the personal stories in Life, Life International and Life Espanol; the copies of Life for U.S. and Canadian distribution would be made available to the public four days before any other publications would appear (i.e., by Field) and only one day before any other publications would appear in the rest of the world. However, Life International and Life Espanol would have to wait for ten days after Field's foreign publications were printed before they could carry stories written by the astronauts. On the other hand, Field would have the right to publish the personal stories in books and newspapers throughout the world and in magazines outside of the U.S. and Canada except those printed in association with Life (44; 160).

The contracts were primarily elongated versions of the Life contract of 1959. Rules were spelled out stating under which conditions the contracts could be dissolved, how the astronauts were to contact Field and Life if they wanted to tell their stories to any of the rest of the media, how the publishers could not disrupt the normal operations and training of the astronauts and how the lawyers were dismissed from any responsibility (yet they could be called to help if there were any disputes between the corporations and the astronauts) (44; 160).

The contracts covered the possibility of more astronauts joining the astronaut corps and a basic difference between the 1963 and 1959 contracts was in how the astronauts would be paid. The 1959 contract used program dates as a way to pay the astronauts; the 1963 contracts used a time element--every September 1 the astronauts would be paid a certain amount.

Since Field and Life announced that they would pay the astronauts \$520,000 per year, it would seem that the 16 astronauts who were then in the employment of NASA would earn \$32,500 per year but this was not so. The 16 astronauts would earn only \$16,250 (\$6,250 from Life and \$10,000 from Field). This was done in order to allow for expansion of the astronaut corps without diminishing the amount of money that the astronauts would earn. Thus, there was room for 16 more astronauts before the ceiling of \$520,000 per year was reached. After that time, the active astronauts would divide the \$520,000 evenly among the families (which included the families of astronauts who died while on duty). (44; 160).

Something that was not mentioned nor implied in the contracts was the matter concerning the insurance the publishing companies were also willing to provide for the astronauts. Field and Life chose not to buy policies for the men but, if any astronauts died accidentally while on assignment to NASA, then the publishers would pay the survivors \$100,000 (\$50,000 from each corporation). It may not have been cheaper for the journalistic organs to underwrite their own policies for the astronauts rather than to pay insurance policy premiums based on risk rates. During the next four years, seven astronauts would die (an eighth would die in an airplane crash in late 1967 when only Life was left holding a contract with the astronauts--Field failed to renew at the end of the 1963 four year contract for reasons to be discussed later), costing the firms \$350,000 each. According to insurance agent Robert Dragos, of State Farm Insurance, the insurance the firms could have purchased would have cost them much less than the \$700,000 they had to pay as a result of those astronauts' deaths (see Appendix B for a copy of the contracts) (34).

The terms of the contracts were apparently not well explained to other publications or else they were not understood properly. Newsweek reported, "sixteen astronauts last week sold their personal stories for \$1,040,000 to Field Enterprises Educational Corporation covering newspaper and book rights and to Life magazine." The figure is correct

for a two year contract but Newsweek did not spell out exactly what the astronauts were to receive--a maximum of \$16,250 per year with less as the number of astronauts rose above 32 in number nor did the magazine state that the contract was to last only four years and the million dollar figure was not a total sum. Months later, in the May 11, 1964 issue, Newsweek corrected itself somewhat in an article about the Field Corporation with the statement that Field was paying the astronauts \$10,000 for four years. Interesting enough, Newsweek did not editorialize about the contracts. Ed Diamond, Newsweek's science editor, was not in favor of the contracts and he still maintained that feeling in early 1977 (31; 122: September 30, 1963).

Time, Life's new-brother, did not report the contracts precisely either. Whoever wrote the article in Time also explained that the astronauts would be receiving \$1,040,000 from Life and Field--without specifying the amount of time over which the money would be paid to the astronauts. The reporter did note that the men would be paid \$16,250 per year. This leads this author to believe that there was a reason for publications reporting the \$1,040,000 figure as reported in Time and Newsweek; \$16,250 times sixteen men for four years comes out with a total of \$1,040,000. This is possibly where the misconception arose (159: September 27, 1963).

Other members of the media were not exactly impressed with the new contracts. The New York Times, perhaps the most vocal of the critics, blasted NASA for allowing the astronauts to repeat what the Times thought was a mistake in the first place. If the astronauts needed more money, stormed the Times, then the government should pay them more. Part of the Times editorial reads:

The sale represents a stain of commercialism on the record of the space program... The motive of private profit has an honorable and legitimate place in the world of commercial endeavor but that world does not embrace the tasks / of / the astronauts.... They should not be allowed to reap enormous private profits from outside sources (120: September 19, 1963).

In what appears to be the only publication to present a reasonable explanation of the contracts, U.S. News and World Report offered its version in its September 30, 1963 issue. The numbers were wrong there, too, as that reporter wrote that the astronauts would receive \$16,250 each a year for four years (without specifying that the amount each astronaut earned would drop if there were more than 32 astronauts) but this was much closer than most other publications had written. Still, it would be interesting to find out who supplied this information to the media (163: September 30, 1963).

The editors of U.S. News and World Report stated that there was opposition to the sale of the personal stories by many people in the media and that the criticism was based upon three points (as the opposition saw it): 1. the sale of the personal stories introduced an "unfortunate element of commercialism" in the scientific endeavors in the government; 2. it was inappropriate for government employees to sell their personal stories for a profit--something which was denied to test pilots in the military services; and 3. the sale of the stories was tarnishing the image of the U.S. space program at home and abroad (though exactly in what manner this was happening was not discussed). In the same pages, a NASA official told the reporter from U.S. News and World Report that "there would be no contracts if the astronauts had not insisted upon them." In a letter years later to this author, Colonel Shorty Powers vigorously denies this accusation, writing that "the report that they had insisted upon the contracts is pure hogwash" (126; 163: September 30, 1963).

In U.S. News and World Report, John Glenn told a reporter what the astronauts' views about the contracts were. Glenn said that he looked at the money from Life and Field as a means to guarantee his children's education. He thought of the criticism towards the contracts as being from members of the media who were upset at not being part of "the family," but he added, "most of the press has been extremely kind" to the astronauts. Towards the end of the interview, Glenn claimed that astronauts could have taken advantage of more situations but they had not.

The only ones that the men had invested in were the Cape Colony (which had to be given up because of pressure exerted by the media and the public) and an apartment project in Washington, D.C. (this is the only mention anywhere of such an investment by the astronauts); they had turned down another investment, said Glenn, in Bermuda because they had thought it would not be good for them. Glenn also said that the astronauts had turned down about \$2,000,000 in offers which included free cars, lifetime jobs with companies, lecture fees, additional contracts for writing stories and books and performing on film and television. This did not include endorsing products for advertisements, where the astronauts could have received large sums had they chosen to do so (163: September 30, 1963).

Glenn obviously knows well how much the astronauts could have taken in if they had wanted to. He was the man who had received thousands of dollars from fans and well-wishers following his space flight but he had turned over the money to charity, keeping not a cent for himself as he considered that he had only been doing his job.

Life's manner of celebrating the new contracts was to immediately print personal stories written by the new astronauts in its September 27, 1963 issue. Although this was one year after the men had been selected, it was the first opportunity for the magazine to use articles written by these men who were now under contract for their personal stories for the next four years--something which the editors of Life proudly pointed out in an announcement in that issue. In retrospect, it was possibly wise that Life waited a year for another reason--if the men had tried to write anything for Life when they had been selected, with the problems of the contracts aside here, they possibly would have not had much to write about. But, one year later, they were working busily on future missions which provided new material for Life's columns. Tom Stafford wrote about his special area, which was communications, including the use of television to send back images of what the spacemen would see on the surface of the moon when they arrived there. Ed White

became a bit philosophical: "...you'll never satisfy man's curiosity unless a man goes himself." And Neil Armstrong was unknowingly prophetic "The other day I was simulating a landing on the moon in a device that shows a wide-screen picture of the moon's surface coming closer and closer to you.... I could almost touch down on the moon. Then I realized it was only an illusion" (98: September 27, 1963).

During the fall of 1963, an Italian journalist, Oriana Fallaci, arrived in Houston to gather material for a book she wanted to write about the U.S. space program, which would include views upon the astronauts. The book, If the Sun Dies, is virtually the only candid account of the astronauts during those years and it shows a good deal more than did the plastic Life articles. In the year that she hung around the NASA installations and the astronauts, Fallaci compiled an arsenal of information and she did not pull any punches in what she wrote. She derided Glenn for not wanting to tell her what books he would take with him into space (other than his technical manuals); she told him that his knowledge of technology would not be sufficient to sustain him for long. At the end of the interview with her, Glenn was gritting his teeth while trying to maintain a smile as he left the interview room, leaving Fallaci with only an accompanying PIO to whom to talk (Interestingly enough, Glenn had written of the works of Faraday, Franklin and Disraeli in the March 8, 1962 issue of Life; so maybe Fallaci overshot her point a bit) (41).

The Italian also chastised NASA's PIOs for paying too much attention to her. During one interview with an astronaut, she was given only ten minutes to talk to him. To the amazement of the astronaut and Fallaci, the PIO who had come with her kept reminding them of how many minutes were left in the interview period. The astronaut finally ignored the PIO's reminders and kept talking past the ten minute limit, as did Fallaci. Frustrated, the PIO had to haul Fallaci out of the room. According to Jack Riley and John McLeaish, who headed the PIO at Houston in 1976, the man who timed Fallaci's conversation so accurately

eventually found himself transferred to another post within NASA (104; 129; 41).

Because If the Sun Dies contains many personal anecdotes about the astronauts as well as some which were related to Fallaci by the astronauts, the book would seem to be in clear violation of the Field-Life contracts, section 8b. Fallaci was not given permission by Life or Field to talk to the astronauts and she did not need the permission--she had arranged to talk to them while they were on duty, ultimately becoming a member of their inner circle to which very few journalists had the privilege of belonging. Professor Louis Alexander, of the University of Houston Communications Department, says that he knew most of the astronauts were open with her and believes that neither she nor they feared that the contracts would stop the interviews. Another reason, given by a source who wishes to remain anonymous, is that some of the astronauts were impressed with this well known journalist who had come from so far to talk with them--just as other people were impressed by talking to the astronauts. Deke Slayton, in one conversation with Fallaci, realized that he might have been one of the B-25 bomber pilots who attacked her village in World War II on a particular day--the day when a bomb blast knocked the then 14-year-old partisan fighter off her bicycle as she approached a bridge (5; 41).

There has been some talk among male members of the media that Fallaci obtained her information from the astronauts by using sex. Professor Alexander tends to doubt this, although others insist that they have heard this rumor. Practically all of the people who told this author that Fallaci had sex with some of the astronauts have always started their comments with "From what I've heard..." or "I have heard...." There seems to be nothing definitive, only rumors that cannot be proven and some of this might be jealousy on the part of some of the male reporters. "She had a piece of equipment that the rest of us [male] reporters didn't have and she used it," said one journalist, who best not be identified. Another man, when asked how he thought Fallaci avoided any hassles with the contracts of Life and Field, replied, "How

do you think she got her information?"

Magazine articles, written about Fallaci years later, tend to defend her. Time wrote that she had a habit of dressing in an unsexy manner without using lipstick or combing her hair when she conducted interview. Newsweek once mentioned that Fallaci admitted that being female was an advantage in the field of journalism as long as a woman did not use her sex or behave like a little girl. In Esquire, Fallaci was quoted as saying that men told her more information than they would have spilled to male reporters but that was because the interviewees were impressed by being asked questions by a woman (39: January, 1973; 122: January 22, 1973; 159: October 20, 1975).

There were also stories of sexual relations between some of the astronauts and other women reporters. Again, Louis Alexander:

There was frequent talk among the press about women using their femaleness and some resentment--but it is hard to know how to characterize that resentment, since I have no way of knowing whether they felt they had anything to resent.

I know of at least one generally-circulated story about a women reporter who tried, and possibly succeeded in using her femaleness to get stories; and upon whom the effect backfired. For a reason males would enjoy, whether true or not: She wasn't much fun when she was alone with a man, inept, according to the circulated stories.... To decide how much of this happened, how much was talked about and how much was fended off, plus how much never happened at all is a major task of research (5).

In the early and mid-sixties, few articles which were written by women about the astronauts appeared in publications. Therefore, maybe not many female journalists actually came into contact with the astronauts. Of course, there were other females such as those who were associated with the electronic media and newspapers as well as those who might be classified under the heading, "space-groupies"--young women who were attracted to the astronauts because they were news. What the male reporters may have been complaining about may have been a result of their imagination. No doubt, some reporters were not too competent in interviewing the astronauts and used the excuse of women using their sex as a means to soothe their own wounded egos, in addition to the egos of

their editors, who were paying the bills and demanding copy.

There have been stories about the womanizing done by the astronauts. In his book, Return to Earth, astronaut Edwin Aldrin admitted to having an affair with a woman while he was still married. His Apollo 11 partner, Michael Collins, described the feelings of a friend of his when he learned that Collins was applying for the astronaut corps: "Now don't forget, Mike," said the friend. "When they ask you why you want to be an astronaut, tell them it's because of all the money and ass you can get" (2; 24: p180).

Henry Still, coauthor of the book Starfall, writes in that book:

It was not surprising that the accumulative pressure of the space program, which took men away from their homes repeatedly and for long periods of time, began to strain some of the astronauts' marriages. From the beginning, NASA administrators had been grateful for the psychological wisdom that had gone into selection of the space pilots in the first place.... ..the behavior of these men was watched as closely as a stallion training for the Kentucky Derby. An astronaut could not be calm if he did not get along with his wife or if he were in love with another woman. At most he might allow himself a casual encounter, a short fleeting adventure, but the fates forbid that he should give in to passion.... It would have been nothing short of miraculous if none of the men had slipped by the wayside.

Betty Grissom tried not to be disturbed by the tender traps waiting out there while her husband was gone....

One temptation had been relieved when the astronauts were given their own airplanes. Before that there had always been the haunting vision of a stewardess ripe for diversion during a few hours' layover in a strange city (59: pp135-136).¹

In the same book, Mrs. Grissom writes:

I can understand what happened to some of the marriages. It was mostly being apart, you know he's gone most of the time and wherever an astronaut goes, there are secretaries and other girls to crawl all over them. It seems like the girls were all thrilled at meeting an astronaut, and of course the wives weren't thrilled because we had known them all our lives....

¹In the early sixties, the astronauts were assigned a fleet of jet trainers for two purposes: one, so they would not have to rely upon commercial transportation to fly to various points across the country; and two, so they could remain proficient at flying.

We kind of laughed at a few women. To me they just made fools of themselves. I think Gus laughed at them too, but I can't say that he didn't enjoy it. It was flattering. It's hard to resist something like that. I can understand the man. He's out there being treated like a celebrity and then when he comes home all he hears is bitch, bitch, bitch. After a while, he doesn't want to come home anymore.

Women are getting more outspoken, too, and aren't going to just sit home and take everything. It's hard to stay home and think you're trying to keep the kids going, the house going, the cars and the lawn, while these fellows are out at this party, that party and another party.

I went through a hard few months and finally made up my mind there wasn't anything I could do about it and I wasn't going to sit around and worry. Worry didn't help me a bit. I'm not saying that Gus didn't have girlfriends, but whenever I thought of things like that, I went back to the time when he said: "I expect secretaries to act like secretaries and I expect them to do their duties. I'm doing my work and I expect them to do theirs."

I wasn't feeling sorry for myself. I just tried not to think about those possibilities (59: pp135-136).

To Mrs. Grissom's account, Still adds another paragraph:

There were fewer of these "possibilities" than Betty or the other astronaut wives might have imagined. As a practical matter, these men had no wish to rock the marital boat, jeopardize prestigious positions or tarnish the gleaming facade which had been carefully fashioned around NASA and the space program. "Customer relations" men and executives from the large corporations wined and dined the astronauts when they came to town, but most of the parties were staid affairs. While appearing glamorous and exciting to the wives at home, these often were dutiful "must" appearances for political, public relations or morale-building purposes (59: p136).

Reporters knew about some of the astronauts' relations with the opposite sex but none chose to write anything about their exploits. Leo Janos, once Houston bureau chief for Time, said, "The astronauts aren't saints.... The carousing they did before launch and in between missions was nothing compared to the other stuff that made up the missions. What happened in space was far more important than what they did on the ground with the women. Now, if one of them got caught with a woman the night before a launch, that would have been news and I'm sure that we would have written about that" (79).

Dora Jane Hamblin, of Time and Life, writes in a letter to the author:

I knew, of course, about some shaky marriages, some womanizing some drinking and never reported it. The guys wouldn't have let me, and neither would NASA. It was common knowledge that several marriages hung together only because the men were afraid NASA would disapprove of divorce and take them off flights. I do not think they were a wild bunch or any different from any other cross-section of well educated, well trained middle class Americans. I think in general the press treated them more than fairly out of a complicated interaction of desires--on the part of the men, on the part of NASA, on the part of the press--to find and keep valid heroes in an era of high technical achievement and very exciting adventure (64).

Paul Haney states, "Sure, we [the members of the PAO] knew that some of the astronauts had been with some women...and I could tell you some stories about them...but what good would that accomplish if those stories had appeared in print?" (66).

The answer is nothing. There might have been trouble if such news had become public, just as trouble might have arisen if it was known in 1962 and 1963 that President Kennedy had been having an affair. If there had been trouble, NASA probably would have had to rearrange the crew selections in addition to the schedules in addition to the delays that would have resulted from using new men in the missions. There would have been no use for such stories and it was just as good that none of them ever appeared.

What the press seemed most interested in were the launches. No manned missions were occurring in the fall of 1963 yet NASA was busy. On October 18, 1963, NASA announced that 14 new astronauts had joined the organization, bringing the total number to thirty. From the Air Force came Major Edwin E. "Buzz" Aldrin; Captains William Anders, Donn F. Eisele, Charles A. Bassett II, Theodore C. Freeman, David R. Scott and Michael Collins. The Navy supplied Lieutenant Commander Richard F. Gordon, Jr., Lieutenants Eugene A. Cernan, Alan L. Bean and Roger B. Chaffee. Clifton C. Williams arrived from the Marine Corps. Rounding out the group were two more civilians: Russell L. "Rusty" Schweikart and R. Walter

Cunningham.

Throughout the rest of 1963, the first 16 astronauts would continue working on the Gemini programs until they were joined by the third set of astronauts, who were due to begin work in February, 1964. With not much happening at NASA in which the public would be interested, Paul Haney, the new director of the PAO at MSC, decided to implement monthly briefings for the media at the MSC press headquarters. These briefings would consist of talks to the reporters by various members of MSC, designed to help the reporters understand what was happening at that time and also to give the media a working knowledge of the Gemini program so that when the missions started flying, the reporters would not have to frantically hunt down NASA officials for information (66).

Haney maintains that the purpose of the briefings was not to usurp authority from his boss in Washington, Julian Scheer, but the members of the media decided that Houston was "the place" to be. They favored the briefings so much that, in April, 1964, Haney changed his format to one briefing a week to accommodate everyone. Soon, publications began setting up Houston offices for their staffs. Time and Newsweek opened up Houston bureaus not to report about Texas but about NASA. AP and UPI tried the city for a while but, wanting to be closer to MSC, they moved their offices to Clear Lake, just outside of NASA's gates (66; 79).

According to Haney, Scheer was "pleased and pissed off at the same time" about the weekly briefings. Haney says that Scheer preferred for most of NASA's information to originate in Washington, not from the centers. This started a small private war between the two men that ultimately became rather vicious and tiresome. Even though both men respected the credentials of the other, they had different opinions of how things should be run. Haney was now out in front of the media--where Powers had been--and this ran counter to Scheer's belief that his staff should be behind the scenes. If the news had been released in Washington as Scheer so desired, then Scheer would have been at a disadvantage because NASA really would not have been able to release much news at all;

protocol determines that no government agency can scoop the White House. Yet, when the media reported news that had been released in Houston, says Haney, "Julian lifted off in Washington" (66).

Scheer vigorously denies this. He said in an interview that the situation was quite the opposite. He wanted all of the astronaut news handled by the PAO of the MSC since the members of that office had more contact with the astronauts than did the main office in Washington. The same rule applied to all centers: each center was to report on what was its special area in relation to NASA's overall operations. Scheer also said that a look at the news releases produced by the PAO Headquarters in Washington will verify that the NASA administration never tried to run the entire public affairs show from there (137).

Perhaps the NASA Headquarters did not release all that much information but, as mentioned, protocol may have had a role in determining what was released by the centers. Gordon Harris, the head PAO of the Kennedy Space Center, illustrates a point in his book, Selling Uncle Sam:

A long-standing arrangement of political significance in this special area creates problems for information officers and will undoubtedly continue to plague them in the future. The rule is that once an agency has completed the procurement process and selected a contractor, either through competition or otherwise, it must notify the Congress before any public announcement. Senators and congressmen representing the state and district where the award will take place are advised, usually after similar notice to the White House. Inevitably this provokes gamesmanship. The first congressional office receiving the call is apt to phone the press and break the story immediately. Because the announcement is coupled with the name of Senator X or Congressman Y, their constituents are supposed to conclude that he or they engineered the contract. The fact is that Congress had nothing to do with it. No harm is done if the story is told correctly. Unfortunately, the congressional office knows only as much as the agency relayed and, naturally, attempts to make the story as exciting as possible. Word that a company...won a \$1,000,000 contract would ring few bells, but when that award means 500 new jobs, even hard-boiled editors find it interesting. The trouble is that in many cases the award is an add-on (to use bureaucratic jargon) and simply means the same company will continue to produce the same item with the same number of employees. That deflates the news, and somehow the congressional office fails often to add that all-important detail. Back at the

store the government P.R. operator sitting with his news release telling the complete story must suffer in silence until the magic hour when he is free to call the press. Usually he has missed the edition that carries the congressional news beat (69: pp12-13).

Not only did the NASA PAO had to contend with protocol but also with Life still and its new partner, Field. At the end of 1963, it became visible to some members of the Field organization how much President Bailey K. Howard viewed the contracts with the astronauts. At a year-end meeting with his board of directors at the "21" Club in New York, Howard, as the story goes, stood at the head of the table and went over the events of the year in a speech to the officials gathered before him. And then he said, "This year will be remembered as the year we bought the astronauts" (144).

He continued to brag about how the astronauts had been purchased as if they were some sort of commodity until Scotty Reston, a member of the board, became upset. Reston launched a counter-attack, telling Howard that the President of Field was wrong, egotistical and not being realistic. The astronauts, said Reston, had bought Field, not the other way around. Howard, intimidated by the attack, sat down as Reston continued to blast away. When Reston finished, an uneasy air lingered over the conference table until Alistair Cooke cracked a few mild jokes to clear the atmosphere (144).

Howard's words give an indication of how he felt about the astronauts. Writer William Shelton, who worked for Field for 18 months, was of the opinion that Field tried to use the astronauts in an exploitive manner. To impress their salesmen, Shelton says that Field would have them meet the astronauts and send them packing to sell their products. At one time, Trudy Cooper, wife of the astronaut, went on a trip to Omaha against Shelton's advice to meet some of the Field representatives in order to encourage them to sell more and better. Others have mentioned Field's exploitation of the astronauts too. It seems as though Field entered into the contracts only to make money while Life signed the contracts with the intentions of helping NASA and the nation by

disseminating information about the astronauts to the public (144; 26: May/June, 1973).

When the spring of 1964 rolled around, John Glenn became the first astronaut to leave NASA. He chose to enter into politics. Both parties had been trying to claim Glenn because of the magnetism of his name. When he chose the Democrats, it caused one politician to remark, "It was as if Santa Claus said he was a Democrat" (161: January, 1971).

Glenn had hopes to run for the U.S. Senate, representing his home state of Ohio but his dreams fell with him on a bathroom floor during the spring of 1964. A door on the medicine cabinet in the bathroom had stuck and Glenn yanked on it to open it. It sprang loose, Glenn lost his balance and hit his head as he fell. From that point on, for several weeks, the first American to orbit the earth could not even walk around his hospital room. The slightest turn of his head would produce nausea. To add to his troubles, his wife had to enter the hospital for an operation, his father fell ill and his father-in-law underwent two brain operations. Glenn's resources were drying up for other reasons too. He had incurred several bills during the primaries and he insisted upon paying them off. Glenn's name remained on the ballots until seven weeks before the election in November when his name was finally struck. Despite the absence of his name, 200,000 people voted for him anyway, which delivered a message to the other men who were running for election. As time slipped by, Glenn decided to retire from the military (which is something that is not automatic for an astronaut upon leaving NASA, contrary to what some people may think). Glenn's reason for leaving was that he did not want to be the world's oldest, permanent astronaut. President Johnson offered to promote Glenn to the rank of full colonel so he could benefit from higher retirement payments but Glenn refused to accept this. The President would have none of that and promoted Glenn despite his protests. On January 4, 1965, Glenn retired into private life. Eventually he would become the President of Royal Crown Cola and run for Congress another time, which was unsuccessful. It would not be until 1974 that Glenn would win a seat in the

Senate by a two-to-one margin over his Republican opponent. In early 1975, Glenn returned to the hill where, twelve years before, he had entered as a national hero to the standing ovation of the Congress (8: pp77-80).

While Glenn was having his share of troubles in the first half of 1964, 1964, NASA also began to encounter some problems during that summer. It was then that Paul Haney had a "nasty set" with the Houston Post. It had started when Gus Grissom wrote an article for Life about the upcoming Gemini missions. The beginning of the story seems personal enough but, after a few paragraphs, Grissom was describing the Gemini spacecraft in a technical manner:

Now in the Gemini capsule, there's very little equipment in the pressurized cabin and nothing is buried. Most of the systems are installed in separate packages on the outside of the cabin or in the adapter section behind us. All you have to do to get at one of those "black boxes" is open up a panel. If one goes [bad]/... take it out and plug in a new one. Another Mercury alumni, Chuck Mathews, now Gemini program manager, has wisely insisted on this quick-fix method (98: June 5, 1964).

On June 8, 1964, Houston Post writer Jim Maloney sent Paul Haney a note with a copy of the Life article attached to it. In the note, Maloney asked several questions:

....Is this considered to be a "personal" story?

....I use the word personal because I am told that is what the Life contract is for--"personal stories." I was not permitted to see the contract, so I must accept what I was told.

...Are those stories read by anyone to determine if they fit the terms of the contracts?

If so, by whom?

Who read this one?

....There is a date--December--given by Grissom as the date of the first manned Gemini.... I want an official comment on this date. I want an official's name with the comment (108).

Maloney was correct in some regards: Grissom had indeed written "By December, when we hope to launch our mission.... John and I will know each other pretty well," but NASA had not officially given any date for the Grissom-Young mission. Hence, Grissom was giving Life exclusive information--something the magazine had been trying to obtain for years.

Haney apparently missed the mention of the date when he had reviewed the article before it went to the presses. Maloney, who had been trying to interview Grissom for four months, also complained to his editor about the Life article. The Post editor, William P. Hobby, Jr., wrote his Congressman, Albert Thomas, who had opposed the contracts from the beginning. Thomas, head of the subcommittee that handled NASA's appropriations, took up the issue with NASA's administrator, writing, "It is not too late for Jim Webb to act now and the sooner he acts, the fewer headaches he's going to have." Thomas also wanted the government to increase the pay of the astronauts and supply them with up to \$200,000 worth of life insurance (98: June 5, 1963; 26: May/June, 1973).

Webb did not answer Thomas immediately but Scheer did, saying that NASA had made a mistake in approving Grissom's Life article. This did not placate Maloney. He describes his feeling in a letter:

As soon as we at the Post realized what the contract would mean in restricting our coverage, we complained to everyone who would listen.... When the contract first came into being, the Post or very few other news organizations were aware of it, and not aware at all of what it would mean down the road. Then, as the move of the the...Manned Spacecraft Center was begun in 1962 very slowly to Houston from Langley Field, Virginia, we began to catch on. MSC folks began drifting in, including the astronauts, slowly and in small groups, then in growing numbers. It took a while for us to realize what their move meant to us newswise. And it took a while for us to realize what the coverage rules were going to be. In fact, NASA, which was itself a brand new organization, was still formulating the rule. We had a tough learning period, at least I sure did. Maybe I was slow. But the meaning of the contract, and NASA's then news coverage rules crashed through to me--and I transmitted this info to our management--we reacted as we thought best (106).

Haney looked upon the Post's anger as being just another round in the press versus NASA-and-the-contracts skirmishes that had been going on for years. It had started with the Washington Post, followed by the New York Times and finally the Houston Post, said Haney, decided it was its turn to "Let's goose NASA.... It was as if we had to be opposed by the press like the Republican-Democrat kind of thing" (66).

Haney met with the hierarchy of the Post and explained NASA's position on the contracts. He told Hobby and Hobby's mother, the publisher of the paper, about the safeguards that NASA had worked out plus the advantages that the astronauts enjoyed with the contracts, such as having a more private life and having life insurance. Haney also mentioned that the official aspects of the astronauts' work was available for all the media to see. When Haney left that meeting, the brass of the Post told him that they understood the situation (66).

Obviously they did not or, if they did, they chose not to pass along their understanding to their editorial writers. On the Sunday morning following the meeting with Haney, August 2, 1964, the Post opened its attack on the editorial page:

The idea that the astronauts can sell stories of their work to one medium while denying similar stories to other media is unthinkable.

The fact that such a situation exists is deplorable....

When the crew and the backup crew for the first manned Gemini flight was named [April 13, 1964] requests for interviews with these crewmen were not acknowledged.

Still the reporters were patient. They realized that the men of these crews are busy with their training.

Then a magazine that pays the astronauts for their "personal" stories ran a story signed by the men of this first Gemini crew.

First of all, the story ran two months after requests were made by reporters for similar stories.

Secondly, the story by the command pilot of the first Gemini spacecraft was not a personal story. He was discussing his duties as a public employee and the use of public equipment paid for by every taxpayer in this country.

Stories of this type are public property if anything is and should be available to all representatives of all news media on an equal basis.... ...the image of the astronauts with news stories for sale is one that cheapens us all" (75: August 2, 1964).

The next day, Haney was back in the offices of the Houston Post. Again, it seemed like the Hobbys understood and Haney went back to his post at MSC. If the Post understood Haney, the writers did not show it. Another blast was delivered eight days later:

It is not particularly surprising that the nation's space program is under attack from time to time from some quarters....

[But] what is surprising, though, is that the National Aeronautics and Space Administration would permit its necessary public relations effort to be hurt by allowing Time, In. and Field...to monopolize the "personal" stories of the astronauts through lucrative contracts with them.

And as the space program gets more and more adventurous and dramatic and challenging, the public relations effort is sure to be hurt more and more.

In a recent Life magazine article said to have been written by the command pilot of the first manned Gemini flight, we are given a sample of "personal" stories. ...the writer discusses the merits of the Gemini spacecraft as compared to the Mercury spacecraft and announces, for the first time, the month in which the manned Gemini flight is scheduled.

This is not a personal story!

And yet, what can you expect? Would Field and Life pay \$520,000 a year for an astronaut's recipe for barbecue sauce? Or for his wife's advice on how to grow camelias?

The exploration of space is, and should be a national goal, a national effort. It isn't, and shouldn't be, commercialism in any form or anything that would even resemble commercialism.

The mere existence of the Field-Time contracts suggests that an astronaut's space voyage is a great feat of personal achievement, when in fact thoughtful people know that any manned space flight is a gigantic team effort involving the hard work and close cooperation of hundreds of scientists, engineers and technicians.

We would like to believe that the astronauts got into the space program for reasons other than \$520,000 a year.....

The salaries for public service are, unfortunately, low. The astronauts must have known this before they entered the space program. And there are very real dangers to space flight. They must have known this. And there are certain pitfalls, notably invasion of privacy, that come with fame such as theirs. They must have known this.

And they must have known that the Field-Time contracts could only lead to many very earthly problems (75: August 11, 1964).

Haney trudged back to the Houston Post's offices for another visit, this time taking Alan Shepard with him to help explain the contracts once more. Haney wondered what had gone wrong with the previous meeting. "Maybe I couldn't speak Texan," mused Haney years later. "I don't know why they didn't understand me." Maybe speaking Texan would not have helped. Again, the Houston Post levelled the shotgun barrels at everyone who was tied into the contracts, with an article running under the headline, "Contracts' Bad Public Policy" (75: August 18, 1964; 66).

The story read:

...The Post finds repugnant any commercialism of the esteem in which the public holds the astronauts. This is the effect of permitting them to contract with two private publishing firms for their "personal" stories.

...The Post believes most firmly that the policy of permitting the rather lucrative contracts is wrong in principle and is therefore a bad public and governmental policy. It has said so on several occasions.

...Aside from putting the astronauts in the position of peddling information which should be equally available to the public and all news media in a nondiscriminatory basis, there is this very pertinent point made by Editor and Publisher when it said: "How do you like that, Mr. Editor? Here are some real national figures, and some about-to-be national heroes, and your reporters can't interview them unless two of your competitors say it's okay."

The net effect is to cheapen the space program in which the astronauts are participating but it also opens the door to favoritism, the sale of public property for private benefit and government by crony (75: August 18, 1964).

Haney had had enough. He decided to let the Houston Post run its course and not bother to fight back anymore. Nevertheless, he had a researcher in Washington, D.C. make a list of all the people who had been on government payrolls while writing for a profit---the number came to nearly 130 people, including Supreme Court Justice William O. Douglas who had written more than a score of books concerning the business of the nation's top court while he sat on its bench. Also on the list was the skipper of the submarine Nautilus who wrote his version of the first underwater voyage under the North Pole for the Saturday Evening Post. Haney believes that the father of the Post's editor, William Hobby, Senior, had also written a book while he was the governor of Texas (this author cannot find evidence to support or refute this) (66).¹

It would seem that, initially, the Houston Post had raised a valid point in bringing up the matter of Grissom's article for Life but it was apparent that the Post was not gaining any ground. For all of the Post's work, Editor Hobby did not succeed in dissolving the Life-Field contracts, and his newspaper soon joined the ranks of the Washington Post and the New York Times in failing to bring the contracts to an end. However,

¹However, in 1977, Bill Hobby, Jr., now Lt. Governor of Texas, wrote this author that he still holds financial interests in various media although he is now a government employee. This seems to be a conflict of interest.

Hobby does have the distinction of editing the last newspaper that made a major attack upon the contracts, if that is any consolation to his ego.

Despite the brushfires the PAO of MSC was having with the Houston Post, the MSC kept working on Gemini. In April, 1964, the first Titan II missile, which had been mated to a Gemini spacecraft, was successfully launched from Cape Kennedy. Other projects associated with Gemini were also proceeding well. The astronauts were travelling to the McDonnell aircraft plant in St. Louis quite often, training in the simulators there. They also visited other contractors to stimulate the employees to maintain good performance in their work for NASA. Astronaut Rusty Schweikart spent eight days in a Gemini space suit (which was quite different from those used for the Mercury missions) performing a variety of tasks, including flying at zero-G, riding in the centrifuge and simulating a four-day Gemini mission. At the Cape, tests were being run on the second Gemini launching, which would also be unmanned (55: pp73-103).

On October 31, astronaut Theodore "Ted" Freeman was approaching the runway at Ellington AFB (the military installation near the MSC which NASA also used for its planes) when a large snow goose hit his plane. The astronaut stayed with the plane in spite of having lost power and possibly being blinded by the impact with the bird. Freeman held the plane in good attitude for a few moments until it suddenly rolled onto its back. The astronaut delayed squeezing the trigger handles on his ejection seat a moment too long. When he finally ejected, he was killed upon impact with the ground. Freeman was the first fatality within the ranks of the astronauts. He would not be the last (24: pp50-51).

FLYING, WALKING AND TRAFFIC COPS

During the two years that the Americans were working on Gemini, the Russians had been busy at their own spaceport. Following Gordon Cooper's flight, on June 16, 1963, the Soviets had launched another two-ship mission. One of those Vostoks contained cosmonaut Valentina Tereshkova--another first for the Russians as she became the first woman to fly in space. The following November 3, she married fellow cosmonaut Andrian Nikolayev after a romance that was "long suspected" by the Russian media. The next June, the first "space baby" was born to the couple. The child, Yelena, underwent several studies by Russian medical experts to determine if she contained any abnormalities caused by her parents having flown in space; she was perfectly healthy (153: pp121-125).

The Russians also launched the world's first multi-man mission, surprising the Americans with not just two men but three, including a doctor, who found themselves in space on October 12, 1964. As usual, the Russians landed on their own territory, preferring to settle on land rather than on water; but this flight marked the first time that any cosmonauts remained in their spacecraft. Previous flights had ended with the cosmonauts ejecting from their spacecraft at a certain altitude and descending to earth via the conventional parachute while the spacecraft continued to plunge towards the ground, several thousand feet below. Nine days after the flight, the Soviets held a press conference with the cosmonauts and 2000 reporters attended. When the reporters asked about the landing, the answer was, "The landing of the spaceship was softer than the stopping of a modern lift" (153: p132).

The Russians preferred not to show their spaceship, however, nor to talk about their heatshield. One of the experts at the press conference remarked that the composition of the heatshield was "one of the secrets of the Soviet experts." The majority of the information supplied by the Russians at that press conference was about the future plans to build a space station in orbit around the earth--which they said would be of more importance than a mission to the moon (153: p133).

On March 18, 1965, the Soviets launched the second Voskhod but this one contained only two men, unlike the previous one.¹ During this flight, Alexei Leonov became the first human to "walk" in outer space while his pilot, Pavel Belyayev remained inside the still-pressurized compartment (this may seem strange to Americans who remember that the U.S. Gemini spacecraft had to be completely depressurized for the astronauts to leave the spaceships but the Soviets had included an inflatable airlock on the side of the Voskhod for their cosmonauts to enter before exiting into space). "Walking" is not really the word to use for Leonov's ten-minute float; other than pulling on his tether, the cosmonaut had no way to control his movements (153: pp134-146).

Some hours after Leonov re-entered his spacecraft, it came time to return to earth and the cosmonauts suffered the same fate as had Scott Carpenter. They overshot their intended landing zone. While Western intelligence sources knew of the cosmonauts' plight, the Russian media kept quiet about the mistake for more than five hours after the spacemen had landed. The cosmonauts found themselves in a dense forest about 15 miles from the nearest sign of civilization, which was a forest firebreak. They slept where they landed that night and the next morning some rescuemen, who had been dropped from a helicopter, skied to where the astronauts were encamped. It was not until March 21 that the cosmonauts were able to be picked up by helicopter and that was only after they had skied to the firebreak (153: pp134-146; 175b).

In the United States, things were busy as the first manned Gemini mission was being prepared. On the morning of March 23, 1965, Gus Grissom and John Young, the first astronaut of the second group to fly in space, left their quarters at the Cape and were suiting up when Wally Schirra walked into the room where they were being outfitted. The astronaut of MA-8, wearing an old Mercury spacesuit which was tattered and patched here and there, told Young and Grissom, "I have suited up just in case you two chicken out and turn the mission over to the backup teams...." Schirra had also something else which, unknown to others, he

¹The Soviets were no longer using the one-man Vostok spacecraft.

gave to Young--a corned beef sandwich that he had acquired at a Cocoa Beach restaurant. Later, Young and Grissom rode the elevator up the gantry and entered their spacecraft, "The Unsinkable Molly Brown" (61: p104)

At 9:24 a.m., the third Gemini-Titan (GT-3) was launched for a three-orbit flight. Although no spectaculars such as a space walk were planned, the astronauts were able to change their orbital planes a few times, becoming the first spacemen to do so. They also checked out the possibility of using their maneuvering unit's thrusters to position them for re-entry procedures in case the retro-rockets failed. It was a cautious first test of the Gemini spacecraft (57: p189).

During the mission, the sandwich that Young had smuggled aboard with Schirra's assistance appeared. Much to Grissom's surprise, Young yanked the delicacy out into the open and offered it to his command pilot. Grissom took a bite, noticed the crumbs floating around the cabin and decided that the sandwich had better be stowed before any more bites were taken because the loose particles could impair the filters of the air systems. For his fun, Young received NASA's first official reprimand that was ever given to an astronaut (98: April 2, 1965).¹

Michael Collins writes about the trouble that the sandwich caused:

NASA...reacted hysterically. The medics claimed that somehow that sandwich had negated the flight's medical protocol, while the engineers claimed that crumbs from it could easily have invaded the guts of the machinery with catastrophic effect. Some members of Congress became apoplectic, charging NASA with having lost control of the astronaut group. I think most of us could have strangled Wally for bringing on a tornado of upper-echelon down on us for something as trivial as a corned-beef sandwich (24: p138).

Henry Still wrote of the incident later in a book about the Grissom family:

The press, which already viewed Gus Grissom as Peck's bad

¹Grissom's son, Mark, told his mother later that his father had confided in him that there had actually been two sandwiches and Grissom ate half of one while Young finished off the rest (59: p153).

boy, jumped gleefully upon this episode which interrupted the crisp rigidity of the official flight plan. Gus was mildly rebuked when he got home, though not as sharply as the press indicated. Betty worried about the sandwich more than any other episode in the Gemini 3 flight. Always fiercely defensive of her husband and his work, she was concerned that this would open him up to a new wave of criticism.

"It was my fault that the sandwich got on board," Gus told her later. "I should have known because I was in charge of the flight" (59: p153).

The sandwich did not affect the flight in the slightest manner. But, for all of the maneuverability that the spacecraft was supposed to possess, it performed badly when landing, undershooting the mark by 60 miles. However, this time the astronauts were found quickly and did not have to wallow in the ocean as did Scott Carpenter. When they first hit the water, the side Grissom was on plunged underneath the waves and he thought, "Here we go again..." but the spacecraft righted itself and floated as it was designed to do. When the astronauts were picked up by the helicopters, they had shucked their spacesuits and made the ascent into the Navy helicopter wearing only their long underwear. By the time they arrived on the deck of the aircraft carrier Intrepid, they had been issued standard blue Navy robes for some modesty, maybe not for their sake, but so none of the public viewing the televised pictures of the recovery would be upset (98: April 2, 1965; 61: p113; 57: pp189-191).

A few hours after the astronauts arrived on the ship, the Molly Brown came on deck as well. The Molly Brown's name still bothered NASA officials. Grissom writes in his book Gemini, which was published after his death:

She was the first and last Gemini spacecraft to have her own name. Thereafter, the practice ceased.... Nevertheless, there is a significance in the ending of this hand-me-down tradition from the services. NASA was letting us and the world know that Gemini wasn't a "Peanuts" cartoon episode and we weren't bunch of "Red Barons" flying around out there (61: p94).

When the flight was over, there was a fair amount of publicity surrounding the mission. The fact that the Russians had a cosmonaut who had walked in space did not seem to bother the Americans. One editorial

cartoonist thumbed his nose at the Soviets by drawing a picture of a proud President Johnson pushing his twin astronauts (one of them was holding a steering wheel) in a baby carriage down a sidewalk past a Russian space walker, saying, "So what? My boys can drive before they walk."

Grissom offered his thoughts on the post-flight publicity that greeted him and Young: "I think I can understand the reason behind the gigantic outpouring of goodwill John and I received for our relatively easy flight. After all the Russian space spectacles, the United States was back in the manned-space flight business" (61: p115).

Life, as can be expected by now, brought out the astronauts' personal stories of their mission in its April 2, 1965 issue. The articles were more personal than what Grissom had written the previous summer; NASA was probably making sure of that this time.

Life also did not pass up a chance to let its readers to know what the Russians were up to. When Novosti, the Soviet press agency, offered the personal stories of Leonov and Belyayev for publishers to print, Life snatched up the offer. The article was no better nor worse than those which had been written by the American astronauts. The language may seem stilted but that might be due to the translation which sometimes disrupts the flow of a language; likewise, Russians might think the same of the articles in Life (98: May 14, 1965).

Leonov wrote in flowery terms:

When I stepped out of the ship above the Black Sea, I looked around--how beautiful. I love the Black Sea. I love it in any weather. How long have I sat by its shores and admired its variegated colors. But from our altitude, the water looked different. It was a monotonous dark blue, changing into a gun-metal gray. It as if the sunlight had discolored the water. Out in the open, I observed a ship.... The ship was lighted from all sides, as if bathed in a flow of light.... There is dead silence in the cosmos. Pavel talked to me. I reported to him on everything I saw in space.... Nor did I feel the enormous velocity of the ship. It seemed to be motionless" (98: May 14, 1965).

Less than two weeks after Leonov's account appeared in Life, NASA released some news of its own. The flight of Gemini 4, which was to study

the effects of a four-day flight upon the men and the machines, would now have another purpose: one of the astronauts would exit from the spacecraft and do more than just float in space, he would carry a "gun" which was filled with compressed oxygen, allowing him to propel himself around the spacecraft for what was called "Extravehicular Activity (EVA)". The media were caught flat by the announcement. A headline for a story in the Washington Evening Star, on March 18, 1965, had read, "'Space Walk' is still a year away for U.S." but it obviously had been proven untrue six days later when NASA made the announcement.

Shortly after the announcement that one of the Gemini 4 crew would leave his spacecraft, Julian Scheer sent a memo to the White House, on May 24, 1965, to explain his view upon the post-flight activities of the Gemini crews.

During the Mercury program and on into the first manned Gemini flight, space flight was new to this nation and we found a new group of heroes created by the American people. Each flight was a "first" of some kind, we were behind the Russians and our flight program was smaller and more understandable. Both U.S. and Russian space flyers' names became well known.

As a result, New York City always wanted a ticker tape parade and the White House showed, on behalf of the American people, its appreciation of the work the astronauts had done.

We are now entering a new phase of our program....

The image that is, perhaps, best for this nation is one of a nation...that goes about its work in an orderly and well-planned manner. We will fly these flights as best we can and put these flyers right back into the flight schedule for a future missions

We feel that any build-up of personalities resulting from these flights should be spontaneous, based not on the fact that the astronauts flew, but what they accomplished in flight or difficulties they overcame or obvious skills they demonstrated....

Therefore, we prefer to have a mechanism built into our Public Affairs program which will enable us to react quickly to given situations and to allow us the flexibility to choose the course that appears best at the time of the completion of a successful mission.

On the upcoming flight, Gemini 4, we must consider that astronauts Grissom and Young were received at the White House less than ten weeks from this launch date / June 3 / and participated in New York and Chicago parades. Similar events 90 days later, unless the flight departs radically from the flight plan, may be too much saturation and repetition.

Therefore, in summary, it is our recommendation that we plan no events in advance of the Gemini 4 flight but be prepared to move rapidly in case there is interest there. We will...discourage other activity, such as ticker-tape parades, and will have consideration a visit by the astronauts to the University of Michigan campus in late June or early July. Both graduated from the University.

Julian Scheer (139).

On the next day, when the above memo was laid before the President, his aide, Marvin Watson, had attached a sheet of paper with some suggestions written on it. Those suggestions read:

NASA suggest that since there will now be frequent space flights flights, you should reconsider the policy of White House receptions and ceremonies for the astronauts.

The next flight is scheduled for June 3 and will last for four days. There will be some six days debriefing in Houston, Texas which will mean approximately ten days from blast-off until they would be at the White House.

Since both of these astronauts are graduates of the University of Michigan and in that the University has asked that both come to the University, Director Webb suggests that you consider not having the White House or Capitol ceremonies and allow it to be handled in this manner.

Do you want a White House ceremony? Yes _____ No _____

...If you said no, Director Webb suggests that since the astronauts will be in Houston for debriefing, and if you are in Texas, you might want to have them come to the ranch. Yes _____
No _____

Marvin (139).

At the bottom of the memo, when it was returned to Watson's desk, was President Johnson's handwriting, spelling out his thoughts: " I agree with the last paragraph...let's play it by ear. L" ¹

This may not seem important but, in the future, it would be President Johnson who would take the criticism for Webb's final suggestion as reported to the President by Watson.

The PAO of NASA was realizing that things had changed since the previous flights and the PAO in Houston was finally allowed to take control over the news coverage of the flight once the missile had left the pad at Cape Kennedy. This decision caused some anxiety among the MSC officials. The original press building at MSC had been "designed to house

¹President Johnson did not bother to check any of the answer blanks provided for him by Mr. Watson.

all large events covered by the news and television services: but it could not hold all those members of the media who had told NASA that they were heading to Houston. In a panic, MSC officials went about the Houston area and finally acquired a 25,000 square foot facility that belonged to McDonnell's Houston representative, Frank G. Morgan, Jr., just across the street from MSC.¹ On May 25, the registration process began and all members of the media who wanted to cover the flight began to sign their names to the lists and pick up their passes. The list of correspondents would end up with 1128 names; 1068 of those were from the news media and the other 60 were public relations and engineering personnel from the industrial firms working with NASA (55: p421).

These reporters gathered at the new building for the public affairs activities of MSC, now called Building 6. It was there they would interview officials who understood the technology of the upcoming flight and would hear briefings about the major components of the spacecraft and missile. Building 6 was to be the newsmen's center of operations. From there they could be taken on tours of the facilities within the MSC grounds and orient themselves with the astronaut training and flight control facilities. During the mission, the reporters would gather there three times a day for press conferences and briefings given by Chris Kraft's flight control teams as they came off-duty. This would occur throughout the remaining flights as well but not with the intensity of Gemini 4. This intensity would be evident by the amount of stories that the media would produce about the second manned Gemini flight, which were more than any other flight during the Gemini program (55: p422).

On June 3, 1965, Gemini 4 was launched, carrying astronauts Ed White and Jim McDivitt into space. Witnessing the event at Cape Kennedy were 671 members of the media. Soon after the launch, 81 of those people

¹Local reporters did not care for NASA to lease the building, spelling out that the rent was costing the U.S. \$92,165 per year. In addition to that, \$166,000 were needed for modifications, \$8000 for television monitors and another \$6600 for just more than 600 chairs.

jumped on planes and headed across the Gulf of Mexico for Houston (where MSC controlled a mission for the first time) to join the reporters already there in Building 6 (88: Winter, 1966, pp722-728).

A few hours after they were placed in orbit, White prepared to step outside of the spacecraft. He opened his hatch and cautiously stood up in place, the gold-foil covered umbilical cord floating inside of the space cabin.¹ With a small burst of the compressed oxygen from his gun, White left the spacecraft and soared in front of McDivitt, who was busy shooting pictures of the floating astronaut. As the minutes went by, so did the oxygen supply in the gun. When that happened, White simply did what Leonov had done, use the tether line. At one time, White did walk--on top of the spacecraft. He placed himself on it by pulling tightly on the tether, which gave him some friction against the surface of the spacecraft. When his shoulder brushed against McDivitt's window, the astronaut inside complained, "You smeared up my windshield, you dirty dog!" Miles below, the world listened in amusement to the astronauts chattering back and forth.² When it came time for White to return, he said he did not want to do that although he realized that he had better follow the flight plan. By the time the hatch was closed, White had been outside for nearly 20 minutes, twice as long as Leonov had been outside of his Voskhod (98: June 18, 1965; 118: September, 1965).

Although the walk of White's was the most impressive part of Gemini 4's mission to the public, it was considered as a secondary task by NASA. The main project was to evaluate the long-term effects of four days in space. For the two-and-a-half days after the walk, Gemini 4 was allowed to drift so as to conserve attitude control fuel. Other tests were performing a rendezvous with the second stage booster (this phase was

¹The cord supplied communications and oxygen to White, who also had a chest pack carrying 20 minutes' worth of oxygen in case the cord broke.

²John Young, who was listening to them, called up and told them to save their voices, explaining, "The toughest part comes after you get back to the United States." Another interesting point is that although McDivitt was obviously the only person up there shooting pictures of White, Field gave itself credit for the pictures when they were published in one of its publications, as if McDivitt was working exclusively for World Book.

cancelled) and, like Grissom and Young, White and McDivitt were to change their orbits occasionally. On June 7, the crew returned to earth and were hauled aboard the aircraft carrier Wasp after being picked up by a helicopter (57: pp201-202).

It was either sometime during the mission or immediately after the splashdown that the White House announced that the President would receive the astronauts at his Texas ranch near Austin. Some Americans did not care for this act and they let the President know their thoughts. Three telegrams, supplied to the author by Historian John Fawcett of the Lyndon Baines Presidential Library in Austin, illustrate some of the feelings of the public.

Mr. President, in all due respect, I, like many Americans, feel that the place of honor and dignity in which to receive our Gemini twins is in fact the Capitol of this country. Not Texas. It would be much more diplomatic and regarded abroad with much more favor if you would adhere to the people's wishes. We want our astronauts acclaimed in our Capitol.

Elizabeth Tracy (New Haven, Connecticut)

It is apparent that by personally lionizing our space heroes, you have bypassed we citizens who are taxpayers. As one, I would prefer having them received in the White House other than some remote place on some remote river presenting only one person.

Bob Stenzhorn (Tampa, Florida)

Texas spirit is no bigger than Nevada's. Would it be possible to welcome the astronauts in our Capitol? Washington, D.C."

Betty Horton (Reno, Nevada)

President Johnson abandoned Administrator Webb's suggestion about meeting the astronauts at the ranch, maybe because of the protests, and the reception was held at the White House on June 17, 1965. The Gemini 4 astronauts arrived that morning with their families and almost as soon as the helicopter bringing them from Andrews AFB settled on the ground, Mrs. Lady Bird Johnson asked the families to spend the night in the Presidential Mansion. At a Rose Garden ceremony, the President called White and McDivitt the "Christopher Columbus of the 20th Century," and added that while the United States had not yet passed the Soviets, the

Americans were at least even with them now. Next came a parade and then a lunch with Vice-President Humphrey which was also attended by several Congressional leaders. Off the astronauts went to talk to the House and the Senate and then back to the White House. There, the men and their families swam in the White House swimming pool and later in the evening they went to the State Department for a reception. To the people gathered there, the astronauts showed a 20-minute movie of White's walk in space. In the blackened room, the image of a white-suited astronaut floated across the screen just as White had in space; the red, white and blue of the tiny U.S. flag sewn on White's left shoulder showed clearly on the film (117: SP-350, p143; 85: p288).

Mrs. Johnson describes what happened when the lights came on after the last frames of the movie disappeared from the projection screen:

...then Lyndon delivered the shocker of the evening. He said to the Gemini 4 astronauts, "This may not make me too popular with you families. But I'm going to ask you tonight, in the very next few hours, to take the Presidential plane and travel outside the country again.... I want you to join our delegation in Paris" (117: SP-350, p143; 85: p291).

What Johnson wanted the astronauts to do was to fly to the Paris airshow because the Russians had humbled the Americans there. Yuri Gagarin was standing next to a copy of his spaceship (seen for the first time by the western world) and was shaking hands with the visitors, scoring an impressive hit. The French press had noted that most of the crowds were ignoring the lackluster American pavilion. At the President's announcement, the wives of the astronauts were visibly stunned. They had arrived in Washington for, at most, an overnight stay; they had brought nothing for a trip to Paris. Never mind, said the President and the First Lady. They whisked the astronauts' ladies to the White House and plunged into the wardrobes of Mrs. Johnson and her daughters to find clothes for them. At 4 a.m. the next morning, the plane left Andrews with the astronauts, their wives, Humphrey, Webb and Charles Mathews, the Gemini program manager (117: SP-350; p143; 85: P291).¹

¹Johnson also had Dr. Mathilde Krim of the Sloan-Kettering Institute for Cancer Research join the astronauts in Paris, although how she related to an airshow is a bit incomprehensible.

Although the astronauts made it to Paris for only the last day and a half of activities, they gave the Soviets some competition. Wherever the astronauts went, so did hordes of Frenchmen, causing one Paris newspaper to remark, "A partial recovery for the United States" (117: SP-350, p143).

By the time the astronauts returned to the U.S., they were greeted by the issue of Life containing their personal stories. Compare the following account, written by White, to what Leonov had written for Life only a month before.

There were the vivid colors of the sky, followed by the clouds, the ocean and the earth. I had seen Texas and the Gulf States, and then I saw Florida coming into view. At about that time, I rolled over, facing right down, and I could see all the islands of the Carribean stretching down beneath Florida--the Keys, the Dominican Republic, Cuba, Puerto Rico and many of the others. The richness of those colors! The blues of the ocean were so deep and the greens of the shoals and shallow water so beautiful! Of all the colors, I myself felt red, white and blue all over.... I knew it was not going to be too easy to get back in.... We had quite a struggle with the hatch again.... ...the lever was not catching; it was turning free and not ratcheting the hatch down at all.... Between the two of us, with a lot of pulling and tugging, we finally got the hatch closed. It was a perfect example of teamwork and epitomized to me the vital necessity of having two men in a spacecraft who can work literally as one..." (98: June 18, 1965).

Life was not the only magazine that could claim it moved fast to produce the news for the public to read. Newsweek had planned to have golfer Jack Nicklaus on its cover for the June 21, 1965 issue but that was changed to a picture of White. Because of this capability for fast change, Newsweek's editors patted themselves on the back in the editorial column. It would not be the last time that Newsweek or a few other magazines made fast changes concerning U.S. space efforts.

Shortly after the return from France, White wrote President Johnson a letter expressing his thanks for all that the President had done and White added something that he had not told Johnson while he had been in Washington. During the mission, White wrote, he carried a 1950 United Nations flag, which had belonged to White's father (an Air Force general

who had been with the U.N. peacekeeping forces) and had had it tucked into a leg pouch while he performed his EVA. "If you feel this flag might serve in some way to promote better world relations," suggested White. "I would be proud to have it used in this manner" (174).

Johnson agreed and contacted the U.S. ambassador to the U.N., Arthur Goldberg. Goldberg, in turn, made contact with White and the astronaut soon presented the flag to the United Nations (83).

This gesture was also a boon to the U.S. public image in front of the world. This would not be the first time an astronaut had come forth with a suggestion that would help the public image of NASA and the United States. It may have seemed that the astronauts, taken as a group, did not care for the public relations activities, but there were some who had their own ideas for helping and they took matters into their own hands at times, as did White on this occasion.

Gemini was now running at near full speed. Two months after White and McDivitt had returned, Gemini 5 sat on the launching pad at Cape Kennedy. The flight, manned by Pete Conrad and Gordon Cooper, would last eight days, again, to study the effects of long flights upon the men and the machines with secondary objectives of testing the rendezvous radar (although there was no target vehicle with which to rendezvous, only a transponder) and checking the performance of new fuel cells in addition to 17 other experiments. But there was none of the grandeur of Gemini 4, just a long space flight. Later, Mike Collins would refer to Gemini 5 as a "ho-hum dull kind of flight and even Conrad's customary ebullience was muted" (24: p149; 57: p210).

In June, 1965, an article appeared in that month's issue of Ebony, a publication which aims primarily at the black population of the United States. The writer discusses the fate of USAF Captain Edward J. Dwight, a black test pilot who had not been selected by NASA to be an astronaut. Dwight had been among a group of eight Air Force officers who had been recommended to NASA "without qualification" for duty in the astronaut corps. Of the eight men, only Dave Scott and Ted Freeman had made the

entry into NASA's Houston complex for work (Freeman, of course, died a year after the selection had been made). Ebony called NASA to obtain more information about Dwight's rejection. But the NASA PIO could tell the writer only that the PIO was not at liberty to discuss the details of individuals who had not been accepted by NASA as astronauts. The final comment in Ebony's article was that NASA and the Air Force were discriminating against Captain Dwight. (36: June, 1965).

This may or may not have been true. Ebony did point out that only two of the eight men who had been recommended "without qualification" had been accepted by NASA, which does not have to take every pilot recommended by military or civilian sources. NASA has its own procedures for picking astronauts. NASA did not say that Captain Dwight was not a good pilot; no doubt he was because he belonged to the Air Force flight test school, a unit that no simple pilot can just wander into and join. Another point of contention with Ebony by this author is why did the writer decide to wait until more than one and a half years after the official announcement of the group of astronauts for which Dwight had been considered before griping about the selection process? This article would have been better if it had been run shortly after the announcement of this group of astronauts (the third group) which was made in October, 1963.

It is true that NASA was and still is a very image-conscious organization and Dwight's rejection might have been based upon the color of his skin. Yet at the same time, one must look at what happened between NASA and the town of Huntsville, Alabama. When NASA started building its facilities there to test and construct its large rockets, it laid down very clear terms that it would not consider even beginning to move into the area unless the surrounding region agreed to abandon its discrimination against blacks. Huntsville residents agreed and NASA finished its rocket-building base, establishing one of the first fully integrated communities in Alabama, a state known for its reluctance to drop segregation as was its governor, George C. Wallace.

The case about Captain Dwight was never brought up again in the

press as far as this author has determined. It is reasonable to believe that there was no discrimination against the Captain unless further facts are found and brought into the public light.¹

About ten days before the launch of Gemini 5 was to take place, the press reported that there was disharmony at the Cape surrounding the mission. The rumors included statements that Cooper and Conrad were fighting about various things. Eventually Cooper set things straight in Life but not until after the mission was complete. Cooper wrote in that article,

...some imaginative reporter had put out the story that Pete Conrad and I were feuding. One of us...supposedly had taken a poke at the other and the story was that bad blood was flowing all over Cape Kennedy.... Possibly some guy was hard up for a story and started thinking about our different backgrounds. Pete's an Ivy Leaguer from the East, I'm from Shawnee, Oklahoma.... He's Navy, I'm Air Force.... Some guy must have thought all this out and figured a punch in the nose was bound to happen and gone ahead to writing about it without checking to see if it really had. I'm here to state flat out that it had not (98: September 24, 1965).

In the meantime, Julian Scheer seems to have had a change of mind about handling some of the publicity that would occur after the astronauts were to return from space. On August 13, 1965, he sent another memo to the White House, spelling out his thoughts. In it he mentioned that there was no way that any activities could happen until 11 days had passed from the recovery, as the astronauts would be in debriefings all of that time and would not have time to see even their wives. But Scheer now has different thoughts about limiting the appearances of the astronauts. In the memo he wrote:

It appears that post-flight interest in astronaut appearances will continue to be high and we plan to continue to touch base on the major engagements, i.e., requests from large cities (139)

When the personnel at the Cape first attempted to launch Gemini 5, CBS covered the event live for seven hours, only to watch the mission end

¹See p219 for Mike Collins' comments upon the selection process.

in a cancellation. No doubt this cost CBS heavily as it not only lost money on this type of long coverage but it would also have to cover the next try as well, with no idea of how many attempts would be made. But the next attempt was successful and, on August 21, 1965, Cooper and Conrad were launched into orbit atop their Gemini-Titan vehicle. For more than a week they would remain in space. Conrad carried with him a memento from another astronaut--Ted Freeman's wedding ring. He had taken it with him to give back to Freeman's widow, Faith, upon his return since Freeman had never had the chance to fly above the earth's atmosphere. In the future, other astronauts would also carry items into space for their comrades who had fallen in the line of their explorations (8: p90; 98: September 24, 1965).

The flight encountered some minor difficulties in the power systems but, other than that, it went smoothly. When the astronauts came down on August 29, they were brought aboard the aircraft carrier Lake Champlain. Among those who received them was a representative from the International Aeronautical Federation (IAF) who asked to see certain dollar bills which had been carried aboard Gemini 5 during the flight. His purpose in asking was to verify, by checking the serial numbers, that they were the same ones which had been placed in the spacecraft before launch, i.e., in reality, to insure that Gemini 5 was indeed the same spacecraft that had left Cape Kennedy eight days before. The checking seems superfluous because the flight had been watched by the world but the IAF considered this to be standard procedure for recording any attempts at setting records, whether watched by all of humanity or not. Conrad wondered what would have happened if he and Cooper had substituted "a couple of Confederate bucks for the others." Conrad possibly did not know, but the answer would have been that nothing would have happened--Confederate dollars were just what Shepard had carried with him on his flight years before for his proof to the IAF (61: p139).

The flight of Gemini 5, like Gemini 4, was just the beginning of the travels of its crew. Whereas White and McDivitt went to France, Cooper and

Conrad were going to more countries and the plans being laid for that trip were beyond the control of the astronauts. It was during their flight that the Chief of Protocol for the State Department, Lloyd N. Hand, visited with President Johnson and talked about sending the astronauts to various countries on a goodwill tour, which would be the first such tour made by any of the astronauts. On September 1, 1965, Hand sent Johnson a reminder.

You will recall that I spoke to you last week about the possibility of some of the astronauts travelling to certain selected countries around the world. The purpose of this trip is to demonstrate the United States' willingness to share its knowledge about space technology and to allow our astronauts to demonstrate our peaceful intentions in the exploration of space. This conversation was prior to your announcement Sunday as to the possibility of some of the astronauts being available for foreign travel....

Selected embassies around the world have given overwhelming support to the proposal (65).

With Hand's memo were statements made by several ambassadors of the United States stationed in various countries. They included remarks such as:

Believe visit would not only be valuable and highly successful public relations venture but would provide unparalleled means allow government of Nigeria gain credit their participation space scientific program [sic].

Interest high and general attitude admiration for outstanding accomplishment [Mexico].

Embassy believes Her Majesty would welcome visit to London by astronauts Cooper and Conrad.

Japanese people are demonstrably space conscious, and media has given heavy play to Gemini V feat. Visit might also take some edge off scheduled visitation to Japan of Soviet cosmonauts Nikolayev and Tereshkova who scheduled arrive in October as guests of Japanese Socialist Party on occasion latter's 20th anniversary [sic].

Believe that in view major NASA interests in Spain visit would be most beneficial in creating atmosphere favorable both to resolution current technical matters relating NASA activities here and to long range Spanish-US relationship [sic].

Johnson agreed to the visits, writing that the astronauts should not be accompanied by high-government officials, only their wives and necessary aides. He also wanted the astronauts to be prepared to help with scientific lectures and to "provide public demonstrations of space equipment, techniques, etc., in countries approved by the State Department and NASA" (65).

When the astronauts of Gemini 5 finished their debriefings on September 11, they received a phone call from President Johnson. It was not a totally spontaneous thought on the part of the President. Julian Scheer had been at work again and had made suggestions to the President as to what he could say to the astronauts. Scheer's script follows:

This is President Johnson speaking. I'm glad to learn that your eleven days of intensive debriefing are over, and that so much valuable scientific information is being gained from the study of your record breaking flight, and I am happy you are back home with your families today....

I have stated...that those who venture into space go as envoys of the entire human race.

I therefore believe that, perhaps, the most important mission you can perform now is that of sharing your findings in space with the people of the world.

Accordingly, I am making arrangements now for you to visit a number of countries--many of which have cooperated with us in the Gemini tracking and data acquisition networks that monitored your mission--to give them a firsthand account of our manned space flight program. You have been invited to the International Aeronautical Federation meeting in Athens and the nations of Turkey, Ethiopia, Malagasy, Kenya and Nigeria have invited you to visit them.

We are looking forward to having a chat with all of you, and we'll be giving you further details of your itinerary at that time (139).

No one recorded the impressions of astronauts Cooper and Conrad as to what they thought of this. By now, all of the astronauts may have had the impression that whatever they did in space would be followed by a visit to other countries, and they were not far from being right.

Although some people may have been enthusiastic about sending the nation's astronauts across the world to spread the knowledge about the U.S. space program, the man who headed NASA was not impressed with doing this. Jim Webb did not care for the tours because there were people in

the government who were attempting to stick his administration with the bills for these trips. He said in an interview in late 1976 that if the State Department and the U.S. Information Agency had wanted to send the astronauts to various places, then those two agencies should have footed the costs for such trips. "NASA needed its money for missions and rockets," said Webb. "Not for sending out astronauts to other nations. I paid but I was reluctant when I did. . NASA didn't depend upon those tours, or any others, to sell NASA. We depended upon the success of our missions to support our cause" (170).

This author, while agreeing with Webb that if the other governmental agencies wanted to send the astronauts abroad, then they should have paid the bills for such trips, questions Webb's statement on the value of any tours, especially those within the confines of the U.S. The success of the missions was definitely a selling point but so was the exposure of the astronauts to the public because of the heroes into which they had been made. Keeping the astronauts under wraps forever would more than likely have hurt the popularity of NASA, especially during those early years when space travel was still a novelty that only a small number of individuals could enjoy.

The funding for the trip of the Gemini 5 astronauts was worked out and they flew to Athens, their first stop, where they also flew into a peck of trouble which gave the PAO a black eye, according to the editor of Missiles and Rockets (112, October 4, 1965).

It had started innocently enough. At the same meeting of the IAF were two Russian cosmonauts, Leonov and Belyayev. Jules Bergman of ABC decided it would be nice for the cosmonauts and the astronauts to meet. After all, it seemed natural. ABC checked with the Russian delegation about arranging such a meeting and the American journalists received a "da." Then ABC hauled in its equipment from across the Atlantic after receiving what it thought was a go-ahead from NASA in Washington. Bergman arranged to have most of the Russians, including the cosmonauts and the Soviet scientist who headed the delegation, Leonid Sedov (who had once

been hustled by a Time reporter in a blue Cadillac from Providence, Rhode Island to New York City) at the Galaxy Bar high atop the Athens Hilton. It was there they were supposed to meet the astronauts. In addition to the Russians were other scientists, camera operators and the Chairman of the U.S. House Space Committee, Congressman George Miller. But the astronauts never showed up. Everyone waited and waited. Finally Bergman called Julian Scheer, the PIO for the trip, to find out what was happening (112: October 4, 1965; 98: October 1, 1965).

Scheer replied that the astronauts were not coming since no one had cleared the meeting with him. It turned out that the astronauts were actually doing nothing at the time of the meeting. They could have attended but Scheer had kept them from it. Later that day, the head PAO told the media, "Today we learned for the first time an American network was seeking to arrange an exclusive interview. We do not grant exclusive interviews but we conduct our business openly and before all news media" (112: October 4, 1965; 98: October 1, 1965).

Bergman protested and told Scheer that he had talked to Brian Duff of the PAO at NASA Headquarters in Washington, from whom Bergman had received permission. Scheer pointed to a man nearby and asked Bergman, "Do you know who that man is?" Bergman said he did not. Then Scheer introduced the ABC reporter to Brian Duff. According to Scheer, Bergman's face fell upon hearing the introduction (137).

Scheer also stated that Bergman had made his move without any consideration to the U.S. State Department or to the United States. This was possibly another reason for Scheer deciding to keep the astronauts away from the Galaxy Bar. (137).

The incident atop the Hilton (or the lack of an incident) was the first of three episodes that occurred between the media and the PAO in Greece. Concerning the Galaxy Bar incident, Scheer's actions seem justified. ABC was the only news organization at the bar that day and, from what all reports have shown, it must have looked like an exclusive interview; moreso because Bergman had arranged it all. In fact, he might

have been calling for Scheer to play his hand, hoping for a bluff and it backfired on Bergman, with residual fallout on Scheer who had the courage to stand up to such tactics.

The second incident, which seemed to be a mistake on the part of NASA, occurred when the Russians were presenting their papers to the conference. At the same time, the astronauts were holding a press conference, thus splitting the attention of the media. Later, when the Russians realized that their press conference would conflict with the presentation of the astronauts' papers, they cut their conference short so as not to interfere. If the timing of the astronauts' press conference was Scheer's fault is not known but it seems that it might have been the responsibility of the people who had arranged the entire schedule for that meeting of the IAF. Since the Russian press conference was scheduled in a manner similar to the astronauts' press conference, it would seem that this is a good possibility.

In order to help rectify the first mishap which occurred at the Galaxy Bar, Scheer found himself thrust into the position of trying to get the astronauts and the cosmonauts together. He called the President of the IAF, Dr. William Pickering, but Pickering could offer no help. It was now up to the spacemen to patch things together.

Cooper made the first move. At the session that was held especially for the royal families of Greece and Denmark, Cooper virtually committed diplomatic murder by directing his opening comments not at the royalty in front of him but at the entire audience, asking everyone to give cosmonaut Belyayev (who was present without Leonov) a round of applause. After he finished his speech, Cooper, followed by Conrad, vaulted from the stage and waded through the crowds straight for Belyayev. While the royal families retreated to an outer area to greet the spacemen, the reporters and tourists crushed around the Russians and the Americans, causing absolute pandemonium. The spacemen, pressed together because of the crowd, traded flight pins that had been given to them by their flight agencies. Then they tried to move into the outer area to meet the

royalty but the closeness of the crowd knocked over the people, tables and lamps as the queen bees and their attendants moved en masse through the Hilton. Speaking of Queens, Queen Mother Frederika was nearly knocked on her back by the crowd. The meeting with the royalty was short, but for the first time at the IAF meeting, the Russians and the Americans had met (98: October 1, 1965).

That night at the dinner, Cooper invited Belyayev and Leonov to have breakfast with the Americans the next morning, which they accepted. When morning came, the Russians, who were supposed to appear at 9:00, did not. Anxiety gripped the Americans as they paced the floor: were the Russians making a repayment for the Galaxy Bar incident? No. Leonov and Belyayev arrived a few minutes late and sat down with the astronauts for breakfast on a balcony overlooking the Acropolis. All of this was nice except for one thing--they were not alone. In stepped Jim Hicks, who was a reporter. That would have been innocent enough if he had been a pool representative since he was the only reporter there, i.e., in a very exclusive position. But Hicks belonged to the archnemesis of the press--Life magazine. Life carried details of the breakfast whereas no other magazine had such a story available to them. Missiles and Rockets' editor, William J. Coughlin, accused Scheer of giving Life an exclusive only two days after saying that NASA did not grant anyone exclusive interviews (98: October 1, 1965; 112: October 4, 1965).

Scheer spoke to this author years later about why he allowed the reporter from Life inside the hotel room that morning.

Life demanded an interview and I said that an interview would be done for the entire press. This was not to be a personal story. I met the astronauts and the cosmonauts who were also joined by Chuck Berry [the NASA physician assigned to the astronaut corps], Deke Slayton and an interpreter. Later I briefed the press about the breakfast and Life got nasty about it (137).

Maybe Hicks used the material obtained from Scheer's briefing for his story about the breakfast but according to William Coughlin, Hicks was in the hotel room with the spacemen when they ate their breakfast that morning. If Hicks was in there, it was a serious mistake on the part of

the NASA PAO. If the Life reporter was not in the room, then William Coughlin erred in writing his editorial entitled, "The Ugly American."¹

The third event of the Athens affair came after the astronauts had actually left Athens and were on their way to the city of Thessoloniki for a meeting there. During the short flight, Pete Conrad beckoned Jules Bergman, who was accompanying the men, to come to the compartment in which he and Cooper were sitting (13).

Bergman writes about what happened then in a letter to the author:

What happened is that I bent over to chat with Conrad who was at a window seat. As I did so, Scheer, at the opposite aisle seat, declared nastily, "You can't come back here..." and, before Conrad or I could explain, he got up and lunged at me. He missed, I retreated a foot or so in surprise and Bill Coughlin and a few others grabbed him to restrain him. It was certainly embarrassing to all there (13).

In an interview with the author, Scheer gave his impression about what had happened during that flight.

On the flight to Thessoloniki, Jules was abrasive and loud when he was in the compartment with us. We were trying to write our speeches and he was making it hard to concentrate. There was sort of a swinging door at the front of the compartment and he was standing near it. Jules kept talking, making things difficult for us and I said something to him like, "Jesus Christ, Jules, leave us alone," and I explained to him about the speeches we were working on. He persisted in talking loud so I got up and shoved him through the door. I guess that was something I should have thought about and maybe shouldn't have done. William Coughlin later wrote an editorial about it...with some nasty comments (137).

As Coughlin described it to the readers of Missiles and Rockets, Scheer had "slammed him [Bergman] bodily out of the compartment to the embarrassment of all present" which included newsmen of both Greece and the United States (112: October 4, 1965).

After leaving Greece, the rest of the tour proceeded without incident. However, when the entourage returned to the United States, not much news was made of the troubles between the media and the PAO in Greece. Greg Robinson, the Army Assistant to the President's Armed Forces Aide, sent a report to the White House upon the trip.

¹However, Bergman also writes that "Life was indeed invited" to the breakfast and that "none of the other media were there" (13).

The visit of the astronauts to Greece, Turkey, the four African countries and the Canary Islands was highly successful from a public relations viewpoint. The astronauts were well received by the public and official governments in all places with the exception of Turkey where the public response was lukewarm. The enthusiasm of the African countries was particularly noteworthy.

The highlights of the trip were:

1. The enthusiastic reception by the people of Thessaloniki, Greece which exceeded the enthusiastic welcomes received in Africa.
2. The audience with His Royal Majesty, Emperor Haile Selassie of Ethiopia. The Emperor was most cordial and chatted with the astronauts for better than one hour.
3. The visit with President Kenyetta at Keekorok Lodge, Kenya. The President was kind enough to take us on a guided tour of the game preserve and show us "his" lions.
4. The visit with the Emir in Kano, Nigeria. The Emir presented a spectacular show of approximately 300 regally-attired guards mounted on horses and camels.
5. The warm and friendly crowds throughout Africa.

During the trip we learned some lessons which will apply to any succeeding trip. Sufficient time should be allotted prior to commencing the trip to allow receipt of and approval of planned programs at each location, the respective roles of NASA and the State Department should be clearly defined and clear instructions should be issued to all countries to be visited reference participation of party members. This will prevent friction between NASA and State, will assure that the astronauts have at least one rest period each day, and will result in programmed participation of all party members....

Hugh Robinson (130)

When Scheer returned, the news of the Greek incidents had preceded him and Haney sent his boss a note, asking, "How were things in Greece?"

Scheer did not have to wait long for a reason to fire back a joke in Haney's direction. The next day, Haney and Chris Kraft found themselves on the first plane that was ever hijacked from the U.S. to Cuba. When Haney finally arrived at his intended destination, a few hours later than he had planned, he found a message waiting for him: "Greece was fun. Had any interesting flights lately?" (66).

Scheer had more important things to worry about though; Gemini 6 was just over the horizon. On October 19, he sent Presidential Press Aide Bill Moyers a note that may have been typical for all missions.

Just a reminder that we launch Schirra-Stafford on October 25 and recovery is October 27. We will open a line with you on launch

day, as usual, and Bill Lloyd will keep you informed. You might want to consider now if the President will want to talk to the astronauts on the ship, as usual, or to break the pattern this time.

Scheer (139)

On the launch day, the Gemini program suffered its first major setback. At Cape Kennedy, two missiles were set for launch: the Gemini 6 was on top of its Titan II missile and a Gemini-Agena Target Vehicle (GATV) rested on the tip of an Atlas. The Agena was to be fired first and shortly thereafter the Gemini astronauts would be launched to rendezvous and dock with the Agena. However, a little more than six minutes after the Agena was blasted off the pad, all telemetry from it ceased, indicating that the spacecraft had failed. The countdown for the Gemini 6 crew continued until it was evident that the Agena spacecraft had disintegrated 540 miles out from the Cape. With no target for Schirra and Stafford to chase, the NASA officials cancelled the second launch of the day (57: p216; 98: November 5, 1965).

Sadly, the two astronauts left their spacecraft and walked away from the gantry. Schirra called home and told his daughters to go to school while Stafford telephoned the editor of his hometown paper in Weatherford, Oklahoma, and thanked him for arranging a parade that was to have been held after the mission was completed. Schirra commented later, "It's a little like show-biz with all those people watching. But we're not in show-biz and we couldn't come out of that elevator with big, fake smiles on our faces.... They would be looking to see how we took it" (98: November 5, 1965).

At NASA and McDonnell, some people were putting their brains to use and came up with a target for Gemini 6 after all--Gemini 7. On October 28, 1965, Bill Moyers announced that Gemini 6 would be removed from the launch pad and Gemini 7 would be erected in its place to be launched first. If there was no more than the usual damage to the pad after Gemini 7 left earth, then Gemini 6 could be launched in a matter of days without having to go through the elaborate check-out procedures since

they had already been accomplished (57: p217).

A month and a half passed and Gemini 7 was ready. On December 4, 1965, astronauts Frank Borman and Jim Lovell boarded their spacecraft in the morning and were launched that afternoon. Their mission was to fly in space for fourteen days during which to study the long term effects upon the men and the equipment which put them there. They wore lightweight suits which they could remove to be in their long underwear but for most of the mission NASA ordered the crew to have at least one of them wear his spacesuit in case of an emergency. By the twelfth day, NASA finally allowed both men to remove their suits simultaneously. NASA also changed the sleeping habits of the astronauts. On previous missions, one astronaut had to remain awake while the other slept, which was unsettling for those who tried to sleep. Even if the "sleepers" turned down their volume switches, they could still hear the conversations between the one astronaut who was awake and the ground controllers (during another mission, an astronaut had been asked by ground controllers to check some switches on his buddy's instrument panel and he was surprised to see his "sleeping" partner reaching forward to check the switches himself). On Gemini 7, all of this changed. Borman and Lovell were allowed to sleep at the same time. Mike Collins said that NASA informed the public that the astronauts were going through "simultaneous sleep periods" because the officials did not want to tell the public that "the astronauts are sleeping together" (57: p224; 24: p

On December 12, Gemini 6 (technically labelled as Gemini 6A by NASA) sat on the pad with Schirra and Stafford in the spacecraft once more.¹ The engines ignited at 9:54 a.m. and shut off a few seconds later with clouds of exhaust boiling around the launch area. The Titan had not moved off the pad and Schirra made a wise decision. Not knowing exactly what had happened, he held onto the ejection ring between his knees and elected not to pull it (if he had, he and Stafford would have been ejected

¹As the astronauts rested in the spacecraft, NASA was being blasted by fundamentalist radio preachers for attempting a launch on a Sunday.

from the spacecraft and the mission probably would have ended then and there).¹ As it was, the Titan was undamaged by the premature shutdown of its engines; an electrical plug had dropped out of the tail of the missile earlier than planned. But even if the plug had held, the engines would have quit anyway because NASA announced on December 13 that a plastic dust cover, installed in the factory, had not been removed due to human error and it would have blocked a fuel line (57: p226; 24: p164).

Finally, the third attempt to place Gemini 6 in space worked and, on December 15, the Schirra-Stafford team left Cape Kennedy in a manner that most astronauts would prefer to leave. Gemini 6 was not going into orbit for any long distance or time records. Schirra wanted to get into space, rendezvous with Borman and Lovell and get back down as soon as possible. Scientists were not pleased by this. They wanted the astronauts of Gemini 6 to perform some experiments and Stafford wished to take a walk outside of the spacecraft, "but Wally just laughed," writes Michael Collins. "He wanted simplicity, brevity and success. He had the world's greatest human computer, Tom Stafford, to analyze the rendezvous problem and once that was over, Wally was going to...come home and have a cigarette" (57: p227; 24: p161).

Only a few hours after launch, Schirra and Stafford caught up with Borman and Lovell, who were flying as a passive target in Gemini 7 as they needed to conserve their fuel for their longer flight. With Gemini 7 "stationary" in relation to the maneuvers of Gemini 6 (even though both spacecraft were flying in excess of 17,000 mph), Schirra and Stafford brought their spacecraft to as close as one foot and as far away as 300 feet from Gemini 7 while taking pictures and having pictures taken of them. There was a lot of chit-chat, as a person might expect with the gregarious Schirra amongst the company up there. "There seems to be a lot of traffic up here!" Schirra told the ground controllers in Hawaii (118: April, 1966).

Borman replied, "Call a policeman." Schirra remarked that he could see the 11-day-old beards of Lovell and Borman through the windows. Then

¹During a test of the ejection seats, Grissom and Young had watched a seat fired from the spacecraft sitting on the test stand but the hatch did not open. Nevertheless, the seat shot through it. As Young commented

Schirra held up his own little message to Borman from the all-Navy crew of Gemini 6--in the window of his spacecraft Schirra placed a sign referring to Borman's alma mater: "BEAT ARMY." While Schirra had flown the spacecraft into position for the rendezvous, his partner, Stafford, had been so busy working with the spacecraft's brain as well as his own that he had managed to look out the windows for no more than 15 minutes during the first six hours of flight. .. But, during the rendezvous, it was Stafford who did most of the sightseeing as he photographed Gemini 6's viewpoint while Schirra piloted the four-ton spacecraft around Gemini 7 (118: April, 1966).

For three and a half orbits, the spacecraft flew together, while on the ground, tiny U.S. flags popped up on the consoles of the controllers at MSC and cigars were lit by the people gathered in the control room--a typical procedure for any success in NASA. When the two teams of astronauts separated, Schirra went into an orbital flight that differed from that of Gemini 7 and he and Stafford stayed in space for another day (57: p229; 118: April, 1966).

Schirra and Stafford slept after they had left Borman and Lovell and, when they woke the next morning, they startled the ground controllers with the statement that they were watching a UFO which was also orbiting the earth. "This is Gemini 6," called Schirra over the radio. "We have an object, looks like a satellite going from north to south, up in a polar orbit. He's in a very low trajectory, looks like he may be going to reentry pretty soon. Standby...looks as if he's trying to signal us." The controllers had no idea of what was happening until they heard the sounds of bells and a harmonica playing "Jingle Bells." The affable Schirra had struck again (61: p152).

Gemini 6 landed on December 16, seven miles from the assigned landing point, which was not as accurate as Schirra's previous landing during the Mercury program. While Schirra and Stafford were brought aboard the aircraft carrier Wasp in the West Atlantic, Borman and Lovell were encountering troubles with their fuel cells. The crew of Gemini 7 later, such a mistake on the launch pad could cause "a helluva headache" for an astronaut but he added that the headache would not last long, though.

asked the controllers for a private conversation and instead of releasing an exact transcript of what had been said, Paul Haney and Kraft later paraphrased the conversation for the media's benefit. Kraft was also busy talking to the crew, trying to get them to stay in space for another two days as Borman and Lovell were thinking about coming down early because of the hassles with the power systems (57: p226; 93).

When Borman and Lovell finally arrived on the deck of the Wasp to join Schirra and Stafford on December 18, they had flown in space for more than 280 hours and they were none the worse for it. In fact, when they left the helicopter, they walked across the flight deck of the ship without any ill effect and appeared to be in better shape than had been Cooper and Conrad whose flight had gone for only eight days (24: pp164-165).¹

The missions of Gemini 6 and 7, dubbed "The Flight of '76" by NASA employees, marked the awareness of a NASA procedure by the media. Ground controllers, when knowing that the media wanted to listen in on the air-to-ground transmissions "live," would inform the astronauts via a code so the astronauts could say pleasantries during that particular pass over the United States. The code, referred to as "HF-6" by controllers, was thrown in with a bunch of other data transmitted to the astronauts when they were approaching the American continent. Usually the reporters who scanned the transcripts would be none the wiser, thinking that "HF-6" was some technical information being used by the crew and the controllers. Thus, upon hearing "HF-6," the astronauts, said Paul Haney, "would say Bicentennial kinds of things, like, 'Gee, those orange trees in California sure look fine today,' and other things like that" (66; 93; 104; 129).

The press had found out about the code during one of the flight controllers' shift press conferences of the "'76" mission when Gene Kranz, who was in charge of one of the teams of flight controllers, told a reporter, who had asked him about the meaning of HF-6, what the code

¹A person must keep in mind that either eight or twelve days in space, which may not sound like much, is not all that comfortable in a spacecraft that has about the same volume as a telephone booth.

meant. NASA had not used the code in a sinister manner, according to John McLeaish (head of the Houston PIO in 1976), but only as a way to tip off the astronauts that they were "live" at certain times. The knowledge of the use of "HF-6" did not arouse the media much nor did it cause the code to never be used again (104).

Whereas all of the flights of Gemini and Mercury had gone well without any real difficulties in space (barring the loose heatshield of Glenn's Friendship 7), Gemini 8 would change all of that as well as the method by which NASA reported the progress of the flights to the media.

GEMINI 8: A LESSON IN PUBLIC AFFAIRS

Before Gemini 8 was launched, disaster struck NASA again. On February 28, 1966, in fog and rain, Gemini 9's prime crew, Elliott See and Charles Bassett, and their backup crew, Tom Stafford and Eugene Cernan, were enroute to St. Louis for two week's training in the simulators at the McDonnell complex. Because of the weather, the crews, each in their two-place T-38 trainers, were forced to make instrument landings. Bassett and See were the first to make the approach and they dropped towards the runway. On the way in, they hit the roof of the McDonnell plant 1000 feet from the runway, bounced into a courtyard of the complex and the T-38 exploded, injuring several McDonnell employees and killing the astronauts. Minutes after the accident, Stafford and Cernan landed safely. NASA later announced that the backup crew would then assume command of the mission and fly it on schedule. Alan Shepard was appointed to head an investigating team to look into the cause of the crash (57: p234).

Sixteen days after See and Bassett died, Gemini 8 blasted off from Cape Kennedy following a GATV. The primary objectives for the mission were for the astronauts, Neil Armstrong and Dave Scott, to dock with the Agena and to perform some extravehicular activities. About six and a half hours after Armstrong and Scott were launched, they successfully docked with the GATV. Twenty-seven minutes after docking, a thruster at the rear end of the Gemini spacecraft malfunctioned, causing the two mated vehicles to tumble wildly out of control. Armstrong backed off from the Agena. He thought the target vehicle was at fault but the Gemini continued to tumble, its thruster stuck in an open position (57: p235).

With the spacecraft revolving 300 degrees per second, Armstrong elected to shut off the Gemini's Orbit Attitude and Maneuver Systems (OAMS). Turning off the OAMS did not stop the movement though; Newton's Second Law of Motion states that once a body is in motion, it will continue to be in motion unless acted upon and since Gemini 8 was

already in motion in a frictionless environment, it continued to spin. Armstrong finally decided to use the attitude controls which were to be used only for positioning the spacecraft for reentry just before entering the earth's atmosphere. When he activated this system to stop the tumbling, he was also forced to end the mission for NASA rules dictated that once the reentry control system was put into operation, a mission would have to be terminated as quickly as possible (57: p235).

Armstrong stabilized the Gemini and assumed the correct reentry attitude. Gemini 8 landed after only seven orbits in the western Pacific. The astronauts had to wait for three hours before the U.S. destroyer Leonard Mason arrived to retrieve them and their spacecraft (57: p235).

When they arrived at Okinawa, Armstrong and Scott were met by Wally Schirra and Dr. Duane Catterson, of NASA, who had flown there from Hawaii (Schirra had been at the Royal Hawaiian Hotel at Waikiki with Frank Borman and their wives. They had been on a goodwill trip throughout the Orient for President Johnson. During that time, about 30 days, Borman and Schirra were giving up to three speeches a day at different locations. After being in Hawaii for a short time on their way back to the U.S., Schirra and Borman had been informed about the situation involving Gemini 8 and, while Schirra headed to Okinawa, Borman took the wives home by commercial airplane). Later, they went to Oahu, Hawaii where Armstrong and Scott were checked by physicians at Tripler Hospital and found to be in good shape (141).

As if the trouble with the stuck thruster (which was not analyzed for days afterwards) was not enough for NASA to be concerned about, the PAO came under heavy fire from the media. Paul Haney had been ready to leave Mission Control that evening when the Agena-Gemini combination began to tumble. According to Louis Alexander, Haney broadcast a "cryptic announcement" to the media and continued to do so for the next 30 minutes when the astronauts finally attained control of their spacecraft. The reporters demanded to hear the tapes of the air-to-ground

conversations. Julian Scheer, who had been at his home at the time of the thruster malfunction, received a call that "the astronauts are dying, screaming in space." With Scheer was George Miller, the Chairman of the House Space Committee, and Howard Simon, later to become the managing editor of the Washington Post but then a reporter closely tied to space. With Miller and Simon as witnesses, Scheer decided that the tapes should not be released to the media because he thought that the families of the astronauts might be listening to the radio or television and they should be spared from having to hear the voices of their husbands and fathers (66; 137; 88: Winter, 1966, p727).¹

The initial response from Haney to the media was that the voices of the astronauts would, according to Alexander, "give the impression of an alarm that was not justified by the events" (88: Winter, 1966, p727).

While the media could not obtain the information they wanted out of NASA, i.e., the tapes, they went to another place for a "human" story-- the astronauts' wives. Mike Collins had just arrived at his home when his wife received a phone call asking for the Collins to look after Dave Scott's children until the astronauts were brought down. Collins called Mission Control to find out exactly what was happening (he had left MSC before the accident had occurred) and Mrs. Scott's father, General Ott, arrived with the children. Mrs. Collins and General Ott stayed with the children while Collins drove to the space complex to see what he could do. When the astronaut understood that everything was going to be okay, he returned home and he, his wife and General Ott decided that the Scott children should be returned to their home. Word arrived that Mrs. Armstrong was on her way to the Scott house too and so was the press. By the time the entourage from the Collins' house arrived, the front yard was lit with television lights and excited reporters stood on the lawn. Realizing that all of the activity was in the front yard, Collins ordered

¹Why Simon did not file an exclusive story from his observations is not known but he might have held back because of the ethics around the situation, i.e., he could have made things difficult for Scheer to act if Scheer had known that Simon was going to file a story; this is only speculation though.

his small group in the back door to avoid a scene. Jan Armstrong arrived with NASA officials following closely behind. She went for the front door, wading through the reporters and the NASA officials kept the press at bay by saying that she wanted to talk to Mrs. Scott for a short while and would eventually talk to the reporters. Placated, the television crews turned off their lights and the correspondents huddled in the darkness, waiting for Mrs. Armstrong to reappear (24: pp183-184).

After learning that their husbands were all right, the wives decided to call it a night and Mrs. Armstrong headed home. As soon as she reached the front door of the Scott house, the flashbulbs and strobes went off and the kleig lights and tape recorders went on. Leaving her questioners behind, Mrs. Armstrong jumped in her car and left the confusing scene. She also left some hurt and angry reporters at the front of the Scott residence. Collins writes, "She hadn't even gotten in the 'thrilled, proud and pleased' which is the astronaut wife's standard" (24: pp183-184).

The next afternoon at a press conference held by Haney and Mission Director William Schneider, the tapes were released to the media. Louis Alexander writes, "The voices of the two astronauts--carefully noted by the reporters--were so unusually calm that it excited among them admiration for the astronauts' professionalism" (88: Winter, 1966, p727).

There were no cries for help, no screams of pain, not even a rise in Armstrong's tone of voice--he was the only astronaut talking with the ground controllers. Part of the transcript follows, showing only Amrstrong's words because those of the controllers would only tend to elongate and possibly confuse the issue.

Well, we consider this problem serious, we're toppling end over end but we're disengaged from the Agena.... It's a roll or nothing, we can't turn anything off. Continuing...in a left roll.... OK, we are regaining control of the spacecraft slowly in RCS direct....
 ...it was when we were in the 0-180-0 spacecraft configuration. Spacecraft BEF hooked into the Agena and we were stabilized there. We had the attitude power off in the spacecraft, OAMS attitude control power off (117: Transcript of the Gemini 8 mission).

After the tapes were played, Haney talked for a few minutes, as did Schneider, and then the press conference turned into a question and answer session.

Haney: I'd like to say we appreciate your forbearance in release of the tapes. As we said last night, we believe that they would be released, now they have been released. The additional time is accountable in the fact that we included considerably more talk than just air-to-ground passes which we thought might be in your best interests.... I believe that's everything we have.

Question: Paul, you indicated last night, I think, that one of the reasons for not releasing the tape was a high voice level. Now I didn't hear a high voice level on these tapes. What were you referring to?

Haney: If I said high, it was erroneous. I said the voice level was, I meant to say, the voice level was important. You compare that with the heart rates.

Question: Just to follow up. I didn't hear any indication in the voice level that would suggest that there was any strong emotion being displayed in the voice. Was that what you meant last night?

Haney: No, that is not what I meant, but if that is what you meant, that's perfectly all right with me.

Schneider: I think we were quite pleased with the way that the crew behaved and I think you'll agree with me as that they behave quite phenomenally under the very trying situations and should be complimented.

Still, some reporters were not totally sure that the tapes they had heard at the press conference had not been censored.

Question: I have two questions if I may. First of all, could you tell us a little more accurately what portions were deleted, I think what I'm looking for is some reassurance that no sections pertinent to technical information were cut from the tapes that we've heard.

Haney: That's the point I want to make. Absolutely nothing was deleted, in fact we went the other route and added the Flight Controllers' cross-talk between passes (117: Air-Ground Tape Briefing, Houston, Texas, March 17, 1966).

Even though it had been primarily Haney's idea initially to withhold the tapes, it was Scheer who accepted the blame for Haney's actions.

Ten years later, in an interview, Scheer said,

We made a mistake in Gemini 8 by withholding those tapes and I took the responsibility for doing it. Keep in mind that the same

system that created this situation was also creating live television throughout all phases of the missions. But I had to be responsible for the actions of my people (137).

A few people in the PAO in late 1976, when asked to recall what they thought was the low point in the history of that office, pointed to the withholding of the Gemini 8 voice tapes. These people included Jack Riley, John McLeaish and Terry White. Others at the space center in Houston, in retrospect, agreed with the PIOs. Chris Kraft, who became the director of MSC in 1972, said, "We made a serious mistake in Gemini 8 by withholding the tapes." Dr. Gilruth expressed similar sentiments, saying, "Scheer withheld the tapes and we shouldn't have done that" (48; 93; 103; 129; 175).

The NASA Public Affairs Office learned a lot from the experiences surrounding the tapes of Gemini 8. The people associated with the office admitted that they had erred but they also defended themselves in respect to some other areas regarding the events that followed the splashdown of Gemini 8. In Roundup, the MSC newsletter, PIO Terry White wrote about some of the reporters who had been covering the mission.

While the Gemini VIII spacecraft and its crew were still aboard the USS Mason en route to Okinawa after a successful landing...many self-styled space expert reporters had already pinned down the cause of Gemini VIII's problems to that convenient scapegoat, "pilot error."

After failing to badger the mission director and Gemini project management in speculating on the causes of something that happened in space half-way around the world, our typewriter-flying space cadets concluded that indeed the Gemini VIII crew had sent the wrong command into the Agena's stored program and got thruster firing instead of a tape recorder start. As if Armstrong and Scott, with their hours of simulations and training, could not recite the digital command core numbers in their sleep.

Tight deadlines and table-pounding editors notwithstanding, irresponsible speculation with incomplete information does credit to neither the space program or to journalistic integrity. Of course, there is always that small minority of reporters whose attitude is "Don't confuse me with the facts, my mind is made up."

As the Gemini VIII onboard recordings revealed when returned stateside, a short circuit caused a yaw/roll thruster to fire continuously. Moreover, commands sent to the Agena through the Gemini encoder were correct and in proper sequence. Pilot error

was positively ruled out by the findings of the Mission Evaluation Team, who within 72 hours after the problem arose, sifted out the reason for it.

The majority of reporters from magazines, newspapers radio and television who cover the manned spaceflight program are competent, responsible people who do their homework and who understand that without sufficient data, it is unfair to expect management or operations people to comment prematurely on probable causes of mission problems. But then there is always that ten percent whose bias gets in the way of their accuracy (132: April 1, 1966).

Obviously, there were some members of the public who thought that the media were unfairly accusing NASA of being wrong. When White wrote Haney, asking permission to run the aforementioned article, Haney not only approved but suggested that "we might also run a few letters we've received on press treatment of NASA people" (68).

In one part of the press, there was a small change in how the astronauts were being handled. The personal stories of the Gemini 8 astronauts were of a different format than stories written by previous astronauts. In the April 8, 1966 issue of Life, the stories of Scott and Armstrong were not "written" or dictated by them in the first person sense. Nor were their stories separated as being written by Scott and written by Armstrong. It was one whole story speaking in the "we" category sometimes and other times in the "they" aspect--both forms referring to the Gemini 8 astronauts. Why Life did not use the "I" first person story-telling format is not known (98: April 8, 1966).

Another aspect of Life, including Field, came up in April, 1966. That month, 19 new astronauts were selected and that brought the total number of astronauts to 54. This number cut the yearly payments from \$14,857 to \$11,555. The insurance still stood at \$100,000 though. The nineteen were: Vance D. Brand, John S. Bull, Gerald P. Carr, Charles M. Duke, Jr., Joe H. Engle, Ronald E. Evans, Edward G. Givens, Fred Haise, Jr., James B. Irwin, Don L. Lind, Jack R. Lousma, Thomas Ken Mattingly, Bruce McCandless II, Edgar D. Mitchell, William R. Pogue, Stuart A. Roosa, John L. Swigert, Jr., Paul J. Weitz and Alfred M. Worden. Like the previous groups, the men came from a variety of backgrounds,

representing all of the military services and some civilians were also in the group. Again, no blacks or women were chosen. Mike Collins, who was a member of the selection board, writes in his book Carrying the Fire,

The absence of blacks was a different matter /from women, who would have necessitated a number of changes in suits, systems etc./¹. NASA should have had them, our group would have welcomed them and I don't know why none showed up. Perhaps there weren't any who had the flying-educational backgrounds required or perhaps they were more interested in other careers. I only know that no one was eliminated because of color (24: p178).

The new group of 19 astronauts, dubbed by John Young as the "Original Nineteen," in jest, were selected because they were qualified, not because they were needed for missions. Slayton had wanted the selection board to choose as many as they felt were fit to join the corps; he had set no limit. The members of the board were Young, Collins, C.C. Williams and Warren North, a civilian in NASA, felt that no more than six astronauts needed to be added but Slayton needed people to fill the lists of prime crews, support crews and backup crews for the many flights coming in the future. At that time, the feelings were that there would be many more space missions--Apollo moon landings and flights with an emphasis like the later Skylab. At that time, no end was in sight (24: pp180-181).

¹In June, 1965, NASA had selected six scientists to join the astronauts corps. Some say this was done to placate the nation's scientists who were complaining that NASA was doing nothing for science. The six were: Owen K. Garriott, Edward G. Gibson, Duane E. Graveline, Joseph P. Kerwin, Frank C. Michel and Harrison H. "Jack" Schmitt.

THE LAST OF GEMINI

On May 17, 1966, astronauts Gene Cernan and Tom Stafford lay in the couches of Gemini 9 and waited for a GATV at another pad to be launched. The Agena-Atlas combination roared upwards until a short occurred in a servo control circuit in the guidance systems and the space vehicle pitched over 216 degrees, pointing towards Cape Kennedy. Seven and a half minutes after launch, the Agena hit the Atlantic Ocean 90 miles from its launching pad. Stafford may have been wondering if he was having some sort of effect upon the Agenas since he had been on the crew of Gemini 6 too (57: p243).

The minds at NASA came up with another plan. They would not use an Agena as a target vehicle for Gemini 9, since one was not readily available but they would use a shortened version of one, which did not have a fuel tank, i.e., it would only be used for docking exercises and not for powering the Gemini to a higher orbit. Called the Augmented Target Docking Adapter (ATDA), the satellite was launched from Cape Kennedy on June 1, 1965. Gemini 9 was supposed to be launched that day too but there was a failure in some ground equipment and the Gemini 9 astronauts once more left their spacecraft (57: p243).

Finally, on June 3, 1966, Cernan and Stafford were launched from Cape Kennedy and caught up with the ATDA in the third revolution around the earth. But a jinx held with the mission. Although the astronauts found the abbreviated Agena, the nose cone shroud had failed to separate because a tether had not let loose. The partially open nose cone halves prevented the Gemini from docking with the ATDA and the appearance of the ATDA caused Stafford to comment that it looked like an "angry alligator" (57: p243; 24: p188).

With the docking now out of the question, the crew turned to their secondary tasks. After two days of flight, Cernan opened his hatch and became the second American to step into space. His "walk" was not the same as White's had been. Cernan was to move to the rear of the Gemini's adapter section, where there was an equipment bay, and strap on a portable

astronaut maneuvering unit (AMU). The AMU had been placed in the bay because there was no room for it in the cabin. In the process of trying to put on the AMU, Cernan exerted himself so much that he fogged his faceplate. At that point, he and Stafford decided that there was no need for him to chance the remainder of the EVA in that condition so they called it off. What the second American space-walker had done was to illustrate to NASA officials and McDonnell's designers that proper handholds and footholds were necessary to move about in space effectively. Two hours after he had left the cabin, Cernan rejoined Stafford inside the Gemini. The next day, after some more experiments and another sleep period, Stafford and Cernan fired their retro-rockets and returned to earth, landing only one mile from their intended splashdown point (57:p246; 24: p188).

Life came out with an article on the mission in its June 17, 1966 issue but, for the first time time, Life did not publish a personal story by the astronauts. A person might think that by this time, Life was tiring of stories of astronauts and space. That may well have been the case. A look at the June 24, 1966 issue will show some dramatic news that grabbed the nation's attention. Over the skies of California, the experimental bomber, the XB-70, had been flying in formation with a number of smaller jets. The purpose of the flight was to position a number of planes, which had in them engines manufactured by General Electric, together for a family portrait for the company. As they flew, an F-104 interceptor took its position near the large, twin tails of the bomber. There, the smaller plane was caught in the invisible, swirling vortexes of air behind the huge bomber. Out of control, the F-104 flipped upside down, tore off one of the tails of the bomber and seriously damaged the other. The pilot of the F-104 was killed outright while those in the XB-70 fought for the control of their crippled aircraft. The big plane sank from the skies and the co-pilot ejected safely after some initial trouble due to the gravitational forces of the wildly spinning airplace. The pilot never made it out and was killed when the plane, like an ancient pterodactyl, slammed into the ground miles below (98; June 24, 1966).

With no successful docking in space to its credit yet, NASA

officials were crossing their fingers as only three more missions were left in the plans. On July 18, 1966, Gemini 10 left the Cape with astronauts John Young and Mike Collins to take up where the other flights had fallen short. Presumably, this time Young left his sandwiches home on earth. At about five hours into the flight, Young and Collins caught the Agena and docked with it. With that accomplished, they could then use the big engine of the Agena to boost them where they wanted to go without having to use anymore fuel from the Gemini's tanks, which were low at that time because of some excess maneuvering required to approach the Agena. By using the power of the Agena, the astronauts pushed themselves to an altitude of 475 miles giving them the record "on a platter," as Collins wrote later, for having flown the farthest from earth. It was at that altitude that Young and Collins found another Agena, the one that had been used during Gemini 8 (the Agena of Gemini 8 had not been at that altitude when Armstrong and Scott had docked with it. After those astronauts had landed, ground controllers had pushed the Agena to that height and "parked" it for future use) (57: p251; 24: pp203-218).

On the second day, the astronauts were about to open a hatch so Collins could stand and take some pictures when they received a call from Houston. It was Deke Slayton, who rarely took over the air-to-ground microphone. Collins describes the conversation in his book.

"John, this is Deke. You guys are doing a commendable job of maintaining radio silence.... Why don't you do a little more talking from here on?" This may not sound like much of a censure, but in our world this is a BIG DEAL. Deke, who is extremely closemouthed himself, comes on the radio only in extremis and he must have caught a huge ration of abuse around Mission Control to actually incite us to chatter.... ...the reporters at the news center are not going to be satisfied with a vague promise of scientific results to be published at some future date: they want hard news, they want quotes, and they want them right now. The American public has a RIGHT TO KNOW! Never mind that we are busier than two one-legged men in a kicking contest. Never mind that we have been given four days' work to do in three.... Never mind all that--we are not talkative enough and we have been commanded to speak. John is pissed. "OK. What do you want us to talk about?" Deke backs off. "Well anything that seems appropriate. Like EVA."

John rubs it in a little bit. "All right. Mike is talking right now, matter of fact." Mike is not only talking, he is singing like a canary, prating endlessly about things that are better left... for the...debriefing after the flight.... Jesus Christ! Here I am, asshole deep in a 131 step EVA checklist and they want to talk about baseball! One little boo-boo at this state of the game and all the oxygen will depart my suit and I will die, and they will be talking about the color of the infield grass and I will have to interrupt them to describe my last gasp, just in time to make the deadline for the city edition (24: p219).

The chatter continued and the astronauts opened Collins' hatch. He stood on his seat and shot ultraviolet photographs for the scientists back on earth to use. After he had been standing for some time, Collins' eyes began to water. At first he thought the sunlight was causing the problem but then Young's eyes began watering too. Both were nearly blinded by the moisture. However, the problem cleared enough for Collins to continue with the photography and reenter the spacecraft without further alarm.¹

On the third day of flight, the astronauts closed the gap between them and Agena 8 to a distance where Collins could "walk" to it and retrieve a package on its side. The package, a device used to measure micrometeorite hits, was taken by Collins after some maneuvering on both his and Young's part and was brought back inside the Gemini. There was another EVA an hour later consisting of only opening the hatch and throwing out a duffel bag of equipment that the astronauts did not need anymore. The next day, Gemini 10 splashed down within sight of the television cameras (24: pp228-249).

At the press conference following the flight, a phone call from Slayton to some high McDonnell officials averted what might have been a public relations disaster. It seems that somebody at the plant had some photographs of two bunnies from the St. Louis Playboy Club attached to the inside of the spacecraft's window shades so that during the sleep periods, when the shades went into position, the pictures were viewable. The girls headed for the press conference and Collins writes that he and John could imagine the scene--the two girls standing in a crowd of reporters and asking the astronauts what it was like "going around the

¹It was not known at that time what caused the condensation but it is thought to be a chemical in the air purification unit.

world 45 times with us?" The scene never materialized because of Slayton (for an interesting account of Gemini 10, read Collins' book, Carrying the Fire, pp200-249).

The astronauts of Gemini 10 joined Cernan and Stafford in the distinction of not having their personal stories printed in Life. Once more, national news wrestled the spotlight from what the astronauts had to write. In Austin, Texas, a young man by the name of Charles Whitman ascended the steps of the tower on the campus of the University of Texas. Shortly after he barricaded himself on the tower's observation deck, he killed a number of people and wounded many more on the ground below with a high powered rifle. The terror ended only when law officers and civilian volunteers stormed the young man's high vantage point and killed him in a fusillade of bullets. The August 12, 1966 issue of Life, which might have otherwise contained the words of Collins and Young, carried the story and photographs of the Texas slaughter.

Like clockwork, the Gemini program kept flying along. On September 12, 1966, Gemini 11 was launched from Florida. The objectives of the crew, Pete Conrad and Dick Gordon, were to perform an EVA to an Agena which with they were then to dock and to perform some other lesser experiments. Within the first revolution around the earth, they docked with the Agena, making it the fastest docking ever achieved. The spacecraft flew together while Conrad powered up the Agena's rocket and propelled the crew to a new height record--741 nautical miles. From that altitude, the curvature of the earth is more apparent (the photographs of the earth taken by Conrad and Gordon were later considered by many people to be very outstanding).

Then Gordon left the Gemini and, while sitting astride the nose of the Gemini like a cowboy sits on a horse, he attached a tether to the Agena from the Gemini. Once Gordon was inside the Gemini's cabin again, Conrad undocked the two spacecraft. Being tethered allowed them Gemini to maintain position without having to use fuel. The astronauts also noticed that the slow spinning motion was creating artificial gravity because they found one of their cameras constantly placing itself at the rear of the cabin wall; the amount of gravity was not that much in comparison to what people know on earth, it was only 1.5 thousandths of the earth's pull.

On the second day, Gordon performed another EVA although it was

one where he only stood on his seat shooting pictures, similar to what Collins had done during Gemini 10. Finally, after three days in space, Conrad and Gordon returned to the waters of the western Atlantic. Their return sparked some controversy in the United States, particularly among housewives who had been watching soap operas that afternoon. It was during those programs that the networks decided to show the recovery live. Minutes later, the telephone switchboards of the networks lit up with the calls of angry soap opera fans. Clearly, the public was not interested in Gemini as it had once been. In his book, Gemini, Grissom writes that the viewers "were partially right" in their complaining because, to the uninformed, the Gemini missions must have seemed repetitive, although to the people at NASA, each mission was uniquely different (61: p90; 57: p255).

Some photographs shot by the Gemini 11 crew were published in Life but there were no personal stories. No large news event happened during the weeks following Gemini 11's flight which might have "bumped" the stories of Gordon and Conrad from the pages of Life. Therefore, it would seem that Life was not interested, or judged the public to have no interest, in what the astronauts "felt" in space anymore. The excitement was dying.

On the ground, the astronauts made a decision in early October at the recommendation of Alan Shepard to hire a new lawyer to handle their legal problems. C. Leo DeOrsey had died in 1965 and Harry Batten then took control of the legal responsibilities for the astronauts. In 1966, Batten died. With no one to represent them, the astronauts went shopping for lawyers. Shepard, on the advice of his friend Jack Valenti (who had been involved in government and later set up the movie rating codes), contacted the law firm of Louis Nizer. On October 5, 1966, the PIO at MSC released a short statement to the media that read: "Louis Nizer, New York City attorney, has been selected by NASA astronauts to be their personal adviser, succeeding the late Harry Batten of Philadelphia." But Nizer himself did not handle the astronauts. Instead, he passed on that

responsibility to Paul Sawyer, one of the members of his firm. As with DeOrsey and Batten, the Nizer firm would not receive any fees for its work (116: MSC 66-75; 134).

Gemini 12 appeared on the launch pad shortly after Gemini 11's Titan II missile had been launched. A writer for U.S. News and World Report wrote that the men working around Pad 19, where Gemini 12 was awaiting launch, seemed to have an easy, relaxed air about them as they prepared the missile and the spacecraft for the flight. On November 12, 1966, as Jim Lovell and Buzz Aldrin walked towards the launch pad, they each wore a sign on the rear of their spacesuits that, when they stood side by side, told the world, "THE END." When they arrived at the gantry the last Gemini crew found a sign waiting for them: "Last chance. No reruns. Show will close after this performance." A few hours after they took their places in their spacecraft, Lovell and Aldrin were in space (163: November 21, 1966).¹

The flight of Aldrin and Lovell, supposed to be the last flight of the Gemini series, seemed to be a wrap-up flight. During the first day of flight, Aldrin performed several stand-up EVAs in order to shoot pictures of stars. It might seem odd that the astronauts had to shoot photographs of the stars while they were outside of the Gemini but the glass windows blocked the ultraviolet light from passing through and the scientists wanted to see the type of ultraviolet light being emitted from the stars. The next day, Aldrin left his spacecraft, although he was tethered to it, and performed a series of experiments using restrainers that permitted him to conduct a rather effortless EVA in contrast to those of Cernan and Gordon, who had overexerted themselves. During that EVA, Aldrin threw a Veterans' Day pennant into space and, as he did that, his words were broadcast live around the world. The amount of time that

¹Aldrin almost lost his chance to go into space because of a well-meant but wrongly placed remark he had made during Gemini 9. When Stafford and Cernan could not dock with the shroud covered ATDA, Aldrin suggested that Cernan inspect it during an EVA and remove the cover. Gilruth, who did not think this was wise because a piece of metal could puncture Cernan's suit, heard this and was set to order Aldrin off of Gemini 12 but Slayton intervened on Aldrin's behalf and he remained on the crew.

Aldrin spent outside of the spacecraft--five hours and 38 minutes--gave him the record for EVAs and Lovell also earned a record for himself--over 425 hours in space. That made him the person who had been in space more than any other man (2: pp182-184; 57: pp259-261; 24: p262).

When Aldrin and Lovell returned to earth on November 15, 1966, NASA and the media in general had already painted Gemini 12 as being the most perfect Gemini mission, succeeding where all others had failed--at least it seemed that way in the press. Mike Collins takes exception to that line of thought. He mentions in his book that Gemini 12's crew had been given four days to accomplish a list of tasks that he and Young had to accomplish in the three-day flight of Gemini 10. Aldrin's EVA work was portrayed as being not as troublesome as what had been encountered by the previous astronauts who had "walked" in space. This also irritated Collins, who claims that he and White had not had any trouble during their EVAs. Aldrin agrees with Collins on this. In an overall aspect, the media did not write that much material about the flight of Gemini 12 other than it was the last flight of the series (2: p183; 24: p262).

The men of Gemini accomplished what they had set out to do: 1. prove that men could survive in space for as long as 14 days, which was more than enough to go to the moon and back, with no ill effects; 2. prove that a rendezvous could be accomplished between space vehicles--one astronaut claimed it was just about as easy as parking a car in the home garage; and 3. prove that the teams needed for flight control, planning and testing required for such a project could be handled adequately (57: p261).

After NASA announced that Gemini was through, the eyes of the nation began to focus on the next program--Apollo--designed to take men to the moon's surface, but destined to begin with the ashes of tragedy.

CONCLUSION OF THE GEMINI YEARS

In the time of three and a half years, from the end of Mercury until the end of Gemini, a number of occurrences happened in relation to the magazines, the PAO and the astronauts. Overall, it was a more relaxed feeling between the groups although there were some sore points, most notably the withholding of the voice tapes of Gemini 8.

In an overview, it would appear that the publicity around Gemini began well, despite a lapse of almost two years since the last Mercury flight. Gemini 3 came after several Soviet launches and the publicity surrounding Gemini 4 was tremendous because of the atmosphere created around Ed White's space walk. Gemini 5 was a long-term flight that did seemingly nothing but fly around the earth for eight days. Then came the heartbreak of Gemini 6's Agena blowing up but this was followed a short time later by the spectacular rendezvous of two manned spacecraft during the "Flight of '76." Gemini 8, of course, was aborted only a few hours after its launch because of a stuck thruster. This possibly caused the media to be more attentive to that flight. Gemini 9 encountered more trouble with a target vehicle that refused to be docked with and an abbreviated EVA. Then, Geminis 10, 11 and 12 put together an impressive list of good technological accomplishments but, by the time those missions were flown, the interest was dying. As Gus Grissom wrote, the flights must have seemed repetitive to the general public. But the astronauts may not have been concerned about the lack of publicity. In late 1966, Loudon Wainwright wrote in Time, "From all I can gather, the diminution of public notice and fanfare is of small notice to the astronauts. 'Nobody around here is disappointed by it,' Scott Carpenter told me" (159: December 12, 1966).

Perhaps another thing that cut down on the public interest was the length of the flights. With the coming of the long flights, primarily Geminis 5 and 7, the minute-by-minute reporting, such as had happened during Mercury, was hard to maintain and was beginning to fade. Because of this, i.e., the removal of Gemini from constantly being in the public

eye plus the apparent redundancy of the program, public interest in Gemini dimmed. This is most noticeable in the articles written about the last three Gemini missions. It was as if they were written in an "Oh yeah, forgot to tell you but a couple of astronauts went into space for a while again" attitude. The hoop-lah was gone and it would be necessary for Apollo to pick up the pieces for that was the program taking men to the moon and back.

Another item that might have cut down on the publicity was the lack of a small group of easily identifiable astronauts. Whereas Mercury had only seven astronauts, Gemini had many times that number. By the time Gemini ended, over 50 men were within the astronaut corps. As time went on, it may have been harder and harder for the public to keep up with who was who in space. Because of this, the vision of the astronauts as heroes might have been diminished somewhat, although as a group they were still held in relatively high esteem. It is interesting to note in The Reader's Guide to Periodical Literature that the number of articles under "Astronauts" tend to drop as Gemini went on, even though there were more astronauts. In the 1963-65 issue, there were 79 articles for under that heading (or about 40 per year); this drops to 34 in the 1965-66 issue and further to only 24 in the issue for March, 1966-February, 1967 (during which time Geminis 8-12 flew).

Viewed in another way, the number of astronauts helped NASA by giving the space administration more astronauts to use for public relations purposes. The public relations activity most utilized was one called "The Week in the Barrel." This was when an astronaut, who was not assigned to a prime or backup crew for an upcoming mission, would be assigned to public relations duty for a week. There would only be one such week a month, thus only 12 astronauts would be used during the year. The purpose of this activity was two-fold, according to Gene Marianetti, a protocol officer at NASA Headquarters: 1. to give the astronauts experience with the media, which could help them at later times, primarily after they had returned from missions; and 2. to let the public see some of the

astronauts (109).¹

There was an almost limitless number of requests coming into NASA for an appearance by an astronaut here and there. NASA Headquarters fielded these and, at the beginning of each year, set up a schedule with the astronaut office at MSC to arrange for the astronauts for the next year (the astronaut office handled all astronaut appearances related to technical matters without any help from headquarters). Marianetti says that the trips were arranged geographically so the astronauts who were participating in the program could accomplish as much as possible without having to fly across the entire nation. Mike Collins assumes that the basis of determining who was seen by the astronauts was decided in terms of political clout, persistence and prestige of the audiences (24: pp93-97; 109).

A day in the "Week in the Barrel" could sometimes require an astronaut to stop in as many as three locations for various purposes. Since the astronauts had access to a fleet of supersonic T-38 trainers, moving from city to city did not present all that much of a task although it could be tiring. According to Marianetti, a NASA protocol officer usually met the astronauts at each location and gave them more detailed briefings about what they were to do. These meetings were for the benefit of the public, not the media. If reporters were at the stops, that was fine, but the trips were never meant to be used expressly for having the astronauts meet the media. As can be expected, the well-known astronauts were desired by the crowds but, more than not in the early sixties, the lesser known men went to the various localities. Mike Collins remembers one time, before he flew in space, when a Boy Scout asked him, on a speakers' platform, if any of the "real" astronauts were coming (for more views on Collins' attitude towards "The Week in the Barrel," read Carrying the Fire, pp93-97) (109).

The astronauts were also sent to other nations to engage in public

¹No one to whom this author has spoken remembers exactly when the "Week" started but the earliest reference to it was in a NASA press release dated February 16, 1965 (116: MSC 65-28).

relations not just for NASA for also for the United States. As mentioned, earlier in relation to Gemini 5, NASA Administrator Webb did not care to use his funds to send the astronauts on these journeys as he believed that someone else should carry the burden of the expenses. An illustration of what happened to one trip can be seen in an exchange of letters in January, 1966 between various people in the White House. On January 21 Lloyd Hand sent a notice to President Johnson telling that Webb did not have \$53,000 to spare for covering the transportation for a trip to eight Far Eastern countries by some astronauts. Because Webb said he lacked the funds, Hand wanted to know if he could check with the Air Force's Special Air Missions branch since the purpose of the trip was a Presidential Mission (costs other than the transportation were already being handled by the State Department). The President rejected Hand's suggestion to make contact with the Air Force and he wrote at the bottom of Hand's memo, "If space can't do it, I'd forget it." Apparently Presidential Aide Joseph Califano did not hear of Johnson's rejection and he continued to pursue funding for the trip. He approached the Secretary of Defense, Cyrus Vance, and Vance said that he could pick up the tab. The President was then told of this but he disapproved of the plan on January 26. Yet, somehow, the funding for the transportation was arranged, because in February and March, astronauts Borman and Schirra went on a President Presidential goodwill mission throughout the Orient (65; 18; 141).

Occasionally the White House became involved in domestic appearances too. In June, 1966, a letter arrived at the White House from a Betty Weinheimer of Stonewall, Texas, which is virtually the backyard of the President's Texas ranch. In that letter, Weinheimer asked for White House assistance in obtaining an astronaut or two for Stonewall's Peach Jamboree to be held in late June. The President refused to let anyone from the White House contact NASA to help the officials of the Peach Jamboree (173).

Neither were the astronauts free on their own to accept invitations for various function. Deke Slayton, the Director of Flight Operations,

put his thoughts in a memo to the astronauts.

Nothing engenders hatred more rapidly than having an astronaut appear at the Podunk Center Elks Club on his own after having officially turned down the local Congressman's request for a Chamber of Commerce or Rotary meeting.... No astronaut has authority to accept speaking engagements or public appearances... without approval from higher authority. When in doubt, call... (24: p93).

The only time that the astronauts were not engaged in any public activities was from just prior to a launch until the mission was finished. During this time, the astronauts were called to Houston or the Cape and were to stay at those two places. This policy might have appeared to be unnecessary but, in case of an accident, an astronaut visiting some city could have found himself suddenly thrown into the role of an "expert" and be asked several questions that were best left unanswered except for official NASA statements (2: p249).

The media tended to find NASA's PAO rather inept when it came to handling emergencies. Professor Louis Alexander writes of a survey he conducted about the PAO:

NASA's public affairs staff does unusually well in its routine services for the press and when things are going normally. By "routine" or "ordinary" services, the media representatives indicated they mean the press kit and flight plan, the running commentary over the public address system and its transcripts and the change-of-shift briefings. "There is evidence of a lot of planning by people who know and understand the particular needs of newsmen working on the story," said Robert Zimmerman of the San Diego Sun.

It must be recognized that what is routine for space flight coverage may be quite unusual as ordinary press services go: an explanation of orbital mechanics, a demonstration of an astronaut's propulsion pack for manuevering in space, a digest (detailed enough to be useful to a radio newsmen) of the flight plan for the entire three-day mission.

The press is not at all satisfied with NASA's press workings when things are not going smoothly aloft. "I have found that while NASA has more information than a dog has fleas while all is going well," chided William Hines of the Washington Star, "the experts tend to pull back for regrouping when things go wrong."

NASA's prompt defense: At such times, not enough is really known. It would be all too easy to give sincere, but wrong

replies (88: Winter, 1966, p736).

Alexander's survey found that most of the press had high praise for NASA's PR management in some areas, most importantly, the various press conferences that were held by NASA. These included pre-launch, post-launch, change-of-shift, post-flight and astronaut briefings. Yet at the same time, members of the media complained about the caliber of the PAO staffers, saying that few were qualified to adequately answer technical questions. When a person thinks about it, that is more than likely true. The members of the PAO were journalists, not technicians. However, it was their responsibility to see that knowledgeable NASA officials could provide technical information to the media. Another complaint that Alexander's respondents supplied was that "officials and astronauts do not always volunteer information which the reporters consider significant" (88: Winter, 1966, p736).¹

Yet some of the reporters were also considered ignorant. Alvin B. Webb, of UPI, writes critically of his fellow reporters in Alexander's survey:

Listening to a typical NASA press conference, a newsman must be astounded by the uninformed, useless and often down-right asinine questions generated by his colleagues...news conferences often turn out to be useless exercises despite the willingness of NASA experts to do their part (88: Winter, 1966, p737).

The astronauts may have been unwilling to do too much for NASA's public relations--they had enough to do otherwise. Note the following travel schedule for the month from 1964.

April 13: all astronauts in Houston
 April 14: Grissom in Burbank dealing with suit molding at Weber aircraft
 April 14-16: astronauts Carpenter, Armstrong, Lovell, McDivitt, White, See, Stafford, Schirra and Conrad to Alpine, Texas for Geology field trip

¹Interestingly enough, NASA has never conducted a poll on its PAO among the media, according to William J. O'Donnell, the Director of Public Affairs Officers Division, in the spring of 1977. The only ones known by this author to be in existence were done by Lydia Dotto (now a reporter of the Toronto Globe in Canada), D. Brent Clements of Brigham Young University and that done by Alexander at the University of Houston (123a; 23).

April 15: Borman to Huntsville for Saturn coordination
 April 15-17: Gemini Coordination at St. Louis, Young and Grissom
 April 17: Cooper to Langley for docking simulation
 April 17: Cooper at Flagstaff, Arizona for a scientific meeting
 April 20-24: Four unassigned astronauts to Langley for docking simulation
 April 21-24: Gemini Coordination for Schirra and Stafford in St. Louis.
 April 27-May 2: Cooper in Washington for public appearance
 April 28-30: ten unassigned astronauts to North American for Apollo design review
 April 30: all available astronauts to Tucson for geology field trip
 April 30: Borman at Martin plant for a zero defects visit
 May 2: Grissom at Purdue for a public appearance (61: p82).

Being an astronaut was (and still is) a very demanding job. The beginning course for new astronauts in the early sixties was as follows:

Astronomy: 15 hours of class
 Aerodynamics: 8 hours
 Rocket propulsion: 12 hours
 Communications: 8 hours
 Medical: 12 hours
 Meteorology: 5 hours
 Physics of the upper atmosphere: 12 hours
 Guidance and Navigation: 34 hours
 Mathematics and physics of space vehicles: 40 hours
 Digital computers: 36 hours
 Geology: 58 hours (24: p72).

This was the *beginning* course. Astronauts were assigned to certain areas of study that were to be their own specialty. In addition to this, they went through hours of simulations, survival treks in remote areas, riding the centrifuge, being involved with spacecraft design work and countless other tasks. It is no wonder that some of the astronauts may not have favored public relations activities. Mike Collins writes in his book, "I simply do not enjoy PR work and there is no point in pretending I do" (24: p95).¹

There was possibly one source of public information that the astronauts did not mind too much--Life magazine. It may seem that this

¹The irony of this statement by Collins is that after his Apollo 11 flight, he went to the State Department where he became the Assistant Secretary for Public Affairs. He writes that when he left that job for another in Washington, D.C., he left the organization more effective than when he came; so even if Collins hated PR work, he must have known what he was doing (24: p458).

author has spent considerable time discussing Life and its relationship with the astronauts but that is necessary. It was virtually the only magazine which reported them (not just the missions) in depth, mainly through the use of the personal articles. This is not to slight the other magazines but Life was in a unique position--having the astronauts being available to its reporters and photographers in the astronauts' off-duty time. Mike Collins offers his views upon the contracts with Life in his book.

Pat [Collins] felt that to take money under any circumstances for our participation in the space program was wrong, since the taxpayers had financed it and we should not gain personally from a public venture.... ...consider for a moment, the possibilities in holding Life magazine a virtual captive: certainly after being invited into the home and hearing the wife emote and the children prate, the stinkers weren't going to turn on their host (even a paid one) and write nasty articles. No, the contract almost guaranteed peaches and cream, full-color spreads glittering with harmless inanities....

Flip the armored beetle over and inspect the soft underbelly. What did little Sarah Jean think about Daddy's impending departure, temporary or permanent? How did Mom feel when Dad was up? (An astronaut wife I know, when asked this by a female reporter, blinked a time or two and then deadpanned, "Honey, how do you feel when your husband is up?" End of interview.) But no doubt about it, home was where the personal stories were and this is what the contract was all about. I feel that it was perfectly proper to extract compensation for this invasion of privacy.... ...also it served as a beautiful excuse for turning off any non-contract interviews. In fact, once the word got around, the regulars would quit bugging the wife and kids.... This was not true during the chaotic times when a husband was up.... Of course, the men still had professional, or non-personal or whatever interviews and these were scheduled on Fridays. If possible, we would schedule ourselves to be away from Houston on Fridays but if we weren't, we grunted, hot under TV lights, and we sat walleyed while passing back and forth the same cold potatoes.... Sic transit media (24: pp52-55).

Yet, just as much as Collins (and Shepard too) says that the astronauts had Life under control, the Gemini 10 astronaut admits that Life had him as well. When this author sent a question to Collins asking him if he allowed the Life photographer-reporter teams into his house only to fulfill the contract, he replied yes. When asked if he would have done

the same had the contract not existed, Collins answered no (25).

According to writer Robert Sherrod, the contracts were strengthened in practice by the astronauts' new attorney, Paul Sawyer, of Louis Nizer's law firm in New York. What Sawyer did, writes Sherrod in Columbia Journalism Review, was to remind the astronauts, through Shepard (who was then grounded due to ear trouble but was in charge of the astronaut corps), that the astronauts were to talk to no one but reporters and photographers from Life and Field about their personal impressions. In conversation with this author, Sawyer said he did not know if he was all that tough in comparison to DeOrsey and Batten. However, he said, he did try to make it clear to the astronauts that Life and Field might not regard the arrangement for the personal stories worthwhile if the astronauts kept talking to everybody about their feelings (134; 26: May/June, 1973).

The sterner measures hit the Los Angeles Times in 1966. The newspaper wanted Wally Schirra's byline on a special section entitled, "Space," which already had contributions by Webb and Vice-President Humphrey. If we can get Schirra's bosses to write for us, reasoned the editors of the Times, why can't we get Schirra? NASA approved but Life and Field pointed to section 8b of the contracts and said no. Life editor Thompson warned that if an article written by Schirra appeared in the Times, then the contracts that the astronauts had with Life and Field could be terminated. Schirra, no fool, kept his name out of the newspaper (26: May/June, 1973).

There is another example of how the terms of the contracts were met. Buzz Aldrin's wife, Joan, who was very much involved with theater work, was asked by a Houston area radio station to host a twice-weekly afternoon talk show. She decided to use her maiden name in order to avoid any association with NASA and the format of the radio program was to be left up to her. At first there did not seem to be any difficulty, figured the Aldrins. After all, Renee Carpenter was writing a newspaper column. Field torpedoed the radio show idea, saying that, although no restrictions were in the contract, "they would nevertheless consider it

politic of us to drop the show," remembers Aldrin in his book, Return to Earth. His fellow astronauts voiced displeasure about the thought that one of the astronaut wives might be hosting a radio talk show and they added that they did not care for Mrs. Carpenter's column either. Eventually Mrs. Aldrin dropped the idea of working for the radio station. But weeks later she became bitter when she learned why Field had never forced Renee Carpenter to abandon her column--Field was selling what she wrote (2: pp161-162).

Attorney Sawyer says that Life and Field did not always stop the astronauts from writing for other publications. He stated in the interview, "If the magazine was something like Boys' Life, then 99.9 percent of the time, Life and Field would say yes, and Bill Anders wrote for that magazine once. But if the publication was like Look, then the answer was no." Clearly, the matter depended upon for whom the astronauts were going to write their personal stories (134).

It may seem odd that the contracts were being applied more stringently by Field and Life when virtually all vocal opposition to the contracts had disappeared. However Sherrod offers a possible explanation: Field was losing money on the deal (more about this will appear later when this author discusses Field's election to not renew the contracts in the fall of 1967). Sawyer says that if he cracked down at all on the astronauts, it was because of Field's distress. The New York lawyer added that Life never presented the astronaut corps with any real legal hassles since "it would appear bad if Life was suing the astronauts and the astronauts were suing Life." Differences with Life were worked out on a practical basis, not a legalistic one, according the Sawyer who also said, "We handled the discussions with Life on a basis of what was good for everyone involved" (134; 26: May/June, 1973).

The astronauts and the missions were important to many people, not just Life and Field. Following the missions was the business of every reporter sent to either the Cape or to MSC. As Gemini progressed, NASA Headquarters wanted the focus of the newsmen to change to Houston 24 hours

after the rockets had left their launching pads. This may seem logical because Houston took control of the missions just seconds after the astronauts were launched but Dr. Kurt Debus, the head of the Kennedy Space Center, would have none of this idea. He reasoned that many of the media wanted to remain at the Cape for the entire missions rather than to have to hop in a plane and fly across the Gulf of Mexico. If that happened, time would be lost by the reporters or each medium would have to have two sets of correspondents--one in Houston, the other in Florida. Some publications might have been able to have afforded that luxury but not everyone could. The issue was resolved when communications were installed at the Cape and the newsmen were allowed to remain there, able to hear the complete missions by listening to special "squawkboxes" that broadcast the talk between the ground controllers in Houston and the astronauts (69: p119).

Other anomalies of news coverage between Houston and Florida developed as Gemini went along. One was that MSC would handle all news about the astronauts regardless of where the men were. That meant if a reporter at the Cape wanted information about the astronauts, some who might have been at the Cape in training or preparing for a mission, he would have to call Houston despite the proximity to the astronauts. Gordon Harris, in his book, Selling Uncle Sam, states, "If a catastrophe occurred while the rocket was within sight of the newsmen at the launch base, they were supposed to rely upon that distant Texas observer for information" (69: p208).

Gemini 4 was the last crew to receive a parade at the Cape. After that mission, the control was switched to Houston and the Gemini crews were returned there following splashdown. It was a sharp break for the residents of Brevard County, Florida, who had been accustomed to giving lavish welcome-back parties for the Mercury astronauts who regarded Florida as their second home (in Houston there was a substantial lack of community participation). There was no small resentment towards NASA by the Floridians at the loss of the astronauts (69: p128).

But, no matter where the astronauts went, more media than just Life and Field were sure to follow, despite the thought that this author has dealt primarily with them while discussing the flights of Gemini. Many other publications sent reporters to the Cape and to Houston but the magazines that produced the news just as fast and accurately as Life were Time, Newsweek and U.S. News and World Report. However, there is one magazine that many people at Houston with NASA mentioned more often than Life when asked by this author about how the magazines handled the space administration--National Geographic. The magazine with the yellow border on its covers, although never timely because of its precise production, carried brilliant photographs and its articles lent the public a better understanding of what NASA was doing in space. From 1955 until 1966, the editors of National Geographic wrote 26 stories related to the U.S. space efforts: seven of those were about manned space flights and astronaut training. Although National Geographic was prohibited by the Life-Field contracts from having any of the astronauts write stories for its pages, National Geographic's editors did have other personnel within the ranks of NASA write stories for them.¹ NASA's Assistant Administrator, Hugh Dryden, wrote articles about Ed White's space walk and NASA's plans to put men on the moon. MSC Director Gilruth described the training that the astronauts went through in preparation for their flights while a NASA physician wrote about Shepard's flight in Freedom 7.

Although there were often members of NASA's hierarchy on the magazine's Board of Trustees, they gave no favoritism towards having articles written about NASA, as attested to by several people within NASA and working with National Geographic. According to sources at NASA, the magazine had to proceed through normal channels to gather information. Gilruth, in a letter to this author, mentioned that he had been approached by Ken Weaver, the magazine's science editor, who asked if the Director of

¹A person should not have the opinion that National Geographic did not try to have the astronauts write stories in its pages. Science editor Ken Weaver writes that the staff of the magazine tried "very hard" to have Glenn write a story for them about his flight but Life stopped them cold (169).

MSC would write a story about the training of the astronauts. To do this Gilruth received help from the National Geographic people and also from his own staff, who put together a text for him after the outline of the story had been agreed upon (169; 48; 47; 152; 20).

Usually several months passed after a flight before National Geographic was able to publish anything about it. This may lead some people to criticize the magazine for being slow but few people understand what goes into printing that magazine. Frequently color runs are sent back time and again so the results match the original transparencies. This takes time but the editors of National Geographic insist upon high quality output. Putting out an issue within three or four months of an event is considered fast work by the National Geographic staff. Despite this time lag, National Geographic still published some of the best material ever made by magazines about the manned spaceflights as well as other aspects of NASA (169).

The media was not the only way that the public affairs office of NASA reached the people though. It had its own way of handling the public. In late 1963, plans were discussed at Cape Kennedy to allow the public into NASA's grounds to see what was there. Eventually tourists were allowed to drive through on Sunday mornings for a look but they were prohibited from stopping. On September 18, 1965, the motorists, for the first time, were allowed to stop to view the Gemini spacecraft that had returned from the mission flown by Cooper and Conrad. Given that chance, 6000 people showed up. Shortly after Christmas of that year, over 33,000 people journeyed through the complex one day in their automobiles. On July 20, 1966, NASA started a touring service using old buses leased from the General Services Administration and 1500 people took the tour of the Cape facilities that day. Plans were laid for a visitors center at the Cape to be completed by the middle of 1967 (69: pp92-94).

Cape Kennedy was busy doing other things. It was turning down many requests to use the spaceport as a backdrop for advertisers and also was allowing some to be filmed (such as one for a major oil company which

showed large ocean-going tankers gliding by the launch complexes despite the fact that rockets do not use oil based products as a fuel). The Cape Kennedy PAO also helped actor Don Knotts with his version of astronauts in the movie "The Reluctant Astronaut." At another time, Lassie came to the Cape and was filmed for his television show among the launching pads (69: p8).

Meanwhile, in Houston, a visitor facility was being built, too, in order to accommodate tourists. NASA was beginning to open up although there were no doubt some reporters who thought otherwise because of the Gemini 8 episode.

It is this author's opinion that the general public thought well of NASA during the Gemini years even though the populace possibly was becoming bored with the project after seeing 20 men go into space during a period of 20 months. There were faults but NASA operated in a way that was more open than did most other government agencies. The hassle with the tapes of Gemini 8 was a matter concerning the media only, who appeared to be more concerned with getting some news fast rather than wait for accurate facts. The public possibly did not care about those tapes, yet it might have, had the tapes not been released at all.

Not only was the public affairs office maturing during Gemini but so was the media because of the efforts of the PAO. Reporters found themselves more knowledgeable about what was happening with the space shots and more able to transmit this information to the public. Likewise, the astronauts were beginning to accept their public relations roles, even though they may have considered that it interfered with what some of the astronauts thought to be their only responsibility--flying. The Gemini period was not only a time when techniques were being perfected in space by the astronauts but also a period when the relations between the PAO, the media and the astronauts became better through understanding. The result was that the nation was acclimating itself to what was happening in the black skies above the earth's atmosphere. The public was so confident that the space programs were going so well that all was almost

becoming ho-hum and, as fate sometimes plays the game, a shock is needed and two months after Aldrin and Lovell returned to earth in Gemini 12, the jolt of failure was felt by everyone and the complacency was lost.

APOLLO: THE FIRE

On December 15 and 16, 1966, the PAO at MSC held a two-day seminar to give the media more information about the upcoming Apollo mission, scheduled for February, 1967 and to let the reporters meet the prime crew. The astronauts were Gus Grissom, Ed White and Roger Chaffee. Along with them at a press conference were Deke Slayton and the backup crew, consisting of Wally Schirra, Donn Eisele and Walter Cunningham. At that gathering, much of their talk revolved around how the astronauts felt about taking their suits off once they were in space. Grissom replied that he was "very bashful" while White commented that he wanted to keep at least his helmet and gloves on. While there was humor in the talk at the press conference, a message was being given to the newsmen--do not spend too much time on this mission because the better ones are yet to come. Program Manager Joseph Shea described it this way, "It's almost a bland mission to describe because it's not spectacular."¹ NASA assured the media that all would be taken care of since NASA would handle the first hand reporting of events leading up to the flight. Perhaps for this reason, the media decided to pay little attention to the preparation for the first Apollo shot (90: pp42-44).²

More than a month later, on Sunday, January, 22, 1967, the astronauts of the prime crew stopped at their homes in Houston to visit their families. They had been in California preparing for their mission and were due at the Cape the next day to begin some simulations. The stopover in Houston also allowed the men to read their mail which had been accumulating for some days. But before Grissom left his house that Sunday afternoon, he expressed dissatisfaction with the progress of the Apollo mission. Mrs. Grissom and Henry Still wrote in their book, Starfall, what the astronaut did on his way out that day.

When Gus was ready to leave, he packed his bag, then went to

¹At another press conference during the seminar, Shea told reporters that there had been more than 20,000 failures in the six years of the Apollo program; of these, 220 were in the environmental controls that were necessary to keep the astronauts alive in space (90: p39; 97: p367).

²This mission was to be known as either Apollo 1 or Apollo/Saturn 204. The spacecraft itself was known as Apollo 012.

the kitchen and sliced off a piece from a large slab of cheese a friend had given the family for Christmas.

Then he went out in the courtyard and pulled a lemon off our tree. It was a Texas lemon, really as big as a grapefruit.

"What are you doing with the lemon?" Betty asked.

"I'm going to hang it on that spacecraft," Gus said grimly and kissed her goodbye.

He left with his hunk of cheese and that lemon and that's the last time he was here at the house (59: pp181-182).

On Friday, January 27, 1967, the members of the prime crew left the astronaut quarters at the Cape to head to Launch Pad 34 where their Saturn IB with an Apollo spacecraft atop it awaited them. Grissom, White and Chaffee were to participate in a "plugs-out" test, the first ever with a crew in the spacecraft. The plugs-out test was a simulation of a countdown until 15 minutes before the simulated launch when all external power was to be disconnected. The astronauts entered the spacecraft at 2:30 p.m. and Grissom called for an air sampling team; he smelled a buttermilk odor in the spacecraft and wanted it checked. The air sampling team, called "The Watermelon Gang" because of the shape of their mechanical samplers, found nothing, even when they were called in for a second time. Finally, the three-part inward opening hatch was closed at 3:00 and the astronauts were sealed inside. With that done, the air of the spacecraft was purged to be replaced by pure oxygen at a pressure of 16.6 psi. The Apollo command module (as the spacecraft was called in order to differentiate it from the lunar module which was designed to place men on the moon) became a bomb at that moment (90: p6; 69: p9).

The media were not particularly interested in what was happening at Pad 34 that day. NBC's Jay Barberee was the only network reporter assigned to the Cape, was on his way to Bimini to talk with Adam Clayton Powell, the controversial Congressman from New York City. Howard Benedict, a veteran space reporter was delivering a speech in Alabama. George Alexander, from Aviation Week and Space Technology, was with UPI's Al Rossiter, Jr., at a Sigma Delta Chi meeting twelve miles away. In the blockhouse was Jack King, a PIO of the Kennedy Space complex. From time to time, he telephoned wire service reporters as he customarily did on every launch,

reporting the progress of the test (90: p9; 69: p37).

Official Washington was going about its usual day. At the White House, space advocate President Johnson signed the Treaty on Outer Space, the design of which was to remove all weapons and territorial claims from space. Also with him at the signing was NASA Administrator Webb with an entourage from the astronaut corps: Neil Armstrong, Scott Carpenter, Gordon Cooper, Dick Gordon and Jim Lovell. Ambassadors from many countries including the U.S.S.R. were there representing their countries' interest in the treaty. At five o'clock, Johnson signed the piece of paper and passed out the pens he used in writing his signature (85: p482).

The checkout of the spacecraft was going badly because of many little "glitches," as the space community referred to problems. The communications were so bad that Grissom once complained, "How do you expect us to get to the moon when we can't even talk to the guys three hundred yards away?" At one point, Deke Slayton, in the control room, almost decided to go the spacecraft and go inside with the crew to observe what the problems were but he remained where he was. (91; 98: April 21, 1967).

MSC's Flight Director Chris Kraft, in Houston, and the Cape's flight test supervisor, George Page, held a facetious talk about who was more responsible for the holds in the test: Houston or the Cape. During a hold in the simulated countdown, the Pad Leader of the White Room (the sterile compartment at the top of the gantry encompassing the spacecraft) dismissed most of his men to go on a coffee break (90: p9).

At 6:30, the hold was still in effect (there were only ten minutes left in the "countdown" once the hold was finished) and everything seemed "normal" for the type of day it had been. Twenty seconds later, astronaut White's pulse went up with no explanation but the people in the control room paid no attention, thinking that it was some normal excitement. Then the gyroscopes in the spacecraft indicated that someone was moving in the spacecraft's cabin but all the astronauts were supposed to be strapped into their couches. At 30 seconds past 6:30, the oxygen

being supplied to the astronauts through a common valve was indicated as beginning to rise in the amount being used. The electrocardiogram showed White was beginning to move in his position. There was a surge of power and the electricity to the spacecraft's radar and a communication unit went dead. More motion was recorded. The oxygen level went so high so quickly that the meters could not follow it anymore. More motion occurred and then, at five seconds after 6:31, someone, apparently Grissom, yelled "Fire in the spacecraft!" (12: pp17-18; 91).

The fire in the spacecraft, from a still unknown source, ignited over 70 pounds of combustible material and the temperature soared to over 1200 degrees Fahrenheit.¹ In the fire, the combustible materials produced several gases. In eight, maybe ten seconds after the voice had cried out the warning, one of the astronaut's suits was penetrated by the fire and the gases were sucked into the men's breathing systems.² Seven seconds after that, the pressure that had built up to 29 psi within the command module ruptured a hole in the lower side of the spacecraft and the heat and smoke spread to the outside. The launch support crew in the White Room was driven back from the spacecraft by the fiery blast (some members of the team thought that the escape rocket above the spacecraft, similar to that of the Mercury spacecraft, had ignited). When several members of the support team put on gas masks, they had to retreat again because the masks were unable to keep the smoke out. Eleven seconds after one or more of the astronauts' suits had been entered by the smoke, came the last garbled communication from the spacecraft (90: p34).

At 6:36, four and a half minutes after the last bit of information had come from the spacecraft, the launch crew managed to open the three hatches. Because of the heat, the men could not enter to touch the astronauts. There is still speculation that the astronauts might have

¹That is, 70 pounds of materials combustible under usual atmospheric conditions. But with pure oxygen present as it was, even stainless steel can burn so no doubt there was much more than 70 pounds of materials that burned that day.

²Sucked in because the air pressure in the suits was lower than that of the cabin, which had been increased because of the fire.

still been alive at that time but this is doubtful. The autopsies showed that the astronauts did not die of burns--none would have been fatal--but from asphyxiation; soot was found in their noses, nasal cavities, trachea and bronchia (90: pp35, 325-327).

Firemen arrived and fireman Jim Burch approached the open hatch, looked around and saw none of the crew. The lights of the spacecraft's control panels glowed in the darkness. Then Burch saw the astronauts in the spacecraft: Grissom had left his couch and had obviously been trying to open the hatch; White, in the center couch had turned and appeared to have been trying to assist Grissom; and Chafee, in the right couch, was still in his couch, apparently trying to maintain communications with the ground as that was his responsibility on the crew. Another fireman, Jim Mooney, touched the astronauts for a response but received none. Many members of the launch support team still feared the deadly escape rocket capable of producing up to 5000 degrees on the ground, more than two hundred feet away, if it ignited (98: April 21, 1967).

The men in the control had heard the cry of "Fire in the spacecraft" twice and then saw a belch of smoke appear on the television monitors covering the outside of the command module. Jack King stated later that there was concern about the men at the top of the gantry and the astronauts and the controllers attempted to communicate with the astronauts. Deke Slayton left the control room and headed towards the pad with a team of doctors. While he was gone, King took a small note pad and scawled out a message to be released to the media. Then he called Gordon Harris, head of the Cape's PAO, at 6:37, informed him of the fire and discussed how the media were to be told of the tragedy. (91).

The Pad Leader at the top of the gantry, when asked by the control room personnel what had happened to the astronauts, replied that he could not describe the scene; in essence, without trying to inform everyone who was hooked into the communications loops, the Pad Leader was saying that the astronauts had perished (90: p14; 91).

When Slayton returned to the control room, he told King that the astronauts were dead. King then tried to contact Julian Scheer in Washington. Harris was also trying to reach Scheer; he could not find the head PAO so he called Al Alibrando, who was Scheer's assistant for public relations for the manned space flights. Alibrando was not reachable either so Harris called Alibrando's home in Maryland to tell Mrs. Alibrando to have her husband call the Cape as soon as he could. Then Harris left his home and went to the news center of the Cape, arriving there about 7:10. Somehow Scheer got the message to call and he phoned King. King told him the news and read the prepared press release. Scheer agreed with King's message. Then King called Harris for further comments about his intended statement to the press. Harris, too, agreed with it and it was released at 7:40 (91; 137; 70b).

It read:

There has been an accidental fire at Launch Complex 34 during the plugs-out test of the Apollo/Saturn 204 involving a fatality. More will be announced after next-of-kin have been notified. The prime crew was in the spacecraft (69: p38; 91).

The statement did not say that any astronauts had died, only that there was "a fatality." Many reporters criticized NASA later for not reporting that the astronauts were dead. But NASA rightly defends itself by saying that it was not known at the time if the next-of-kin had been told of the accident and the space officials did not want the families to find out by listening to the radio or television or from some reporter.¹ King, in an interview years later, said that some of the media likened the Apollo fire to a Presidential killing, i.e., the media does not have to wait for the First Lady to be notified in order to tell the public. But NASA stuck to its gun and clearly seems to be in the right in this case. Although the astronauts were well-known men, their families would seem to be entitled to as much consideration in an accident as the families of any other American (91).

¹Many of the NASA officials and astronauts remembered the time when Ted Freeman was killed in an airplane crash in October, 1964 and his widow found out about his death when a reporter came to the house to ask her for some additional information (24: p270).

Slayton called his MSC office ten minutes after the fire and found his assistant, Don Gregory, and Mike Collins there. After hearing the news, Collins called astronaut Al Bean and, together, they managed to find some other astronauts who could go to the households of the deceased men to inform the families of the fire. Unable to have someone go to the Chaffee home, Collins took it upon himself to go there and break the news to the widow. Wally Schirra, who had just returned from a flight, went to comfort Mrs. Grissom. As he stood in the house, still in his flying suit, he was asked by Mrs. Grissom, "Did Gus get the lemon hung on the spacecraft?"

Schirra assured her that her husband had done that. "Well," she said. "I guess now they know what he thought of it" (59: p189; 24: pp270-271).

Shortly after the families were informed of what had happened, Slayton was told that they knew. He passed this onto King. With this confirmation, King, Haney, Harris and Scheer prepared the second statement, this time announcing the names of the astronauts. This statement was released at 8:30 that night (91; 69: p40).

Earlier, at the White House, the scene was different. After the Treaty on Outer Space had been signed, President Johnson held a farewell dinner for the outgoing Secretary of Commerce, John Connors. Unknown to the President, Scheer and Webb were figuring out a way to inform him. Lady Bird Johnson recalls:

During John Connors' toast, someone handed Lyndon a folded note.... His face sagged...the news was bad and something close. When the applause died down, he said, "I have to make a sad announcement. We have lost three astronauts. Ed White and Virgil Grissom and Roger Chaffee at Cape Kennedy. There was a fire in the spaceship." He said a brief farewell to the Connors and left for the situation room.... Lyndon did not come home for a long time (85: p482).

Until 8:30 that night, the people at the White House dinner were the only other ones besides those connected with NASA who knew that the astronauts had died. But the media was trying to get information in any manner that it could. Mary Bubb, who worked for Fairchild publications

and was a stringer for Reuters News Agency, had been in her home at the time of the fire when there was a phone call. A voice said that there had been a fire on the pad. She told the caller, "You're putting me on," and then the person reiterated his statement. She ran down to the AP Bureau, only two doors from her home, and found Jim Strothman, who had also just been called. Bubb then called Fairchild and talked them into holding their presses for the distribution of news to the electronic media for another hour. Without any confirmation from NASA other than the voice on the phone, Bubb went ahead and announced to Fairchild that all three astronauts were dead. By 8:30, she knew she was right (17).

In Alabama, UPI reporter Howard Benedict had heard the news and tried to get a plane to Florida. There were none available so Benedict took a plane to New Orleans, made connections there with a Florida-bound plane and arrived in Tampa shortly thereafter (11).

George Alexander, of Aviation Week, had been with many other journalists at a meeting of Sigma Delta Chi, the honor society of journalists, when a call came for an Air Force PIO who was at the meeting. All the news said was that there had been an accident at the Cape and none of the newsmen bothered to take action. Another telephone call came and the location of the accident became known--Pad 34. A third phone call came and it was announced that the crew of the Apollo spacecraft was involved. The meeting quickly ceased as the reporters left the room (4).

NASA was moving fast. Author Eric Bergaust (who wrote Murder on Pad 34) claims that Dr. Gilruth, who was in Washington, ordered a news blackout at the Cape and all telephone lines cut off. However, Jack King says that he was able to keep his line open and therefore was able to continue feeding reports to Harris and others in the PAO. What is odd about the stories that Gilruth ordered the Cape sealed is that he was the Director of MSC, not the Cape and therefore had no authority over the personnel of the Cape. In an interview, Gilruth said he knew that the reporters would be trying to get the "biggest story of their

lives." If Gilruth did order a news blackout is not known but it is known that it was very hard for the reporters to pry much information out of the PIOs that night. It was possibly the wisest thing for the PAO to keep a closed mouth on the affair since not all the facts were known that evening. (91; 12: pp20-22; 48).

Major General Samuel C. Phillips, head of the Apollo moon program, left NASA Headquarters and flew to the Cape, ordering an impoundment of all equipment and records related to the mission. Administrator Webb was busy with several of his headquarters personnel attempting to piece together an investigation board. At the homes of the Apollo 204 astronauts, NASA guards and local police arrived to keep the curious away. The parents of Ed White, living in St. Petersburg, Florida, turned off their lights and drew the blinds that night. At the home of the elder Grissoms in Mitchell, Indiana, the city mayor set up a police guard around the house and asked the State Patrol to assist (12: pp20-22).

At the Cape, the reporters were arriving at the newscenter seeking information about the fire. No members of the media were allowed into the Cape proper (because of the demands of the media some years before, the newscenter for Cape Kennedy had been built at the Cape Royal Hotel, 12 miles from the launch facilities; this had been done because many of the reporters did not like to travel to the Cape, far from their hotels, to get their news). After the 8:30 announcement containing the names of the astronauts, the media learned from the PAO at Cape Royal that:

- there was no fuel in the rocket nor in the spacecraft
- some pyrotechnics were aboard but not armed
- the countdown had not been underway; it had been stopped at 6:28
- there had been communications problems consistently in the test
- engineers in the blockhouse had seen the fire via the television monitors
- there were some members of the support team near the spacecraft at the time of the fire
- it took five or more minutes to remove the three hatches of the command module under normal circumstances; they were the boost protective hatch, the inner and outer hatches
- the bodies of the astronauts were still in the spacecraft
- the astronauts entered the command module at 2:00 and the hatch

was closed at 2:30. Slayton later changed these times to 2:30 and 3:00 respectively (69: pp40-41).

At 10:00 that night, the PAO at the Cape informed the media of the names of 27 men who had been on the gantry during the fire and were being treated for smoke inhalation. By 10:50, the PAO was able to state that 25 of these men had been released but two required further treatment. At 11:05 (CST), Paul Haney, at MSC, made a small error in stating that the spacecraft had been on "internal" power at the time of the fire.¹ However, the Cape was correctly reporting that the spacecraft had been on external power. This was pointed out as a discrepancy by several newsmen and Julian Scheer became angry that not only were his PIOs not relating their stories to each other's but that some members of the media were apparently trying to drive a wedge between the PIOs.

At the top of the gantry, various NASA officials and workmen gathered around the open hatch. Black soot covered everything inside the spacecraft. NASA photographers shot pictures and moved away. It was not until seven-and-a-half hours after the fire that the bodies were removed, a process hampered by the fusion of the spacesuits to the couches. Jack King does not remember any of the media requesting copies of the photographs of the interior while the bodies were still there (91).

In Chicago, NASA received help from an old friend but the media turned it down. Colonel Shorty Powers was snow-bound at O'Hare airport and, after placing several calls, a friend of his at MSC finally reached him at a hotel near the airport. At the time, the media could only say that there had been an accident at the Cape with not much else in the way of details. Powers' friend told him that he had come from the homes of the astronauts and mentioned that NASA officials, other astronauts and, in one home, a minister, were with the families. Powers writes

¹Some things are still unclear about this though. NASA has said that the spaceship was on external power at the time of the fire. But the test schedule that day called for the command module to go on internal power at T-15 minutes (15 minutes before the simulated launch). At the time of the fire, it was T-10 minutes and holding so therefore the spacecraft should have been on internal power if all was in accordance with the procedure called for at the time. However, it stands that the command module *was* using external power at the time of the accident.

in a letter that he knew the media would be informed shortly thereafter since the next-of-kin had been told.

I felt no compunction therefore about trying to move the information. More than that, I felt an obligation to try to get the information out because it was clear to me that to get it piece-meal and probably with great speculation in the absence of official information would only make the whole thing more damaging to the overall program

I called one of the network affiliates in Chicago, identified myself and told the news director what I had and that I was willing to go on the air either live or taped with the story. First of all, he wouldn't believe it was me--and then, much to my chagrin, told me that he was getting all the straight information from his sources at the Cape--even though he admitted that I had more than he did. He would not move the story and after one more call with much the same result, I gave up (126).

At 8:00 a.m. the next day, Saturday, the Cape Kennedy newscenter made available more facts for the media, primarily clarification about the times of the events of the previous evening. At 9:00 a.m., NASA announced that a panel of inquiry had been appointed to study the accident and it was to be headed by Dr. Floyd Thompson of the Langley Research Center. At 9:45 a.m., General Phillips met the newsmen to brief them on the status of the situation and he then answered their questions for 30 minutes (69: pp41-42).

That same morning, a piece of paper was laid on the desk of President Johnson. It was from a White House staffer, Bob Fleming, who wrote:

Newsweek is planning its cover story on the astronauts' accident, so Normal [sic] Milligan is asking about your receipt of the news and actions thereafter.

George [?] agrees that a few facts would show how you keep in touch with important activities.

May we provide this information--if it is correct:

You were in the Mansion, that Secretary and Mrs. Connors and a few friends were there for supper, when the word came by telephone.

You advised the others of the accident, and then left the group to dictate telegrams to the families and your public statement.

You then received additional calls and talked with other officials throughout the evening as supplemental information was received.

I do not suggest we go into details beyond these brief facts (45).

President Johnson obviously did not want Newsweek to print such items. The next issue of that magazine, dated February 6, 1967, contained no reference as to how the President received the information about the fire.

At 3:00 that Saturday afternoon, Dr. Thompson convened the investigation board. Jack King sat in on the board's closed hearings as an observer who would relate the events twice daily to the media. King was not to discuss the findings of the board's members but rather to reveal who spoke to the board, how long the meetings lasted and other peripheral information (91; 69: pp41-42).

On January 29, at 11:30 a.m., the funeral plans for the astronauts were given to the media: White was to be buried at West Point, his alma mater; Grissom and Chaffee were to be laid to rest in Arlington National Cemetery in two separate services.

At noon on the same day, the PAO staff arranged for a media pool to be escorted to the launch complex and for a writer and a photographer to visit the top of the gantry to see the command module. George Alexander said in an interview that there was debate amongst the reporters as to who would ascend the gantry and finally it was decided that a representative from a trade magazine would go. It turned out to be Alexander. Mary Bubb says that she and Alexander discussed the situation between themselves and decided that Alexander would go since he had more experience with the manufacturer of the spacecraft. However it was decided, Alexander went to the White Room and saw what had been the pressurized tomb of the three astronauts. He was allowed to stick his head in the open hatch and look around but not touch anything. He could see that the interior had been burned more intensely in some areas than in others. When he returned to the ground, he was taken to the Cape Royal Hotel where, at the newscenter on the tenth floor, he typed his report for the media and NASA then made copies of it available for all the members of the media who requested them. A copy of his report appeared in Aviation Week. The cockpit, wrote Alexander, looked like the cockpit

of an airplane which had suffered a direct hit by an artillery shell (69: pp41-42; 4; 17).

The media were taken out to the Cape's airstrip the next day to view the caskets being loaded in an airplane to fly them to Washington, D.C. and New York. At the White House, suggestions were being made to the President for him to attend the funeral services of at least one of the astronauts (69: p42; 86).

On that same day, January 30, Julian Scheer decided he had had enough with the media trying to drive wedges into the statements of his PIOs. He sent Paul Haney a memo that day which was accompanying a story written by a UPI reporter.

The attached from UPI is the first of a number of attempts to split our statements on the 204 accident.

Your comment from here on out is simply: "No comment."

The Review Board will release all information through Jack King. He will confer with proper people and there will be no statements from anyone in NASA on this subject.

The next day, Tuesday, January, 31, the bodies of Grissom, White and Chaffee were buried while the rest of the astronaut corps attended. Grissom was buried first, with the President standing nearby. His widow wore a blue dress and was closely attended to by Wally Schirra. The other Original 7 astronauts were also there.¹ A Life photographer caught the expression of Mrs. Grissom while she watched the flag that had covered her husband's coffin being folded--her countenance was not one of sorrow but one of anger in the photograph that appeared in the next issue of Life (98: February 6, 1967).

Later that day, Chaffee was buried not far away. His funeral was also attended by the President and the men of the third group of astronauts to be selected for duty with NASA. As a sidenote, Grissom and Chaffee were buried relatively close to the grave of First Lieutenant

¹In the issue of Life which showed the funerals, astronaut Slayton is not pictured at the funeral of Grissom even though he was there. He was dressed in civilian clothing and perhaps a picture editor of Life did not recognize him. In one situation, he was in line with the other Mercury astronauts and the photograph used in Life was cropped so he was not visible even though there was space on the page for a larger picture.

Thomas E. Selfridge, the first aircraft fatality (98: February 6, 1967).

At West Point, Ed White was laid in the earth on the grounds of the U.S. Military Academy. In attendance were the First Lady, Vice-President Humphrey, Mrs. Webb, Air Force Chief of Staff John McConnell and White's minister from Seabrook, Texas (98: February 6, 1967; 58: p483).

The magazines reporting the events of that long weekend obtained information in the best way they could. Time erroneously reported:

The flames were apparently sucked into the astronauts' space suits, *killing them as soon as they noticed the fire* [italics by the author for emphasis]. The three *charred* bodies were left strapped to their couches for more than seven hours...(159: February 3, 1967).

Newsweek prided itself on being able to change its cover photograph in the middle of a press run; the original cover was replaced by a photograph of the three astronauts which had been taken a few days before the accident by an AP photographer. The writer of that magazine's article on the fire was more accurate than most writers when he or she described that the astronauts had died from either "incineration or asphyxiation" but was inaccurate in the statement that the deaths were instantaneous (122: February 6, 1967).

This brings up two points. One, the deaths of the astronauts were not instantaneous but that fact was apparently not known by even the PAO for several days, which was past the deadline of many publications. Second, eyewitness accounts of the spacecraft with the bodies still in it may have led to the assumption that the three men had been burned to death. Jack King remarked in an interview in 1977 that the interior of the spacecraft had been covered with the soot of the fire, blackening everything, including the astronauts' suits and skin, which may have given the appearance that the crew had been burned in their suits (91).

Meanwhile the magazines also concentrated upon another area of the fire--the investigation. Some of the press (and later authors of books) thought that the idea of NASA appointing its own inquiry board was ridiculous--an attempt to whitewash the findings. However, the military

investigates its own accidents and so does practically every airline along with the Federal Aviation Authority. Likewise companies which have industrial accidents tend to conduct their own investigations simply because they know more than anyone else about their occupations and hardware. Thus, it makes sense that NASA conducted its own investigation; who knows more about manned spacecraft than NASA?

In the same issue that carried photographs of the funerals, Life's Robert Holz came out on the side of NASA, saying that the investigation of the fire was in capable hands. He editorialized that the astronauts were not the only test pilots--which is what the astronauts are and were--who have died in the line of duty; only the week before, wrote Holz, two Air Force test pilots had died in accidents (98: February 6, 1967).

Much of the media attributed their lack of information to NASA and they are right. No one knew what had caused the fire and NASA management told everyone in the space administration to be quiet to stop any errant speculations. The rumors were plenty as it was. One of the rumors was that there had been tapes of the last moments of the astronauts, indicating that the astronauts had not died quickly and had cried out in pain shortly after the one astronaut had announced "Fire in the spacecraft!" John Wilford printed this in the New York Times. When NASA officials were questioned about this later, the answer was only, "No comment." The rumor was correct. Jack King, who had been in the blockhouse during the test, did not remember hearing any screams during the incident but, three days later, he heard the tapes and the screams were there.¹ Paul Haney had told newsmen in Houston only a few hours after the fire that it was a "fair assumption" that the astronauts had died quickly. The management of NASA might have known about the cries on the tapes, as did Wilford's source(s), but when the PAOs were confronted with questions about those cries, what else could they say

¹These tapes would later prove to be very valuable to Mrs. Grissom in 1971 when she sued North American Rockwell, the manufacturer of the command module, for \$10 million for negligence in the construction of the spacecraft.

except "no comment" if they had not been informed by NASA's hierarchy? Likewise about the "instant deaths." If the PIOs knew, then the PAO was at fault for covering up information but if they did not know, then the blame lies with the management of NASA. Finger pointing goes every which way on this account: Webb talked to some of the PIOs the day of the funerals and said he had not been told of any tapes containing the cries of pain. Scheer said Haney had not told him but Haney claims that he did inform Scheer about the cries (17; 66; 137).

Some NASA personnel knew a great deal about the fire soon after it had happened and Scheer's "No comment" rule applying to all the centers was a wise one. This was meant to cut down on speculation yet at the same time it may have increased it since the official lines of communication with the media were cut. This forced reporters to rely upon their backup means of finding information from NASA. These backup means might have been accurate or not; it depends upon how close they were tied into the investigation. Howard Benedict, of AP, said in an interview that he had his network of "spies" working for him around NASA and quite often had to hold clandestine meetings with them so they would not be fired by NASA or receive reprimands. Mary Bubb, of Fairchild publications and Reuters, indicated a similar use of sources within NASA.¹

Obviously NASA was not the only source from which reporters could garner information. There were the contractors for Apollo. John C. McClintock, Chief of the Program Control Division at MSC, issued the following upon the contractors as well as NASA personnel on January 31, 1967:

Subject: Speeches and news releases on the Apollo program. As a subject of the recent accident involving spacecraft 012 and in the interest of the Apollo program, contractors are asked to have their

¹Gordon Harris, in his book, Selling Uncle Sam, writes that some newsmen occasionally monitored the shortwave radio communications used by the personnel at the Cape, including guards, truck drivers, firemen and "others who talked too freely on the air." Therefore, a reporter did not need just a system of willing informants to provide information for stories (69: p201).

personnel refrain from participating in any of the following activities pertaining to the Apollo program until such time as the investigation has been concluded:

Speeches (except currently scheduled courses of instruction or familiarization)

Presentation of technical papers

Publication of articles in periodicals or technical journals

Holdings of news releases

New releases

The above policy also applies to coverage on all systems, subsystems and operational methods....

Public information activities of the contractors in response to pressure from news media must be closely coordinated with MSC Public Information Office. Information release should only be in response to query and must not be or lead towards speculative conclusions concerning the accident. Responses by public information employees should follow specifically documents already in the public domain (90: p328).

When the PAO of the MSC received the memo, a staff member called NASA Headquarters, which issued a new set of rules on February 2, 1967 to supersede those of McClintock's:

1. During this period of time we realize that all Apollo associated personnel will be questioned about the 204 accident. This matter is in the hands of the Review Board and no speculation on causes or probable cause is proper. However, we feel that speeches per se should not be forbidden. The speaker must stay away from those areas about the accident which speculate on causes...but dissertations about the program in general and specifically about the role of the individual contractors is all right. Discretion must always be exercised but there is not a blanket embargo.

2. There should be no embargo on technical papers now scheduled.... Presentations...which could tend to have contractors or NASA defending a position should be looked at carefully and coordinated with Apollo office.

3. All of these papers /articles in journals and periodicals/ come to NASA for clearance for technical accuracy and will continue to be examined in that context. Contractors should not stop present commitments and should continue to prepare such articles for publications in the normal course of its work /sic/.

4. None are presently scheduled /press conferences/. If there is a desire to hold news conferences, contractors should discuss it with the center's public affairs office.

5. All news releases are presently cleared for technical accuracy /by/ the Center Public Affairs Office. This continues and contracts /sic/ should continue to submit news releases considered of public interest. There is no desire to stop the flow

of public information in NASA or the Apollo program.

6. Contractors understand the responsibility of the Review Board. The desire is not to hamper the Board in its work, and to refrain from speculation. We are keeping the doors of our contractors open to the press, responding to queries and demonstrating to media the equipment presently used and under development. This material is presently in public domain. Press relations should continue to be carefully coordinated with the center public affairs offices.

Signed, George Mueller, Associate Administrator for MSF [Manned Space Flight] ; Julian Scheer, Assistant Administrator for Public Affairs (90: pp328-329).

NASA was not creating a total news blackout as some people have claimed but it was attempting to hold down the loose talk and rumors. The messages were clear: there would only be one part of NASA whose staff would comment upon the accident and that was the Review Board under Dr. Thompson. Until the Board made its findings public, everyone else in NASA was to remain silent. This irritated the media. Some reporters claimed that they had a right to know what killed the astronauts. At the time, the public possibly wanted to know also but until things were completely cleared up and understood by the Review Board, not much could be said.

In a letter, Paul Haney describes the months following the fire and the effects upon the NASA community.

[King] sat in on most of the 204 Board hearings but, characteristically, they kicked him out when they took critical actions.

Immediately after the fire--like about a week after it--Joe Shea and I went to New York and had long, off-the-record but informative chats with various news people. We spent two hours in Whyte's Bar on 57th St. with Cronkite. Had a long lunch with Dick Witkin of the Times at the Harvard Club. And Jim Kitchell assembled the NBC crew for long evening confab. We told them all we knew about the fire, probable cause, etc.

Then the whole information effort halted for about five or six months. The engineer types loved it. They'd say, "We can't say a thing until the board makes its report." As a result, we were never able to get out info on the tremendous amount of work that was going on inhouse during the spring and summer of 1967... like capsule fires under controlled causes...development of new materials for space suits and capsule interior, etc.

We suggested and held an anniversary dinner for Shepard on May 5, 1967, to try to get people to come out of themselves a little

again. About 400 attended. It was in the hotel across from MSC. Sort of roasted Shepard (we put together a special gag film called, "How to Succeed in Business Without Really Flying Much." Shepard had his ear problem then and wasn't flying at all). Gave him a barbecue. Al made a good inspiring speech about all the work that had to be done. Von Braun came over for the dinner, in one of his rare public Houston visits. He made a good talk too...something about the work we were involved in was a bit more complicated than making shoes...all told in that wonderbar [sic] apple strudel [sic] accent of his. No one from Washington was invited (67).

The manner in which the PAO handled the news about the fire provided a thesis subject for D. Brent Clement, of Brigham Young University, who was working on a master's degree. In 1968, Clement published his thesis: the conclusions of which follow:

1. Considering its purpose as outlined by management, the Public Information Branch is being operated on an overage or above average manner.
2. The space agency does a better than average job of recognizing the interest of newsmen. Elaborate facilities are provided.
3. NASA's information program has definite goals and objectives, although they could be more specific.

Inherent problems revealed are:

1. The personal integrity of program personnel is questionable. However, much of the blame is shifted from the PAO to NASA management.
2. In emergencies, NASA personnel lack the personal courage required of good public relations practitioners.
3. NASA Information programs could more effectively explain and justify the actions of management. At present, this is not considered an important function.
4. The agency should be more concerned with two-way communication. Little is done to analyze what the public would like to know.
5. NASA needs more specific short-term, intermediate and long-term goals and objectives. Present goals and objectives are too general to be effective.
6. The space agency has been ineffective in anticipating public reaction. Little is done to anticipate trouble before it begins.
7. NASA could improve its public image by utilizing a more extensive research program. Presently, little or nothing is done (23).

As is known by anyone who studies the events of that spring of 1967,

NASA took a beating on Capitol Hill in Washington, D.C. when several disclosures showed the laxity of NASA's management and how it attempted to cover up many aspects related to the fire, most notably, the Phillips Report. This report, written by General Samuel Phillips in late 1965, describes how loose the entire operation around Apollo was yet practically everyone who appeared before the Senate hearings committee denied ever hearing of such a report, or ever of hearing previous warnings about North American's progress with the project (90: pp113-114).

The image of the astronauts remained intact for the most part, but the fire shocked the nation into realizing that the men could really die. It might sound crude to read it in such terms but the public seemed to have the image of the astronauts as being almost gods, that they could not do anything wrong nor perish. The thought almost seemed to be that if astronauts died, it would be in their airplanes or in space but not on the pad. Astronauts do not die on earth, they fade away in the skies.

Mrs. Grissom wrote in her book, Starfall: "They tried to make them look like perfect American boys. Well, in most respects they were, but they were human, too, just like the rest of us" (59: p114).

As an ironic footnote to all of this, the hatch that was on the Apollo 204 command module came about as a result of Liberty Bell 7. The designers of the Apollo spacecraft preferred a hatch that did not open quickly. They feared an easily opened hatch might cause a repeat of Grissom's first flight; hence a more secure hatch that could not be removed with just a flick of the wrist was installed. As time went on, even before the fire, the designers had second thoughts about the triple hatch, along with a number of elements in the command module. Forty-five changes were planned for the spacecraft; 36 of them had been taken care of by January 27, 1967. Of the six remaining changes, one was a new hatch. (98: April 24, 1967).

THE SECOND INTERIM

The mission which Grissom, White and Chaffee were to fly was scheduled for February 21, 1967 but the first Apollo flight took place in October, 1968. Some people regard the fire as being the cause for delaying Apollo for a year and a half but Mike Collins writes that the fire had no effect upon the timetable of the moon landings. He states that the first lunar landing would have occurred in the middle of 1969 even if the fire had not happened. That is how things in the space agency were during that time. The fire caused many changes in the Apollo command module but the lunar module, not affected by the fire, was not ready for a checkout flight until the spring of 1966 (24: p275).

Things were not going well for the Russians either. While the Americans were not launching any manned flights during 1967, the Russians, who had not launched any cosmonauts into space for a couple of years, launched a new type of spacecraft, called Soyuz, on April 24, 1967 with only one man aboard (the Soyuz is capable of holding up to three cosmonauts). Tass was remarkably reticent about the progress of the flight, indicating that not all was going correctly. The cosmonaut, Vladimir Komarov, who had flown in Vokhod-1, was having trouble controlling the spacecraft and, after 18 orbits, elected to reenter the atmosphere. At an altitude of about four miles, Komarov's Soyuz unfurled its parachutes but they failed to deploy properly. At a speed of nearly 300 mph, Komarov impacted upon the soil of his country and was killed (153: pp149-150).

In the U.S., Joe Califano sent a confidential message to President Johnson on April 24 concerning the cosmonaut's death.

Webb and Katzenbach both believe it would be a good idea to send an astronaut and his wife to the Soviet funeral for their cosmonaut. Webb recommends Frank Borman.... Katzenbach said that, before any announcement is made, there should be a check made quietly with the Russians to avoid embarrassment. He needs prompt authority to send a cable to U.S. Ambassador Thompson in Moscow so the check can be made. If you approve, I will tell Nick to send the cable (18).

President Johnson approved the attempt but the Russians did not,

saying that the funeral was purely an internal affair. The Russians, who had feared "counter-propaganda" from the West, found none, but only sympathetic messages from all over the world.¹ Jim Webb sent a message urging closer cooperation between the Soviets and the Americans, suggesting that such efforts might have prevented the deaths of Komarov and the Apollo 204 astronauts. Similar to Apollo 204, a State Commission was appointed by the Soviet government to study the Soyuz accident (153: pp159-160).

Despite the apparent setback given to the Russians, they still had some thoughts about going to the moon. In May, 1967, astronaut Mike Collins and Dave Scott went to the Paris airshow and met cosmonauts Belyayev and Konstantin Feoktistov. A crowd gathered as the men met and soon the Russians proposed a way to get away from the autograph seekers; nearby was a Russian plane which the men hopped aboard and sat in, surrounded by Soviet security men as they talked with vodka in their hands. It was then that Belyayev remarked that he and other cosmonauts had been practicing helicopter flights--something required for lunar touchdown--although the Russians would not admit that. What he did admit was that he soon expected to make a circum-lunar flight (24: pp279-280).²

Meanwhile, in the United States, the astronauts received a setback of sorts. On May 2, 1967, Field Enterprises Educational Incorporated announced that it would not renew its four-year contract with the astronauts for their personal stories. The Washington Post reported the news that day and added the fact that when Field pulled out--on August 31, 1967--the astronauts' incomes would be reduced by \$10,000 per family. This shows how misinformed some of the media still were. There were 54 astronauts and six widows (who were still being paid under terms of the

¹The Russians had good reason to fear what the American press might have to say. Before Komarov crashed, he used his flight for propaganda purposes, praising "the courageous Vietnamese people for fighting against the bandit aggression of American imperialism" (8: p135).

²Belyayev never had the chance. In January, 1970, he died of complications following surgery for stomach ulcers.

contracts) at that time and that number was to be divided into Field's maximum payment of \$320,000 per year for the group. Thus, each family was receiving approximately \$5333 per year from Field (168: May 2, 1967).

Another aspect of the story was Field's reason for quitting. The official excuse was that there were too many astronauts for the contract to be practical anymore, i.e., the amount that each astronaut was receiving might not make it worthwhile in his eyes to pay allegiance to Field. Writer William Sherrod claims there was another reason: Field was suffering financially from the contracts.

Partly this was due to hard luck...the first manned Gemini flight was scheduled for November, 1963 but as the program fell further and further behind, Field found itself paying out over \$1 million (including expenses) during the flightless doldrums.¹ Newspaper syndication never caught on as expected, and the sale of books about the Gemini program and the astronauts' families were even more disappointing. Foreign syndication...was better but after four years, Marshall Field 4th / the owner of Field / found that he had spent about \$3 million--which exceeded receipts by a substantial margin (26: May/June, 1973).

Jim Godbold, who had helped to negotiate the original contracts for Field in 1963, says that Sherrod is wrong. Godbold said in an interview that while Field had published only one book by the astronauts during the time from 1963-1967 (the book by Grissom--Gemini), the official reason was the correct version of why Field decided not to renew the contract with the astronauts (52).

At the time of the announcement, Bailey K. Howard, President of Field, was reported in U.S. News and World Report as saying,

To cover the personal stories of the astronauts who are not in the program, together with their families, has become extremely difficult and quite unlike the undertaking originally assumed, which involved only the seven original astronauts and the second group of nine (163: May 15, 1967).

If Howard really believed this, then he had to have been naive not

¹However, it would seem that Field had to have known that the first Gemini flight would not occur until late 1964--this was public knowledge in the summer of 1963 when Field was negotiating the contracts with the astronauts and NASA (the Original 7 astronauts had argued with President Kennedy for another Mercury flight then to kill the 18-month gap). If Field knew, then maybe Sherrod made a typographical error and meant November, 1964.

to think that more astronauts would be added to NASA for future flights. This author tends to think that both Sherrod and Godbold are correct to a degree: the astronaut corps had grown too big for Field's money to have that much of an impact, especially with the earlier astronauts who remembered receiving \$10,000 per year from Field, but with only one book having been produced for Field in four years, Field was possibly hurting from financial losses as well.

While the U.S. astronauts were losing money, the Russian government was earning money because of its cosmonauts. The Saturday Evening Review carried an article in its May 13, 1967 issue describing how the Russians finally learned from Life the technique of selling stories. Writer William Shelton reported that for \$100 a reporter could talk to a pair of Soviet space pilots while for \$25,000 a news medium could arrange to interview a crew that had just returned from an epic flight, such as would have been the case for talking to Leonov following his space "walk." The only people who could do this were bonafide journalists and the payment had to be in U.S. dollars, not to the cosmonauts, but to the Novosti Press Agency. It was obvious that the Russians knew how to exchange public interest in their space programs for cold cash; they had been watching the American astronauts do it for eight years (133: May 13, 1967).

On May 22, 1967, Betty Grissom wrote President Johnson a letter, suggesting that MSC should be renamed for her husband. The thought was not entirely her own as she states in that letter, "This idea has been brought to our attention [the family's] from people all over the world. It is our hope and prayer that you will also feel that Gus deserves this honor." The President directed NASA Administrator Webb to handle the reply, which was to carry Johnson's signature (60).

MSC was never renamed as the Grissom Manned Spacecraft Center, as Mrs. Grissom desired. Instead, Bunker Hill Air Force Base in Indiana, Grissom's home state, was named for him in May, 1968. In the early 1970s, MSC would be renamed for President Johnson, who died in February,

1973.

On June 6, 1967, another astronaut died. Major Edward G. Givens, one of the 1966 group of pilot-astronauts, was returning to his home from a party of the Birdman's club (the fraternal organization of Air Force pilots) when he was killed in a car accident. Again, the old military uniforms that the astronauts rarely wore any more were taken out of the closets as the men gathered to bury another of their kind (24: p51; 123b: p160).

For some years, the Air Force had a project underway involving its own astronauts, to be used in conjunction with NASA but for Air Force purposes. The Air Force wanted to put a large space station into orbit and from there monitor the earth with its astronauts. The astronauts of the Air Force belonged to what was called the Manned Orbiting Laboratory (MOL) and they were separate from NASA yet in some regards they were treated in a manner like their NASA cousins. One of the MOL astronauts, Major Robert Lawrence, was asked to participate in a Chicago parade, to be held on August 12, 1967 but the Air Force said no. The explanation to the Undersecretary of the Air Force from the Director of U.S.A.F. Information, Brigadier General William C. Garland, is as follows and illustrates the difference between NASA's astronauts and those of the military.

The parade is an annual affair, sponsored by the Chicago Defender, a Negro newspaper, and the parade takes place in general in the Negro area. Colonel Springer, our Chicago representative, advises that there is normally a large turnout by the Negro population, that the parade has sort of a folklore and Christmas Santa Claus approach. In past years there has been some difficulty by military participants, i.e., comments from spectators and objects thrown at the military by spectators.... Colonel Springer is less than enthusiastic over Major Lawrence's possible participation, although he does not anticipate any difficulties....

In the past, our MOL astronauts, after their initial press conference on selection, have been "under wraps" with no public visibility. A precedence would be established by permitting Major Lawrence to attend this function and could result in many demands for our MOL astronauts which could have an impact upon this sensitive program. In the past we have turned down requests, as

has NASA with their astronauts, based on the fact that the heavy training schedule would not permit public appearances.

If political or other considerations are not overriding, I recommend we turn down this request on the same basis that we have used in the past (46).

Major Lawrence did not participate in the parade on the basis that he was too busy. But the main point in using this letter is to show that whereas NASA conducted an open operation in front of the entire world along with putting its astronauts into the open, the Air Force kept its men "under wraps" for whatever purposes were needed. The author does not know anything about MOL other than what has already been stated but a reason to keep the MOL astronauts out of public circulation was to keep them from talking or having to say "No comment" in reply to reporters' questions. Space was to be used for peaceful purposes and the military was not to enter into it, as stipulated in the treaty signed by the U.S. and other countries on the day of the Apollo fire. It was for this reason that the Air Force's astronauts were kept out of sight, in the opinion of this author.

On October 5, 1967, an astronaut left Florida to return to Houston when he lost control of his plane. At supersonic speed, the white, needle-like T-38 dove into the ground killing the pilot. Note NASA's manner of handling the following press releases, much in the same way as the Apollo fire.

October 5, 1967

HOUSTON, TEXAS -- An astronaut was reported killed about 1:30 p.m. EDT today in a crash of a T-38 near Tallahassee, Florida. The plane was returning to Houston from Cape Kennedy. Details of the crash were lacking. Identification of the pilot was withheld pending notification of next of kin (116: MSC 67-57).

October 5, 1967

HOUSTON, TEXAS -- Astronaut C.C. Williams, Jr., 35, was killed about 1:30 p.m. EDT today in a T-38 crash near Tallahassee, Florida.

There were no details immediately available on circumstances surrounding the crash.

Williams, a Marine major was flying by himself in one of 23 T-38 jet aircraft used by the astronauts. He had left Patrick AFB, Florida at about 1 p.m. bound for Ellington AFB adjacent to the Manned Spacecraft Center in Houston. He planned to make a gas stop at Brookley AFB at Mobile, Alabama (116: MSC 67-58).

The second announcement listed the members of the Board of Inquiry who had already been appointed to study the reasons for the crash. Within two hours of the first announcement, all signs of Major Clifton C. Williams, Jr., were removed from the astronaut office. His name plate was removed from his office door and his mail box. A file full of photographs of Williams for autograph seekers was emptied. Other astronauts called home to let their wives know that they were safe (123b: p158).

The next day, another announcement was released to the media, giving details of the upcoming funeral. Later that day, a fourth announcement about Williams was produced at the PIO, stating that there would be a memorial service for the astronaut at a Catholic church near MSC. In Washington, D.C., Julian Scheer sent an outline of the funeral plans to George Christian at the White House, "in case you want to pass it to the appropriate people" (139; 116: MSC: 67-59, 67-60).

The following Monday, six astronauts went to Washington, D.C., to act as pallbearers for Williams' body when he was buried at Arlington. In Dickinson, Texas, the remainder of the astronaut corps attended the memorial mass for him; the men sat at the rear of the church and they were the first people out. Overhead thundered four T-38s, saluting the fallen astronaut (123b: p160).

On November 9, 1967, a number of NASA personnel gathered in the morning hours at the Cape to watch another missile being launched. This was not just another missile but *the* missile, the one destined to take men to the moon; it was the Saturn 5. The Cape officials had tried to launch the unmanned space booster the previous month but had encountered various delays. Now, on that Thursday morning, the towering gantry rolled back from the rocket that stood taller than the Statue of Liberty. If things went wrong, there would be a fireball 3000 feet in diameter. The force of the explosion would throw heavy objects as far as three miles away; this is what made NASA officials decide to put spectators about three and a half miles away from the gantry. At 7 o'clock that morning, the five engines of the Saturn were ignited and 15 tons of fuel per second spouted into flame. Richard Lewis describes the event:

Up went the rocket, clearing the launch tower, piercing the sky. Fires burned all over the launch tower and dense smoke rose from the pedestal. The ground began to shake as though an earthquake had started.... The shock wave smote observers three and a half miles away like a giant fist.... Telephone receivers danced in their cradles.... In the concrete and steel control center, plaster dust began falling on the consoles. Werner von Braun was bellowing, "Go Baby, GO!" Part of the roof and a window in the CBS trailer began to fall in on commentator Walter Cronkite as he was describing this stupendous scene. He kept on talking while others in the trailer held the roof and window (97: pp401-410).

Columbia University's Lamont Geological Observatory at Palisades, N.Y. reported that the Saturn 5 launch produced such shock waves there, 75 minutes after launch, that they were exceeded only by the nuclear testing of the Russians and the Americans, the Krakatoa volcano explosion in 1883 and the fall of the Siberian meteorite in 1908 (97: p410).

On January 29, 1968, a Florida newspaper, Today, which bills itself as being "Space-Age," printed a front page editorial as a memorial tribute which said, "One year ago, the men, their faith, their hopes turned to charred embers in seconds." On the second page, a Today reporter wrote that the astronauts had burned to death. Although it was known by then, the media kept using the phrases that referred to the Apollo 204 astronauts as having been burned to death. Not only were newspapers and magazines using the phrase but so were those who should have known better. McGraw-Hill's Encyclopedia of Space, published in 1968, mentioned the astronauts were "burned to death." Former astronaut Brian T. O'Leary (a scientist-astronaut selected in August, 1967 with ten others) stated the same in his book, The Making of an Ex-Astronaut. So did other astronauts. Wally Schirra wrote an article for Life in December, 1968, saying "Ever since Gus Grissom, Ed White and Roger Chaffee...were incinerated during a routine test." Maybe it was simply easier to say that the men had died as a result of their burns, which was not the case. They had died of asphyxiation. Period (90: p49; 123b: p160).

It was close to a year after the accident that another astronaut, Major Lawrence of the MOL program, died in an airplane crash. Three other MOL astronauts had died in early 1966.¹ The widows of these pilots

¹None of the MOL astronauts died in space,

were not paid \$100,000 (split equally by Life and Field) as were the widows of dead NASA astronauts. The black magazine Ebony printed pictures and a short story concerning the funeral of America's only black astronaut. No other publications mentioned his passing (36: February, 1968).

On March 27, 1968, the first man in space, Yuri Gagarin, died in the crash of a jet trainer in the Soviet Union. The mid-sixties seem to have been a deadly time for anyone to have been an astronaut or cosmonaut. It appeared that the odds were finally catching up with everyone (153: p25).¹

On April 23, 1968, the PAO at MSC released a bulletin announcing that, for the fourth time in NASA's history, an astronaut was leaving the ranks. Brian T. O'Leary, who had been with NASA since the previous summer, claimed that "flying just isn't my cup of tea." This seems to be O'Leary's real and main point although there was dissatisfaction on his part towards NASA's attitude towards the scientist-astronauts. He claimed that NASA preferred to use the pilot-astronauts for the missions and it would be up to ten years before any of the scientists would fly in space. O'Leary was close. The first group of six scientist-astronauts had been selected in the summer of 1965 and one of those six, Harrison Schmitt, flew in December, 1972 on Apollo 17 and several more of the men flew in the Skylab missions in 1973-74). There has been talk by others that the scientist-astronauts were ridiculed at times by the pilots, saying that the scientists had no reason to be in the astronaut corps. Loudon Wainwright wrote in Life in 1970 that Shepard was accused as being unsympathetic towards the scientist-astronauts when it came time to tell them that they were disqualified from a flight and that he also told jokes about them. A confidential source said in an interview that some of the pilot-astronauts with NASA at that time did not care for O'Leary and they care less for him today because of his book, which is rather

¹This is not meant to be a reflection upon space flight. It does illustrate, however, that military flying is a high risk occupation. The astronauts flew aircraft much more than they flew spacecraft so it might be said that the chances for them being hurt or killed while in aircraft were greater than while being in spacecraft.

critical of NASA in places.¹ The source also said that the pilot-astronauts like to take O'Leary flying at times just to get him air sick (116: MSC 68-32; 123b: p200; 98: July 31, 1970).

In May, 1968, one of the astronauts checked into a Los Angeles hospital using an assumed name. He did not want anyone to know he was there because of the mail he might receive. Another possible reason is that he was of the Christian Science religion, a sect that does not believe in the use of medicine to cure any ailments. The operation he underwent was to relieve an old problem with his inner ear, which had been keeping him off balance just enough to keep him off flying status. The astronaut realized that the moon flights were approaching and he wanted to be on one of them. In a television interview sometime later, the astronaut said that he had not given up his religion by having the operation; if members of other religions can do things that they do not believe whole-heartedly, then he could have an operation and still retain his faith. The man was Alan Shepard and, after years of being grounded, he was back in the running (161: January, 1971).

During the interim between Apollo 204 and Apollo 7 (the first manned mission of the series) there appeared to be not much happening in the way of publicity about the astronauts. Toward the latter portion of the interim, the publicity that existed was geared toward the flight of Apollo 7. This was the flight where the Apollo project, NASA and North American Rockwell would finally clear themselves of the fallout that had covered them since the Apollo fire a year and a half before.

¹The Making of an Ex-Astronaut. Boston, Houghton, Miffling, 1970.

THE FIRST OF THE SUN

The publicity that surrounded the astronauts of Apollo 7 and their mission began when the Apollo 204 astronauts died. Wally Schirra, Donn Eisele and Walter Cunningham made up the backup crew for Apollo 204 and, upon the deaths of the others, moved into the prime crew position. Their appointments were duly noted in Time and Newsweek in the issues that carried the news of the Apollo fire in early February, 1967. After the fire, the first manned mission to Apollo was constantly in the news as its launch date kept slipping back and back.

On May 9, 1967, Life came out with photographs of the Apollo 7 astronauts and their families. Once again, Ralph Morse photographed the pictures. The stories in that issue were not written by the astronauts but were only about them. Walt Cunningham was described as having callouses on his hands from pulling himself by the bootstraps so much. Donn Eisele, however, was "the most relaxed character around." Schirra, the veteran of two flights in space and soon to be the only astronaut to fly in all three series, was written up as being the astronaut who loved to play "gotcha" jokes on everyone and would "most likely...have to go on a diet to squeeze himself into the ship." Why Life chose that early of a time to write the stories about the crew is not known. Perhaps Life wanted to fill up some empty time in the U.S. space program or perhaps Life thought the crew was going to be launched sooner than they were (98: May 9, 1967).

Meanwhile, NASA was at work too in relation to the publicity around the flight. Paul Haney describes some of the efforts of the PAO in a letter:

A few months before Apollo 7, we scheduled several major press activities involving the crew.

One was in Sacramento at an Aeroject plant where they made the S-IVB [the third stage of the Saturn 5 rocket]....

We had another press conference with the Apollo 7 crew at Downey in the same room, etc., where we'd held a similar one with Grissom's crew two years before. We also did a safety press show at the Cape, showing the new egress safety lines from the spacecraft. And we did something up in Dover, Delaware, at

International Latex, with Walt Cunningham to show off the new suit [that was more fire-resistant than previous suits]. In short, we did more with the 7 crew than with most other Apollo crews because we were looking for the reassurance factor and the Schirra crew was more agreeable to do press things than most of the crews to follow (67).¹

Before Apollo 7 was launched, there were a couple of occurrences that attracted the attention of space watchers. One was on the ground. On September 16, 1968, NASA Administrator Webb announced that he was going to step down from his post effective October 7, 1968, his 62nd birthday. It may have been expected that he would retire if the Republicans won the upcoming Presidential elections but the early retirement caught some of the press off-guard. In an interview, Webb said that he had known since the previous December that President Johnson would not run in the elections and it was then that Webb decided to leave NASA (Webb claims that the President told him of his decision not to seek re-election). In Webb's place would step Dr. Thomas O. Paine, who would act as the administrator until a person could be found to assume the post permanently (97: p432; 170).

The second bit of news came from Russia. On September 21, a satellite, Zond-5, landed in the Indian Ocean. That may not seem like anything important but it was the first man-made object to go around the moon shooting photographs and return safely to earth, having been launched on September 16 (153: p215).

Shortly before noon on October 11, 1968, a Saturn IB missile launched the Apollo 7 astronauts into orbit around the earth. Mike Collins describes it in a variety of ways:

[Wally's] Apollo flight was especially gutsy, coming after a fatal fire but that spacecraft wouldn't dare blow up with Wally on board.... It marked the end of the slippage in the program, the end of a series of target dates which were discussed but never

¹In the letter, Haney also wrote the author, "...we had an explosion of the S-IVB in a captive run on Friday, January 20, 1967...one week to the day before the 204 fire...almost one week to the day down to the minute. It wrecked the test stand and took about a year to get back in operation (67).

met, an end to the fire-damaged talking phase of Apollo....

The flight itself was kind of a bore compared to the three-day Gemini...flights.... Wally, Donn and Walt chatted and fussed their way around the world 163 times (24: pp59, 300).

The PAO had a small run-in with one New York reporter during the mission when a bulldozer in Maryland inadvertantly cut the communication lines to the Goddard Space Center, which serves as a backup to MSC in case the Houston base should be incapacitated. The first report of the cut was immediate--NASA had lost data information but not voice communications from the center, according to PIO Bob Gordon. During that time that the communications were partially lost, a PIO kept commenting about what was happening and when all things were restored to operating fully again, the PIO corrected a few errors that had been made. At this point, the New York reporter demanded that NASA tell him what had been said originally. The PIO simply refused to tell him anything concerning the first, error-laden report, saying that he did not have to give it to him. The matter ended there (53).

During Apollo 7, there was a change in the procedures made without the astronauts knowing about it. The air-to-ground communications went live. Until that mission, everything had had a six-second delay.¹ From now on, all communications would be live except for a one-second delay which was necessary for the lip-synchronization to match the visual images on the televised pictures (103; 140).

There was an item onboard Apollo 7 which caught the attention of the world--a television camera inside the command module that could broadcast pictures to earth with only a split second delay. Not everyone in NASA favored the presence of the camera. NASA Historian Jim Grimwood writes:

One piece of equipment got aboard Apollo 7...in spite of the insistence of the engineers that it was not needed and the ambivalence of the test-pilot-oriented astronauts. This was the television camera....the device had been going in and out of the craft since design concepts in 1964 as though it were

¹Except for the passes in Gemini where the astronauts were informed, via "HF-6," that they were being broadcast live to the world.

caught in a revolving door.... ...most of the engineers viewed TV cameras only as nice things to have.... ...equipment considered as luxury items got axed. There were those who persistently argued for the inclusion of the camera.

NASA personnel in charge of the public information activities, Scheer in Washington and Paul Haney in Houston, consistently favored the use of TV (56: p505).

So did one of Joseph Shea's assistants, William Lee, who wrote in the spring of 1964,

I take typewriter in hand to plead once more for including in-flight TV.... Since it has little or no engineering value, the weight penalty must be assessed against a different set of standards than is customary in such tradeoffs. One of the objectives of the Apollo program is to impress the world with our space supremacy. It may be assumed that the first attempt to land on the moon will have generated a high degree of interest around the world.... A large portion of the civilized world will be at their television sets wondering whether the attempt will succeed or fail. The question before the house is whether the public will receive their report of this climatic moment visually or by voice alone (56: p505).

The first Saturday morning of the flight, the ground controllers told Schirra to turn on the television camera, which had not been scheduled to be turned on until Sunday evening. That order produced an explosion of sorts between ground personnel in the control room and the astronauts, most particularly Schirra.

Schirra: You have added two burns to this flight schedule, you have added a urine water dump, and we have a new vehicle up here and I tell you this flight TV will be delayed without further discussion until after the rendezvous with a spent booster.

Capcom: Roger, copy.

Schirra: Roger.

Capcom: Apollo 7, this is Capcom Number One in other words, Slayton was on the line.¹

Schirra: Roger.

Slayton: All we have agreed to do on this is flip it. Apollo 7, all we have agreed to do on this particular pass is to flip, flip the switch on. No other activity associated with TV. I think we are obligated to do that.

Schirra: We do not have the equipment out, we have not had an opportunity to follow setting, we have not eaten at this point,

1

Remember Collins' remark about when Slayton came on the radio during Gemini 10.

I still have a cold, I refuse to foul up our time lines this way (178: pp149-150).

Schirra held to his word and refused to turn the television camera on. Flight Director Chris Kraft "got madder than hell," remembers PIO John McLeaish. Years later, Schirra talked about the decision he had made that Saturday morning.

Three guys were killed because of a short and we did a number of things to prevent this [from repeating]. The television was something that we had never checked out in orbit before and shortly after we were in orbit...they wanted us to turn the TV on. We did not have this on the flight plan for that time.... They told us, "Just turn the switch on," but we weren't going to do that. The spacecraft was using pure oxygen at that time.... We were in a [potential] firebox. That's an easy thing to say--"Turn the switch on"--when you're on the ground because there you can walk away from a fire. I've been in [television] studios and have seen things short out there. The television was not to interfere with the flight plan. My excuse at that time...was, "I don't want to interfere with the Howdy Doody Show" (140).

Slayton, also in a later interview, agreed with Schirra's decision to not turn on the TV, despite Slayton's initial annoyance at Schirra's refusal.

Schirra was the commander of his vehicle and he made his choice. It was all right.... I would have delayed the TV a day, too, if I had known what the schedule had been.... Schirra was the commander and knew the situation. We could argue all the time when he came back about the camera, we didn't, but he was up there and I respect his decision. At the time, no one on the ground really understood the situation [in the spacecraft] (152).

Meanwhile, on the ground, reporters were badgering the astronauts' physician, Dr. Charles Berry, about how he planned to cure the colds of the astronauts, which were obviously helping to make them irritable (in turn, irritating the ground controllers). Finally, Berry had enough of the questioning and snapped, "If I knew how to cure the common cold, do you think I would be standing here talking to you gentlemen? I would be sailing on my private yacht!" (97: p436).

On Sunday evening, as was originally planned, the Apollo 7 astronauts not only turned on the television camera but, despite their colds, turned on the charm as well. Schirra had cards printed with such

slogans as "Keep those cards and letters coming, folks," and he welcomed the viewers into the command module with the comment, "From the lovely Apollo room, high atop everything." Schirra had become the ham again, the warm astronaut many people loved. Together, the astronauts made their presentation known as "The Wally, Walt and Donn Show." It was a hit. There were more shows throughout the rest of the flight (97: p438; 159: October 25, 1968).

The change in the flight schedule caught up with the astronauts again after the first television show and Schirra exploded once more.

I have had it up to here today and from now on, I am going to be an on-board flight director for these updates. We are not going to accept any new games...or do some crazy tests we never heard of before. Each [new] test is going to be reviewed thoroughly before we act on it" (97: p439).

All that the ground controllers could say to that outburst was simply, "Roger."

Schirra, not realizing that his voice was being carried live by the networks, became upset again at another time. He told the ground controllers, "You won't miss a hell of a lot if you don't get it here. We did not get the results you're after. We didn't get a darn thing in fact" (8: p136).

The press seemed concerned about Schirra's attitude towards the mission and the ground controllers. To the reporters, who were worried about the tension between the astronauts and the men in the control room, Paul Haney laughed off the situation with, "...something happens to a guy who grows a beard [the flight was 11 days long]. Next thing you know, he starts to protest...." The members of the media laughed and left the issue alone except for referring to it in future articles (97: p439).

Mrs. Schirra was learning how to handle the reporters while her husband was in space. She had gained some experience with the news media with two other missions already completed. The wife of the space veteran had gone to the airport during an early part of the mission to pick up a friend and the reporters pursued her, ruining the occasion. To prevent

this from happening again, Mrs. Schirra made a deal with the media--if she posed for a picture of her picking up the morning newspaper, she could go on a shopping trip without any harassment from the reporters. The correspondents bought the idea and, that day, Mrs. Schirra went shopping, sans reporters (98: November 1, 1968).

There was one reporter who was allowed into all the homes of the Apollo 7 families--Dora Jane Hamblin of Life. She had written some articles about the astronauts during earlier years (such as recording the emotions of the people in the galleries during John Glenn's speech before Congress) and was now a close friend of many astronaut families. It was not until February, 1967, that she actually had been given control of fulfilling the contract for Life. Her control came about as a result of the October, 1965 New England power failure which blackened the offices of Life.

She writes of what happened in the editorial offices of Life that night:

We were sitting around, shooting the breeze when Phil Kunhardt, then an assistant managing editor, suggested it to me almost as a dare. I don't know what compelled him to choose me.... As a wild guess, I think perhaps he made the decision because I was known as a hard worker, that I get on well with people, and that I knew absolutely nothing about the kind of technology required to hurl a capsule at the moon. I have always suspected that Phil--or others--thought I would work hard at trying to understand and that maybe, if the scientists could make it clear to an ignoramus like me, I could then, in turn, make it clear to the millions of Life readers who were probably as ignorant as I. Just a guess (64).

Hamblin eavesdropped on the families a lot over the next few years. During Apollo 7, she described Mrs. Eisele as having a "face full of terror" during the launch and worrying about her husband's flight. Lo Cunningham, wrote Hamblin, played cards and slept well. Jo Schirra never lost her "serene exterior" but developed a painful headache at one time. Hamblin was one of the best Life writers ever assigned to cover the astronauts, in the opinion of this author. Loudon Wainwright is also considered to be another one of Life's top writers (98, November 1, 1968).

Other happenings were taking place on the ground. At the White House, Joe Califano received a message from Larry E. Levinson, another

White House staffer. In the message, Levinson asked if the astronauts were to be promoted one grade higher upon their return, an event that was promised during the early Gemini flights by President Johnson. However, the plan, as originally conceived, was that no astronaut would be promoted to a rank higher than colonel in the Air Force and Marines or captain in the Navy. Levinson wrote,

If this policy prevails, then the only change would be a promotion for Eisele from Major to Lt. Colonel. NASA, as you know, gives non-promotional awards to its civilians and possibly a special award in this case to Schirra [who was already a Navy captain].

Am I safe in assuming that this was the way we will handle Apollo? (96).

The answer was yes (96).

There were other requests made at the White House. On October 21, the television and radio networks wanted to know, an hour in advance, if possible, if they could transmit live any messages that the President might say to the astronauts the next morning when the astronauts returned from space. President Johnson replied in the affirmative (22).

However, in reply to a NASA request, which he considered ludicrous, one White House staffer, Charles Maguire, wrote, "Someone at NASA should be put into orbit for this piece of junk" (102).

Throughout the flight, most things had gone well, causing General Phillips to remark later at a press conference that the flight was "one hundred and one percent" perfect. But there were some small mishaps that had occurred during the mission. Just before the launch, someone at the gantry had carelessly let an escape elevator malfunction, thus removing an avenue of emergency egress in case of an accident.¹

There was also a failure in the electrical distribution system of the spacecraft for a short while as even the backup system failed to take over properly, causing the ground controllers to reactivate the primary

¹Another means of quick escape from the rocket was a slim wire that went from the spacecraft to an underground safety shelter located a few thousand feet away. In case of an accident, the astronauts would hook onto the wire and slide to safety (if they did not die of fright on the way down). And there was always the escape tower on top of the spacecraft which could take the entire command module off the rocket and drop it into the ocean a few miles away.

system. The ground controllers were alarmed enough at this that they ordered the astronauts to fire their big Service Module Propulsion System engine (SPS) to bring them 30 miles closer to the earth; in case of another failure, the astronauts could return home with a minimum use of power. There were difficulties with the biomedical sensors attached to the men's chests; Major Eisele reported that the wires of his sensors were heating up. There were about 50 minor mishaps of one sort or another. But, overall, the mission was deemed a success. Perhaps the best aspect was the firing of the SPS engine eight times during the flight. If any Apollo was going to go to the moon and back, the engine would have to work or else. Just or else. Nothing more needed to be said (90: pp289-291).

On October 22, the astronauts were due to return but Schirra wanted to add another twist to the reentry procedures. The colds were still plaguing him and the others in the spacecraft. Because of that, they wanted to keep their helmets off so they could clear their eardrums as the air pressure inside the spacecraft changed during the descent. Ground said no because the astronauts' heads would not be properly supported--the couches had been designed for the men to use with their helmets on, not off. Schirra insisted on no helmets, telling Slayton that in case they died, "You can wear black armbands as long as you want but I don't want to put that helmet on." Once again, Schirra won and, on the way down through earth's atmosphere, the astronauts equalized the pressure in their eardrums. None suffered any injury because of what they did (90: P288; 140).

They splashed down near the aircraft carrier Essex and President Johnson called them. His words were not only heard by the astronauts but by all of America. Eisele became a Lieutenant Colonel and awards were given to Schirra and Cunningham. Only upon their return to earth did the crew members realize that their words to the ground controllers had been heard live by the entire world, which surprised Schirra. He was also surprised at the fuss made by the media about his comments

while in space, especially about the refusal to turn on the television camera. He talked about his feelings later in an interview with the author:

Having the delay was beneficial if you wanted to say something emotional or had a disagreement with someone and did not want it broadcast to the public. It was not that the talk was containing anything confidential but it was between air and ground, which was nothing that the public would be interested in listening to.

Airlines don't fly with the guys in the cockpit having their voices being broadcast to their passengers. It may be cockpit chatter but those guys wouldn't be flying anymore, you can place bets on that.

Essentially that's the way it is with the spacecraft. But when someone has to comment on the mission, it should be the guy in the cockpit. He's the guy in charge, he knows what's going on. The "Voice" should have been the guy in the cockpit, not someone else. I'm saying that in bitterness (140).

The magazines printed their stories quickly. Time wrote about the astronauts: "they fought off ennui as they plodded through the humdrum housekeeping and engineering duties necessary to prove their craft moonworthy.... For astronauts and space watchers alike, the high points of the week were the television shows." Life was forced to hold back on the personal stories until its December 6, 1968 issue. It was in those pages that Schirra openly criticized NASA's planners: "We were much too busy...for a first flight. It's easy to get cut from a flight crew but it is difficult for them to cut you down once you're in flight." Here, Schirra again defended his decision to not turn on the television camera that one morning. Most of his article was spent defending the crew's decisions. A person might have wondered if the ground controllers should have been given equal time. Then, Schirra alluded to the image of the astronauts, reporting that during the flight, when feeling dirty and grubby, he had turned to Cunningham and said, "Just think, people think we're up here dashing around as space heroes." In the end, Schirra finally admitted that he and other astronauts were not like other men--he put his pants on two legs at a time--in space, of course.

Eiesele wrote much about the computer and the problems encountered

with it. He wrote about it continually, all the way through his description of the reentry, when the computer finally died. Cunningham wrote about the physical aspects of weightlessness and how difficult it had been for him to sleep in space. Along with that, he discussed the space food and the cleanliness of the spacecraft during the flight. He also speculated on living a full life and mentioned the effects of the G-forces that had acted upon the astronauts during the ascent and descent (98: December 6, 1968).

Dora Jane Hamblin had a hand in those stories too. She did not write them and neither did the astronauts. The men had dictated them into tape recorders or to Hamblin. She writes,

In the case of the "flight stories" in Apollo, which were signed by the men but written by me, my primary concern was separating the important, salient and/or most interesting developments so that all three men did not tell the same story. I would tell them first to give me any personal reactions, then divide up the territory, so to speak, to let each develop a theme on part of the flight. Their own preferences obviously entered into this: one guy had the lunar module as his responsibility, one the command module, one the navigation, etc." (64).

Hamblin was not even allowed to take the stories to Life's offices for the editors to look at until the astronauts had held their first post-flight press conference. After that, along with NASA's clearance to make sure that no new technical material was being released, Hamblin took the stories to the editors, usually copy editor Joseph Kastner and managing editor George Hunt. However, she did not have to clear the stories with NASA that carried her own byline. She also stated that there were no guidelines given to her by either NASA or Life as to how she was to write her own stories or what questions she was to ask the astronauts (64).

On October 27, 1968, the Russians closely followed the Apollo mission with another space shot, their first successful manned mission in many years. Georgi Beregov, piloting his first mission in Soyuz 3, rendezvoused with the unmanned Soyuz 2 spacecraft. However, he did not dock with it, to the consternation of the Soviet public. It was thought

that the officials did not want to take such a risk with the Soyuz at that time. Like Apollo 7, Beregovi televised the images of the rendezvous and the interior of his spacecraft to the Russian populace. After more than 94 hours in space, the cosmonaut returned safely to earth (153: pp162-166).

On November 4, 1968, it was reported in Aviation Week that the Apollo 7 astronauts had shot more than 700 photographs during their mission. Then the writer noted:

The mission used a very high-resolution film developed for Air Force reconnaissance satellites...the Defense Department, State Department, Atomic Energy Commission and other agencies, for the first time, demanded seats on the NASA board selecting photographs for release (10: November 4, 1968).

The U.S. chose to not release all of the photographs. There was speculation that the photographs would reveal certain mineral deposits somewhere on earth and touch off a "buying boom." In London, British scientists and engineers argued that the U.S. refusal to release the photographs was the best argument that the Europeans had to develop a launching facility and systems so they would not have to rely upon the Americans. The United States defended its decision because, "the State Department does not like to release photographs of foreign countries, the Pentagon is worried about views of military installations [belong to what country?] and the AEC does not want its nuclear facilities shown..." (10: November 4, 1968).¹

On November 6, 1968, NASA published a policy statement concerning the release of information in future accidents. There would be an immediate announcement of the accident, said the statement, but the names of the victims would be held until the next of kin were notified. If the relatives were near the installation where the accident had occurred, then the notification of names would be given to the media

¹Not too long after the flight of Apollo 7, some citizens in Maine sent a request to NASA asking for a photograph, taken from space, of their state. NASA replied that no photographs of Maine were available. The citizens still wanted a photograph of their state and turned to another source--the Soviet Union. Sure enough, the Soviets supplied the desired photograph without much problem.

within one hour after the dispatch of information to the relatives. If the relatives lived farther away, then up to two hours would be allowed after the message had been sent to them before the news would be given to the media. That covered all personnel, not just the astronauts. But in case the astronauts were involved in another accident:

Procedures for public announcement of domestic casualties not related to space flight involving astronauts will be the same as for all other NASA personnel except that the MSC must be advised. If injury or fatality occurs in flight, provision will be made to advise the family but in no circumstances will the information be delayed more than 20 minutes (69: p43; 103).

In mid-November, the temporary administrator of NASA, Thomas Paine, told the nation the news about the next Apollo mission. It had been designed to be a repeat of Apollo 7 but there had been rumors since the middle of the previous August that Apollo 8 would orbit the moon.¹ On November 12, Paine made the news official. Apollo 8 would orbit the moon. There could be no lunar landing as the lunar module, necessary for a descent to the moon's surface, was not ready yet. But America was finally going to the moon (24: p294; 97: p440).

¹On August 19, 1968, the newswires had carried some stories that Apollo 8 might circle the moon. There was definitely support for this idea among NASA's employees. They looked upon the mission as simply changing the apogee (the farthest point of an orbit from the earth) from 4000 miles to 250,000 miles, the distance to the moon.

FINALLY, AN AMERICAN FIRST

Many Americans must have felt secure in that their country was finally going to do something first in the space race, which seemed to be going full steam again, despite the deaths of cosmonauts and astronauts. The Russian scientist Sedov had told the IAF in New York City on October 25, 1968, that the Russians were not going to the moon. Then Beregovi's flight had touched off speculation in the West that the Russians were gearing up to go to the moon anyway.¹ On November 10, Zond 6, another Russian moon satellite, went to the moon, orbited it and returned safely to earth. Thirteen days later, Tass declared that Zonds 5 and 6 were test flights preceding manned flights to the moon. On November 25, Ivestia, the Soviet government's newspaper, reported that the Zond spacecraft, with certain modifications, could carry cosmonauts (90: p279).

The next day, a UPI report from Moscow stated:

The Soviet Union is preparing to launch its most spectacular manned flight by dispatching shortly at least two, and probably three, men on a circumlunar flight. The moon flight, sources said today, may be undertaken before the launching of the American manned craft, Apollo 8, set for December 21 (162: November 23, 1968).

Finally, on November 29, Tass reported, "Automatic space probes always precede manned flights.... The space route earth-moon-earth has been opened" (90: p279).

The statements were more braggadocio than anything else. The Russians did not have a rocket as large as a Saturn V, which was necessary to put men in orbit around the moon, much less land on it. The Russians had not landed any spacecraft on the moon and could not be expected to do the same with a manned spacecraft if they had no experience (90: p280).

In an interview, flight director Kraft revealed why the objectives

¹Beregovi's flight was clearly one intended to go only around the earth but the thought that he had rendezvoused with another satellite led Western observers to think that the Soyuz 3 was a checkout flight, similar to Apollo 7 (which was a spacecraft designed for moon flights but relegated to earth orbit for that mission) (90: p279).

of Apollo 8 had been kept secret until only a month before the flight.

They [the Russians] knew our schedule for the earlier flights but Apollo 8 was kept quiet. We were aware that the Russians would try to get around the moon...and in the summer of 1968, we decided to chance on Apollo 8 around the moon. All of these problems were to scoop the Russians (93).

Kraft was right. The Russians were scooped and they were trying to impress the world with what they were "doing."

On December 1, 1968, Life magazine made another deal with the members of the astronaut corps. The editors of Life thought that they could put together a book about the first moon landing and they offered the astronauts \$200,000 as an advance against the royalties for such a book. This money was in addition to the \$200,000 that the corps received every year from Life. As he had done before, the astronauts' attorney, Paul Sawyer, passed on orders to Alan Shepard to instruct the other astronauts that they were not to talk to any non-Life writers about their personal feelings, except this time, according to writer Robert Sherrod, Sawyer cracked down so hard that "the newer astronauts were walking around with tape on their mouths" (146; 26: May/June, 1973).

Paul Sawyer talked of the book contract with this author in 1977.

Until Apollo 8, there had been a dearth of interest in the space program for quite a while. But Apollo 8 brought in a whole new ballgame--the men were going to the moon.

We brought in the book contract for the first moon landing right before Apollo 8. We were assuming that the book would be done by some famous author, whose name would make the book a runaway best seller. But, as it turned out, Life brought in two of their own writers, who were very competent still (134).

On December 9, 1968, President Johnson held a party at the White House honoring Jim Webb. The Apollo 7 and 8 crews were there with their wives. So was Charles Lindbergh. In all, 23 astronauts and their wives were at the Presidential Mansion that evening, including Cooper, Schirra, Slayton and Shepard. Much NASA brass attended and so did the widows of the three astronauts who had died in the fire at Pad 34 (85: p748).

Time came out with an article about the three astronauts of Apollo 8 in its December 6, 1968 issue. The article contained short

sketches about the men, their military backgrounds and their activities outside of NASA. Poet James Dickey, in another article in the same issue, was described as accepting an offer from Life to cover the launch, something he did because the astronauts had a deep significance to him. Dickey told the interviewer, "I can see life as hardly explored yet. These space guys are showing that miracles still happen."

Time's Houston bureau chief, Don Neff, wrote that the flight of Apollo 8 would be greater than the flyby of Mars by Mariner 4. Researcher Sydnor Vanderschmitt, in the editor's column, mentioned that her interest in space was revitalized because of the upcoming mission (she had already worked on 12 other cover stories about space) (159: December 6, 1968).

Life printed stories about the astronauts. Dora Jane Hamblin was featured in the editor's column; whoever wrote the column stated that Hamblin had established a firm relationship with the families of Apollo 8. Astronaut Bill Anders, the lunar module pilot (without a lunar module to fly), was pictured at ease in the backyard of his home. He spoke of having faith in his equipment. Jim Lovell was shown with his youngest son, Jeffrey, whom Lovell joked about getting away from for a few days in Apollo 8. He also spoke of having faith in his equipment. Borman was described as having the right temperment to command the mission. He, too, spoke of having faith in his equipment (98: December 20, 1968).

At a pre-flight press conference, Borman told reporters that he looked upon Apollo 8 as a means to clear the air of all suspicions that certain items would not work properly. He also hoped that the mission would remove doubts from many minds about sending men so far from their home planet for the first time. He said,

We designed Apollo, we said we were going to the moon...and... finally when we get down to examining the details and saying we are really going, people start getting a little queasy about it.... But I have no hesitancy about the hardware (24: p303).

Three days before launch, NASA's safety chief, Jerry Lederer,

almost undid the efforts to allay fears about the dangers of the flight. He said,

...[the mission would] involve risks of great magnitude and probably risks that have not been foreseen. Apollo 8 has 5,600,000 parts and one and a half million working systems, subsystems and assemblies. Even if all functioned with 99.9% reliability, we could expect 5600 defects... (24: p304).

A person might wonder why there was all this talk about having faith in the equipment. It was no doubt on everyone's minds but there is no record of orders to intentionally discuss it. It appears to be coincidental. Frank Borman, in a letter to this author, denies receiving any instructions to stress the safety of the equipment. So did Hamblin, who had written the articles in Life's December 20, 1968 issue (15; 64).

On December 21, 1968, the American people gathered at the beaches at the Cape and around their television sets across the nation. Friends of the Apollo 8 astronauts, who had received formal invitations from the crew, were at the VIP viewing stands three miles from the launch pad. Over 1351 journalists had signed in at the Cape to witness the first men leave humanity's three-billion-year-old cradle. When the engines of the Saturn 5 ignited, the eyewitnesses at the viewing stands could see the rocket lift off but heard no sound. Fifteen seconds later the sound waves came rippling across the sand and grass dunes and almost knocked the people off their feet. Apollo 8 was going to the moon (58; 69: p49).

Nearly three hours into the mission, the command module was in a "parking orbit" around the earth while the astronauts checked their spacecraft's equipment. Then they fired the third stage which had remained attached to them. For more than five minutes, the engines burned fuel, boosting Apollo 8 to more than 24,000 miles per hour to escape the pull of the earth's gravity. When almost five hours had passed since the launch, Lovell called to Houston about the view witnessed by men from the farthest vantage point ever.

Boy, it's really hard to describe what this earth looks like...the window is bigger than the earth is right now. I can clearly see the terminator /where night meets day/. I can see most of South America all the way up to Central America, Yucatan and

the peninsula of Florida (118: May, 1969).

Eleven hours after launch, Borman called Houston and asked permission to take a sleeping pill before he went to sleep. Houston concurred and, while Borman slept, Anders and Lovell kept busy doing other various chores but Borman had trouble sleeping. Soon, Lovell and Anders asked Houston for some radio silence so that their commander might sleep better. After sleeping about four hours, Borman became sick, threw up and had diarrhea. Houston did not know anything about this until the next day, when the ground controllers played back some taped telemetry that had been beamed down from the spaceship. In that batch of mechanical signals was a verbal ship's log made by the crew and, when the controllers listened to it, they heard the news about Borman's sickness. Lovell was then questioned about Borman by the ground controllers and he agreed with the tape. Soon after, Borman requested a private conversation with the astronauts' physician. While the regular controllers stayed in the primary control room, some others went one floor lower into a duplicate of mission control. From there, Dr. Charles Berry and an "elite group" of maybe six men discussed the situation. There was not much to the conversation, held in secrecy from the public's ears. Borman was told to rest and drink fluids. The Apollo 8 commander blamed his sickness on the sleeping pill but the men on the ground thought that it was the first case of motion sickness to occur in the U.S. space program. The Russians had always talked about their cosmonauts suffering from it, and now the Americans had "caught" it too. The American spacecraft of Gemini and Mercury had been too small for the astronauts to move about the cabins freely but the Apollo cabin offered plenty of room as did the Russian spacecraft. Lovell, too, had suffered some motion sickness at the beginning of the flight when he had taken some star readings, which required him to leave his seat and move into the lower equipment bay but he did not suffer as Borman did (118: May, 1969; 24: pp306-307).

Nearly halfway to the moon, the crew came on the airwaves with a television show. They attempted to photograph the earth but it was too

bright for the TV lens to record. Lovell demonstrated how to inject freeze-dried chocolate pudding desert with water. Anders showed how a toothbrush floated in the weightlessness and Borman seemed healthy again, much to the happiness of the controllers and obviously to himself (118: May, 1969; 24: p308).¹

At 50,000 miles from the moon, the crew finally could televise the pictures of the earth without difficulty and sent back the images. Lovell commented that if he was a space traveller from another planet, he would wonder if the earth was inhabited. He added that the earth looked like a "grand oasis in the great vastness of space" (118: May, 1969).

After three days of flight, Borman surprised some people on earth by stating that the astronauts had not seen the moon yet since their windows were pointed away from the small planet. With 17 minutes to go before the spacecraft disappeared behind the moon that Christmas Eve Day, it was still 1300 miles from the lunar surface. When five minutes were left, the astronauts had only 670 miles to go. Then Apollo 8 was gone from the view of the earth. Behind the moon, with no way to inform the ground controllers, the astronauts fired the SPS engine for more than four minutes to slow the spacecraft into a parking orbit around the moon (118: May, 1969).

When the command module reappeared and was in contact with earth again, Lovell described the view.

Houston, the moon is essentially gray, no color. Looks like Plaster of Paris. Sort of grayish sand... Coming up now are the old friends Messier and Pickering /craters/ that I looked at so much on earth. And I can see the rays coming out of Pickering. They look quite faint, like changes in the mare /lunar material/ (118: May, 1969).

A few seconds after Lovell spoke, Anders added his thoughts, saying, "...Earthshine is about as expected, Houston. Not as much detail of course as in sunlight, but you can see...(118: May, 1969).

¹However, the pictures from Apollo 8 failed to convince the Flat Earth Society in London that the earth was a globe. They considered the televised images to be showing only a flat disk (118: May, 1969).

During the second orbit around the moon, the astronauts turned their television camera on and transmitted pictures of the moon's surface to the earth. The astronauts continued to add their own commentary to the views.

...The color of the moon looks like a very whitish gray, like dirty beach sand with lots of footprints on it [Anders].

...There is no trouble picking out features that we learned on the map [Lovell] (118: May, 1969).

In the third orbit, Lovell rested, Borman navigated and Anders was busy shooting still and motion pictures. The astronauts made a mistake in the photography assignments. They were supposed to shoot some black and white film through various color filters except they mixed up the films and ended up shooting some color film through the filters, ruining that batch of film (118: May, 1969; 123b: p129).

While they orbited the moon, Borman read a prayer into the ship's log which was to be recorded on the ground and given to his Episcopal Church in League, Texas, where he was a lay preacher. Six hours after the television broadcast, Houston called Apollo 8 and told the astronauts what the reaction to the television show had been on earth.

Your TV program was a big success. It was viewed this morning by most of the nations of your neighboring planet, the earth. It was carried live all over Europe including even Moscow and East Berlin. Also in Japan and in North and Central American and parts of South America (118: May, 1969).

The flight of Apollo 8 also caused a first of another kind to be scored by the Americans. Radio Havana rebroadcast a transmission of the Voice of America, which had carried a tape of Apollo 8's mission. Never before had that happened.

However, the reception was not equally shared by some sports enthusiasts who had been watching a football game. The astronauts and ground controllers had kept in mind what had happened earlier in December when a television show, Heidi, had inadvertently cut into the telecast of another professional football game--the protests had been voluminous. Apollo 8's broadcast from the moon caused a similar, smaller storm of

protest when about 2000 callers complained to CBS in New York about the disruption. Even in the astronauts' own neighborhoods in Houston, the television program failed somewhat to draw the children to the TV sets sets--Santa Claus was going through the streets at the same time, providing competition (8: p146).

In the 85th hour of flight, on Christmas Eve, the astronauts sent another telecast to earth. Each man took a turn describing what he saw as the electronic eye of the camera scanned the lunar surface, only 70 miles below. Then, as the spacecraft approached the terminator where there was sharp contrast, Anders said, "For all the people back on earth, the crew of Apollo 8 has a special message that we would like to send to you." With each astronaut speaking a part, they read the beginning verses of Genesis and then wished everyone a Merry Christmas (118: May, 1969).

Their reading of the Bible caught everyone off-guard. The chief of the PAO at Cape Kennedy, Gordon Harris, wrote in his book,

The spontaneity of timing increased the impact of their action while also triggering a shrill protest from agnostics who tried to convince the federal court that astronauts had no right to express religious sentiments in outer space. That backfired against the atheists when thousands of God-fearing people petitioned NASA to allow the astronauts freedom to do as they wished. Action protest and reaction made news (69: p61).

A Japanese newsman called a PIO to request a copy of the script from which the astronauts had read. The PIO referred the foreign correspondent to the Gideon's Bible in the reporter's hotel room. For Julian Scheer, the reading of the Biblical passages was "the biggest thrill" of his life and he still considers it that way. For many people, their emotions possibly paralleled what Scheer had felt. Apollo 8 had come at the end of a very depressing year. Vietnam was dragging on. Martin Luther King, Jr., and Robert Kennedy lay slain by the hands of assassins. Chicago's Mayor Richard Daley had unleashed his

¹Borman later considered the reading of Genesis to be a success because a Catholic--Anders--had read the King James version of the Bible.

police upon the protesters at the Democratic National Convention, turning it into shambles and perhaps costing that party the Presidential election. The flight to the moon was an optimistic note on which to end the year (90: p305; 8: p155; 137).

After the television show that evening, Apollo 8 disappeared behind the moon a few more times and then, during the last time that it was hidden from earthlings' sight, the big SPS engine burned again for about three-and-a-half minutes. As the spacecraft came into radio contact with earth, Lovell called out, "Please be informed there is a Santa Claus!" (118: May, 1969).

On their way back, the astronauts transmitted one more television show, about 110,000 miles from earth as their speed was increasing due to the pull of the earth's gravity. From the end of the telecast until about 30 minutes before the reentry, there was not much excitement on the recorded log of the spacecraft. Apollo 8 approached a very narrow corridor in which to enter the earth's atmosphere. If the ship plunged too steeply, it would burn; if the astronauts aimed too high, they would bounce off the atmosphere like a stone skipping off water to be lost forever. At 25,000 mph, Apollo 8 hit the outer fringes of earth's air and became a fireball of 5000 degrees as the astronauts had aimed their path for reentry perfectly (118: May, 1969).

When they hit the water, the men in Mission Control went wild. The controllers waved tiny U.S. flags and started smoking their traditional post-flight cigars. Miles away, the astronauts were hoisted into helicopters and taken to the aircraft carrier Yorktown, which was floating near the splashdown point. It was a momentous occasion for everyone (118: May, 1969; 24: p312).

Congratulatory messages poured into the U.S. from across the world. The Soviet Union and other Communist nations sent them too. Everyone was impressed by the flight. Dr. Gilruth remarked in an interview later, "When Apollo 8 got to the moon, the race ended. We had really broken the back of their [the Russians'] opposition.... That was the driving

force." What Gilruth meant was that it had been the Russians who had provided the impetus for the Americans to go to the moon. Flight director Kraft said that once Apollo 8 was flown, it was easier for the rest of the flights to be accepted by the public as there was now confidence in the ability to send men to the moon (118: May, 1969; 93; 48).

The media went wild too. Newsweek carried a composite photograph of the Apollo 8 astronauts, their spacecraft and the moon on its cover for the January 6, 1969 issue. That issue contained the televised pictures and scenes of the astronauts' wives and children. The story was complete, even to the point of telling how the astronauts had increased their speed accidentally by venting urine overboard. There was a special section describing how the craters on the far side of the moon acquired their names. U.S. News and World Report had a subheadline announcing the "trail-blazing flight of men from earth around the moon and back. The journey packed with 'firsts' almost guarantees Americans will walk on...the moon by mid-1969." The usually non-emotional news magazine wrote that the astronauts "made it seem easy. They were cool, non-ruffled--even laconic in tone." The editors of that magazine had a quote about the astronauts from NASA Administrator Tom Paine: "It was a triumph of the squares." Borman said, "We're the last of the good guys." The magazine carried brief biographies of the astronauts, content to describe the mission more than the men. But without the men, the media would not have had the interest in the mission that they did. The international competitiveness showed when the writers of U.S. News and World Report pointed out that the three Apollo 8 astronauts had more than twice the time in space of the entire Russian cosmonaut team. Ironically, the usually fact-conscious magazine slipped when it reported that the astronauts had to cope with the cold and heat of space, as if they were personally fighting them all the way to the moon and back. Such was not the case; the spacecraft took care of that job for them. The only trouble the astronauts encountered was their motion sickness (163: January 6, 1969; 122: January 6, 1969).

The next issue of Newsweek carried eight pages of Apollo 8 color photographs of the moon and the earth. Accompanying the photos was a short comment, including the following paragraph.

Home safely from the moon, Apollo 8 astronauts Frank Borman, James A. Lovell, Jr. and William A. Anders found themselves relentlessly earthbound last week. They had to submit to endless briefings and confront.... ..mail and telegrams...all proof that their lives will never again be free of the moon's influence (122: January 13, 1969).

National Geographic joined the crowd of publications printing stories about the mission. Its May, 1969 issue was packed with photographs and the article was written by General Phillips, the Apollo program director, who used radio transcripts (including those of the television shows) and his own commentary to describe the flight (118: May, 1969).

Time named Anders, Borman and Lovell as its "Men of the Year." It reported that although the men had not erased the other events of the year, they had overshadowed them. They were also privileged, said Time, to put their names alongside of Lindbergh, Captain Cook, Marco Polo and the arctic explorer, Amundsen. The Apollo 8 astronauts "risked their lives," and had "courage, grace and cool proficiency...." Time also commented that in the wake of the "rollicking Wally, Walt and Donn" show, Apollo 8's television shows seemed businesslike, almost staid yet exciting (159: January 3, 1969).

On January 6, 1969, astronauts Mike Collins, Buzz Aldrin and Neil Armstrong were called into Deke Slayton's office. As they stood there, Slayton simply said, "You're it." They knew what he meant--they were going to land on the moon (2: p201).¹

On January 9, 1969, the Apollo 8 astronauts journeyed to Washington, D.C. to meet President Johnson at the White House. When the President presented medals to the astronauts, he said that they represented all nations, all races, all religions and all of the

¹Collins had originally been a member of the Apollo 8 crew until he had to undergo an operation for a pinched nerve in the neck. He was replaced by Lovell. In turn, Collins, upon verification that the neck operation would not impair his flying abilities, was put back to the Apollo 11 crew, bumping Fred Haise, the original command module pilot for that mission (24: pp312-313).

ideologies of the people of earth. In return, the astronauts presented the President with a photograph of his ranch, taken from the vicinity of the moon. Following the White House ceremony, the astronauts went to Capitol Hill where they addressed a Joint Session of Congress. They then went to the State Department where the men held their first post-flight press conference. Julian Scheer introduced the men and stepped away quickly to let them answer the questions thrown at them by the reporters.¹ After that was finished, they retreated to the White House once more for the last big bash thrown by the President. Not only were the Apollo 8 astronauts there but so were all other astronauts, past and present.² That same day, it was officially announced that Collins, Armstrong and Aldrin would be the men going to the moon on Apollo 11 (24: p312; 137; 122: January 13, 1969).

The next day, the Apollo 8 astronauts continued on a journey that might have been harder than the one they had flown to the moon--the journey of tours, speeches, handshakes and interviews. They went to New York City for a tickertape parade on "Apollo Way (Broadway was renamed for that day)" and a visit to the United Nations. They then put in appearance at football's Super Bowl. Next there was a parade in Houston. A spot in President Nixon's inaugural parade was saved for them, complete with a command module and a replica of the lunar module. The old days of NASA had returned. The American public thought so too. After years of absence, the heroes were back (122: January 13, 1969).

¹All of the crews flying the remainder of the Apollo flights would now hold their post-flight press conferences at the State Department (137 (137)).

²Except John Glenn. See p142.

THE CHECK-OUT FLIGHTS

On January 14, 1969, the Russians went at it again, launching Soyuz 4 into earth orbit with cosmonaut Vladimir Shatalov aboard. The next day, another Soyuz was launched, carrying three cosmonauts, Yevgeni Khrunov, Boris Volinov and Alexei Yeliseyev. The day after Soyuz 5 was put into orbit, the two ships docked, achieving the first linkup between two manned spaceships. As the spacecraft docked, Volinov made a bad choice of words and broadcast to the world, "He's [] Shatalov in Soyuz 4 [] raped us" (153: p169; 159: January 24, 1969).

After the docking was completed, cosmonauts Yeliseyev and Khrunov transferred to Soyuz 4, thus effecting the first crew exchange in space. Aviation Week reported that the cosmonauts had studied how a rescue mission would be performed if one was ever necessary. On January 17, Soyuz 4, with its expanded crew of three, returned to the soil of Russia and on the next day the lone Volinov followed suit in Soyuz 5 (153: pp169-176; 10: March 17, 1969).

Apollo 9 was due to be launched on February 28, 1969 but it was postponed for three days because the astronauts had caught the common cold. The delay caused by the colds cost NASA \$1.5 million. On March 3, astronauts Dave Scott, Jim McDivitt and Rusty Schweickart were ready and walked to a van from their suiting room to be taken to their command module, sitting more than 300 feet above the ground. A few hours after they were sealed inside the spacecraft, their large Saturn 5 vibrated the ground and roared into earth orbit (8: p159).

The purpose of Apollo 9 was to check out the lunar module in orbit around the earth. In the shadow of Apollo 8, this flight seemed less dramatic. Even flight director Kraft mentioned that fact, yet added that Apollo 9's flight was more complex and "is even more dangerous than Apollo 8" because of the work required of the astronauts in maneuvering the two spacecraft apart and together (90: p204; 8: p159).

The "less-important" attitude towards Apollo 9 prevailed throughout the media. Although the flight was more complicated than the previous

flights, it lacked the excitement that Apollo 8 had generated. Two hundred fewer journalists (1,107) than had been at Apollo 8's liftoff for the moon witnessed the launching of Apollo 9. After the flight, only 15 articles about the mission would appear in magazines as compared to 33 which had been written on Apollo 8 and 21 about Apollo 7 (127: March, 1968-February, 1969; March, 1969-February, 1970).

When the command module (CM) separated from the third stage of the Saturn, the astronauts turned it around and docked with the lunar module (LM), which was nestled in the upper portion of that stage. Slowly, they withdrew it from the unit and, later, astronauts Schweickart and McDivitt entered it to "power up" the LM's systems. Eventually, the astronauts separated their two spacecraft to a distance of 100 miles and docked again after a chase around the earth. Once the rendezvous had been completed, the mission was 97% accomplished.

Another aspect of the mission called for Schweickart to put on a Portable Life Support System (PLSS) backpack, which would be used by astronauts on the moon's surface, and make his way from the LM to the CM while the spacecraft were docked. He was to do this to see if the transfer could be completed in case the tunnel joining the two spacecraft became impassable.¹ But before Schweickart could step outside the LM, he became sick and vomited twice while still inside of the spacecraft but not in a totally enclosed spacesuit. NASA ordered the spacewalk forgotten lest Schweickart vomit in his helmet, blinding himself or perhaps even suffocating to death. Another request for a private conversation came from the astronauts and, once more, a group of select individuals went to the alternate control room to discuss the situation. This time, the astronauts did not want it disclosed to the public that Schweickart was sick. They were embarrassed and resented the public disclosures of the astronauts suffering diarrhea and nausea. Slayton wanted to hold back the news of the private conversation but Gilruth and others said no--it had to be released. Soon, there was a begrudged compromise

¹The astronauts in the LM had to return to the CM since the CM was designed to reenter the earth's atmosphere; the LM could not do this as it was not able to protect the crew from the heat of reentry.

and Gilruth ordered the release of a statement paraphrasing the conversation. The astronauts were furious. Said one astronaut on the ground, "I'll never tell the ground a God-damned thing from up there." The situation went before Tom Paine (who had just been appointed as the permanent administrator of NASA) and he ordered a "hold" to be placed upon the information. The media suspected that vital information was being held back and tension soon was in the air (159: March 14, 1969).

Dora Jane Hamblin commented on this aspect of reporting in a letter:

They [the astronauts] were always complaining that they couldn't mention physical problems without having all the world know about them and they repeatedly asked for more privacy in these areas. They wanted to tape record, for example, episodes of air sickness or urinary problems, etc., so that the medics could examine everything after the flight, instead of discussing them over the open microphones from the spacecraft to flight headquarters. Reporters could hear all those open reports and pounced on them, to the disgust of the guys. I tend to agree with the men (64).

Rusty Schweickart also offered his opinion about how he felt in regards to the public looking in on his activities, although he was not referring specifically to the problems he encountered during Apollo 9, in a letter.

It gets a little like being an animal in the zoo--everyone gawking and somehow having the right to probe and poke.... I am [Schweickart's emphasis] somewhat private about my activities...(142).

Obviously, Julian Scheer was not kidding when he once remarked that NASA had such an open information program that "the world knew every bowel movement of every astronaut" (137).

The tension about the withheld news cleared the next day when Schweickart felt better, and in agreement with McDivitt and Scott, decided to perform an abbreviated EVA.¹ The two spacecraft were depressurized and, slowly with an inch clearance, Schweickart backed out

¹Just how the matter was resolved and how Time acquired the information about Schweickart's troubles is not known to the author.

of the LM onto its "front porch" where he stood for 46 minutes. In the CM, Scott opened the hatch and stood in the opening. The two astronauts shot pictures of each other, ignoring the calls of the Capcom.¹ At one time, the Capcom pleaded, "Hey, does anyone up there read me?" Schweickart went back inside the LM, secured the hatch, and, upon the tenth call from Houston, the astronauts decided to finally answer (159: March 14, 1969).

Apollo 9 marked a return to naming the spacecraft, this being done out of necessity since there were now two spacecraft in flight at once and they could not both be "Apollo 9." The CM was called "Gumdrop," The LM that Scott described as "the biggest, friendliest, funniest-looking spider I've ever seen," was named, appropriately, "Spider." During the walk in space, Schweickart, too, needed a call sign and, since the red-haired astronaut was wearing a bright red helmet, he was aptly nicknamed, "Red Rover." When the EVA was over, PIO Jack Riley told the world, "You've heard it here...[the] adventures of Red Rover and his friends, Spider and Gumdrop" (159: March 14, 1969).

The rest of the flight was exceptionally quiet. The astronauts sang "Happy Birthday" to Kraft and to their secretary. The ground controllers beamed up news and sports scores. At one point, the controllers allowed the astronauts to oversleep a wakeup time by two hours. One day during the flight, a NASA official said that the highlights of that day would be the "sleep cycle and the wake-up period" (159: March 21, 1969; 122: March 24, 1969).

On a Sunday during the mission, Julian Scheer called the manager of the Beatles to request permission to use the song "Yellow Submarine" in a presentation about Apollo 9. He was sold the rights for that use for only one dollar, possibly the most inexpensive sale of Beatle material ever made (137).

When Apollo 9 was scheduled to reenter on March 13, the astronauts looked with worry upon their intended landing zone below. They called

¹The Capcom was always another astronaut and was the only member of the ground control team allowed to speak to the flight crew since astronauts, like all pilots, tend to have a language all of their own.

down and discussed with Houston what the controllers had been reluctant to tell them--that the landing site was choppy and stormy. It was decided that the astronauts would go around the earth once more than they had planned to do; this additional orbit would put the crew in the water about 535 miles to the south of the original splashdown point but still within range of the recovery forces. The Apollo 9 astronauts then separated from the unmanned "Spider" for the last time and also jettisoned the big Service Module, which supplied the bulk of the CM's oxygen, electricity and maneuverability, as the procedure called for doing. In the CM, the only portion of the entire Saturn 5 rocket which was aerodynamically designed to reenter the earth's atmosphere without burning up, the astronauts watched the flames of reentry glow around their windows. They settled onto the calm water of the Atlantic Ocean within sight of the television cameras which beamed back the sights live to the American public (10: March 17, 1969; 122: March 24, 1969).

The March 28, 1969 issue of Life showed the return of the Apollo 9 astronauts to earth and Houston but not much else, except for a poem that had been written by Scott's daughter, Tracy. There were no personal stories in any of the later issues. Again, the personal stories may have been bumped by other news. The next week's issue of Life carried the stories about former President Eisenhower's death and funeral (98: March 28, 1969, April 4, 1969).

Schweickart, several years later, remarked in a letter,

As to our Apollo 9 stories in Life, I do not recall exactly what happened (and do not care either). To the best of my knowledge, we did write and they did edit and publish--but, if you /referring to the author/ have not found them, perhaps my memory is leaky. It is just not important to me (142).

Apollo 10 was hard on the heels of Apollo 9, coming only two months afterwards. The number of journalists who attended the launch this time was up from Apollo 9, now being 1,519, the most ever for a launch to that date. There had been much speculation that Apollo 10, designed to be a checkout of the LM around the moon, would conduct a landing but NASA had

ruled out that possibility publicly on March 24. One reason was that Apollo 10's LM was too heavy for such an operation and another was that the lighting conditions on the moon, at the planned time of arrival of the Apollo 10 crew, would not be the best in which to attempt a landing. Mike Collins, in his book, writes that if he had had his way about scheduling the missions, he would have delayed the launch of Apollo 10 until Apollo 11's lighter lunar module was ready; he would then have given that LM to the Apollo 10 crew and ordered them to go for the landing. Despite the fact that many people wanted Apollo 10 to land on the moon, its commander, Tom Stafford, the rendezvous expert of Gemini 6 and 9, believed in trying out the LM first and probably would not have wanted to have been the first man on the moon (24: pp326-327; 69: p49; 10: March 17, 1969).

Almost as soon as the astronauts of Apollo 10, Stafford, Gene Cernan and John Young, were in space on May 18, they began one of the most televised odysseys in space history. They carried the first color television camera aboard any spacecraft and used it to the hilt. The addition of a small black and white monitor also made it easier for the crew members to see what they were showing to the folks back home. The first show lasted 22 minutes and illustrated the docking of the CM to the LM, still in the upper portion of the third stage of the Saturn. The next show was of the CM's interior and the crew performing its tasks. Four hours after liftoff came the third show, lasting for 13 minutes, as the spacecraft separated from the third stage. Then, at 21,000 miles out, only an hour after the previous show, the men televised pictures of earth to earth (10: May 26, 1969).

The reason for the saturation of television signals pouring from Apollo 10 was the attitude of the crew. Tom Stafford had been in charge of developing air-to-ground television communications almost from the time he joined NASA in 1962. He wrote in Life later,

I fought long and hard to get that high resolution color television camera on board. We had had black and white on board before but it didn't produce the total grandeur in spectrum that we had all seen in space.... I really wanted to show it and share

it because it belongs to all people and I have been happy to learn that they appreciated it (98: June 20, 1969).

Gene Cernan, the LM pilot for the mission, was called "the most PR conscious astronaut of them all," by NASA Protocol Officer Gene Marianetti. In Life, Cernan stressed the importance of having live television on the flights because "what you're seeing didn't happen yesterday and you're not watching a replay. You're watching history as it happens." An AP reporter quoted Cernan as saying that the crew elected to take the television camera on the mission so the public "can see what's behind the 'Gee whizzes' and 'Oh gollies' that we speak of during the flight" (8: p169; 98: June 20, 1969).

Roy Neal, of NBC News, offered this author an additional explanation of how the color TV camera got on board the command module.

We had been trying for years to get NASA to put television cameras in the spacecraft. Chris Kraft told NASA that if the missions to the moon weren't going to have cameras on board, then he was going to back out of the entire deal.

After Apollo 7--this was the first flight with TV, an RCA black and white which the crew used to deliver some pictures to earth and Stafford and Cernan were acting as Capcoms for this mission so they could see first hand what was being sent back--there was this party. Stafford, Neil [Armstrong] and Cernan were there. They saw the RCA man there and someone said, "Pretty lousy TV today!"

Well, in the crowd was this little man who made some remark about being able to put color TV in the spacecraft. Stafford got interested in what this little man was saying and soon Stafford was in a back room with papers spread all over the place with a top RCA engineer. Stafford said he wanted color on his mission.

Westinghouse and CBS were able to supply off the shelf equipment which worked. It was a TV camera where different color filters revolved around in front of the lens and another unit on the ground would then be in synchronization with the one in the spacecraft so the images on the ground would come out in color, not in black and white....

Another thing about the crew. Deke Slayton was opposed to holding direct interviews with the members of the crew so they supplied the networks with ten hours of videotaped interviews of what would be happening with Apollo 10 covering all aspects of the mission (119b).

John Young was the pilot of the command module for the mission and

he wrote in Life that, at first, he was against the use of the television camera but its "recording" values changed his opinion about the use of it; it seems that the PR value of the camera did not impress Young. According to a source at NASA, whose name best not be revealed by the author, Young is sometimes indifferent to the public relations aspects of NASA. It was said by this source that Young had divorced his first wife just before the Apollo 10 but he did not inform anyone at NASA about it. This caused some embarrassment to NASA when some reporters approached his former wife, Barbara, only to find out that she was not his wife anymore. As the source stated it, there was a quick "dressing down" of Young by several of the NASA hierarchy for not letting the space administration in on the knowledge of his divorce (98: June 20, 1969).

Roy Neal offers his opinion of Young:

John doesn't enjoy being in front of a microphone. He realizes the requirement of doing PR work because of his buddies. He protects his men / Neal said this in 1977 when Young was in charge of the Astronaut Office in Houston / yet he opens up and when he does, he is spectacularly good, especially in explaining the work that the astronauts do (119b).

With a crew of two astronauts who loved the television camera for its PR value and another astronaut who liked it for its recording values, Apollo 10 swung into lunar orbit three days after launch. From there, the astronauts beamed back another television show from a height of 61 nautical miles above the lunar surface. The Apollo 10 astronauts were earning a reputation for being the salesmen of the space program. During one telecast, the astronauts increased their airtime from 15 to 72 minutes and the networks objected strongly about the loss of their valuable time (8: pp169-170; 10: May 26, 1969).

As they orbited the moon, Stafford and Cernan floated into the LM, codenamed "Snoopy" and, after sealing the tunnel, separated from "Charlie Brown." While Young kept a vigil for them in the CM, Stafford and Cernan descended to a little less than ten miles to "barnstorm" the moon, as one Life writer put it. During their "barnstorming," the LM pilots overflew a mascon (a mass concentration of heavy lunar material

which exerts a gravitational pull that is stronger than the rest of the surrounding lunar area) and Snoopy was jostled into a wild rotation. Cernan called out, "Sonuvabitch!" (which was appropos for Snoopy) and the entire world heard every syllable.¹ The situation was not as serious as some people might have then thought--that the LM would plunge to the surface of the moon--and the astronauts regained control quickly to complete the rest of their barnstorming. As they continued to fly above the lunar surface, Stafford photographed geological details until his camera malfunctioned. Then he let loose the second set of choice words: "Ah, shit!" The public did not take too kindly to the astronauts using profane language in the heavens and many people let NASA know their feelings. But the media came to the rescue of the LM pilots, stating that the men had every right to say what they did if the going became tough. Buzz Aldrin states in his book, "Besides preparing the way for our flight, Tom and Gene were also establishing the reality of the astronauts--we were, after all, human." At the Cape, someone hung a sign that read, "The Flight of Apollo 10: For Adult Audiences Only" (8: p176; 2: p207; 10: June 2, 1969).

While Cernan and Stafford went about dipping down close to the moon and back up, Young was busy circling the planet, taking photographs and performing other experiments. He later commented that "I was so busy that I didn't feel lonely. The moon fascinated me like Africa once did" (98: June 20, 1969).

The two spacecraft joined again and Stafford and Cernan left Snoopy for the larger cabin of Charlie Brown. Then they jettisoned the LM to leave it parked in a lunar orbit. A little while later, they fired the SPS engine to return to their home. On the way back, a voice broke some news to the world: "We are in the process now of commencing scientific experiment Sugar-Hotel-Alpha-Victor-Echo. And it's going

¹Cernan's exclamation caused Collins to later write, in jest, that Cernan should have had his Boy Scout membership revoked and that NASA had to hire four more secretaries to handle the influx of mail from people who did not care for such language.

to be conducted like all normal human beings do it." What the men were doing, for the first time by any astronaut, was to shave in space. Just before launch, Deke Slayton had gone to a local store at the Cape and had bought brushless shave cream for about \$2.50. That, with a normal razor, worked well since the cream kept the whiskers from floating about the cabin. This may seem insignificant but the Whirlpool Corporation had spent \$10,000 of tax money to develop a shaver for space use, which failed (10: June 2, 1969; 98: June 20, 1969).

On May 26, 1969, the crew of Apollo 10 returned to the waters of earth and went through a series of debriefings. The number of articles written about the flight in magazines did not increase significantly from the number about Apollo 9 (only 16 compared to 9's 15), but there was interest. Aviation Week, in one issue, carried 13 pages about the mission, most of them being written material describing the mission in detail. Life published the astronauts' personal stories and the other news magazines published their load of stories of the flight. U.S. News and World Report scooped everyone else in the magazine trade by announcing, in early June, that Neil Armstrong had been chosen as the man to walk first on the moon but it erroneously reported that he and Aldrin would explore the moon for 22 hours. As it was, they were on the moon in the LM for about that time but they walked on it for no more than three hours (98: June 20, 1969; 10: June 2, 1969; 163: June 2, 1969).

The stage was set for what many people regard as the most momentous occasion to happen in the history of humanity. According to NASA's launch schedule, the next flight was the one to put men on the moon.

THE MEN ON THE MOON

In early 1968, Julian Scheer sent Dr. Gilruth a memo discussing the philosophy of the PAO. He stated that the PAO was to be neither passive nor aggressive but largely reactive and "not seek coverage of space but.../would/ break our backs making our facilities and our people available." Scheer added that there would be no "free rides, no free meals, no glad-handing." Then Scheer changed the subject of the note to discuss Gilruth's chief PAO at MSC, Paul Haney. Haney was acting out a dual role; he was almost devoting himself fulltime to being the "Voice of Mission Control" while trying to control the overall operations of the MSC's Public Affairs Office. Scheer, who had fired Powers in 1963 for doing the same thing, had not changed his attitude at all towards his personnel being in the limelight and he wanted Haney to cease this practice (56: p616).

Scheer preferred not to fire Haney though so he instructed him to do one of two things: Haney could either retain control of the PAO under Gilruth and drop the practice of being the "Voice;" or he could continue to work with mission commentary and be replaced as the head Houston PAO by someone else. Scheer claims that there was tremendous interest by the media in the flights and they were not totally satisfied with the job that Haney was doing since he was doing one too many things to be effective. Scheer also told this author that some of Haney's staff acted as if they had their hands tied because of their boss' dual role, which did not allow him time to concentrate fully on making decisions about the office's operations. Haney chose to accept neither alternative and he wanted to remain as he was (137).

Then Scheer offered Haney a chance--before Apollo 10--to stay with NASA. He ordered Haney to come to Washington, D.C. for a while and skip that mission so the two men could straighten out their differences. After that, Scheer said, Haney could return to the PAO in Houston and handle the publicity for the lunar landing. The friction continued though. As it finally ended, Scheer and Gilruth conferred on the matter

and Gilruth fired Haney just before Apollo 11. Yet Scheer was blamed for Haney's dismissal. He commented, years later, that he felt "like the President firing the Air Force One pilot" (137; 47).

Gilruth said in an interview,

Things just weren't working out with Paul. It's tough to be a Public Affairs man and a front spokesman. He feels that he is doing the job and yet he is not representing the program. Haney did too much... Julian took the rap for firing Haney, not me.

He [Haney] was the best man we've ever had (47).

Scheer said that Haney took a parting shot at his Washington boss by stating that Scheer wanted to handle the commentary himself. Scheer claims that he never wanted to sit in front of a console telling the world about the missions nor did he want to sit through long hours of simulations to familiarize himself with the different aspects of the missions. Scheer then sent Brian Duff down to Houston to take over Haney's position. Duff did not become the "Voice," however. That responsibility was given to a number of people, including Jack Riley, Doug Ward, John McLeaish and others. No longer could the "Voice" be identified with only one or two people as it had been when Powers and Haney were associated with it (137; 56: p616).

Scheer shifted the PAO into high gear for the Apollo 11 mission. He made three broad changes in the standard operations of the public affairs office for the mission: 1. he did not care for the round-robin type of interviews where one astronaut of a crew talked to the newspaper reporters, another to the radio-television folks and the third to the magazine writers. Scheer claimed that this produced a stereotyped character. Now, he wanted the astronauts to be accessible to the public. He advocated taking Armstrong to his native state of Ohio where he would be filmed by NASA so the television networks could use the film during the mission to show the public some of Armstrong's background. Scheer wanted to do this since the networks needed "human" stories about the astronauts to air during the long mission. Otherwise, the telecasts would become repetitious. Slayton gave in grudgingly to this request.

He allowed more reporting about the crew to be done while they were in training but he drew the line when reporters wanted to contact the families. Slayton said, "Landing on the moon does not change that [the Life contract with the astronauts for their personal stories];" 2. Scheer arranged for a pool of five members of the media to be present to observe the final rehearsal for the EVA (the moonwalk in this case) and he set up press conferences with the astronauts to be held only five days before the launch; and 3. Scheer then had members of the NASA hierarchy write material for a project planned by the New York Times. He next went over the lists of people who had been invited to the launch and expanded it, bringing in people who had never been to a launch before (56: p617).

For Apollo 11, Scheer became more aggressive than normal in administering the public affairs work. He used the public interest in the moon mission as a lever to force others within NASA to accept his theories (56: p617).

On June 15, a reporter from the New Yorker arrived at MSC. Henry Cooper had arranged with his editors to stay in Houston from long before the mission began until days after it ended. Cooper said in an interview,

Because of the nature of American journalism, reporters can't do follow-up or preliminary stories. Very few magazines and newspapers let their reporters go from beginning to end. I had an advantage.... Because of the nature of the New Yorker, I had a unique approach. Everyone else had a deadline, I had none.... I was doing it out of my own interest (28).

For nearly a month, Cooper was practically the only reporter in Houston, outside of those who were there regularly as part of a beat. His persistence would pay off at a later date when he wrote a book about the almost-disastrous flight of Apollo 13 where his knowledge about NASA's operations showed to his advantage (28; 27).

On June 16, press briefings commenced in Washington, D.C. at NASA Headquarters when NASA released a 250-page press kit for the mission (in comparison, the Gemini 3 press kit had had only 48 pages). Out of retirement came Howard Simon of the Washington Post, who had last

covered the Flight of '76 about two-and-a-half years before. He was now an editor for the newspaper but decided to handle one more space mission by himself (69: p29: 151).

As things moved closer to the launch date, July 16, everything moved at a faster pace. Yet, on the Fourth of July weekend, the astronauts took time off and went home to be with their families. At the Cape, hotel prices for the weeks of the launch went up to \$60 per night. Car rental agencies were pulling in cars from all over Florida to the Cocoa Beach area. Apartment landlords raised the rent for visitors using their facilities (8: p186).

On July 5, the astronauts held a press conference in Houston. They were on a stage surrounded on three sides and overhead by a plastic enclosure. Behind them were fans to blow the air away from them into the audience of reporters. NASA had had enough trouble with colds and other sicknesses in the past and wanted to take no chances with the crew of Apollo 11. In the crowd sat author Norman Mailer, who later wrote a book about the Apollo 11 venture, Of A Fire On The Moon.¹ Mailer in the book, seems vicious towards what he saw at the press conference. He calls Armstrong "wooden" and "remote" in his appearance. Mailer also suggests that Armstrong would have been "more extraordinary in fact if he had been a salesman making a modest, inept, dull little speech for then one would have been forced to wonder how he got his job..." Aldrin, writes Mailer, was like a tank, dull and ponderous who talked in his own technical jargon, unable to translate his thoughts into everyday English. Collins, on the other hand, is described by Mailer as a man who joked about things, was cunning and shy yet supplied a good ending to the press conference. Mailer notices that Collins was not asked many questions and the author suggests that the layout people of magazines would more than likely lop Collins off the pages (98: November 14, 1969).

Two interesting comments were made by Armstrong during the press

¹The book bombed in book sales.

conference. In the interview for the magazine writers in the Lunar Receiving Laboratory (LRL; where the astronauts and the moon material that they would bring back would be quarantined for three weeks upon their return), Armstrong seemed to tell the reporters that he would be a hero on his own terms, not those dictated to him by the media nor the public. When asked if his privacy was invaded, Armstrong replied, yes, but "we're required to do these things [talk to the media] just as salmon swim upstream" (98: November 14, 1969).

Mailer was writing his book for Little and Brown publishers, a subsidiary of Time, Inc., but Time, Inc. was not a part of Life and for that reason, the astronauts were excluded from talking to him because of the book contract they had signed with Life. His contact with the astronauts was very limited. Armstrong told writer Robert Sherrod in 1971, "I understand Mr. Mailer's exposure to me is confined to one press conference" (26: May/June, 1973).

Paul Sawyer, the astronauts' attorney, says that although Mailer was writing for a subsidiary of Time, Incorporated, the astronauts had never been offered any money by Time, Inc. to help write Of A Fire On The Moon. Sawyer also says that Mailer told the people at Time, Inc. that he did not need to talk to the astronauts in order for him to successfully write his book (134).

There was another press conference at the Cape two days before the launch--this one was televised completely with the astronauts in a near empty studio and the reporters in another location so the astronauts would not have to be exposed to any germs that the reporters might be carrying. The crew wore brightly colored beach shirts as they fielded the reporters' questions. Armstrong handled most of them. Collins said that he was embarrassed by the position in which fate had put him; he requested that the newsmen take it easy on his family while he was gone. Again, it was Collins who appeared to be the most relaxed of the crew (178: pp260-261; 8: p184).

Dr. Charles Berry caused a minor flap when he announced that he

would not allow President Nixon to eat with the astronauts the night before the launch. Again, the reason was fear of germs. Astronaut Borman criticized Dr. Berry for cancelling a prime morale booster. As it was, the President did not show for dinner that night. Collins writes in his book that the episode offered some comic relief for the astronauts because it seemed ridiculous to prevent them from coming into contact with the President since they were in daily contact with dozens of other people. The President found himself thrown into a touchy situation, explains Collins. If the astronauts became sick in space, the President could then be blamed and, even if they did not turn sick, he would be held as having disregarded the astronauts' physician (who was rarely seen by the astronauts and seems to have been held in contempt by some of them). However, NASA Administrator Paine apparently was germ-free and had dinner with the men on the eve of their launching (24: p349; 2: p215; 8: p186).

As the launch date approached, the astronauts no doubt had many things to think about and one of those was buying some extra insurance. Aldrin writes in his book that, "The three of us...bought ourselves some insurance for our families in the extremely remote possibility that we might not return." Another item that the astronauts were concerned about was the publicity that would arise from their flight. Colonel Aldrin's sister mentioned that her brother was beginning to worry about the loss of privacy and freedom. Collins was worrying that his family would be subjected to close public scrutiny. His 73-year-old mother said, "He doesn't think an old lady like me should have to put up with that."

John W. Wilford, of the New York Times, writes

The astronauts' concern about such things was one of the latest facts of existence for all three and one thing was certain...all that was in their personal past would be merely prologue and life for them--and perhaps the world--would never be the same again.

There were people who were making sure that the world would never

forget the flight of Apollo 11. The media hit the Kennedy Space Center (KSC) like a tidal wave. A total of 3,497 newsmen were at the Cape for the launch, more than 800 were from foreign countries. About a week before the launch, 1500 reporters suddenly appeared at Houston to join Henry Cooper of the New Yorker. At the Cape, ABC-TV supplied 254 commentators, engineers and technicians to handle its operations, CBS had 244 personnel, including the recently retired Wally Schirra, and NBC brought along 147 personnel. At least 445 people represented magazines as writers and photographers (69: pp28-31; 28).

From other nations came 118 correspondents from Japan, 82 from Great Britain, 81 from Italy, France had 53, Argentina 52, Germany 44, Canada 38, Spain 27, Brazil 26, Australia 25, Mexico 21, Switzerland 20, Belgium 19, Korea 15, the Netherlands 10, Chile and Venezuela 9 each, Columbia 8, Costa Rica and Sweden 7 apiece and Israel 6. Czechoslovakia Denmark, Panama, Nicaragua and Peru had 5 representatives each; four each from Ecuador, Finland, Iran and South Africa; three each from Bolivia, Greece, Luxembourg, Turkey and Uruguay; two each from India Angola, Austria, Ireland, Lebanon, Malta, Romania and Yugoslavia; and one reporter each from Guatemala, Egypt, Haiti, Honduras, Iceland, Monaco, New Zealand, Norway, Rhodesia, Somalia, Swaziland and Wales (69: pp28-31).

The European radio-television network bought time from commercial satellite circuits to supply coverage to the nations there. U.S. networks built their own studios at the launch site and paid NASA for rent and electricity (69: pp28-31).

The PAO was extremely active. The information plan for the PAO alone came to 84 pages; this covered organization, security, newscenter operations, commentary, news briefings, communications network, photography, guest provisions and contractor activities (NASA used some outside help occasionally in the public affairs business but not all that often). Eighty-five NASA PIOs stood by to assist the media and 18 more people came in from the Air Force and civilian ranks to provide

additional help. The U.S. Information Agency supplied interpreters to help the members of the foreign media. At five and four days before launch (T-5 and T-4), NASA replayed the tape of the June 16 mission briefing for the reporters. On T-2, Westinghouse described the television system of the spacecraft to the media. That same day, Dr. Debus, the director of KSC, Gilruth and von Braun held a joint press conference. On T-1, TRS Systems briefed the media on the LM abort procedure in case something should go wrong during the descent to the moon. Major public affairs people received contingency plans in case problems should occur during the launch, the flight to the moon, while the astronauts were on the moon, on the way back or during the reentry. Approximately 200 personnel were temporarily assigned to the PAO (69: pp28-31).

The PAO also:

- supplied 15 telephones with 40 call directors at the KSC newscenter and installed 15 more pay phones there;
- installed more than 206 phone circuits at the press site while the media leased 1000 more from Southern Bell;
- provided recorded status reports from T-3 through launch. This was called more than 2400 times during those four days; and
- paid Chic Sales \$20,000 to take care of people at the press site and other places.

Perhaps an impressive figure was that of the overall operations of the PAO at KSC for Apollo 11. The cost came to \$450,000, which was one-third of that year's budget for Public Affairs work and there were still two more moon missions scheduled for that fiscal year. That money was used for janitors, utility service, rental of the newscenter at KSC (located on the tenth floor of the Cape Royal Hotel in Cocoa Beach), renting the bleachers used at the press site, printing publications, reproducing news releases and transcripts of air-to-ground conversations, photography, transportation, couriers and the hiring of translators (69: pp28-31).

In the middle of all this, the head PAO at KSC, Gordon Harris, suffered an attack of appendicitis on T-5. Yet his doctors allowed him to leave the hospital to observe the launch from the guest viewing

site--attended by a doctor and a nurse who suddenly found themselves with front row seats. Power talks (69: p31).

After the launch, the Columbia Graduate School of Journalism computed the figures for the press attendance at the Cape on the day of the launching. Only the opening of the United Nations in San Francisco in 1946 and in New York City in 1947 had more journalists attending them than were at the Cape for Apollo 11 (69: p206).

Across the world, many nations prepared for the day that Armstrong and Aldrin would step upon the moon. Columbia cancelled all soccer games for that day. A Yugoslav newspaper offered \$800 to the reader who could predict what Armstrong would say when he first set his foot on the lunar soil. Brazil's government ordered all church bells to ring on that day. Venezuela was set to declare the day a national holiday, which is what President Nixon did in the U.S., ahead of time, anticipating the success of the mission. The U.S. Embassy in Rio de Janeiro set up a large television screen in the Museum of Modern Art. so passers-by could watch the progress of the mission. Meanwhile, in Florida, the "No Vacancy" signs were lit at motels for at least 50 miles around the Cape. Titusville youngsters were charging \$1.00 per head for people to sit on their lawns while they watched the launch. Entrepreneurs were everywhere. One lady collected 480 pictures from NASA and mailed them to 10 European newspapers for a price but the newspapers could have had them for the same price at which the lady had obtained them--nothing (69: p32; 8: p188).

On the eve of the launch, the Reverend Ralph Abernathy led a "Poor People's March," complete with a mule-powered wagon, to the gates of KSC to protest the use of money for space exploration when more important things on earth needed to be done first. NASA Administrator Paine and Julian Scheer met with Abernathy and others from the march to explain that the money being used for the mission had already been spent and that cancelling the mission would waste more money than would be used if the mission was completed. Paine offered to pick up a delegation

from the march the next morning and transport them to the observation site so they could watch the launch. When the NASA bus arrived the following morning, there were food packets on each seat and 100 men, women and children of the march joined other guests in the VIP stands. Paine had wisely averted a confrontation (69: p110; 8: p191).

The Soviets did not want to be scooped by Apollo 11. On July 15, they launched a moon probe, Luna-15, designed to orbit the moon (the first Russian spacecraft to do so), land softly on the surface and return to earth after picking up some soil samples, although the Russians did not admit to this. By the time Armstrong, Aldrin and Collins were ready to be launched into space, Luna-15 had already swung into orbit around the moon. Some NASA officials were furious. They asked the Soviets for information about their moon mission but the only answer was that it would not interfere with the Americans. Finally, after a call was placed to Moscow by Borman (who shrewdly reversed the charges), the Americans were given the orbital information about Luna-15 and they then deduced that it would present no hazard to the Apollo 11 astronauts (178: p265; 153: p204).

At 6:25 on the morning of July 16, 1969, the astronauts of Apollo 11 emerged from their robing center in their spacesuits and headed past photographers to the towering gantry and rocket, miles away. At 7:30 a.m., the temperature under the tin roofs of the viewing stands was already 100 degrees Fahrenheit. One of the NASA contractors passed colored hats around, increasing the atmosphere of a carnival setting. (178: pp261-263).

Among the visitors in the VIP stands were former President and Mrs. Johnson, Vice-President Agnew and the representatives of the Poor People's March. Television's Jack Benny and Johnny Carson stood there too. In all, there were 56 ambassadors, two foreign ministers, 33 senators, 206 congressmen, the Secretaries of HEW, Commerce, Transportation and Interior, 19 governors, 225 French industrialists and 129 Korean Parliamentarians. At another site, reserved exclusively

for astronauts and their guests, Charles Lindbergh stood with the new breed of pilots; he was there at the invitation of Collins. Lindbergh later wrote Collins, "There would have been constant distractions for me in the area with VIPs, among whom I refuse to class myself, what a horrible designation!" (24: p451; 69: p101).

Just less than a million people surrounded the region in the morning heat awaiting the launch. CBS' Walter Cronkite and Wally Schirra overflowed the area in a helicopter to their press building. Schirra remembers that the roads were packed with traffic. NASA had once expected two million spectators to show for the launch but some sources say that only 750,000 people were there that morning (69: p211; 140).

As the astronauts were preparing to enter the command module, Collins handed a small brown bag to "the czar of the launch pad," Guenther Wendt, who was in charge of the support team on the gantry. In the bag was a joke that Collins had whipped up for Wendt, an avid fisherman--an uncured minnow nailed to a board with a plaque that read, "Guenther's Trophy Trout." But Collins was worried about the "trout" spilling out of the bag in front of the television cameras that were capturing the scene. No one saw it except Wendt and his crew who had a good laugh (24: pp359-360).

Armstrong had entered first, taking the couch on the left side of the CM and then Collins went in, moving to the far right. As the technicians helped those astronauts adjust themselves in the spacecraft, Aldrin stood by himself for 15 minutes on the gantry, looking out over the masses of cars and people miles away who had come to watch him and his fellow astronauts take to the skies (2: p219).

Just before launch, Collins worried about something else besides the minnow that he had given Wendt. After the hatch had been sealed, the CM pilot noticed that a pouch on Armstrong's left suit leg was near the abort handle and could snag it, possibly exploding the CM away from the Saturn rocket, producing what would be considered to be the biggest goof in history. Armstrong rearranged the pouch and all

was safe. Collins remembers thinking:

Jesus, I can just see the headlines now: "MOONSHOT FALLS INTO OCEAN. Mistake by crew, program officials intimate. Last transmission from Armstrong prior to leaving launch pad reportedly was 'Oops'" (24: p364).

At 9:30 a.m., the large engines of the Saturn 5 rocket, each nozzle bigger than the command module, fired and Apollo 11 was on its way. In the CBS news booth, Cronkite was yelling, "Go baby. Go!" The sound of the launch blasted the spectators just as the other Saturn 5s had done and then, with only a contrail to remind people of the path of the rocket, the astronauts were gone (118: December, 1969; 99: November 17, 1970).

As the spacecraft rounded the earth preparing to fire into the lunar journey, Collins noticed a sunrise as the crew emerged from the shadow of the earth and exclaimed, "Jesus Christ, look at that horizon! Goddamn, that's pretty, it's unreal." Fortunately, Collins' words were not broadcast to the ground, otherwise he might have been kicked out of the Boy Scouts too along with NASA having to hire even more secretaries to handle his comment (24: p368).

Collins unstowed an item that he and the other Apollo 11 astronauts did not favor--the television camera. He writes in his book,

Our TV camera was the eye of Apollo. It was also late getting delivered and was a bloody nuisance of an afterthought that was not required for the safe completion of our flight; therefore we didn't want to fool with it. Reluctantly we agreed to turn it on a couple of times as specified in the flight plan, but we weren't happy about it and we didn't even practice with it, and we didn't rehearse any shows. We simply didn't have time to fool around with it. Neil and Buzz didn't know how to turn it on or focus it, and my knowledge of it was pretty sketchy. In flight we found the best thing to do was use masking tape to stick the monitor on top of the camera so we could tell which way to point it, a jury rig that is ridiculous when compared to the mathematical precision and extensive rehearsals that accompanied our other preparations. But TV couldn't kill us and a lot of other things could.... ...the last bit of advice we got about TV was something to the effect of: "Gee, I hope you

guys will put on some great shows. You know, there will be a billion people watching, so don't screw it up, O.K.?" (24: p350).

The first show from Apollo 11 was short because the spacecraft was in such a position that its signals could reach the ground station at California for only a few moments before the command module flew out of range. The TV camera went back into storage as the astronauts prepared to fire the third stage engine to put them on the track to the moon. After that was done, like Apollo 10, the CM separated from the upper stage, revolved around and plucked the LM from the top of its third stage cocoon. At 130,000 miles out, the astronauts who were reluctant to use the TV camera, beamed back pictures of the earth. Armstrong described everything in detail and then the quiet, shy Collins decided to give everyone on earth a case of nausea. He turned the camera slowly as he pointed it at his home planet, saying, "OK world, hang onto your hat. I'm going to turn you upside down.... You don't get to do that everyday" (24: p386).

After an eight-hour sleep, the astronauts had a mid-course correction cancelled since the flight was going so well. Due to the cancellation, they had some extra time to putter around and open the tunnel between the CM and LM sooner than planned. Then Aldrin decided to do an impromptu television show and called Houston to inform them that a show was on the way. In turn, Houston informed some surprised networks to prepare themselves for the show. It lasted 96 minutes and opened with Armstrong in the tunnel handling the docking probe. Aldrin moved into the LM, taking the television camera with him. As he explained the LM, he pretended to push the abort button and straight man Houston cried, in mock horror, "We don't recommend that." Aldrin worried about the restraining straps in the LM's harnesses pulling his pants down in front of 50 million people but Houston informed him that they could not see that low. Collins appeared, saying that he was filling in for the "czar"--as Armstrong had been called by the Soviet newspaper Pravada--who was brushing his teeth. According to Aldrin, the show was

well-received by the public (178: pp265-266; 2: p226; 24: p386).

Houston continued to beam up the news of the day to the astronauts. At one point, the Capcom told of a reporter who had interviewed Mike Collins, Jr. The younger Collins had been asked what he thought of his father going down in history, to which Mike had replied, "Fine, what is history anyway?" A number of the astronauts possibly respected young Collins for his answer (24: p388).

On the fourth day, in the tenth orbit around the moon, Aldrin and Armstrong climbed into the LM, sealed the tunnel and parted from the CM, leaving Collins by himself. At Houston, behind the consoles in Mission Control sat many people associated with NASA--George Mueller, General Sam Phillips, Gilruth, Slayton, Lovell and Anders. In a glass-enclosed room behind the control room sat von Braun, John Glenn, Tom Paine and Robert Seamans (then the Secretary of the Air Force).

As the LM, codenamed "Eagle," began its descent, it was drawn slightly off course, unknown to the astronauts though, by the mascons that had affected Cernan and Stafford in Apollo 10. The LM's computer guided the Eagle down until the last few seconds when Armstrong saw that they were headed for a field of boulders. With less than a minute's worth of fuel left, Armstrong flew the Eagle past the boulders and settled upon a flat part of the Sea of Tranquility (if the astronauts had run out of fuel, they would not have crashed but would have fired the ascent engine, aborting the landing to return to the CM).

Armstrong's first words were, "Houston, Tranquility Base here. The Eagle has landed." The time was 4:17 p.m., EST, July 20, 1969.

The world erupted in jubilation. At MSC's newscenter, the newsmen "were giggling wildly, waving their arms and yelling." The astronauts' wives were solicited for their opinions. Mrs. Armstrong could only say, "Good...good...good..." In Italy, 25,000 people were watching a performance of "Aida" in the Roman Arena at Verona when, during the first intermission, the news of the landing was announced to the audience in four languages. Members of the crowd pulled tiny American

flags from their pockets and waved them about. The bells in Brazil pealed. At Yankee Stadium in New York City, 35,000 baseball fans sang "America the Beautiful." In Ohio, a photographer recorded the elderly Armstrong's impressions as they waited to watch their son walk on the moon. Meanwhile, Aldrin silently held communion on the surface of the moon, not making much of an issue of it to avoid the battles that had erupted with Apollo 8's crew reading from the Bible (8: p205; 178: p272; 118: December, 1969).

Hours later, Armstrong opened the hatch and, with Aldrin's guidance, backed out of it to step down the ladder onto the surface. Aldrin had thought (in the previous spring) that because of the precedent set during the Gemini flights where the spacecraft commander stayed inside the spacecraft while his partner performed the EVA, he should be the first on the moon; but he was dissuaded by several arguments: 1. Armstrong was from the second group of astronauts while Aldrin was from the third group, which gave Armstrong more rank than Aldrin; 2. Armstrong was a civilian which appeared better to the world for America's image; and 3. Armstrong himself had told Aldrin that he did not want to pass up the chance to be the first on the moon. So, Armstrong went out first with his first words in his head. There had been wide-spread discussion in the pre-launch days about what Armstrong should say and, finally, Julian Scheer put an end to it when he wrote a sharp memo to NASA hierarchy, stating, in effect, Did Queen Isabella tell Christopher Columbus what to say? The choice was left to Armstrong (2: pp205, 234).

On the way down the ladder, Armstrong forgot to pull a small handle to deploy a small black and white television camera which would telecast the image of him descending to the surface. He backed up, unfastened the camera and the image suddenly appeared to the world-- upside down at first but this was rectified by a converter in Houston. Almost six hours after the LM had set down, Armstrong left the last rung of the ladder. "I'm going to step off the LM now. That's one small step for a man, one giant leap for mankind" (118: December, 1969;

2: p234).

Fifteen minutes later, Aldrin backed out of the LM. Together, the astronauts set up experiments on the lunar soil and placed a TV camera away from the LM but aimed at it. Armstrong read the plaque attached to one of the LM's legs, stating that man had come to the moon in peace that day and it was signed by the three Apollo 11 astronauts and President Nixon. Next, the men pounded a staff into the stiff soil and unfurled a spring loaded American flag, which looked like it was flying in the airless environment of the moon (to avoid commercialism, NASA had gathered all the U.S. flags that a person could buy, removed all identifying labels, jumbled them together and then had a secretary walk into the room where the flags were and pick one for the flight). Then the astronauts were instructed by the Capcom to move to a position where the television camera could see them. As they bounced to that spot, they were informed that the President would be calling them from the White House. They waited and, finally, Bruce McCandless, the Capcom, told the President when to speak. The message was congratulatory and contained wishes for a safe journey home. After that, the astronauts went about the surface collecting rocks, including a purple one. At the end of their EVA, Aldrin went inside the LM first, followed shortly by Armstrong, who had spent two hours and 20 minutes outside the LM. On the way in, one of the astronauts' PLSS backpacks snapped off the circuit breaker necessary to fire the ascent engine but it was later discovered that it could still be pushed in (118: December, 1969; 178: p277; 2: p214).

While the astronauts were still on the moon in their LM, Luna-15 crashed a distance from them and, with that failure, the U.S. was assured of being the first nation to obtain lunar soil (118: December, 1969).

The astronauts went to sleep in the lunar module following their walk and then, after staying on the moon for about an entire earth day, they fired the ascent engine to return to Collins who was orbiting high

above them and who had been unable to locate their base from his orbital track (118: December, 1969).

On the way home, the astronauts cancelled more than 250 envelopes. Until 1973 when Aldrin disclosed it in his book, it was thought that the only envelope carried and cancelled aboard Apollo 11 was the one given to the Postmaster General after the flight. The other envelopes were kept by the astronauts. This may seem insignificant but this episode should be remembered when Apollo 15 is discussed (24: p426; 2: p48).

The men also sent back another television show. Armstrong could not show the moon rocks but the next best thing--the cases that contained the rocks. Collins illustrated weightlessness and its effects upon water in a spoon. On the day before splashdown, the men televised another show for the people on earth; this one contained personal messages from each of the astronauts about their impressions of the trip. None spoke for more than a couple of minutes. Collins described the CM a bit more, Aldrin became philosophic, discussing the meaning of the flight and Armstrong thanked the Americans who had made the trip possible (24: pp426-433).

On July 24, the command module hit the waters of the Pacific Ocean. The astronauts immediately donned isolation garments and, looking like creatures from another world, were hauled into a helicopter and taken to the aircraft carrier Hornet where they were put into a portable, trailer-sized LRL, called the Mobile Quarantine Facility (MQF). President Nixon was on hand to receive the men, the first time that this had ever been done by a President. Inside the MQF, the astronauts were joined by a flight surgeon and a mechanical engineer. The ship docked at Pearl Harbor, where crowds greeted them. Then the MQF was placed inside of a C-141 jet cargo plane and flown to Houston. There the men were placed in the MSC's LRL for three weeks. Other people were selected to be with the astronauts in the LRL for those 21 days.

One of those other people was PIO John McLeaish, who was to provide reports to the media about what the astronauts and others in the

LRL were doing during their stay. Collins states in his book that McLeaish's presence might have deterred some reporter from crashing into the LRL, from where he could hope to send a stream of exclusive reports (once a person was admitted into the LRL, he or she could not leave until the astronauts did in mid-August since everyone in there was considered to be under quarantine). The astronauts liked McLeaish but they were hoping for some time off when they could do anything they wished without having it reported to the media (24: p445-448).

The news of Apollo 11's trip caused various reactions. Some people were obviously pleased by it while others, saying that the trip represented the American government, dismissed it. Fist fights in Mogadiscio, Somalia broke out because of the flight. As can be expected, offers to the crew to appear everywhere appeared from various sources. One place in Atlantic City offered the astronauts \$100,000 apiece for one week's engagement (what the astronauts would have done to entertain the crowds is not known). Children were named Apollo, Columbia (the name of the command module) and for the astronauts.

The astronauts and everyone else in the LRL, including one female who had wrangled her way in, were released on August 10, 1969. As soon as Aldrin was home, members of the Italian "paparazzi" were waiting for him. He did not think that they would bother him but soon they were at the door. He explained that all interviews would first have to be cleared with NASA. Aldrin then left to go downtown to buy a new suit and, sure enough, the paparazzi followed. Aldrin cut through Ellington AFB, an open base, but he managed to have the guard slow his pursuers just enough for him to lose them. The ruse failed as the paparazzi caught him only minutes later. (2: p26).

Armstrong was having similar difficulties. He was sitting beside his backyard pool when he discovered three Japanese journalists climbing the fence. Quickly, he ordered them out of his yard.

While the astronauts of Apollo 11 were discovering that the media and the public were attempting to get a closer look at them, some

more astronauts were joining NASA, except that these men were already astronauts. The Air Force's MOL Program was cancelled in the summer of 1969 and its astronauts were transferred to the ranks of those who had been training with NASA for years. This seventh group of pilot-astronauts consisted of Karol J. Bobko, Robert L. Crippen, Charles G. Fullerton, Henry W. Hartsfield, Jr., Robert F. Overmyer, Donald H. Peterson and Richard H. Truly (116: MSC 76-168).

The cross-country trip for the Apollo 11 astronauts started with the characteristic journey to Washington, D.C. where the men addressed Congress, stopped at the White House and held a press conference at the State Department. Then, in one day, they visited New York City, Chicago and Los Angeles with their families. As if that was not enough, the Apollo 11 crew and their wives were sent on a round-the-world trip in a presidential jet. The itinerary for that trip included Mexico, Columbia, Brazil, Spain, France, Belgium, the Netherlands, Norway, Germany, England, Italy, the Vatican, Yugoslavia, Turkey, Zaire, Iran, India, East Pakistan, Thailand, Australia, Korea, Japan and, finally, close to home, Canada. At Bombay, India, a crowd of over 300,000 people turned out to greet the astronauts, stunning the entourage by the sheer mass of humanity gathered there. The trip lasted from September 24 until November 5, when the group arrived back in Washington, D.C. At the White House upon their return, President Nixon told the men that "certainly the first men ever to land on the moon have demonstrated that they are the best ambassadors America could ever have on this earth..." (164: Senate 92-40, p80).

Aldrin remembers the scene upon returning home:

Most of the country reacted as though we'd never been gone. Little press coverage of the trip appeared in the United States--a nice situation which, in retrospect, is sad because it would have been nice for the general public to share in this particularly American triumph. Yet at the same time we were asked to carry members of the press on the plane, one and all we refused. On board the plane was the only place we had privacy and could relax. The press had been along during our one-day cross-country tour and had proved a bit bothersome (2: p85).

Aldrin also worried about the future. When he once went to Chicago to make a speech, some liquor had been provided for him in his hotel room and, when he returned to his room that night after giving his appearance, he discovered the liquor was gone. He writes, "I ordered myself a couple of drinks from room service and with some bemusement, wondered if fame would prove as fleeting as the liquor supply" (2: p244).

The crew soon split and went their own ways. Aldrin attempted to go back to the Air Force and suffered what he called "a good old American nervous breakdown." He went on to develop his own research group and take part in some television commercials. Collins was appointed to the State Department to work with public affairs; he soon quit that post and became the Director of the National Air Museum at the Smithsonian Institute. Armstrong, a quiet man to begin with, seemed to withdraw further into a shell of some sorts. One source said that Armstrong envisioned a "Charles Lindbergh aura" about himself; the source also said that Armstrong would not allow his children to be photographed for fear that they might be kidnapped (a la Lindbergh) and that he has his speeches copyrighted so no one else could use his material. The first man on the moon left NASA in 1970 and eventually became a professor of aeronautical engineering at the University of Cincinnati.

Apollo 11 was destined to go down in history as *the flight*. John Glenn had been *the man* until Armstrong set foot on the moon. People remember Armstrong but not many of the other astronauts. But in 1969, it was Armstrong, Aldrin and Collins and, as Frank Borman told them one night after their flight, "All things...all material things" would belong to the crew of Apollo 11 if they played their cards right (2: p55).

IN THE SHADOW OF A GIANT: APOLLO 12

Apollo 12 is destined to live forever in the shadow of what many people consider to be mankind's greatest venture. As the shot was being prepared, 2,262 reporters and photographers descended upon the Cape, about 1200 less than had been there for the previous flight (69: p49).

The media seemed to have the attitude that Apollo 12 was not going to be as spectacular as Apollo 11 had been. As Mike Collins puts it, if a moon flight was compared to the Super Bowl, who would want to keep seeing the same Super Bowl over and over all the time. Thus, it was inevitable that the interest was going to die off. Collins states:

First, Apollo 11 was perceived by most Americans as being an end rather than a beginning and I think that is a dreadful mistake. Frequently, NASA's PR department is blamed for this but I don't think NASA could have prevented it. It's simply the American way (24: p464).

Life conceded that its star guest-writers were dropping in value as performers. In the November 14, 1969 issue of Life, a reporter states:

History gives few prizes to its second run heroes...however daring their achievements.... ...the men of Apollo 12 have more of the flair and flamboyance of traditional heroes than Neil Armstrong, Edwin Aldrin and Michael Collins.../the Apollo 12 astronauts/ are more relaxed, voluble, humorous and daredevilish (98: November 14, 1969).

In that same issue, Norman Mailer delivered his critical comments about the Apollo 11 crew (mentioned earlier in this thesis). This might seem that Life was turning on the first crew to the moon but several people have told this author that that was not the case. Michael Collins believes that Life printed what Mailer wrote because it was "just making space for a 'superstar's' opinion" (98: November 14, 1969; 25).

On November 14, 1969, with President and Mrs. Nixon in attendance and with just as much power as the other moon rockets, Apollo 12 left the bounds of earth with astronauts Pete Conrad, Dick Gordon and Al Bean, a rookie who was acting as the LM pilot. As other crews had done before them, they televised shows back to earth and, after three days of flight, they entered into lunar orbit. Conrad and Bean entered the

LM, "Intrepid," and separated from Gordon, leaving him by himself in the CM, "Yankee Clipper." By now, the planners at NASA had learned about the mascons which had caused so much trouble for Apollos 10 and 11. With this knowledge, the flight of Apollo 12 was practically perfect. Intrepid settled down on the moon just about where it was supposed to rest. The preciseness helped because the astronauts were to journey to an "ancient" spacecraft that had been on the moon since the mid-sixties--Surveyor III--which had helped to map the area where Apollo 12 had landed. Conrad and Bean stayed on the moon's surface for more than 31 hours, during which they were outside the LM for about eight hours (69: p101).

The television show that was supposed to be transmitted from the surface of the moon never took place. When the astronauts were setting up the TV camera outside the LM, one of them inadvertantly pointed the lens at the sun, burning out the electronic scanner. Therefore, the world had to once again rely upon only radio to determine what was happening on the moon.

During one of their two EVAs, the astronauts were deploying the various experiments when one piece of equipment failed to unfold as it was designed to do. One of the astronauts tried to pull it apart but it did not budge. Finally, in frustration, he hit it with his hammer as most people might do with a mechanical object that fails to please them. The ground controller praised the men for showing the world what "Yankee ingenuity" was all about. After their stay was finished, Bean and Conrad returned to the CM and Gordon, bringing not only moon rocks with them but also parts of the Surveyor as well.

While the astronauts of Apollo 12 were gone, Neil Armstrong and Buzz Aldrin met the media in a press conference. Aldrin had been misquoted by a newsman whom he had never met and he was upset at the incident. What had happened was that Aldrin had spoken to a relative of his and said that, contrary to what some scientists had said, there was no possibility of the moon rocks catching on fire when exposed to pure oxygen. The relative later repeated the story to a man he met on

on an airplane. The other man turned out to be a reporter and shortly after he had talked to Aldrin's relative, a story appeared in a newspaper under the headline, "Aldrin Fears Lunar Rocks." Aldrin's relative was embarrassed, as was Aldrin, who became incensed about the inaccuracy of the report. At the press conference, Aldrin lashed out at the media but told the reporters that he was not aligning himself with Vice President Agnew, who was attacking the media at the time. Aldrin remembers in his book:

I urged them to try harder to be accurate and asked that they not invent drama where no drama existed. As I concluded, I tried to inject a little humor by apologizing for the fact that we seemed so dull that invention was sometimes necessary to attract readers and listeners.

There was a moment of silence, followed by the usual questions--this time all directed to Neil and none to me. Afterward, a couple of newsmen I knew came up and apologized. I insisted that an apology wasn't necessary and that...I felt most of our coverage was actually quite good but that the exceptions were fairly disastrous.

I would have preferred that the matter be dropped at the press conference but it speaks well of the freedom of the press in this country that they were unafraid to publish criticism directed at them. What's more, they went to great lengths to quote me accurately (2: pp249-250).

On November 24, the astronauts of Apollo 12 returned to earth, plopping down in the warm waters of the Pacific and being picked up by the Hornet. It was almost a rerun of Apollo 11. From the Pacific, the men took the same route as Collins, Aldrin and Armstrong and ended up in isolation in the LRL in Houston. The White House ran into a small snag on the military promotions for the astronauts since it was standard procedure to promote the officers for only one flight, customarily their first one. Thus, Gordon and Conrad, Navy lieutenant commanders, were ineligible to be promoted to captains since they had already been promoted following their Gemini flights. President Nixon ordered the policy suspended and promoted all three astronauts one grade (148).

In the LRL, another little hassle erupted. Doug Ward, the PIO in there with the crew to report day-to-day occurrences to the

media. The Apollo 12 crew members took a dim view of this as they did not feel that the Apollo 11 crew had set any precedent by allowing a PIO to live with them during its stay in the LRL. Bean, Conrad and Gordon did not have anything against Ward personally but they did not care for a journalist to be in the LRL with them. Ward called Slayton to ask him to talk to the crew explaining Ward's role--he was to report to the media what the highlights of each day were, not give a second-by-second account of what the astronauts were doing. One day the astronauts scheduled a briefing for the Flight Operations staff and Ward was told that he would be invited into the briefing. But, according to Ward in an interview in 1977, "it was obvious to me by the time I was called in that they had covered everything." Alan Shepard, who had been there, was putting on his coat and was leaving along with some other astronauts who were assigned to later moon flights.¹ Ward, put off by such tactics, called Howard Gibbons, another PIO who was Ward's contact man on the outside, and complained about the circumvention. Gibbons called Slayton to relay the complaint. The reply to Ward was that he could obtain material from the transcript of the briefing. Ward did not accept this. He felt that the transcript could not substitute for the give-and-take of spontaneous questioning (166).

Ward had never been told by his superiors to attend the briefing; he had made up his own mind to go to it. When Gibbons told the media that Ward had not been instructed to go to the meeting, the reporters thought that Gibbons meant that Ward had been told explicitly not to go to the briefing, which was not the case at all. In stories that appeared in newspapers, it looked as though PIO was against PIO and Julian Scheer was dragged into the fracas. He called Houston to find out what was happening, was told the facts by his men in the PAO and was satisfied to discover that it was the media, not his men, who had

¹Shepard and the others who were with him were not in the LRL but outside of it, speaking to those inside through the use of microphones and speakers. If Shepard had been inside, he never would have been allowed to leave as he did.

created the confusion, although he was not pleased that the confusion existed. Next, some of Slayton's superiors jumped on him in a "forceful" manner about the exclusion of Ward from the briefing, even though Slayton had had nothing to do with the incident. Slayton attempted to make amends with the media, said Ward in an interview years later, by becoming amiable for a while. Ward recounted later that he should have gone to Slayton about the issue rather than go through an intermediary (166).

However, the Washington Post was in error about the episode. In its December 9, 1969 issue, the Post claims that Ward had been excluded from the briefing by Gibbons; that another PIO, Terry White, was "burnt up" about the situation; and that Slayton had been the person who had ordered Ward barred from the briefing to protect the Life contracts (168: December 9, 1969).

Ward says that the Life contracts had nothing to do with his exclusion. Gibbons, as discussed, did not prevent Ward from being there nor did Slayton. Terry White, in an interview, did not remember being "burnt up" about the incident (in fact, he had to think for a few moments before remembering the incident at all. The only thing that might be drawn out of this tempest in a teapot was that it was Shepard (who had grumbled something about the press being present as Ward walked in) who might have had a say about keeping Ward out, for whatever reasons he had. Other than that, it was a case of everything becoming misplaced when it came time to place attribution (166; 175).

The December 5, 1969 issue of Life showed the "Go-Go" astronauts of Apollo 12 sitting atop their three gold Corvettes.¹ The writer of the article had an interesting way of loosely describing a half-billion dollar journey to the moon and back; he wrote that the astronauts had "wisecracked" their way through the mission while performing their scientific duties. In the next issue, Life wrote that Apollo 12 had been so successful that longer periods of time would be given to

¹Astronaut Jim Irwin writes that some of the flight crews could be identified by the cars they drove, like Apollo 12. Apollo 15's crew, to which Irwin belonged, drove a red, white and blue combination of cars.

the astronauts of future moon missions to explore the moon for scientific purposes: "NASA hopes this will placate its own scientists, some of whom have quit the program in recent months."¹ In the December 19, 1969 issue of Life, Conrad simply wrote about all the fantastic times he had had on the moon. Bean referred to the good times too and to the scientific packages only a little. Gordon discussed the possibility of returning to the earth alone if the LM did not come back up from the surface of the moon. He also mentioned that he had felt frustrated at not being able to go down to the surface of the moon after going so far to be near it (98: December 5, 1969, December 12, 1969, December 19, 1969).

The flight of Apollo 12, which had gone so smoothly, as did Apollo 11, led the nation to fall into a slumber regarding moon missions and the public interest had fallen considerably by the time the next mission was ready to go. It was all too peaceful and, as had happened with Apollo 204, another shock was coming to jolt the nation's complacency.

¹Among the scientists at NASA who were leaving were three of the scientist-astronauts: Brian T. O'Leary, Frank C. Michel and John H. Llewellyn (116: MSC 76-168).

THE LITTLE LM THAT COULD - AQUARIUS

On January 6, 1970, NASA announced that three astronauts had been grounded for disobeying flight orders unrelated to space flights. What had happened was that Al Bean, on December 16, had thought he had been cleared for takeoff from Ellington AFB but he had not and he had taken off without a departure release. On December 17, in separate flights, astronauts Walt Cunningham and Joe Kerwin (who was later to fly in Skylab 2) had failed to list "a suitable departure airport before takeoff." Shortly thereafter, Deke Slayton had grounded the men until January 23 (116: MSC 70-5).

Not much else happened between Apollo 12 and Apollo 13 that was of much significance. In its April 13, 1970 issue, Time was prophetic, writing that while the interest in space flights was going down, NASA was still interesting: "...there is nothing routine about the mission planned for astronauts James Lovell, Fred Haise and Ken Mattingly. It may well prove to be the most challenging test yet of man's skills in space." Time did not know how true that statement was to be. The writer pointed out that to prevent a repeat of what had happened to Apollo 12's lunar TV camera, a new flare-resistant color TV camera would be taken on Apollo 13 and a black and white TV camera would serve as a spare (159: April 13, 1970).

In Milan, Italy, the newspaper IlGiorno summed up what seemed to be the world's attitude towards the upcoming flight. "Too Perfect," read a headline above a story about Apollo 13. "The Public is Getting Bored" (159: April 20, 1970).

The day before the launch, there was a crew substitution, the first ever in NASA's history. The members of the crew had been possibly exposed to the measles and NASA's physicians discovered only Lovell and Haise were immune to them. Mattingly was not. Because of that, Mattingly was removed from the flight to be replaced by the backup command module pilot, Jack Swigert, who had to prove himself to Lovell, the spacecraft commander, who did not think at first that Mattingly

knew enough about the mission to take Mattingly's place (159: April 20, 1970; 122: April 20, 1970).

On April 11, 1970, Wally Schirra and Walter Cronkite drove to the CBS press site. On the launch day for Apollo 12, they had flown to the site in a helicopter to avoid the crowds on the roads but noticed that the traffic was not enough to justify flying. So, for Apollo 13, they drove through the streets unencumbered by tourists. The low of the Apollo program had hit from the viewpoint of public interest. Only 1,107 journalists bothered to come to the Cape to watch the blast-off. It was as if the flights were now mundane. The interest was dying (69: p49; 140).

The astronauts were strapped in their couches, their CM's hatch was shut and the gantry crew folded their equipment to leave the astronauts by themselves. The nearest people were those in the blockhouse, which still shook every time one of the moon rockets left the earth. The blast-off came and the rocket went. That was about the attitude of the journalists too. Some skipped across the Gulf of Mexico to Houston and the remainder hung around the Cape waiting for the mission to end peacefully about ten days later. Things just did not work out that way.

On the way to the moon, the astronauts transmitted two color TV shows to the rest of humanity. But some of the networks were not too favorable about using anymore of their air time to show the public what had been seen many times before. CBS and NBC chose not to air the shows in order to continue showing some sports games. The only people who saw those shows either watched ABC or else they were the technical personnel of the other two networks watching the input from NASA to their studios (159: April 20, 1970).

The flight was proceeding so smoothly that one controller remarked that the astronauts were "putting us to sleep down here." Another team of controllers whittled away the time by discussing the number of times the number 13 had appeared in the mission. It was Apollo 13, launched

on April 11 but at 1313 Hours (1:13 p.m., CST). And then April 13 arrived (27: p7).

On the evening of April 13, the crew televised another show back to earth. It began with Lovell turning the camera around in the cabin of the CM, saying, "What we plan to do for you today is start out in the spaceship Odyssey (the CM) and take you through from Odyssey in through the tunnel into Aquarius (the LM)." Haise floated near the tunnel and Lovell, holding the camera, followed him in to the LM. There, Haise described the moonship. After that, it was back into the CM where Lovell showed Swigert, hard at work but who managed to spare a second to smile at the lens. Lovell kept commenting about what was what inside the CM and talking about the upcoming moon walk. Finally, the Capcom broke in and suggested that they call it a show. Lovell agreed, said goodbye to the earth folks and wished everyone a good night. It was nine o'clock (27: pp10-14).

A few minutes later, the astronauts turned on small fans in their SM's oxygen tanks to stir up the liquid oxygen in order to keep it from settling in various layers at different temperatures. However, unknown to anyone, one of the fans had been tested two weeks before at the Cape and had been left on for eight hours. When the fan was designed there was no thought given to it overheating even when left on for such a long period of time (much past its intended limit). But that was when the fan was operating on the 28-volt current of the Service Module on which it was designed to be operated. However, the checkout procedure had used 65 volts, which had burned out many wires and had caused a safety device to fail. When the fans were turned on after the third TV show, that fan overheated, causing the pressure in the oxygen tank to increase to the point where the tank finally blew up. This explosion blasted one side panel off of the SM. It was fortunate in some regards that the panel blew off, otherwise the CM, on top of the SM, might have popped off like a cork out of a bottle which would have left the astronauts with no rocket power to use to come home. An explosion would not

really be the term to use: a tank failure is how the NASA officials referred to the accident (27: pp19-21).

The first notice of the accident came when Swigert called the ground and said, "Houston, we have a problem here." He had felt a shudder run through the ship and knew that something was wrong, although he did not know what. Lovell had been floating above his seat when he heard a bang. Haise had been in the tunnel when he noticed it vibrate up and down. To Haise, that was strange as the tunnel usually vibrated side to side if it shook at all. The time was 9:08 p.m., CST (27: p22).

Haise came through the tunnel and Swigert unclipped himself from his seat, raced for the tunnel and slammed it shut after Haise had entered the CM. The warning lights came on. The pulses of the astronauts went from 70 to 130 per minute.

At the time of the tank failure, Apollo 13 was 206,000 miles from the earth and far beyond the point where Odyssey could turn around on its own power to return to earth. The astronauts and the ground controllers discussed what to do. The power was dropping and within an hour all the power to the CM from the Service Module was gone. Haise simply told Houston, "It's dead."

The thought of a lunar landing was gone. On the next day, at 2:43 a.m., the astronauts fired the descent engine of the LM to put them on a whip-around course around the backside of the moon. As the men went around the backside, silence set in as the moon blocked the communications to the ground. Lovell had seen the moon before but Haise and Swigert gazed at the pock-marked surface only 130 miles away. They had come so close but it was all so far now. Lovell soon pulled the others away from the windows. After they came around the moon, they fired the descent engine of the LM once more, 18 hours after the previous burn. It was a mid-course correction to help them return to earth as soon as possible. Instead of leaving the LM behind, as the other crews to the moon had done, Apollo 13 kept their Aquarius with them, using it as a "lifeboat" since it had power and the CM had

none (122: April 27, 1970; 27: pp91-94).

At MSC, NASA had created pool positions for the electronic and print media in glass-enclosed booths at the rear of mission control. The media had always been able to monitor the previous flights but reporters had been barred from mission control. Now, for the first time in NASA history, the media was able to watch the personnel in the control room and listen to what they were saying to each other. However, at the time of the accident, the pool positions were unmanned. But not all was lost. In the MSC newscenter was a pool control room where 100 networks were receiving information constantly from all of NASA on a 24-hour basis. The pool control was designed to distribute this information and to alert the correspondents if anything unusual happened during the flight. That night, Bill Johnson of NBC News was at the pool control room when he heard the news of Apollo 13's troubles. He called Roy Neal, who was at the home of astronaut Ron Evans, having supper with Evans and a number of other people, including about half a dozen astronauts (119).

Neal describes what happened then:

I discussed the situation briefly with Tom Stafford [also at Evans' home] who was second in command of the astronaut office at the time. He checked his office, found out that there was real trouble aboard the spacecraft, then I and the astronauts went to mission control. We arrived about 15 minutes after the first trouble call (119a).

Neal was the first reporter to the pool position set aside for the electronic media in mission control and began to work immediately. With him, as pool producer, was Jack Kelly of CBS. Neal continues:

Our first pool report went out approximately 20 minutes after the problem began. We then fed reports continuously for about 14 hours. That was followed by frequent reports during the next 36 hours.

Pool headquarters began contacting the TV and radio networks within the first few minutes of the first call from the spacecraft. Most nets heard the problem as it developed since they all had air-to-ground audio feeds terminating in their newsrooms. The biggest thing we [in the pool position at MSC] had to offer, of course, was the information from the Flight Directors, which

was only available in mission control (119a).¹

Not all of the networks were able to move rapidly at getting the information out to the public. Everyone at CBS had gone to dinner but ABC was fortunate in that a director had scheduled a meeting of his personnel at the time of the accident, thus ABC was able to put the news on the air first. At NBC, Fred Reinstein found himself without his operating personnel to help him so he gathered some secretaries to assist feeding the information from the MSC pool position to the public. At MSC, the pool position for the print media remained empty for a short while before anyone arrived to man it (119b).

Leo Janos, the Houston bureau chief of Time, moved fast to get the news. He found another Time staffer who knew the technical material about space flight and together they went to MSC, Janos hoping to concentrate on the human side of the story. Janos talked about his efforts later with this author:

I didn't know anything about the hardware. I wanted the men. There had been this laconic voice coming over the radio..."Houston, we have a problem." It was so calm. I would have been screaming, "Houston, the whole place is going and I'm gonna die!" It was a great story. There is man in his little coffin forever and ever to become the Star of Bethlehem.... I went for the transcripts, dramatizing what it was like. The human emotion aspect to this was compelling as hell....

I went with a stringer who knew the hardware to a debriefing. I knew nothing. During the talk with this guy [a flight controller], I forced myself to keep awake because he was talking about a lot of technical stuff. Then, when it was over, I said to the guy, "Gee, I appreciate this information."

You know what the guy says then? "Oh, roger." That personified the attitude of all the NASA people for me then. Here we are, on top of a great story and this guy says, "Oh, roger" to a thank-you (79).

The news spread across the world and nations offered the U.S. their

¹According to Gilruth, the members of the Flight Operations teams had resisted the idea of creating pool positions in the rear of mission control because the controllers did not like the idea of journalists looking over their shoulders. Gilruth also stated that it was up to media to select who would be in the pool positions (48).

help in whatever way they could be of use. The Soviet Union told the Americans that its navy would be ready to assist in the recovery of the astronauts upon splashdown if the U.S. government desired the assistance. While everyone on earth waited in suspense, the temperature in the unpowered CM dropped to 38 degrees Fahrenheit, making it virtually impossible for the astronauts to sleep in there. The air also started to foul. A jerry-rigged system was made, using hoses, lithium hydroxide canisters from the LM and CM and a lot of tape. Soon, the air was better. The astronauts could not vent their urine outside because the flight plan was now so critical that even the force of the urine being dumped would cause the spacecraft to drift off course by a minute amount, necessitating the use of precious fuel to correct for it. Haise scrounged around the LM and came up with plastic bags and a five-gallon can in which to store the urine. A water gun in the CM leaked and Swigert had wet feet. On the night of April 15, there was another mid-course correction. The astronauts tried to find stars but gases still venting from the SM clouded many of the observations in addition to causing the spacecraft to continuously drift away from the flight path. Haise was so cold in the CM that he went into Aquarius to warm himself but it took four hours for him to stop his shivering. The astronauts, tired from lack of sleep, started making mistakes as Houston kept sending additional information for them to use to get home (122: May 4, 1970, April 27, 1970).

Pete Conrad was at the Lovell home in Houston. Neil Armstrong went to comfort Mrs. Haise, seven months pregnant. In Denver, Swigert's mother went into seclusion while his father continued to remain awake, following the details of the flight (Swigert was a bachelor). President Nixon visited the Goddard Space Center near Washington, D.C. for 45 minutes to learn more about what was being done for the astronauts. In Houston, a member of the Atomic Energy Commission was breathing down the necks of NASA officials because the LM carried an 8.36-pound container of radioactive plutonium. It was to be used with the lunar

experiments and left on the moon. The fear was that once the LM was cast loose from Odyssey near the earth, it would be scattered over a widespread area during the reentry. The NASA controllers were trying to convince the AEC official that the remains of Aquarius would hit the Indian Ocean, sink and the only effect of the plutonium would be to keep some fish warm at the bottom of the ocean. At the rear of mission control were several NASA brass and also many Congressmen. The PIOs were providing running commentary and the flight teams held briefings for the media after each change of command. The flow of information from Houston to the world never stopped (122: April 27, 1970; 27: p159; 104).

At 6:53 a.m. on April 17, the final mid-course correction was made. Shortly thereafter, the astronauts fired the explosive bolts holding the SM to the CM and waited, cameras ready, for the SM to drift into view. It rotated rapidly as it sailed by, revealing a gaping hole and a long brown streak staining its side. The astronauts were able to only shoot a few photographs because the service module was soon gone from view. With the service module gone, the astronauts prepared for reentry, which was fast approaching. The LM was still attached to the CM. In the windows, the earth was growing noticeably larger by the second as the earth's gravity pulled the two spacecraft faster and faster to 25,000 miles per hour. Swigert busied himself with star sightings, trying to find some on which to align the navigation systems but ice particles accompanying the spacecraft confused him. Lovell, in the LM, kept adjusting the attitude of the spacecraft as they neared the earth, preparing to jettison the LM. At one time, Lovell grumbled to the ground controllers about what lousy calculations they were sending up to the crew. Finally, Lovell thought enough time had passed and he shot through the tunnel into the now-powered-up CM.¹ Turning around, he took one last look at Aquarius, which had become a garbage can containing all of the astronauts' refuse, closed the hatch

¹Odyssey was now operating on its internal power which had been shut off shortly after the accident since the CM's batteries would last only for a few hours and they would be needed during the reentry.

and took his place in the CM. The air pressure in the tunnel between the two spacecraft was increased by the astronauts. At 11,000 miles from their intended splashdown point, on the backside of the earth (which means that they were much closer than that distance to the earth), and flying at 15,000 mph, the astronauts jettisoned Aquarius when they unlocked the 14 latches holding the spacecraft together. The compressed air blew the LM away. Later, as the astronauts swung around the dark side of the earth, the LM burned up while plunging through the atmosphere towards the Indian Ocean where its radioactive debris sank to the bottom (27: pp164-199).

Meanwhile, the ground controllers were concerned that the heatshield of the CM might have been damaged by the explosion in the SM. As the astronauts raced at 25,000 mph, they arched down through the atmosphere. The last thing Houston and the rest of the world heard from the spacecraft before the heat of the reentry cut the communications was Lovell saying, "Thank you" (27: p195).

When three and a half minutes went by after the blackout began, Capcom Joe Kerwin called the spacecraft since that was all the time normally taken up during the reentry when the communications were inoperable. Thirty seconds more went by, still no answer from Odyssey. Another minutes went by. The controllers began to worry that something was wrong. Finally, Swigert called in, "OK Joe," he said. Nine minutes later, at 12:07 p.m. (CST) in front of cameras transmitting to the largest TV audience in the world, Apollo 13 arrived home (27: p197).¹

Although the spacecraft was resting in 81 degree water, the astronauts could still see their breath in the chilled CM. When they were taken aboard the aircraft carrier Iwo Jima, the physicians there said that the astronauts were in the worst shape of all the astronauts they that had examined after returning from space flights (this is understandable since the astronauts had not really slept since the accident had happened four days before). One of the astronauts told the doctors

¹Upon completion of the mission, Grumman Aircraft, the manufacturer of the LM, submitted a "towing" charge to North American Rockwell for the 300,000 mile trip. The NAR officials chose to ignore the jest.

before he went to bed, after guzzling fruit juices, that he did not know how much longer the crew could have continued the flight (98: May 1, 1970; 27: p199).¹

Americans breathed a sigh of relief and went wild. For a few days it seemed that all the world had been captivated by the drama of the space flight. Yet, the number of magazine articles about Apollo 13 numbered fewer than those that had been written about Apollo 12. Robert Gilruth remarked in an interview that "we were fortunate that the press was in mission control" at the time of the oxygen tank failure. Congressman Olin Teague, head of the House Space Committee, felt the same way. According to Roy Neal, after the flight, Teague grabbed Gilruth and said, "Bob, you know, it was good that we had those guys [the media] in there when the accident happened. We should always have them there" (119; 48; 127: March, 1969-February, 1970, March, 1970-February, 1971).

Members of the PIO at MSC regard Apollo 13 as being the high point of their effectiveness; these people include John McLeaish, Jack Riley and Terry White. White says that the public information office responded quickly to getting information to the newsmen during the mission. Members of the media agree with this statement and with the thought that the mission was the highwater mark of the PIO's effectiveness (104; 129; 175).

Professor Louis Alexander of the University of Houston writes in a letter:

The difference between Apollo 13 and previous flights, in terms of NASA PR, resulted from the implementation of a new policy just before Apollo 13 began. That change in policy resulted from the efforts of a new appointee as head of public information [Brian Duff]--he was both intelligent and sincere with NASA and with the press.

Members of the press thought the policy change was coincidental with the need of NASA to reach Congress for more budget in the wake

¹On the last day, the astronauts ran out of water in the CM.

of public decrease in interest after the first moon landing....

NASA cooperated to the nth degree and the reporting that resulted was far more prompt and far more complete....

I consider NASA's permitting full freedom to be the evidence of full cooperation under the new policy. That freedom continued throughout in the presence of reporters, in shifts in the viewing and listening booths at the rear of mission control (6)

Roy Neal says of the mission:

The great highlight of Apollo 13 was we had fought for a long time to get the vital information of the flight controllers' communication loops and we were the eyes and ears on mission control for this mission and every one thereafter (119).

The astronauts of Apollo 13 wrote their own versions of the flight in the May 1, 1970 issue of Life. Lovell wrote that he thought the Apollo program had matured because of Apollo 13. He also revealed that he had seen the movie "Marooned" just before the flight (which was about an Apollo spacecraft and its crew stranded in space with no hope of returning to earth) and this made him think about the possibility of being in space forever. Swigert wrote that he had practiced on a situation in a simulator where only 2 fuel cells and one oxygen tank failed. He had not thought it possible for three fuel cells and both oxygen tanks to quit. The flight, wrote Swigert, gave him more confidence in the space program, not less. Haise described the physical aspects of the flight, writing, "I'm not a romanticist." In their stories, Haise and Swigert attributed the control and planning of the rescue to the ground controllers (98: May 1, 1970).

Years after the flight, Haise wrote in a letter,

I feel their effectiveness that of the PIO was more due to the fact that Apollo 13 was one hell of a story. It was as good as any mass murder for getting banner headlines. Apollo 11 was also a winner but I suppose Apollo 13 had more human interest because of the impending human tragedy (63).

Lovell writes of the flight:

It is human nature for individuals, indeed entire populations to become complacent when things are going well; and in the space program, most of the flights were successful so the flight crew of Apollo 13 was not overly concerned with the fact that prior

to the explosion we were competing with the local baseball game. In general, the press handled the report on Apollo 13 accurately. As is characteristic of the press, they tended to overdramatize the dangers.

The Lovell family's relationship with the press during Apollo 13 was excellent.... My family had no problem along these lines (100).

Writer Henry Cooper, of the New Yorker, wrote a book about the flight flight, entitled, 13, The Flight that Failed, which was drawn largely from material that Cooper had written in the magazine. The time that Cooper had spent hanging around NASA during the earlier flights paid off. He had brief talks with Haise and Swigert but Lovell refused to talk with him, says Cooper. When Cooper sent Lovell a copy of the draft for him to check for errors, Lovell still held back his comments. Cooper speculated at the time that Lovell was not talking because he was writing his own book about the mission or because he was protecting the contract that he had with Life (no book written by Lovell ever appeared in print). The writer also noticed that whenever Haise and Swigert appeared somewhere, Lovell was not with them. However, this author had no trouble in obtaining replies from Lovell in 1976 concerning his views upon various subjects (28; 100).

The flight of Apollo 13 had re-awakened a slumbering nation, informing the public that space flight--although it had been made to appear easy--still contained dangers. For their part in the flight, the Apollo 13 astronauts were awarded Medals of Freedom by President Nixon shortly after the spacemen had returned from space. Another Medal of Freedom went to Sigmund Sjoberg, the flight operations director for the mission (69: p49; 122: April 27, 1970).

No one said anything about the PAO receiving any medals or commendations for its work. But then, the PIOs would possibly have turned down any such offers since they considered the work to be normal for them. The University of Missouri once gave the PAO a citation for its overall efforts in the space programs. The PAO was also nominated for a Pulitzer Award but Scheer turned it down because the public

information officers of NASA were not members of the working press for whom the Pulitzer was designed (137).

The Apollo 13 astronauts earned another, less-known, designation-- they were the last astronauts to write their personal stories for Life. In 1967, the editors of Life had foreseen the public interest in the astronauts fading after the first moon landing and, when the contract for the personal stories was renewed, the editors wrote a stipulation that the contract would end one year after the first man walked on the moon. Thus, on July 20, 1970, the contracts that the astronaut corps had had with Life since 1959 came to an end. After that time the astronauts were free to write for whomever they chose. Attorney Paul Sawyer says that no publications came running to the astronauts to buy the rights to their personal stories. Sawyer adds, "So there we were, like a bride at the altar waiting for a bridegroom." An era that had sparked so much controversy in past years ended with little notice by either Life or the people who had so strongly opposed the magazine's connection with the astronauts. Gone, along with much of the fanfare of earlier flights, was Life (134).

THE BREAKING OF THE ASTRONAUT IMAGE

Between Apollos 13 and 14, some interesting events took place around the NASA community. Since the Life contract had faded away, the astronauts were now subsisting on their salaries and not much else. In the summer of 1970, David Wolper Productions offered to produce a television documentary about the astronauts and their families. The families of the astronaut corps would receive \$100,000 plus 50% of the profits. There was an advance payment of \$60,000 which was split 60 ways. The rest of the money never came through as the project fell apart. And not everyone wanted to share equally (26: May/June, 1973).

Astronaut Tom Stafford, sitting in as the head of the astronaut office for Alan Shepard (who was training for Apollo 14), called the widows of the eight astronauts who had died and asked for their participation in the film production. When Mrs. Grissom read the contract later, it became obvious that the astronauts were going against the widows. The terms stated that, after five years of widowhood, the women would no longer be eligible to receive a part of the proceeds from ventures entered into by the active astronauts, such as any more contracts with other media for their personal stories. Mrs. Grissom called Stafford to complain and he told her that she was the only widow to have voiced a differing opinion about the terms. Later, in talking with Mrs. Beth Williams, widow of C.C. Williams, Mrs. Grissom learned that Stafford had told Mrs. Williams the same thing. Then, the widows talked to a lawyer who made their position clear to the other astronauts: their husbands had given their lives and all they wanted was their share of the money coming to the astronauts. At that time, Mrs. Grissom was being paid a widow's pension of \$299 a month by the government (59: pp220-221).

After the astronauts heard from the lawyer, Pete Conrad visited the Grissom household to tell Mrs. Grissom, "If your husband was just in the Air Force, you would have been given one year to get out of your house if you were in base housing." Mrs. Grissom countered by pointing

out what the Original 7 had thought: that the astronauts, including the widows, would equally share the proceeds from any sales of their personal stories. Finally, Conrad said that many of the astronauts did not want to share anything with the widows. "They [the newer astronauts] won't even know who Gus Grissom was," said Conrad. "If they don't," replied Mrs. Grissom, "...then they'd better find out" (59: pp220-221).

She eventually received her share of money from the Wolper project (\$1000) even though she had not signed the contract; if she had done so, she would have cut herself off from receiving any future proceeds. Then she received a letter from Shepard stating that a new policy was being implemented. It stated that when the youngest child of an astronaut's widow reached age 18, then the benefits would be severed (59: p222).

At times, Mrs. Grissom found it hard to relate to some of the astronaut community, even before this incident, and it was no fault of hers. One night at an astronaut party, to which she had been invited by the Schirras, she was told that several of the families were planning to go to Acapulco for the Easter holidays that year. Then one of the wives snapped, "But there's no widows going to be allowed on this trip [sic]. It's going to be a fun trip" (59: p216).

Another incident happened when Apollo 11 went to the moon. A committee had been appointed by NASA to study what symbolic items might be left on the lunar surface. One suggestion was the mission patch that had been worn by the Apollo 204 astronauts when they died.¹ Al Shepard was not in favor of this thought. He did not feel that the patch should be taken on the flight since Apollo 1 had never flown. He telephoned Mrs. Grissom and was told by her that she was in favor of Aldrin and Armstrong taking it with them. "I'll go along with your decision on it," said Shepard. "But I don't think you should do it" (59: p219).

Mrs. Grissom recalls in her book:

I don't know why he was against it.... I called Pat [White] and Martha [Chaffee] and they both went along with it. I said,

¹The patch was labelled as Apollo 1.

Pat, you want to know how I feel about it, I don't care what Al Shepard does think. I don't think it's any of his business (59: p219).

Finally, Mrs. Grissom cut the ties with "Togethersville," a term that was used to describe the astronaut community, although it was not a geographical term since they lived a distance from each other in little clusters. In the middle of January, 1971, she walked into the Clear Lake City law office of lawyers Ronald Krist and Kenneth McConnico and asked for help. After a few weeks of deciding where to act and where to make their move, the two lawyers flew to Titusville, Florida and, on January 25, 1971, filed a \$10 million suit for negligence against North American Rockwell (NAR) on behalf of Mrs. Grissom.¹ By the time the lawyers returned to Houston, the news of the suit had already preceded them. They were mobbed by reporters at the airport. "How does it feel to be famous?" asked one reporter.

"Oh, are we famous?" asked Krist.

"You're definitely famous," was the reply.

The fame of the astronauts, and particularly this case, had spread to the lawyers. They found their telephones ringing day and night. They were invited to sit with attorney Melvin Belli on a television show to discuss the differences between German and American legal systems. Mrs. Grissom and Krist went to New York City to appear on NBC's "Today." The newsmen bothered Mrs. Grissom so much that she had to obtain an unlisted telephone number. The other widows of the Apollo 204 astronauts were asked by the media if they were participating in the suit; they were not. A six-page article appeared in Life--unusual attention for any law firm to have lavished upon a lawsuit (98: September 17, 1971; 59: pp228-229).

North American Rockwell filed a "pro forma" reply, stating that Colonel Grissom had been negligent on "the premises," as the company

¹The question of where to file the suit was for several reasons. The accident had happened in Florida, the family resided in Texas and the manufacturer of the CM was in California, each state having different statutes of limitations.

referred to the command module. This was something that a NAR official, Dr. John McCarthy, had hinted at during the Senate hearings of 1967 and who had been forced to retract his statement when Congressman James Fulton of Pennsylvania found the remark to be offensive to the astronaut's character (90: p203; 98: September 17, 1971).

Some people thought Mrs. Grissom was suing the U.S. government, which was not the case. Ron Krist offers his view of her patriotism:

I think it's patriotic to institute a suit against a corporation that has a five billion dollar contract paid by the U.S. tax payers, if they botch the work after we pay them five billion dollars, I think it's patriotic to make them toe the line and account for it (59: p230).

However, the angry letters came in, blasting Mrs. Grissom. A number of them were bitter:

I hope you lose your case and that you receive no money....

The world is already full of hungry money suckers such as you.... You're very, very sick. Go to Russia and stay!

My husband works for NAR and also met your husband.... Perhaps you have forgotten your husband volunteered.... If you must strike back, why not go dig up his remains? Why must you help the communists...? (59: p231)

Dr. Robert Gilruth sent a bitter letter that he had received to Mrs. Grissom. Accompanying the letter was his own note: "Dear Betty, I am passing this on to you since I am sure you want to know what people are thinking" (59: p231).

And there were letters that supported her. A Methodist minister wrote,

Fight on. I just want to support you in your suit for your rights in relation to the tragic callous lack of safety for your husband in the flight program. I'm with you in spirit and with a sense of shame that you must stand alone to call for the most elementary expression of justice (59: pp231-232).

More encouragement arrived in the mail from many places:

I'm all for you and so is the rest of my family....

Hope you get the entire sum.... ...even though money cannot in any way erase your grief.

Your journey is embarkation on a course of action bringing

about direct and indirect confrontation with the establishment....
 Congratulations for your lawsuit...(59: p232).

The battle would continue for almost a year.

In the July 31, 1970 issue of Life, a story about Alan Shepard written by Loudon Wainwright, appeared. Wainwright, who had been a staff writer for Life from 1959-61, was back to write the story about the man who had just been officially announced as having been selected to be on the Apollo 14 crew.¹ Wainwright treated Shepard fairly, showing both the good and bad sides of the first American astronaut. The writer stated that:

- Shepard was aloof;
- Shepard applied ridicule to the scientist-astronauts, telling jokes about them from time to time. The scientist-astronauts claimed that Shepard was unsympathetic to them and was icy towards them when it came time to disqualify them from flights;
- Shepard set himself up in an apartment while the other astronauts moved into houses near MSC when the space administration moved to Houston in 1962;
- Shepard lived in a \$150,000 house in an exclusive Houston neighborhood. "Just too big," said his daughters, preferring his country home;
- he had discussed his secret ear operation with Deke Slayton in 1968 before he went to California / which seems odd since everything that the other astronauts did had to be cleared through Shepard yet Shepard did not feel obligation to divulge some of his activities to them--this seems unfair /;
- Shepard had set up a ten day lecture series for himself at North American Rockwell's California plant so he could study the CM. He also arranged another tour at the LM's home at Grumman Aircraft Corporation on Long Island;
- Shepard was concerned that he was projecting the image of the "hustling" astronaut to the public;
- Shepard tended to brush off the public as it did not understand him; and
- Wainwright hinted that Shepard had been put back to Apollo 14 because of his incompetence (98: July 31, 1970).

¹It has been stated by several sources that Gordon Cooper had been originally slated to be the commander of Apollo 14 but, as the sources have told this author, an impending divorce in Cooper's crew and his love of fast cars, kept those men from flying the mission. He retired on July 31, 1970. Upon the announcement about Shepard, Cooper was in London and a reporter asked him for a comment about Shepard's selection. Cooper replied, "I would rather not speak too much of Captain Shepard. I have my own feelings about him." The rivalries were still present.

In all, the article was not too kind towards Shepard, who had been well respected nine years before when he flew in MR-3. Wainwright writes in a letter:

I had no special instructions on the Shepard story in 1970. Since it was not a story carrying his byline, we did not seek his approval. Whenever a story appeared under my byline about the astronauts, I said pretty much what I wanted to say, and no one at Life ever suggested that I either put the kid gloves on...or take them off....

When there were no longer contractual ties, the writing wasn't so reverent as it had been in the beginning (165).

From the looks of Wainwright's article, he was not kidding. Life's protection of the "simon pure guys" image (as Buzz Aldrin labelled Life's portrayal of the astronauts) fell away when the contracts faded from the scene. It is interesting to note that Wainwright's article came right after the contracts had expired--only 11 days before. One day in a bar, a Life editor reportedly said, "Let's tell what the astronauts are really like," but could not because, at the time of his statement, the contracts were in effect. Now, in the summer of 1970, Life's editors and writers finally had their chance to show "what the astronauts are really like." They did not go wild with pent-up hostility (this author doubts there was any), but the article about Shepard was not the friendliest ever written about him (26: May/June, 1973; 2: p301).

Another issue of Life that came out that summer carried a one-page article by Gene Farmer, who had been working on First on the Moon with the Apollo 11 astronauts and Dora Jane Hamblin. Farmer wrote a follow-up story about those astronauts, telling what they were doing one year after going to the moon. He said that Armstrong had not really changed from what Farmer had known of him before the flight. The first man on the moon told Farmer, "The principal change in my life has been that people now keep asking me how my life has changed." Aldrin, according to Farmer, had changed the most and Collins, now working in the State Department, had changed some because, "going to the moon did remove a whole lot of things from my shopping list." Farmer editorialized at

one point:

The decorations, the honorary doctorates, even the flight itself have, I think, changed the three astronauts in ways that not one of them yet fully recognizes even in himself, let alone in the other two. The common denominator of change seems to be a determination to repay society. Each knows that there was a big element of chance in his emergence as "a hero," for the first lunar landing could well have been achieved by another Apollo crew (98: July 24, 1970).

Apollo 14 was launched on January 31, 1971 and, with astronauts Stu Roosa and Edgar Mitchell with him, Alan Shepard was on his way to the moon. Five days after launch, he and Mitchell descended to the Fra Mauro region for a 33-hour stay. They brought along a three-wheel cart to carry the moon rocks and tools as they walked for several miles across the lunar surface. The cart, weighing only 25 pounds in the lunar gravity, bounced continuously, spilling items so often that one astronaut would follow the other, picking up whatever fell. On February 6, the astronauts made a second journey out of the LM to collect more moon rocks. While on this excursion, Shepard affixed a six-iron golf head to a digging tool, dropped a few golf balls and drove them for "miles and miles and miles." Then the men packed up everything, dumped what was unnecessary for the flight home out the LM hatch and launched themselves from the moon. During the three day flight home in the CM, Mitchell silently tried some ESP experiments with some ground-bound friends.¹ On February 9, the astronauts reached home and were put into two-week quarantine at MSC. It was the last time any crew spent time in the LRL (118: July, 1971).

The media reacted with a bit more enthusiasm towards Apollo 14 than towards Apollos 12 and 13. There were 35 articles about the third mission to land on the moon and about five more articles were on Shepard alone. Shepard cannot be thought of as a reason for the increased publicity or the increased attendance at the Cape when the mission started. The

¹According to an article in the Daily Nebraskan, the college newspaper at the University of Nebraska-Lincoln, Mitchell told a college audience at that campus that his experiments had been successful (30).

reason was more than likely the flight of Apollo 13. The number of correspondents at Apollo 14's launch was 2,355, which was 436 more than had been at Apollo 13's departure (69: p49; 127: March, 1971-February, 1970).

Gordon Harris attributes this surge of attention to the trouble with Apollo 13.

...we learned that problems made news, while the successful performances of rockets and spacecraft and astronauts were accepted as routine, a phenomenon difficult for space engineers and managers to accept, as the public relations staff learned (69: p48).

After the flight of Apollo 14, many articles concerning Mitchell's ESP experiments appeared in newspapers and magazines. What he had been trying to learn was if people could communicate with one another without having to use electronic communication channels. Mitchell, in reply to a question by this author, writes,

Out of the hundreds of articles [about his ESP work], only a handful have been disappointing. I have been treated well by the press because I have tried to work with their needs.... Almost every paper has carried several articles--most were not too bad (113).

On February 22, 1971, Julian Scheer wrote the lead for a story that the public affairs office was preparing to release to the media. That press release was the announcement of his resignation as NASA's Assistant Administrator for Public Affairs, effective March 22, 1971. Scheer calls the writing of that lead, "the only dishonest thing I ever did while I was in NASA" (137).

The press release contained praise for the head of the PAO:

...under Scheer's direction, NASA anticipated and planned for press needs in connection with Apollo manned flights, including a worldwide communications network for disseminating television pictures live from the Moon on Apollo 11...; developed worldwide exhibit programs, began regular television and radio network services, started a varied publications program, produced over 100 major motion pictures on the agency's programs for public distribution, and developed an innovative elementary and secondary school education program. Activities in Washington and at 11 other NASA locations are directed from Headquarters....

He was awarded NASA's Exceptional Service Medal in 1968 and NASA's highest award, the Distinguished Service Medal, in 1969. NASA's Public Affairs program received several national awards, including the 1970 University of Missouri School of Journalism Special Achievement Award which cited the NASA program "for its outstanding, almost inconceivable, contributions to journalism technology and progress through highly complex communications facilities and networks which have enabled the people of Earth to be witnesses to man's pioneering journeys into space and to the Moon; for its cooperation with the mass media of communication of the world--and especially with those of the United States--in making available the continuing story of the American space program; for its recognition of, and dedication to, the proposition that as the frontiers of space are explored there is the incumbent responsibility on government to expand the frontiers of journalism so that the public will be fully informed" (116: 71-28).

While some people may think that the "dishonest thing" that Scheer did was to pat himself on the back in the press release, possibly the most dishonest thing he did was to not list the reason why he was leaving NASA--he had crossed wires with Congress.¹ Scheer says that his dismissal revolved around the manner in which invitations to the KSC launches were handled by him--specifically, why he kept refusing to supply launch invitations on an unlimited basis to Dr. James R. Maxfield, a Dallas, Texas researcher and cancer specialist. Scheer's successor, John P. Donnelly, confirms Scheer's statements on this subject (137; 33).

Maxfield had the habit of arriving at Cape Kennedy with planeloads of friends, who came at his invitation. This had started when Maxfield saw the first Saturn launch in 1961 and continued through the rest of the decade into the 1970s. He never brought less than a planeload of his acquaintances. The most that arrived at one time at the Cape were five planes at one time. His son, Morgan Maxfield, a Kansas City businessman, brought an entourage to the Cape from Kansas City on one occasion aboard a chartered 747. The Maxfields took care of their guests. Once, when a group was brought to Florida, they went to Disneyworld first (about 40 miles from the Cape), and arrived at the launch complete with a police

¹According to Scheer, he had only written the lead; someone else in his office had written the remainder of the press release.

escort around the buses. It did not seem as though the Maxfields were causing the government any expense but rather the inconvenience of having 300-400 people who were not expected show up at the launch viewing stands (69: p213; 70; 137).

Maxfield said in a conversation:

There was some difficulty in getting the people out to the launches. We just simply passed the word around that we were going and if anyone wanted to come along with us, they could.... They paid their expenses while on the trips....

About the NASA information program--the general public was never informed very well by NASA about what was going on. NASA did a lot of publicity. Julian Scheer, and the newscasters were part of this, only pointed at a hunk of metal. They didn't tell the public that for every dollar spent on space, there was five dollars coming back in spinoffs in the medical fields, in medicine and in many other areas.

We felt this was important that the public get the facts. They got only half-facts from NASA. We felt that by inviting many people from various areas, we could help spread this information about (110).

In essence, it appears that Dr. Maxfield and his son were trying to run the public affairs of NASA.

What Scheer wanted to do was to limit the number of passes available to Maxfield. It did seem rather strange that the doctor was bringing in more people than were allotted for the White House (20) and the Vice-President (10) combined. Scheer preferred to keep Maxfield limited to less than 25 passes per launch but the director of NASA's public affairs ran into stiff opposition, he said, from Congressman Olin E. "Tiger" Teague, of the House Science and Technology Committee, who was the U.S. Representative for the Texas district in which Maxfield lived.¹ Teague said that the Maxfields did more than any other individuals to sell the U.S. space program. It was Teague, claims Scheer, who resented his way of handling one of Teague's more important constituents (69: p213; 70; 137).

According to Scheer, Teague tried to oust him when Webb was in power but failed. Next came Paine, who also did nothing to fulfill Teague's desires. When Paine left NASA in 1970, George M. Low became

¹Although not the House Space Committee, Teague's committee dealt heavily with NASA's operations.

the acting administrator. In early 1971, Scheer offered Low his resignation; his reason for wanting to leave NASA was that he was putting in just too much time--up to 15 hours a day for seven days a week. Scheer did this on the advice of his wife, Webb and Paine but Low asked Scheer to stay with the space agency, which Scheer did (137).

Then, shortly after Scheer had made his request to part from NASA, Low called Scheer and rather awkwardly told Scheer that the world would appreciate what the public affairs director had done during his years at NASA but things were changing and it was time for Scheer to leave. Scheer believes that Teague had finally found an administrator to dump him. He agreed with Low and offered to resign in March, 1971. President Nixon heard of Scheer's "resignation" and called him to ask him if he wanted to stay but Scheer said that he thought it was best for him to leave (137).

In Scheer's place, Low appointed the astronauts' attorney Paul Sawyer to act as a consultant on NASA's public affairs policies after Scheer left. The Washington Post editorialized about Scheer's temporary replacement:

There is something strange about the decision of NASA to bring in...lawyer Paul Sawyer as a consultant.... NASA has had, for a decade now, what seems to us and to most journalists to be the most effective and most honest public information program in government. It is hard to see why public monies should be spent to study it, particularly when the man chosen to make the study has represented the astronauts in recent months in negotiating private contracts for the stories of their private activities.

Lying behind the move, of course, is the decision of NASA's acting administrator, George Low, to fire Julian Scheer who has run the agency's public affairs department for nine years. Mr. Scheer survived the first two years of the Nixon administration largely because of the remarkable job he has done in creating NASA's exceptionally good public image. In the process, however, he has alienated some powerful members of Congress by refusing to cater to their every wish, such as providing special facilities for their friends during the various lunar expeditions. The pressure for his departure, it seems, had become more than NASA was willing to withstand, particularly now that it is less popular on Capitol Hill than it once was.

But there is nothing in Mr. Scheer's departure that would

seem to call for re-thinking the highly effective policies he administered for so long. Mr. Scheer fought long and hard for the view that the public had a right to know as much as possible about NASA and it is largely because of his efforts that NASA permitted live television and radio coverage of all major space activities....

Even assuming that the new men now running NASA have a legitimate reason for wanting a consultant's advice on public information activities, the decision to get that advice from a lawyer for the astronauts is highly questionable.... Thus, regardless of Mr. Sawyer's qualifications or motivations, he is cast into an impossible situation; he cannot recommend anything that can conceivably be construed as limiting NASA's public information operations without being open to the charge, whether fairly or unfairly raised, of doing it to help astronaut-clients of his law firm.

It is always disappointing to acknowledge that a few malcontents on Capitol Hill can force the firing of a competent public official. But it is profoundly distressing to think that the new hierarchy at NASA is so insensitive to the public interest as to see no conflict in asking the astronauts' lawyer for help in working out a new public information policies and picking a new public affairs director (167: March 27, 1971).

Attorney Sawyer, who acted as a consultant for only five weeks (during which time, Al Alibrando, who had been Director of Information for Manned Space Flight, was the NASA official in charge of the PAO), was paid less on a per diem basis than he would have earned in legal fees. He said in an interview in 1977,

The whole deal about the conflict of interest was kind of silly. If NASA had told the astronauts to go out on the parade field and stand at attention, they would have done it. I wasn't there acting for the astronauts. I was working on the whole aspect of the public information program.... There was no conflict of interest... (134).

From what this author has researched, there is nothing that indicates that Sawyer ever made any recommendations on behalf of the astronauts. But the Washington Post did raise a good point: even if Sawyer was not prejudiced towards acting in the astronauts' favor, that thought might linger in the minds of many people and it would be hard to remove that thought although it also must be remembered that the Louis Nizer law firm was not being paid any money to work for the astronauts

so there was no financial obligation for Sawyer to be considerate of the astronauts during the weeks he spent acting as a consultant.

As for Scheer being fired because of Congressman Teague, George Low does not believe this. In a letter he wrote to the author, he said that he would prefer to not discuss the matter but added, "I will tell you that the story you have heard concerning Mr. Teague is not true."

Representative Teague explained his role in the affair to this author in a letter:

...the problems with Mr. Julian Scheer did not originate with Dr. James Maxfield. The problems arose with the general way in which Mr. Scheer handled the attendance at the NASA launches at Cape Kennedy.

In the district of almost every Member of the Science Committee, some incident had been handled in a way that the Member was not satisfied with the work of Mr. Scheer. For example, one incident that I remember--a Dean of Engineering wanted a pass to the launch [sic] and could not get one, although a professor serving under the Dean was sent one which was unsolicited and could not be used. This is an example of many, many cases. In many ways, it is my opinion that Mr. Scheer did an excellent job. But in some areas, in particular dealing with people, he was less than desirable.

I have been personally contacted a number of times since Mr. Scheer left NASA concerning his employment; and each time, I have recommended him. As you may or may not know, our Committee reduced by a considerable amount, the amount of money authorized for his office. There was not once complaint from anyone, newspapers or magazines. For a period of time, our Committee was flooded with complaints concerning Mr. Scheer's handling of passes for the launches. In my mind, there is no question that Dr. Maxfield spent more of his personal money to promote the space program and was responsible for plane loads of business people from the whole Texas area and from Kansas City to attend the launches. A number of people did this, a number of industries did this; and knowing what was happening on Capitol Hill, it was most important that we do everything we could to convince American citizens that the space program was a worthwhile project.

It was my feeling most of the time, and I know the feeling of other Members of the Committee, that Mr. Scheer's attitude was that our Committee was just a necessary nuisance. Very few people know how close we came to not being able to get the money for the space program for a number of years. As far as I am

concerned, it was strictly a part of Mr. Scheer's job in which I felt he failed. There was nothing personal then; there is nothing personal now.

For sure, I was not the only one prodding Mr. Scheer to either change his ways or get some administrators to change his job (156).

Gordon Harris, at Cape Kennedy, believes Teague is right. He says,

Low had his own reasons for firing Scheer. But Congress did have something to do with Scheer leaving. [Senator] Margaret Smith went after NASA, with Goldwater behind her, saying that they had supported NASA's public relations and had got no answers to items they were interested in--nothing (70).

While Scheer believes that Teague was the man who was out to eliminate him from his job, it would seem plausible that Scheer has made him his personal scapegoat. But most of the evidence points out that there were members of Congress, particularly in Teague's Committee, who were upset at his performance. It does appear, however, that Teague did have much to do with Scheer's firing. How much Teague had to do with Scheer's replacement is not known but, on August, 15, 1971, John P. Donnelly took over as the Assistant Administrator of Public Affairs for NASA, relieving Alibrando (123a).

In early 1971, Alan Shepard had visited the launch site of MR-3 (presumably while he was at the Cape preparing for Apollo 14) and found it to be decaying. He managed to bring NASA's attention to this, thinking that the launch pad of the first American manned mission should somehow be honored as a historical spot. NASA agreed and an effort to dedicate the site began. On May 5, 1971, the tenth anniversary of Shepard's first flight, Shepard returned to Launch Complex 5/6 at the Cape. So did 3,000 officials and employees of NASA. The old blockhouse had been outfitted with the same equipment as had been in there on the day of the Redstone launch. President Nixon and Vice-President Agnew sent notes of congratulations to Shepard for his work over the years with NASA. While Shepard's father and the astronaut watched, their wives unveiled a bronze plaque that stood on the launching pad and bore

a profile of the astronaut and the following legend:

ALAN B. SHEPARD, JR.

The first American to penetrate outer space began his flight from this launch complex in Freedom 7 on Mercury Redstone No. 3 at 9:34 A.M. May 5, 1961

From this beginning, man reached the Moon.
John F. Kennedy Space Center
National Aeronautics and Space Administration

Shepard mingled with his old friends for awhile, some who were still working on Apollo, and then returned to Houston to resume his old job of being the Head of the Astronaut Office (117: Kennedy Space Center Story: pp168-171).

In the middle of 1971, a NASA custom was discontinued, possibly to the relief of the astronauts. The "Week in the Barrel" had come to an end. NASA Protocol Officer Gene Marianetti stated in an interview that "The Week in the Barrel" was called off because there was not much demand anymore to have the astronauts put in appearances around the country. Essentially, said Marianetti, what had happened was that Slayton one day said, hey, we're not flying as much anymore, so let's tone down the program a little. NASA hierarchy agreed. Since that time, the requests for astronaut appearances have been handled by the astronauts' office and NASA Headquarters. Occasionally, schedules for tours similar to the "Week in the Barrel" would still be set up but as a weekly occurrence, it was gone forever (109).

On July 23, 1971, the New York Times and the public information office of NASA released statements to the media that the Times had made an agreement with attorney Paul Sawyer for the personal stories of the Apollo 15 astronauts and Harrison Schmitt (due to fly on Apollo 17 as the first and only geologist-astronaut to visit the moon). The NASA press release reads, in part,

Terms of the agreement call for one byline article each by Apollo 15 astroanuts...for publication after the post-mission press conference and three byline articles by Astronaut Schmitt while the crew is on the lunar surface.

The New York Times Special Features / the syndicate division of the newspaper / also has rights of taking still photographs in the homes of Apollo 15 crew members at the time of their first return from the mission and rights to interviews with family members.

The agreement...provides for payment by the Times Special Features of 50% of the gross proceeds from the syndication of the articles (116: MSC 71-51).

Newsweek did not think too much of the efforts of the New York Times. It recalled an editorial from the Times' earlier days that states:

The motive of private profit has an honorable and legitimate place in the world of commercial endeavor but that world does not embrace the tasks / of / astronauts.... They should not be allowed to reap enormous private profits from the outside sources / referring to Life and Field / (122: August 9, 1971).

Newsweek reported that the Times was being hypocritical by offering the astronauts money for something that the Times had originally blasted Life, Field, the astronauts and NASA for doing. It was as if the Times was saying, "Do as I say, not as I do." In the Newsweek article, a Times spokesman tried to clear up the muddy waters around the issue by stating, "Well, at least they will not reap enormous profit" (122: August 9, 1971).

Newsweek was correct for condemning the Times. This author has attempted to question several people at the Times as to why there was a change in attitude towards offering money to the astronauts for their personal stories. There have been no replies to the queries sent.

The day before launch of Apollo 15, Jim Irwin, the LM pilot, spent some time playing handball, so much that he completely dehydrated himself and, without his knowledge, lowered the level of potassium in his body. This would affect him later in the mission and cause some strain between NASA and the media once more (77: p27).

On July 26, 1971, Apollo 15 took off with Irwin, Dave Scott and Al Worden on board. The mission was the most scientific one to that date. The target of Irwin and Scott, who were going to the lunar surface in the LM, "Falcon," was the long Apennine mountain range where some

peaks rise to more than 15,000 feet. On July 30, the Falcon settled near Hadley rille between a number of mountains. After they were on the moon--and partly crushed the bell of their descent engine--Scott poked his head out of the upper hatch of the LM, looked around and told Houston what he saw. Near him were mountains taller than Mt. Everest, in relation to their surroundings; a meandering gorge a mile across, 1000 feet deep and 70 miles long; and a fantastic vista one of the moon's mountain ranges. Craters were abundant in the area. Scott slipped back inside the LM, sealed the upper hatch and then he and Irwin rested for a short time before making their first trip outside the LM. Nine hours later, they left the Falcon. One of their first discoveries was a thick, dark powdery dust covering everything, including portions of their white moon suits, cameras and other gear. They set up a color TV camera and, while the world watched, unfolded a weird contraption that soon took shape as a small cart. It was the first Lunar Rover, or "Moon Buggy" to some people. The astronauts then unloaded their gear on it, mounted the TV camera on a center support and buckled themselves into the seats to go zipping across the moon at a top speed of nearly ten miles per hour. They headed for the gorge first for a look. As they took panoramic pictures with their still cameras, a ground controller operated the TV camera on the Rover to follow the astronauts (there was a one-second delay because of the distance that the radio and television signals had to travel). The TV could work only when the Rover was parked and its parasol-antenna was aimed precisely at the earth. With its television shows, NASA was improving substantially (118: February 1972).

On earth, the television pictures were being transmitted to the networks by NASA but the networks were not always transmitting the images to the public. Wally Schirra and Walter Cronkite sat in the CBS studios with other personnel watching the shows being broadcast from the moon. Schirra recalls:

We were sitting there watching the shows when Jan Armstrong [the wife of the astronaut] called and asked why we were

not putting the show of the Rover out over the air. I had to tell her that we wanted to...but the commercial advertisers didn't.

Cronkite and Frank Stanton / the President of CBS / wanted air time but the advertisers would not buy the time. Dave Scott demonstrated the law of physics with a feather and a hammer but the whole world couldn't see it because we were competing with the soap operas (140).

It would have been a gallant but futile effort for CBS to have attempted to air the shows by itself without any advertisers. The network had been hurt somewhat during one of the Gemini missions when it televised a countdown for several hours before the whole launch was called off. That possibility did not exist this time but there would have been a hole in CBS' profits if the network had continuously shown the telecasts from the moon live. Instead, the networks seemed to be content with clipping highlights from the moon telecasts and running those on their evening newscasts.

The exertion of the first EVA, which covered more than six miles, proved telling on Irwin. It lowered his potassium level even more as he sweated in his suit. Another thing that affected him was that he could not get the water bottle in his suit to work properly as he walked about the moon, further dehydrating him (77: p73).

As the men pushed a drill into the stubborn soil of the moon, the TV camera caught them struggling with it, something that neither astronaut cared for the world to watch. The physical efforts were beginning to show even with Scott as his fingers began to swell inside the tight gloves from the exercise (118: February, 1972).

As Scott and Irwin returned to the LM after their first EVA, Worden soared above them with a modified SM, mapping the moon with a score of various instruments. The next day, August 1, Scott and Irwin went on a second EVA, 7.64 miles long, during which they travelled half a mile up Mt. Hadley Delta.¹ On August 2, the lunar astronauts took their third and final EVA in the Rover, adding another three miles to their log. After

¹Mt. Hadley Delta was NASA's way of distinguishing that mountain from Mt. Hadley, which was nearby. The delta is not a river in the sense to which earthlings are accustomed; it is only a means of identification.

their return, Scott stood before the remote controlled TV camera and demonstrated Galileo's Principle by dropping a Falcon feather and a hammer. They hit the ground at the same time. "How about that," said Scott. "He [Galileo] was right." When Irwin found that he had finished his work but Scott was still busy at his chores, he spent 15 to 20 minutes bouncing around the LM like a young boy (77: pp65-86; 118: February, 1972).

Then, with the Air Force Hymn playing from a tape recorder in the LM, Air Force officers Scott and Irwin took off from the moon, watched by the world 250,000 miles away as the TV camera on the Lunar Rover caught their ascent in its lens. After they left, the TV operator at MSC panned the camera around Falcon's base of operations as if to make sure no one else was there (118: February, 1972).

After the Falcon had docked with the CM, Irwin moved inside the larger spaceship and felt some minor pains in his chest but he chose to ignore them. Then, after the astronauts undocked from the LM (leaving behind some items because both Scott and Irwin had thought that the other had taken them into the CM), Slayton made one of his unusual radio appearances when he told the crew to take some sleeping pills. Irwin, not knowing it, was suffering from a "bigeminy rhythm," which means both sides of the heart are contracting at once in confusion, thus tiring the heart rapidly. While taking his suit off, Irwin felt tired and wanted to lie still for five to ten minutes. The Capcom called the crew once and inquired if they had taken the sleeping pills. The message from Apollo 15 was that the astronauts did not think they were necessary and preferred not to take them. Scott was now beginning to show symptoms of bigeminy rhythm too.

During the flight to earth, the astronauts crowded together in the CM to float before the TV camera and conduct the first air-to-ground press conference ever held in space. It was a hit with the media. One questioner asked what did the astronauts want and not want to do again. Scott said that he liked being on Mt. Hadley Delta and seeing the entire

panorama from the upper hatch of the LM; Worden liked the engine burn that put the spacecraft into lunar orbit and the burn putting them towards the moon from the earth; and Irwin said the liftoff from the earth was his high point and falling in front of the TV camera while on the moon was his low spot of the mission. Then, Worden performed an EVA, retrieving precious film packages from the SM since that module would have to be jettisoned before the reentry (118: February, 1972; 77: pp92-102).

When the astronauts returned to earth, Irwin was still not feeling well. During the physical examinations, the astronaut almost fainted. For a few nights, when he slept, he felt as though his body was tilted. On the airplane from Hawaii to Houston, the astronauts pulled out a stamp cancellation device and cancelled 650 envelopes which they also autographed. The envelopes had been carried on the moon by Irwin and Scott (77: pp114-118).

Because they did not have to be quarantined, the astronauts went home upon arriving at Houston. At Irwin's home, the press was waiting for him and they apologized to the family for intruding upon their privacy (77: p118).

During the debriefings, the crew slipped away to rendezvous, with NASA's blessings, with the writers from the New York Times. Irwin writes in his book, To Rule the Night,

They talked to the three of us separately and picked our brains about our first impression of the flight. I thought it was an imposition. Here we were, not back to normal physically and still involved in debriefing the flight. Yet we had to go to the motel and spend an hour or two with these Times people. I got into a little trouble about this. I told them exactly what I thought (77: p119).

What Irwin meant in his last two sentences was that he told the Times reporters about his impressions of God while he was on the moon; of the tilting feeling when he slept on the aircraft carrier; and that "something is not right yet" with him physically. The article went through NASA for clearance and the public affairs people at NASA

decided that none of Irwin's information had been released to the rest of the media yet so it was eliminated from the article. Writes Irwin, "The Times people were a little chagrined that it was handled this way" (77: p119).

Bob Gordon, a PIO at MSC, says that Dr. Berry decided to call a press conference shortly after it was learned that Irwin had told the Times about his ailments. It was mentioned to this author by flight director Kraft that Berry had realized during the mission that the astronauts were having heart problems but he had chosen to not inform the crew about the situation for fear of informing the media as well since reporters were listening in on the conversations (93; 53).¹

Irwin writes in a letter,

Dave and I had our heart problems after we left the surface of the moon. However, we were not informed of this until we returned to earth. This omission of a possibly very vital transmission concerning our welfare represented a gross injustice to us and the space program. I would have welcomed a call from Dr. Berry or any other doctor regarding medical advice. That was their purpose for monitoring us (78).

On August 13, 1971, Dr. Berry, along with Bob Gordon, held the previously mentioned press conference. During that confrontation with the media, Berry mentioned that he had seen signs of the trouble with Irwin one-half hour before the launch. The doctor also said that he noticed the signs again when the astronaut was on the moon and, most particularly, when Irwin was on the way home. During the return trip, Berry added, he noticed that Scott was suffering from the same symptoms. The physician said that the signs were associated with fatigue and that it meant the astronauts had to rest. The doctor also told the reporters that, as of the time of the press conference, there still had been no medical debriefing of the crew although the men had been examined aboard the aircraft carrier immediately after the flight. Berry then virtually admitted that he had first learned about Irwin's dizzy spells and the

¹The flight surgeons of NASA receive information about the astronauts through telemetry containing the impulses of the medical sensors placed at different locations on the astronauts' bodies.

astronaut's tilted sensations from the PIO who had read the transcript of the Times articles. Yet, when Berry was asked if that was the first time that the medical officers of NASA had learned about those symptoms, he replied no, that the physician aboard the aircraft carrier had been told about them by Irwin (116: Apollo 15 PC-59).

Some reporters were put off by Berry. They questioned why he had not called the press conference days before. They also claimed that Berry had previously told them that all was normal with the astronauts which misled them into believing it. Berry pointed out that surely some of the press had seen Irwin since the flight and that he did not look as though he was suffering. One reporter said that he thought Irwin looked dizzy. Berry started grasping for explanations as to why he had not told the media about the situation. A reporter asked if Washington had told Berry not to talk about the heart problems. Berry answered no, he had not been told what to do by anyone. Then Berry was asked if he had issued any orders to be silent. Berry replied no to that too but he then clarified himself:

...let me be clear about that, there has been and there always is, that the material that is done in medical examinations and the material that come from the medical debriefing and its--you know, everything that goes on tape at these things is stamped confidential and all that sort of thing, all of that is done and is done medically confidential as well as just being confidential to the program.... ..other than that, there has been nothing else that's been done (116: Apollo 15 PC-59).

Berry was becoming flustered as he answered the questions but he finally dug up a plausible excuse for his refusal to discuss the situation any earlier--that the matter was between patients and their doctors, which is usually respected by everyone else. Note how Berry talks in the following paragraph when he discusses the patient-doctor relationship.

...knowing Jim as he is, he tends to be a pretty introspective kind of guy anyway, and I suspect that what he said, was well, this isn't, you know, it's not really bothering me--you know, it's here and I'm still able to do everything that I need to do, and Dave's convinced I can, and I'm convinced I can,

so there's--I don't think it's interfering and I don't, so I'm not bringing it up. I think some of that again, you've got a problem that you gotta, we gotta face this and we might just as well say it out, we're going around it all over the [communications] loop here, so let's we ought to bring that one out, too. Everything you say in that spacecraft, and this causes all kinds of problems for me, as a physician or anyone of us as physicians, try to monitor that activity, is a fact that anything that those guys say does not have any doctor-patient confidentiality whatsoever. They're left with a position where they've gotta say it and it's going to be, you're going to be sitting over here in the room listening to it and the next thing that happens, and furthermore, it's going to be printed out and handed to everybody. And that's the same as if you come to me in my office up here and we talk about your case of gonorrhoea or whatever and I end up putting that out in the public press.... ...that's the kind of position that we're in. And I'm sure that hampers the flow of information....

...if you do have something that comes from that [conversation] that is going to impact the mission, in any way, that I think that has to be said, and must be said to the public and to the press, I thoroughly agree with that but I think that there ought to be the capability, which there is not, for an individual to talk--for a patient to talk with the physician and that does not exist (116: Apollo 15 PC-59).

The media remained split about Berry's explanation that there should be doctor-patient confidentiality in the space program (he had certainly used it with some degree of privacy during Apollos 8 and 9). Louis Alexander of the University of Houston's Communication Department, writes,

The press was critical of Dr. Berry and NASA for not notifying the press of Irwin's heart condition. It looked like a throwback to me of the old policy of waiting till NASA had the answer and an official position to take before letting the press in on it. For some reason...the press was less critical or resentful, generally than it had been previously of NASA withholdings. Maybe the doctor's invocation of client-professional relationships had something to do with it, maybe not. I cannot personally say (6).

Yet Howard Simon, managing editor of the Washington Post, said in 1976 that the situation concerning the medical information was handled wrong. He stated that "it should have not been restricted" (151).

Despite the rather correct flap about the heart conditions of the

astronauts by the media, the mission was deemed a success by all. Practically every article written about Apollo 15 was favorable and many mentioned that it was an uplift to the hopes of future moon missions and especially to NASA's hopes for future funds (159: August 9, 1971).

The cancelled envelope situation was another breed of problem though, particularly for the astronauts of Apollo 15. The way that had started was when a former space industry representative to the Cape, Horst (Walter) Eierman had contacted Scott in May, 1971 about carrying the envelopes to the moon. Scott then approached Worden and Irwin about it, thinking that they could use the money from selling the envelopes to Eierman as a trust fund for their children. Following the flight, in September, 1971, Scott mailed 100 of the envelopes to Eierman, now in West Germany, and each astronaut received \$8000 for their troubles. In October of that year, Scott told Irwin that they were in trouble because Eierman was selling the envelopes in Europe--which had not been part of the deal. The crew members sent the bankbooks back to Germany and tried to call the deal off. How Scott had heard about the selling is not known although Irwin speculates that there may have been a leak to the European press. An embarrassing situation was on the horizon. The crew went to Belgium to meet the King of that country and, when they were there, there was mercifully no mention of the envelopes being sold to anyone. For awhile, the astronauts breathed a sigh of relief. Periodically, when at home, the crew received reports that the envelopes were being sold for as much as \$1500 apiece. Until the next spring, the issue slowly brewed beneath the surface and was not known by many people (77: pp228-230).

On November 8, 1971, some action was taken as the result of the medical trouble aboard Apollo 15. Gilruth, Kraft, Low, Fletcher and some others, including John Donnelly of the PAO, met to discuss what could be done if such a situation arose again. They reaffirmed what had been put into effect on May 13, 1969 by Tom Paine. Paine's statement had said that if a private conversation was requested by the

astronauts, then the following ground rules would apply:

1. Flight crews and/or the Mission Director may request a private conversation at any time.
2. The Public Information Officer responsible for Mission Commentary at the time of the request will be notified in advance of the requested conversation and will monitor the conversation in real time with the Mission Director.
3. A summary of the conversation will be released at the discretion of the Office of Public Affairs.
4. Tapes of the air-to-ground conversations will not be released (148).

In the meantime, Mrs. Grissom was busy with her lawsuit. In the fall of 1971, both she and North American Rockwell officials were testifying about what they knew. Her case in Florida had been dismissed on the grounds that the action was past the statute of limitations but then her lawyers found a new avenue--if it could be proved that the victim of an accident suffered during that accident, then the suit could remain. Lawyers Krist and McConnico realized that they had the best records for which a person could hope to use that Gus Grissom had consciously suffered from the fire--the NASA tapes from the spacecraft monitors. North American Rockwell obtained a court order to go through Grissom's personal papers, including some related to Gemini rather than Apollo. Mrs. Grissom's lawyers kept moving with their case. Then, one day, they were approached by the lawyers of NAR to discuss an out-of-court settlement. For three days, they met about such an arrangement, settling on the amount, Mrs. Grissom was awarded \$300,000. After expenses and attorney fees, she received \$60,000 and each of her two sons was awarded \$75,000. The other two widows, even though they had not filed suit, were later awarded similar amounts. The \$350,000 represented \$25,000 for each second that Gus Grissom had suffered in the fire (59: p248).

By the time Apollo 16 flew to the moon in April, 1972, many astronauts had left NASA for various reasons. Some went on to well-paying jobs and disappeared from the front pages. Some returned to what they had been doing before they worked with NASA--usually those were

the scientist-astronauts. It had been known for some time that the last moon flight would be Apollo 17, whose crew had already been selected. After that there would be three manned Skylab missions. There was also talk about a joint Russian-American mission using the Apollo and Soyuz spacecraft with the heavier and more maneuverable Apollo performing the active maneuvers during the docking.¹ Including Apollo 16, that meant only 18 more astronauts were going to fly in space. Beyond those missions was the Space Shuttle, due to fly in 1979. The prospects of immediate flights for several astronauts appeared slim. When Apollo 16 flew, 16 astronauts had already left NASA (they were Carpenter, Cooper, Glenn, Schirra, Armstrong, Borman, Aldrin, Collins, Cunningham, Gordon, Graveline, Michel, Bull, Llewellyn, Holmquist and O'Leary) and eight others had died. The ranks were dwindling.

One day in the spring of 1972, before Apollo 16 flew, Jim Irwin was flying with Deke Slayton in a T-38 when Slayton asked Irwin how many envelopes the astronauts of Apollo 15 had carried with them to the moon. Irwin told him there had been 400. Slayton said that he had heard another number. Irwin said that the other number was inaccurate and referred Slayton to Scott for further information. The next day, Slayton called Al Shepard and Scott together for a conference. Irwin was fishing at that time and, when he returned, he found Slayton was much concerned after having heard the complete story. Slayton then called his superiors and the story was given to the media. As Irwin writes in his book, "This invited the response of Congress and the Senate Space Committee felt that they had to investigate" (77: pp232-233).

In the middle of this brouhaha came Apollo 16. It had been postponed from March 17 to April 16, 1972 because of a variety of mechanical troubles with the systems of the CM, LM and the moon suits. Astronaut Charles Duke had been sick for awhile but that had not had any

¹NASA officials were skittish about the joint, international mission because on June 29, 1971, Soyuz 11 returned to earth after its three cosmonauts had been in a space station for 29 days and, during the reentry, the air leaked out of the spacecraft, causing air embolism, killing all three men (153: pp238-246).

effect upon the delay. On April 16, the men at Cape Kennedy put Duke, Ken Mattingly and John Young into space. Their launch was witnessed by the second largest group of correspondents to gather at the Cape for a blastoff. At least 2,641 reporters had registered for the launch, 800 short of the figure set by Apollo 11. A number of the spectators who had shown up to watch the launch were Duke's relatives, who became known as "Duke's Raiders" to the KSC-PAO staffers (69: pp49, 104).

Gordon Harris remembers,

We saw to it that bright yellow school buses were stashed away in Cocoa Beach out of sight of the big boys from Washington. Charlie's aunts, uncles, nephews and kissin' cousins somehow got word where to find those vehicles. They were on the space center when Duke took off for the moon (69: p104).¹

Young and Duke went down to the surface of the moon in the LM, "Orion," and took another Lunar Rover with them. Among the instruments they carried was a camera using special films to be aimed at the earth to take photographs showing how far the atmosphere really extended from the planet (the films later revealed that the faintest edges of air around the earth extend to about 100,000 miles). After a few days in the Descartes Mountain Range, Young, Duke and Mattingly returned, arriving in earth's waters on April 27, 1972 (118: Dcember, 1972).

The number of magazine articles on Apollo 16 was the second highest after Apollo 11. They totalled 39 but the number could be deceiving. As time went on with Apollo, more articles appeared but they seemed to have less text and more photographs. Coincidentally, the same thing had happened during the Gemini program (127: March, 1972-February, 1973).

After Apollo 16, the attention returned to the astronauts of Apollo 15. NASA officials found out about the extra envelopes that had been on the moon--NASA had given permission for the astronauts to carry only 243 envelopes with them--and then discovered that the astronauts

¹According to Harris, there was a quota system of how many passes to a launch that each astronaut could have and the number of Duke's relatives--who had invited themselves--greatly exceeded the limit. To keep the Washington officials from finding out about this group of Duke's relatives, Harris had them hidden from sight until just before launch (70).

had also carried a small sculpted aluminum figure to the moon, leaving it there as a small, personal gesture to the deceased astronauts and cosmonauts. "The Fallen Astronaut" had been designed and made by Belgian artist Paul Van Hoeydonck with the understanding that there would be no commercial or personal exploitation. But Van Hoeydonck did not keep his part of the bargain. After the flight, he put 950 copies of the statue up for sale through the Waddell Gallery in New York for \$750 apiece. Scott tried to stop the sales but failed (59: pp240-241).

For the second time in the history of the U.S. manned space programs, reprimands were handed down to members of the astronaut corps. At the end of the investigation about the envelopes and the statue, NASA issued this statement:

In recognition of the apparent intent of the Apollo 15 crew to gain personally from the exercise of their astronaut privileges in the matter of unauthorized postal covers, but considering as well their ultimate rejection of such personal gain, Scott, Worden and Irwin have been formally reprimanded. Their official efficiency reports as military officers reflect a formal finding of lack of judgment. These two actions result in severe career penalties, whether the astronauts remain in Federal service or not (59: pp241-242).

The investigation into what the Apollo 15 astronauts had done also turned up evidence about personal gain among other members of the corps. Fifteen astronauts had sold 500 copies of their autographs on blocks of stamps for five dollars apiece. Five of the fifteen gave their \$2500 to charity. Slayton and Shepard were incensed but there was really nothing they could do about a person selling what is ultimately his--an autograph.¹ NASA soon announced heavy restrictions about what the astronauts could do. All personal articles to go on a flight had to be bonded 21 days prior to the scheduled launch date. In each package could be no more than 12 articles weighing no more than one-half pound. Upon return, the astronauts would have to reveal everything that they had taken with them or, if they did not tell what they had carried, they would not be allowed to break that news in a personal story. Concerning

¹NASA never released the names of those 15 astronauts.

the autographs, Dr. George Low, the Assistant Administrator of NASA, said,

There is a very real issue as to whether the government has any basis for questioning the disposition of an individual's property rights in his own signature.... The NASA employees that were involved have been personally admonished by the Director of the MSC / Kraft, who had taken over at the beginning of the year after Gilruth retired / for this infraction of NASA policy / not checking with NASA heirarchy about selling their autographs / (10: November 25, 1972).¹

One day in May, 1972, Slayton stopped by Irwin's office and asked him when he planned to leave NASA. Irwin said that he wanted to stay until at least Apollo 17 had flown. Then, Slayton asked, "Why don't you start laying the groundwork to leave this summer?" (77: p233).

Scott and Worden were not at Houston at that time but when they returned to MSC, it was clear that the crew was being broken up. When Irwin picked up his retirement papers from the Air Force, the sergeant who handed them to him said that Irwin had better take those papers and run "before the Air Force changes its mind" (77: p234).

Irwin and Scott were called to Washington to talk on Capitol Hill but not to a Joint Session. Together, they told a special hearing about what they had done with the envelopes. Irwin writes in his book, that the senators asked about "the cancelled envelopes I had given to personnel who worked in the mailroom down at the Cape; they couldn't understand how I could have given these valuable envelopes to the help." Until this time, Dave Scott had had an unblemished reputation, writes Irwin. So did the astronaut corps (77: p235).

On May 23, 1972, NASA announced that astronauts Irwin and Mitchell would be retiring from NASA. The press release stated that the men did not know what they would be doing nor had the exact dates of their departures been revealed. Nothing was mentioned in regard to the envelope "scandal," as some people called the situation. It was written in the announcement that "based on Irwin's plans to retire, a new backup crew for Apollo 17 has been named.... The original backup crew was made

¹Low had been replaced by Dr. James C. Fletcher as the Administrator of NASA on April 27, 1971.

up of David R. Scott, commander; Alfred M. Worden, command pilot; and Irwin, lunar module pilot." The new backup crew consisted of Young, Duke and Roosa. It was apparent that NASA was making sure that none of the Apollo 15 astronauts would ever fly in space again (116: MSC 72-113).

Irwin told the Baptist press that the NASA officials had no choice but to reprimand him and the others. He said that the crew had acted in haste and under terrific pressure during the preflight times but Irwin added that those reasons did not excuse the three astronauts from their mistakes (77: p234).

The reactions about the envelope handling incident were varied. Chris Kraft says that, in his opinion, the issue created the low point in the astronaut image and that NASA handled it all poorly. "The self-flagellation was ridiculous," says Kraft. "We were as benevolent to the astronauts as we could be" (93).

Astronauts Mitchell and Cunningham hold the view that the Apollo 15 astronauts were sacrificial lambs. "The Apollo 15 fellows were crucified," Mitchell told writer Howard Muson of the New York Times Magazine. "It was a political year [1972] and NASA was headline-grabbing so as not to spoil the Boy Scout image" (121: December 3, 1972).

Mitchell wrote this author that he agrees with Kraft's statement but not entirely.

...it wasn't self-flagellation. It made scapegoats of the Apollo 15 crew to make NASA look good.... The crew made an error in judgment which they thought better of after the flight and corrected. However, because of the pressure from [Senators William] Proxmire, [Jacob] Javits and [Walter] Mondale, their careers were ruined over a minor indiscretion (113).

Irwin offers his comment in a letter:

The handling of the "envelope scandal" was very poor in my judgment. I would not agree with Mitchell's assessment because if anything; NASA's approach destroyed the Boy Scout image. There are some facts revealed in my book which could shed some light on this topic. I will say that this issue is not dead (78).

The Apollo 15 astronauts had not cheated in what they had done.

But it seems that the whole incident was blown out of proportion. If the

politicians had come into the arena and demanded action as Mitchell claims, then the crew might have indeed been sacrificed by NASA. The entire situation could have been handled internally without any outside help from the members of Congress. As Mrs. Grissom describes it,

They always tried to make the astronauts look like perfect little boys, but they were just people like the rest of us. Some knew how to capitalize on being an astronaut without getting caught (59: p241).

It had been known by some and suspected by many people for many years that the astronauts could not have been as good as Life and other media made them appear but, finally, the knowledge was laid before the public for examination. That part of the astronaut image was long overdue and, regrettably, the Apollo 15 crew members found themselves disgraced and Mrs. Grissom had to suffer through a long lawsuit to establish the reality. The price was too high.

....AND ONE FOR NOSTALGIA: APOLLO 17

It is not fair to say Apollo 17 was a nostalgic flight for the space buffs. No one invests a half-billion dollars for the purposes of nostalgia. The last mission to the moon was designed to gather more information about earth's companion but some people still saw the flight as the last time to get together and identify with a dream finally coming to an end. The dream had not stopped when Armstrong stepped on the moon. It would end when Gene Cernan would step off the lunar soil to return to his lunar module.

Two weeks before the flight, on Thanksgiving weekend, one reporter had an excellent opportunity to grab an exclusive story but he passed it up. Writer-photographer George Sand, working for Outdoor Life, was hunting ducks with Gordon Harris, the head of the PAO at Cape Kennedy. As they brought down ducks at the Merritt Island National Wildlife Refuge, in the shadow of the missile gantries, they heard shooting from an adjacent duck blind. Sands asked Harris if he knew who was there. Harris told Sands that astronauts Cernan and Ron Evans were also hunting ducks, taking a break from their strenuous training schedule but not from their quarantine. Harris was hoping that Sands would overlook the presence of the astronauts. About an hour after Sands had been told, he and Harris sat in a truck, waiting for Evans to move his car so they could leave. As Evans moved his car, Cernan stood five feet from the truck and asked why Sands and Harris were leaving.¹ Sands never touched his camera nor did he ever report the encounter. He wrote his article on the Merritt Island preserve but there was no mention about Evans and Cernan being there too.

There was almost a carnival atmosphere surrounding the Cape before the launch. Life paid a visit, setting up a party in a large colored tent. Cars crowded around the beaches for miles. This launch was practically the biggest of them all. More reporters signed in for Apollo

¹At Harris' suggestion, the windows of the truck were rolled up to prevent the quarantine from being broken although it seems rather funny in a way that the astronauts were the ones free to move about in this case.

17's launch than had been there for Apollo 11. At least 3,503 members of the media were on hand to observe the liftoff, replacing Apollo 11 as the third most thoroughly covered event in the history of journalism. At one of the parties, Bob Schwartzman of the Boston Pheonix approached Al Shepard and asked if he would be willing to talk about his relationship with the media. Shepard deadpanned, "Sure, if you're willing to listen to a bunch of four-letter words." Writer Tom Wolfe walked around the various parties, gathering information for a story he was putting together for Rolling Stone (131: January 4, 1973; 69: p49).

The NASA public affairs office was busy at the Cape. It borrowed 310 buses to transport the official visitors, 40,000 strong, around the space center. NASA accepted 5400 invitations, of which 2400 were for Congressional use, 600 for the astronauts and there were 500 car passes. Everything cost the Kennedy Space Center over \$416,000. Of that, \$141,079 was for transportation; \$213,304 for "housekeeping services;" \$23,934 for photography; \$35,202 for PAO communications and \$21,129 for rentals and equipment. Gordon Harris writes in his book that the crowd at the viewing stands was also the wettest--and he did not mean that the weather was bad. Beer bottles and cans littered the viewing area--perhaps because the launch was taking place at night (not many people could possibly stomach too much beer during the early morning launches of Mercury and Gemini). On inebriated visitor fell off the bleachers twice and was helped back to his place. When he fell the third time, the PAOs let him remain where he fell (69: p102).

The launching had been scheduled for near 10 p.m. on December 6, 1972 but there was a small delay of two-and-a-half hours. Finally, at 12:33 a.m. (EST), December 7, 1972, the last trip to the moon began with astronauts Cernan, Evans and Harrison "Jack" Schmitt riding in the CM, "America." It was the first night launch of the Saturn 5 rocket (also the last) and the light of the five first stage engines could be seen by the residents of North Carolina. The liftoff practically provided the area around the Cape with a false dawn, lighting everything in sight

(118: September, 1973).

Three days later, Cernan descended the ladder of the LM and Schmitt soon joined him on the surface of the moon. They unfolded their moon buggy from a bay in the descent stage of the LM and Cernan accidentally tore off part of one fender with a hammer. Using instructions from the ground controllers, the astronauts fabricated a replacement fender out of clamps, maps and tape to prevent dust from flying into their field of vision. For three days, the two astronauts performed a series of EVAs outside the LM, using their lunar rover to carry them for miles and miles across the lunar surface. Once more, the lunar rover had a TV camera operated by a controller at NASA who followed the movements of Cernan and Schmitt as they completed their collecting of rocks and soil samples (118: September, 1973).

During one EVA, when the scenes of it were being transmitted to earth, NBC-TV reporter Jim Hart talked to Cernan's 9-year-old daughter, Tracy, while the images of what was happening simultaneously on the moon 250,000 miles away were flashed on a studio screen behind the two. Hart had approached Mrs. Cernan about doing such a personal interview with Tracy and she had given her blessing since she knew Hart was a polite, outgoing reporter. For 20 minutes, Hart and Tracy talked in front of the nation. Hart asked her questions about how she felt about her father being on the moon, about what flights she remembers and about going to school. Then she shared a secret with Hart; Tracy told him that her father had "promised to send me a moon beam" (20).

Cernan, in an interview with this author, says,

She, in 20 minutes, represented what the PAO should have done over the years. She got more pen pals and notes from parents.... I never really knew it [the interview] was going on.

The interview was live, totally unrehearsed. Hart was trusted by my wife. If we could have, we should have done this earlier. The Public Affairs Office would have been better for it (20; 21).

The last mission to the moon set several records for Apollo. It was the longest flight to the moon (almost 302 hours--nearly 13 days), spent the longest time in lunar orbit (147 hours), contained the largest

amount of samples brought back from the moon (249 pounds--more than one-quarter of all material gathered in the Apollo program) and astronauts Cernan and Schmitt had the longest amount of time outside of the LM than any other moon visitors had spent (22 hours and 4 minutes for Cernan, Schmitt had slightly less).

As the men went about their work during the EVAs, Schmitt hummed "Tiptoe Through The Tulips." He was in rock-heaven, so to speak, for a geologist. At each rock, he wished he could stay a little longer but time did not permit it. At the end of the last EVA, the men gathered together their gear and lunar samples, preparing to leave. Then they unveiled a plaque on the leg of the LM. It read:

Here man completed his first exploration of the Moon, December 1972, A.D. May the spirit of peace in which we came be reflected in the lives of all mankind (59: p252).

Then, after Cernan watched Schmitt ascend into Challenger, the LM, he stood alone and spoke his words to the world:

Any part of Apollo 17 that has been a success, is probably due to the thousands of people in the aerospace industry who have given a great deal besides dedication and besides effort and besides professionalism to make it all a reality. I would like to thank them because what we've done here--as a matter of fact, what has been done for 200 years--you've got to attribute to the spirit of people like those.

And I guess there might be someone else that has something to do with it, too, and I've been reading His signs.... If he's listening, I'd like to thank Him, too.

As I take man's last steps from the moon's surface for some time to come, I'd like to say that I believe history will record that America's challenge of today has forged man's destiny of tomorrow. As we leave Taurus-Littro, we leave as we came and, God willing, we shall return, with peace and hope for all mankind. God speed the crew of Apollo 17 (59: p253).

On December 16, 1972, Gene Cernan, the last man on the moon, stepped upon the ladder of his LM and left the lunar surface. It was the end of the dream.

CONCLUSION OF APOLLO

The Apollo program was watched by the world throughout its history. In front of everyone, Apollo began in the ashes of a disaster, fell into a quiet re-evaluation of nearly 20 months, slowly built up to what many people regard as the epic flight in the history of mankind and then slowly subsided because of a lack of attention except for some peaks here and there caused by the frailties of men and machines.

The PAO, operating under the leadership of Julian Scheer for most of the Apollo flights, and under John Donnelly for the rest of the time, performed remarkably well during these years. There was a significant improvement from the Gemini flights in the PAO, especially from Gemini 8 which had proved to be a great fiasco for the PAO, costing much confidence in it by members of the media. Unfortunately, at the beginning of Apollo, the 204 fire did nothing to help build the credibility of the PAO either. Even though the public affairs office operated in a proper manner, many representatives of the media did not think so and they vocally let the world and NASA know their feelings. However, there was not much the PAO could do about the incident around the fire. They handled the reporting of the accident as well as anyone could. Their hands were tied by the accident investigation board. The PAO supplied information to the board when it requested material about different items but the board did not support the PAO other than to give peripheral information about what was going on. Even though Jack King was sitting in on the meetings of the board, it did not help because, as Paul Haney puts it, King was not invited to sit in when the members of the board did not want him there. Hence, it was a bit hard for the PAO to handle the reporting of NASA during those months--at least in relation to the fire (103; 67).

There were others in NASA who tried to help the media as much as they could and, no doubt, they had good intent in their hearts as they attempted to pass accurate news onto the reporters. But there were also inaccuracies from time to time which led to rumors. The PAO, with

its voice officially silenced, could do nothing to squelch the rumors except to report "No comment," which was hardly a reply at all. NASA might have been better off to have allowed the PAO in on some of its investigative and corrective activities in early 1967.

As Apollo 7 approached, NASA was determined to show the world that space flight was safe again. Demonstrations were held everywhere and, suddenly, engineers, who had been hiding under a cloak of secrecy that had been thrown over them because of the fire (which might have delighted some of them, according to Haney), found themselves thrown into the public spotlight to prove that everything in NASA was good again.

Through Apollo 11, the next flights sold themselves, particularly after Apollo 8 went around the moon to illustrate that it could be done. That was what some NASA officials were hoping Apollo 8 would do--instill confidence in the public and Congress that everything worked. Apollos 9 and 10 were checkout flights of the equipment, mostly the lunar module, but they also set the stage for Apollo 11. During this time, it appeared that the PAO went about its usual work, relaying the words of NASA brass, scientists and astronauts to the world that everything was going to be fine although there was still risk involved. Much of the work seemed to go into handling the crowds, dignitaries and media at the launches and taking care of the media afterwards during the missions and the post-flight activities. The PAO did not have to sell NASA to the public between Apollos 8 and 11. The missions did that.

Apollo 12 just about disappeared from history. Seemingly, so did Apollos 14 and 16. It was as if every other flight did something to make news. Apollo 13 almost did not come home. Apollo 15, albeit late, made news when the crew was discovered to be human. Apollo 17 was news because it was the last mission to the lunar soil.

Apollo 13, as mentioned, is regarded by many reporters and PIOs to be the most effective mission in the way that the PAO handled it. Apollo 15 caused a minor sore. That was not the fault of the PAO but, rather, Dr. Berry who forgot that astronauts also talk to reporters and

can tell them of their chest pains.

During the Apollo program, the confrontation between Haney and Scheer came to an end with Haney leaving NASA. There is no doubt that Haney was an effective head of MSC's PAO but, perhaps, to save his position (whichever one he desired), he might have taken Scheer's offer to drop one of his responsibilities. Likewise, Scheer might have worked out his differences with Congress. Scheer's administration of the PAO was effective yet difficulties existed here and there. By his own admission, Scheer writes, "I have no problem whatsoever with a judgment that I was an inefficient operator...."¹ Obviously, Congress agreed. It was during Scheer's tenure that the PAO had its worst and best times--respectively Gemini 8 and Apollo 13. There appears to be no radical changes in the overall operations of the PAO after Scheer left, which was immediately after Apollo 14 (but then this author does not have an official list of the invitations to the launches so it is impossible for him to evaluate how much of a change there was in this area following Scheer's departure; according to Gordon Harris, Dr. Maxfield did find it easier to get his people into the launches after Scheer left and that is the only change this author could find in the operations of the PAO after Donnelly took command). But, as Scheer stated, and this author believes, NASA was the most open of all the government agencies (138; 137).

Julian Scheer comments upon the PAO under his command:

The program is an example for the rest of the world. Everything was completely free for the world to know.

A few individuals fell out along the way and the fact that I was criticized by others doesn't add up. That's insignificant. The major point is that the space program was open for all to see....

The proof of how well this worked was in how accessible we were to the media. It was an example of democracy and the press in action....

The only regret that I have is that I thought we had set an example for the rest of the Federal Government to follow--there were no secret bombings, no secret deals--but it didn't work.

¹This author would prefer to believe that Mr. Scheer made a typographical mistake in his letter.

The only time I was in the press was when I fired someone. I could have been out in front if I had wanted to but I didn't choose to do that. The ones who were to be out in front were the ones like Kraft, Webb and Fletcher--not me....

We forced the military--out of NASA's thinking for the press--to put TV on ships and open up their secrecy. We spent millions of dollars for film cannisters.... I personally inspected the films for the in-school program space movies. Every flight had film taken on board by the astronauts and it was available 10 days after landing to the media to whoever wanted it.¹

Every night we had speakers across the country free of charge. We had copies of our films and transcripts for any reporter that wanted them.²

We had no guidelines for our operations when I first came to NASA. No one had ever done this. We--Paul, Shorty and I--sat down and decided how to do it. / We wanted to / create a ground station for communications and the media, a station for the recovery on the ships. We planned unmanned satellites for carrying communications.

We just didn't work with the astronauts and manned space flights. We handled everything. It was a vast, vast program of information. The people in all the countries got this. We were to tell the world something the minute it happened.

People like me, Haney and Powers don't count. It / the PAO / was faceless, tough and hard, thrusting the space program out into the open....

I can look back with nothing but good feelings on those times. I'm delighted to have been part of the program....

And God damn it, it worked (137).

There is no question about it, in the opinion of this author, Scheer had the best information program of the U.S. Government. There were mistakes and Scheer admits to these but there was no other place in the government where the media could turn to and find such openness. In the experiences this author had with the public information office in Houston, no hindrances were encountered and the staff there attempted to supply answers to every query asked.

Not only did the PAO supply information to the public about the space programs but so did the media. Magazine writers and editors

¹Gordon Harris writes, that for Apollo 11, the "KSC furnished 36,000 black and white photo prints, 5,250 color transparencies and 30,000 feet of 16 mm color motion picture film to the media" (69: p31).

²The air-to-ground transcripts were not exactly short. Apollo 17's was 2,430 pages long. Imagine what the reproduction costs would have been if each of the 3,503 reporters at that launch had asked for a copy.

had more interest in the Apollo program than in Gemini. The first Gemini missions averaged around 19 articles apiece in the magazines. This tapered to about 12 apiece for the last four Gemini missions. However, Apollo started at the same level as Gemini's beginning (barring the Apollo fire), progressed upwards, sustained a slight dip for Apollos 9 and 10, soared to 61 articles for Apollo 11 and then levelled off around 34 articles per flight through the rest of the moon flights (127: March, 1965-February, 1973).

It was during Apollo that the astronauts had their last chance at establishing themselves as heroes through the use of the personal stories, if any of them had wanted to do that. Even before Apollo began, Field backed out of using any more personal stories, leaving Life in the running until July, 1970. The 1968 book contract that Life signed with the astronauts produced some results and a Life-sponsored book about the first moon mission, First on the Moon, was written by the Apollo 11 astronauts who were helped substantially by Dora Jane Hamblin and Gene Farmer of Life.

Hamblin writes:

First on the Moon grew entirely out of my work with the astronauts during Apollo. Gene Farmer, in New York, took my reports and did the actual writing. He and I were paid nothing except our regular salaries.... The book was published by Little, Brown, which is a wholly owned subsidiary of Time, Incorporated. Thus it was all in-house, part of the same contract deal. One item of the contract, by the way, was that the astronauts would not be permitted to write a book or have one ghost-written until five years after the first moon landing. After that deadline, Michael Collins, one of the most literate of the whole group, published a book called Carrying the Fire. Very good. "Buzz" Aldrin, about the same time, worked with a former Life man, Wayne Warga, to produce a kind of true confessions book called Return to Earth... (64).

Writer Robert Sherrod states that First on the Moon sold only 23,000 copies. What saved Life, writes Sherrod, was the European interest in Life's articles, offered through syndication to European publications. This pulled in almost \$600,000, to be split with the astronauts. Sherrod offers the following figures (which he obtained in an interview with attorney Paul Sawyer) showing the astronauts' profits from the ventures taken with Life. Life's profits were exactly the same since they shared

equally.

Book Advance	\$200,000.00
Foreign Syndication	296,844.62
<u>First on the Moon</u>	119,843.96
Special on Apollo 11	114,608.00
Book-Record Combination	25,000.00
<u>Total</u>	\$756,494.58 (26: May/June, 1973).

These figures were the earnings only through Apollo 11. The Apollo 12 mission produced only another \$12,000 for the astronaut corps. Then the Wolper project gave the families another \$60,000 to split among themselves. Next, the New York Times somehow divested itself of \$30,712.50 for what it seemed to insist was not checkbook journalism. Some articles appeared in National Geographic in September, 1973 and were written by Dave Scott and Harrison Schmitt (Frank Borman also narrated a record for the National Geographic Society at one time). The magazine's assistant editor, Ken Weaver, writes, in a letter that "our payment...has totalled no more than \$10,000." If the total of money earned from 1968 through the last magazine article written by the astronauts--the September, 1973 issue of National Geographic--is totalled (including the \$200,000 per year for three years from Life), each family received approximately \$24,500 or about \$8333 per year.¹ This is not much when compared to the earnings of the Original 7 during the Mercury program (26: May/June, 1973; 169).

During its last years, not only did Life rely upon the astronauts to describe what was happening but the magazine also expanded its coverage. Dora Jane Hamblin gave insight of the astronauts' homes in a very human way. Poet James Dickey was hired by Life to give his opinions about what he thought of one mission. Normal Mailer was asked to contribute his thoughts--taken from his book, Of a Fire on the Moon--for an issue. Loudon Wainwright was brought back for the article on Shepard. Some writers have remarked that Life was clutching at the

¹Even this approximation could be way off because, from September 1967 through September, 1973, the number of astronaut families grew and shrunk as some new groups of astronauts were added and other members of the astronaut corps left the ranks.

straws by doing this, trying to maintain the attention of the public. This author chos es not to believe this type of thought--all that Life was doing was diversifying its means of explaining the missions and the men to the public.

As time went on, especially after the Life contracts faded from view, the later moon mission received less and less attention from Life. While Life's attention span was dropping, that of National Geographic was rising. National Geographic covered only Apollos 8, 11, 14, 15, 16 and 17. It was during these missions that National Geographic carried some of its best work on NASA, showing the moon, the astronauts and the earth in some spectacular photographs. The texts on the last missions were not lengthy but the magazine's staff more than made up for this by using numerous photographs of superb quality. An interesting item noted about National Geographic is when it published the articles about the missions: it seems that the article about a mission was always published in the issue that was coming out for the month of the next mission. Examples of this are the Apollo 8 story was printed in May, 1969--the month of the next mission to the moon; and Apollo 11's story was printed for the December, 1969 issue, just in time for Apollo 12. This may have been a coincidence but this author thinks that there was some planning by the magazine's staff behind this in order to help publicize the upcoming missions. Overall, the magazine performed a great service to its society's members and to NASA.

The magazine that wrote the most articles about the missions (but not about the astronauts) is Aviation Week and Space Technology. While other magazines sometimes played up the human drama of the missions, a reader could turn to Aviation Week to learn what was going on technically with the missions. This magazine devoted many pages to NASA's efforts in manned space flight (as well as in other areas). It is not a magazine that is considered by many people to be published for distribution to the general public but rather to those people who are interested in flying.

Of all the magazines, Life still seems to be the one that is most associated with the astronauts. It did an admirable job of showing the human side of space flight from 1959-1972 but there were some faults too. The biggest one is that Life is considered by many people to have shown the astronauts with only their best foot forward; it did not show the astronauts as they really were.

Mike Collins writes in his book,

Test pilots are taught to perceive, to remember, to record every impression in flight--so that later, on the ground, they can report as fully and precisely as possible, exactly what happened. No one disputed this point, so that what happened during a space flight was discussed publicly at the post-flight press conference in as much detail as the press could stomach. But, of course, that was not sufficient. What they really wanted to know was: beyond all that technical crap, what did the crew feel...? This is what Life paid to find out and what the others pried to find out without paying and, in truth, neither unearthed very much. Life's little extra certainly wasn't worth the money. I suppose this because, as technical people, as test pilots whose bread and butter was the cold, dispassionate analysis of complicated facts, we were frankly embarrassed by the shifting focus. It didn't seem right somehow for the press to have this morbid, unhealthy, persistent, prodding, probing preoccupation with the frills, when the silly bastards didn't even understand how the machines operated or what they had accomplished.... ...we weren't trained to emote, we were trained to repress our emotions, lest they interfere with our complicated, delicate and one-chance-only duties. If they wanted an emotional press conference, for Christ's sake, they should have put together an Apollo crew of a philosopher, a priest and a poet--not three test pilots. Of course, they wouldn't get them back to have the press conference, in all likelihood, because this trio would probably emote all the way back into the atmosphere and forget to push in the circuit breaker which enable the parachutes to open (24: p54).

Collins' fellow crew member of Apollo 11, Buzz Aldrin, offers his view of the Life articles.

I suppose the portrayal we received in Life and subsequently in nearly all the media the space program a great deal. Unfortunately, near all of it had us squarely on the side of God, Country and Family. To read it was to believe we were the most simon-pure guys there had ever been. This simply was not so. We may have regularly gone to church but we also celebrated some pretty wild nights....

I remember one day, picking up a copy of Life magazine...and thinking, "If only it was like that." Here were all the happy, contented wives, and children smiling from happy backyards with the husbands standing proudly by. Well, the fact is that the husband probably flew halfway across the country to pose for the pictures, the kids were strangers to him and the wife was scared to death....

All of us somehow had to reconcile the image and the actuality. My kids had been forced to reconcile the media's family portraits with the reality of day to day living. They had to reconcile the father they saw on television with the one they saw at home. The father at home, at least in my case, was often inattentive, tired and asleep on the den sofa by nine o'clock (121: December 3, 1972; 2: pp302-303).

Tom Wolfe's Inner Voice of the Astronauts, who narrates a story about the astronauts in an issue of Rolling Stone, gives his version of the members of the media:

As you can gather, we never had a particularly high opinion of the press. The press hovered like the fruit fly. Oh, there was an occasional good soul, such as some of the people from Life, perhaps because they were our captives, come to think of it. But, taken as a whole.... ...what a swarm of silverfish and second-raters.... ...the writers Life assigned to us.... ...were our favorites / of all outsiders /.

Without the Life screen, we doubt that NASA could have even succeeded in preserving the image of us as a bunch of God-loving crewcut Explorer Scouts. We ended up being protected like royal families, but American royal families against a backdrop of not marble, gold and ermine but of Buddy and Sis and Mom's pie (131: January 4, 1973).

Fred Haise, of Apollo 13, gives his view of Life:

I think the Life stories were good. The real question and one I cannot answer, is "How much other (maybe better) coverage in other magazines did we lose?" I don't know of any efforts by other magazines personally.... In fact, I've never been asked to write an article for free! (63).

Jim Lovell writes in a letter,

Due to the tremendous popularity of the program, the astronauts would have been inundated with requests to supply information about their private lives. The Life contracts enabled that information to be channelled to the public with a minimum amount of interference from the news media.... In addition, the contracts provided an additional small source of income to defray some of the large post-flight appearance expenses which no one

anticipated before the flights (100).

Ed Mitchell, was asked if the astronauts were concerned when the contracts with Life finally went out of existence. He replies, "No. We had other ways of dealing with the media. The monetary imports of this series of decisions was great however" (113).

Other people besides the astronauts thought well of Life. Both Chris Kraft and Robert Gilruth praised the magazine's efforts to show the human side of the astronauts (93; 48).

Some members of the PAO favored the contracts. Others did not. Jack Riley, a PIO at MSC, recalls:

Newsmen sometimes had some problems getting the wives of the astronauts to talk. The PIO could arrange for the reporters to talk to the astronauts but not the wives. The reporters would then set up stake-outs around the homes of the astronauts hoping to talk to the wives.

A number of the astronauts preferred the insulation that Life offered them. They didn't mind it at all that the rest of the press couldn't get to them. Some felt badly and went along because of peer group pressure and because the practice was already established (129).

Julian Scheer, in an interview in 1976, said,

It was confusing at times--the relationship between Life and NASA. It produced its awkward moments at times. It was also a up and down relationship. I kept the contracts when I arrived in 1963 because I couldn't do anything about them. I take anything that can work to my advantage so I accepted them even though I didn't like them at first. They provided me with not having to arrange interviews with 60 wives. I wasn't interested if the astronauts ate apple pie or what they did personally. If Life wanted to do that, that was fine. We weren't in the business of exploiting the astronauts. We didn't do any feature stories on the astronauts (137).

Journalists appear to be split in how they look upon the Life articles. Leo Janos, former Houston Bureau chief for Time, says,

Life was a brilliant decision on NASA's part. The astronauts made a bundle.... And it treated the astronauts fantastically.... I think NASA blundered by not having human interest in its own stories [the press releases] (79).

John N. Wilford, of the New York Times, who broke the story about the astronauts of Apollo 204 not dying instantly, writes his thoughts in

a letter:

Frankly, the Life pieces were not that great. They conveyed the Boy Scout and happy home image that, to some extent, backfired--because it tended to make people think of the astronauts as very dull, uninteresting technocrats. But NASA wanted it this way, and the Life deal seemed to be a safe way of funneling safe stuff about the astronauts to the public. How much more the rest of us could have gotten is problematic--for the astronauts did not really like to talk with the press on any free-and-easy basis and they were very busy people, as were the rest of the press that had to cover all other aspects of the missions (177).

Loudon Wainwright II, who wrote some interviews of the astronauts from Mercury through Apollo, writes:

Most readers of big magazines like Life are more interested in people than technology. I believe the editors of Life were happy about the way the contract worked out for the magazines. I didn't know about NASA's public image or more precisely what they wanted their public image to be, but there can be no doubt that publicity given the astronauts made lots of people aware of the existence of NASA

The astronauts appear to be criticizing the magazines, or at least Life, for producing the kind of bland, namby-pamby stories that the astronauts and NASA insisted on. The agency and the pilots were generally against stories that probed, made human judgments or were controversial. At the very least, therefore, the astronauts were co-conspirators in the production of stories that made them look like Boy Scouts and all alike. They may not have admired the results, but they fought hard, with very few exceptions, to keep the material free of wrinkles and distinct personal flavor (165).

Dora Jane Hamblin, another Life writer during the Apollo era, writes:

I believe Life was far more effective than NASA in bringing national attention to the men themselves. The magazine's circulation was about 8 million at the time, and the Life stories were far more detailed, more comprehensible than most of the NASA releases. Life was very good at "haute vulgarisacion" and at clarification of complex subjects. Our pictures were far superior to anything NASA did--so much so that NASA customarily picked up Life's photos for service to other news media.

I think Life treated the men and their families with kid gloves. So did most of the rest of the press. These guys were heroes, most of them were very smooth, canny operators with all of the press. They felt they had to live up to a public image of good

clean all-American boys and NASA knocked itself out to preserve that image.... Thus there was this tendency to keep everything as Mike Collins says, "peaches and cream" (64).

Life had a love-hate relationship with the astronauts. Money was provided to the astronauts and they held Life in the palms of their hands. "Life was controllable," Alan Shepard once said. His statement possibly could have made editors gag at the thought of someone else controlling their publications. But it was true. On the other hand, Life's editors had wisely forecast the drop in interest in Apollo as the missions progressed and thus limited the contract to July, 1970. It appears that Life's original intentions contained many aspects: the first spacemen would be popular and, if a magazine held the rights to their personal stories, then that magazine would sell more issues, which would also sell the astronauts and NASA to the public. In the long run, Life's contracts may have worked out to the advantage of both the government and the astronauts. The contracts upset other members of the media but if Life had not done it, some other publication might have bought the personal stories. As was noted, even the New York Times, which chastised Life for "checkbook journalism," also employed such tactics.

The astronauts not only had to deal with the media but also had to get along with themselves and the PAO. There were several little bitter rivalries. Slayton had once said that the competition for getting on the flight crews was fierce but not one of outright hatred. For instance, Irwin had found out that Schmitt might be riding on Apollo 15 instead of him because of the pressure from the scientific community. Irwin complained to Slayton and Shepard. Irwin remained on the crew as Schmitt was placed on Apollo 17's crew. Gordon Cooper was supposed to fly during Apollo but he was bumped from the schedule by Alan Shepard. (39: January, 1973; 77: p213).

Some of the men knew, from observing the situations around the first groups of astronauts, that fame could be put upon them once they were selected as astronauts. Jim Irwin writes in his book that, before he became an astronaut, he and his wife had heard that astronauts earned

thousands of dollars from Life for their personal stories. Irwin also mentions that his wife distrusted the "glory and fame and adulation that are heaped upon the astronauts." The Apollo 15 astronaut states that he did not like the fame and publicity either but he had to accept it as being part of his job. Some others, upon confirmation that they had been accepted into the astronaut corps, may have wondered about how the publicity about their lives would affect them, their families and their performance as test pilots (77: p215).

Fred Haise writes about the same subject.

I, of course, was aware of the publicity given the "Original Seven," but figured, with the group growing to about 50 astronauts when I joined, the individual notoriety part of it would wane. In any case, the thought of being in the spotlight was accepted, though underneath, I didn't believe I would ever be in that spot. It was for those older heroes! I don't particularly like it nor dislike it--it is just part of the job. My single, sole overriding motivation in joining the program was developing and flying spacecraft. It still is (63).

According to various sources, some members of the astronaut corps thought of themselves as heroes but it seems, to this author, that the majority of the astronauts were not all that boisterous. Some realize that they have been offered places in history and have quietly accepted those niches, such as Neil Armstrong. Others play the role of the astronaut; Mike Collins describes Pete Conrad in the following manner: "Funny, noisy, colorful, cool competent; snazzy dresser, race-car driver. One of the few who lives up to the image. Should play Pete Conrad in a Pete Conrad movie." Matter of fact, after Conrad left the astronaut corps, he did play in a movie as an astronaut (24: p60).

Many of the astronauts who left NASA went onto well-paying jobs; some realized the prestige of their employment with NASA and used that as leverage in helping to find occupations. Cooper was asked about the ethics of the astronauts using their names to get ahead in the business world. His reply appears in Dun's Review: "I don't think that people can well afford to criticize us for wanting to get into the business of making money--as long as it is in good taste." The

astronauts who left NASA ended up in a variety of jobs: Borman became the President of Eastern Airlines; Cooper went to Walt Disney Enterprises; Charlie Duke and Al Shepard became the Coors Beer distributors in San Antonio and Houston, respectively; Cernan went onto become an oil broker while his partner on the moon, Schmitt, joined John Glenn in the Senate in 1977; and others found business positions to suit them around the world. The men also took part in many advertisements: Schirra stood on traintracks for the Association of American Railroads; Aldrin has appeared on television for Volkswagon and Toro lawnmowers; Jim Lovell talked about the importance of breakfast for children; and Al Bean said that having a certain credit card was more valuable than having a certain name since no one recognized him anymore as being the fourth man on the moon (35: December, 1972).

But, when the men were still part of the astronaut corps, they did not agree as to how much they should participate in the public affairs programs of NASA. This disagreement extended back to the days of Mercury when it was John Glenn versus Alan Shepard. There is no attempt here to illustrate where each astronaut stood on this topic but some of the astronauts, and others outside of NASA, offer their opinions.

John Wilford of the New York Times writes:

Few of the astronauts really understand public relations. Some may have been "prima donnas," I can't say. They were under tremendous pressures to do a difficult job, and with their backgrounds in the military and test piloting, it just did not seem that public relations was either essential or a part of their job. Toward the end of Apollo, some of them tried to make a more conscious effort at public relations but it was wooden. Their best public relations was to do their job and do it well to be available for occasional press conferences (176).

Edgar Mitchell comments upon the PAO and the astronauts:

Exposure to these experiences [public appearances] always benefited the individual from a learning point of view. NASA's use of the astronauts to inform the public of the merits of the program and to sell the program were totally misdirected.... Individual PIOs were often great and worked well with us. Official policy was disastrous (113).

One NASA official, who wishes to remain anonymous, states simply:

The NASA Public Affairs operates in an opposite manner as has most of the technical NASA community (including the Astronaut Office), i.e., the public affairs offices operate without noticeable planning which leaves those they deal with in doubt about what's expected of them.

This author has heard this type of statement from a few sources around NASA who also wish to remain unidentified: that whereas the bulk of NASA's offices and departments know exactly what they are doing, the public affairs office is sometimes loosely organized--in the opinion of these people--and since these people are not accustomed to this type of operations, they do not care to work with that office. But these people do agree that the public information officers have been well liked by the rest of the NASA community and are thought of well.

Of course, public relations meant that the astronauts also had to deal with members of the media, something that none of them apparently relished doing too often. Again, Tom Wolfe's *Voice of the Astronauts* offers his opinion about the astronauts' relationship with the media.

It is entirely possible...that we misjudged and underestimated the press. God knows they misjudged us. I don't know how they could even buy the idea that a bunch of test pilots and combat pilots would turn into programmed Merit Badgers as soon as they were given the title Astronaut....

In the picture on the [television] screen, all you see is one reporter standing in front of a little house with the shades drawn and it all looks very cozy.... In point of fact, the lawn would...look like the clay flats three hours after the Marx Midway Carnival pulls in. There would be four or five mobile units with cables running through the gumbo.... All these people would be out there wearing bush jackets with leather straps going this way and that...yelling to each other and mainly just milling about...hovering...like the fruit fly. They were desperate, of course. Give us a sign! (131: January 4, 1973).

Of the people with whom this author has communicated, two of the most articulate astronauts who have opinions about the public affairs management are Fred Haise and Gene Cernan. Haise had been the editor of his college newspaper and was a reporter for seven years for the Biloxi-Gulfport Daily Herald, covering at times, police-city hall beat,

convention beat and small-time sports activities. He claims, "This doesn't make me equal in competence to anyone in the PAO but I feel I have a better understanding of the way that business works than most astronauts." Haise writes further:

I feel they [the members of the PAO] did an adequate job to support the newspapers and TV who are interested in punch-line facts, i.e., straight news stuff. This was the handout news release type material. A big gap was more depth, more detailed "feature" material for periodicals. Maybe this was restricted by the Life contract. I feel also they could do more with our personal appearance time. First, the banquet events should be screened to try to get max exposure from the standpoint of audience size and type of people. I find myself all too often talking to people who know all about the program and are friends who need no convincing of the merits of the space program. We should talk to those who don't know what the program is about; even those who might be considered adversaries....

This agency needs to shift to a balanced attack for PR purposes to sustain the space program. Exploiting the hero is only one avenue. We need to highlight the vehicle--its design features, its capabilities. We need to really highlight the things it does on its mission. The crew should be interwoven where appropriate but not made the exclusive theme.... The public affairs role is one then of information flow for that purpose only, rather than the sales pitch [Haise's last paragraph was written about the Space Shuttle, for use in the late '70s throughout the '80s and possibly into the '90s but the author felt that the astronaut's point applied to other programs as well in general, hoping that this is not too much of an assumption to make] (63).

Haise also writes about the image of the astronaut to the public:

I have never been told what I could or could not do as an astronaut. The image obviously implied certain constraints--a nasty divorce or scandal wouldn't fit. And as any other reputable person, you can't steal, forge checks, etc. The role of piloting and functioning as a crew says you shouldn't be seeing a psychiatrist or be a member of alcoholics anonymous. I subscribe fully to these unsaid, unwritten rules... (63).

Gene Cernan gave his views upon the astronaut image and the PAO in an interview in the fall of 1976. His thoughts might be considered as a wrap-up for the entire program. He said that part of the most important aspect of the public affairs was to let the public identify with the program, to identify with the history that was being made.

Cernan was critical of the top level management of the public affairs office, saying that the public affairs job should have been contracted to a firm outside of NASA. But he did not lay the blame squarely on the the PAO. "Us astronauts had archaic ideas too," said Cernan. "We were professional aviators and some were better than others at PR. Most of us thought of the aviator job first. The astronauts were initially a hindrance to playing the PR game" (20).

Cernan also mentioned that the Friday rule for interviews with reporters was "a very fair thing," but the reporters who had a lack of consideration for the astronauts' time made journalism "not my favorite profession." The astronaut who flew to the moon twice commented that journalists were not allowed to touch the prime mission crews and therefore the prime crew for the next mission was the "hot" crew (20).

Cernan states:

NASA-PAO overlooked the responsibility to keep the public informed. It had a moral responsibility to share an identity with the people. Now, we're trying to sell shuttle and having a hard time....

Life agreed to compensate the astronauts for their time. Personally, Life's personal stories, the ones showing the kids that skinned their knees, did more to share and identify than any one thing the PAO has done. It was the best thing for public exposure that ever happened to the astronauts and Life. None of the stories were phoned up (20).

Cernan said that going to the moon did not change most of the astronauts. He writes in a letter that, "It obviously affected some--at least the notoriety was a vehicle to push what they had been or believed before going" (21).

In the interview, Cernan said,

An astronaut isn't a guy given a house, a car and a six-figure income with \$50,000 bonue. There was a lack of public awareness there. Some of the astronauts were pro's and out-going guys. And the opposites exist--the type who say, "Don't bother me," and they have their rights but they're also shirking their responsibility. Your life isn't your own anymore when you're an astronaut. You must watch what you do and say.

We probably should have been told what to do by higher ups.

The public believed that we had psychiatric training. No. There was none of this--act this way, do this, do that, etc.

The greatest rewards of the flights were coming back and sharing stories with the public....

Because our time was really tight at times, we did not know everything that the public was interested in. The journalists knew what the public wanted to know and they directed questions about those subjects to us. The journalists knew earth's story interests because it was over the heads of the astronauts who had been gone and weren't aware of what was considered to be interesting back here....

You have to admit /if you're an astronaut/ that you're in a marketing program. Once you walk on the moon, you cannot unwalk /Cernan's emphasis/. NASA had tremendous technical resources but the most important were the human resources for use in domestic and diplomatic reasons. The sad part is that we don't recognize the guys in space and don't choose to use them to help sell the /space/ program.

I resent that the astronauts were called heroes. I wasn't born or trained to be a hero. NASA didn't train me /to be a hero/...but you are given one heck of a responsibility. Some guys thought of themselves as heroes though. You can't ignore being a hero and you have to accept the responsibility of being a hero. Young kids look at you. You represent the country in what and how you say something. A very significant representative of the U.S. is what an astronaut is.

NASA is only a service organ to the U.S. It is on the top of the ladder in our country. We got on stage and we had to stay there with something to say, otherwise we should have gotten off... go into hibernation. You take the opportunity if it's there but you have to be responsible for what you say.

I'm upset with self-proclaimed experts. I've taken every opportunity to give speeches.... ...I did some things the public affairs people said couldn't be done....

I was upset and attacking a system and its approach to getting to the public /when he had told this author earlier that he was not pleased with the operations of the public affairs office/. I'm not attacking the names of the people who ran it (20; 21).

Obviously, there are a lot of aspects to what Cernan said and he has very strong opinion about those subjects. But he seems concerned, quite right, about the image into which the astronauts had been molded, through no choice of their own, and the responsibilities that had to go along with that image--the image of the hero. Some of the astronauts accepted that image. Others rejected it, saying that they had no

obligations to anyone but they really did. This is not to say that the astronauts were supposed to give more of themselves to the nation than what they already were doing but some of them needed to understand that the nation and the world were looking at them as humans who had been elevated almost to the level of gods. Likewise, the journalists had the responsibility to show those men as they really were, not as they thought the public needed to see them. The astronauts had good points and they had faults. NASA, the astronauts and the media could have shown those faults for they were minor ones; if the astronauts had had large faults, the men never would have been selected for the astronaut corps in the first place.

The astronauts were made into public images because of what they did, not because of what they looked like or who they had been before joining NASA. As Gene Cernan said, "Once you walk on the moon, you cannot unwalk." There was no escaping what the astronauts did and the images that were created around them will follow them forever.

SUMMARY AND CONCLUSION

This author has arrived at the following conclusions about the astronauts, the magazines and the Public Affairs Office of NASA:

1. The occupation of the astronauts did much to create a public interest in them. They were fulfilling the dreams that people had been dreaming for thousands of years: ascending into the heavens without first having to die; to leave the bounds of his planet; and to go where no human had ever gone. The astronauts were cast into the image of the trail-blazers, explorers and men who knew no fear. Yet, as the astronauts know very well, they could not have done their jobs except for the efforts of thousands of others who never appeared in Time, Aviation Week or on the television networks.

It has been said that the difference between the astronauts and the explorers of years ago is that the astronauts are part of a large team and the explorers of yesteryear operated on their own. This is not necessarily true: who remembers the names of everyone who participated in the Lewis and Clark expedition? Who remembers the names of Lindbergh's financial backers? Who was Amundsen's assistant at the South Pole? Likewise, the events that many explorers participated in were what made the leaders of those expeditions famous; afterwards, their names were famous. This is what happened with the astronauts, too.

2. What interest there was in the astronauts that had not been created by their occupation was created by the media. The media provided the public with stories on the background of the men, their families and their life styles. NASA's Public Affairs Office primarily supplied information about the men's occupations.

It would seem that, at first during the short Mercury flights, the magazines provided the public with much of the in-depth material about the astronauts that was developed by their writers and the magazines would continue to do this throughout the moon missions. But, later, as the electronic media covered the longer missions, they, too, found

it necessary to provide in-depth material to the public to maintain attention to their channels of communication.

NASA was willing to cooperate with the media in supplying material to the networks--note Scheer's efforts prior to Apollo 11--but NASA preferred to emphasize the mission rather than only the men who were flying it. NASA supplied little biographical information about the astronauts but supplied hoards on the hardware involved with the missions including what the mission hoped to accomplish.

It would seem that the public was interested in the *astronauts* whereas NASA preferred for the interest to be in the *mission*.

3. Not only were the astronauts fulfilling the dreams of many people by going into space but they were also a kind of political football player. They were the men of America against the cosmonauts of Russia in a race that had started with Sputnik in 1957.

T. Keith Glennan, the first Administrator of NASA, compares how the publicity of NASA and the astronauts was handled under his and Jim Webb's administrations:

From the very first day I was at NASA, our program was open--but not a program to be exploited by the media corps having little sense of responsibility. I, personally, was interested in what we (NASA) could do responsibly to fulfill the charge imposed upon us by the Congress in enacting the law. At that period (1958-61), NASA needed no special treatment by the media to support its operations. In fact, the media's efforts were less than helpful.

My own concern was directed to the provision to the public--and here I acknowledge the importance of responsible elements of the "media"--of solid information relating to our hopes, failures, progress and intentions. I suspect that I should acknowledge that only in my tenure could NASA have this type of conviction about the media.

When Messrs. Kennedy and Webb took over, the need for an offset to the "Bay of Pigs" fiasco required, I suspect, a different approach. In my tenure, I could indulge my own convictions about the purpose, directions, pace and importance of specific elements of the "Space Program." Mr. Webb was committed by President Kennedy's 25 May 1961 address to the Congress to an almost single purpose objective--man to the moon and safe return within the decade of the 60s (51).

Glennan is correct--there was a different attitude towards NASA during his term in office than in later years when Webb took control in early 1961. This might have been due to the difference in leadership, to the political climate or to the fact that launches were finally beginning to occur when Webb was the NASA Administrator (which would definitely create more interest than the preparations did).

But the fact remains, for a long time, it was *us* against *them* and the astronauts and cosmonauts carried national prestige with them into the black skies everytime they were launched.

4. Some of the astronauts, particularly the first ones, did not care for the hero image that was laid upon them by the media and the public. But these early astronauts did nothing to suppress that image. When they first joined NASA, the Original 7 were unaware that they could become public heroes because of their positions but, later, through the use of the Life contracts, some of them attempted to portray a certain image, although not one of the American hero. The image in Life tended to show smiling, middle-class Americans who comprised the ideal families.

5. The later astronauts, who had seen the public image that had been developed around the earlier ones, could see what might happen to them. Therefore, they were more prepared for the public image that was cast upon them once they joined the astronaut corps and made flights in space. But none of the astronauts went into NASA to become heroes (those who tried to enter for such a reason were eliminated by the selection boards); they became astronauts because they were fliers.

6. The PAO helped the later astronauts prepare for future public exposure through the use of the "Week in the Barrel," which was helpful for NASA's public relations as well.

7. The fame of NASA and the astronauts waxed and waned, dependent upon the nature of the mission to which the men were assigned--not upon the personalities of the men themselves. In the opinion of this author

the following missions were the highlights that would have drawn the attention of the American public to them, no matter who flew them:

- the first man or American in space
- the first man or American to orbit the earth (assuming that the first person in space did not already do this)
- the first multi-man mission
- a mission that occurred following a long stretch of time when no manned missions have been launched (such as Gemini 3)
- the first space walk
- the first crew-exchange that took place in space between two spaceships
- the first flight to the moon
- the first mission to the moon's surface
- a flight during which there is significant trouble to the point that the crew members might not be able to return to earth (such as Apollo 13)

It seemed as though the public put high value upon doing things first. first and not much more. Since the Russians did many of the firsts first, some of the firsts are not well-remembered by the Americans. The Americans remember that Shepard was *our* first man, Glenn was *our* first orbiter, White was *our* first space-walker and Gemini was *our* first multi-man spacecraft. Then *we* beat *them* with Apollo 8 going to the moon and Apollo 11's LM settling upon the moon.

In this author's opinion, the flights that generated the most publicity were

- Shepard's MR-3 flight
- Glenn's MA-6 flight
- Cooper's MA-9 flight
- Gemini 3 (Grissom, Young)
- Gemini 4 (McDivitt, White)
- Gemini 6/7 (Schirra, Lovell, Borman, Stafford)
- Apollo 7 (Schirra, Cunningham, Eisele)
- Apollo 8 (Borman, Lovell, Anders)
- Apollo 10 (Young, Cernan, Stafford)
- Apollo 11 (Aldrin, Armstrong, Collins)
- Apollo 13 (Lovell, Haise, Swigert)
- Apollo 17 (Evans, Cernan, Schmitt)

The flights that seem to be the most remembered by the public are Shepard's MR-3, Glenn's MA-6, Apollo 8 and Apollo 11. The men who seem to be most remembered are Armstrong, Glenn and Shepard. Armstrong would, no

doubt, be the most remembered man in the astronaut corps; yet it was fate which put him in that position. Tom Stafford on Apollo 10 or Pete Conrad on Apollo 12 could easily have been the first man to walk on the moon.

8. Although the public was interested in the men, it was not equally interested in the machinery and the organizations that put the astronauts into space. That was possibly because it was far easier for people to identify with a man in space rather than a machine. Armstrong created far more interest than did the first satellite to land on the moon--who can remember that satellite's name? As Glennan put it, "Technology was interesting [to the public] only the extent the astronauts were prepared to cope with it" (51).

9. NASA did nothing to promote the hero image of the astronauts to the public but, on the other hand, NASA did not discourage this image either (and NASA would have suffered greatly if had tried to do this). NASA's silence on the matter might have been seen as an approval by the media for the media to continue with what it was doing.

10. The Public Affairs Office was an effective organization although there were some faults here and there through its history. It did very well considering that there was no precedence for its members to rely upon for guidance.

11. Likewise, the magazines handled the publicity of the astronauts well most of the time and, like the PAO, they also suffered from faults at times.

12. Life magazine was a plus for NASA although its contracts with the astronauts for their personal stories caused a number of headaches for NASA personnel. The contracts took a burden off of the PAO's back by handling the personal aspects of the astronauts; otherwise NASA would have had to play constant watchdog and nursemaid to the astronauts and their families during the years when great public attention was upon the astronauts.

13. Life did not hamper the work of other publications except to dampen the egos of reporters from some publications. A reporter could get the astronauts to talk if he or she tried hard enough.

14. There seemed to be a reverent attitude towards the astronauts in the magazines until 1971-1972. Then, the writers started chipping away at the images that had been created around the astronauts and they showed the astronauts as human beings, something that they had been all along, except that everyone had thought otherwise until this time.

15. The astronauts never set out to create a special image of what an astronaut should be but they realized that they had to maintain a certain life style in the public eye, as does any professional. However, there were some astronauts who thought of themselves as heroes and acted as such, although it seems that their efforts have gone largely unnoticed in public.

The history of the astronaut began officially in April, 1959 and will continue into the future. But the history really began before 1959 though, it started when the first person looked up at the skies and dreamed of flying like the birds. As man's knowledge developed to a level that would permit him to fly the blue skies, the thought of flying in the black skies of space took his mind. By the time 1959 came about, mankind had been dreaming its dream for thousands of years. The astronauts and cosmonauts were fulfilling dreams as old as humanity.

In effect, everyone on this planet is an astronaut since the earth is constantly whirling through space but, in relation to our surroundings, we call ourselves ground-bound and admire the men who can escape our environment, although they have to take part of this environment to survive.

When the astronauts first took to space, it was almost beyond the imagination. It was fascinating and emotional but the men were coolly professional and seemed to have a devil-may-care attitude. Glenn had once said that the men might as well be happy when they can for tomorrow

they may die. That's true of human life in general but maybe moreso with the astronauts because they were closer to death than most other people.

Many of us among the earthbound wished that we were going along with the astronauts into space. It was up to the journalists and the media to tell the world what was happening with such unearthly exploits and about the men who ventured away from us. The astronauts were not accustomed to being in the spotlight of the world and they resented it, particularly they resented the journalists who put them there. The journalists are not that much to blame for casting the spotlight upon the men, only for the degree of accuracy in their reporting. The source of this spotlight was the public. If the journalists had avoided reporting about the space efforts, there more than likely would have been a justifiable public clamor to know what was happening at Cape Canaveral, to the detriment of the space program.

President Kennedy set a goal for not just the United States of American but also for the world, especially Russia, at least in the minds of the Americans. The Russians gave the U.S. impetus to go to the moon, to finally do something first that involved emotion. The U.S. flew the first fuel cells in space--so what? The U.S. had the first men in space to observe a typhoon--so what? But the Russians had the first man in space, that's what mattered. The Russians had the first satellite in space, that's what mattered. Putting a man on the moon first was what mattered for the Americans; it was as much of an effort to restore national rprestige as it was a scientific achievement.

Once the goal was attained, it was a question of "what next?" The U.S. had put a man on the moon and, therefore, more trips to the moon seemed unnecessary. As the men of Apollo 11 walked on the moon, Vice-President Agnew told the nation that the next target was Mars--that's what mattered. But Mars really may not matter. There have been budget cuts in NASA's work and the space efforts for the present are earth-oriented. If man goes to Mars, or any other planet, the voyages will be long, in terms of months and years, and the excitement will not

be there (at the closest approach of Mars to earth, a radio signal still takes seven minutes to travel one way). Project Mercury was exciting because the events were happening *now*. Gemini began similarly but slowly faded into obscurity because of the assumed repetition of the flights. Then Apollo capped it all. Television made it all seem real again, to the point of acclimating the world almost too much with space travel. It was not the Buck Rogers type of travel where men met intelligent creatures from other planets. It was three days to the moon and three days back. For Apollo 11, those days to the moon and back were full of excitement and risk as seen by the people on the mother planet. During the later missions, the three day trips were too long to maintain excitement, except for Apollo 13 where the drama of death versus man loomed high.

There were not only more men but more missions than almost everyone could keep track of. Everything became a blur to the senses except for missions that were of importance to the public in the terms of "that's what mattered." Soon, the thought of space travel became almost mundane to the public and might have done so no matter how hard ANSA and the government tried to make it appear interesting. That Apollo 13's oxygen tanks exploded on the way to the moon may have had a good side effect. The accident caused many people to lose faith in the moon missions temporarily but they soon regained it, convinced that the U.S. could solve the problem.

When the men and the missions were few in the first years, the heroes were well-known to everyone. Their faces appeared on newspapers' front pages, the covers of magazines and on the television screens. But soon the occupation made the men look alike. It became difficult to identify with them. Perhaps in the future, if nations other than the U.S. and Russia send men into space, the same hero-phenomenon will occur with their astronauts. It seems to happen every time there is some new quest that is being fulfilled. No one remembers the second man who flew alone across the Atlantic only days after Charles Lindbergh had done it.

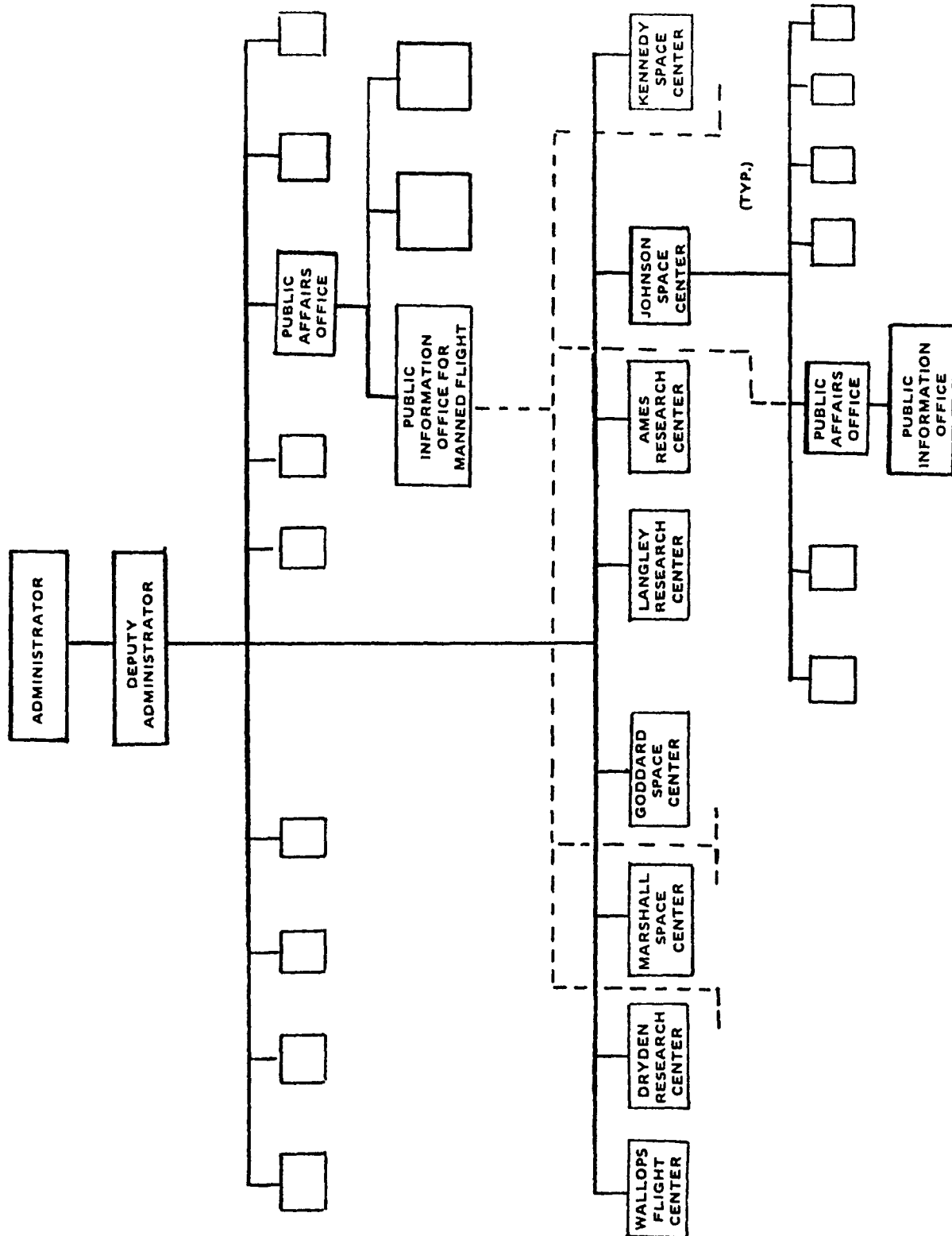
He was the hero there. Magellan was the first man to attempt to circle the globe and, even though he did not fully succeed, 18 of his followers did. But the second group of men are not well known. People in the western hemisphere remember that Columbus came in 1492 but not the years of his return trips. The first is what counts--the winner.

To the Americans, the astronauts were the competitors, the winners and the heroes. There will never be another group like them for a long time to come.

APPENDIX A:
THE PAO

There may be some confusion about the public affairs office of NASA and the public information office. The PAO of NASA is in charge of all public relations activities of NASA. At each center, likewise, is a smaller PAO. These offices are responsible for the public relations activities of the centers on an overall basis--producing films about the projects going on at the centers, conducting tours, handling VIPs visiting the centers, preparing reports for distribution to people or groups desiring them and almost anything else that could fit into the category of public relations. The public information office, however, is designed to handle the media primarily and is subordinate to the PAO. Thus, a public information officer is also a public affairs officer but not necessarily so in reverse. Each public information office is almost like a library of information for the media except they are a little like newsrooms of newspapers. Each person in the PIO is responsible for covering a certain aspect of that center's operations and, if something of worthwhile importance happens in his or her assigned area, he or she will write a press release concerning that information.

On the next page is a chart showing the operations of the PAO as they were designed in late 1961.



APPENDIX B
TIME CONTRACT (1963)

AGREEMENT dated September, 1963, among Time Inc., New York corporation (hereinafter referred to as "Time"), C. Leo DeOrsey (who represents the following seven astronauts and their respective families; Malcolm Scott Carpenter, Leroy G. Cooper, Jr., John H. Glenn, Jr., Virgil I. Grisson, Walter M. Schirra, Alan B. Shepard, Jr., and Donald K. Slayton), and H. A. Batten (who represents the following nine Astronauts and their respective families: Neil A. Armstrong, Frank Borman, Charles Conrad, Jr., James A. Lovell, Jr., James A. McDivitt, Elliot M. See, Jr., Thomas P. Stafford, Edward H. White, II, and John W. Young).

It has been announced by the National Aeronautics and Space Administration (hereinafter referred to as "NASA") that the sixteen Astronauts above named (the "Astronauts") have been selected for training for participation in manned space flight projects to be undertaken by NASA.

Time wishes to obtain rights in and to the personal stories of the Astronauts and their families. Messrs. DeOrsey and Batten have represented that they are authorized to sell such rights in respect of the Astronauts and their families and have submitted to Time copies of their agreements with said Astronauts and their families (copies of said agreements are annexed hereto as Exhibits A and B).

It is therefore agreed between the parties as follows:

1. Grant of Rights.

(a) Time is hereby granted the right to create, and to authorize others to create, literary and pictorial material using or based upon the personal stories of the Astronauts and their families with respect to their experience occurring up to and including the last day of the term hereof. Time shall own all rights in all media throughout the world in and to any material so created, including any such material which may be created by an Astronaut or any family member

at the request of, or in cooperation with, Time. Time shall have the right to copyright all such material in its name and shall own all rights in the copyright thereof.

(b) Time shall exercise its rights granted in subparagraph (a) only for the purpose of publishing any material so created in LIFE, LIFE International, and LIFE En Espanol. Time is expressly granted the right to use such material for such publication. Subject to any agreement which Time may make with others it is understood that publication in LIFE shall precede any other publication in any other media of communication (i) in the United States and Canada by at least four full days, and (ii) anywhere else in the world by one full day. Publication in LIFE International and LIFE En Espanol shall not commence until at least ten full days after publication by others outside the United States and Canada. In no event will publication of the personal stories of the Astronauts be permitted in the United States and Canada in any weekly, biweekly or monthly magazine or periodical other than LIFE.

(c) Immediately upon publication of any such material in LIFE, all rights in such materials, including the copyright, shall be considered assigned back to Messrs. DeOrsey and Batten or their successors, and Time shall be considered to have received simultaneously with such assignment a license or licenses by Messrs. DeOrsey and Batten, or their successors, granting to it exclusive first magazine serial rights in the United States and Canada and the non-exclusive right to publish such material in LIFE International and LIFE En Espanol.

(d) Except as provided in paragraph 7(a) hereof, no rights to use the name of any Astronaut or any family member in any print media during the term hereof, or rights to create literary or pictorial material for use in any print media based on the personal stories and experiences of any Astronaut or family member occurring prior to the end of the term hereof, shall be granted to anyone other than Time except for the rights granted Field Enterprises Educational Corporation in two contracts dated this date, copies of which have been delivered to Time.

(e) Each of the parties shall promptly on request execute

and deliver such further assignments or documents as another party may from time to time reasonably request to evidence the rights and licenses referred to herein and to permit appropriate copyright protection of any material.

2. Term of Agreement

Subject to the rights of termination described herein in paragraphs 8 and 9, the term of this agreement shall be from the date hereof to August 31, 1967, provided that Time is hereby granted the irrevocable right and option to extend the term of this agreement with respect to each Astronaut and the members of his family to the date upon which such Astronaut ceases to be employed or detailed to NASA. Such option shall be deemed automatically exercised by Time unless it advises Mssrs. DeOrsey and Batten, or their successors, to the contrary in writing on or before May 31, 1967.

3. Duration of Rights.

Time's right to create material based upon the personal stories and experiences of the Astronauts occurring prior to the end of the term hereof shall continue after the term, as shall its right to use material created by Time pursuant hereto whether such material is created during or after the term. Except as provided above, all obligations of the Astronauts shall cease upon the end of the term hereof, and no Astronaut or member of his family shall have any obligation to consult with or cooperate with Time in the preparation of any such material after the term nor shall any material created after the term be attributed to any such person unless such person's consent in writing shall be first obtained.

4. NASA Policies.

(a) This agreement is made pursuant, and at all time subject to, the NASA policy set forth in NASA Releases Nos. 62-198 and 62-199, both dated September 16, 1962, with regard to the sale of literary rights by the Astronauts.

(b) It is agreed that NASA shall have the absolute right to approve this agreement, and without such approval it shall not be

effective or binding upon the parties hereto. The date on which such approval is obtained shall be the Effective Date hereof.

(c) Time will not at any time publish or cause to be published any materials deemed classified by NASA or the Department of Defense.

(d) If the authorship of any article is to be credited to any Astronaut (as a signed piece or as an "as told to" type of by-line story), advance approval of such story shall be obtained both from such person, or his agent, and from the appropriately designated representative of NASA. Such approval shall be communicated to Time as quickly as possible in light of the particular editorial deadlines involved.

5. Editorial Arrangements.

As soon as convenient after the execution of this agreement, Time will assign writers and photographers who shall make all necessary arrangements to visit with and observe the training and lives of the respective Astronauts and their families. The Astronauts and their families will cooperate with such writers and photographers in connection with all research, writing, photographic and all other arrangements which are reasonably necessary for the purpose of carrying out the intent of this agreement. Time agrees that it will work out these editorial arrangements in such a manner as not to interfere with the training and conditioning of any Astronaut.

6. Use of Names.

Time may use, or authorize the use of, the names and pictorial material of the Astronauts and their families, and such biographical data as it deems appropriate, in connection with the exercise of rights granted hereunder. It is understood that such use will be dignified in nature and in conformity with NASA's policies.

7. Other Proposals.

(a) Because of the widespread public interest in manned space flights, it is recognized that the Astronauts will be sought after

by the press and other media to comment upon the scope of their official activities in such programs. It is understood that they shall be completely free, without having obtained permission from Time, to write for publication for non-competing media, to be photographed, interviewed, or to participate in public service television, radio, motion picture or recording activities to the extent deemed necessary by NASA to carry out its informational and educational responsibilities. It is further understood that the Astronauts are expected to be responsive to and cooperative with NASA in such matters, and Time will not attempt to influence, either by advise to the Astronauts or by any other means, the extent or manner of the Astronauts' participation in such matters.

(b) With respect to matters pertaining to their personal stories, subject to the grants made in the Field agreements, if the press or other media request the Astronauts or members of their families to be interviewed, write or otherwise publish, or appear on television or radio, whether for consideration or not, before doing so they, or their representatives, shall first obtain Time's approval in writing. It is expected that Time will grant such approval in any instance where the acceptance of such outside offers will not, in Time's opinion, materially affect the value of any of the rights granted to Time hereunder.

8. Time's Right of Termination.

(a) In any of the following contingencies, Time shall have the right, by giving written notice to the Astronauts or their agents, to terminate this agreement, including its obligation to make any payments which become due subsequent to any such termination:

- (i) if the United States Government shall cancel or suspend NASA's activities with respect to manned space projects;
- (ii) if any Astronaut is directed by NASA that he may not make his personal story available to Time;
- (iii) if any Astronaut is directed by NASA that his

personal story is in the public domain or must be made available to others as well as Time.

(b) If at any time the value of the personal stories of the Astronauts is badly impaired or lost as a result of the administration or existing NASA policies of public information (as set forth in NASA releases 62-198 and 62-199) or as the result of future policies of NASA (or the administration thereof), Time will (i) bring the matter to the attention of Messrs. DeOrsey and Batten, or their successors, and (ii) discuss it with the proper representatives of NASA with a view to exploring the means of eliminating any impediments to the value of the stories. However, if, after the passage of a reasonable time (not to exceed thirty days), Time does not consider the value of the stories fully restored, it may terminate this agreement and be relieved of any further obligations hereunder by giving written notice to the Astronauts or their representatives. If Time's option to extend this agreement has been exercised and such termination notice is given after May 31, 1967, Time shall, simultaneously with such termination, pay Messrs. DeOrsey and Batten, for the account of the Astronauts and their families represented by them, an amount equal to one-third of the amounts which would thereafter have been payable as provided hereunder if this agreement had not been terminated; provided that the aggregate of such termination payments with respect to the Astronauts and all additional astronauts making agreements with Time, as provided in paragraph 11 hereof (whether under this agreement or any other agreement relating to the purchase of rights in the personal stories of the Astronauts or additional astronauts), shall not exceed \$200,000 (with the termination payments otherwise payable with respect to the Astronauts and any additional astronauts to be adjusted pro rata).

9. Termination of Astronauts' Rights.

All Astronauts mentioned by name herein and their families represented by Messrs. DeOrsey and Batten, who are employed by, or

detailed to, NASA during the course of its manned space flight projects, will be eligible for payment under this agreement. However, the term hereof shall automatically and without notice terminate with respect to any Astronaut upon the termination, for any reason whatever other than death, of his employment by or detail to NASA. Time shall not thereafter make any payments hereunder with respect to such Astronaut or his family expect for payment pursuant to subparagraph 10(c) if applicable. In the event of the death of any Astronaut while employed by or detailed to NASA, he shall, for purposes of payments to be made hereunder (including payments under subparagraph 10(c)), continue to be regarded as actively employed by NASA, such employment to be deemed terminated simultaneously with the termination of the employment by, or detail to, NASA of the last living Astronaut so employed or detailed.

10. Payments by Time.

In consideration of the above, and subject to paragraphs 8, 9 and 11 hereof, Time shall make the following payments to Messrs. DeOrsey and Batten:

(a) Initial Period (through August 31, 1967)

(i) To Mr. DeOrsey, or his successor, for the account of the Astronauts and families represented by him:

Upon the effective date: \$1,000 in respect of each Astronaut; \$1,000 in respect of each Astronaut's wife, and \$4,200 in respect of each Astronaut's family.

On September 1, 1964: \$4,250 in respect of each Astronaut and his wife, and \$2,000 in respect of each Astronaut's family.

On September 1, 1965: \$6,250 in respect of each Astronaut's family.

On September 1, 1966: \$6,250 in respect of each Astronaut and his wife.

(ii) To Mr. Batten, or his successor, for the account of the Astronauts and families represented by him:

Upon the effective date: \$56,250.

On Sept. 1, 1964: \$6,250 in respect of each Astronaut and family.

On Sept. 1, 1965: \$6,250 in respect of each Astronaut and family.

On Sept. 1, 1966: \$6,250 in respect of each Astronaut and family.

(b) Renewal Period.

In the event Time exercises its option pursuant to paragraph 2 hereof, Time shall make the following payments:

(i) To Mr. DeOrsey or his successor, for the account of the Astronauts and families represented by him:

On Sept. 1, 1967: \$6,250 in respect of each Astronaut and family.

On Sept. 1, 1968: \$6,250 in respect of each Astronaut and family.

On Sept. 1, 1969: \$6,250 in respect of each Astronaut and family.

(ii) To Mr. Batten or his successor, for the account of the Astronauts and families represented by him:

On Sept. 1, 1967: \$6,250 in respect of each Astronaut and family.

On Sept. 1, 1968: \$6,250 in respect of each Astronaut and family.

On Sept. 1, 1969: \$6,250 in respect of each Astronaut and family.

(c) In addition, if any Astronaut's employment by, or detail to, NASA shall terminate after August 31, 1970, for any reason (except dismissal for cause which shall not be deemed to include mental or physical disability) and if, upon such termination Time shall not be obligated to make a future payment or payments in respect of such Astronaut for rights in his personal story pursuant to another agreement, Time shall pay to Mr. Batten or Mr. DeOrsey, as the case may be, with respect to such Astronaut and his family, the sum of \$6,250, such payment to be made twelve months after the termination of such Astronaut's employment by, or detail to, NASA, or on September 1, 1972, whichever shall be later.

For the purpose of the limits on the maximum amounts payable set forth in paragraphs 8 and 11 and similar limits in any other contracts between the parties hereto, the payment date for all such

final payments and all final payments payable by Time under any other agreements to Astronauts or additional astronauts making agreements with Time as provided in paragraph 11, shall be deemed to be September 1, 1972.

11. Other Astronauts.

Time understands that additional astronauts may be assigned to NASA's manned space program to participate in manned space flights in capacities similar to those of the Astronauts who are parties to this agreement. Time reserves the right to offer an agreement identical in all relevant respects to this agreement to each of such other astronauts, subject to the following conditions: (a) that such other astronaut shall officially have been selected by NASA for training for flight (as distinguished from ground duty) in its manned space flight projects; (b) that such other astronaut shall enter into such an agreement on behalf of himself and his family no later than six months after he shall officially have been so selected; and (c) that the first payment to be made to any such other astronaut shall not be due until the date one year after he shall officially have been so selected and shall be limited to this part of \$6,250 as shall equal in proportion the part of a year from such date until the next payment date for the Astronauts covered by this agreement (at which time he shall receive the full payment then due him), and such other astronaut shall not be entitled to share in any payments which shall have become due prior to his first payment.

Notwithstanding any other provisions of this agreement, the aggregate of all payments to be made by Time in any calendar year to all such additional astronauts and to the Astronauts, whether under this agreement or any other agreement relating to purchase of rights in personal stories or experiences, shall not exceed \$200,000 (with all payments to the Astronauts and such additional astronauts then due to be adjusted pro rata to the extent necessary to keep the aggregate

of all payments from exceeding such maximum); and Time's obligation to make payments to the Astronauts pursuant to paragraph 10 shall be subject to this limitation.

12. No Liability Upon Messrs. DeOrsey and Batten.

It is recognized by Time that Messrs. DeOrsey and Batten are, respectively, acting on behalf of and solely in the interests of the Astronauts and their families whom they, respectively, represent, and that neither has any personal interest in the proceeds to be paid to him hereunder. It is therefore understood that neither shall be liable personally to Time for the performance of this agreement by the Astronauts, other than that each will be apprised of any differences of opinion related to the performance of this agreement that may arise between Time and the Astronauts or their families represented by him, and that the cooperation of Mr. DeOrsey and Mr. Batten or their successors may be sought by Time to help settle any differences or problems involving the Astronauts or their families whom they respectively represent. Until otherwise notified in writing by all of the Astronauts represented by Mr. DeOrsey that another person has been authorized by them to be their agent, Time shall be entitled in all matters relating to this agreement to regard Mr. DeOrsey as the sole authorized agent of such Astronauts. Likewise, until otherwise notified in writing by all of the Astronauts represented by Mr. Batten that another person has been authorized by them to be their agent, Time shall be entitled in all matters relating to this agreement to regard Mr. Batten as the sole authorized agent for such Astronauts.

13. Miscellaneous.

The term "families" as used in this agreement shall be deemed to include the respective wives and children of the Astronauts if not otherwise specified.

All references in this agreement to NASA or any official thereof shall be deemed to apply and to include any successor or other agency or person having substantially the same authority or function.

14. Applicable Law.

This agreement is made pursuant to and shall be governed by the laws of the State of New York applicable to contracts to be performed entirely therein.

IN WITNESS WHEREOF, the parties have executed and delivered this agreement as of the day and year first above written.

TIME INCORPORATED

ACRONYMS

- AMU Astronaut Maneuvering Unit: the backpack designed for use during Gemini flights but never used because of various difficulties in flight.
- ADTA Augmented Target Docking Adapter: a shortened Agena target vehicle used only in Gemini 9 for the Gemini spacecraft to dock with.
- CM Command Module: the main spacecraft of the Apollo program; designed to carry three men for long voyages in space but it was necessary to have the Service Module with the CM as the Service Module supplied virtually all power and attitude control for the CM.
- EVA Extra-Vehicular Activity: Any activity outside of a spacecraft, such as a space walk or a walk on the lunar surface.
- GATV Gemini-Agena Target Vehicle: A unmanned spacecraft that was used for docking practice with the Gemini spacecraft; the Agena could also be used for powering the Gemini to different altitudes and orbits as it had a powerful engine which the astronauts in the Gemini could control once the two spacecraft were docked.
- GT Gemini-Titan: the manner in which the Gemini missions were called.
- JSC Johnson Space Center: in 1973, the Manned Spacecraft Center at Houston was renamed in honor of former President Lyndon Johnson, one of the main supporters of NASA during his years in government.
- KSC Kennedy Space Center: formerly referred to as Cape Canaveral but now only the NASA launching facilities where most of NASA's launchings take place; named after President John Kennedy.
- LM Lunar Module: the first true spacecraft which could only fly in a vacuum and was designed to land on the moon.
- LRL Lunar Receiving Laboratory: a section of the Manned Spacecraft Center at Houston set aside for astronauts returning from the moon and for the material which they brought with them; the astronauts and their support teams would be quarantined in here for various lengths of time. The last crew quarantined here was Apollo 14.

- MA Mercury-Atlas: the manner in which the Mercury missions were referred where the Atlas was the launch vehicle.
- MR Mercury-Redstone: the manner in which the Mercury missions were referred where the Redstone missile was used as the launch vehicle.
- MQF Mobile Quarantine Facility: a airtight house trailer type of unit which carried the astronauts of moon missions from splashdown to the LRL; essentially, a portable LRL.
- MSC Manned Spacecraft Center: NASA's primary facility for training astronauts for spaceflight; in Houston, Texas; now called the Johnson Space Center.
- NASA National Aeronautics and Space Administration: the agency of the U.S. Government responsible for conducting research of flight in the atmosphere and in space; conducts both manned and unmanned flights for research.
- OAMS Orbital And Maneuvering System: the attitude controls of the Gemini spacecraft that controlled the movements of the spacecraft.
- PAO Public Affairs Office or Public Affairs Officer: the office or an employee thereof responsible for handling the public relations of NASA
- PIO Public Information Office or Public Information Officer: the office of employee thereof responsible for aiding the media in reporting about NASA's activities; also prepares press releases about NASA's activities.
- PLSS Portable Life Support System: a backpack affair used by the Apollo astronauts to sustain themselves while they were on the surface of the moon.
- SM Service Module: one of the Apollo modules necessary to support the functions of the command module. See CM.
- SPS Service module Propulsion System: the engine that was used to place the entire Apollo spacecraft into lunar orbit and take them out of lunar orbit for the trip home to earth.

U.S. MANNED SPACEFLIGHTSPROJECT MERCURY

MR-3 (Freedom 7)	May 5, 1961	Shepard
MR-4 (Liberty Bell 7)	July 21, 1961	Grissom
MA-6 (Friendship 7)	February 20, 1962	Glenn
MA-7 (Aurora 7)	May 24, 1962	Carpenter
MA-8 (Sigma 7)	October 3, 1962	Schirra
MA-9 (Faith 7)	May 15, 1963	Cooper

PROJECT GEMINI

Gemini 3 (Molly Brown)	March 23, 1965	Grissom, Young
Gemini 4	June 3-7, 1965	McDivitt, White
Gemini 5	August 21-29, 1965	Cooper, Conrad
Gemini 6	December 15-16, 1965	Schirra, Stafford
Gemini 7	December 4-18, 1965	Borman, Lovell
Gemini 8	March 18, 1966	Armstrong, Scott
Gemini 9	June 3-6, 1966	Stafford, Cernan
Gemini 10	July 18-21, 1966	Young, Collins
Gemini 11	September 12-15, 1966	Conrad, Gordon
Gemini 12	November 11-15, 1966	Aldrin, Lovell

PROJECT APOLLO

Apollo 1 (Apollo 204)	January 27, 1967	Grissom, White, Chaffee
Apollo 7	October 11-22, 1968	Schirra, Eisele, Cunningham
Apollo 8	December 21-27, 1968	Borman, Lovell, Anders
Apollo 9 (Gumdrop, Spider)	March 3-13, 1969	Schweichart, McDivitt, Scott
Apollo 10 Charlie Brown, Snoopy)	May 18-26, 1969	Young, Cernan, Stafford
Apollo 11 Columbia, Eagle	July 16-24, 1969	Aldrin, Armstrong, Collins
Apollo 12 Yankee Clipper, Intrepid	November 14-24, 1969	Bean, Conrad, Gordon

Apollo 13 Odyssey, Aquarius	April 11-17, 1970	Lovell, Haise, Swigert
Apollo 14 Kitty Hawk, Antares	January 31-February 9, 1971	Shepard, Roosa, Mitchell
Apollo 15 Endeavor, Falcon	July 26-August 5, 1971	Irwin, Scott, Worden
Apollo 16 Casper, Orion	April 16-27, 1972	Young, Mattingly, Duke
Apollo 17 America, Challenger	December 7-19, 1972	Cernan, Evans, Schmitt

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