

2004

The Taj Mahal of sport: the creation of the Houston Astrodome, 1957-1967

Jason Bruce Chrystal
Iowa State University

Follow this and additional works at: <https://lib.dr.iastate.edu/rtd>

 Part of the [Leisure Studies Commons](#), [Recreation Business Commons](#), and the [United States History Commons](#)

Recommended Citation

Chrystal, Jason Bruce, "The Taj Mahal of sport: the creation of the Houston Astrodome, 1957-1967 " (2004). *Retrospective Theses and Dissertations*. 767.
<https://lib.dr.iastate.edu/rtd/767>

This Dissertation is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

The Taj Mahal of sport:
The creation of the Houston Astrodome, 1957-1967

by

Jason Bruce Chrystal

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: History of Technology and Science

Program of Study Committee:
Alan I Marcus, Major Professor
Amy S. Bix
George T. McJimsey
Hamilton Cravens
Richard N. Kottman

Iowa State University

Ames, Iowa

2004

Copyright© Jason Bruce Chrystal, 2004. All rights reserved.

UMI Number: 3136300

Copyright 2004 by
Chrystal, Jason Bruce

All rights reserved.

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI[®]

UMI Microform 3136300

Copyright 2004 by ProQuest Information and Learning Company.

All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

Graduate College
Iowa State University

This is to certify that the doctoral dissertation of

Jason Bruce Chrystal

has met the dissertation requirements of Iowa State University

Signature was redacted for privacy.

Major Professor

Signature was redacted for privacy.

For the Major Program

For Lora Leigh,

TABLE OF CONTENTS

CHAPTER 1.	INTRODUCTION	1
CHAPTER 2.	THE NEXT BIG LEAGUE CITY	15
CHAPTER 3.	FINDING THE “CRACKER JACK” LOCATION	46
CHAPTER 4.	MORE MONEY, MORE BONDS	90
CHAPTER 5.	DESIGNED TO BE THE BIGGEST AND THE BEST	128
CHAPTER 6.	LAWYERS, GUNS, AND MONEY	155
CHAPTER 7.	THIRD TIME THE CHARM	200
CHAPTER 8.	BUILDING THE DOME	226
CHAPTER 9.	DOMESDAY	266
CHAPTER 10.	THE ASTRO-DOOMED STADIUM	297
CHAPTER 11.	CONCLUSION	334
	BIBLIOGRAPHY	343

CHAPTER 1: INTRODUCTION

This dissertation explores the creation of the Houston Astrodome, the first domed stadium built in the United States, from its earliest history of planning in the late 1950s to its construction and completion in the mid-1960s. It is during the time frame of 1957 to 1967, I argue, that we can see an example of the change in Houston and American society from one of an era of optimism and prosperity to one of pessimism and scarcity. By examining the arguments of stadium supporters and opponents, the alterations in design, the selection of certain technologies, and the changing opinion of what the stadium was to various individuals, we can obtain a clearer picture not just of Houston or Texas, but also of the United States. Although the histories of baseball and football are important to the story, the Astrodome was conceived as more than just a sports stadium. In an era of ebullient optimism, Houston leaders championed a multiple purpose stadium that could house an almost infinite number of civic events. Even better to these stadium enthusiasts, a domed stadium would symbolize the vigor of Houston and obliterate the perceived stigma of the city as merely an oil town.

As America emerged from World War II, it entered into a new era of confidence and optimism. Historian Carl N. Degler stated that the postwar years in America were an "era of greatest abundance."¹ Never before in its history had the United States witnessed such abundance, growth and prosperity. As wartime demand stimulated the nation's industrial production, America emerged wealthier and prepared for postwar reconstruction. With the

¹ Carl N. Degler, *Abundance and Anxiety: America, 1945-1960* (Westport, Connecticut: Praeger, 1997), 124-148, quotes 147; David Q. Voigt, *Baseball: An Illustrated History* (University Park: The Pennsylvania State

devastation of both Europe and Asia, America's gross national product ballooned 250 percent from 1945 to 1960. Individually, Americans witnessed the growth of their personal income too, from \$3,083 to \$5,657, and were "better off than at any time in the nation's history." Although returning soldiers threatened the miniscule unemployment rate, the G. I. Bill of Rights enticed many men into America's colleges and universities while helping subsidize their housing. With greater earning potential and more money, they could spend their wealth on consumer products like private homes, television sets, and automobiles. With more money in their pockets and more time on their hands, Americans in the Fifties could pursue more activities in a "leisure society." Historian W. J. Rorabaugh agreed with Degler's opinion of the postwar years and asserted that this "was a promising time," and Americans, in general, were "hopeful and optimistic." After perceiving that they won the war, Americans could welcome and relish the "peace abroad and prosperity at home," complete with "future national bounty that accommodated both private luxury and public expenditure."²

Similarly, Americans perceived that their science and technology won the war. America's victory "reaffirmed America's technological strength." Historian Thomas P. Hughes labeled this perception "technological enthusiasm." This faith in America's science and technology did not end with the war, but continued into the 1950s and early 1960s. Despite the apparent advances of the Soviet Union and the rise of the Cold War, American science, technology, and industry promised to tackle and defeat the spread of communism. The federal government extended contracts to private industry and universities that would

University Press, 1987), 219-223; Gerald D. Nash, *The American West Transformed: The Impact of the Second World War* (Bloomington: Indiana University Press, 1985), 201-216.

² W. J. Rorabaugh, *Kennedy and the Promise of the Sixties* (Cambridge, UK: Cambridge University Press, 2002), ix; J. Ronald Oakley, *God's Country: America in the Fifties* (New York: Dembner Books, 1986), 228-229. Oakley also provides a brief account of leisure pursuits, 249-266.

prevent the spread of communism by creating "a worldwide era of plenty" and transform "the world in the United States' image." Essentially, the United State would "engineer a new world order" that it would also guide.³

The "space race" between the Soviet Union and the United States demonstrated the America's optimism in its science and technology. After the Soviets launched *Sputnik I* on 4 October 1957 (and *Sputnik II* a month later), the popular perception was that all of America became anxious, fearful, and depressed as their faith in American superiority was shaken. President John F. Kennedy's decision to send a man on the moon, announced to Congress on 25 May 1961, affirmed his faith that the US could accomplish the difficult task of a lunar landing, despite the financial costs. During his "second inaugural," Kennedy announced to the members of Congress, "I believe we possess all the resources and talents necessary" to take more active measures for the exploration of space, particularly a manned space flight to the moon and back. Kennedy explained that the work and financial cost would be great for the nation. But Kennedy also affirmed his faith and confidence that America would achieve space success and lead the entire world. Besides, the President would add later, the hard work and cost of sending a man to the moon would only benefit the nation in terms of increasing international prestige, advancing science and technology, strengthening the economy, and even increasing the standard of living. Other proponents used a similar argument to support the space program on its potential "spill-over" effect. This "spin-off" or technology transfer

³ Alan I Marcus and Howard Segal, *Technology in America: A Brief History* (Forth Worth: Harcourt Brace College Publishers, 1999), 253-260; Thomas P. Hughes, *American Genesis: A Century of Invention and Technological Enthusiasm* (New York: Penguin Books, 1989), 1-12. Hughes, however, failed to delve deeper into this decline. One study takes Hughes to task for this inadequacy. See Lester Louis Poehner, Jr., *The future's not what it used to be: The decline of technological enthusiasm in America, 1957-1970* (Ph.D. dissertation, Iowa State University, 2000). I disagree with Poehner's assessment that this decline began in the late 1950s, but see it occurring during the mid 1960s.

would strengthen the economy, solve social ailments, and generate general progress. Dr. Hugh L. Dryden, the Deputy Administrator of NASA, expressed his confidence that science and technology would spill-over from the space program to the rest of society. “The influence of the technical progress,” he told the members of the Senate’s Appropriation Committee in 1961, “will be felt throughout or economy...” and “will be adaptable to a host of other uses.” This almost inevitable “technological progress” would permeate throughout American society from new technological applications in industry to new goods for the average American.⁴

During the war, Houston had played a vital role in the national defense, aided by the massive influx of federal money. This economic stimulus expanded the city's established industries like petroleum, steel, and transportation and stimulated the growth of newer ones in rubber, petrochemicals, natural gas, and ship building. The six railroads in Houston, for example, increased their tonnage 128 percent from 1940 to 1945. Oil refiners moved their operations from Beaumont and Port Arthur to the banks of Houston's ship channel to take advantage of the facilities already built in Houston. The number of refineries multiplied that, in turn, increased overall production to satisfy military demand. The infant petrochemical industry grew to conserve and convert gases into useful end products. Aided by an

⁴ Poehner, 17-41; Marcus and Segal, 296-297; Robert A. Devine, “Lyndon B. Johnson and the Politics of Space,” in Robert A. Divine, *The Johnson Years, Volume Two: Vietnam, the Environment, and Science* (Lawrence: University Press of Kansas, 1987), 228-232; John M. Logsdon, *The Decision to Go to the Moon: Project Apollo and the National Interest* (Cambridge, Massachusetts: The MIT Press, 1970), 109-121, 123-130; Roger D. Launius, *NASA: A History of the U.S. Civil Space Program* (Malabar, Florida: Krieger Publishing Company, 1994), 60-66; Mark E. Byrnes, *Politics and Space: Image Making by NASA* (Westport, Connecticut and London: Praeger, 1994), 39-40; James L. Kauffman, *Selling Outer Space: Kennedy, the Media, and Funding for Project Apollo, 1961-1963* (Tuscaloosa and London: The University of Alabama Press, 1994), 20-29; Vernon Van Dyke, *Pride and Power: The Rationale of the Space Program* (Urbana: University of Illinois Press, 1964), 104; U.S. Congress, Senate, Committee on Appropriations, *Independent Offices Appropriations, 1962, Hearings...on H. Res. 7445, 87th Cong., 1st Sess., 1961, p. 649, quoted in Van Dyke, 104.*

interconnected pipeline, the petrochemical industry increased its overall production and efficiency.⁵

The city of Houston, like other major metropolitan areas in Texas and the Sunbelt witnessed tremendous postwar growth. Houston's population swelled after the war. In the 1940 census, Houston totaled 384,514 inhabitants (the Standard Metropolitan Statistical Area (SMSA) was 510,397). By the end of the decade, this number increased fifty-five percent to 596,163 (SMSA 806,701) and would continue to increase to 1,139,678 (SMSA 1,243,168) at the start of the Sixties. In comparison, the population of Dallas-Forth Worth (using only the SMSA) was 584,225 in 1950, 976,052 in 1950, and 1,656,816 in 1960. The population increase triggered an economic boom that helped secure an optimistic outlook for the future. WWII provided "both investment and human capital that had been previously lacking." Houston also benefited from low taxes, cheap labor, a million consumers, and a "positive attitude towards business and industry." Houston, however, did not seem daunted by this rapid growth, but instead, seemed to relish it. With the city's reliance upon petroleum and its related industries, Houston seemed immune from any economic downturn and contributed to the nation's insatiable demand for energy. Additionally, the "entrepreneurial elite" that guided the city advocated physical and economic growth of Houston. For these individuals,

⁵ Marvin Hurley, *Decisive Years for Houston* (Houston: Houston Chamber of Commerce, 1966), 71-72, 86; Robert D. Thomas and Richard W. Murray, *Progrowth Politics: Change and Governance in Houston* (Berkley: The Regents of the University of California, 1991), 46-48; Gerald D. Nash, *The Federal Landscape: An Economic History of the Twentieth Century West* (Tucson: The University of Arizona Press, 1999), 41-75; John M. Findlay, *Magic Lands: Western Cityscapes and American Culture After 1940* (Berkley: University of California Press, 1992), 15-16. John B. Boles, *The South Through Time: A History of an American Region* (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1995), 451-455. New Dealer Jesse H. Jones almost single handedly brought about the creation of Houston's petrochemical and synthetic rubber industries during WWII. See Jesse H. Jones, *Fifty Billion Dollars: My thirteen Years with the RFC* (New York: Macmillan, 1951). On the ship channel, see William D. Angel, Jr., "To Make a City: Entrepreneurship on the Sunbelt Frontier," in *The Rise of the Sunbelt Cities*, ed. David C. Perry and Alfred J. Watkins (Beverly Hills: Sage publications, 1977), 116-123.

the future of Houston would continue to grow and expand. Houston was definitely without any type of limits.⁶

Houston's leaders also responded to the postwar "rapid growth" by building infrastructure the city required for the future. In 1949, mayor Oscar Holcombe announced the construction of a modern airport. The completion of the new international airport in 1954 promised to handle the increasing number of national and international airline flights. When the new airport seemed unable to satisfy the new jet airplanes and the ever-increasing traffic, construction on an even larger airport commenced in 1962. Houston leaders did not neglect the city's ship channel, which was enlarged to accommodate increasing ship traffic. In 1957, Houstonians approved bonds to expand the port's facilities and amenities to handle more and more business. By 1967, Houston ranked third in the nation for tonnage handled, trailing only New York and New Orleans.⁷

The final element of Houston's transportation system was its roads and highways. In addition to paving and planning city streets, the city planning commission attempted to rationalize traffic flow inside the city limits. These men emphasized private automobile usage, which greatly expanded the city's physical growth, ensuring that public transportation would never be a practical solution. "For Houstonians, the automobile was almost a necessity of life," noted historian David G. McComb. Any new commercial building, for example,

⁶ United States Census Bureau, *Census of Population: 1950*, vol. 2, part 43, (Washington, D.C.: United States Government Printing Office (USGPO), 1952), 55; United States Census Bureau, *Census of Population: 1960*, vol. 1, part 45, (Washington, D.C.: USGPO, 1962), 55; Bradley R. Rice and Richard M. Bernard, "Introduction," in Richard M. Bernard and Bradley R. Rice, *Sunbelt Cities: Politics and Growth Since World War II* (Austin: University of Texas Press, 1983), 8; Carl Abbott, *Urban American in the Modern Age, 1920 to the Present* (Arlington Heights, Illinois: Harlan Davidson, Inc.: 1987), 56; James C. Cobb, *The Industrialization and Southern Society, 1877-1984* (Lexington: The University Press of Kentucky, 1984), 63-67; Barry J. Kaplan, "Houston: The Golden Buckle of the Sunbelt," in Richard M. Bernard and Bradley R. Rice, *Sunbelt Cities: Politics and Growth Since World War II* (Austin: University of Texas Press, 1983), 196-202; Oakley, 229-230.

⁷ David G. McComb, *Houston: The Bayou City* (Austin: University of Texas Press, 1969), 171-177.

necessitated ample parking spaces. Because Houstonians placed the city's transportation future on the auto, they made a commitment to proliferating expenses that came with it. For example, the Gulf Freeway when completed in 1952 cost the federal government, the state of Texas, Houston, and Galveston \$28,000,000. (Cost of construction in Houston was \$1,600,000 a mile.) Another plan for Houston entailed a 244-mile four-lane highway project that would encircle the downtown area and cost over \$100,000,000.⁸

These transportation facilities helped bring NASA's space research laboratory to Houston in September 1961. NASA selected Houston over twenty other cities like New Orleans, Los Angeles, Boston, and Dallas. Surely one reason was that influential Texans like Houstonian Albert Thomas who chaired the House Appropriations Committee and vice president Lyndon B. Johnson were in important political positions to influence for Houston. But even more than these political allies, Houston fulfilled the various requirements that NASA demanded for its research lab. The most important of these was Houston's transportation facilities. The ship channel and related port facilities provided access to the Intracoastal Waterway and the Gulf of Mexico, connecting the manned spacecraft center to the other essential cities for Project Apollo. The railroads provided more than adequate freight service for NASA's needs. The two airports guaranteed that Houston would remain the hub of jet operations in the southwest. And the investment in the freeways in and around the city provided excellent service to all parts of the country. Other industries also relocated corporate headquarters to Houston to take advantage of the city's "expanding transportation networks of aviation and highway systems" and renewed commitment to higher education.

⁸ McComb, 178-182; Oakley, 244-246.

According to historian Stephen B. Oates, NASA's decision "portended new dimensions in scientific and technological growth" for Houston.⁹

Houston's growth was not atypical of other Sunbelt cities during and after the war, asserted historian Robert Fisher. For Fisher, the main feature of Houston's growth has been the petroleum industry.¹⁰ In 1946, nineteen counties that surrounded Houston contained over 100 oil fields and more than 7,000 oil wells. On average, each well produced 65 barrels a day (the state of Texas averaged 21 a day). These oil fields produced 20% of the state's production of crude oil and 40% of petroleum refining (593,990 barrels a day). A network of pipelines that increased overall efficiency and production as the by-products for one plant became the raw material for another connected all the oil wells, gasoline and cycling plants, and refineries. The "Spaghetti Bowl" pipeline system moved 527,000 barrels a day into Houston and 370,000 out. It was no wonder that Houston's petrochemical industry flourished since it was within pipeline reach of two-thirds of the nation's oil and natural gas reserves. Despite the national recession in 1957 and 1958 (that hit the petroleum industry particularly hard), Houston's vast industrial and commercial network allowed it to withstand the recession

⁹ James Stafford, "Behind the NASA Move to Houston," *Texas Business Review* 36 (April 1962): 90-91; Stephen B. Oates, "NASA's Manned Spacecraft Center at Houston, Texas," *Southwestern Historical Quarterly* 67 (January 1964): 354-356; Edward F. Haas, "The Southern Metropolis, 1940-1976," in Blaine A. Brownell and David R. Goldfield (eds.) *The City in Southern History: The Growth of Urban Civilization in the South* (Port Washington, New York: Kennikat Press, 1977), 172-179.

¹⁰ Robert Fisher, "Urban Policy in Houston, Texas," *Urban Studies* 26 (February 1989), 145. Arguing what exactly is the Sunbelt is well beyond the scope of this dissertation. For my purpose, I will agree with a geographical definition of the Sunbelt by Bradley R. Rice and Richard M. Bernard that uses the southern border of Kansas as the line of demarcation. States south of this imaginary line are considered "Sunbelt." See their "Introduction," in *Sunbelt Cities*, ed. Richard M. Bernard and Bradley R. Rice (Austin: University of Texas Press, 1983), 1-30.

of 1957 and 1958. The dominance of petroleum industries in Houston's economy allowed those outside of Texas to label Houston the "Oil Town."¹¹

Once the war ended, Houston's economic boom did not. The feeling of "boundless optimism and affluence" pervaded throughout the city.¹² Houston's economy did not slow down but actually accelerated. Its industries did not close after the war, but remained busy as they tried to meet the demands from America's growing population and global reconstruction needs. Many, like the synthetic rubber and steel plants, did not require massive reconversion for peacetime demands. In this way, Houston did not experience a disastrous unemployment or a postwar economic depression. Economically, Houston merely augmented its wartime gains.¹³

The economic expansion Houston experienced was aided and abetted by its increasing population. "The key to the Sunbelt South's economic takeoff was its population growth," wrote James C. Cobb.¹⁴ In Houston this was also true. At the beginning of the 1950s, Houston's population was 596,000 and Harris County's was 806,701. By 1960, Houston's population nearly doubled to 938,000, a growth greater than fifty percent during the decade. Harris County tallied 1,243,158 people, also an increase of more than fifty percent. The city boundaries also increased by 1,773 square miles, almost completely

¹¹ McComb, 185-186; Hurley, 85-86, 104-105, 160-161; George Fuermann, *Houston: The Once and Future City* (Garden City, New York: Doubleday and Company, Inc., 1971), 33-34; Douglas T. Miller and Marion Nowak, *The Fifties: The Way We Really Were* (Garden City, New York: Doubleday and Company, Inc., 1977), 17.

¹² W. J. Rorabaugh, *Kennedy and the Promise of the Sixties* (Cambridge: Cambridge University Press, 2002), xxi.

¹³ Hurley, 68, 84, 158.

¹⁴ James C. Cobb, *The Industrialization and Southern Society, 1877-1984* (Lexington: The University Press of Kentucky, 1984), 51-67.

engulfing Harris County.¹⁵ The number of registered automobiles, building permits, and bank deposits all doubled during the 1950s. The city's consumption of electricity tripled, and the number of customers doubled. Houston Chamber of Commerce President Marvin Hurley proudly cited the investment in Houston's infrastructure as testimony to the city's remarkable growth. Houston's "swelling statistics" included almost \$500 million of commercial and residential construction, \$200 million in public works, \$97 million for public schools, and \$38 million for churches occurred between 1948 and 1955. The city grew physically too. After the city annexed 140-square miles in 1956, Houston became the second largest American city.¹⁶

Aided by cheap labor, low taxes, raw materials, consumers and “the region’s positive attitude towards business and industry,”¹⁷ Houston's spectacular postwar growth could also be attributed to its leadership. Much like the entrepreneurs who backed the creation of the Ship Channel, the businessmen of the 1950s retained close, intimate relationships with politicians.¹⁸ The business leaders, so-called self-made men, found allies in other self-made men. Houston's entrepreneurs have been labeled as tenacious, "aggressive," and opportunistic in their efforts to obtain public money to aid their private investments and expand their city. The vast railroad network and the Ship Channel are pre-WWII examples of this nexus. After the war, this would be seen in federal money for flood control programs, highway expansion, home loans, and NASA. This pro-growth coalition of wealthy businessmen and political leaders was created not just to expand the city's economy, but also

¹⁵ Michael C. D. Macdonald, *American Cities: A Report on the Myth of Urban Renaissance* (New York: Simon and Schuster, 1984), 94; Hurley, 100, 205. Houston's growth rate was 57.4% and Harris County's was 54.1%.

¹⁶ Hurley, 159, 162.

¹⁷ Cobb, 66.

as a means to laud its increased wealth. But more than just wealth, Houston's continual growth became an "unquestioned good in and of itself," a "civic virtue," a means to obtain international recognition. What was good for the economic elite, therefore, was good for the city. Opposing their consensus meant one opposed what was good for Houston. These nonconformists and their ideas, therefore, could be marginalized as out of step or out of touch with reality.¹⁹

Kirkpatrick Sale noted the tremendous expansion that occurred in post-war Houston. In his book *Power Shift*, he labeled Houston "the pluperfect mid-century metropolis" because it dominated the six pillars of industry: agribusiness, military-defense, advanced technology, petroleum and natural gas, real estate, and leisure. For Sale, the Houston's functional central business district made it "so choice." Since no one actually resided in downtown Houston, the city was surrounded by suburbs and served by large, multi-lane freeways. Downtown Houston, "devoid of character," was all about business and making money. This "spirit" of money-making, Sale concluded, permeated throughout the city and its history.²⁰ All of this postwar activity and remarkable urban growth seemed to necessitate a concrete mark of Houston's greatness and pledge of unlimited expansion. Houston needed to prove that it was a "big league" city and not just a mere oil-town. A professional sports franchise with a large sports stadium would accomplish this goal and much more.

The postwar coalition of Houston consisted of business elites and politicians was exemplified in the "8F Crowd." The 8F Crowd received its name from George Brown's suite

¹⁸ William D. Angel, Jr., "To Make a City: Entrepreneurship on the Sunbelt Frontier," in *The Rise of the Sunbelt Cities*, ed. David C. Perry and Alfred J. Watkins (Beverly Hills: Sage Publications, 1977), 116-123.

¹⁹ Thomas and Murray, 14-16, 85-88; Miller and Nowak, 11.

²⁰ Kirkpatrick Sale, *Power Shift: The Rise of the Southern Rim and Its Challenge to the Eastern Establishment* (New York: Random House, 1975), 51-53.

in the Lamar Hotel. Brown, cofounder of Brown and Root, was often joined by *Houston Chronicle* owner Jesse H. Jones, *Houston Post* owner and former governor William Hobby, James Ellis of First National City Bank, and Gus Wortham, a life insurance executive. They would meet at Brown's suite to play cards, drink, exchange stories, and determine the course of Houston's future. These men held similar ideas, opinions, and objectives for the future of their city. What was good for their business ventures coincided with the best interests of the entire city. Their power, however, waned in the late 1950s and early 1960s, as members of the 8F Crowd passed away. This did not mean that their vision died with them. Houston's Chamber of Commerce filled some of the void as did other business and political leaders.²¹

Some of these businessmen eventually created an organization to effect a certain change in Houston. The result was the creation of Houston Sports Association (HSA) in 1958. As the name implied, the HSA was created to bring big league sports to Houston. Led by former sports writer George Kirksey and backed by banker William Kirkland and oilman Craig Cullinan, Jr., the HSA realized that it needed to differentiate Houston from other cities in the nation. They needed a way that Houston could flaunt its spectacular growth and prove that it was no longer a mere Oil Town. This could be done by obtaining a major league baseball franchise, a status symbol, as "something deep and intensely dear that is finally possessed." By becoming "big league," Houston would differentiate itself from other Texas cities and demonstrate its "coming of age." Easterners would be able to distinguish Houston

²¹ Carl Abbott, *Urban America*, 81; Wendell M. Bedichek and Neal Tannahill, *Public Policy in Texas* (Glenview, Illinois: Scott, Foresmann, and Company, 1982), 276-277; George Lipsitz, "Sports Stadia and Urban Development," *Journal of Sports and Social Issues* 8 (Summer/Fall 1984): 10; Fuermann, 14.

from San Antonio and Dallas. Houston would overcome its inferiority complex plus lure additional businesses and corporations.²²

Major league baseball would not be the sole determiner of Houston's big league status. A new sports stadium would do it too. But not just any average stadium, which would defeat the purpose of flaunting Houston's greatness. Instead, the HSA wanted a stadium that would take advantage of the most modern technology and demonstrate Houston's grandiosity. A domed stadium would do this. It would "display human technological achievement never remotely approximated in human history," allowing man to overcome nature, and prove Houston's ascendancy in the nation.²³

The HSA's domed stadium not only represented the goal of this small group of influential Houston businessmen, the stadium also pointed to the city's politicians and residents determined effort to take advantage of a seemingly endless opportunity in the US. Houston seemed to have a limitless future that would only get better as the city grew and matured. Houston had grown in many ways after World War Two. The city expanded its infrastructure constructing new freeways, widening the ship channel, and planning a modern jet airport. A city that had grown culturally and physically needed a symbol of this era in its history. Other American cities had constructed massive monuments that testified to a city's greatness. New York City had the Empire State Building, St. Louis had the Arch, and Los Angeles had Disneyland. City boosters hoped that a modern domed stadium, the largest in the world, would certify Houston's "metropolitan status, create a positive attitude for tourism

²² George Lipsitz, "Sports Stadia and Urban Development: A Tale of Three Cities," *Journal of Sports and Social Issues* 8 (Summer/Fall 1984), 11; William Barry Furlong, "That 'Big League' Yearning," *The New York Times Magazine* (16 June 1957), 14.

²³ Alan Gowans, *Images of American Living: Four Centuries of Architecture and Furniture as Cultural Expression* (New York: Harper and Row, 1964), 450; Lipsitz, 11.

and commerce, and enhance (its) own civic image.” The city had the money, the location, and the will to build the largest domed stadium in the world.²⁴

The period from around the mid-1950s to the later 1960s witnessed a profound change in American society. The optimism of the 1950s began to wane during the 1960s. In its place arose feelings of finitude, doubt, pessimism, and cynicism. These feelings infiltrated Houston as well and would alter the way Houstonians viewed the Astrodome. Although the stadium never received total support from every resident of Houston and Harris County, they generally viewed it as something that would benefit the area in every facet that could be imagined, from economics to stature. The nation’s sixth largest city finally proved to its detractors and skeptics that Houston “made it” and was “progressive.” The large entertainment complex would host major league sports and cultural events, something lacking in the rough, unlettered “Oil Town.” The stadium would incorporate only the latest technology while demonstrating the scientific expertise of Houston. The splendor of the Astrodome would not last long.

²⁴ Steven A. Reiss, *City Games: The Evolution of American Urban Society and the Rise of Sports*, (Urbana: University of Illinois Press, 1989), 239-240.

CHAPTER 2: THE NEXT MAJOR LEAGUE CITY

In late 1950s, the people of Houston and Harris County could view their future with optimism and rightly so. Houston was “big league in population, in business handled, in bank deposits and bank clearings, in number of automobiles, telephones, radios and TV sets.”¹ This optimistic attitude, faith in technology, and belief in a better future pervaded Houston. But Houston in the late 1950s, however, was not “big time” in professional sports. Houston hosted its share of prizefights, but the sport of boxing did not make a city “big league.” What Houston did have was a storied minor league franchise that had been a member of the Texas League since the late 1880s. The Buffaloes or Buffs became a farm team of the professional Saint Louis Cardinals in 1922. Even though the Buffs brought home the Texas League championship in 1956 and 1957, it was not a world championship. “Houston: home of a minor league championship team” was hardly a moniker that Houstonians would want to use to define their up and coming city. “Houston: home of the world champions” sounded more respectable.²

After the war, major league baseball remained as popular as ever. Fans had more disposable income to spend and the increasing number of night games contributed to baseball's recovery. Attendance in 1948, for example, was 20.8 million, up one million from the year before.³ But trouble was on the horizon for major league baseball. Attendance

¹ Frederick G. Lieb, “Kirksey Heads Houston’s Drive For Big-Time Birth,” *The Sporting News (SN)*, 15 January 1958, p. 6.

² Clark Nealon, Robert Nottebart, Stanley Siegel, and James Tinsley, “The Campaign for Major League Baseball in Houston,” *The Houston Review*, 7, no. 1 (1985): 3-6.

³ Benjamin G. Rader, *Baseball: A History of America's Game*, 2d ed. (Urbana and Chicago: University of Illinois Press, 2002), 189-194; J. Ronald Oakley, *God's Country: America in the Fifties* (New York: Dembner Books, 1986), 249-251; Jules Tygiel, *Past Time: Baseball as History* (Oxford: Oxford University Press, 2000),

throughout the nation began to decline in the 1950s, even though the economy remained strong. Owners scurried about looking for explanations. One answer was found in changing leisure habits of Americans. More Americans chose to spend their leisure time away from the ballpark and instead driving to visit family and friends or participating in sporting events, for example. A second explanation was the proliferation of radio and television. Instead of traveling to the aging downtown ballpark, fans could remain in the comfort of their own homes in suburbia to watch or listen to the game. "Yet another explanation," posited baseball historian David Q. Voigt, "faulted baseball's hidebound, traditional fifty-year old format for failing to keep up with changing population trends." Owners took note and tried to rectify the curious decline. They determined that most cities could not support two franchises, that new ballparks were needed, and most importantly, that new markets in the West and South should be tapped to the fullest potential.⁴

The situation in major league baseball provided a slim possibility that Houston could become a big league city and throw off its bush league reputation. In July 1951, the House Subcommittee on Monopoly Power investigated the operation of major league baseball and the power of franchise owners. Although the House Subcommittee resolved not to act against the owners, notice was served to the owners that their power could be challenged. On the heels of the hearings, owners altered the agreement concerning the transfer of franchises. Previously, any owner who wanted to move his club needed the unanimous vote of the other owners. Under the new rule, the owner need only the undivided consent of his league. If the

148. During the 1920s, attendance averaged 7,351, declining to 6,578 in the 1930s, and rebounding to an all time high 16,027 in 1949.

⁴ Voigt, *Baseball*, 223-225; Benjamin Rader, *Baseball : A History of America's Game* (Urbana: University of Illinois Press, 1992), 173-174; John P. Rossi, *A Whole New Game: Off the Field Changes in Baseball, 1946-1960* (Jefferson, North Carolina: McFarland and Company, Inc., 1999), 114-115; Tygiel, 147-148.

club from one league asked to move into a city occupied by a team from the other league, there was nothing to stop the established team from preventing it. The owner of the transferring club only had to pay an indemnity to the minor league and the affected franchise. Thus, an owner needed only the votes of seven owners instead of fifteen to move from one city to another.⁵

In 1953, Boston Braves owner Louis R. Perini asked for, and received, the permission of other National League owners to move from Boston to Milwaukee where he owned the minor league Brewers team. Instead of allowing Perini to go bankrupt, the owners authorized the transfer of the Braves to Milwaukee beginning later that year. Milwaukee county officials authorized the construction of a \$6.6 million county-owned stadium that tempted Perini's desire for relocation. This was the first franchise transfer since 1903.⁶

The result was dubbed the "Milwaukee Miracle." Perini's Braves, no longer competing with the more popular Red Sox in Boston, attracted 1.8 million fans in the first year of operation. Their final year in Boston, the Braves had drawn 280,000. According to the Milwaukee Association of Commerce, the Braves generated \$25.3 million "in new business" during the team's first four years. The survey claimed that "the average out-of-town fan," (which was every one-out-of-three) spent almost \$11 during each trip to Milwaukee. The Braves added at least \$7,000,000 to the local economy. The biggest winners were transportation companies and hotel and motel owners. Local non-baseball related merchants, however, complained that this money was not spent at their stores, but mainly inside the county stadium. A Milwaukee movie theater owner lamented that he actually lost

⁵ Elihu Lowenfish, "A Tale of Many Cities: The Westward Expansion of Major League Baseball in the 1950's (sic)," *Journal of the West* 17 (July 1978): 73-74.

money since the arrival of the Braves. "I realize the Braves are good for Milwaukee," he said, "but as far as I'm concerned they can go back to Boston tomorrow." The real winners, of course, were the Perini brothers who watched their Braves average more than two million spectators since their arrival from Boston in 1953. Another franchise, the St. Louis Browns, saw a jump in their attendance figures from almost 300,000 to over one million when they became the Baltimore Orioles in 1954. A final franchise, the Athletics, abandoned Philadelphia in 1955 for greener pastures in Kansas City. The Athletics witnessed an attendance in Kansas City of 1.4 million, while their final year in Philadelphia they drew 290,000. These moves began the alteration in the map of major league baseball and forced the owners to "become more amenable to change."⁷

Although the general map of major league baseball changed a bit, the teams were still located in the Northeast. It seemed as if baseball dared not extend its western reach beyond Missouri. This did not satisfy native Texan George Kirksey. A sportswriter who began a public relations firm, Kirksey clamored for a major league team for Houston. He argued that the city's population of 1.2 million (sixth largest in the US) would more than support a major league franchise. After an aborted attempt to buy the St. Louis Cardinals, Kirksey keenly watched the events unfold in Milwaukee, Kansas City, and Baltimore. In late 1956, Kirksey secured the help of William Kirkland, chairman of the board at First City National Bank and baseball fan, to bring big league baseball to Houston. Understanding that they could not do it by themselves, Kirksey and Kirkland met with other like-minded Houston businessmen who

⁶ George Kirksey, "Houston: the Next Major League City," *Baseball Digest* 18 (March 1959): 21; Lowenfish: 74-75.

⁷ "Home Runs on the Balance Sheet," *Business Week*, 14 April 1956, 163-170; "Does Big-League Baseball Pay?" *Business Week*, 5 October 1957, 41-42; William Barry Furlong, "That 'Big League' Yearning," *The New York Times Magazine*, 16 June 1957, 16; Tygiel, 169-178.

wanted their city to become “big league.” One important member was Craig Cullinan, Jr., grandson of Texaco founder Joseph S. Cullinan. Kirkland invited Cullinan to make a more prominent role in the effort to make Houston “big league.” At a 4 January 1957 meeting, Kirksey, Kirkland, and Cullinan decided to create an organization whose *raison d'être* was to make Houston “big league.”⁸

The syndicate eventually became known as the Houston Sports Association (HSA). A member of the syndicate could purchase a share, and not more than seven, of the HSA with a \$500 down payment for each share. With this small down payment, an investor was betting that the HSA would bring major league baseball to Houston. Once the HSA obtained fifteen pledges, the contract would become binding upon, an event that occurred on 14 July 1958. Eventually, twenty-seven men purchased the thirty shares of HSA stock. Meanwhile, Kirksey and Cullinan traveled across the country meeting with baseball owners, introducing themselves and their cause of a “big league” Houston. In an interview twenty years later, Cullinan said baseball owners told the HSA reps that they needed a stadium before getting a franchise. However, back in Houston, the HSA heard just the opposite. City and county officials informed Cullinan to first get a professional team. Only after obtaining a franchise would city and county governments start the work towards a stadium.⁹

This new large stadium was the Harris County Domed Stadium or the Astrodome. It has commonly been assumed that the entire stadium idea came from Roy Hofheinz.¹⁰ “The boy wonder of Texas politics,” Hofheinz studied law at the Houston Law School and managed Lyndon Johnson's first senate bid. He won election to the Texas Legislature in 1934

⁸ Frederick G. Lieb, “Kirksey Heads Houston’s Drive For Big-Time Birth,” *SN*, 15 January 1958, 6; Nealon, et al: 6-11.

and two years later, at age twenty-four, the judge of Harris County. After a brief retirement, Hofheinz returned to public life when he became Houston's mayor in 1952. He immediately clashed with his council and soon was branded as "arrogant and domineering, a dictator in an elective office." When council members boycotted meetings to defeat one of Hofheinz's bond issues, he threatened to arrest them using a mayoral "bench warrant." The council responded with a threat of impeachment. Despite his abrasive personality and concerted attack from former supporters, he won reelection in 1954. His luck, however, abandoned him in 1955 as he was removed in a special election that revolved around Hofheinz's power struggle with the city council.¹¹ But the notion of a massive arena, stadium, or entertainment complex in Houston was discussed and debated amongst government leaders and businessmen before Hofheinz entered the scene in the early 1960s. Stadium fever even appeared before major league baseball announced its plans to expand in 1960. Although intimately intertwined with professional athletics, the original stadium concept anticipated dozens of diverse events at one city location, not just baseball. Early stadium enthusiasts envisioned a system that could accommodate almost any event at almost any time. This system was apropos for Houston of the late 1950s. The city was still riding the wartime economic boom. While other cities across the country began to experience the effects of the coming recession, Houston continued to grow physically and expand financially. A massive, expensive entertainment

⁹ Nealon, et al: 11-13.

¹⁰ Lipsitz, 13. Ray, 260-266.

¹¹ Gary Cartwright, "A Barnum Named Hofheinz; a Big Top Called Astrodome," *New York Times Magazine*, 21 July 1968, 15-18; Roy Terrell, "Fast Man With a .45," *Sports Illustrated*, 26 March 1962, 34-35; Marshall Frady, "Hofheinz and the Astrodome," *Holiday* 45 (May 1969): 44.

complex would most assuredly confirm Houston's worth and prove its vitality to all skeptics and critics of "Oil Town."¹²

Before the HSA began its organized bid for professional sports and a stadium, other Houstonians pondered ideas and models of large stadia. One serious proposal came from oilman Glenn McCarthy who revealed his model of a football stadium that had a paneled roof that could slide open and closed.¹³ Houston politicians also entertained the feasibility of a sports stadium. Councilman Matt Wilson brought the issue of a stadium to his fellow city council members on 4 June 1957. Wilson showed that Houston's population rank of 14th in 1950 had climbed to place it 8th in 1957. Based merely on population, Wilson advocated that Houston was already a big league city, but needed to become recognized as one too. He proposed a \$5 million bond issue, subject to voter approval, that would "finance construction of a municipally-owned baseball stadium." This stadium, he hoped, would attract a major league baseball team.¹⁴

More importantly, the stadium would be a symbol of Houston "making it," a testimony of the city's past and future greatness. Dynamic cities, the argument went, were building stadiums to lure baseball franchises from older, tired, less-progressive cities. The most recent example, the city of Milwaukee had financed its own county stadium that lured the Braves away from Boston. Following this recipe, Minneapolis and San Francisco already had begun construction projects in the hope of obtaining similar results. "The people of Houston could demonstrate by an overwhelming vote in favor of the bond issue that they

¹² David John Kammer asserted a similar idea about Houston justifying a large stadium. For Kammer, the stadium would symbolize not just Houston's desire for greatness, but also "it would stand for the city itself." See Kammer, "Take Me Out to the BallGame: American Cultural Values as Reflected in the Architectural Evolution and Criticism of the Modern Stadium," (Ph. D. dissertation, The University of New Mexico, 1982), 311-313.

¹³ Nealon, et al: 6.

want and will support big league baseball,” said Councilman Wilson. With a promise of a public-financed stadium, Wilson contended that "some Houston millionaires" might make a more determined effort to bring big league professional sports to the community. Since the Houston millionaires would be spending their money on getting a franchise started, city members would be doing their part in making the city big league. He concluded, “It seems that we’re in a better position now than ever before to get big league baseball here.” Under his plan, the city would lease the stadium to the baseball franchise. But the future stadium would be more than merely a limited baseball park. Unlike outdated parks that only allowed baseball, the future Houston stadium would house dozens of sporting events like football, the Olympics, boxing, polo, and others, taking advantage of limitless possibilities. A multiple purpose stadium, allowing flexibility for the diversity of entertainment was supposed to guarantee continual and almost infinite revenue for Houston.¹⁵

As historian Steven Riess argued, city officials and leaders, like Wilson, desired major league franchises because these boosters “hoped to certify their city’s metropolitan status, create a positive attitude for tourism and commerce, and enhance their own civic image.”¹⁶ As Riess also determined, several cities vied for a finite number of franchises. In this respect Houston was no different than any other hopeful “minor league” city. To entice an owner to a particular city, several amenities were needed to make a particular city stand out among numerous rivals. The requirement, then, was for Houston to make itself more appealing than its rivals like Dallas-Ft. Worth, Minneapolis-St. Paul, Buffalo, Montreal, or Toronto. Houston's leaders needed to appeal to the unique, individual characteristics of

¹⁴ Ernest Bailey, “New Stadium Might Get Us Major Team,” *Houston Press*, 4 June 1957, pp. 1, 2.

¹⁵ “Proposes Stadium at Prison-Farm Site,” *Press*, 12 June 1957, p. 1.

Houston to differentiate it from other challengers. Therefore, the Houston stadium had to be much different than any other conceived. In effect, Houston boosters needed to demonstrate the uniqueness of the Bayou City, its amenities, and its stadium among all other big league competitors.

In 1957, the plight of the HSA received a boost from Brooklyn Dodgers owner Walter O'Malley. O'Malley was fed up with Ebbets Field, the Dodgers home field since 1913, and the Brooklyn fans who failed to fill the aging stadium to his satisfaction. Even though the "Bums" captured the NL pennant in 1955 and 1956, the Dodgers only drew an average of 16,000 spectators a game. The disgruntled O'Malley professed that the 1957 Dodger season would be the last in rickety Ebbets Field. On 21 February, the O'Malley (as he preferred to be called) declared that he and Walter Wrigley had swapped minor league franchises, an ominous portent of things to come. O'Malley secured the Los Angeles Angels of the Pacific Coast League and Wrigley Field in exchange for the Fort Worth Texans of the Texas League. Unable to cajole a new stadium from Robert Moses and New York City mayor Robert Wagner, O'Malley entered into negotiations with Los Angeles mayor Norris Poulson to secure a location for a stadium. In May, NL owners told the O'Malley he could flee to the West Coast if he could persuade another franchise to follow. O'Malley enticed New York Giants owner Horace Stoneham to move his team to San Francisco. Stoneham, whose Giants also experienced lackluster attendance competing against the Yankees in New York, secured the promise of a new stadium from the San Francisco government. Stoneham announced his departure in August 1957 while O'Malley waited until the end of the season in October. When major league baseball began its 1958 season, it finally reached coast to coast.

¹⁶ Riess, 239.

But as Kirksey noted, a large chunk of the US was still lacking big league status. This was the Southwest and Texas, but in particular Houston.¹⁷

After the Dodgers and Giants relocated to California, NL president Warren Giles asserted that expansion would be the only method for cities to obtain teams, “not additional franchise transfers.” At first this was exciting news. Expansion had been rumored at meetings since the Braves moved to Milwaukee. Giles, however, did not foresee immediate expansion for either the National or the American League. At best, Giles predicted a four year intermission before any expansion talk would resume.¹⁸ Despite Giles's dour forecast, Kirksey and Cullinan remained upbeat. They said that if Houston ever were to obtain a major league baseball franchise, the city must be proactive. Kirksey and Cullinan urged the city to begin the steps towards building a 40,000-seat stadium with parking facilities for at least 15,000 automobiles. Once the city formulated and authorized a stadium plan, they argued, then the problem of obtaining a team could be tackled.

Kirksey came back from Milwaukee more determined than ever. “Big league baseball in our corner of Texas could be a repetition of the Milwaukee Braves,” chortled Kirksey, but on a grander scale. But behind the silver lining, Kirksey saw some gray clouds. He knew that boosters in Minneapolis, Dallas, Toronto, and Montreal were actively seeking a big league franchise. Although these cities did have amenable qualities, according to Kirksey, Houston was the clear leader over these cities in two key areas. First and foremost, Houston had a larger population base. In 1959, Houston could count 1.195 million inhabitants. This made Houston the fifth largest city in the US (and the largest city without a professional sports

¹⁷ Lowenfish: 77-79; Cary S. Henderson, "Los Angeles and the Dodger War, 1957-1962," *Southern California Quarterly* 62 (Fall 1980): 262-270; Neil J. Sullivan, *The Dodgers Move West* (New York: Oxford University

team). If trends continued, Houston's population would be 1.5 million in 1965 and 2.3 million in 1975. And second, Houston had the money to bring in a team, backed by the deep pockets of wealthy oil tycoons. Alone these two factors would guarantee success well into the future. The one category that Houston did not lead, however, was that of a stadium. In this matter, Minneapolis led the others and could be viewed as Houston's greatest threat. Minneapolis had already constructed a stadium to lure a franchise to the Twin Cities. But that was where its advantage abruptly ended. Minneapolis-St. Paul's bid was jeopardized by its proximity to Milwaukee and Chicago. Owners in Milwaukee and Chicago would not want to face greater competition for fans in an already full plate. On the other hand, Houston boasted a population much greater than that of its rivals, especially the Twin Cities. Unlike Minneapolis which was so close to other big league cities, Houston "would be out here on the Texas prairie, with no club closer than St. Louis or Kansas City" remarked Kirksey. The problem, however, was that Dallas could use the same arguments that Kirksey was using for Houston. Kirksey, however, dismissed Dallas due to the rivalry Dallas had with its neighbor Fort Worth. Kirksey refused to accept that leaders in Dallas and Fort Worth could put their differences aside for the good of both cities. Only Houston, it appeared, would be able the next great city to become big league.¹⁹

Kirksey met with Harris County Judge Bob Casey in 1957 to discuss the role the county government could play in helping Houston land a big league franchise. Kirksey asked Casey if county funds could be used to help build the stadium and other related facilities.

Press, 1987), 81-136; Kirksey: 21-22.

¹⁸ "Expansion Next Move for Majors," *Chronicle*, 9 October 1957, Sec. C, p. 4

¹⁹ Kirksey: 22-23; Nealon, et al: 13-15; Benjamin Rader, *Baseball: A History of America's Game* (Urbana and Chicago: University of Illinois Press, 1992), 179; David Quentin Voigt, *American Baseball, Volume III: From*

This would mirror the situation that occurred in Milwaukee, in which Milwaukee County had financed stadium construction. Kirksey argued that by following the pattern of the “Milwaukee Miracle,” Harris County would experience even greater enthusiasm among its residents for big league baseball. Kirksey had no doubt that the Harris County government could finance construction and its residents as support a major league baseball team. The government would reap large dividends upon its small investment, just as Milwaukee County had. Judge Casey informed Kirksey that Harris County could not legally perform the task under the Texas Constitution. It would take a new state law to authorize such a project. Fortunately, Kirksey knew Texas State Senator Searcy Bracewell. Kirksey had performed some advertising work for Bracewell's political campaigns and other personal work. Bracewell took Kirksey's plea to his fellow senators. On Thursday, 10 October 1957 Bracewell introduced Senate Bill Number 23, a bill in the state's special session that authorized Harris County the power to issue revenue bonds for a sports stadium. One month later, it was passed and signed into law.²⁰

With the approval of the state legislature, Bracewell, Kirkland, and Kirksey implored Harris County's five-member Commissioners Court to create a special committee for the express purpose to research and study the feasibility of a stadium built with county revenue bonds. Bracewell answered legal questions from the Court while Kirksey presented the plans for obtaining a major league baseball team. The Court voted unanimously to appoint a seven-

Postwar Expansion to the Electronic Age, (University Park and London: The Pennsylvania State University Press, 1983), xxiv-xxv; Lieb, 6.

²⁰ Rule, “Stadium Plan to Lure Big League Baseball Going to Legislature,” *Press*, 11 October 1957, p. 1, 6; Rule, “Sidelights,” *Press*, 16 October 1957, p. 19; “40,000-Seat Stadium Is Must for Houston,” *Chronicle*, 16 October 1957, sec. C, p. 6; Kirksey:25; Nealon, et al: 7, 15.

man stadium research team. Once the Court received the committee's report and recommendation, Judge Casey promised to "take immediate action."²¹

The Houston City Council also started its effort to inform the public about the stadium, its potential benefits and to explore all means to pay for the revenue bonds. On Monday, 20 November 1957, the Trice Production Company erected an oil well on the 331-acre city prison farm. Since this was public land, and since Houston already received royalties from eleven oil wells at a garbage dump, Councilman Shirley Brakefield wondered if revenue bonds from the prison farm oil well could be used to build a stadium and a recreation center on the site. Brakefield said that the oil wells could be constructed around the stadium and the parking lots. This public land would, thus, "serve as a doubly beneficial piece of property for the community." The City Council asked for a legal opinion on this matter in November 1957. The royalties would not have to be spent on stadium construction, but, instead, used as collateral to obtain a lower interest rate for the revenue bonds. Even if Brakefield's plan proved unlawful, the state legislature had another plan that authorized the Harris County judge to establish a seven-person park commission "to build and operate the stadium." The Legislature's plan required public approval because it also utilized revenue bonds to finance stadium construction. Both planning mechanisms reassured city interests by promising that the people of Houston would own the stadium, not some sports franchise owner.²²

The Commissioners Court created a park commission (or park board) in February 1958 to act as a "fact-finding body" pertaining to the myriad phases concerning the stadium.

²¹ Rule, "County Court Okays Stadium Study! Chicago Cardinals Want to Use It," *Press*, 6 February 1958, p. 16; Rule, "Sidelights," *Press*, 7 February 1958, p. 10.

Once the board made its report to Harris County court and assured that “sufficient revenue” was available, the court then would decide whether to issue revenue bonds. Even before the special park board was named, stadium boosters named several potential sources of revenue: professional sporting events, the Houston Fat Stock Show (later renamed the Houston Livestock and Rodeo Show), religious meetings, music concerts, and political gatherings. Kirkland, who represented Houston entrepreneurs, Kirksey, and oilman Craig Cullinan argued for a prohibition on tapping county tax revenue to retire the stadium bonds. This would assure that future tax rates could not be raised to pay for the stadium and thus, the men hoped, lessen potential opposition to their project. Houston and Harris County taxpayers, therefore, would not be financially burdened if the stadium failed, as the bondholders would take control over the stadium. Kirkland, Kirksey, and Cullinan, by publicly affirming this notion, intended to demonstrate that stadium boosters were indeed working for all of Houston, not themselves.²³

The seven-man commission contained five men from Houston and two from neighboring communities. The Houstonians were William Kirkland who made his fortune in insurance and former Houston Buff player Eddie Dyer, former Houston Livestock Show and Rodeo president Archer Romero, Hubert Allen, and oilman Corbin Robertson. Civic engineer E. B. Mansfield from Pasadena and Wilton Roper, a banker from Baytown rounded out the commission. Starting immediately, the County Park Commission planned to tour other metropolitan areas that built or planned to build a large sports stadium, including Milwaukee, Baltimore, and Louisville. Kirkland and his colleagues needed to answer three questions

²² “Ruling Asked On Baseball Stadium Funds,” *Chronicle*, 20 November 1957, sec. A, p. 1; “City Eyes Plan for Big Stadium,” *Chronicle*, 21 November 1957, Sec. A, p. 1.

concerning the proposed stadium: was it needed for Harris County, who would use the stadium, and what would be the stadium's annual revenue? By viewing how other metropolitan areas answered these questions the park commission hoped to determine what would be the best course of action for Houston. The commission could report what worked in one city, what failed in another, and determine an individual recipe for the Bayou City's success.²⁴

Eventually, the county park commission traveled to twenty American cities. Working "quietly but thoroughly," they discovered that no city had begun construction planning to accommodate both football and baseball. By May 1958, the group released to the public preliminary drawings of a multi-purpose stadium that combined the playing fields of both baseball and football, but could also allow other events. The board's preliminary plans envisioned seats that would be easily moved to allow the spectators to have the best view at both events. Some of the stands would be movable to allow for greater flexibility for different events. For example, the stands on the first and third base sides for a baseball game would extend the length of the football field and bring the spectators closer to the event. This mechanism insured that the dirt infield would never interfere during football games. The results would be fewer player injuries and a decrease in the damage to the playing surface. Even though the Commission purposefully ignored questions about location to avoid any unnecessary controversy at this early stage, it focused on the stadium's potentially low price tag. A multi-purpose stadium would, supposedly, be cheaper than single-purpose stadiums, maintenance money would come from rental fees, and it would not increase taxes. As Dick

²³ Dick Freeman, "Many Stadium Hurdles Left," *Chronicle*, 7 February 1958, sec. B, p. 2.

Peebles, sports editor for the *Houston Chronicle*, wrote, "From a cost point, the committee said the modern design eliminates the necessity for duplicating plumbing, wiring, rest rooms, parking, concession stands, storage and numerous other facilities." But the park board was going to consider all types of designs during this phase and not just focus on one at the cost of excluding another.²⁵

The multi-purpose design garnered the most attention from the park board and the average Houstonian. This was the first time that any city or any individual planned a stadium for both sports.²⁶ All other existing stadiums either had been designed as a baseball park or a football arena. All of these sports arenas represented the era when each was planned and built. For example, Pasadena's Rose Bowl, the Los Angeles Coliseum, Municipal Stadium of Baltimore, and Chicago's Soldier Field were built during the 1920s mainly for football or track and field events, while Yankee Stadium and Ebbets Field, also built in the 1920s, housed baseball games. Generally, when these playing fields were planned municipalities had the money to lavish on large and prestigious stadiums. These stadiums, however, were constructed before both sports began to dominate professional athletics and adapted poorly to them. The more recent sports arenas of the late 1950s, Chavez Ravine in Los Angeles and San Francisco's Candlestick Park, were designed and built solely for baseball. The Houston design, on the other hand, attempted to incorporate the needs for both major professional sports. Houston's plan was truly multi-purpose and a celebration of the Bayou City's

²⁴ Dick Peebles, "Commission to Seek Information On Feasibility of Stadium Here," *Chronicle*, 19 February 1958, sec. F, p. 1; Nealon et al: 15-16.

²⁵ Peebles, "Houston Will Be Waiting," *Chronicle*, 5 May 1958, sec. B, p. 3; Peebles, "Stadium Group Mulls Over Unique Plans," *Chronicle*, 5 May 1958, sec. B, p. 2.

²⁶ Rule, "Sidelights," *Press*, 5 May 1958, p. 10.

individuality.²⁷ This was typical of the 1950s and of Houston in general. In an era of optimism, anything could be constructed. Robert E. Fischer, associate editor of *Architectural Record* wrote, “There are hardly any physical limits to the engineering possibilities in buildings, whether of height and span of structure, indoor ‘climate,’ or any of the other aspects of building technology.” “This technology,” he continued, “has opened up endless opportunities through new concepts, methods, materials and applications which have to be understood and evaluated in order to be properly used.”²⁸

A design to take advantage of the multi-purpose form was called a “rounded triangular.” This form incorporated four movable stand sections that allowed greater flexibility for the holding of different events. Whatever the mechanism chosen to move the stands, pneumatic tires, rails, or tractors, the rapid “convertibility” of the stadium meant that baseball could be played in the afternoon and a football game later that evening. Additionally, by implementing movable stands, football games could be played on the baseball outfield, not the dirt infield like other arenas, lessening the damage to the playing surface and to athletes.²⁹ These preliminary proposals were not received without criticism. First, by placing the movable sections in front of other seats, some of the stadium’s seats would not be used for football. Second, the portable stands would be moved across the dirt infield, subjecting the surface to as much potential damage as any sporting event.³⁰ The committee also recognized that to fill the stadium and make it a paying venture, parking spaces for cars and buses needed to be placed around the stadium. The initial number of cars

²⁷ Steven A. Riess, *City Games: The Evolution of American Urban Society and the Rise of Sports* (Urbana and Chicago: The University of Illinois Press, 1989), 144-146.

²⁸ Robert E. Fischer, *Architectural Engineering*, (New York: McGraw-Hill, 1964), v.

²⁹ Rule, “Sidelights,” *Press*, 5 May 1958, p. 10; Nealon et al: 16.

³⁰ Rule, “Sidelights,” *Press*, 26 May 1958, p. 16.

was estimated at 20,000, which would require at least 200-acres for the entire stadium project. This would consume a large amount of available land within Harris County for all stadium facilities.³¹

Armed with mountains of material and data,³² the park board gathered in mid-June to review its findings. The members agreed that the idea for constructing large multi-purpose, multiple building facility was indeed “practical” and “desirable” for the people of Harris County. The park board determined that a \$20 million revenue bond issue could allow for the “development, in good time,” of a “multi-purpose sports, recreation, cultural and exhibition park worthy of Harris County.” A “modern stadium” could be used for baseball and football games, religious events, and “large industrial exhibitions.” An adjoining indoor coliseum could house additional events like oil shows, conventions, and music festivals. By combining a stadium and a coliseum, the county could reduce its construction and maintenance costs while housing major league baseball, professional football, the Fat Stock Show, and almost every type of indoor and outdoor event possible. The bonds would fund the purchase of 400- to 500-acres of land, the construction of the sports stadium, erection of a separate “large modern A/C coliseum” for indoor events, and “adequate parking facilities” for the entire project. They then presented their findings to the members of the Court Commissioners on June 22. Chairman Kirkland expressed his opinion of the meeting’s atmosphere. “I felt that the report was enthusiastically received by the court,” he said. The report, he continued, was

³¹ Rule, “Sidelights,” *Press*, 5 May 1958, p. 10.

³² Douglas S. Tawney, manager of Baltimore’s Memorial Stadium sent a letter to George Kirksey of the HSA during the discussion phase. In the letter, Tawney provided his opinions concerning stadium planning that those in Houston might consider to reduce or eliminate problems Tawney experienced. Tawney, for example, recommended plenty of automobile parking, limit the number of bleacher seats in favor of backed-seats, first aid rooms, field drainage, complete coverage of sprinklers, several freight elevators, and a sod nursery. Douglas S. Tawney to George Kirksey, 5 June 1958, Minchew Collection 94-275/7.

“the first step toward realization of the dream of major league sports for Houston and surrounding territory.” W. B. Morgan would later add that the sports complex would provide “badly” needed “wholesome recreation and amusement” and make Houston a “Mecca for visitors and tourists” from all around the state, country, and world. All that remained was a sound commitment from potential tenants to assure a future source of revenue, thus creating a self-supporting facility.³³

The park commission also recommended that the July 26 Democratic primary elections be the date for the decision of the bond issue, a mere five weeks away. Commissioner Phil Sayers expressed a concern whether the county could arrange this so quickly. Kirkland’s response was that the county must act as quickly as possible or face two problematic scenarios. First, any delay in the date might reduce or eliminate a source of revenue. The faster they constructed the stadium, the faster large conventions, like the national political conventions, could plan meetings in Houston. The second danger focused on the continual flux that appeared in professional athletics, especially major league baseball and football. Both commissioners from major league baseball and professional football broached the possible expansion of their leagues into untapped areas. Furthermore, dissatisfied individuals across the nation were toying with the possibility of creating rival leagues to compete with those already established. Either way, Houston needed to have a source of revenue for a future stadium in place to make it that more attractive than other cities. Cullinan, who was also present at the meeting, echoed Kirkland’s sentiments. The

³³ “Report of Harris County Board of Park Commissioners to Harris County Commissioners Court,” 20 June 1958, Minchew Collection 94-274/8 Harris County Domed Stadium General File #1 — Thru January 1959 File”; W. B. Morgan, “Resume of Report of Harris County Board of Park Commissioners Court,” 19 August 1959, Minchew Collection 94-274/8; “Stadium Report Slated Friday,” *Chronicle*, 19 June 1958, sec. E, p. 1; Nealon, *Post*, 21 June 1958, sec. 1, p. 5.

actions that Harris County had taken in the past several months, according to Cullinan, proved that concerted actions and valiant decisions to get professional sports and a stadium for Houston were being made. Cullinan remarked that Houston was "getting (its) house in order to attract either an existing major league franchise or to obtain a new franchise, if and when the major leagues expand." Cullinan remained cautiously optimistic, however. He wanted everyone to understand that merely discussing a proposal or even building stadium would not guarantee a professional baseball franchise.³⁴

Thus, Houston taxpayers would vote for or against a \$20,000,000 revenue bond issue in the Democrat primary on July 26. Due to the nonpartisanship of Houston's municipal elections, every citizen could cast a ballot on July 26. The funds from the bond would be used to buy 400 to 500 acres of land, facilities for a 45,000-seat stadium, and a coliseum for the Fat Stock Show "and other events." The committee also recommended that Houston be prepared to start construction of the stadium once the city landed a major league sports team. With voter approval in July, Kirkland was confident that Houston increased its chances of obtaining a professional sports team.³⁵

The stadium committee arrived at the \$20 million estimate by basing the cost of the stadium at \$6 million, the coliseum also at \$6 million, \$3 million for parking, \$2 million for the livestock facility, \$1 million for land, and \$2 million for other miscellaneous expenditures. The \$20 million preliminary price tag seemed to be high, especially when many considered that it was only a sports stadium being considered. Milwaukee had

³⁴ Nealon, *Post*, 21 June 1958, sec. 1, p. 5.

³⁵ "Stadium Report Slated Friday," *Chronicle*, 19 June 1958, sec. E, p. 1; Peebles, "Stadium Bond Vote May Be Held July 26," *Chronicle*, 21 June 1958, sec. A, p. 8; Barry J. Kaplan, "Houston: The Golden Buckle of the Sunbelt," in *Sunbelt Cities: Politics and Growth Since World War II*, eds. Richard M. Bernard and Bradley R. Rice (Austin: University of Texas Press, 1983), 205.

constructed a \$6.6 million stadium five years previous and Kansas City upgraded its baseball park for only \$3 million.³⁶ How could Houston justify a stadium costing almost three times as much as the most recent baseball stadium? The stadium committee responded to these concerns by focusing on the major difference between the Milwaukee ballpark and the Houston stadium. The Houston facility would be much more than a limited-use ball yard. According to the report, “The commission visualizes buildings combining many new and original ideas which would give the people of Harris County perhaps the finest sports center and exhibition park in the United States.” These multiple purpose facilities would generate at least \$683,994 per year to amortize the \$20 million bonds, the report concluded.³⁷

The informal acceptance of the park board report gave the people of Houston the power to determine the future of their city. They would decide if Houston was indeed worthy of big league sports and a stadium. County officials could have easily issued the revenue bonds without a vote from the public, but the county stadium bill passed earlier in the year demanded that any future stadium issue had to be placed before the public. “This was not necessarily inspired by the patriotism of the men involved” but instead to prove to those involved with professional sports that a large number of people in Houston were in favor of a big league team. The boosters of the bond issue needed to reassure the voters of Houston that building the stadium would not cost the county a dime, but instead that the bonds would be amortized with revenue the stadium generated from the events it held.³⁸

³⁶ Nealon, *Post*, 21 June 1958, sec. 1, p. 5; Riess, 235.

³⁷ Nealon, *Post*, 21 June 1958, sec. 1, p. 5; Jack Gallagher, “\$20,000,000 Bond Issue Vote July 26 on Houston Stadium,” *SN*, 2 July 1958, 20.

³⁸ Mickey Herskowitz, “Building Park, Getting Franchise Are Next Steps-in Either Order,” *Post*, 22 June 1958, sec. 4, p. 3.

Even though the Commissioners Court enthusiastically supported the park board's report, the revenue bond issue still needed ratification by the Democrat party to allow the issue in its primary. After a three hour debate and a vote of two-to-one, the Harris County Democratic Executive Board agreed to place the bond issue on the primary ballot. The bond issue joined an already "crowded" primary with other issues like funding for a charity hospital and an increase in the school tax. Upon hearing the news, Cullinan and Kirksey could barely contain their excitement. Kirksey chortled, "This is the biggest victory we have scored in our campaign." Cullinan said, "We're well on our way to getting Houston's house in order" for professional sports. Kirksey realized that even though this was a big victory, the battle was far from over. The HSA still needed the voters to approve the bond issue in a month. To this end, the HSA had to convince a majority of voters that the tax rate would not be increased. The syndicate also had to assuage fears that its intentions were noble and that they were not going to fleece the public. "We're going to put on a campaign to tell the people of Harris County that this won't cost them a penny," Kirksey promised. Instead of being burdened with the costs of the stadium, forced upon them by a small group of influential and rich businessmen, the people of Houston would have the final say in the future of the stadium and major league sports.³⁹

The Fat Stock Show's executive committee announced its support for the bond issue, with a pledge of 230 acres of Stock Show land at South Main Street for the stadium location. Archer Romero recommended the land offer to his colleagues because the Stock Show was experiencing "increasing handicaps" brought about by its antiquated and increasingly

³⁹ "County Stadium Bond Issue Gets July Ballot Spot," *Post*, 24 June 1958, sec. 4, p. 1; Gallagher, "\$20,000,000 Bond Issue Vote July 26 on Houston Stadium," *SN*, 2 July 1958, 20.

inadequate facilities. The Stock Show had recently been forced to spend about \$100,000 annually to build and take down temporary facilities at the Sam Houston Coliseum. "For that reason," Romero continued, the executive committee "will give this land and all its oil and gas rights to the county if the provisions as set forth are met." Under this arrangement, the Stock Show parcel need not be the future location of the stadium. It could be sold or traded if there was another location that the park board found suitable. The only stipulations were that the Fat Stock Show approve the plans for the future facilities with generous parking facilities and an "acceptable lease" be made.⁴⁰

The importance of the Stock Show's offer should not be underestimated. First, the Houston Fat Stock and Livestock Exhibition (it eventually was renamed the Houston Livestock and Rodeo Show) was one of the oldest and most prestigious events for Houston and Texas. Begun in the 1930s, the Stock Show was a week-long fair, rodeo, and livestock exhibition that promoted education and family entertainment. Second, the men involved with the Stock Show were also some of the wealthiest, most powerful, and politically connected in Houston history. Third, the prospect of intertwining the future of the Stock Show with that of the stadium suggested a broadening of support into non-sport groups. Fourth, a donation of land would significantly reduce the cost of the project.

The support from the Stock Show, "one of Houston's strongest and soundest organizations behind this project," provided a tremendous boost in the fight for the stadium. The Show's offer was the first concrete financial asset that could be used to support the backing of the revenue bonds. For *Houston Post* sports editor Clark Nealon, the

⁴⁰ Neil Addington, "Fat Stock Show Board Offers County Site for New Project," *Post*, 25 June 1958, sec. 1, pp. 1, 5.

announcement was “a meeting of the minds between Houston’s older leadership and its younger leaders.”⁴¹ A *Post* editorial termed the overture of 230-acres “prospectively one of the greatest bargains offered.”⁴² *Houston Press* sports editor Bob Rule labeled Stock Show action as the “most significant” in the early stages of the county stadium. The Stock Show would not offer its land if it did not intend on using the facilities every year. Annual rent from the Stock Show would help amortize the bonds. Just as important, “Houston’s very finest citizens” could now be viewed as stadium backers. The land the Stock Show offered, in the general area of South Main near Playland Park, provided a site that was considered “ideal” by stadium supporters. The South Main location, according to Rule, allowed for easy access anywhere in Harris County and assured the space for all buildings and parking facilities.⁴³

To bolster citizen support and enthusiasm, Judge Casey created the “Non-Partisan Citizens’ Committee” to actively campaign throughout Harris County. Casey chose “three of Houston’s outstanding leaders to head up the campaign,” Gus Wortham (president of American General Insurance Company), R. E. Smith (oil man and rancher), and L. F. McCollum (president of the Continental Oil Company). These men, in turn, created separate canvassing committees for the entire area. R. E. Smith understood the importance of the issue not just for Houston and Harris County but the entire “Gulf Coast area.” Nealon said that these three civic leaders were asking all voters “to launch a business proposition” that meant “the best facilities for the best of sports and other activities at no price other than the cost of a seat.” Within two weeks, Wortham, Smith, and McCollum added twenty-five former

⁴¹ Nealon, “Post Time,” *Post*, 26 June 1958, sec. 6, p. 1.

⁴² “\$20 Million Coliseum-Stadium Free To County If Bonds Voted,” *Post*, 26 June 1958, sec. 5, p. 2.

professional baseball players to their ranks and the 46-man Houston Chamber of Commerce Athletic Committee to rally support.⁴⁴

Opponents of the bond issue or those who did not think the city needed a big league baseball team pointed to the Buffs dwindling attendance. If Houston baseball fans did not support one team already, the argument went, why did boosters think these same fans would attend a different team? Indeed, the argument continued, the Buffs had won the Texas League championship the previous two seasons, and yet attendance continued to fall. Nealon countered that "enthusiasm for major league baseball and enthusiasm for Texas League baseball are two different things." The Buffs, he continued, were not a factor in the 1958 race since the St. Louis parent club raided its farm affiliate of its best players. Also, St. Louis feared that the Texas League was going to fold and therefore offered only minimal financial support to the Buffs. Nealon asserted his contention that Houston sports fans would turn out in droves once a big league franchise was secured. Only by voting for the bond issue in July, he concluded, could the Gulf Coast prove that it would "hold its own with any area in the country in attendance for major league baseball."⁴⁵

The HSA invited Ray Weisbrod, executive vice president of the Milwaukee Association of Commerce, to explain the benefits that major league baseball had brought to his city. Speaking at the Downtown Rotary Club on 16 July 1958, Weisbrod testified to the financial bonanza baseball bestowed upon Milwaukee. It infused the local economy with a total of "seven or eight million dollars" since the Braves arrived in 1955, he claimed. It

⁴³ Rule, "Sidelights," *Press*, 26 June 1958, p. 14.

⁴⁴ Nealon, "Post Time," *Post*, 1 July 1958, sec. 4, pp. 1, 4; "Fine Leadership for Bond Drive," *Post*, 3 July 1958, sec. 2, p. 4; "25 Ex-Pros On Stadium Committee," *Post*, 14 July 1958, sec. 4, p. 1; "Bond Issue Gets Boost From C of C," *Post*, 10 July 1958, sec. 6, p. 2; "Athletic Committee Joins Stadium Drive," *Press*, 9 July 1958, p. 17.

provided the people with a "wholesome," family-oriented social outlet. But even more than the money, Weisbrod affirmed, major league baseball "gives us world renown." "Major league baseball can do the same thing for Houston it did for Milwaukee," he added. "The baseball club has been good for, and to, the community," Weisbrod continued, "but it is more than just a business proposition because the presence of the Braves has generated a spirit of civic enthusiasm in Milwaukee far greater than any strictly-business enterprise could ever hope to accomplish." Weisbrod finished by saying, "It is a spirit which has carried over into other activities and brought success to civic enterprises which in other years have failed miserably." Bob Rule, concurring with the substance of Weisbrod's speech, added, "I am absolutely certain that major league baseball will drastically and completely change Houston's way of life-and just as certain that it will transform Houston into one of the great sports cities of the country."⁴⁶

Weisbrod also conveyed a word of warning or advice from Braves owner Lou Perini. Major league baseball faced inevitable expansion and it would need an intermediate stop from the coast to coast airplane ride. A reason why baseball seemed in a state of transition was the current state of most ballparks and stadiums. "Major league baseball has centered in antiquated parks in run-down neighborhoods, and that is the reason for the exodus of these other teams," he said. Stadium supporters could not have said it any better than Weisbrod. Expansion was going to happen. Cities that located large and modern stadiums in good sections had the best chance to land a team. This was what Houston was trying to achieve.⁴⁷

⁴⁵ Nealon, "Post Time," *Post*, 15 July 1958, sec. 4, pp. 1, 2.

⁴⁶ Herskowitz, "Perini, Says Weisbrod, Rates Houston as 10-Club Possibility," *Post*, 17 July 1958, sec. 4, pp. 1, 2; Rule, "Sidelights," *Press*, 17 July 1958, pp. 18, 19.

⁴⁷ Herskowitz, "Perini, Says Weisbrod, Rates Houston as 10-Club Possibility," *Post*, 17 July 1958, sec. 4, pp. 1, 2.

As the election date neared, Dick Peebles continued his earnest pitch for the revenue bond issue. Peebles averred the need for a large multiple-purpose stadium for Harris County. If there was not one, he continued, would the Commissioners Court have created a seven-man committee to study the feasibility of such a stadium? Additionally, Houston was the largest city in the United States that did not have a major league baseball team. As the population of Houston and Harris County continued to grow and as metro area commercial and industrial bases expand, the city would also need to increase its entertainment and recreational facilities. The stadium would be a major impetus for additional entertainment for the region. The facilities already in Houston (Rice University's 70,000-seat football stadium, 22,000-seat Jeppesen Stadium, the 12,000-seat high school Delmar Stadium, and 11,499-seat Busch Stadium, the home of the AA Houston Buffs) were all inadequate for professional baseball and football, according to Peebles. Busch Stadium, although a fine minor league baseball park, did not have the seating capacity or the parking facilities for a major league team. Enlarging the stadium's facilities for major league sports would be impractical and too expensive. On the other hand, a new multi-purpose stadium would be able to accommodate more events than just football and baseball, ensuring continual use throughout the year.⁴⁸

For Peebles, the location of the stadium was more important than its size. The stadium "must be easily accessible from all directions" and have ample parking facilities. Peebles recognized that those who would attend the events at the stadium would not come solely from Harris County. He speculated that spectators would come from a radius of 300 miles from Houston. Thousands of visitors from across Texas and the South would travel to

⁴⁸ Peebles, "Facts Show That Stadium Is Needed," *Chronicle*, 14 July 1958, sec. B, p. 1; Peebles, "Plenty of Uses For County Stadium," *Chronicle*, 15 July 1958, sec. B, p. 1.

Houston to see an event, across the state's highways in their cars. Therefore, the stadium needed to be accessible from the roads and have plenty of space to park the autos. These visitors would also bring money to spend in Houston, not just at the stadium. Peebles promised that a financial boom would erupt when Houston obtained major league status.⁴⁹

Four days before the primary, Joe Brown and Kenny Land met in the Sam Houston Coliseum for the lightweight boxing championship. The subsequent discussion amongst boxing fans did not center on the fact that Brown successfully defended his title, but featured complaints that the coliseum proved inadequate for the match. An hour before the fight, fans had gobbled up all "relatively close" parking spaces near the coliseum. Even worse, Nealon reported, was the problem that many fight fans were turned away due to a lack of available seating. With an estimated crowd approaching between 3,000 and 5,000 spectators, 400 standing-room-only tickets were sold. All these fans ended up getting stuck in the lobby before the fight in a virtual melee.⁵⁰

On the election day, Peebles wrote that approving the bond vote "could start a chain reaction that would be felt from coast to coast and which could shake the foundations of major league baseball and professional football." Even though there were groups of Houston businessmen prepared to obtain a baseball and football teams, Houston needed to have a stadium ready for the teams. For Peebles, there was just no question that Houston would obtain multiple sports franchises in the near future. Houston residents and sports fans, he argued, could not lose because these taxpayers would not be held financially responsible; only those individuals who bought the bonds were taking a gamble. With 'the eyes of the

⁴⁹ Peebles, "Site, Not Size, Should Be Key," *Chronicle*, 17 July 1958, sec. G, p. 3; Peebles, "Big Leagues Help Business," *Chronicle*, 19 July 1958, sec. A, p. 9.

entire sports world” upon Houston, overwhelming support, averred Peebles, would vault the city in front of other contenders. But only if Houstonians voted. Peebles finished by catering to a pleasing and possible baseball future. “Just think,” he concluded, “Houston may be the team that will crack the Yankees’ dynasty in the American League.”⁵¹

The initial issue of the Saturday election concerned the funding of a new hospital. The Harris County Medical Society did not want \$6 million of hospital bonds to finance a new hospital in the Texas Medical Center. They advocated that city money be spent at the Jefferson Davis location, thus averting new construction. Even though this was an important issue, the revenue bond issue garnered the most attention. City and county voters “gave an enthusiastic ‘go ahead’ signal for revenue bonds” with a 3-to-1 ratio in favor. The number of those who approved was 81,403 or 77% with 24,395 voting against the bond issue. With this mandate from the voters, the HSA intended to proceed as quickly as possible to obtain a big league franchise for the city. In the words of HSA chairman and Hofheinz business associate R. E. Smith, “The size of the majority clearly shown that Houston sports fans want the best.” Smith pledged that the HSA would deliver “the best sports center in the United States” to the deserving people of Houston. Kirkland promised that the park board would continue its duty “to work to develop a master plan for the most modern facilities for major spectator sports with all the trimmings necessary for the entertainment and comfort of the public, including, of course, ample parking facilities.” Cullinan viewed the election “victory” as “a giant step forward” for the entire community. First and foremost, Cullinan opined, the stadium would “supply needed recreation and relaxation for people of Harris County.” Secondly, the

⁵⁰ “Nealon, “Post Time,” *Post*, 25 July 1958, sec. 4, pp. 1, 6.

⁵¹ Peebles, “Horse Comes Before Cart,” *Chronicle*, 25 July 1958, sec. D, p. 4.

Houston Fat Stock Show would have the facilities it desperately deserved. Thirdly, the stadium would attract hundreds of thousands of "visitors and tourists" to Texas from across the county and the globe. Cullinan predicted that the new stadium "could mean more to Harris County than anything that has happened since the port of Houston was opened in the World War I era." With the election over, the County could initiate a search for the best available location and make Houston "the sports capital of the South."⁵²

The HSA started its own phase of stadium planning. Cullinan wanted the HSA and the Park Board to work together as close as possible. Collaboration between the two groups would assure "one of the finest athletic plants ever built in the United States." Only through tight collaboration, he argued, would construction of the stadium occur after the eventual granting of a big league baseball franchise. But Cullinan warned that a franchise would come to Houston only if the County and the HSA maintained a "united front" and avoided "controversies over site, (and) size." Cullinan demanded that the stadium plans incorporated a "permanent movable seat idea" which would allow for many diverse events. Cullinan also wanted to remind William Kirkland that the stadium was for the people of Houston and it must provide them with the comforts and conveniences to keep them satisfied. To this end, Cullinan advised Kirkland to find a location that was accessible to visitors and Houston residents and included parking facilities for at least 20,000 autos.⁵³

⁵² "'Full Speed Ahead,' Cry Stadium Group," *Post*, 27 July 1958, sec. 5, pp. 1, 4; "Stadium Vote Passed by Impressive Margin," *Post*, 29 July 1958, sec. 4, p. 3; Peebles, "Major League Baseball, Pro Football Near," *Chronicle*, 27 July 1958, sec. F, pp. 1, 5; "Medical Center Site Favored; Stadium O.K.'d," *Chronicle*, 27 July 1958, sec. A, p. 1.

⁵³ Craig F. Cullinan, Jr. to William Kirkland, 30 July 1958, Robert J. Minchew Houston Astrodome Architectural and Engineering Collection, 1957-1967, 94-274/2, Center for American History, the University of Texas at Austin (hereafter cited as Minchew Collection).

The election results reverberated all the way to New York, home of three major league baseball franchises. Sports writer Jack Cuddy expressed his optimistic view that Houston would eventually win a big league baseball team and much more. In Cuddy's opinion, Houston was "rich," populous ("the largest American city that has no major league baseball club"), and understood to have a tremendous "sports enthusiasm." It had already become the "western mecca of professional boxing" in only a few years, now Houston had its eyes set on the professional leagues of baseball, football, and basketball. The election results demonstrated that Houston was now prepared, organized, and a force to be reckoned with. "The oil city, the industrial city" was not going to remain idle and watch other lesser cities enjoy the accoutrements of being big league. The overwhelming support for the bond issued seemed to prove this big league desire. "Watch Houston," Cuddy warned, because "It has the people, the dough and the enthusiasm to become very 'big time' in sports."⁵⁴

After receiving voter approval, the challenge of making "orderly progress" towards fulfilling the goal of a sports center and major league franchises remained. This road to "progress" would include selling the revenue bonds, selecting the stadium site, designing the physical plant, finding tenants for the facilities, and obtaining sports franchises.⁵⁵ The first victory for a large sports complex had been achieved with relative ease. The triumph seemed to promise that construction and big league status was just on the horizon.

⁵⁴ Jack Cuddy, "Houston Tabbed as Major Sports Capital by New York Columnist," *Post*, 14 July 1958, sec. 4, p. 2.

⁵⁵ Nealon, "Post Time," *Post*, 29 July 1958, sec. 4, p. 1, 3.

CHAPTER 3: FINDING THE “CRACKER JACK” LOCATION

The passage of the bond issue ushered in a new era of Houston and Harris County history. The town defined by its Ship Channel, petroleum industry, and the wealth of its citizens, voted to alter its image. The people of Houston took their first steps to change the city's status as a second-rate sports and third-rate cultural town. Houstonians chose to try and make their city the epicenter of big league sports, cultural events, and tourism in the Texas and the entire Southwest. The revenue bond election seemed to guarantee the funds for this complex without burdening the taxpayers. With the bond issue settled, the next task that facing the Harris County Commissioners Court, the Harris County park board, and the Houston Sports Association (HSA) was to find a "cracker jack" location.

Finding this "cracker jack" location sounded easier than it was. During his visits to big league ballparks across the county, HSA chairman Craig Cullinan realized that a huge parcel of land, 400 to 500 acres for the stadium and parking space for 20,000 automobiles, would be essential. This HSA request was problematic. Although the County and the HSA could obtain additional money, either through more bonds or private donation, both sides wanted to acquire the land as cheaply and expediently as possible. A site that already had some type of development, houses, buildings, etc., meant that construction costs would increase. Hence, any undeveloped location would receive the greatest attention from the park commission. Having more people involved in negotiations would complicate the process involving more demands, more conditions, more haggling, and more delay. The HSA's provisions did have an upside, however, by seeming to eliminate a location in downtown

Houston. Some advocates would still fight for a downtown location to save the central business district. Others looked towards Houston's growing and abundant suburbs.¹

To this end, like-minded Houstonians either banded together into new alliances or exploited the resources of present, cohesive groups, that each claimed to have the best intentions for the citizens of Harris County. These individual groups proffered their own locations to try and land the future jewel of Houston. The stadium would not just bring prestige and economic benefits the city and the county, but especially to the individual area or community within Harris County. What resulted was a serious and at times fierce competition for the impending stadium site. The stadium, then, was no longer a means to promote unity for the entire city that had united for the common goal to pass the bonds and make the city "big league." It began to become a divisive issue that threatened the cohesive fabric of the city and county. This did not mean the Houston's feeling of optimism had vanished. Instead, the problems signaled the coming pessimism.

The first offer to land the stadium site came from a group of businessmen north of Houston. The North Harris County Chamber of Commerce (NHCCC) wanted the future facility built on the 2,546-acre site intended for the new jet airport. This "newly formed" group argued that the land would be too small for a modern jet airport. They did not want to spend resources on an obsolete airport when the land could best be utilized for a modern stadium. Since the city had already marked the land for the airport, it already had major highway access, a "key factor," according to NHCCC members. Maurice Burns, the temporary chairman of the NHCCC, said his group favored the stadium instead of an airport,

¹ Reiss, 240-241. The usual stadium-building formula, according to Reiss, was mustering support, finding a location, and then obtaining the money. In Houston, the location came after the money was obtained.

but provided no additional reasons other than his opinion that a small jet airport would become obsolete before it was finished. It could be surmised that Burns and his coterie agreed with the sentiments of the Aldine Taxpayers Association who also opposed this seemingly inadequate airport. (Aldine was located ten miles north of Houston.) Burns was eventually proved correct. The airport's small runways could not accommodate the requirements for the newer jet airplanes.²

This group suggested that constructing the stadium north of Houston, to borrow a baseball term, was a “home run,” for several reasons. Firstly, they pointed out that thanks to the Gulf of Mexico, more towns were located north of Houston within a 200-mile radius. These municipalities contained over two million people whereas a population of only 500,000 resided south of Harris County. Thus, the stadium would be closer to a larger pool of spectators who might be “very reluctant” to travel through Houston and its heavy, increasingly dangerous traffic. Secondly, more potential sites were available in north Houston than south. With most of the available land north of the city, county leaders could place the stadium in many possible locations providing greater flexibility for the entire project.. Thirdly, because this land was undeveloped, it would be cheaper than anything purchasable south of Houston or near downtown. This would result in a total lower cost. Fourthly, six highways fed into north Houston and Harris County while only two supported the southern part. More highway arteries would lessen congestion, allowing more visitors simpler access and making an easier approach for those first-time travelers trying to navigate

² “Northside Site Is Proposed For \$20 Million Stadium, Center,” *Post*, 7 August 1958, sec. 4, pp. 1, 4; “Another Site for Sports Center Proposed,” *Post*, 9 August 1958, sec. 2, p. 4; “North Site For Stadium Urged,” *Chronicle*, 7 August 1958, sec. E, p. 1.

the already choked downtown traffic. And, finally, the stadium would be closer to the proposed jet airport.³

The opposite end of Harris County also found its champion. The president of the Galveston Chamber of Commerce, James W. Lain, congratulated the park board on the proposed stadium. Lain also hoped the southern part of Harris County would receive due consideration. These facilities, Lain wrote, would provide the "Gulf Coast Area" much needed recreational and entertainment opportunities. The 125,000 residents of Galveston County, Lain continued, were as sports minded as their northern neighbors in Harris County. Speaking for these enthusiasts, Lain wanted the Park Board to consider a location near the Gulf Freeway, which would benefit both the residents of Harris and Galveston Counties as well as the two million tourists who traveled to Galveston each year. By locating the site between Houston and Galveston, he asserted, both cities would receive the benefits from the stadium. The stadium, Lain envisioned, could be the first step between greater cooperation between Houston and Galveston and possibly the creation of a metroplex.⁴

Other proposals suggested locating the stadium all across Harris County. Hans C. Katz from the realty firm Lionel J. Ellis and Company offered two large locations on Gulf Freeway. J. Edwin Swift proffered a 2,900-acre tract of land owned by William A. Fraser. The land, located at Jones Road and Jack Rabbit Road, granted easy accessibility with the

³ Bob Rule, "Sidelights," *Press*, 30 July 1958, p. 10; "North Side Fans Seek New Athletic Stadium," *Chronicle*, 31 July 1958, sec. 6, p. 3; Letter from Roy C. Hohl to William Kirkland, 3 August 1958, Minchew Collection, 94-275/2.

⁴ Letter from James W. Lain to Mansfield, 26 November 1958, Minchew Collection, 94-275/2. Lain did not use the term "metroplex." The term "metroplex" was not coined until the 1970s. I use the term here in a similar way that Harvee Chapman and others used it, as a way to promote the alliance, albeit uneasy, between Dallas and Fort Worth. Like the airport for Dallas and Fort Worth, the stadium could have been the facility to link Houston and Galveston. See Robert B. Fairbanks, "Responding to the Airplane: Urban Rivalry, Metropolitan Regionalism, and Airport Development in Dallas, 1927-1965," in *Technical Knowledge in American Culture:*

completion of the highway out of Hempstead. Swift promised that the County could purchase Fraser's land at the low price tag of \$1,500-an-acre. Louis H. Rubin from Gelta Realty Corporation suggested a 514-acres site in southeast Houston, 10.5 miles from downtown.⁵ The first series of offers came from those who wanted to locate the stadium on Houston's periphery, not the choked downtown area. Whatever the location, it was generally understood that adequate access from highways and other roads needed to be available.

While all types of offers arrived at City Hall, the Commissioners Court office, and HSA headquarters, city and county officials already had started their own investigation immediately following the election. Houston Mayor Lewis Cutrer, a friend of R. E. Smith and one time attorney for Roy Hofheinz, discussed a few of the early rumors that swirled around these government officials. One rumored location was on 500 of the 1500 acres of Memorial Park, "Houston's largest wooded playground." Cutrer liked this initial proposal, and said, "I think it would be a cracker-jack location," but only if the design would not interfere with the rest of the park.⁶

Memorial Park, however, was not just some piece of Texas prairie with a few trees and shrubs. The history of this park went back to William Hogg. Hogg, a son of James S. Hogg a former Texas governor, acting as an agent for then mayor Oscar Holcombe purchased the land in 1924. Hogg hoped to preserve the land as Houston continued to grow. Hogg sold the 1503 acres to the city at the price he paid, about \$433/acre or \$650,147. Mayor

Science, Technology, and Medicine Since the Early 1800s, ed. Alan I Marcus, Hamilton Cravens, and David M. Katzman (Tuscaloosa: The University of Alabama Press, 1996), 187-188.

⁵ Letter from Hans C. Katz to Seth Irwin [Morris?], 4 December 1958, Minchew Collection, 94-275/2; Letter from J. Edwin Swift to the HSA and Commissioner Lyons, 12 November 1958, Minchew Collection, 94-275/2; Letter from Louis H. Rubin, 12 November 1958, Minchew Collection, 94-275/2.

Holcombe allowed Hogg to insert a restriction on the deed: the land could only be used for park purposes. Under the terms of the sale, the city was required to obtain consent from a Hogg family member before any aspect of the park was touched. Other aspects discouraged Memorial Park location. One was cost. The HSA would have to buy some additional land adjacent to the Park. The land was estimated at \$30,000 an acre, which meant the HSA would have to spend almost \$9,000,000 for the land. That price tag left only \$11,000,000 to build the stadium and coliseum.⁷

Thomas E. Willier, a traffic and business consultant for Houston, performed an analysis of Memorial Park for Harris County to determine its worthiness as the site for the sports complex. Willier considered Memorial Park in its relation to the rest of the metro area especially in regard to population trends and distribution, accessibility, driving times, and proximal land use. In his five-page report, Willier anointed Memorial Park as the best site in Harris County. Memorial Park, he claimed, provided the most efficient access via current state highways and city roads. Just as critical, future city growth would surround Memorial Park, assuring the site would adequately fulfill anticipated entertainment requirements. The stadium, therefore, would not be located at a great distance from downtown Houston or hidden in a suburb. The stadium would be close to the downtown business district, but not too close.⁸

Despite Willier's report and Mayor Cutrer's endorsement, some who heard of the proposal announced their disapproval of the decision. Gus Haycock, director of Houston city

⁶ Mel Young, "Major League Stadium In Memorial Discussed," *Chronicle*, 28 July 1958, sec. A, pp. 1, 2; Kenneth E. Gray, *A Report on the Politics of Houston* (Cambridge: Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, 1960), s. II, 23-33.

⁷ "Opposition To Stadium in Park Area Mounts," *Chronicle*, 8 November 1958, sec. A, pp. 1, 4.

parks and recreation, warned that a large stadium would destroy the park and turn it into a “circus.” E. B. Mansfield, secretary of the Harris County Park Commission, also admonished against such a senseless and reckless finding. Mansfield did not like Memorial Park because of its location in the heart of city, near jammed downtown Houston. The roads that served the Park were already overcrowded with traffic. Any additional traffic from sporting events would only make the situation worse. Logistically, he protested, placing a stadium this close to the central business district would be foolish.⁹

In early November 1958, three months after the election, the park board held an “informal” meeting with city and county officials at the Lamar Hotel to discuss the possibility of locating the stadium in Memorial Park despite the criticisms of that site. According to park board commissioners Kirkland and Romero, initial surveys of Memorial Park concluded it was “superior” to more than a dozen other locations within the city and throughout the county. Officials of the Fat Stock Show said that Memorial Park was acceptable for their future needs as well. Judge Casey, however, warned of the potential firestorm this could create. Any effort to alter Memorial Park in such a fashion, Casey began, required the authorization of city voters, which would not be an easy task despite the overwhelming voter approval of the revenue bonds and enthusiasm for a major league sports franchise. Houstonians would not support defacing the largest and most popular park in the city. But even more difficult, members of the Hogg family would have to approve the measure. The Hogg estate had rejected a plan submitted by the Museum of Natural History for an arboretum and botanical gardens only months earlier. In addition to Hogg approval,

⁹ Thomas E. Willier, “A Sport Center For Harris County, Evaluation of Potential Site, Memorial Park,” Minchew Collection, 94-274/2.

the HSA would have to pay the city the appraised value of the land, which meant that most, if not all, of the \$20 million bonds would be used.¹⁰

The *Houston Chronicle* printed an op-ed on November 10 attacking the proposition of using Memorial Park as the stadium location. The *Chronicle* said that it would not have supported the bond issue if the plans of destroying Memorial Park had been revealed before the vote. The paper's editors affirmed that by considering this site, the park commissioners were at best "breaking faith" with the public. "Tammany Hall in its worst days never dared lay its hands on Central Park," but the park board's actions demonstrated a willingness to ignore public opinion and destroy the last remaining virgin land inside the city. It not only was Houston's largest public park, but it was the only one even remotely close to downtown Houston. "Today it is impossible to gather up anything like that in acreage within reasonable distance," so it must be preserved at all cost, even the cost of a stadium. "Such a park becomes more valuable daily for recreation purposes," the *Chronicle* lamented, "as vacant land in the county is fenced in and posted." If the park board was unwilling to listen to this argument, the editorial wanted the park board to consider their decision's effect upon Houston's already congested downtown traffic. The traffic leaving the stadium in Memorial Park and spilling onto the dangerously overcrowded Memorial Drive and Post Oak Road would only make a bad situation worse.¹¹

Once the Memorial Park scheme and related stories ran in the newspapers, the public started attacking the misguided proposal. Houstonians generally agreed that Houston needed more public parks and open spaces, not less. The parks that Houston already had should be

⁹ Young, "Major League Stadium In Memorial Discussed," *Chronicle*, 28 July 1958, sec. A, pp. 1, 2.

¹⁰ "Stadium Site In Memorial Park Just One of 14," *Post*, 1 November 1958, sec. 1, pp. 1, 6.

rigorously preserved at all costs instead of defaced and destroyed. Kenneth Franzheim, city architect, said the proposal “would be the biggest crime ever committed,” making Memorial Park into a large parking lot. Charles Hamilton, former president of the Houston Parks and Recreation Association, asserted the importance of park land to Houston and Harris County . Already “way down” in park area, Hamilton said Houston needed to add more “breathing spaces” as the city continued to grow, not reduce its meager acreage. “We need to keep that park there so we can have the great city we are destined to be,” he concluded, because “Memorial Park will one day be to Houston as Central Park is to New York.” These leaders were not attacking the idea of a stadium, but rather complaining about one of the possible sites for its construction.¹²

In the face of growing opposition, park board secretary Mansfield explained that the commission's primary concern in determining the best location was a “site where the maximum number of people have the most accessibility to the stadium.” A larger percentage of the county’s population, over 500,000 Houstonians, resided within a 25-minute drive from the Park, as opposed to other potential sites in Harris County. The second advantage of Memorial Park, according to Mansfield, concerned the future freeway system. As planned, the Houston Loop (highway 610) would nearly abut the stadium on its western flank while the Southwest Freeway was located very near the site, allowing easier and faster access to all Harris County residents, Texans, and out-of-state visitors. In his opinion, then, Memorial Park satisfied these criteria. Thirdly, Memorial Park already contained water pipes, sewer lines, and other aspects of physical plants, which would save construction time and money.

¹¹ “Keep Center Out Of Memorial Park,” *Chronicle*, 10 November 1958, sec. A, p. 1.

And finally, it would be at the center of Houston's future population. What this meant, he concluded, was an immediate savings of time and materials. But Mansfield did not mention the cost of buying the land. Conservatively, the value of Memorial Park land was estimated at \$40,000 per acre. If the park board decided on purchasing 300-acres of land, it would cost \$12 million. This meant that only \$8 million of the \$20 million would remain of the revenue bonds, hardly enough for a first-class facility let alone a multi-purpose stadium. Mansfield also affirmed that the park board did not want to create a "hassle" over the selection of the site, which would disrupt future stadium workings. With this in mind, however, the park board unanimously approved Memorial Park as the future home of the stadium. Former mayor Oscar Holcombe, under whose mayoral leadership the city had purchased the land for the park in 1924, affirmed the limited use of the land. But, Holcombe also attested that a county stadium "might fit the bill" as a recreational facility. If Memorial Park was rejected, the park board warned, Harris County needed to look for a location that offered at least 500 undeveloped acres.¹³

Immediately, a group of Houston women promised the park board and City Council a fight if Memorial Park was violated. Even though they were women, said the group's leader Sue Barnett, they were "influential" and "not to be taken lightly." The most influential woman in Houston, Ima Hogg, rejected any attempt to locate the stadium within Memorial Park. In a letter to Mayor Cutrer, Hogg expressed her confidence that her sister-in-law Mrs. Alice Nicholson Hanszen, formerly Mrs. Mike Hogg, and Mrs. Margaret Wells Hogg in

¹² "Civic Leaders Oppose Park Site," *Chronicle*, 11 November 1958, sec. A, pp. 1, 2. The total number of acres of Houston's park system was 3,963. Ellifrit claimed that the city required 8,000 acres to satisfy the needs of the city's 910,000 people.

opposing the site would join her. Hogg wrote, “Such proposed use for a sports stadium, even though of a very worthy nature, would be in direct violation to the expressed provision contained in the conveyance under which the city acquired the land comprising Memorial Park—namely, that it would be used for park purposes only.” Hogg confirmed that she voted for the bond issue and wanted a stadium to be built, “but not in Memorial Park.” Unwilling to challenge Ima Hogg’s decision, commissioner court members, park board commissioners, and city councilmen affirmed their commitment to her wishes. Additionally, they also questioned the feasibility of Memorial Park. Garth Bates said, “I do want to do everything we can to preserve our parks for park purposes and to acquire more.” City Planning Director Ralph Ellifrit viewed the situation as “a matter of destroying one value to get another rather than supplementing one value with another.” Locating the stadium in Memorial Park, he cautioned, meant that additional land would be eliminated for parking and highway access. “If we rid our meager park resources every time some good project comes up, we will soon have lost them forever,” Ellifrit warned. Kirkland and Romero apologized for the “tempest in a teapot” that erupted when news leaked over Memorial Park, starting the controversy. Mayor Cutrer and other individuals involved with the project concluded that the issue was now closed, that it was time for everyone to move on, and continue the search.¹⁴

¹³ Jack Mohler, “Stadium Site In Memorial Park Studied,” *Press*, 8 November 1958, pp. 1, 5; Garvin Berry, “Why Stadium Men Picked Memorial,” *Press*, 10 November 1958, pp. 1, 9; “Oppose Stadium In Memorial Park,” *Press*, 11 November 1958, pp. 1, 9.

¹⁴ “Oppose Stadium In Memorial Park,” *Press*, 11 November 1958, pp. 1, 9; Garvin Berry, “Won’t Build New Stadium In Memorial,” *Press*, 11 November 1958, pp. 1, 8; Brian Spinks, “Memorial Site Riled Out Of Sports Stadium Speculation,” *Post*, 12 November 1958, sec. 1, pp. 1, 11; “Board Drops Plan For Stadium Site In Memorial Park,” *Chronicle*, 12 November 1958, sec. A, pp. 1, 14; “Mayor Councilmen Talk Stadium Site,” *Post*, 13 November 1958, sec. 1, pp. 1, 16; “Miss Hogg Merits Gratitude For Preserving Memorial Park,” *Chronicle*, 13 November 1958, sec. A, p. 14.

The “storm of protest”¹⁵ the Memorial Park issue panicked some members of the HSA. They tried their best to distance themselves from the firestorm, claiming the HSA body had never considered Memorial Park as a location for the stadium. HSA president Craig Cullinan explained that the HSA was not present at the meeting between the Harris County Board of Park Commissioners, County Commissioners, and city council members. Therefore, the HSA could not be held responsible for submitting the Memorial Park site. The HSA was only concerned at the moment with accessibility and parking space of any potential location, Cullinan continued, and “never advocated or recommended any particular site.” Cullinan wanted the controversy to be solved as soon as possible, because controversy “might have an adverse affect” in the HSA’s effort to obtain major league baseball and professional football. Park board chairman, William Kirkland and vice-chairman Archer Romero attempted to quell the furor by insisting in a written statement that the “informal” meeting was solely “exploratory.” Assisted by “technically trained personnel,” the Park Board had surveyed fourteen locations in Harris County, trying to determine the best suitable locations. According to the park board, Memorial Park proved to be “superior” to all other sites available. The meeting’s goal was “essentially to investigate the availability of Memorial Park property and the legal problems involved.” Kirkland and Romero wanted Houstonians to know that no final decisions had been made. Kirkland insisted that park commission officials had not even considered Memorial Park before the July election and that they were merely doing the job to which they were appointed.¹⁶

¹⁵ In addition to the protest of government officials, two public petitions were also circulated protesting the encroachment upon Memorial Park. See, “Two Petitions Protest Stadium in Memorial,” *Chronicle*, 10 November 1958, sec. A, p. 1.

¹⁶ “Protest Grows Over Stadium In City Park,” *Chronicle*, 11 November 1958, sec. A, pp. 1, 2; “Oppose Stadium In Memorial Park,” *Press*, 11 November 1958, pp. 1, 9.

City Council members also wanted to distance themselves from all possible negative publicity. Council members pledged a future “hands off policy” in stadium site selection. The City Council pointed out that Harris County had the responsibility to select a site, not the city. Therefore, the Council should be absolved of all malice created by the County's Memorial Park decision. The park commissioners, the Council vowed, would remain the only body to investigate and select a site for the stadium. Members of the City Council reaffirmed that they were just an advisory body for the County in this matter. Mayor Cutrer wished county leaders well and confirmed the stadium was the county's "responsibility," not the city's.¹⁷

Now that the supposedly optimal site had been summarily dismissed, other viable locations received more attention from the Commissioners. One of these sites was the land owned by the Fat Stock Show near South Main and Old Spanish Trail.¹⁸ Bob Rule called this area an “ideal” spot for the future stadium, for many important reasons. One, the land owned by the Stock Show totaled 230-acres of unobstructed land, large enough for a county stadium and other supporting buildings. Second, the Show's leaders were willing to trade or donate this land to the County. Rule also pointed out that if it additional land seemed necessary for construction, adjacent property could be purchased. Just as important, Rule added, a South Main location could be readily accessed throughout Harris County and especially downtown Houston. For Rule, the South Main location appeared to be close to selection in early 1959, despite the seeming inactivity of the park board.¹⁹

¹⁷ “City Officials Pledge Neutral Stadium Policy,” *Chronicle*, 13 November 1958, sec. B, p. 1.

¹⁸ Omstead, “Stock Show's Decision May Swing Stadium,” *Post*, 28 February 1959, sec. 1, pp. 1, 11.

¹⁹ Rule, “Sidelights,” *Press*, 6 January 1959, p. 12.

Even though he remained optimistic, Rule understood the critical “crossroads” that Houston faced. Voters had passed the revenue bond issue, but nothing else had been accomplished regarding the stadium. The big leagues were allegedly looking for suitable cities for possible expansion. Those cities that were prepared would become the exclusive members of professional sports leagues. Even a hint of dissension, not to mention inadequate facilities, could suggest that a city was not ready for the big leagues. The Kellogg Company, the sponsors a football clinic, had recently selected Dallas’s Memorial Auditorium for their event instead of any Houston facility. Kellogg chose Dallas because they felt it had “the most modern convention facilities in the Southwest,” complete with ample parking. “While the clinic itself was nothing in particular to fight over,” explained Rule, “that explanation of why Dallas got it, to me, carries a somber warning for Houston—be ready or be by-passed.”²⁰

Rule feared that Houston’s perceived disarray could cost it not only big league sports, but also many large conventions and meetings. According to Rule, immediate construction at the South Main location should begin in earnest, regardless of the city landing a major league franchise. Continued delay, he warned, meant that city and county officials would not be prepared for the eventual call up to the big leagues. These officials needed to get ready for the future when, not if, major league baseball came calling. Other tenants were already available, like the Stock Show and the University of Houston, for example, Rule continued, that would provide the capital for the amortization of the revenue bonds until the HSA landed a franchise. The entire stadium did not need to be completely constructed, he added, nor all the \$20 million spent. He worried that the once unified stadium effort had lost the harmony

²⁰ Rule, “Sidelights,” *Press*, 16 February 1959, p. 14.

needed to see the project come to fruition. There seemed to be a lack of optimism and an increase in pessimism.²¹

As Rule and others hinted at a waning optimism for Houston's proposed stadium, several disgruntled baseball enthusiasts had already started the game plan to force major league baseball owners to expand their ranks. As previously noted, the first efforts of postwar expansion were merely relocation. O'Malley and Stoneham altered the original formula by resettling in California. After O'Malley's strong-armed tactics, Brooklyn's congressman Emanuel Celler initiated congressional hearings to question major league baseball's exempt status from anti-trust legislation. Although baseball owners retained their exempt status, the 1957 hearings prompted New York Mayor Robert Wagner to search for a means to return big league baseball to Brooklyn. His attempts to lure the Reds and then the Pirates failed. Wagner asked attorney William Shea to start a new major league baseball circuit. Shea's efforts resulted in the formation of the Continental League of Professional Baseball Clubs. Shea asked aging baseball icon Branch Rickey in 1958 to advise and eventually preside over the new circuit.²²

Rickey, an ex-Dodger general manager, immediately took action. He invited several wealthy men who wanted to own and operate baseball teams to New York to discuss the plans for expansion. Rickey met with Cullinan about the HSA representing Houston. Cullinan accepted Rickey's offer. The CL also received support from groups representing Atlanta, Minneapolis-St. Paul, and Toronto. Upon hearing the news of the HSA's entry, civic leaders in Houston expressed their excitement and enthusiasm. When the news of Houston's

²¹ *Ibid.*

entry into the CL, Mayor Cutrer reacted, "I'm very happy." Cutrer also said that Houston would prove the decision to include Houston would be a good one. James M. Delmar, former president of the Houston Amateur Baseball Federation, said he was "delighted" about this "wonderful thing." Now that Houston was on course to be a big league city in baseball, Judge Elliott wanted the stadium to be ready in 1961.²³

On 18 August 1959, Rickey, Shea, and other CL owners met with Commissioner Ford Frick, National League president Warren Giles, American League president Joe Cronin, and a handful of owners to discuss the new league and its eventual integration into the major league ranks. Major league owners expressed their delight in a new league and pledged support. Rickey and Shea remained skeptical of MLB's goodwill, but enthusiastic that the CL would become a third major circuit.²⁴

They could remain optimistic because they found an ally in the US Senate in Estes Kefauver. The Tennessee senator chaired the Senate Antitrust Committee. Kefauver began hearings on major league expansion in 1959 and 1960. Again, baseball's anti-trust exemption status and control over the minor leagues were other issues. Rickey and Shea informed senators of the state of major league baseball at that time. These owners, they wrote, "have a total lack of loyalty to the communities which support their enterprises." The owners were businessmen, pure and simple. If a better deal came along, Rickey and Shea continued, the

²² Murray Polner, *Branch Rickey: A Biography* (New York: Atheneum, 1982), 255-257; James Edward Miller, *The Baseball Business: Pursuing Pennants and Profits in Baltimore* (Chapel Hill: The University of North Carolina Press, 1990), 78-81.

²³ Herskowitz, "Houston Included in Continental League," *Chronicle*, 28 July 1959, s. 4, pp. 1, 6; "Houston Baseball Assured in 1960," *Post*, 28 July 1959, s. 4, p. 4; Dan Daniel, "Big League Expansion Set! Houston Has Top Priority," *Press*, 23 July 1959, p. 9; Rule, "We Have the Franchise, Stadium Next Big Goal," *Press*, 28 July 1959, p. 10.

²⁴ Polner, 257-259; Nealon, et al, 19-22; Nealon, "Baseball at Crossroads and Houston Has Stake," *Post*, 16 August 1959, sec. 3, pp. 1, 3; Nealon, "Rickey Will Guide Continental Loop," *Post*, 19 August 1959, sec. 4, pp. 1, 5.

owners would move their teams to wherever they wanted to go to increase their profits. The Continental League owners, on the other hand, were "local, civic-minded, financially sound baseball fans of excellent reputation." All the CL owners wanted was a chance to bring baseball to their cities.²⁵

The enthusiasm did not wane in Houston despite the fact that the HSA did not control the Houston territory. Under the rules of major league baseball, an owners was required to obtain the territorial rights to a city. In Houston's case, the HSA had to purchase the territorial rights from Buffs owner Marty Marion. Cullinan said that discussions with Marion were underway to get the territory. Cullinan said that he did not think there would be any snags during the negotiations. He was confident that the HSA would get control quickly and painlessly. Within a week in late July and early August 1959, Houston became a big league city twice. After the announcement of the HSA's entry into the Continental League, HSA member K. S. (Bud) Adams announced his entry in Lamar Hunt's American Football League. The park board hastened its activity since both the HSA and Adams expressed interest in leasing the county stadium.²⁶

Houston had finally become big league in baseball and football. But the optimism surrounding the baseball negotiations evaporated. Despite several attempts by the HSA to either buy the Buffs or merge groups, a baseball war erupted in Houston, resulting in a cloudy future for the stadium. Marion refused to be bullied by the HSA. The HSA refused to

²⁵ Polner, 257-260; Miller, 82-83.

²⁶ Herskowitz, "Houston Included in Continental League," *Post*, 28 July 1959, s. 4, pp. 1, 6; "Houston Baseball Assured in 1960," *Post*, 28 July 1959, s. 4, p. 4; "Houston Included in Grid Loop Plans," *Post*, 29 July 1959, s. 4, pp. 1, 5; Herskowitz, "Houston Will Join Pro Grid," *Chronicle*, 3 August 1959, s. 4, pp. 1, 3; "Bud Says: 'We're In,'" *Post*, 4 August 1959, s. 4, pp. 1, 3. For a brief account of Bud Adams and his role in the new football loop, see Ed Gruver, *The American Football League: A Year-by-Year History, 1960-1969* (Jefferson, North Carolina: McFarland and Company, Inc., Publishers: 1997), 13-15.

submit to Marion's outrageous price. Marion remained steadfast in his terms and began negotiations with individuals from the American League. Without a settlement, officials from both major leagues began to reconsider Houston.²⁷

A year after the bond vote, it appeared that Houston was no closer to a stadium than it was before the bonds were approved. The park commission's initial foray appeared to be a fiasco with no agreement on the horizon. Even though the county had commissioned architects for the stadium's design, no plans had been completed. It appeared that the commission had failed in its work. Adding to this perception of failure, Kirkland disclosed that the board was now focusing on a coliseum, rather than a stadium. With no major league baseball franchise, the stadium lacked its primary tenant and primary source of revenue. Marty Marion offered to lease the stadium for his AAA Buffs, but received a cold reception from the park board. Instead, the only viable group at the moment, the Fat Stock Show, necessitated a large coliseum, not a stadium. "We've got to go the coliseum route in the beginning and in planning along those lines it is necessary to seek a location closer to town," said Kirkland. Since the Stock Show donated its own land for the project, the Park Board hoped to build the coliseum to compensate its generosity.²⁸

At the annual meeting of Fat Stock Show directors and members in May 1959, Romero, speaking as a member of the Park Board not as chairman of the Fat Stock Show, said, "Our traffic experts and other authorities have advised us that the South Main Street area is the best location" for stadium facilities. The Park Board, he continued, met with R. E. Smith and Conrad Hilton, both of whom owned land adjacent to the proposed location.

²⁷ Rule, "Sidelights," *Press*, 23 July 1959, p. 9; Rule, "Sidelights," *Press*, 19 August 1959, p. 10

Romero remained optimistic that a favorable agreement would be made soon between the county and the three landholders on South Main in an effort to create a building site with a total of 350-acres. When the Park Board obtained the land, then it could begin the process of building the first structure in the complex, a coliseum for the Fat Stock Show. Then, Romero affirmed, the county could start searching for potential coliseum tenants, which would, in turn, facilitate the selling of the revenue bonds and the planning of future facilities at South Main.²⁹

A “gravely concerned” Judge Elliott feared Houston was not only losing its chances for big league sports franchises, but also for constructing its sports stadium. In separate meetings with the Commissioners Court and Archer Romero, Elliott learned that the more lessees that could be found for the stadium, the more attractive the bonds to buyers. In effect, the more sources of potential revenue, the greater the chances that the stadium could be constructed. According to Elliott, the interest rates on the revenue bonds had already increased three-quarters of one percent since the vote in 1958, with a serious threat of further increases in a “tight-money” American economy.³⁰

The park commissioners also started wavering on the original plan of a multipurpose stadium. Instead of one stadium, the commissioners began to consider a facility with multiple buildings, each serving a specific purpose. Under this new idea, there would be a baseball stadium, a football stadium, and a building for the Fat Stock Show. The commissioners decided to focus on a baseball stadium first and foremost. “We started on this thing talking about major league baseball and our stadium will be designed with baseball in mind,” said

²⁸ Nealon, “Post Time,” *Post*, 13 February 1959, s. 5, p. 1; Rule, “Sidelights,” *Press*, 14 April 1959, p. 10; “Action Expected Soon On New Stadium Here,” *Post*, 28 July 1959, s. 4, p. 4.

William Kirkland. Asked whether the stadium would be “multipurpose,” Kirkland responded saying, “It will be multipurpose stadium in the same sense that Busch Stadium (St. Louis) is multipurpose.” Busch Stadium could accommodate both football and baseball games without requiring movable stands or bleacher seats. For Kirkland and the commissioners, the stadium’s first priority was to allow baseball. Football and other events would have to wait for their own separate lodgings.³¹

Many Houstonians did not agree with this change in outlook. Although separate facilities for each event would have been a great luxury, the question was whether Harris County could afford it. Dick Peebles, executive sports editor for the *Houston Chronicle*, challenged the Park Board’s reasoning. Using statistics from the Park Commissioner’s 1958 report, baseball revenue (\$326,414 annually) alone could not amortize \$6,000,000 in bonds. According to that report, \$390,600 would be needed annually to pay the bond debt. Therefore, he concluded, baseball revenue alone could not provide the needed revenue for the payments. Thus, finding any brave soul to buy the bonds was going to be difficult, because there was zero chance of getting a decent financial return. Even worse, the Harris County voters who approved of the \$20,000,000 revenue bonds were going to be upset, “and rightfully so,” if a single purpose stadium plan was approved instead of the multipurpose stadium.³²

The gloomy stadium situation became worse in February 1960. Members of the Fat Stock Show contemplated backing away from the previous commitment to the HSA and the proposed construction. Stock Show committee members investigated building their

²⁹ Nealon, “Post Time,” *Post*, 27 May 1959, sec. 4, p. 1, 2.

³⁰ Mike Thorne, “Judge Dubious About Stadium,” *Chronicle*, 23 October 1959, s. 1, pp. 1, 6.

exposition center site nearer the central business district instead of placing it adjacent to the stadium. This generated some concern about the future location of the stadium, because the Stock Show owned \$2.5 million of land on South Main that was going to be traded to the park commission for the land that the exposition center and stadium site were to occupy. If the Stock Show reneged on its previous verbal commitment, the HSA, the county, and the city could do nothing about it. Without the Stock Show's land, the Park Board would be forced to ponder yet another location within the county for the sports complex. Furthermore, the stadium would be minus one major tenant and the much desired revenue it could promise. Stock Show president, Douglas Marshall, confirmed that his group would donate its land and its building fund to anyone who offered to build a coliseum in an approved location in Houston. For Marshall, the sports stadium and the Stock Show's exposition center did not necessarily have to be in the same location within Houston. He hinted at the real possibility that the Show would locate its new facilities near the downtown, "everything else being equal." According to Marshall, there was a "50-50 chance" that the coliseum could be built on its property on South Main or near downtown Houston. Mayor Cutrer approached Marshall about changing the Stock Show's plans to build south of downtown Houston. Cutrer wanted the coliseum downtown, regardless of the immediate consequences.³³

Mayor Cutrer continued to push his idea of locating the stadium downtown. After talking to Marshall about the downtown location, Cutrer authorized a city survey for the location west of Houston Avenue between Memorial Drive and Washington Avenue. Even though he claimed he was not trying to gain support for a second auditorium, his actions

³¹ Peebles, "Football May Be Frozen Out," *Chronicle*, 9 August 1959, sec. 5, p. 3.

³² *Ibid.*

seemed suspicious, especially since Kirkland affirmed that the park board was close to finalizing the South Main location. The mayor asked that the board give this site “careful consideration” before acting. Cutrer preferred the downtown to South Main because, in the mayor’s opinion, it would best for the city. Councilman W. H. Jones concurred with Cutrer, but confessed that he worried that Harris County would be unable to afford the new stadium. Jones endorsed building a smaller 25,000-seat coliseum at the Cutrer’s site, because several hotel and motel chains planned to build in downtown Houston. Building the coliseum would also “do away with a rapidly deteriorating area” within Houston, while also satisfying the need for a larger music hall. Jones also dismissed the notion that a downtown coliseum would worsen the traffic situation. Placing the coliseum next to the stadium at South Main, on the other hand, he warned, would definitely choke the highways while costing \$9,000 a day (which included interest, maintenance, and bond retirement). “In short, we are in very bad need of a 25,000-seat coliseum, we cannot afford a \$20 million stadium,” Jones concluded.³⁴

Mayor Cutrer proposed a downtown exhibition-auditorium to rival the stadium. He met with Stock Show officials Archer Romero and Doug Marshall to inform these men of his plan. Cutrer said that he was not attempting to dissuade the Stock Show officials from moving their facilities south of the downtown area. On the contrary, Cutrer claimed, he was just informing the men that the Houston Avenue site was an “exceptionally fine place” for a large auditorium.³⁵ As Cutrer turned up the heat on Stock Show and Country officials, Judge

³³ “Stock Show May Back Out of Stadium Deal,” *Chronicle*, 11 February 1960, sec. 1, p. 1.

³⁴ “City Competition On Stadium Disclaimed,” *Post*, 12 February 1960, sec. 6, p. 1; Ellen MiddleBrook, “Downtown Site for Stadium Given New Boost by Mayor,” *Post*, 16 February 1960, sec. 6, p. 1; Councilman Jones For Downtown Coliseum Site,” *Post*, 17 February 1960, sec. 1, p. 11.

³⁵ “Stadium May Meet New Snag,” *Post*, 11 February 1960, sec. 1, pp. 1, 11.

Elliott announced that the park board selected South Main as the future site for the county stadium and coliseum. After months of negotiating with R. E. Smith, Conrad Hilton, and the Herman Estate, the three other owners of land adjacent to the Stock Show's property, the county exchanged other holdings of "comparable acreage" with each these groups. Elliott also confirmed that the coliseum received top construction priority over the stadium. One reason was the war between Marty Marion, owner of the minor league Houston Buffs, and the HSA. The other was to keep Stock Show officials from considering Cutrer's proposal.³⁶

The Stock Show's executive committee called a special meeting to discuss potential locations for its expanded facilities. Now that the park board had decided in favor of South Main, the next move was the Stock Show's. Stock Show president Doug Marshall read his speech that favored the mayor's downtown location. R. E. Smith, although not a member of the executive committee but who attended at the meeting as a guest of Archer Romero, rose from his seat to oppose Marshall's speech. In a impassioned plea to committee members, Smith said that he sold his land to the Stock Show to expand its facilities at South Main. Smith hoped that "an inadequate site would not tempt the Stock Show" but that the group would still fulfill its promise to Smith. Even though Smith avowed that he did not care about the stadium site, he did want it to be at an convenient spot for "most." Marshall reaffirmed to Smith that Stock Show representatives would decide what would be best for the Show. Oilman Glenn McCarthy said that he supported his friend Smith's stance on the issue. Both Smith and McCarthy previously owned the land at South Main and offered it to the Stock

³⁶ Rule, "Stadium Set For So. Main," *Press*, 10 February 1960, p. 14; Rule, "Sidelights," *Press*, 11 February 1960, p. 16; "Stadium May Meet New Snag," *Post*, 11 February 1960, sec. 1, pp. 1, 11.

Show in the late 1940s. The downtown location, both Smith and McCarthy agreed, would only exacerbate already congested traffic.³⁷

Fellow city councilmen Walter Jones and Bob Webb agreed with the mayor that downtown Houston was the optimal location for the Stock Show's coliseum and the stadium. Webb said, "It's completely silly to put major facilities such as this on the outskirts of the city." Jones focused on the crucial financial reality of the situation. He favored a downtown coliseum as a cheaper option to the large and undecided stadium. "We are in very bad need of a 25,000-seat coliseum, but we cannot afford a \$20 million stadium," Jones argued. The city, he concluded, could not afford both a sports stadium and a large coliseum. Cutrer confirmed his desire for the coliseum downtown, whatever the Stock Show decided.³⁸ Bob Rule responded to Cutrer and his cadres desire to split the facilities into two locations. "How Lewis Cutrer could oppose this acreage as a site for the Coliseum is a complete mystery to me," he wrote, "To want a crowded downtown location in preference to this is absolutely unbelievable." According to Rule, "What was needed was complete support from all, not division." For the mayor and "the desperate efforts of big downtown interests" to come out with this "bombshell" at this critical juncture just added more damage to major league sports and stalled the stadium efforts. These individuals did not have the city's interests at heart, he said. Cracks in the once unified Houston front began to branch out in many directions, threatening to hurt the big league cause.³⁹

³⁷ Jack Mohler, "McCarthy, Smith Oppose Change in Sports Center Site," *Press*, 13 February 1960, pp. 1, 5; "Smith Speech Startles Stock Show Site Group," *Post*, 13 February 1960, sec. 1, pp. 1, 13.

³⁸ Garvin Berry, "Councilman's Coffee Got Cold, Words Got Hot Over Coliseum," *Press*, 17 February 1960, p. 1, 2; "Mayor Wants Auditorium Downtown," *Press* 22 February 1960, pp. 1, 2.

³⁹ Rule, "Sidelights," *Press*, 22 February 1960, p. 10; Rule, "Sidelights," *Press*, 23 February 1960, p. 10.

Judge Elliott refused to consider the downtown location for the stadium. He said that he and the rest of the Commissioners Court would support the park board's decision. "The board didn't just draw the location out of a hat," he proclaimed, but had surveyed the entire county at a cost of \$10,000. The Board reported that the vast size of the South Main site could accommodate a vast array of events, unlike some of the others, especially Cutrer's downtown proposition that boasted a mere thirty-three acres. Not only was the size of the downtown location inadequate, but also the county would have to buy additional land from private citizens and businesses to get enough for even a modest facility, Elliott warned. No one could speculate on how much the final price tag would cost.⁴⁰

As the stadium issue became murkier, Councilman Walter Jones demanded that all the interested groups present all their information, so each side could know what the other did. More importantly, the public would finally be informed instead of kept in the dark. "Open meetings and open discussion will either get the county stadium off to a start—within a few months—or it will show we can't do it at all," Jones said. Since the decision involved public money, they should be informed of everything surrounding it.⁴¹

Just when it seemed that the Park Board would make the South Main location the official stadium site, the Texas Highway Department located a future highway interchange at the South Freeway and South Loop nexus. In an effort to avoid any problems, the Highway Department agreed to move the interchange location 200-yards to the west. The mayor's downtown location doubled as the exposition site and slum clearance. Cutrer then sent a description of this location, complete with ideas for a "\$9.5 million exhibition hall, a three-

⁴⁰ Tom Omstead, "Harris Officials To Back Park Board Stadium Site," *Post*, 24 February 1960, sec. 1, p. 1.

⁴¹ Berry, "Jones Asks Showdown on Stadium Row," *Press*, 25 February 1960, p. 2.

story exhibition building, and parking lots capable of handling 2,500 cars,” to Leopold Meyer, chairman of building and grounds committee. To achieve this, the mayor pondered three scenarios. The city would construct the coliseum, the city and county would enter into a joint agreement for financing, construction, and operation, or sell the land to Harris County and allow the county to reap the “profits from rental and concession contracts.” To complete his plans, the mayor theorized, would take only a year and only \$3 million, faster and cheaper than the current state of affairs. Cutrer maintained that he was not attempting to erect a building that would compete with the larger stadium, but a facility that could compliment the needs of the city with events at the stadium.⁴²

On the heels of the announced merger, the Houston Urban Renewal Commission backed Cutrer’s downtown auditorium plan. John L. Andrews, chairman of the Commission, volunteered a 100-acre location slum for the mayor’s auditorium. Since the land was only “occupied by low income Negro units,” federal funds could become available to eliminate this blighted area from Houston’s downtown. Thus, Houston could expulse an eyesore far more cheaply than originally envisioned by Cutrer in a win-win situation for all involved.⁴³

Mayor Cutrer continued to add further devices to the stadium location debate. To gain additional support, Cutrer speculated on the infusion of federal money to aid the construction of a coliseum for the central business district. A large underground parking facility and large exhibition building might be able to attract Civil Defense funds, thus, reducing the financial obligation of local residents. In addition to this ploy, Cutrer also contemplated a monorail line to link the central business district to the Houston Avenue exhibition site. This would

⁴² Omstead, “Stock Show’s Decision May Swing Stadium,” *Post*, 28 February 1960, sec. 1, pp. 1, 11.

⁴³ “Baseball Groups Merge,” *Press*, 2 March 1960, pp. 1, 2.

fully maximize the coliseum's parking facility: when no events were being held, local residents could park and ride. Cutrer defended his actions in terms of bettering Houston by creating "a strong central city." Many other US cities, concluded the mayor, located new coliseums and exhibition halls near their central business districts and maybe Houston should do the same.⁴⁴

Stock Show officials invited Houston and Harris County leaders to tour the Show's current facilities at the Sam Houston Coliseum and the two disputed stadium locations. After viewing the competing sites, Councilman Jones became even more adamant about Cutrer's alternative. Speaking of South Main, Jones said, "We simply must be realistic about this site" and consider the advantages of the downtown alternative. The South Main location, he continued, would cost the city millions of dollars to prepare the location with utilities and roads, adding to the cost of construction.⁴⁵ "The necessary drainage, access streets and water and sewer lines would run into millions of dollars of expense to the city," Jones said.⁴⁶

Roy C. Hohl, owner of a car dealership located just north of downtown Houston, formed the Sports Center North committee in an effort to get noticed by the HSA. Kirkland replied to the new committee by saying that the park commission had already "gone too far with the South Main Street site to consider anything else." Kirkland, however, did promise Hohl that if the Stock Show decided to build a coliseum downtown, the park commission would immediately get in touch with the Sports Center North committee.⁴⁷ Sensing an opening, the Sports Center North Committee asked the Park Board to reconsider and move

⁴⁴ "Federal Aid Enters Debate on Coliseum," *Post*, 1 March 1960, sec. 1, pp. 1, 2.

⁴⁵ "South Main Center Site Work Far Too Costly, Councilman Says After Tour," *Post*, 2 March 1960, sec. 1, p. 3.

⁴⁶ "North Side Site Petition Added to Coliseum Fight," *Post*, 3 March 1960, sec. 1, p. 3.

⁴⁷ "North Side Stadium Site Group Formed," *Chronicle*, 19 February 1960, sec. 4, p. 19.

the site north of Houston. Roy Hohl, its president, referred to the same statistics they had cited months earlier.⁴⁸ Hohl was joined by another delegation of North Side residents who submitted a petition to the City Council. The petition contained over 14,000 signatures and demanded that the stadium's location be moved north of Buffalo Bayou "in the interest of the public." The North Side group argued that this central county location "would benefit the area as a whole better and would guarantee attendance at sporting events." Petitioners asked to locate the stadium at the center of Harris County in an effort for "more complete community service" and, in their words, a even distribution of the city's public improvements and infrastructure. The South Main site was too close to the Fort Bend County line, they said.⁴⁹ Hohl's group decided to raise the stadium stakes by offering the Park Board "bodies of land equal in size" to the South Main site for the stadium. Hohl hinted at the possibility of getting "a larger area" than the 230-acres the Stock Show made available. Kirkland promised to "look very seriously" at the donation offer from Hohl.⁵⁰ Undaunted by Kirkland's initial lack of enthusiasm, Hohl presented two more sites a few weeks later. The North Committee, however, designated these new locations, as "free sites". In effect, Hohl's group would give their land holdings to the County in return for the stadium complex.⁵¹

Another group expressed their dissatisfaction with a South Main stadium site. Members of the Boating Trades Association of Metropolitan Houston backed the mayor's request to study a downtown location. Glen T. Bundick, the group's senior vice-president, said that the Boating Trades Association was "the second largest" user of the Sam Houston Coliseum, which was too small for the annual boat shows. Bundick said that he did favor a

⁴⁸ Omstead, "Stock Show's Decision May Swing Stadium," *Post*, 28 February 1960, sec. 1, pp. 1, 11.

⁴⁹ "North Side Site Petition Added to Coliseum Fight," *Post*, 3 March 1960, sec. 1, p. 3.

new stadium for Houston and a new coliseum in the central business district “if there is room.” If the mayor’s survey demonstrated that the stadium could not be built there, Bundick at least wanted a new auditorium to remain downtown or to have the Coliseum enlarged.⁵² Cutrer could point to opinions of city councilmen, petitions from north Harris County residents, and a large convention that were unhappy with South Main. All these differing opinions created an air of cynicism and doubt in Houston.

Inviting all “interested groups” (representatives from the Stock Show, the park board, the North Side stadium group, and John L. Andrew of Urban Renewal), the new county judge Bill Elliott (who had replaced Casey in the 1959 election) called a “clear the air” parley on 22 March 1960 concerning the stadium location. Commissioner Kyle Chapman wanted this meeting to eliminate some of the confusion surrounding various aspects of the stadium. Mayor Cutrer concurred and added that such a meeting would hasten stadium construction because the Park Board would finally obtain all materials and make the most informed decisions. “It is a good thing for various groups to get together and express themselves, to present all available information for study so that whatever decision is made can be made after due deliberation,” he said. Cutrer launched into a defense of his downtown idea. Locating the facilities near downtown Houston, he asserted, meant that the area’s hotels and stores would provide the “greatest convenience to the greatest number.” For the mayor, this was “the best place for an auditorium and coliseum” and maybe the entire sports complex, with the possible addition of another forty acres. Commissioner “Squatty” Lyons charged that the mayor circumvented the park commission with his scheme. “I and many others are

⁵⁰ Omstead, “North Side Offers Free Arena Site,” *Post*, 13 March 1960, sec. 1, p. 1.

⁵¹ “N. Side Offers 2 Stadium Sites,” *Chronicle*, 13 March 1960, sec. 1, pp. 1, 27.

surprised and upset that the mayor took such action since during the bond issue you and the city council passed a resolution supporting us in promises that a site of at least 400 acres with ample parking would be acquired,” Lyons said. Cutrer told those assembled that he discussed his information with Romero and other Stock Show officials. Lyons was even more outraged, “Why didn’t you tell us about this downtown site ‘way back after Memorial Park was considered in ’58?” Cutrer responded by warning everyone that putting everything at South Main “would hurt the city.”⁵³

Even though the two-hour conference produced no immediate compromises, the mayor received a major defeat from the Urban Renewal Commission. Andrew reassessed the Houston Avenue site in terms of a stadium. Houston Avenue would not be the best site for a stadium nor an exhibition hall because it was a “terrible bottleneck,” said Andrew. Without Andrew’s support, Cutrer lost an important means of financing the coliseum. Kirkland reaffirmed that the South Main location was the only “logical one” in the county because its vast size would accommodate a stadium, parking facilities, and accessibility. He also wanted to impress upon everyone present that the stadium would not get built without the participation of the Stock Show, who remained undecided about their future coliseum.⁵⁴

By May 1960, nearly two years after the bond election, there had been no progress concerning the stadium. It left John Barnhill of the *Houston Press* to wonder, “Will Houston ever get that stadium?” Apparently, the members of the park board were waiting for the

⁵² “Downtown Coliseum Supported,” *Post*, 8 March 1960, sec. 1, p. 8; “Mayor Wants Auditorium Downtown,” *Press*, 22 March 1960, pp. 1, 2.

⁵³ “Showdown Parley Set On Stadium,” *Post*, 22 March 1960, sec. 1, pp. 1, 11; Berry, “2 New Angles on Stadium,” *Press*, 25 March 1960, pp. 1, 2.

⁵⁴ “Stadium Talks Produce No Compromise Plans,” *Post*, 26 March 1960, sec. 1, p. 11.

Stock Show's decision on its future facilities, which would come in June.⁵⁵ During the meeting, two locations, a downtown site and the South Main location, garnered most of the attention for the Stock Show's director. Leopold Meyer, the head of the buildings and grounds committee, announced to the Show's directors that his group favored South Main. After he was finished, the Show's executive committee and board of directors erupted into applause and immediately and "unanimously approved" the recommendation. This "definite" and yet "unofficial" pronouncement meant that the county park could take this decision to the commissioners' court for further action.⁵⁶ The report also affirmed the Show's allegiance to a stadium at the same location. The executive committee also wanted the county to honor two conditions of this agreement. First, Stock Show officials wanted to reserve the right to approve or reject any structure at the building site. Second, the Stock Show wanted to retain the receipts from the sale of such things as concessions and parking.⁵⁷

With the approval of the Stock Show, the County Commissioners and the park board finally started the remaining processes for the stadium. The Stock Show allowed the county to construct a stadium or stadiums on its land, in return for the right to approve the facility design and the means for continued successful operation.⁵⁸ These officials also recommended an alternative proposal to use tax bonds to help pay for the stadium and exposition center. The tax bonds differed from the revenue bonds in that the revenue bonds depended on the stadium generating money from events, while the income from the tax bonds would come directly from a tax on Houston citizens. Harris County commissioners and the county judge,

⁵⁵ John Barnhill, "Will Houston Ever Get That Stadium?" *Press*, 12 May 1960, p. 23.

⁵⁶ "Study of Development Costs, Coliseum, Second Stock Show, South Main Street, and O.S.T. Site," March 1960 File, Minchew Collection, 94-274/7; "Fat Stock Show Site Choice Near," *Chronicle*, 9 June 1960, sec. 1, p. 1; "Stock Show Swings To South Main Site," *Post*, 10 June 1960, sec. 1, pp. 1, 8.

⁵⁷ "Stock Show Favors So. Main St. Site For New Grounds," *Press*, 10 June 1960, p. 3.

however, opposed “saddling” Houstonians or Harris County residents with such a plan.⁵⁹ Along with the mayor, five councilmen flatly refused any such thing. Councilman Frank Mann promised to oppose any such mechanism. Voters had been promised that the stadium complex would not the public a dime, Mann said. Councilman Walter Jones preferred that the city focus its attention and money on more pressing concerns such as paving streets, extending sewer lines, and other infrastructure.⁶⁰

About the only individual who was not enthusiastic was Mayor Cutrer, who refused to comment on the recommendation. Cutrer simply opposed the Stock Show’s decision. He still hoped he could get a coliseum at Houston Avenue. He offered a compromise to the Stock Show, Harris County, and the HSA. The Stock Show could still have its facility at South Main, as it wanted. But this coliseum would be a “less expensive but attractive building designed solely for rodeo and livestock display purposes.” A second facility, an “all purpose elaborate coliseum,” would then be built in downtown Houston. For the mayor, this made perfect sense. “We must not lose sight of the fact that expensive facilities are not designed for the use of one show alone,” the mayor continued, but “to be of benefit to the public, they must be able for use for a wide range of attractions.” The city remained in a “pall of confusion,” partly in due to the definition of coliseum, auditorium, and stadium.⁶¹

Instead of elation over the Stock Show’s pronouncement, Kirkland feared that the stadium was dead because the city did not have a major league baseball franchise. Kirkland lamented that he did not know “how we can get the project off the ground,” without a guaranteed source of money that a baseball team could assure. Essentially, the bonds could

⁵⁸ “Stock Show Favors So. Main St. Site For New Grounds,” *Press*, 10 June 1960, p. 3.

⁵⁹ “Tax Bonds Defray Stadium Cost Opposed,” *Chronicle*, 16 June 1960, sec. 1, p. 1.

not be sold unless Houston became big league. The result was continued delay and indecision from the park board. The board wanted a professional baseball franchise for the city before they acted on the stadium. The problem with the board's stance was that a team would be granted only if the city had adequate facilities. Kirkland promised that once a baseball team was granted to Houston, "the board will attempt to sell bonds to get the money to buy a site and build a building." Kirkland wanted to reiterate that the city needed a tenant and the money it would generate to retire the revenue bonds. "We don't have any money. We don't have a place to go for the money unless we get a franchise," he said.⁶²

At the 28th All-Star Game held in Kansas City in July 1960, rumors about both leagues expanding its numbers to ten eclipsed the game itself. On receipt of this news, Kirkland promised a stadium if Houston received one of the future expansion slots. "If the major leagues expand and grant Houston a franchise, we'll find a way to build a stadium," he said, by securing a paying tenant. A single tenant, in turn, would make the revenue bonds more attractive to potential buyers. Judge Elliott echoed Kirkland's sentiments that a baseball franchise would help "justify" stadium construction. Once blessed by the major leagues, Elliott vowed that Harris County would provide "complete co-operation... in the construction of a stadium." For Kirkland and Elliott, Houston was long overdue for a big league franchise. They avowed that the city and its people would support big-time professional sports. Elliott pledged, "When the day comes that we get a major league

⁶⁰ Berry, "Councilmen Against Stock Show Plan," *Press*, 15 June 1960, p. 6.

⁶¹ Berry, "Mayor Offers Coliseum Compromise," *Press*, 17 June 1960, pp. 1, 2.

⁶² Berry, "Mayor Offers Coliseum Compromise," *Press*, 17 June 1960, pp. 1, 2; Betty Rose Cravens, "City Hung Up On Stadium Dilemma," *Chronicle*, 20 July 1960, sec. 2, p. 1.

franchise, you can be assured that we will build a type of stadium that is second to none in the country.”⁶³

Kefauver's hearings lasted until June 1960. The established owners won a victory; Kefauver's bill went down in defeat, as congressman expressed a reluctance to become involved in the operations of private businesses. Even though Shea and Rickey lost the battle, they won the war. On the heels of the congressional vote, major league owners co-opted the CL's expansion plans. The AL and NL announced they would eventually expand to ten teams apiece. That August in Chicago, the CL relinquished its claim to four of its cities, New York, Houston, Minneapolis-St. Paul, and Toronto (eventually replaced by Los Angeles).⁶⁴

Cutrer's tenacity to get his downtown coliseum, however, proved to be counter-productive. Even though the Stock Show agreed to build at South Main, the Stock Show had reached no definite plan. The Show's representative Leopold Meyer explained the position of his organization. "The Fat Stock Show is definitely of the opinion that it wants its facilities located on the South Main Street property owned by the Fat Stock Show regardless of whether negotiations are made for financing through revenue bonds, general obligation bonds or private capital," he stated. He expressed his determination to meet with members of the Park Board to determine the final location of the stadium and the Stock Show facilities. *Post* sports writer Nealon wanted to demonstrate to all stadium and major league sports supporters that Houston needed to act as soon as possible or risk losing out to Dallas-Fort Worth.⁶⁵

Cutrer was willing to hire a research team from New York to determine once and for all the exhibition needs of Houston, where the facilities should be located within the city, and

⁶³ Art Casper, "Give Houston a Franchise, We'll Build the Stadium!" *Press*, 11 July 1960, p. 10.

⁶⁴ Polner, pp. 260-261; Keene, pp. 74-80; Miller, p. 83.

how the city should finance it. "I feel that we should find out what kind of program this area needs, adopt one, and get behind it," Cutrer said. The mayor wanted a definite and immediate answer, he claimed, so the city would not lose additional ground to other American cities. Houston had already lost the Junior Chamber of Commerce meeting to rival Dallas, Cutrer lamented. "Counting about 7,3000 delegates and 3,000 wives, that group would spend \$1 million in Houston," asserted the mayor. The longer the city and the county delayed its stadium decision, "we're losing a big opportunity to advertise and promote our community." If an auditorium was not included in the stadium plans at South Main, Cutrer concluded, Houston should seriously consider remodeling the Sam Houston Coliseum to locate visitors in the downtown.⁶⁶

Radio personality Fred Nahas wrote that he was "speak(ing) for the sports fan—the little guy who foots the bill." According to Nahas, "The little guy is sick and tired of all the buck passing and selfish ambitions and political squabbling which could keep Houston from getting a major league franchise." Houston could get bypassed, he continued, "if we don't get to work quickly and build the necessary stadium." Dallas-Ft. Worth seemed poised to take what Houston considered rightfully theirs. While arguing that city officials should invite the Chamber of Commerce to all future meetings in an effort to get "new, impartial, non-political leadership to enter the picture," Nahas concluded "Wouldn't it be sickening if Dallas-Fort Worth got a big league franchise and Houston DID NOT?"⁶⁷

"That Houston is the No. 1 city in expansion picture next to New York is not at all surprising in the light of the recent census count," according to Rule. "Major league baseball

⁶⁵ Nealon, "Post Time," *Post*, 4 August 1960, sec. 4, pp. 1, 3.

⁶⁶ "Cutrer Says He'll Call Auditorium," *Post*, 7 August 1960, sec. 4, p. 8.

people look at population more than anything else, for they don't worry about baseball interest as long as population is there," Rule continued. Rule speculated that the Dallas-Ft. Worth story was just that: a fabrication to compel Houston's factions to reach an agreement. With the sale of Playland Park, near the South Main stadium site, Rule speculated that Houston was going to see more of R. E. Smith and his business partner Roy Hofheinz involved in the fight to win major league baseball and to get the stadium built.⁶⁸

Smith, who played a prominent role in the passage of the revenue bonds, became a HSA stockholder in 1959. Smith made his personal fortune in petroleum and parlayed it into real estate speculation (it has been rumored that he owned two percent of Harris County in the 1950s). Kirksey met Smith in 1958 and told the oil tycoon about the plan to bring major league baseball to Houston. Smith promised to do what he could to help the cause, but refused to force himself and his ideas into the fray. He wanted to stay out of the limelight. His business partner, however, never promised to stay behind the scenes. Roy Hofheinz became business partners with Smith after losing his mayoral reelection bid in 1955. Hofheinz met Cullinan and Kirksey in the summer of 1959 and became a member of the HSA. He embroiled himself in the baseball campaign and eventually the stadium design.⁶⁹

Rumors of the park commission "moving rapidly" after the news of expansion appeared were confirmed by Kirkland. It appeared that the HSA would receive a big league franchise, so Kirkland tried to assuage fear that Harris County could not sell the \$20 million of bonds. Baseball and football revenue, he argued, would easily retire the bonds. In fact, he continued, the county would only sell enough bonds to cover the construction, which might

⁶⁷ Fred Nahas, "Let's Stop Buck-Passing and Land Major-League Franchise Here," *Press*, 4 August 1960, p. 3.

⁶⁸ Rule, "Sidelights," *Press*, 4 August 1960, p. 12.

be less than the \$20 million authorized. Kirkland hinted that the primary blueprints of the stadium accommodated baseball and football games, provided at least 35,000 seats, and allowed for plenty of parking. Echoing popular sentiments among Houston sports writers, Kirkland said, "I do think it's time to move along rapidly, to make sure a site is available to construct the stadium when we provide ourselves with money from the revenue bonds." The only remaining obstacle, according to Kirkland, was the decision of the Stock Show to swap its South Main holdings for other Harris County land.⁷⁰

As the talks for a possible baseball team continued among the major league owners, the park board announced its program for the new stadium. Chairman William Kirkland said that his group was thinking about a 35,000 to 40,000-seat stadium that could host both baseball and football games. Editors of the *Houston Chronicle* announced that this initial proposal was too small. "This isn't a big enough stadium for the nation's sixth largest city," the editors wrote. What they envisioned, instead, was at least a 50,000 seat stadium that allowed for enlargement if needed in the future. Houston would continue to grow almost without limit, the *Chronicle* continued. "In construction of its public structures, Houston has been plagued by small thinking. It has been our history that buildings are outgrown almost by the time they are finished." Houston could not afford to continually make these egregious blunders. "It is time for our planners to start thinking big," it added. These planners needed to think about the future of the city. This future, the article seemed to say, was limitless and boundless. Therefore, city planners needed to have a boundless vision of what the city and the stadium should be. And since South Texas was "football-minded," the larger the stadium,

⁶⁹ Nealon, et al., 23-25.

the more spectators could witness the event. Jeppesen Stadium, the high school stadium and the current home to the Oilers, had a capacity of 34,000, only 6,000 fewer than Kirkland's proposal. The 69,000-seat Rice Stadium was almost always filled to capacity for college football games. The stadium needed to signify the city's status as "one of the nation's major sports centers." A puny, undersized stadium would not do this. "It would be a sad mistake to build the stadium too small. A sad mistake, and a costly one" because the city would have to enlarge it after the construction was completed. Houston was now a major league city, the *Chronicle* concluded, it deserved "major league facilities."⁷¹

Almost on the heels of the recommendation of the *Chronicle*, Judge Elliott and members of the Commissioners Court, and park commission chairman Kirkland, jointly announced the plans for the proposed stadium on Saturday, 21 August 1960. Commending the "determination of Elliott and the Commissioners Court," Kirkland announced the commissions' satisfaction with everyone's tireless effort to make the stadium a "reality." The announcement culminated two years of work much of it "done behind the scenes" by the park board. The stadium plan called for the first of its kind in the world, "a unique, dome-covered multi-purpose sports stadium," on a 259-acre location on South Main. Construction on the "all-weather stadium with a plastic dome" was scheduled to begin in January 1961, require only twelve months to finish, and be ready for the 1962 baseball season. The city's future "show piece and tourist attraction" planned to seat 45,000 for baseball and 50,000 for football. Craig Cullinan announced the HSA's readiness to sign a thirty-year lease with the County, providing the stadium with its first tenant and revenue source. Cullinan hoped that

⁷⁰ "Big League Stadium Action Due Quickly," *Press*, 5 August 1960, p. 1; Rule, "Sidelights," *Press*, 5 August 1960, p. 10; "Stadium Estimate Is Below \$20 Million," *Post*, 5 August 1960, sec. 4, p. 1.

by signing the lease as quickly as possible, construction on the stadium would speed forward. Along these lines, the HSA offered a plan to generate equity and entice buyer interest in the revenue bonds by selling seat options to the public. According to Cullinan and the HSA, the announcement of the stadium plans was the final piece of the baseball puzzle. Since the major leagues endorsed its plans for expansion earlier that fall, the HSA was waiting for its Houston entry. The stadium promised to eliminate “the weather as a hazard to scheduling.” The stadium’s dimensions included the dome height of 230 feet, an outside diameter of 720-feet, and an interior diameter of 650-feet. The geodesic dome would be constructed of a translucent plastic that allowed sunlight into the stadium to grow grass. The remaining details to be ironed out in the next several months included legal, engineering, and financial matters. Once these questions were answered, the construction of the stadium could begin, hopefully in 1961.⁷²

Bud Adams assured that his Oiler team would be a tenant of the new stadium on one condition. “If the stadium is built so that there are 30,000 seats between the goal lines,” his Oilers would play its home games at the stadium. According to Adams, his organization had lost some fans that could not get a good seat at Jeppesen Stadium. “We already have found that football fans just won’t buy tickets unless they are good seats,” Adams said.⁷³ The financial questions that remained for Harris County depended on a constant “sufficient rental” to pay the interest and amortize the revenue bonds. Judge Elliott envisioned a cost of \$700,000 to \$800,000 to achieve this. The HSA promised to sign a lease with the county, perform maintenance on the structure, and sub-lease the stadium to others. Along with

⁷¹ “Let’s ‘Think Big’ On New Stadium Plans,” *Chronicle*, 9 August 1960, sec. 1, p. 15.

Adams's Oilers, the County could guarantee two lessees, but still desired the annual Stock Show as a tenant.⁷⁴ Stock Show president Masterson still planned on building its facilities at South Main too. Some Houston councilmen remained opposed to the stadium location and wanted a downtown auditorium. These opponents expressed their reluctance to spend millions of dollars to build roads and extend utilities to the future stadium. They argued that the money would be better spent in the downtown area.⁷⁵

Sports enthusiasts and stadium boosters argued that the stadium plans almost certainly assured Houston of a professional baseball franchise. The domed stadium "would be a showplace that would draw the curious and the sightseers from all over the country" in addition to the baseball fan. For the tourist, the all-weather stadium meant all travel plans would be a certainty, no matter what event was held under the dome. "Such plant would be a source of civic pride, unique and the largest such structure of its kind in the world," wrote Nealon. Houston Chamber of Commerce president Leon Jaworski predicted the stadium "will further establish Houston as the dominant city of the South."⁷⁶

Five City Councilmen endorsed (three opposed) the "revolutionary all-weather," dome-covered stadium plans. HSA and Harris County required the Council's approval, because of required road improvements and drainage. Preliminary reports set construction to begin in January 1962 and to be completed in one year in preparation for the 1963 season. If the city began road and drainage work, the proposed construction schedule was sure to be

⁷² Peebles. "\$15 Million Domed Stadium Planned," *Chronicle*, 21 August 1960, s. 1, pp. 1, 20; Nealon, "All-Weather Sports Stadium Planned for Site Off South Main," *Post*, 21 August 1960, sec. 1, pp. 1, 18.

⁷³ Nealon, "Post Time," *Post*, 5 August 1960, sec. 5, p. 2.

⁷⁴ "Financing Stadium Is No Problem," *Post*, 21 August 1960, sec. 1, pp. 1, 11.

⁷⁵ "Stock Show Chief Says Building Plans To Stand," *Post*, 23 August 1960, sec. 1, p. 10.

⁷⁶ Nealon, "Post Time," *Post*, 21 August 1960, sec. 5, p. 2.

met. The park board received an agreement from Hilton Hotel Corporation and R. E. Smith to solidify land holdings at South Main.⁷⁷

The editor of the *Houston Press*, George Carmack, told his readers that the city faced a “key play” in its young history. The stadium project, “a symbol of our becoming a big city,” required all of Houston and the Gulf Coast, from the mayor and Stock Show officials to the residents in North Houston, “to pull together” for a common cause that would benefit all. If Cutrer, city and county officials, and stock show leaders “hem and haw,” the “chance of a lifetime” and big league sports would most certainly bypass the city and keep it “stuck in the minors.”⁷⁸ The domed stadium signaled that the city necessarily deserved big league recognition. The stadium would demonstrate Houston's commitment to big league sports and “everything else, from championship prize fights to giant church gatherings and cultural offerings.” When completed, the stadium promised to make the “Weather Man” unnecessary. “When we do that here, watch every other city of the nation follow suit as fast as it can.” The stadium could even “help everyone in Houston—and its neighbors for many miles around—to enjoy life more.” The revenue bonds were tax exempt and potentially attracted more buyers than regular bonds backed by private funds. “It is a grand constructive program. It has private vision yet public prudence. It is worthy of the nation’s most spectacularly successful city.”⁷⁹

All supporters like Carmack had to do was point to the rapid, and dangerous, developments in Dallas-Fort Worth. To prove their intent on becoming big league, the Joint

⁷⁷ Untitled report of Harris County Board of Park Commissioners, undated, Minchew Collection 94-274/7, Pre-Construction Correspondence, Notes, Sketches, Printed Material, 1958-1961 File; Rule, “City Cooperation Assured For Quick Start of Stadium,” *Press*, 22 August 1960, p. 8.

⁷⁸ George Carmack, “And We’ll End Up Stuck in the Minors,” *Press*, 27 August 1960, p. 4.

⁷⁹ “Rain or Shine—Play Ball,” *Press*, 23 August 1960, p. 6.

Board of Park Commissioners of Dallas and Tarrant Counties had unveiled a design for their own domed, air-conditioned stadium. The 31,000-seat arena could be enlarged to 60,000 with the addition of a 150-foot dome. Arena architects averred that the entire stadium project would fall within the proposed \$9.5 million of revenue bonds by using “pre-cast concrete and lightweight materials.” Implementing these materials allowed architects to insert a “supper club” while eliminating obstructions from view. This “supper club” would permit spectators to dine while they watched the game. The architects, Broad and Nelson of Dallas and Preston M. Green of Ft. Worth, insisted that construction could be finished before the 1961 baseball season, with the domed roof and the air conditioning added later. Houston’s position was precarious at best, it appeared. Dallas and Fort Worth were willing to put their differences aside for the best interests of both cities. Did Houston want to languish as a third-rate city while Dallas and Fort Worth moved ahead?⁸⁰

Armed with this stadium plan, the HSA filed its NL entry application for the 1962 baseball season on 11 October. Although the application required six votes of approval, Giles remarked that Houston would be accepted.⁸¹ Even Del Webb was purported as saying, “Houston is number one in our plans.”⁸² At the Chicago meetings, Hofheinz presented the stadium design, parking facilities, highway accessibility, and financing to Giles. Giles then met with the owners to discuss if Houston was worthy of a franchise.⁸³ After presenting their case to the National League baseball owners, Hofheinz, Kirksey, and Cullinan retired to their hotel suite. After waiting for Milwaukee owner Lou Perini to arrive, the owners unanimously

⁸⁰ Roy Graham, “Dallas and Fort Worth Architects Propose Air-Conditioned Arena With ‘Supper Club,’” *SN*, 31 August 1960, p. 13.

⁸¹ Joe King, “N.L. Opening Door for Houston—Dallas Likely A.L. Addition,” *SN*, 19 October 1960, p. 4.

⁸² Nealon, “Ultra-Modern Stadium Called ‘Last Link’ in Houston’s Pitch for a Bid-Time Club,” *SN*, 31 August 1960, p. 13.

voted to award franchises to Houston and New York. Later that evening, the HSA representatives received a phone call from a sportswriter who said, "You're in." Immediately after that phone call, a representative of the NL called the suite to tell them that the commissioner Giles wanted to see them.⁸⁴ The next day, Giles made the formal, public announcement of the owners' decision to award franchises to Houston and New York. Speaking of the work the HSA achieved to that point, Giles said, "Personally, I think the Houston Sports Association has made the most progress than any other applicant in major league membership." Speaking for the entire NL, Giles continued, "We're glad to have Houston. We're satisfied."⁸⁵

On 18 October, the triumphant Hofheinz, Cullinan, and Kirksey boarded their airplane for the flight from Chicago to Houston. After flying through a storm, they landed at the airport and were met by a throng of jubilant Houstonians, including a marching band playing "Take Me Out to the Ball Game." Cullinan expressed his astonishment at the number of well-wishers who greeted he and his associates in the inclement weather. "I had no idea anyone would be here," he said, "This is wonderful." With a NL franchise in the hands of the HSA, the park board needed "to provide the stadium." Judge Elliott said, "With the plans we've seen, we're ready to push forward." Now that the HSA had received the baseball franchise, he continued, all doubts concerning a tenant for the stadium were erased. Judge Elliott said the major league franchise was "One of the greatest things that's happened to Harris County in a long, long time. This will have an impact on the economy of the area for 250 miles. Now the people of New Orleans and San Antonio will be coming here for week

⁸³ Nealon, "NL Votes Franchise For Houston; Start Play in '62," *Post*, 18 October 1960, sec. 1, p. 1, sec. 4, p.4.

⁸⁴ Nealon, "Post Time," *Post*, 18 October 1960, sec. 4, pp. 1, 4.

ends instead of the other way around.” The next step, all agreed, was to get the stadium ball rolling.⁸⁶

⁸⁵ Nealon, “NL Votes Franchise For Houston; Start Play in ’62,” *Post*, 18 October 1960, sec. 1, p. 1, sec. 4, p. 4; Ed Prell, “Senior Circuit Grabs New York and Houston,” *SN*, 26 October 1960, pp. 2, 6.

⁸⁶ Herskowitz, “Dixieland Band Will Greet City’s Heroes,” *Post*, 18 October 1960, sec. 4, pp. 1, 2; Hollis, “Cullinan and Co Get A Big League Hello,” *Post*, 19 October 1960, sec. 5, pp. 1, 5.

CHAPTER 4: MORE MONEY, MORE BONDS

After the Harris County park commission and the Houston Sports Association unveiled the design for the domed stadium, Houston's future seemed as bright as ever. The earlier skepticism that surrounded the stadium project ebbed at the beginning of 1961, but did not completely fade. Big league boosters and stadium supporters struggled to reestablish the feeling of ebullient optimism in Houston. These optimists, aided by the reality Houston finally becoming a big league metropolis, demonstrated that their city's future again seemed bright and unlimited. Porter Parris, vice president and chairman of the Shamrock Hilton, complimented those Houstonians who had recently brought the city notoriety and prestige: Bud Adams for his American Football League Oilers (champions in the inaugural season of play), the directors of the collegiate postseason football Bluebonnet Bowl, and the men of the HSA. Viewed previously as egotistical and selfish, these Houston businessmen were now considered heroes of the city who continued to fight for the best interests of the community. But the HSA and Harris County leaders could not rest on their laurels. Much work needed to be accomplished. The next "giant step" for the city, according to Parris, was the domed covered stadium that would be Houston's "second greatest asset," second to the Houston Ship Channel. Parris pointed to some economic facts he received from officials from the San Francisco Giants. The Giants, Parris reported, had added \$20 million to the Bay Area's economy in 1960. Parris predicted that Houston would "easily become the retail capital of the Southwest," thanks to the drawing power of the dome.¹

¹ Paul Hochuli, "Don't Underestimate Stadium; The Whole Area Stands to Gain," *Press*, 2 January 1961, p. 7.

Houston Press sports editor Bob Rule focused on a better future for Houston that would appear because of the domed stadium. “It will be a show place, a conversation place, a tourist attraction, a facility over which proud Houston will bust its proud buttons,” wrote Rule. “When it’s finished,” he predicted, “it will contain more innovations, more conveniences, more plush accommodations than any other sports facility ever erected on this earth.” The city that had landed the manned space center, proof of Houston’s lead in science and technology, would further demonstrate its lead in these areas with the construction of a revolutionary domed stadium. But Rule was not finished predicting what the stadium would bring, and do, to Houston. “And it will set off an era of sports never before dreamed of for the great Southwest,” he concluded, while “plac(ing) the stamp of big time on this city from now on.” Although Rule’s opinion could be attributed to typical sports reporter hyperbole, to dismiss it as just a sports opinion would be unwise. Rule’s opinion echoed the sentiments of Houston and Harris County residents in general. These Houstonians desired the same type of recognition that the newspapers sports editors and reporters wanted as well: big league status in sports and cultural events.²

Not everyone in Houston, of course, was going to be as electrified about the stadium as sports reporters, sports fans, and HSA members. “A noticeable lack of enthusiasm” emanated from City Hall, according to the editors of the *Houston Press*. This editorial blasted the City Council for delaying improvements of Holmes Road, an important artery near the stadium. The Council’s blatant indifference in upgrading Holmes Road seemed to be a concerted “slow-down” by City officials. Were these officials still upset that the stadium was going to be built at South Main and not downtown? The City Council said that it did not

² Bob Rule, “Sidelights,” *Press*, 10 January 1961, p. 8.

have enough money to work on the road. Public Works director Gene Maier defended the delay, pointing to the cost of this drainage work; money that the city just did not have for this project. The *Press* wondered why Maier refused to use the remaining \$6.4 million of bond money for sewer and drainage improvements. The importance of the stadium and its related projects necessitated immediate action in all relevant areas. It appeared, according to the *Press*, that this was just another example of a dissatisfied, disgruntled City Hall members who were putting their own individual self interest before the public's welfare. With the continual growth of the city, this area would eventually require the road and drainage improvements. By taking the initiative now, there would be no need for future, and possibly costlier, work. The editorial labeled stadium proponents as "most progressive, public-spirited and unbiased." Those who did not support the stadium, on the other hand, could be perceived as selfish and regressive.³

The Commissioners Court did not want any further delays to the stadium project. And yet, the members of the Court supported new legislation that would empower Harris County to issue "tax-supported stadium bonds without a public election." Judge Bill Elliott assured the public that the previous \$20 million of revenue bonds, which were to finance only the construction of the stadium, would "not be disturbed in the least" with this new financing plan. County Auditor S. B. Bruce warned the Judge and the Court that this action threatened the future sale of the earlier bonds. The Court dismissed Bruce's warning. They supported the new tax bonds because it guaranteed the future of the stadium. If the HSA failed to generate enough yearly revenue to retire the bonds, tax bonds protected the County from default and destruction of its credit rating. In addition to safeguarding the county, the

³ "No Stalling on the Stadium," *Press*, 6 January 1961, p. 4.

tax bonds carried a lower interest rate (3.7%) than the revenue bonds (6.0%), saving the county money. Judge Elliott said that switching from revenue to tax bonds, Harris County would save Harris County \$414,000 each year on \$18 million worth of bonds. Houston taxpayers, it was argued, would not be responsible to amortize the bonds through additional taxes, although Elliott confessed that the county would be obligated. The tax bonds would cover not only construction of the stadium, but also acquisition of land and other improvements needed to the South Main site. Even though the proposed bill had not been finished, Elliott wanted to stress the importance of it to his fellow Houstonians. The faster the bill was passed, the quicker the bonds could be sold and construction begun. This meant that the people would have a domed stadium in 1962. If the state legislature passed a special bill that allowed Harris County to do this, Elliott indicated that a contract with the HSA would be the next priority. The Court prepared to switch the mechanism without the approval of the public, based on an established precedent.⁴

The HSA's guarantee of annual rental payments protected county property owners from additional taxes. Along with maintaining, cleaning, and repairing the stadium, the HSA assumed the cost of the stadium throughout the life of the bonds. County auditor S. B. Bruce believed that the county could save at least \$15 million by switching the financing mechanism as articulated by Judge Elliott. Bruce warned that the HSA would have to pay its rent every July before the Harris County set its tax-rate. The other option required the HSA to pay at least part of its rent, guaranteeing the bonds. The funds had to be deposited in the

⁴ Rule, "Tax Bonds Will Save On Interest," *Press*, 10 January 1961, p. 1, 2; Verniaud, "Court Asks Tax Bonds On Stadium," *Post*, 11 January 1961, sec. 1, pp. 1, 5.

bank and available for county use, Bruce said, or the county would have to “levy a tax to cover them.”⁵

Although Elliott made a persuasive case, Harris County state legislators were not completely convinced. They met with Judge Elliott to explain their disapproval of Elliott’s plan. Instead of fiat, the legislators wanted the public to vote on the alterations because, in the words of Bob Baker, “we’re talking about millions of dollars, I think it best to let the people express their opinions.” Elliott protested. He feared this would only delay the opening of the stadium for the 1962 baseball season, a requirement by major league baseball officials. Elliott wanted the legislators to understand the gravity of the situation. The HSA had fought tooth and nail to win a franchise. While waiting for an election, he warned, MLB (major league baseball) might pull out of Houston and award a franchise elsewhere. Elliott refused to allow that to happen to his city. In a prepared statement, the HSA said it understood the County legislators’ reasoning, but planned on presenting them with the facts concerning urgent action.⁶ Representative Don Shipley desired the vote of taxpayers on the issue. “They approved revenue bonds, not general obligation bonds,” said Shipley. If the voters gave it their approval, then that would be fine with Shipley, but not until the taxpayers sanctioned the change.⁷

The main editorials from the *Chronicle* and the *Press* that explained the opinions of their respective editors came out in support of the financing alteration plan. According to the editors of the *Press*, “time is too short to wait on a stadium bond election.” The *Press* equated building the stadium to the development of the Ship Channel and Medical Center. “It

⁵ Verniaud, “Court Asks Tax Bonds On Stadium,” *Post*, 11 January 1961, sec. 1, pp. 1, 5; Stan Redding, “County Will Ask Tax Bond Funding For New Stadium,” *Chronicle*, 10 January 1961, sec. 1, pp. 1, 14.

is not only a great opportunity,” the editorial continued, but “by far our greatest single civic investment to date.” The *Chronicle* urged the alteration because it was “not too big a risk” and “no greater risk...than if the revenue bonds were issued.” The other new ball parks in San Francisco, New York, Washington, Kansas City, and Milwaukee, it continued, had been financed by the taxpayers in those cities. The Houston situation was different because the HSA was assuming the risk of bringing big league sports, renting the stadium, and maintaining it. “The benefits that would accrue to Houston by having a big league team and coliseum suitable for the largest conventions and expositions would be tremendous and would more than compensate for any contribution the county might be called upon to make toward paying off the bonds,” the *Chronicle* argued.⁸

Opposition to the tax bonds was as evident as the support. Leopold Meyer, influential member of the Stock Show, did not offer an enthusiastic response to the tax-backed bond scheme. Meyer, a supporter of Cutrer's downtown plan, promised that he and the members of the Fat Stock Show's building and grounds committee would meet to “reorganize our thinking” on their previous decision to locate future facilities at South Main. He and his fellow committee members, Meyer revealed, had been “reflecting on the wisdom of going out there on account of the relative value of the land and the cost factors involved—drainage, entry, exit, and all those things.” Stock Show officials planned to wait on the outcome of the new bond proposal before making a final decision. If the state legislature approved tax-backed bonds for the stadium, Meyer wondered if the Stock Show could get the same type of deal to construct its own, separate facilities, because “the cattle industry is more important

⁶ Carl Freund, “4 Solons Cool to Stadium Plan,” *Press*, 11 January 1961, pp. 1, 11.

⁷ “4 Solons Oppose Stadium Tax Bonds Without Vote,” *Chronicle*, 11 January 1961, sec. 1, pp. 1, 15.

than baseball and football.”⁹ Meyer’s response was not a reaction to the Commissioners Court for excluding the Stock Show in stadium design. According to Neill Masterson, neither he nor any other Stock Show official was upset at the Court for excluding their input about stadium designs.¹⁰

Some opponents feared that a lawsuit would eliminate the tax-backed bond plan. Judge Elliott said that he appreciated taxpayer concern, but affirmed the duty of public officials to realize “new economic benefits to Houston.” Elliott also mentioned the opposition by some individuals to the expansion of the Ship Channel and stressed that the new bonds would actually save the taxpayer money. Hofheinz wanted to emphasize that no new taxes would come from the new bond ploy. He also pointed out that the HSA thus far had spent the money to formulate a stadium plan and bring baseball to Houston. “The entire risk and entire burden of getting major league baseball to Houston will be borne by (the HSA),” said Hofheinz, a situation that was “not true in any other major league city.” Both Hofheinz and Elliot emphasized the need for immediate action. “If we’re to be in the big leagues in 1962, we’ve got to start moving dirt by the first of February,” said Hofheinz, “That’s exactly 19 days away.” Meyer promised that the Fat Stock Show would only build facilities, which it could afford.¹¹

The County Commissioners arranged a meeting with state legislators and members of the HSA to “iron out differences,” after “a wave of protests from citizens” and public opposition from four of the nine Houston legislators erupted.¹² Representative Henry C.

⁸ “Go Ahead With The Stadium,” *Press*, 12 January 1961, p. 6.

⁹ Harold Scarlett, “Fat Stock Show Site Up in Air,” *Post*, 12 January 1961, sec. 1, pp. 1, 16.

¹⁰ Blackburn, “Stock Show Not Angry Over Stadium, Says Masterson,” *Press*, 13 January 1961, pp. 1, 5.

¹¹ Harold Scarlett, “Fat Stock Show Site Up in Air,” *Post*, 12 January 1961, sec. 1, pp. 1, 16.

¹² “Leaders Hold Huddle Over Stadium Plan,” *Chronicle*, 14 January 1961, sec. 1, pp. 1, 8.

Grover, a proponent of voter approval, received a letter signed by ten angry Houstonians against changing the financing plan without voter consent.¹³ They met on 14 January to determine the immediate future of the tax-rate bonds and the start of stadium construction. The legislators said that their offices had been inundated with written and telephone appeals for the stadium but against the measure to switch funding mechanisms without voter approval.¹⁴

The meeting lasted from 11 am to 1:30 in the afternoon and had to be moved from the Commissioners Court chambers to the larger criminal district court because of the large number of citizens interested in the debate. Despite pleas from Judge Elliott and Roy Hofheinz, county legislators refused to take the issue to the Texas State Legislature by a vote of six-to-one. Legislators expressed a concern about removing the voice of the public in the financing phase of the stadium. They also rejected the idea of taking the issue to the state legislature because it would take too long to organize. Once the Commissioners assured the legislators that a “speedy” election could be legally established, the Court authorized a January 31 election date to vote on \$22 million in general obligation bonds. The Commissioners Court then met with county attorney Joe Resweber to instruct him how to word the election order to safeguard against a legal challenge. Resweber and an assistant then took three hours to perform the work that usually took weeks to complete. After the Saturday parley, county officials needed to print the necessary public notices that were to be posted throughout the county’s 266 precincts. As established by Texas law, these notices were required to be posted fifteen days before the election. The election contained two provisions.

¹³ “Mail Asks Vote On Stadium Tax,” *Chronicle*, 13 January 1961, sec. 1, pp. 1, 8.

¹⁴ Scarlett, “Vote is Favored On Stadium Bond Shift,” *Post*, 14 January 1961, sec. 1, pp. 1, 3.

The first was an \$18 million bond for the stadium itself; the second was for \$4 million for access roads and bridges. Even though the legislators rejected the plan, they asked voters to approve the new tax-backed bonds.¹⁵

Elliott warned that if the tax bonds went down in defeat, “There will be shouting in the streets of Dallas, because it would mean that Houston would lose its franchise.” Elliott announced that the stadium’s construction would cost much more than the \$20 million revenue bonds. Commissioner E. A. (Squatty) Lyons confirmed Elliott’s declaration, saying that in 1958 the stadium had four potential tenants: baseball, football, the University of Houston, and the Stock Show. On the eve of the meeting, however, the University and the Stock Show decided not to back their original consent.¹⁶ Without these valuable lessees, the HSA faced limited revenue and possibly an inability to pay its rent. Always the optimist, Hofheinz promised, whatever the outcome of the election, that “dirt’s going to be flying on the next day, February 1.”¹⁷

Only one legislator concurred with Elliott. J. Charles Whitfield did not think another vote was necessary for the tax-rate bonds. For Whitfield, the 1958 vote had already demonstrated voter approval. He said, “I interpret the vote of the people as wanting to get this thing accomplished, I don’t think the average man cares what type of bond is used.” Unfortunately, those in favor of immediate action were outnumbered in the Texas state legislature. Many of these legislators, in general, supported the stadium, but also affirmed

¹⁵ “Stadium Tax Bond Vote Called Jan. 31,” *Chronicle*, 11 January 1961, sec. 1, pp. 1, 5; Scarlett, “Stadium Bond Vote Ordered Here Jan 31,” *Post*, 15 January 1961, sec. 1, pp. 1, 4; Nealon, “Houston Voters Ballot on New Stadium Issue,” *SN*, 25 January 1961, p. 13.

¹⁶ “Stadium Tax Bond Vote Called Jan. 31,” *Chronicle*, 11 January 1961, sec. 1, pp. 1, 5.

¹⁷ Scarlett, “Stadium Bond Vote Ordered Here Jan 31,” *Post*, 15 January 1961, sec. 1, pp. 1, 4.

that the people should give approval of the different financing mechanism initiative, not the Harris County government.¹⁸

All five County Commissioners publicly lauded the County legislators' decision. Each professed a belief in the self determination of the voters and expressed confidence that the public would vote in the affirmative. Hofheinz was unusually cautious. Although he said he was "convinced the voters will vote for this," a two-week campaign to rally public support for the switch in financing mechanisms began in earnest. Hofheinz pledged that the HSA "won't leave any stone unturned" on the "opportunity of a lifetime" to get the stadium built. Houston voters "have everything to gain and nothing to lose," bawled Hofheinz, because the HSA guaranteed the payment of the bonds, including the interest every year. This would be about one million dollars of HSA money, and not a cent from the taxpayer.¹⁹

Not surprisingly, the Houston newspapers supported and defended the move by Elliott and the Court. It made sense to alter the financing mechanism and save everyone money. The switch, however, was more important than just a means to save hundreds of thousands of dollars for the taxpayers. It signified the decreasing optimism in Houston and even among stadium supporters. Elliott voiced his concern that the HSA just might be unable to generate enough revenue to uphold its end of the agreement. With two potential tenants already out, the HSA would have to work harder to find lessees. Elliott could hedge the County's bet through the use of tax bonds, just in case something went awry. Even though the members of the Commissioners Court like Judge Elliott vociferously endorsed the domed stadium, the skepticism in the Hofheinz's ability to pay the annual rent began to creep into

¹⁸ Scarlett, "Fat Stock Show Site Up in Air," *Post*, 12 January 1961, sec. 1, pp. 1, 16.

the actions of County officials. They began to reconsider their unquestioned faith in the project.

Unsure about the future of the bond issue, Judge Elliott formed a committee to stimulate public support. Elliott appointed Leon Jaworski (former Chamber of Commerce president and 8F Crowd protégé) and William A. Smith (president of the Greater Houston Bowl Association) to lead this ten-day campaign (or as some called it the “crusade” or “proposition for progress”) for the passage of the new bond measure. Both Jaworski and Smith affirmed that passage of the bonds was important for the future of the city. Jaworski and Smith called the stadium the “biggest bargain” in the city’s history. “What other cities” like Milwaukee and Baltimore “spend millions to subsidize, Houston will get without a penny’s cost to the taxpayer,” they added. Hofheinz denied any involvement in the creation of this “Citizen’s Committee,” which he boasted had spontaneously “formed itself.” At the Pasadena’s Taxpayers Association meeting, Judge Elliott spoke in favor of the tax bonds and asked for backing. Elliott equated stadium opponents to those who protested the purchases of Louisiana and Alaska and the construction of Houston’s Ship Channel.²⁰

After the parley, sports reporters from the Houston newspapers dutifully remained optimistic about the stadium. The January 31 election, Clark Nealon of the *Houston Post* wrote, would prove whether or not a majority of voters truly desired “a worldwide tourist attraction to house major league sports and events in all fields.” Anyone who votes against it, Nealon continued, was opposed not just to the future of major league sports, but a voice of

¹⁹ “‘Lifetime Opportunity,’ Former Mayor Says,” *Chronicle*, 15 January 1961, sec. 1, p. 5; “Big Campaign Backing Stadium Bonds to Begin,” *Press*, 16 January 1961, pp. 1, 2.

²⁰ Gene Wilburn, “Jaworski, Bill Smith Lead Stadium Drive,” *Press*, 17 January 1961, pp. 1, 2; “Leaders to Push Stadium Named,” *Chronicle*, 17 January 1961, s. 1, pp. 1, 4; “A Crusade for Houston,” *Press*, 18 January 1961, p. 14; Wilburn, “Stadium Plan Called ‘Big Bargain,’” *Press*, 18 January 1961, pp. 1, 9.

opposition to the very future of the city.²¹ The *Houston Chronicle's* Dick Peebles predicted dire consequences if the new bond issue failed. It would “set back sports in Houston at least 10 and probably 20 years,” he wrote, and solidify the city’s reputation as a “hick town.” The stadium stood to “provide an entertainment headquarters that would be a wonder of the world” and a economic “shot in the arm” for the entire community.²² Finally, Bob Rule of the *Houston Press* agreed with Peebles. The results of the new election, according to Rule, would “prove to a doubting United States that Houston really can build the world’s first domed stadium.” This “world showpiece” would differentiate Houston from other common cities across the globe. It would confirm that the people of Houston coveted “big league” status.²³

In a major victory for the new bond issue, Stock Show’s directors publicly affirmed their support for the new measure of financing the stadium. This reversed the previous warning from Leopold Meyer. Since one of the stipulations of the \$22 million tax-backed bonds was for access roads, Stock Show officials began to rethink their previous idea of building their own facilities, a measure that they admitted they could not afford. Stock Show officials indicated that if the County paid for the needed infrastructure, they would reconsider relocating to the South Main location.²⁴

Another victory for the tax bond effort involved the Houston Buffs. Even with the stadium’s future cloudy, the HSA clarified the baseball issue by buying outright the Houston Buffs and with it the Houston territory. The HSA planned on fielding a minor league team for 1961 while preparing for a 1962 major league debut. Thus, Houston’s “baseball war” had

²¹ Nealon, “Post Time,” *Post*, 15 January 1961, sec. 5, pp. 1, 2.

²² Peebles, “Ballots, Baskets and Challenge,” *Chronicle*, 16 January 1961, sec. 3, p. 1.

officially ended and the final obstacle was removed. Now “a united baseball front” materialized for the upcoming election, something the HSA hoped would reduce any potential question marks. Cullinan announced that both baseball groups “can all work together now to pass the bond issue and give Houston the finest stadium in the world.”²⁵

The same individuals and groups who backed the 1958 bond issue again lined up behind the new bond issue. The directors of the Chamber of Commerce implored voter approval citing both the economic benefits and the prestige the stadium promised to bring to the city. The Chamber’s president, P. H. Robinson said, “Without question it will be a great asset to the community,” that would prove a powerful magnet to attracting all types of events to the city. Park board president Kirkland called the tax-supported bonds “the biggest bargain in Houston’s history” (echoing statements of Smith and Jaworski) because the stadium would be built without raising county and city taxes.²⁶

Hofheinz asked Mayor Cutrer to include adjacent street extensions in the 1961 timetable of public works. Cutrer, however, refused to acquiesce to Hofheinz's demand. “The city will not go ahead with construction on any of these projects until financing of the bonds is approved,” said Cutrer. The mayor, as always looking out for the city, wanted bonds sold and construction begun before he authorized costly street extensions and drainage systems.²⁷ Hofheinz then paid a personal visit to the mayor’s office to ask that the city help defray some of the stadium costs. Instead of arguing with Hofheinz, Cutrer said that he would be willing

²³ Rule, “Sidelights,” *Press*, 16 January 1961, p. 16.

²⁴ “Stock Show OKs Bonds For Arena,” *Post*, 17 January 1961, sec. 1, pp. 1, 10.

²⁵ Nealon, “Baseball War Ends in Buff Sale to HSA,” *Post*, 18 January 1961, sec. 1, pp. 1, 10; Peebles, “Buffs’ Sale Clears Way for N.L. Team,” *Chronicle*, 18 January 1961, sec. 6, pp. 1, 2; Nealon, “N.L. Group in Houston Buys Buffs,” *SN*, 25 January 1961, p. 11.

²⁶ “Stadium Bonds Get Big Boost,” *Chronicle*, 18 January 1961, sec. 1, pp. 1, 11; “Stadium Is Backed by Houston CC,” *Post*, 18 January 1961, sec. 1, pp. 1, 10.

to spend no more than \$750,000 “to help out the stadium project” but not to help in the construction of the stadium itself. The Houston City Council, then, decided to make \$750,000 ready for the construction of access roads and extension of sewer lines. The city funds would widen Buffalo Speedway to the stadium site and extend it to the south to connect with the South Loop. Kirby Drive, the western boundary of the stadium, would be extended from South Braeswood Blvd. to Old Spanish Trail. Greenbriar Drive would be extended to the south and connect with Fannin Drive to form the stadium’s eastern boundary. These three street extensions were in accord with the city’s “master plan of future development.” The final access road would be built from Main to the stadium. City Planning Director Ralph Ellifrit explained to the council members that these designs were the “best” available for the city and the stadium site. It appeared that Cutrer was finally on board with the stadium.²⁸

Support for the \$22 million obligation bond issue continued to “snowball” as the election date neared. The Knights of Columbus, Houston Board of Realtors, and the Downtown Optimist Club, and the AFL-CIO all championed the proposal.²⁹ Prominent Houstonians also expressed their approval of the bond issue. State Representative and former county judge Bob Casey endorsed the bond issue from Washington, D.C. Casey wired, “It is perfectly plausible and sound business to shift to county bonds in order to get the lower interest rate.” W. N. Michels, secretary of Houston’s Property Owners Association, spoke for the opposition. “We don’t think a county should, in effect, subsidize a private corporation.”

²⁷ “Streets to Stadium Not in Program,” *Press*, 16 January 1961, p. 2.

²⁸ “City Votes \$750,000 For Stadium Streets,” *Post*, 19 January 1961, sec. 1, pp. 1, 5.

²⁹ “Sports Stadium Gains Support,” *Chronicle*, 20 January 1961, sec. 1, p. 1; “4 More Groups Backing Stadium,” *Chronicle*, 22 January 1961, sec. 1, pp. 1, 10; “Labor Endorses Stadium Bonds,” *Chronicle*, 26 January 1961, sec. 1, pp. 1, 2.

Michels pointed to the economic recession as proof that the county could not afford another bond issue. If city and county governments could not help the poor and infirm, how could the officials justify the funds for a stadium? “Amid our hardships, we taxpayers are asked to vote a \$22 million bond issue to provide a stadium for private interests to operate,” Michels said. If the stadium was such a good investment, he questioned, the HSA should not need county investment. Michels was confident that even if the bond issue passed, it would be eventually ruled unconstitutional by the courts.³⁰

Former stadium opponent and current city councilman Walter H. Jones announced his support for the bonds. “I wasn’t too happy with the location or with the plan to lease the stadium to a private group, but even so I think the people should go ahead and build it,” he said. Jones stopped endorsing a downtown location after conversations he had with Houston public works employees. These city workers told Jones that any infrastructure at South Main would eventually have to be completed in the near future anyway and that trying to buy land downtown would be nearly impossible. Jones preferred that the County remain the only owner of the stadium, not the HSA nor any other private firm.³¹

To counter arguments that the HSA stood to gain at the expense of Houston and Harris County, Kirksey reported that his organization stood to spend at least \$2.5 million of their own money. This included the aborted CL foray that had already cost the syndicate \$250,000 in 1959 and 1960.³² Cullinan revealed that the Braves had only paid \$25,000 to Milwaukee for the first year to rent the county stadium. Over the last few years, he continued, Milwaukee received about \$400,000 a year from the Braves. The Giants paid at

³⁰ “Tax Bonds Get Casey Approval,” *Post*, 23 January 1961, sec. 1, pp. 1, 4.

³¹ “Councilman Jones Favors Stadium Bonds,” *Chronicle*, 24 January 1961, sec. 3, p. 8.

least \$125,000 yearly for the \$15 million Candlestick Park. The HSA, on the other hand, guaranteed at least \$750,000 a year to lease the stadium. Using such a comparison, the rent that the HSA promised was not only greater than that paid by other baseball organizations, but the stadium was grander as well.³³

For F. M. Law, the domed stadium “will be so unique and so practical that sports writers in papers all over the country will come to see it and write it up in their sports pages” achieving “publicity money cannot buy.” A problem that opponents continually focused upon was the immediate cost of the facility to the immediate public. Law understood the concern for present expenses. But, he continued, “We must think not only in terms of 1962, but we must also think of what Houston and its needs will be in 10, 20, 50 years from now.” Law typified the optimistic thinking of stadium boosters. Individuals like Law asserted their hope and belief that Houston's future was without limits. It was easy to look at the current situation, according to Law, and react against the proposed change. But, he continued, an impulsive reaction would hurt the future of the city. If Houston continued to grow at its current pace, the city and its people would require a magnificent stadium. Law was arguing that the people not view the future myopically, which was dangerous. Houstonians needed to remain mindful and upbeat of their city's future.³⁴

Elliott attempted to dispel rumors that he would sign a contract with the HSA before the bonds were sold. Some individuals speculated that the county was simply giving the HSA a “blank check” to do with as they pleased. Elliott promised that he would do no such thing. The verbal agreement from the HSA, he said, was not enough to sell the bonds. Elliott did

³² “H. S. A.’s Cash Outlay \$2.5 Million—PLUS,” *Press*, 20 January 1961, pp. 1, 2.

³³ “How the H. S. A. Plans to Pay For Stadium,” *Press*, 19 January 1961, pp. 1, 2.

not want the county to be obligated to pay millions of dollars worth of bonds if the HSA lost its MLB franchise. The county would still hold considerable control over the stadium, but necessarily would give the HSA, as the renter, authority to schedule other events in the stadium, since the HSA was taking a huge risk to maintain and operate the facility. Therefore, in the words of the park board, the HSA “must be free to benefit from every possible source of revenue consistent with public policy.” But Harris County would retain “a healthy measure of control over sub-leases and the maximum rentals to be charged to other users of this County owned facility,” Elliott insisted. This was the best available financial plan for Harris County, he maintained, because tax money alone could not get the stadium funded, built, and operated. Only the HSA was willing to try this arrangement, and therefore, he said, it should be given every opportunity to succeed. In defending the HSA's nearly complete control of the stadium, Elliott argued that Harris County could not afford to build it. This seemed incongruous with his assertion that the stadium would pay for itself and the opinion that financially Harris County was growing and expanding. In justifying the HSA's control, Elliott said that Harris County actually faced economic hard times.³⁵

Editors of the *Press* wanted to remind stadium supporters to go vote for the bond issue. The *Press* also wanted to assuage fears that Houston voters would be saddled with millions of dollars of future expenses if the HSA failed to pay for any of the construction and the county did not make a profit. With the city's population at 1.25 million and the cost of the stadium at \$15 million, the worst-case scenario would see each Houstonian “taking on a debt of \$15,” hardly a “life or death financial matter.” On the other hand, the stadium would

³⁴ F. M. Law, “It Would Not Be Like Houston for Us to Fail...,” *Press*, 25 January 1961, p. 1.

immediately mean more jobs for the city, directly for construction and operation of the stadium and the franchise and indirectly to the service sector. The stadium also provided psychological strength to Houston, not just for the present but also for the city's future. The stadium, "a structure so unusual that it could symbolize the progressive spirit of Houston throughout the nation," would demonstrate the forward-thinking of all who resided in Harris County, a beacon of technological know-how and can-do attitude.³⁶

The opinion of the *Press* was joined by "an 11th-hour statement" from Jaworski who warned that a defeat of the bonds "would harm our community irreparably." Stadium opponents, he charged, could not deny that its construction would spur the city's "future growth and development." "The greatest challenge" to Houston since the Ship Channel would be a shining example of the individual "greatness" of Houston. Despite the "imperfections" in the stadium plan, Jaworski wanted each Houstonian to know that its benefits far outdistanced its flaws. Perfection, he said, was impossible to achieve. The proposed stadium plan was as reasonable as could ever be hoped. Jaworski's plea, instead of highlighting the optimistic attitude surrounding the stadium, hinted that some of the skepticism of the stadium was true.³⁷

As the election date neared, "a small but active group of citizens...the Citizens Committee Against Stadium Tax Bonds" hastened its own campaign. Walter T. Keith, Jr. charged that the County officials had conspired with the HSA to give that private company

³⁵ Undated report of the Harris County Park Board Commissioners (8/26/60), Minchew Collection 94-274/7, Pre-Construction Correspondence, Notes, Sketches, Printed Materials, 1958-1961 File; "Elliott Vows No Call for Bond Bids Until Contract Is Settled," *Press*, 28 January 1961, p. 1, 5.

³⁶ "It Would Not Be Like Houston for Us to Fail," *Press*, 30 January 1961, p. 1.

³⁷ "Jaworski Calls Vote 'Greatest Challenge,'" *Press*, 30 January 1961, pp. 1, 5.

the first chance to be the stadium's chief tenant.³⁸ Other opponents began expressing their opinions in the form of editorials to the Houston newspapers. Thomas J. Morris wondered why the HSA was not privately financing the stadium, since boosters claimed it was "such a good money maker." Morris also questioned the real reason why the bonds were being changed from revenue to tax bonds." Could it be that no one wanted to buy the revenue bonds?," speculated Morris. Morris also said that the stadium was not safe for two specific reasons. He disapproved of the plastic roof, arguing that it would not withstand Houston's weather. Morris also questioned the artificial environment under the domed roof. If the smoke, humidity, or heat did not threaten a spectator, then it would be the stadium's air-conditioning system.³⁹

Much of the opposition questioned the need for tax bonds in lieu of revenue bonds. J. P. Rembert doubted whether the new mechanism saved money. The HSA, he argued, either could not find any buyers for the revenue bonds or realized that they could not afford the stadium. For tax bond opponents like Rembert, the millionaires of the HSA needed to assume more financial responsibility than the tax paying public. If the HSA defaulted, these individuals asserted, the average Houstonian would be footing the bill for the stadium.⁴⁰ Others just vented against a project they felt was unsound and unnecessary. Lee D. Parkinson asked, "Why the last minute rush to brainwash the taxpayers?" Parkinson worried that the stadium would not prove such a "lucrative venture" as its proponents boasted. "If this is such a lucrative venture, why is it not built with improvement funds?" Parkinson queried. Parkinson also questioned the idea of using plastic in the roof. "The plastic I have seen sure

³⁸ "Stadium Bond Opponents More Active," *Chronicle*, 28 January 1961, sec. 1, pp. 1, 10.

³⁹ Thomas J. Morris, "No New Business Seen From Stadium," *Press*, 29 January 1961, p. 12.

doesn't improve with age," Parkinson affirmed. Why the need for a climate controlled stadium, he continued, "Are the people getting too much fresh air and sunshine?" Any way Parkinson and others viewed it, the stadium was a bad investment for the people of Houston.⁴¹

George W. Eddy denounced the stadium, the tax-bond issue, and the HSA in his 21 January editorial to the *Post*. According to Eddy, the upcoming election was the most "shameful" event he had witnessed in Houston since he arrived in 1927. The HSA, he continued, would be the only winners in the election. For Eddy, the HSA represented the businessman of the times, "all profit and no risk." In Eddy's opinion, the HSA should be responsible for building the stadium, not the county. It was nonsensical, Eddy argued, for Harris County to own the stadium, because it would be unable to generate revenue from a property tax on the land. He also declared, "A pox on the newspapers for supporting this scheme."⁴² Phillip M. Blair asked why the HSA and county officials wanted the earliest election date possible. "What's the hurry?," he queried, "Are they afraid that if they give us a little more time we'll start thinking of all of the roads and schools that this money would buy...?" The actions, not only of the HSA, but county officials seemed suspect to these doubters. These individuals questioned the use of public funds for a building that did not, and would not, improve the lives of the people. These individuals argued against the optimistic future of Houston. For them, there was a finite amount of public money available for the

⁴⁰ "Sound-Off," *Post*, 21 January 1961, sec. 2, p. 3; J. P. Rembert, "Why the Change From Revenue to Tax Bonds?," *Press*, 30 January 1961, p. 12.

⁴¹ Lee D. Parkinson, "Let Investors in Ball Club Build Stadium—It's Their Project," *Press*, 26 January 1961, p. 10.

⁴² "Sound-Off," *Post*, 21 January 1961, sec. 2, p. 3.

various needs of Houston. Public money, they argued, should be spent on tangible needs like roads, schools, and hospitals not some frivolous and spurious stadium.⁴³

Other individuals began their own campaign to defeat the new bond issue. In her editorial to the *Post*, Mrs. David W. Meyerson wrote that she and people like her had voted for the bonds in 1958 for a general improvement to the county's recreational and park facilities. Harris County, she opined, should construct new public swimming pools and fund new programs for the elderly, instead of ingratiating wealthy "businessmen who are seeking to use \$22 Million (sic) of county funds to construct a fantastically expensive, air conditioned baseball and football stadium to be used for their personal profit." Harris County, she continued, should not use public money to finance the wants of a private group. She wanted the HSA to build its own stadium, with its own money. Edward J. Walichowski saw the HSA and tax-bond boosters involved in a "tax grab." The county, he added, should share in the profits of the HSA if it was going "to shoulder all risks." These people wondered why and how public money could be justified to build a stadium that would be leased by a private firm. In reality, the county remained the owner of the stadium, but sacrificed some of its authority to the HSA.⁴⁴

Four organized groups opposed the stadium (as compared to nearly four dozen in favor). The leaders of Citizens' Committee Against Stadium Tax Bonds, the Pasadena Taxpayers Association, the Constitution Party of Harris County, and the Houston Property Owners Association, Incorporated were determined to let their opinions be heard before the election. Walter T. Keith, chairman of the Citizens' Committee, accused the HSA and county

⁴³ *Ibid.*

⁴⁴ "Sound-Off," *Post*, 20 January 1961, sec. 2, p. 5.

officials of conspiring to thwart the Texas Constitution. According to Keith the constitution read that “No city, county or municipality will contract donate or extend credit to any private enterprise.” In Keith’s opinion, Harris County “is giving the (HSA) priority on the stadium as a tenant” that, in effect, made the HSA the sole owner of the stadium. Dr. Robert Q. Holland, chairman of the Constitution Party, added, “Since private enterprise would have full control of the facilities, it is evident that private capital should finance the revenue bonds for the stadium’s construction.” Former Houston city councilman W. Gail Reeves opined, “Our present county bond debt is 466,235,000 and \$6,800,00 will have to be spent this year on retiring that debt.” “We are already at the ceiling of bond that tax revenues can justify,” Reeves continued, “Even if we increase our county debt by one-third there are many challenging needs that would have to be turned down.”⁴⁵ Houston Property Owners’ (HPO) president Paul C. Roemer charged that the Commissioners Court had “violated their public trust in attempting to saddle the taxpayers with a \$22 million tax bond issue to finance a private enterprise.” The HSA “persuaded our county bosses” to vote for “their pocketbooks and not their conscience.”⁴⁶ HPO secretary W. N. Michels objected to the perceived “steamroll(ing)” of the bond issue and the perceived public underwriting of a private firm.⁴⁷ Charles R. Evans, Jr., the president of the Pasadena group, invited members of the Commissioners Court and the HSA to a radio debate on the election’s eve. Judge Elliott declined the invitation, citing a hectic schedule, and saying, “I discussed all the aspects of the

⁴⁵ “Battle Lines Drawn As Stadium Debate Grows,” *Post*, 28 January 1961, sec. 1, p. 1, 3.

⁴⁶ “‘Trust Violated,’ Says Property Owners Assn.,” *Chronicle*, 29 January 1961, sec. 1, p. 20.

⁴⁷ “Some Oppose Stadium Issue,” *Chronicle*, 29 January 1961, sec. 1, p. 20.

stadium with Evans' group last week." With one opposition group taking to the radio, Reeves went on the television expounding his views.⁴⁸

The *Post* dutifully printed the "facts and figures" of the domed stadium, "a structure unique in sports" and "the only one of its kind in the World." This was not just another bond issue for all of Houston the paper suggested. The vote was not for more sewer lines, an extension of a county road, or even a new hospital. Such projects would be important to the metro area, but the stakes of the January 31 outcome were much greater and farther reaching.⁴⁹ The stadium, the paper asserted, meant "prestige and profits" to Houston. The location was selected for two reasons. The first was that it was the largest, undeveloped area near downtown Houston. Second, only two groups owned the land, Hilton Corporation and R. E. Smith, which simplified and speeded up negotiations. The County paid about \$10,000-an-acre for the land or \$3 million, a fair price, according to two respected Houston realtors. Problems with the drainage of the land, a reason why it was undeveloped, would be solved by building a large storm sewer on the northeast corner of the site that connected to the city's 120-inch sewer pipe at the intersection of Fannin and OST. An additional sewer ditch, located at the southern edge of the site, would reduce the effect of the land's natural slope to the north.⁵⁰

The *Post* affirmed its position, declaring that the stadium would be a monument to the dynamic, growing region" of Houston and also be a testament "to the vision of its leaders as to its resources." The stadium, it continued, would serve Houston in much the same way as the Ship Channel had already done. The city had financed the construction and expansion of

⁴⁸ Freeland, "Stadium Debate Is Proposed," *Post*, 29 January 1961, sec. 1, pp. 1, 7.

⁴⁹ "Stadium Facts and Figures Show What Makes It Unique," *Post*, 21 January 1961, sec. 4, p. 2.

the channel, thus supporting the growth and prestige of Houston. The stadium would have the same positive effect as the Ship Channel. Even if the HSA could not generate the revenue to amortize the interest, the bond issue was a worthy risk for the city, the *Post* insisted. "As the nation's seventh city, as a key city in relations with Latin-America and as a forward-looking metropolis aspiring to events of world-wide significance, Houston needs a 'house' to exemplify leadership, to attract interest and to keep pace with its ever-expanding role." "The 'big league' label means something to Houston. Apart from sports, the rank of Number 7 in the country, and the obvious growth toward higher status, can be exemplified in this undertaking. The citizens of Houston and Harris County can spotlight themselves again as 'do-ers,' not talkers." The *Post* warned that the defeat of the bond issue would mean disaster for Houston. The city, it warned, would be stuck with the negative label of backward, not forward, looking. Its citizens would prove that they were unwilling to provide for future expansion of city facilities, causing future companies to avoid Houston.⁵¹

HSA vice president and general manager Gabe Paul professed that big league cities attracted more industry. "Industry leans to cities with major league baseball because it provides the type of clean, healthy recreation they like to have their employees enjoy, and it also makes it easier to attract new personnel," according to Paul. Kirksey affirmed that Houston was now "the envy of the South" because of its baseball franchise. "We must complete the job and provide a stadium which will make Houston a household word because of its major league team and the world's first air-conditioned and domed stadium."⁵²

⁵⁰ Scarlett, "Do You Have A Question On Stadium?," *Post*, 22 January 1961, sec. 1, pp. 1, 15.

⁵¹ "Houston, Harris Will Benefit By Stadium Bond Issue Approval," *Post*, 24 January 1961, sec. 3, p. 2.

⁵² "132 Club Women Join in Drive For Approval of County Stadium Bonds," *Post*, 25 January 1961, sec. 1, pp. 1, 3.

At a public rally, Hermon Lloyd of Lloyd and Morgan (one of the architectural firms that was in line to win a stadium contract), said the stadium “will be by far the largest thing of its kind that has ever been tried.” He assured those in attendance at the Rice Hotel and those watching the television broadcasts, “We know it can be built. We have engaged the best engineering firms all over the world.” Hofheinz opened the public rally in typical Hofheinz hyperbole. “This stadium takes its place alongside the Eiffel Tower and the great wonders of the world in construction,” he declared.⁵³

To illustrate the benefits such a facility as the stadium might bring, the *Post* pointed to the 187-acre Texas State Fairgrounds, located two miles from downtown Dallas. The fairgrounds incorporated the Cotton Bowl stadium with several air-conditioned auditoriums and buildings. These facilities were used throughout the year, not solely for the sixteen days of the state fair in October or sports events inside the Cotton Bowl in the fall and winter. The attendance for the state fair had never dipped below the two million mark since 1949. The point of the article was to emphasize that visitors from across Texas and the South traveled to Dallas for dozens of events each year. Economic benefits and civic pride were just two benefits for Dallas. Dallas owned the land but leased it to the Fair Association every year. This covenant eliminated the burden on the taxpayers, because of the ability to lease the facilities for various events.⁵⁴

Before the election, Mayor Cutrer interviewed the mayors of five other big league cities to learn how these men responded to the various demands of big league baseball teams. Cutrer telephoned Baltimore mayor J. Harold Grady, George Christopher from San

⁵³ Doug Freeland, “New Stadium Adventure In Design, Planner Says,” *Post*, 27 January 1961, sec. 1, pp. 1, 9.

Francisco, Norris Poulson of Los Angeles, Milwaukee's Henry W. Maier, H. Roe Bartle of Kansas City, and Raymond Tucker from St. Louis. Cutrer learned that each city had "spent considerably less than what is contemplated here." Baltimore had voted for a \$2.5 million bond issue in 1947 to expand Memorial Stadium. The city owned the stadium and leased it to the Colts and Orioles. The cost of renting the stadium offset operating expenses but not the "sinking fund and interest cost of the bond debt." This meant that the city of Baltimore was forced to cover the remaining annual cost of the stadium. The situation in Los Angeles was different than the others. O'Malley financed Dodger Stadium himself, but the city and Orange County contributed \$3 million and \$4 million, respectively, for the roads and utilities. In San Francisco, a private company, created by California state law, issued revenue bonds for \$11 million. Candlestick Park, located about five miles from downtown San Francisco, could be used for both baseball and football. Cutrer revealed that original designs for Candlestick had contemplated adding an aluminum roof. The prospect of increased construction costs and potential public disapproval of a covered stadium on the bay ultimately led builders to keep Candlestick an open-air ballpark. In Milwaukee, the Milwaukee Park Commission had issued \$7,741,000 of ten-year obligation bonds. County Stadium required additional seating expansion after its completion in 1954. In Kansas City, the revenue from the stadium could not amortize the bond debt. Kansas Citians voted for an additional \$5 million in obligation bonds to remain a big league city. St. Louis was currently constructing a privately financed sports and convention center in the downtown area. The total cost of the complex was estimated at \$80 million, \$5 million of which had been voted

⁵⁴ Larry Grove, "Numerous Benefits Are Derived From Dallas' State Fairgrounds," *Post*, 29 January 1961, sec. 1, pp. 1, 7; "Stadium Bond Approval Means Big Stride Forward for County," *Post*, 30 January 1961, sec. 2, p.

by the public for street improvements. Each of the mayors told Cutrer that big league baseball was a tremendous financial asset to their cities. Cutrer, on the other hand, refused to make his personal opinion of the bonds and the stadium known before the election. He did promise complete cooperation if the voters approved of the measure.⁵⁵

On the eve of the election, one fact was certain among the many charges, counter-charges, innuendo, and hyperbole. Harris County did not have a written contract with the HSA, but “only an understanding between men of integrity that the HSA will guarantee the cost of amortizing the bonds in accordance with the County request.” At the very worst, if the HSA failed to make its lease payment, then the County would need to assume stadium operation. The Commissioners discussed this possibility and confirmed that if this occurred, some county services would be reduced, but none eliminated, and no new taxes would need to be imposed. The other concern among voters centered around the leasing of the stadium to the HSA. The Commissioners again conceded that they were granting power to a private business venture. But, they said, the HSA would take the responsibility to sub-lease the stadium to other groups and to maintain the building. The County was more than willing to allow the HSA to perform the scheduling and maintenance duties, a headache Harris County did not need.⁵⁶

County Clerk R. E. Turrentine, Jr. predicted a light voter turnout for the election. “I see a very light vote of 10,000 to 15,000,” he said, and doubted whether more than 20,000 Houstonians would vote.⁵⁷ On Tuesday, 31 January 1961, over 116,000 county voters went to the polls to determine the fate of the tax-bond issue and the domed stadium. After the vote,

6.

⁵⁵ “Mayor Shuns Stand On Bonds, Cites Data,” *Chronicle*, 29 January 1961, sec. 1, pp. 1, 5; Tygiel, 165-187.

legislators planned to cancel the previous \$20 million revenue bonds. Legislators also intended to validate the election results, in an effort to make the bonds “more attractive” to buyers. Generally, the issue received its greatest support from precincts to the west and south of Harris County, areas that stood to gain the most impact from the stadium's construction. Opponents to the bond came from the north and eastern sections where the vote either rejected the bonds issue outright or gave it a narrow margin of victory. These areas would not experience a financial boom of the stadium.⁵⁸

Members of the HSA gathered at the association headquarters at 6:45 that night for a party, win or lose. The mood was reported as “tense and subdued,” when they began to arrive. As results from various precincts were announced over the radio, the mood became worse. Hofheinz sat over a map of Houston, pencil in one hand, transistor radio in the other, awaiting the results. The vote was too close for comfort. By 9:30, however, the number of “for” votes finally outnumbered those “against.” “Frowns had turned to cautious smiles,” once it appeared that the HSA won another contest. Tense, idle talk filled the room as some men tried to quell their fears and those of their friends. Gabe Paul said, “Kirksey tells me that Texas got into the Union by a margin of one vote.” “Indiana,” replied Kirksey. Cullinan was told that he and the HSA would win because they had “the right cause.” A jittery Cullinan retorted, “If the right cause won all the wars, the world wouldn't be in the shape it's in.” By 10:15, the victory was assured and the group brought out the champagne.⁵⁹ R.E. Smith

⁵⁶ Nealon, “Post Time,” *Post*, 29 January 1961, sec. 4, p. 1.

⁵⁷ “Light Turnout For Stadium Vote Foreseen,” *Chronicle*, 30 January 1961, sec. 1, pp. 1, 7.

⁵⁸ Scarlett, “Bonds for Stadium Win in Record Vote,” *Post*, 1 February 1961, sec. 1, pp. 1, 8.

⁵⁹ Herskowitz, “Victory Party Staged by HSA,” *Post*, 1 February 1961, sec. 4, pp. 1, 2.

declared, "Members of the Houston Sports Association accept the vote as a public trust. We'll do just what we said we would."⁶⁰

Hofheinz guaranteed, "Dirt will fly on South Main immediately." However, some of the opposition hinted at filing a lawsuit to challenge the legality of the funding mechanism. Leon Weinberg, a Houston attorney, argued that the financing plan was unconstitutional. Former Councilman Reeves, disappointed with the results, said, "It's hard to stop a panzer division with a cap pistol, but we tried." Reeves said that the results proved the old adage that money wins elections, "It's hard to fight dollars with sense." Walter Keith lamented the results, but did not plan on a legal challenge. Keith, instead, blasted the county's decision to have the election as quickly as it could. "Obviously a 17-day notice of the election provided a completely uninformed and misinformed electorate to go to the polls," he said. Keith, though, still wished the HSA his "best" and hoped that they could provide the city what they promised.⁶¹

On Thursday, February 2nd, excavation for the stadium began as "[A] huge dragline ripped dirt from a 300-acre site off S. Main." [The groundbreaking ceremony was for a temporary structure to drain the hole once it was dug.] After construction firm John Kraak, Inc. started its excavation, an immediate problem became apparent. Water continually seeped into the hole. The installation of pumping machines kept water from completely filling the crater. Later that summer, Kraak buried a drainage system, five to twenty feet below the playing surface, to remove sixty-eight gallons per minute. Since the playing surface was thirty feet below ground level, the drainage system reached fifty feet underground. The HSA

⁶⁰ Nealon, "Post Time," *Post*, 2 February 1961, sec. 4, p. 1.

⁶¹ Scarlett, "Bonds for Stadium Win in Record Vote," *Post*, 1 February 1961, sec. 1, pp. 1, 8.

started the excavation work without a formal contract with the County, in its desire to have the structure ready for the start of the 1962 baseball season. This meant that the work was being financed completely by the HSA. Gabe Paul, general manager of the HSA's baseball team, said the HSA would finance construction until an agreement was reached. "This is one of those times when you have to gamble," he said. The 260,000 cubic yards of dirt required to reach the proposed level of the playing field (twenty-five feet below ground level) at least ninety days of digging.⁶²

An additional result of the election concerned the Stock Show. With its future location still in limbo, Stock Show building committee member Ralph A. Johnson said that his group could revisit a South Main location. With stadium construction moving forward, other infrastructure around the stadium would be built. This included access roads and utilities into the land owned by the Stock Show. Johnson said that this activity "could help get our building program moving" at South Main. Even though a small strip of land separated the stadium site and the Stock Show land, both parties could use the same parking facilities.⁶³

Two days after the election, Hofheinz met with county officials Judge Elliott, auditor S. B. Bruce, and attorney Resweber to begin contract negotiations. The HSA had already arranged to start excavating 260,000 cubic yards of earth on 4 February. The HSA authorized the excavation work only after receiving the consent of the landowners, Hilton Hotels, Inc.⁶⁴ Bruce said that the county would have to create a "prospectus" for the potential bond buyers. Then the bonds would have to be advertised to the public before any bids would be accepted.

⁶² "Stadium Construction Will Start Within Few Days," *Post*, 1 February 1961, sec. 4, p. 1; "Dragline Rips Into S. Main Stadium Site," *Chronicle*, 2 February 1961, sec. 1, pp. 1, 2; "Corrosion Control at Houston's Domed Stadium," *Materials Protection*, 3 (November 1964): 64.

⁶³ "Bond Win May Spur Stock Show Action," *Post*, 2 February 1961, sec. 3, p. 1.

⁶⁴ Verniaud, "Stadium Problems Gather Momentum," *Post*, 8 February 1961, sec. 1, pp. 1, 9.

Once the bonds were sold, signed, and delivered, county funds would become available for construction of the stadium. This meant that the HSA would finance at least two months of work before the county money arrived. Judge Elliott confirmed that Harris County officials planned to support validation of the bonds in the legislature, a measure that would reduce any future legal entanglements. Any lawsuits could threaten the potential sale of the bonds and would delay construction.⁶⁵

While excavation at South Main and contract negotiations got underway, the legal threat became a reality. Ned Gill, a Houston printing executive, filed to contest on Thursday, 2 February, seven hours after the dirt began to fly. According to the petition, Gill claimed that Harris County did not have the constitutional authority to issue the obligation bonds. Additionally, according to Gill, the county did not have power to generate a tax to purchase or improve land without two-thirds approval from the voters. Gill claimed his lawsuit was “an amicable action,” “a friendly clearing of the air” on the constitutionality of the election. With the results so close, Gill continued, “a degree of opposition that is disturbing” was obvious. A lawsuit would determine the legality of the county’s actions and assuage the fears that the measure had been ramrodded through the system. He also said that he wanted a united community behind the stadium and the only way to generate united support was to answer, legally, all the questions had been were generated before the election. Gill’s lawsuit meant that construction would be interrupted until the case made its way through the courts, and maybe even the United States Supreme Court. County attorney Resweber disagreed, “We

⁶⁵ Verniaud, “Timetable Is Drawn On Stadium,” *Post*, 2 February 1961, sec. 1, pp. 1, 6.

think the bonds were voted at a legal election, and that the bonds can be sold.” According to Judge Elliott, Gill’s lawsuit was not “friendly.”⁶⁶

Judge Elliott hoped to hammer out a contract with the HSA within two weeks of the election date, but was unable to achieve his goal. With only one meeting between the County and the HSA taking place, it looked as if negotiations would be dragged out through the spring. Elliott speculated that the contract would involve clarifying profit sharing between the two sides. Elliott wanted the county to reap some percentage of the gross profits of the HSA, but admitted that the figure would have to be determined in negotiations. [Validation bills went through the Texas House and Senate without difficulty.]⁶⁷

Herman Lloyd delivered some bad news on the heels of Gill’s lawsuit. According to Lloyd, the stadium could cost at least \$1.5 million more than the original \$15 million estimate. “I can’t guarantee it won’t go to \$16.5 million or even higher,” Lloyd said. If the costs rose above \$15 million, Lloyd promised “we’ll have to cut down on some things.” The \$15 million overall estimate had been based on a careful study but Lloyd could not guarantee that any of the bids would be lower than the estimate. The original estimate, he said, had not been a conservative one. If the lowest bid proved to be higher than the estimate, Lloyd said that there would be certain reductions in the stadium, but not the dome. “The people voted \$15 million for the stadium plant to include the dome and air-conditioning,” said Lloyd, and “under no circumstances that I could think of would these two features be eliminated if costs turned out to be higher than normal.” Other amenities would get cut first, Lloyd insisted; a

⁶⁶ “Suit Filed Challenging Legality Of Tax Bonds for Sports Stadium,” *Chronicle*, 6 February 1961, sec. 1, p. 1; “Stadium Election Contested,” *Post*, 3 February 1961, sec. 1, pp. 1, 8.

⁶⁷ “Stadium’s Contract Is Stalled,” *Post*, 7 February 1961, sec. 1, pp. 1, 6; “Stadium Cost May Exceed Estimate by \$1.5 Million,” *Chronicle*, 8 February 1961, sec. 1, pp. 1, 4; Verniaud, “Dome Will Stay, 3 on Court Say,” *Post*, 9 February 1961, sec. 1, pp. 1, 10.

stadium without a dome would never considered. He made this statement despite mentioning the estimated cost of the plastic dome. Early calculations of the roof's cost were between \$2 and \$3 million said Lloyd. He based this figure on smaller domes constructed for auditoriums in Pittsburgh and Baton Rouge. Judge Elliott and commissioners Kyle Chapman and Lyons also promised that a stadium with a dome and air conditioning would be constructed. In fact, they said that if the cost exceeded the estimate, they would rather kill the stadium altogether, rather than authorize the building of an inferior structure. The public, they all agreed, had voted for a domed stadium and that was exactly what the Commissioners were going to ensure got built. Elliott said that he and the county "have to live with that \$15 million figure." The County had put its faith in the expertise of the architects and engineers in 1958, when the estimate was set at \$15 million. What about the \$20 million revenue bonds from 1958? These bonds, said Elliott, were to be invalidated when the obligation bonds were validated. Elliott, Chapman, and Lyons refused to create another revenue bond initiative if the bids for construction exceeded the \$15 million of bonds.⁶⁸

The Commissioners Court certified the results of the election as proposition one, the \$18 million park bond issue, passed with a 7,441 majority of 115,695 votes. Proposition two, \$4 million for off-site improvements, passed with a majority of 15,465 of 111,949 votes.⁶⁹ After the certification, the HSA went back to work. They hoped that by moving forward as quickly as possible, their construction schedule would get back on track so the stadium would be finished by the end of the year, and ready for baseball in 1962. By mid-February, the company hired by the HSA to drain the land had completed its job. The next issue was

⁶⁸ "Stadium's Contract Is Stalled," *Post*, 7 February 1961, sec. 1, pp. 1, 6; "Stadium Cost May Exceed Estimate by \$1.5 Million," *Chronicle*, 8 February 1961, sec. 1, p. 1, 4; Verniaud, "Dome Will Stay, 3 on Court Say,"

closing bids for the translucent dome. The Commissioners Court, however, informed the HSA to halt all construction activity. Commissioner Phil Sayers said that the HSA was moving ahead “too fast,” assigning work without County funds or input. Commissioner Kyle Ramsey added, “It’s our project and we’re going to build it.” His colleague Chapman concurred. “This is a Harris County project and that Harris County is going to let all bids and supervise the construction,” Chapman said. Ramsey wanted the HSA to realize that the County did not have to compensate the syndicate for any work already completed. If Gill won the lawsuit, Harris County would not reimburse the HSA one cent. The county could not let out bids for this work, according to the Commissioners Court, until the litigation ended and the county approved the stadium “plans and specifications.”⁷⁰

On Monday, 6 March, District Judge Max Rogers upheld the legality of the January 31 election. Rogers ruled on two of Gill’s three issues: voter notification time and voter approval. Rogers’ decision ruled that the notice given two weeks before was sufficient, and that a simple majority was all that was required for approval. First, according to Rogers, the number of votes cast (over 115,000) proved that there had been ample amount of time to notify the public. “The size of the vote on this election is ample evidence that the people of Harris County were intensely interested in the election,” he opined. Second, concerning the need for a simple majority, Rogers said he “would not feel that this court, or any other, would feel justified in striking it down.” Despite losing the lawsuit, Gill promised an appeal. “I think the judge erred, and we’re going to appeal, that’s all there is to it,” Gill declared. Elliott

Post, 9 February 1961, sec. 1, pp. 1, 10.

⁶⁹ “Stadium Election Contested,” *Post*, 3 February 1961, sec. 1, pp. 1, 8.

⁷⁰ “County Halts Work on Stadium,” *Chronicle*, 17 February 1961, sec. 1, pp. 1, 16; “County Says Stadium Must Await Funds,” *Post*, 18 February 1961, sec. 1, p. 1.

remarked, "I think it is somewhat sad that some people want to treat a thing like this as a big joke."⁷¹

Despite the County's latest victory, time was running out for baseball in Houston. Gill's appeal meant that stadium construction was indefinitely halted. The County still could not make a contract with the HSA, sell the bonds, or post bids for the stadium. The Court learned that a County-HSA agreement was near. Upon hearing this news, Judge Elliott, Commissioner Sayers, and Park Board Chairman Kirkland wanted to expedite the sale of the bonds, regardless of any possible legal appeal by Gill. If the courts proved Gill's lawsuit was "a harassment-type suit," Elliott said that he thought that the bonds could be sold. Elliott argued that Gill was simply determined "to delay this matter at all cost, regardless of what it will do to the stadium and to bringing of major league sports and big conventions to Harris County." Delaying the sale of the bonds pushed back the construction timetable. All Sayers wanted, he said, was "reasonable assurance from engineers and architects that the stadium can be built as we planned within the \$15 million allotted to construction." Commissioners Lyons, Ramsey, and Chapman preferred to eliminate the legal challenge before selling the bonds. Once safe from future litigation, then the county could "move full speed ahead." Elliott also remarked that he had been in contact with two prominent groups to bring their conventions to Houston. The American Legion and the Lions International, according to Elliott, had already made inquiries about using the domed stadium when it was finished.⁷²

⁷¹ "Stadium Bond Sale During Appeal Studied," *Chronicle*, 7 March 1961, sec. 1, pp. 1, 3; Verniaud, "Arena Bonds May Be Sold Over Appeal," *Post*, 7 March 1961, sec. 1, pp. 1, 9; Rule, "Stadium Bond Speedup Asked," *Press*, 7 March 1961, pp. 1, 2.

⁷² "Stadium Bond Sale During Appeal Studied," *Chronicle*, 7 March 1961, sec. 1, pp. 1, 3; Verniaud, "Arena Bonds May Be Sold Over Appeal," *Post*, 7 March 1961, sec. 1, pp. 1, 9; Rule, "Stadium Bond Speedup Asked," *Press*, 7 March 1961, pp. 1, 2.

Gill delayed filing his appeal with the County, using the thirty-day maximum time limit set by Texas law. *Press* editors expressed their outrage at Gill's strong-armed tactics. "You can not compromise with a man who is trying to hold a gun to your head," wrote the *Press*, "You either surrender or you overpower him." Gill wanted County officials to meet two conditions before he withdrew his lawsuit. First, Gill wanted the bond agreement to contain a clause requiring the bonds to be amortized by stadium revenue and only stadium revenues. According to Gill, this addendum would protect all taxpayers from any attempt by the county to increase taxes. Second, the County should invalidate the previous \$20 million revenue bonds voted in 1958. For Gill, this assured that funds from the first bond issue would not be used if the stadium cost more than expected. Although no formal agreement had been made between Gill and the County, Elliott promised that if these clauses raised the interest rate, each would be eliminated.⁷³

A month after filing his appeal, Gill aborted his lawsuit against the County. In a meeting with Elliott, Chapman, Lyons, and Resweber, Gill explained to those present what County officials could do to stop his litigation. Gill wanted assurances that there would be no increase in taxes, and he wanted a written guarantee that all stadium revenue would be used to amortize the bonds. The County leaders eagerly accepted Gill's provisos to end his appeal. Lyons upheld one of his previous promises. "I have said this before and I say again that we are not to spend more than \$15 million for that stadium," said Lyon. Elliott confirmed that he switched the bond plans so the County "would be able to lease the stadium for enough money to retire the bonds." Kirksey was more pragmatic. The cessation of the appeal meant that

⁷³ "Why Mr. Gill?," *Press*, 24 March 1961, p. 8; "Stadium Speedup Asked," *Press*, 6 April 1961, p. 1, 2; "Strike Him Out," *Press*, 7 April 1961. p. 6; Tom Bell, "County May Meet Gill's Terms So He'll Drop Stadium Bond

construction could resume, pending weather. "We now have a fighting chance for the stadium to be ready by next April," Kirksey said.⁷⁴

By agreeing to write into the bonds a stipulation that all stadium revenue would be used to retire the bonds, the stadium backers found what seemed like an easy solution to a pesky problem. County officials failed to realize that the interest rate would increase by one million dollars if Gill's demands were written into the bonds. According to the County's fiscal agents, this would make the bonds would be costlier and more difficult to sell to potential buyers. County auditor Bruce warned that the wording would only confuse buyers who would "shy away" from them. Gill's attorney rejected these conclusions. Gill and Biggs met with their own bond attorneys, who said that the interest rate would not be affected by Gill's conditions.⁷⁵

Adding to the frustration, the Architects dashed any chance that the stadium would be ready for 1962. Architects could not work on the plans while Gill's lawsuit was pending. Instead of being ready for bids on May 1, the architects hoped that they could finish the designs by July. Judge Elliott speculated on the implications of design and construction delays. "If we haven't started, or if it looks like we are not going to get started, the national League would pull out," posited Elliott.⁷⁶

On a visit to Houston, NL president Giles inspected the stadium site and offered a word of concern to the city. "Any undue delays caused by citizens, or any unnecessary delays by engineers," Giles warned, he "would have to reexamine the situation" in Houston. His

Suit," *Press*, 7 April pp. 1, 8; "Gill States Terms For Dropping Stadium Suit," *Post*, 8 April 1961, sec. 1, pp. 1, 7.

⁷⁴ "Stadium Bond Contest Dropped," *Chronicle*, 7 April 1961, sec. 1, p. 1; Nealon, "Houston Stadium Given Go-Ahead Signal by Court," *SN*, 26 April 1961, p. 9.

⁷⁵ "Settlement May Raise Stadium Bond Interest," *Chronicle*, 11 April 1961, sec. 1, pp. 1, 4.

terse statement was concluded with a more optimistic tone, “But I don’t anticipate any such delays” especially from the men of the HSA. Giles did not consider Gill’s legal actions as an “undue delay.”⁷⁷ What delays could possibly arise now? The legal battles had been resolved. The HSA had purchased the territorial rights for Houston, ensuring a united front for major league baseball. South Main had finally been settled as the location. The HSA and the County signed an acceptable lease, guaranteeing rent for forty years. Now the challenge would be to produce a design that everyone could agree was special.

⁷⁶ Verniaud, “Hopes For Stadium by 1962 Dim,” *Post*, 29 April 1961, sec. 1, p. 1, 7.

⁷⁷ Nealon, “Post Time,” *Post*, 21 February 1961, sec. 4, p. 1; Nealon, “Buff Stadium Site Is ‘Ideal,’ Giles Asserts,” *SN*, 1 March 1961, p. 13.

CHAPTER 5: DESIGNED TO BE THE BIGGEST AND THE BEST

The model domed stadium Roy Hofheinz proudly displayed epitomized the feeling prevalent amongst the HSA, the County, the architects, and the engineers. [Something about optimism?] First, the attitude was that Houston and Harris County demanded nothing but the best, no matter how difficult it was to build. Second, a domed stadium demonstrated the enthusiasm and faith of modern technology. The domed stadium would incorporate the most modern technology that "would stand for the city of Houston itself" in professional sports and American technical prowess.¹ To this effect, the stadium must be bigger and better than any other ballpark or arena before or since. But it also was testimony to the optimism in Houston and confirm the city's greatness, now and forever. During the design phase of the Astrodome, the architects and engineers experienced some ordinary engineering problems. But the size of the stadium also brought completely new engineering problems that required novel solutions.

On one hand, the domed stadium took its place among the many other arenas constructed during the twentieth century. Sigrid Marczo, staff writer for the journal *American Engineer*, wrote an article in 1965 that described the myriad of these "new look stadiums" popping up all across the United States. Marczo opined that the twentieth century had ushered in "a new boom in stadium construction." "Across the United States alone," he continued, "some one hundred structures had gone up by 1930." Of this one hundred stadia, eighteen, including the Los Angeles Olympic Stadium (105,000), Philadelphia Municipal Stadium (75,000), Chicago's Soldiers' Field (99,000), and Yankee

Stadium (67,000) had been constructed between World War One and the Great Depression.² The fervor did not return until the era of optimism during the 1950s, when “promotion-minded municipalities” looked to rejuvenate their cities and instigated “a renaissance of major stadium construction.” Milwaukee started the stadium fever that spread to California with San Francisco’s Candlestick Park and Dodger Stadium in Los Angeles. The outbreak was not limited to California but appeared on the East Coast too, as the District of Columbia Stadium in Washington and the forthcoming William A Shea Stadium in New York and Fulton County Stadium in Atlanta demonstrated.³

The new stadiums were some of the largest buildings constructed in the US because, as Robert E. Fischer claimed, the architect and engineer no longer faced a limit in the design and construction of a modern structure. By exploiting the advances in science and technology and the "wealth of resources," architects and engineers could create complicated structures that were once considered impossible to build. Essentially, a “tremendous break-through in technical limitations” and in materials had become practicable, thanks in large part to “the great rise in strength-to-weight ratio in materials.” Just as important was the advances “in structural engineering,” as structural engineers now examined more intensely the “destructive forces inherent within a building.” This notion of limitlessness, of infinite possibilities, affected the ways architects and engineers approached the design and construction of new structures. The only limitation facing architects and engineers, if it could be considered a limit during an era of optimism, was money. This new era of "human technological achievement never before remotely approximated in human history" permeated throughout

¹ Kammer, 313.

² Sigrid Marczoich, “The New Look Stadiums,” *American Engineer*, 35 (September 1965): 33-34.

American society. Viewed in this light, the domed stadium symbolize the era of Houston in which it was conceived.⁴

City leaders, in deciding to build the “new look stadiums,” hoped to take advantage of the “unlimited opportunity” a multi-purpose facility promised “for community recreation, mass assembly, and the stimuli of competition for both spectators and performers.”⁵

Engineers Richard Q. Praeger and John W. Waterbury (consultants for the Astrodome and designers of Shea Stadium) asserted that “the economic key to these new parks stems from their convertibility factor and year-round use capabilities.” City leaders, they continued, understood that the “twin realities” of television and financial prosperity, that arose in America after WWII, compelled stadium planners and boosters to seek and demand convertible stadia that could be used much of the year. According to Praeger and Waterbury, a stadium designer, in blueprinting for the greatest number of “saleable seats,” faced difficult challenges. “He must create a facility that is free from the aggravations of crowding,” they said, “that has ready access to public and private transportation, that provides conveniently located food concessions and accessible rest rooms, and that affords an unobstructed view of the action from every seat in the house.” These amenities, they asserted, would entice the fan from the home to the stadium. The baseball or football game, it seemed, was no longer to remain the main attraction. The stadium became the reason modern fans went to the ballpark not the event.⁶

³ R. Q. Praeger and John W. Waterbury, "Convertibility," *The American City* 81 (August 1966): 100.

⁴ Robert E. Fischer, ed., *Architectural Engineering*, (New York: McGraw-Hill, 1964), . "A New Approach to Structure," *Architectural Forum*, 106 (January 1957): 125; Alan Gowans, *Images of American Living: Four Centuries of Architecture and Furniture as Cultural Expression* (New York: Harper and Row, 1976), 450-451.

⁵ Marczo, 33.

⁶ Praeger and Waterbury, 100.

All other attempts to utilize a baseball stadium for multiple events like boxing matches, football games, conventions, or music concerts, had experienced limited success at best. The main problem was the shape of these ballparks. Generally, most and the best seats were located behind home plate, the dugouts, and beyond the outfield. The triangular baseball playing field could not be efficiently converted to these other events, but a rectangular football field was especially difficult. A football fan, for example, ended up sitting in the end zones or so far from the game that his home recliner in front of the television set offered a better seat, closer to the action. “An effective answer” to this quandary, according to Praeger and Waterbury, was “convertibility, coupled with a circular seating layout.” Praeger and Waterbury with their firm Praeger-Kavanaugh-Waterbury, developed a system of movable stands that promised a cleaner sight line of the playing field. The movable stands could be shifted to orient a spectator’s vision. to provide a clear, unobstructed view of the event. Praeger employed this system for the District of Columbia Stadium that opened in 1961 and William A. Shea Stadium New York opened in 1964. This meant that for baseball games the seats would be aligned to second base and for football games the fifty yard line. To achieve this seemingly impossible task, Praeger-Kavanaugh-Waterbury utilized movable stands that, depending on the event, could be rotated to allow the best view possible. For example, the stands would be rotated to form a “V” lining up parallel to the foul lines for Mets games. For events that required a rectangular performance area, like a Beatles concert or a football game, the movable stands would be rotated and positioned directly opposite from each other.⁷ Movable grandstands worked best in circular stadiums. The circular stands were aligned to the center of the stadium circle. “The two moving

⁷ Praeger and Waterbury, 100-101.

sections provide twice as many seats for rotation to the most desirable locations, since the axis of a football field is coincident with the line that runs from home plate through second base and center field in baseball.”⁸

Mankind has employed dome structures throughout recorded history. As seen in the construction of the Hagia Sophia, St. Paul’s Cathedral, the US Capitol, and the Taj Mahal, domed buildings were generally used for either religious or governmental purposes and demonstrated an aspect of each culture that constructed them.⁹ These domes, asserted engineers David E. Stevens and Gerald S. Odom from the American Institute of Steel Construction, were “ornamental” while their functions were largely ignored. This began to change in the twentieth century, they argued, as a dome’s economic use of space began to be exploited. Stevens and Odom argued that it was not until after World War II, however, that “the full structural potential of the dome has been realized.” The steel framed dome’s “structural efficiency has now become a full partner with majestic architectural beauty.” Steel framed domes, they continued, could now unite “economy of materials” with “economy of cost.” Stevens and Odom suggested that any shape, spherical or conical, could be built with any type of roof system, from geodesic to lamella. But Stevens and Odom added that “lamella, lattice, and geodesic domes were relatively unknown” and unpopular for two reasons. The first reason, they wrote was that “they are highly complex, statically indeterminate space frames” and necessitated model analysis to confirm the design. The second reason was that “their design and construction can only be achieved under proprietary

⁸ Marzoch, 33-40.

⁹ For a description of several types of domes from different cultures, see Michele Melaragno, *An Introduction to Shell Structures: The Art and Science of Vaulting* (New York: Van Nostrand Reinhold, 1991), chs 1-3. 1-3.

rights.” The confidence among the Astrodome planners would prove Stevens and Odom wrong.¹⁰

The HSA asked two Houston architectural firms, Wilson, Morris, and Crane and Lott-Drake, to perform all the initial research and designs for the stadium. Members from both firms toured these stadia before completing their plans. From the new District of Columbia stadium to Walter O’Malley’s Dodger Stadium at Chavez Ravine, the architects the pros and cons of these new ballparks were scrutinized and recorded. One possible design was for a multi-decked stadium like that used for the Milwaukee, Cleveland, and Yankee stadia. These modern stadia incorporated a structural steel framework for the grandstands and reinforced concrete for the foundations, floors, and decks. Although fine designs, each stadium implemented support columns for the upper grandstand, which obstructed the view of the spectators sitting in the lower grandstands. These designs were actually a compromise. The number of support columns was reduced and they were located at the rear of the deck, while girders and trusses were implemented for additional support.¹¹

A visit to each ballpark reaffirmed the boosters' conviction that Houston’s facility would be greater than all other sports arenas yet built. The architects understood the significance of their task and wanted to “design something new and different.”¹² The architects could, and did, take their time before committing to a final design. Every type of stadium design was researched, studied, and critiqued. For over three years, according to Robert J. Minchew, an architect for one of the consultants Walter P. Moore, Inc., the

¹⁰ David E. Stevens and Gerald S. Odom, "The Steel Framed Dome," *Engineering Journal*, 1 (July 1964): 84.

¹¹ Homer T. Borton, "Stadium Design Is a Challenge," *Consulting Engineer*, (August 1956): 48-51. The joint venture of Wilson, Morris, Crain and Anderson and Lloyd and Morgan performed all the initial work without charging a fee to the HSA or Harris County. It would not be until 1961 that the architects were formally hired.

architects studied all the “appropriate plans,” rejected those deemed “unadaptable,” and “recommended a “circular plan.” Since the primary use for the stadium would be baseball, with football a close second, a circular form fulfilled the requirements as stipulated by the County and the HSA.¹³ This design would accommodate the facilities for both baseball and football, the two main spectator sports. By creating movable sections of the grandstands, like that used in the stadia for Washington and New York, the seating arrangement maximized the number of seats while still providing an unobstructed view throughout the stadium. The Washington and New York stadiums were also circular in shape, which allowed more interior space than all other designs. A circular form with arched ribs, “one of the most efficient and economical methods for achieving long spans,” according to Stevens and Odom, also economized the use of materials and space. “These two factors tend to make the domical-roofed, circular building efficient,” they opined.¹⁴

In 1960, Roy Hofheinz, a member of the HSA, told Judge Elliott, Hermon Lloyd, and S. I. Morris that he wanted to take more of a role in the design of the stadium. During the summer meeting, Hofheinz revealed his fascination with the geodesic dome of Buckminster Fuller and his desire to build a domed stadium to house both baseball and football, grow natural grass, and have air conditioning. A domed stadium, he argued, would take full advantage of the proposed multi-purpose stadium the architects had envisioned. Hofheinz asked the architects if it could be built. Lloyd and Morris confirmed that such a stadium could be built with existing technology and architectural processes, but at a severe financial

¹² Lloyd and Morgan internal document (1958), Minchew Collection, 94-274/15, Engineering reports, 1960s file.

¹³ Robert J. Minchew to Edwin M. Long (4/29/64), Minchew Collection, 94-274/9, Skylight Inspections, 1964-1978 File.

¹⁴ Stevens Odom, 83.

cost. Hofheinz would not let the dome's potentially high cost prohibit him from having it built. Hofheinz argued that a domed stadium would not only save money in the long run, but actually make more than a regular open-air stadium. Not only could baseball and football be played inside a domed stadium, but other activities like political conventions, religious meetings, and trade shows, that could not be held in an open-air arena, could be comfortably housed inside it, too.¹⁵

Hofheinz also told the architects that he wanted the stadium's playing surface be natural grass. This decision, in effect, forced the hand of the architects. The architects briefly considered a retractable roof like the one being constructed in Pittsburgh. The Pittsburgh Public Auditorium (completed in 1961) was 415-feet in diameter and 136-feet high, stainless steel, retractable domed arena. Built as a multiple purpose facility, the Pittsburgh arena could seat 13,600 spectators in a climate controlled environment. Private and public funds were used to construct the \$20 million auditorium. The stainless steel dome consisted of eight "pie-shaped" leaves with two leaves stationary. The remaining six leaves were of different sizes and could move along curved rails to open and close the roof. When fully opened, the leaves retracted "into the nested position like multiple-leaf rolling doors."¹⁶ A retractable roof

¹⁵ Nealon, et al., 56-57; Ray, 257, 303-304. Bill Veeck claimed to have designed one of the earliest multi-purpose entertainment facilities in Texas history. Veeck and Bill Zeckendorf, considered building a structure with movable sections, dining rooms, and a sliding roof in Arlington, Texas in 1956. The Arlington facility would eliminate the feud between Dallas and Fort Worth and redirect the two cities' energy to the support of a professional baseball team. Veeck, ever the visionary, wanted to be efficient in the use of space by erecting a ballpark on the roof of a large shopping mall and served by a colossal parking lot. To combat the Texas weather, Veeck devised a "sliding roof" which would be opened for baseball games, but closed for non-sports venues. Veeck viewed the domed stadium's permanent roof as "a great mistake" because it obliterated the aesthetics of a baseball game and replaced it with a plastic, "synthetic background." By corralling as many entertainment outlets as possible in one structure, the baseball team's financial burden would be reduced, according to Veeck. See Bill Veeck, "Veeck Claims Permanent Roof On Domed Stadium 'Mistake,'" *Chronicle*, 21 July 1963, sec. 7, p. 4.

¹⁶ "A Retractable Stainless Steel Dome For Pittsburgh," *Architectural and Engineering News*, 1, (June 1959): 6-8; Z. S. Makowski, "A History of the Development of Domes and a Review of Recent Achievements World-

was dismissed, according to Lloyd, because it was impractical. Lloyd toured the Pittsburgh facility and was not impressed. There were too many potential problems with a retractable roof. A retractable dome, for example, would cost too much to build and operate. Harris County voters had allotted only a finite amount of bonds for construction. Even though the future tenants were indeed wealthy Texans, the men of the HSA argued that they could not be expected to extensively fund the construction of a stadium and expect to survive financially. This was actually a curious argument, especially when Walter O'Malley had used his own money to construct Dodger Stadium at Chavez Ravine. Opening and closing of a retractable roof would severely tax the air conditioning system, increasing the operating costs of the stadium. It would also create an unnecessary maintenance concern for the future.¹⁷

The cost and inherent problems of a retractable roof were major concerns for the architects. But there was another reason that the Houston stadium would remain fixed-roofed. This was Houston's weather. "The prime reason for considering a covered stadium," wrote architect Robert Minchew, was the "Texas Gulf Coast weather" of high humidity, torrential rains, and intense heat. "Those of us who live here thrive on it," he continued, "so long as we are in the confines of an air conditioned space." Because of these weather consideration, and "despite rumors to the contrary," Minchew added, "there was never any consideration of designing a stadium with a movable roof for Houston."¹⁸

Once the architects agreed to construct a domed stadium with a natural grass playing surface, they had to determine which roof design would span a large distance. The architects

Wide," (hereafter cited as HDD) in *Analysis, Design and Construction of Braced Domes*, ed. Z. S. Makowski (New York: Nichols Publishing Company, 1984), 64.

¹⁷ Ray, 304; "Record-Span Dome Roofs Air-Conditioned Stadium," *Engineering News-Record*, 27 February 1964, 26.

had ten types of domes from which to select for the stadium. These were the Schwelder, Zimmermann, ribbed, stiff-jointed framed, network, plate-type, grid, lamella, geodesic, and space frame. Of these ten types only the geodesic and lamella domes promised to safely span a distance of over 600 feet.¹⁹

The geodesic design patented by R. Buckminster Fuller was a essentially a trussed dome. Geometrically, the geodesic dome utilized equal-length members to form equilateral triangles. Single-layer geodesics (characterized with the nodal connecting points on the surface of a single sphere) could not create a span greater than 120 feet. A two-layer geodesic contained two spherical domes with a space in between them. The nodal points of the exterior sphere was connected to the nodal points of the interior sphere to maximize structural strength. The skin of these two geodesic forms did not carry any load. A third geodesic design incorporated the skin to provide additional strength. An advantage of the geodesic dome was that it could be prefabricated, which lessened the overall cost of construction.²⁰

A lamella dome uses units called lamellas that are usually arranged in a diamond shape or X-shape.²¹ By utilizing roof purlins (a horizontal beam that extended the length of the roof to support other beams and rafters), the diamond is completed, generating additional stability. The main framework consisted of twelve, large, double beamed trussed ribs.

¹⁸ Robert J. Minchew to Edwin M. Long (4/29/64), Minchew Collection, 94-274/9, Skylight Inspections, 1964-1978 File.

¹⁹ Melaragno, 308-325; Benjamin, *The Analysis of Braced Domes*, 2-7; Makowski, HDD, 5-63.

²⁰ Makowski, HDD, 32-38, 42-54; Melaragno, 318-320.

²¹ Herr Zollinger, city architect of Dessau, Germany, patented the lamella roof system in his home country in 1908. The Lamella Roof Syndicate brought the patent and trademark to the US in 1925. In 1930, G. R. Kiewitt obtained the franchise rights to the lamella system and founded Roof Structures, Inc. The largest steel lamella dome Roof Structures, Inc. engineered was the 285 feet-domed Field House for Wichita State in 1955. It also collaborated with LM in 1960 for the KTRK television studio in Houston. See, "An Introduction to Roof Structures, Inc.," (1961) WMPA archives.

Connecting the beams were smaller chords called lacings. The main ribs were positioned at thirty degree intervals, much like numbers on a standard clock. The main ribs met at the apex of the dome and ran to the tension ring. Located at the base of the dome, the planar tension ring anchored the roof to the walls, encircled the base, and resisted the outward forces that pushed against the lower sides of the dome. Parallel to the main ribs were bracings that intersected with one of the six “trussed circles or hoops” in the roof. The six trussed circles also intersected with the main trusses. These beams created the lamella roof’s renowned diamond design. The interconnected steel beams quickly and efficiently distributed the concentrated (live) loads and stresses evenly throughout the roof system, predominantly producing “axial forces.”²²

As the architects pondered the merits of the two dome designs, they needed to answer another question. The question was how to get enough natural light into the stadium for the grass. The architects and HSA had asked Texas A&M agronomist George G. McBee to perform a series of experiments to determine which type of natural grass would perform the best inside the stadium. He recommended Tifway bermuda grass over other varieties, but said that would also include fescue in his experiment. The result of McBee's experiments was the selection of Tifway 419. This bermuda grass, according to McBee, was the best grass that tolerated low light levels that could be expected inside the stadium. The Tifway strain promised a deep, dark green grass that kept its color longer than other varieties, even with smaller amounts of nitrogen fertilizer. After planted from sprigs (Tifway was sterile), the

²² Makowski, HDD, 29-30; *Engineering News-Record (ENR)*, 27 February 1964, 27; T. B. Jefferson, "Welded Steel Frames World's Largest Clear-Span Domed Stadium," *Welding Engineer* 49 (June 1964): 57; "Gamma Rays Inspect Welds in World's Largest Clear-Span Enclosed Structure," *Welding Design and Fabrication (WDF)*, 37 (August 1964): 58-59.

grass would grow into a dense sod that would resist the wear of professional sports and frequent conversions.²³

Even though McBee contended that the Tifway would grow and thrive inside the stadium, the architects developed a contingency plan just in case something went awry. Architect Ralph Anderson contemplated a plan for an “artificial playing field grass” and informed Hofheinz of it. The result of Anderson's inquiry was an artificial turf that simulated natural grass in color, texture, and performance that would be placed on a concrete sub-floor. The artificial grass would not rot and resist mildew while maintaining resiliency and offer excellent traction for athletes. The fake grass would offer a truly multi-purpose surface.²⁴

The technology needed to employ a synthetic playing surface already existed and could have been installed in the stadium. Hofheinz decided in favor of natural grass for two reasons. First, Hofheinz said the time was not right for artificial grass because there was too much controversy over indoor baseball already. Playing baseball on fake grass, Hofheinz said, would only exacerbate hostility to the HSA. A second reason for avoiding artificial grass was the novelty of growing natural grass indoors. The decision to cover the playing surface with natural grass demonstrated the optimism in science and technology. The HSA was confident that the special grass would thrive indoors because the A & M experiments proved it would. Besides, the HSA could illustrate its prestige by proving grass could grow indoors.²⁵

²³ George G. McBee, “Association of Certain Variations in Light Quality with the Performance of Selected Turfgrasses,” *Crop Science* 9 (January/February 1966): 14-17; Glenn W. Burton, “Registration of Crop Varieties,” *Crop Science* 9 (January/February 1966): 93-94.

²⁴ Untitled WMCA, (12/30/60), Minchew Collection 94-274/2, Construction Material Brochures, 1958-1962 File. Wilson, Morris Crane and Anderson, Early Correspondence, 1961-192 File.

²⁵ Ray, 305-307

As the architects determined the roofing system, they searched for a way to introduce natural sunlight in the stadium. Fortunately for the architects, the geodesic and lamella designs allowed the incorporation a transparent material into the roof. The next question was to select a transparent material that was both strong and lightweight. The architects were essentially limited to two materials for the skylights, glass and plastic. Plastic held several advantages over glass. Plastic was much lighter than glass. A lighter material reduced the overall load on the structure. The remaining design would not have to compensate for the added stress of the glass skylights. Plastic could be readily molded into whatever shape the employed for the dome design. Plastic could also withstand external pressure from 150,000 to 500,000 pounds per square inch. A lighter, stronger material also reduced the time needed for installation. Using plastic would also save money. The translucency of plastic could be altered to limit the amount of light entering the stadium. If the HSA determined that the skylight should only allow a certain percent of natural light into the stadium, they could have the manufacturer create a skylight to fit their demanding specifications. Simply put, plastic allowed greater versatility.²⁶

Ralph Anderson said that the architects received plenty of information, some of it “conflicting and possibly dubious,” from plastic fabricators and salesmen concerning the life of various translucent panels. As Anderson understood it, plastic, an organic chemical, would eventually deteriorate under constant and continual ultraviolet exposure. Early in the search, the considered reinforce and non-reinforced acrylic, reinforced polyester, and unreinforced poly-vinyl chloride. They had not given up on finding a glass skylight, “either a sandwich or

²⁶ Svend W. Bruun and Joseph R. Loring, “Plastics in Lighting,” in *Plastics in Building*, ed. Irving Skeist (New York: Reinhold Publishing Corporation, 1966) (hereafter cited as Skeist (ed)), 313-315; Gilbert Ford Kinney,

a single glazed unit," that contained the optical properties of plastic. Their early inquiries into glass skylights had been unfruitful because of the high cost of glass lights.²⁷

R .W. McKinley of Pittsburgh Plate Glass Company opined that glass should be considered for the skylights. The glass, McKinley asserted, should have a "positive barrier" like a wire screen, to stop a worker from falling through it. He said that he could not recommend "regular T-window" for Houston because of internal condensation problems between the glass and water vapor accumulating from the atmosphere. A weep hole that allowed water to drain from the surface could work, he posited, but only if it could be free from debris. To eliminate condensation on a single-glazed piece, McKiley suggested that the glass could be kept warm either by relocating an artificial lighting system outside the stadium or by utilizing a special coating and a electrical current to keep the surface warm. In either case, the glass skylight systems envisioned by McKinley were expensive and complicated.²⁸

Of course, plastics contained some inherent characteristics that caused some concern. Plastics had a low strength threshold; it could warp, shrink, deteriorate, and was difficult and expensive to install and repair.²⁹ Plastics also had a problem with permanence. Some organic plastics contain the element carbon. At high temperatures, the carbon could combine with the oxygen in the air to yield carbon dioxide, thus destroying the organic plastic. Second, organic solvents attack organic compounds and reduce the stability, durability, and other properties of the plastic. The skylights, therefore, could not be an organic plastic, but, instead, should

Engineering Properties and Applications of Plastics (New York: John Wiley and Sons, Inc., 1957), 1-2; Skeist, "The Role of Plastics in Construction," in Skeist (ed), 1-3.

²⁷ Letter from Ralph Anderson to Cecil R. Parks, Minchew Collection, 94-274/13 Plastic Skylight Documents, 1957-1962 file.

²⁸ "Memorandum to all Stadium Architects" (9/15/61), Minchew Collection 94-274/13, Plastic Skylight Documents, 1957-1962 file.

use a synthetic plastic like the styrenes, PVC, or acrylics. Plastics, especially thermoplastics, were affected by the increase in temperatures and could cause discoloration, warping, and even failure.³⁰

Third, ultraviolet (UV) light wreaked havoc on plastics. By continuing to absorb UV light, a plastic increased its thermal energy, causing thermal degradation. The UV light also excited the electrons, raised their energy levels, and increased the chances of breaking their bonds. The results of these broken bonds could be something benign like discoloration or something more serious like the loss of the plastic's physical characteristics. UV stabilizers could be added to a plastic that would absorb and/or scatter the harmful rays, protecting the plastic. Stabilizers, however, could not be employed for the skylights. The stabilizers would negate a skylight's transparency, reducing the amount of sunlight coming into the stadium. If the HSA wanted to grow natural grass, any pigment or material that deflected or absorbed light would not facilitate the growth of natural grass.³¹

Another environmental hazard, oxidation, resulted from exposure to higher temperatures and an excess of foreign molecules. Every polymer reacted with oxygen. The results of this reaction was the creation of a free radical. The free radical reacted with oxygen, creating a peroxide radical. The peroxide radical, then, attacked other molecules, generating hydroxyperoxide, which, in turn, could decompose and create more freed radicals. This process could continue on and on without stopping.³²

²⁹ Kinney, pp. 1-2; Skeist, "The Role of Plastics in Construction," in Skeist (ed), 1-3; Bruun and Loring, in Skeist (ed), 313-315.

³⁰ Kinney, 5-6; Bruun and Loring, 314-315.

³¹ Strong, 156-157; Vishu Shah, *Handbook of Plastics Testing Technology* (New York: John Wiley and Sons, Inc.: 1998), 135-136; Shah, 95-97.

³² Shah, 93-94; Strong, 158-159. All other forms of PE, from low-density and high-density polyethylene to crosslinked polyethylene and PE copolymers could be ignored as a skylight material due to the initial traits of

The architects had several types of plastics to consider for the skylights. The composition requirements were strict, although there were many types of plastics available that contained one or more of the desired characteristics for a skylight. The most important was the transmission of light. The key to the light transmission was transparency. Some plastics had high levels of light translucency, but this was not the same as transparency. The HSA's demand to grow grass inside the stadium required transparent skylights. Transparent plastics permitted the greatest amount of light to pass while obstructing or scattering the least possible. Translucent plastics permitted some light to pass through, but not as good as transparent. Translucent skylights could be considered if, and only if, it could nourish the growth of grass. All other plastics, the opaques, despite any other desired trait, were dismissed.³³

Plastics are classified into either thermoplastics or thermosetting. Thermoplastics were solids at room temperature and did not change after being heated. A thermoplastic resin can be heated, made soft, and molded again and again into any desired shape. A thermosetting plastic could be a solid or a liquid at room temperature. It could be softened after heating. But unlike thermoplastics, the continual application of heat, hardened it, and made it rigid and stiff. A thermosetting plastic could not be remolded after the initial chemical reaction during the initial molding process. This was due to the nature of crosslinking during the molding process. The chemical crosslinking reaction was permanent

PE. All forms of PE could not be made transparent without losing toughness and vice versa. See Strong, 198-208.

³³ Strong, 178-180.

and could not be reversed after the initial curing. Therefore, if a thermoset was heated, it could soften, but would keep its original molded shape.³⁴

Initially, some thermoset plastics could be viewed for the composition of the skylights.³⁵ The group of amino plastics provided a possibility for the skylight material. Amino resins possessed several characteristics like superb scratch, heat, and water resistance, and remarkable surface strength. One amino resin in particular, known since the 1920s, was urea-formaldehyde. First applied in Europe as an alternative to glass for window panes, the clarity of urea-formaldehyde suffered in comparison to glass. The urea-formaldehyde resin required a filler material to increase stability. Called "Beetle ware," the urea-formaldehyde plastic lost some of its clarity, but retained much of its translucency, about sixty percent. Any filler material greatly diminished transparency and effectively eliminated all amino resins and phenolic resins. Nevertheless, even though urea-formaldehyde's strength and light weight was a distinct possibility, it was dismissed due to its susceptibility to humidity that caused fissures and failure. The other amino plastic, melamine-formaldehyde, possessed many of the same physical properties of urea-formaldehyde, except that melamine-formaldehyde was less humidity sensitive and more expensive. Aniline-formaldehyde, an amber-colored resin, could not be considered due to its original hue. Unsaturated polyester had great strength and was resistant to most chemicals and water, but did not withstand the weathering of outdoors.³⁶

³⁴ Kinney, 3; Harold A. Sarvetnick, "The Plastic Materials," in Skeist (ed), 11-20; Strong, 62-63, 263-264. Strong also provides additional information concerning the crosslinking of thermosets. See 265-270.

³⁵ Thermosets included, but are not limited to, phenolics, amino plastics, polyester thermosets, epoxies, polyurethanes, and imides.

³⁶ Kinney, 105-113; Strong, 276-279; Skinner and Goldhar, 87-95; Sarvetnick, 20-23. For a brief discussion of filler material, see Shah, 102-108.

Upon further scrutiny, the thermosets could not be viewed as a legitimate possibility because of their crosslinking reaction. Crosslinking made the thermosets more brittle than thermoplastics. To compensate the brittleness, manufacturers added filler material. These fillers, while decreasing brittleness, reduced the transparency of all thermosets. For example, phenolic plastics (PF), the most famous being Bakelite, was indeed strong and durable. The pure resin necessitated a filler material during manufacture to overcome its fragility. Regardless of the type of filler material used, the phenolic resin became opaque. Skylights, then, could not be composed of any phenolic material.³⁷

With the elimination of thermosets, the architects investigated the possible thermoplastics.³⁸ Polyethylene (PE), for example, was the simplest of all polymers and was a component of many flexible products. PE was easy and inexpensive to fabricate. The transparency of PE could be increased, but at a cost of its permeability, tensile strength, and hardness.³⁹ Polypropylene (PP) possessed many of the same traits as PE, such as its light weight and chemical resistance. PP, however, was not only stiffer than PE, but more vulnerable to UV light and oxidation. PE could not be used for the skylight material.⁴⁰

Polyvinylidene chloride, also known as saran, was a strong and clear plastic. But it contained chlorine atoms, unlike acrylics, making it sensitive to ultraviolet light.⁴¹ Polyvinyl chloride (PVC) had a peculiar characteristic called autocatalytic decomposition. If external temperatures rose near its melting point, the PVC starts to decompose. Nearby

³⁷ Kinney, 93-104; Strong, 274-276; W. S. Penn, *Plastics-in-Building Handbook* (London: Maclaren and Sons, Ltd., 1964) 7.

³⁸ The thermoplastics included, but are not limited to, nylons [PA], acetals, thermoplastic polyesters, polycarbonates, acrylics, fluoropolymers, cellulose, polyphenylenes, polysulfones, polyimides and polyaryletherketones.

³⁹ Strong, 194-198; Skinner and Goldhar, 52-60.

⁴⁰ Strong, 208-211; Skinner and Goldhar, 60-69.

hydrogen and chloride atoms also begin to decompose, increasing the rate of decomposition. It could be cast into transparent, rigid sheets, but its sensitivity to UV light and oxidation ruled it out. Even though the eliminated PVC for the skylights, PVC would be useable in the frames for the skylights. PVC frames purported to have several advantages over aluminum frames. The frames could be dyed white during the fabrication process, eliminating the need to paint in the future, although the plastic frames could be painted if necessary. Water condensation on the PVC frames was lower than that of the metal alternative. Less condensation on the exterior of the frame would reduce the amount of water that could pool on the frame and limit the leaking of the frame.⁴² Surprisingly, the architects did not research the possibility to incorporate PVC frames, but used metal frames instead.⁴³

Lightweight styrene thermoplastics could be manufactured into translucent sheets and used for the skylights. But styrenes limited the amount of sunlight to pass through it, even upon the addition of acrylics, and did not withstand ultraviolet or heat very well. This eliminated the outdoor use of styrenes. On a similar note, the could not consider vinyl plastics because of vinyl's index of refraction. Vinyl skylights would not allow the growing of natural grass inside the stadium.⁴⁴ One styrene resin, polystyrene (PS), seemed to provide just the kind of performance needed for a skylight. It was colorless, transparent, and allowed sunlight to pass through without refracting it. It could be made into a clear, transparent, and waterproof panel. Long term exposure to UV light and oxygen, however, yellowed and

⁴¹ Kinney, 62-66.

⁴² Strong, 211-216.

⁴³ R. C. Hess and J. A. Baumann, "Other Plastics for Walls, Roofs and Doors," in Skeist (ed), 157-164.

⁴⁴ Bruun and Loring, 320-324.

stressed PS. Since the skylights were to last for decades, PS could not be used for the skylights.⁴⁵

The final plastic resin, and the one that had the most desirable characteristics of transparency, uniformity, durability, ease of maintenance, stability, and weatherability, was acrylic. There were two types of clear acrylics, PAN and PMMA, also known as Lucite, Plexiglas, and Perspex. PMMA allowed ninety-two to ninety-three percent of light transmission. All other clear plastics gradually yellowed after exposure to infrared and ultraviolet light from both natural and artificial sources. Acrylic, however, did not yellow in laboratory tests. The architects wanted crystal clear skylights for stadium aesthetics, but demanded clarity for the grass. Acrylic could withstand long exposure to weather and sunlight while retaining its optical clarity. Even though acrylic plastics could develop a series of small, fine cracks during fabrication, vigilant inspection eliminated those damaged products. Annealing the acrylic greatly reduced the “locked-in stresses” that contributed to cracking. The major problem of acrylic skylights was the thermal expansion of the joints. The expansion taxed the joints. The best way to offset the expansion of the joints was to apply elastomeric sealants. Despite these problems, an acrylic, PMMA, became the material to be used for the skylights.⁴⁶

Because the architects were designing something radically new, they were unsure just what types of skylights would work best. They decided that it would be best to test as many skylights as possible. For the first test, the architects used two acrylic skylights and three

⁴⁵ Strong, 217-218; Skinner and Goldhar, 78-79.

⁴⁶ Bruun and Loring, 318-319; Strong, 246-247; George R. Rugger, “Weathering,” in Rosato and Schwartz (eds.), 390-393; Chanda and Roy, 421; Kinney, 52-58; Skinner and Goldhar, 85-86; Joseph W. Prane, in Skeist (ed), 366; Birley and Heath, 60-64.

glass skylights.⁴⁷ The glass skylights generated an immediate concern that outweighed any potential benefits. This was the weight and cost of the glass blocks. Each glass panel weighed eighteen pounds per square foot, and cost \$125 each. One acrylic skylight looked like a “bubble” on a three-by-six base. The plastic dome panels could be partially adjusted, if needed, after initial installation. They weighed only one pound a square foot, and cost \$50 each. A concern, however, was that the raised surface of these panels might increase air turbulence in high winds. The other acrylic skylight, and the one eventually implemented, was a louvered system of two layers. The top layer would be constructed with a light transmission greater than eighty-five percent with a translucent bottom layer of fifty-five percent. It would cost (\$75 per panel) and weigh (two pounds per square foot) slightly more than the bubble skylight. Once installed the louvered system could not be adjusted. The louvered skylights provided the greatest amount of light into the stadium available.⁴⁸

The skylights themselves were constructed of double layers of acrylic sheets. A 0.250 inch thick outer layer “crystal clear layer” protected against the elements, while the inner layer, a 0.187 inch thick, diffused the incoming sunlight. The double sheets, separated by an inch and a half, were inserted into a case of “sound-absorbent wood-fiber” and placed into an aluminum frame 44 x 84 inches. To seal the skylights, the architects took advantage of the advances that had been made in the manufacture of caulks. They did not have to rely on oxidized vegetable oil compounds which had a mere ten year life expectancy at best. The complex skylight joints demanded an alternative caulk to keep out whatever Houston’s weather could dish out. First, elastomeric tape was inserted into the joint. Elastomeric

⁴⁷ "Summary of skylight situation as of 8-7-61," Minchew Collection 94-274/13, Plastic Skylight Documents, 1957-1962 file.

polymers could be stretched or compressed but would always return to their original shape. (Of course, if the elastomer was stressed well beyond its yield point, it could not return back to the original.) After placing the tape, the joint received five coats of neoprene/Hypalon. Neoprene was a solvent released sealant. Basically, as the solvent evaporated, the sealant shrank while its consistency increased. Importantly, neoprene did not need any other ingredients before applying nor any curing agents to facilitate the bond. It provided great flexibility under extreme weather conditions with a life span greater than twenty years. But with all sealants, neoprene included, all could fail if pulled from the joint. Hypalon resisted water, sunlight, chemicals, and extreme temperatures while maintaining good adhesion to the aluminum frames. The system provided a waterproof and durable sealant. The double layered acrylic skylights provided "insulation and condensation control." A clear "top layer" allowed sunlight to enter, kept out insects, water, dust, and other unwanted items. The "second layer" consisted of "internal prisms" that diffused the incoming light to reduce glare. The "light-diffused prismatic surface" pattern allowed for a 50% transmission of light into the stadium to grow natural grass.⁴⁹

In March 1961, Ralph Anderson sent letters and diagrams to those engineering companies that had expressed interest in competing for the stadium roof contract. Anderson included a diagram of a "typical sector of the Lamella roof pattern" with a three-foot by six-

⁴⁸ G. C. Phillips to WMCA (10/19/61), Minchew Collection 94-274/7, Depositions, Insurance Reports, Construction Reports, Correspondence, 1961-1973 file.

⁴⁹ Jack D. Hunter, "Indoor Outdoor Playing Field," *DuPont Magazine*, 58 (March-April 1964): 4; "Fluid Applied Roofing For Houston Stadium," *Architectural Record*, 137 (January, 1965): 185-186; McGlew (DuPont) to Minchew (9/14/64), Minchew Collection 94-274/4, Harris County Domed Stadium Construction Correspondence, file #17, September 1964; "Record-Span Dome Roofs Air-Conditioned Stadium," *ENR*, 27 February 1964, 26; "Plastics Score in Stadiums," *Chemical Week*, 17 April 1965, 87-88; Gordon E. Hann, "Sealants," in Skeist (ed), 188-196; A. Brent Strong, *Plastics: Materials and Processing*, 2d ed. (Upper Saddle River, New Jersey: Prentice-Hall, 2000), 312; Anthony Errico, "Architectural and Maintenance Coatings," in Skeist (ed), 353; Joseph W. Prane, "Plastics in Roofing," in Skeist (ed), 364-365; Kinney, 156-157.

foot skylight to be "installed directly to the top" of the roof. The net translucency for the roof area was to be at least 50%. The HSA decided against reinforced polyester materials for the exterior of the roof in favor of reinforced acrylic sheet. The internal structure of the skylight should allow the least amount of angular light cut off. The HSA considered attaching by metal straps a "single heavy-gauge sheet of aluminum with a punched louver pattern" to be employed six inches above the skylight as a sunshade. Anderson wanted contractors to provide a cost estimate of their plans, but to keep the information secret until the HSA decided on its course of direction. Anderson wanted to make sure that the information about the Lamella roof would not "stir up any unnecessary trepidation" in contractors who had submitted plans for different roof schemes. Anderson wanted the stadium architects to receive every possible design plan so as to determine the best course of action for the HSA.⁵⁰

Overall, the architects received nine bids from eight engineering companies. Three bids incorporated the geodesic dome patented by R. Buckminster Fuller. Two of these came from Synergetics, Inc., with the other coming from Jeffrey Lindsay and Associates. Synergetics, an engineering firm located in Raleigh, NC, had designed the Climatron in 1961, a geodesic domed greenhouse for the Missouri Botanical Garden of St. Louis (also called Shaw's Garden after its founder Henry Shaw).⁵¹ The remaining six bids included one that was a Kaiser System, one of laminated wood, one suspension system, a air-supported roof, a lamella roof, and one aluminum space frame. The immediate problem with each geodesic system was cost. Synergetics and Lindsay each made a bid of \$4,814,000 and Synergetics had another over \$5 million. Lydick Roofing Co.'s Kaiser system was listed at

⁵⁰ Ralph A. Anderson, Jr., (3/28/61), Minchew Collection, 94-274/2, Preliminary Cost Estimate, Houston Sports Stadium, 1960 file

\$4,989,490. Even costlier was North American Aviation, Inc.'s bid of \$5,500,000 for its Geolatic System of an aluminum space frame. The suspension system of International Consultants, Inc. would cost \$4,625,000 and Timber Structures, Inc. estimated its laminate wood system at \$3,654,000. The architects, although open to any design, immediately eliminated the air supported system from GT Schjeldahl Company. A plastic roof, they feared, could not withstand the potential hurricane-force winds that Houston periodically faced. The final, and lowest bid of the nine, came from Roof Structures, Inc. The St. Louis firm planned a steel lamella roof system for \$3,224,726.⁵²

Architect and engineer Donald Richter created the Kaiser dome using the Fuller's geodesic form. It was called the Kaiser Aluminum dome, not the Richter dome, because the patent was owned by Henry Kaiser's company and not Donald Richter. (Richter eventually left Kaiser to start his own company, Temcor Aluminum Geodesic Domes.) Both the Kaiser and the Fuller domes utilize a frame of geodesic design and a skin stretched across it. The difference, however, was that the Kaiser dome combined the frame and the skin into one complete, prefabricated unit. The Fuller dome, on the other hand, kept the frame and the skin separate until construction. Richter's innovation enhanced the strength of the entire unit. The first Kaiser dome was a convention hall built in 1957 in Hawaiian Village, Honolulu that withstood hurricane-force winds.⁵³

⁵¹ Untitled document (1/6/61), Minchew Collection 94-274/7, Wilson, Morris Crane and Anderson, Early Correspondence, 1961-192 File; "Jungle Under Plexiglas," *Rohm and Haas Reporter*, (May-June, 1961): 12-16.

⁵² Untitled document (1/6/61), Minchew Collection 94-274/7, Wilson, Morris Crane and Anderson, Early Correspondence, 1961-192 File. Aluminum domes, characterized by the use of aluminum alloys, gained in repute due to the construction in 1951 of the Dome of Discovery for the Festival of Britain. The benefits of aluminum alloys included light weight, corrosion resistance, and simple manufacture (each panel was of one size and could be, in theory, interchanged). See Makowski, 54-58.

⁵³ Makowski, 46-54; "Aluminum Panels Pleated For Strength," in *Architectural Engineering—New Structures*, ed. Robert E. Fischer (New York: McGraw-Hill, Inc., 1964), 7-10. Richter's Temcor firm built three Kaiser domes at Elmira College, New York. Each of the domes spanned 233-feet and rose 62-feet above the ground.

Anderson wrote to Joe Lydick of Lydick Roofing Company to thank him for his offer and explain why Lydick's Kaiser system was eliminated. The Kaiser system, wrote Anderson, not only would cost too much, but also would wreak havoc with the entire construction time schedule. Anderson assured Lydick that the source of the problem was that the original roof estimate of 1960 was too low. "It has become necessary for us to be absolutely ruthless paring back every aspect of the Stadium to some degree," Anderson wrote to Lydick. Therefore, the needed to look elsewhere for a design scheme.⁵⁴

To be sure, the low estimate was a factor in selecting the lamella roof, but so was the speed of erection. There were other benefits, however, that also favored the selection of the lamella roof. The architects chose the lamella design because of a proven record (over a dozen lamella roofs had been constructed during the late 1950s and early 1960s), "apparent economy," and the enthusiastic cooperation of Roof Structures, Inc.⁵⁵ The lamella framing incorporated ordinary building materials and therefore reduced the final price of construction. A lamella roof could "clear span" an area over one thousand feet long while distributing stresses evenly among its beams and supports. For the Harris County Domed Stadium, the roof's steel framework spanned 641-feet, 8 inches across and arched to a height of 213-feet over the playing field. The roof could span a large distance by utilizing trussed beams

Although most of the Kaiser/Temcor domes utilized an aluminum skin with the aluminum frame, the Crystogen, a Temcor creation, employed plastic panels to replace the aluminum skin. This design was implemented for the Botanical Gardens in Des Moines, Iowa. See, D. L. Richter, "Developments in Temcor aluminum domes," in *Analysis, Design and Construction of Braced Domes*, ed. Z. S. Makowski (New York: Nichols Publishing Company, 1984), 526-252, 538-539.

⁵⁴ Ralph Anderson to Joe Lydick (1/18/61), Minchew Collection 94-274/7, Wilson, Morris Crane and Anderson, Early Correspondence, 1961-192 File.

⁵⁵ "Considerations in Design of Astrodome Roofing," Minchew Collection 94-274/8, Skylight Correspondence, 1961, 1975 file; G. R. Kiewitt, "The New Look of Lamella Roofs," in *Architectural Engineering—New Structures*, ed. Robert E. Fischer (New York: McGraw-Hill, Inc., 1964), 20-24.

connected into a diamond-shaped pattern.⁵⁶ Just as important, however, was the system's track record to withstand tremendous wind forces. Houston faced the threat of hurricanes every year because of its proximity to the Gulf of Mexico. A roofing system that could survive the high winds generated by a hurricane received extra attention by the architects.⁵⁷

The Astrodome, wrote consulting engineer Dale S. Cooper after the stadium opened, was simply “the application of conventional equipment, using tried and proven engineering principles and methods.”⁵⁸ If the science and technology that the architects and engineers used to design and build the domed stadium were well-known and unremarkable, why was it, then, that the Astrodome garnered so much press and attention? What made the Astrodome unique or special, Cooper argued, was “the size and the manner in which the products are used.” There were other buildings that could boast of some larger services or infrastructure, like wiring, refrigeration, or height. “But, putting large numbers of people in one enclosure, large enough to house a baseball field, or football field, making the ceilings high enough not to be hit by a batted ball, and then attempting to grow grass under the translucent roof,” Cooper added, “has captured the imagination of people all over the world.”⁵⁹ Indeed, the Astrodome was merely the application of known mathematics and engineering. But it was in its design and construction that the Astrodome reached the zenith of splendor. Conceived in an era of unbridled optimism, the Astrodome was designed and built to be the biggest and the best, intended to antiquate every structure that came before and would come after it. “We

⁵⁶ “Record-Span Dome Roofs Air-Conditioned Stadium,” *ENR*, 27 February 1964, 27; *WDF*, 58; Jefferson, 55-57.

⁵⁷ Makowski, *HDD*, 30.

⁵⁸ Dale S. Cooper, “Houston Astrodome-Power Plant and Mechanical Services Design,” *ASHRAE Journal* 8 (June 1966): 90.

⁵⁹ *Ibid.*

have built something that will set the pattern for the 21st Century,” boasted Hofheinz, a stadium that “will antiquate every other structure of this type in the world.”⁶⁰

⁶⁰ Mickey Herskowitz, “Welcome Earthlings,” *Post*, 8 April 1965, sec. 9, p. 2, 6.

CHAPTER 6: LAWYERS, GUNS AND MONEY

Speaking at the Houston Home Builders Association sponsored “Big League Sports Night” on & February 1961, the Houston Sports Association's (HSA) Roy Hofheinz trumpeted the importance of the stadium to everyone in Houston and Southeast Texas. Looking out into the crowd, he announced, “I don’t think that Houston yet realizes the impact the stadium will have.” The stadium's greatest impact, at least the one most cited by its defenders, was economic. Anything that brought more people and more money into Houston's economy was considered good. Without the stadium, supposedly these visitors would not travel to Houston. “The opportunity for the merchants is tremendous,” he continued, because like a giant magnet that pulled metal to its poles, the new "stadium and the attractions in it" will bring loads of revenue and "change the buying habits of the people of the entire Texas-Louisiana Gulf Coast area.”¹

Hofheinz did not just cite the potential profits of local businesses. He promised that the stadium would be the great social equalizer in Houston. Under the dome roof, every spectator would receive individual attention. From the man who wanted a seat behind home plate to the one who desired a view from right field, each would sit in the lap of air-conditioned luxury. “The man who buys the last seat in the house will be as close to second base as the man who buys the highest price seat,” he promised his listeners.² The stadium, therefore, would alter all life in Houston, Harris County, and the Texas Gulf Coast community. Hofheinz’s statement hearkened to the confident and upbeat conditions in which

¹ “Pro Sports Heads Feted by Builders,” *Post*, 8 February 1961, sec. 4, p. 3.

² “Pro Sports Heads Feted by Builders,” *Post*, 8 February 1961, sec. 4, p. 3.

the stadium idea was first trumpeted. The first bond issue in 1958 had passed by an overwhelming margin. But in just three years, the positive attitude towards the stadium encountered several snags. The turmoil over a suitable location, the battle between the HSA and Marty Marion, the alteration in funding, followed by a closer-than-expected bond election, and two legal challenges signaled a change in the public's outlook of the stadium. As a result of Ned Gill's lawsuits, county leaders and HSA officials began the long process of hammering out a workable lease contract. In the midst of this latest legal wrangling, the County Commissioners and the HSA pursued federal money to supplement the bond funds. The pursuit of federal money to reduce the financial burden of Houston taxpayers, however, resulted in the loss of money, time, and public confidence.

Commissioner Kyle Chapman wanted the public to view the proposed HSA-Harris County contract before any agreement was reached. He did not want to revive notions of perceived secrecy that had surrounded the Memorial Park debacle. "As far as having people know what will be in the contract, I think they should have a reasonable time to investigate this proposed agreement and go into any phase or sentence of it," Chapman said. It was in the public's and the County's best interest, he said, that the people who voted bonds for the stadium know exactly what was in the contract. On the heels of two lawsuits, the Commissioners needed to assuage fears that they were keeping secrets from their constituents and acting unilaterally without the people's consent.³

HSA lead attorney W. Ervin James, escorted by representatives of two consulting law firms, delivered the HSA's sixty-five-page document to the Commissioners Court on Friday, 5 May 1961. James announced that the document "represents our draft of what we think

should be included in the contract” including “out proposals as to leasing, percentages of revenue sharing, and other salient features.” County Attorney Joe Resweber rebuffed all questions reporters asked pertaining to the draft’s content. There was no need to needlessly speculate on the document and engage the rumor mill. He only promised that he and his assistants would quickly and carefully pore over the document and render a decision within a few weeks.⁴

If Resweber was upbeat that he and his assistants would look over the document and render a quick and painless interpretation, he was less enthusiastic days later. The HSA contract differed in several provisions to the one that had been worked upon, according to Resweber. One alteration focused on the selling of the seat options. The HSA wanted to deduct the costs of selling the seat options from its final obligation, instead of paying for the seat option sales. A second change centered on which party was responsible for all stadium maintenance and costs. The HSA asserted that this was the County’s duty, since it was the County's building. And finally all staffing, utility, and insurance costs should now be paid by Harris County, not the HSA. Resweber feared that the new contract financially favored the HSA, while not guaranteeing that the HSA satisfy its contractual obligations. Even trickier than the contract, Commissioner "Squatty" Lyons wanted to determine if the HSA would make an advance rental payment before the county set its 1962 tax rate in July. If the HSA paid \$562,000, the county’s tax rate would not have to be increased to pay the interest on the bonds. County auditor Bruce understood that the HSA agreed to deposit the rent once they

³ “Chapman Wants Public To Study Stadium Pact,” *Post*, 13 February 1961, sec. 1, p. 7.

⁴ “Resweber Mum On Stadium Pact,” *Chronicle*, 6 May 1961, sec. 1, pp. 1, 2.

signed the contract. HSA attorney James contended that rent would not be paid until the bonds were sold.⁵

Resweber recommended to the Commissioners that Attorney General Will Wilson decide upon the legality of the HSA's revised contract. Resweber stated that Wilson's legal opinion would protect the county from future lawsuits and "help us get better interest rates on the bonds." W. Ervin James argued that this decision "could jeopardize the Houston franchise with the National League" because the HSA needed a contract for the stadium before June 1. Resweber hinted that the revised contract could be signed before Wilson's approval if the HSA understood that clauses deemed unconstitutional would be changed. The Commissioners agreed that the bonds would not be sold until Wilson approved the contract. Provisions within the revised contract included the construction of a temporary stadium, built by the HSA with the syndicates own money, adjacent to the domed stadium. Another sticking point concerned "alterations, improvements and additions to the stadium." County leaders wanted to reserve the right to veto any additional structure or facility. The HSA, on the other hand, wanted to have the ability to build a parking garage, for example, at its own expense on the county land. The HSA, then, would reap all revenue until construction costs were redeemed. The HSA responded with something called a "surrender clause." If the county disapproved of any structure the HSA hoped to erect, the HSA could terminate its lease within five years, leaving the County in control of the stadium and the bond debt. Another issue was the sale of seat options. The HSA hoped to deduct all advertising costs of the seat

⁵ "Stadium Hits Snag In Contract Terms," *Post*, 16 May 1961, sec. 1, pp. 1, 9.

options from the net. Originally Commissioners objected, but decided that ten percent from the receipts could be subtracted for advertising.⁶

One provision of the new contract allowed the HSA to construct a temporary stadium at the South Main location and reap all income from it during the year. County commissioners asked Attorney General Wilson to provide his opinion on the contract before any agreement was made. Resweber wanted to exercise some prudence creating the stadium covenant because “It is going to be with us for a long time” and “must not be held unconstitutional at a later date.” Only by exercising caution would any future legal threats be eliminated. Commissioners Lyons and Chapman suggested that the contract be signed and a copy sent to the attorney general. The commissioners made this recommendation after the HSA warned the court members that the NL might pull the franchise out from under Houston unless a stadium agreement was reached. Elliott agreed with Lyons and Chapman. “I’m in favor of signing the contract, if we reach agreement, sending it to Wilson for a ruling and at the same time to advertise the sale of bonds.” In Elliott’s opinion, the bonds could be sold as soon as the contract was signed, expediting the situation.⁷

Before the meeting on 26 May, “seventy-five of Houston’s leading citizens” met at the Houston Club to sign a petition affirming their support of the HSA-County lease contract. These “leader citizens” feared that the HSA would not meet the June 1 deadline set by the National League and would thereby lose its franchise. NL president Warren Giles denied that he would take such a drastic action without examining the entire “Houston situation.” To this effect, the petition stated that the commissioners should sign the contract and avoid

⁶ Stan Redding, “County Asks State Ruling On Contract for Stadium,” *Chronicle*, 24 May 1961, sec. 1, p. 1, 14; Elliott Pledges Legal Opinion Won’t Delay Stadium Contract,” *Chronicle*, 25 May 1961, sec. 1, pp. 1, 14.

jeopardizing big league baseball. Houston attorney John Jamison was confident in the continuing good will and faith of the HSA. "Roy Hofheinz and other members of the Sports Association have been insistent from the time of the election that the HSA carry out everything it agreed to do at that time," Jamison said, "We think the HSA has tendered everything it agreed to tender." Park Board chairman William Kirkland said, "I have read this contract three times and I haven't found a thing that both parties can't sign in good conscience." Jamison and Kirkland pointed out that the HSA guaranteed that the county would share in stadium profits. "The HSA has gone farther than its original proposition in offering the county a percentage of the gross receipts as defined in the lease proposition," affirmed Jamison. Kirkland said that any contract required faith from both parties. This lease agreement was no different. "The HSA is taking a heavy financial responsibility," Kirkland continued, and agreed "to give the county a cut in the excess profits."⁸

Meeting all day at the Harris County courthouse on Friday, 26 May, the HSA and the Commissioners Court agreed to a stadium contract and scheduled the formal signing for the following Monday. Two of the largest obstacles, "alterations, improvements, and additions" to the stadium area and lease renewal options, were resolved by compromises for both sides. Commissioners wanted the authority to veto future structures adjacent to the stadium. The HSA, then, asked that the "surrender clause" be instituted that allowed the syndicate to terminate the lease within five years. If the County rejected a proposed HSA building (a parking garage, for example), the HSA could end its rental obligations. The Commissioners offered a compromise to the "surrender clause." The new provision granted the county

⁷ Verniaud, "Harris To Seek Wilson's OK on Pact for Stadium," *Post*, 25 May 1961, sec. 1, pp. 1, 6; Nealon, "Post Time," *Post*, 25 May 1961, sec. 4, pp. 1, 2.

“absolute veto power” from 1 January 1962 to 1 January 1965 on any planned facility for the stadium area. After these three years, the HSA could terminate the lease within thirty days if the county “refused a reasonable and lawful request.” Hofheinz argued that the HSA required this type of control in an effort to promote the stadium for other venues. Hofheinz, ever the promoter, defended this assertion in terms of communal benefit. “If we can’t generate enough money from what we do out there,” he continued, “three things will happen: we will go broke and lose \$5 million, big league baseball will go out the door, and the county will be stuck with the stadium bonds.” Now that the HSA was in the management and promotion businesses, Hofheinz advocated for greater power over the stadium and stadium property. The HSA desired some freedom in the development of the site for protection of their investment. Concerning the lease renewals, the HSA received two ten-year lease options with \$750,000 rental fee. In return, the HSA would share fifty-fifty in the first \$2 million of gross revenue. The HSA also agreed to pay the yearly rent before the county levied its tax assessment for the next year.⁹

At 9:45 am, Monday, 29 May, Commissioner Ramsey motioned, and Commissioner Lyons seconded, that Judge Elliott sign the stadium lease with the HSA. Cullinan and James, representing the HSA, and Harris County officials Judge Elliott and William Kirkland signed the stadium contract, beating the 1 June deadline. Once the attorney general approved the contract, Harris County could begin the sale of the \$22 million tax bonds. Then Harris County right-of-way engineer E. E. Schwenke could negotiate with the Hilton Hotel

⁸ “Stadium Contract Backed By 75 of City’s Civic Leaders,” *Chronicle*, 26 May 1961, sec. 8, p. 2; Nealon, “Blue-Ribbon Group Backs HSA’s Lease,” *Post*, 26 May 1961, sec. 1, pp. 1, 5.

⁹ Verniaud, “Signing of Arena Pact Is Monday,” *Post*, 27 May 1961, sec. 1, pp. 1, 4; “Stadium Contract Ready to Sign,” *Chronicle*, 27 May 1961, sec. 1, pp. 1, 2; Nealon, “Court Okays Colts’ Lease’ Green Light for Domed Stadium,” *SN*, 7 June 1961, p. 18.

Corporation and other land owners at South Main for the stadium and roads. Elliott also notified the Architects that they could now complete all stadium designs.¹⁰

Attorney general Wilson pronounced his verdict on what he called an “unusual” contract two days later. He approved the forty-year lease contract after he and his staff “worked around the clock” through the fifty-six page document to ready the legal opinion before the HSA’s June 1 deadline. Despite working in haste, Wilson’s decision was “not particularly difficult” and he anticipated that it should withstand any legal challenge in the future. With legal validation, HSA attorney James notified NL president Giles that the stadium contract had finally been sanctioned. “This was the last stumbling block,” a pleased Hofheinz announced, “We are now officially in the National League.” Commissioners Court members also expressed their delight over Wilson’s opinion and determination to speed-up the rest of the project. Wilson still needed to validate the \$15 million construction bond issue. Commissioners began the process of advertising to the \$22 million bonds in the hopes of opening the bids on 28 June. When the Commissioners opened the bids, the HSA would remit its first rental payment.¹¹

On 2 June 1961, Judge Elliott notified Lloyd and Morgan and Wilson, Morris, Crain and Anderson that “your associated partnerships” would be officially employed by Harris County “for the purpose of designing a sports stadium, complete with dome covering and year-round air conditioning.” The contract, according to Elliott, would be signed once the County sold the bonds. The architects, in turn, notified Roof Structures, Inc. of St. Louis that

¹⁰ “Sports Stadium Contract Signed; Architects Rush Their Plans,” *Chronicle*, 29 May 1961, sec. 1, pp. 1, 7; Peebles, “Sports History Made May 29,” *Chronicle*, 30 May 1961, sec. 4, pp. 1, 2.

¹¹ “Stadium Contract Is Approved,” *Post*, 1 June 1961, sec. 1, pp. 1, 10; “County to Open Stadium Bond Bids June 28,” *Chronicle*, 1 June 1961, sec. 1, pp. 1, 19.

they would be the body to sign the contract for the structural engineering of the lamella roof.¹²

The bidders on the \$18 million bonds asked for the highest interest rate possible, 3.80901%. The county prepared to sell the bonds on 6 July to the Harris Trust and Savings Bank of Chicago, the head of the alliance, only if the HSA deposited a lease payment of \$556,900. The HSA, as required by its contract with Harris County, was to deposit its first payment in advance. Even though the syndicate offered a lower combined interest rate for the \$15 million construction and \$3 million purchase bonds, auditor Bruce said that splitting the bonds among several buyers would guarantee the County the best rates across the board. According to Bruce, the combined bid would actually cost the County \$84,055, due to the coupon rates during the first ten years of the lease contract. A concern arose, however, because the interest rate meant that the county would be forced to pay \$7,385 every year, the difference between the interest rate and the HSA's rental payment. The final cost of the construction bonds was \$29,413,775 in forty years, with \$14,413,775 being interest. The worst part was that the bonds could have secured a lower interest rate if sold sixty days previously, according to a county fiscal advisor.¹³

With a grave financial future facing Harris County, the HSA failed to deposit the advanced rent payment before July 6. An upset Commissioner Phil Sayers threatened to cancel the entire bond issue. Sayers blasted the HSA. "They were present June 28 when the bids were opened, they were told we wouldn't sell the bonds until the money was in hand," he said. "They knew we were meeting Thursday (July 6) to sell the bonds, and should have

¹² Bill Elliott to the Architects (6/2/61); Morgan and Morris to Roof Structures, Inc. (6/23/61), Houston Dome Special Revision Folder, WMPA Archives.

been present with the check,” he continued. “If they don’t show Monday,” he concluded, “I’m going to move we cancel the whole thing.” Cooler heads prevailed, as the rest of the commissioners court decided to give the HSA until Monday, 10 July to make the deposit. Hofheinz pleaded ignorance, “We had no notification that we were to have the money on hand Thursday.” Hofheinz said that the HSA would have sent the check earlier if it was really required. He promised to make the payment on Monday. According to Hofheinz, the letter from auditor Bruce that instructed the HSA to remit its payment before or on the date of the bond sale did not actually have a date stated.¹⁴

Hofheinz presented the \$566,900 check to Judge Elliott on Monday, 10 July. The Commissioners immediately ordered the issuance of the bonds. Hofheinz also presented a letter that explained the tardiness of the rental check. According to Hofheinz, the HSA was “not obligated to pay such sum until the date of the closing of the sale of the stadium bonds.” Future payments, the letter continued, “will occur when the bonds are delivered and the money received.” But since the commissioners demanded the first payment “30 days in advance of the due date,” the HSA was “glad to co-operate.” Hofheinz’s letter hinted at the commissioner’s skeptical attitude that the HSA did not have the rent money. Commissioner E. A. Lyons said that the commissioners were simply guarding the county's fiscal future. The check averted any financial “jeopardy.” The HSA, according to Lyons, simply acted irresponsibly. Hofheinz's reluctance to remit the first check, however, created the perception

¹³ “Bids on Stadium Bonds Ask High Interest Rate,” *Post*, 29 June 1961, sec. 1, pp. 1, 10.

¹⁴ “HSA Fails To Pay on Bond Issue,” *Post*, 7 July 1961, sec. 4, p. 1; “New Closing Date Set For Stadium Bonds,” *Chronicle*, 7 July 1961, sec. 2, p. 6.

that the HSA was not looking out for the people's best interest. Instead of quelling pessimistic opinions of the HSA, Hofheinz opened the door to future attacks and derision.¹⁵

Later that month, President John F. Kennedy declared that the nation needed more civilian protection from “nuclear explosions” and fallout. When Judge Elliott learned that federal money could be available if the stadium’s design included a 150,000-person fallout shelter, he began to explore the possibility of including this design feature. Stadium architect S. I. Morris agreed that the stadium could incorporate a fallout shelter. “There’s a lot in the stadium that makes it a natural to be beefed up for a shelter,” Morris said. Elliott agreed. “There is real potential in the domed stadium,” he stated, “now that President Kennedy is so interested in picking up civil defense, we should explore the idea of making such use of the stadium.” Hofheinz met with assistant defense secretary and civil defense director, Adam Yarmolinsky to discuss the stadium’s shelter possibilities. President Kennedy and Vice-President Lyndon B. Johnson both eagerly approved of the plan. Kennedy instructed the Defense Department to formulate its own fallout shelter plan for the domed stadium and report the results.¹⁶

If the County pursued this plan, \$8.74 million would be added to the cost of construction. Judge Elliott wanted to quell rumors that this digression would delay construction of the stadium. Even though the architects were completing the final stadium blueprints, Elliott promised that construction would not be delayed. The architects used the present stadium design, with the only alteration being a deeper excavation than previously envisioned. A two-tier excavation under the grandstands and one located under the parking

¹⁵ “H.S.A. Gives First Year’s Stadium Rent,” *Chronicle*, 10 July 1961, sec. 1, p. 1.

lot, 300-feet wide around the stadium, were the two additions. The new stadium plan would locate twenty-acres of parking and exhibition space underground to serve as protection from “nuclear explosions.” The fallout shelter pledged to house over 85,000 individuals beneath the surface, with an additional 64,000 occupying the area underneath the concrete stands. The increase in construction cost was estimated at \$58.57 per person, which would be financed by Uncle Sam. County and HSA officials hoped that the proximity of downtown Houston would make the stadium more attractive to the federal government. The Harris County proposal asked only that the federal government pay for the alterations of the stadium and make a decision quickly.¹⁷

The federal government, however enthusiastic, allocated at most only \$750,000 for the stadium. Texas Representative Albert Thomas reported that Secretary of Defense McNamara believed “the project to be an excellent one, but said funds are limited.” With such a paltry sum of money, members of the commissioners court decided to abandon the fallout shelter prospect and move forward. Commissioners Lyons and Sayers also expressed a concern that the federal government might become involved in the operation of the stadium. “I don’t want the participation of the government if they think they’re going to run the stadium,” said Lyons. “If federal money means there will be any federal influence on construction, I say we forget it,” avowed Sayers. Chapman concluded that the paltry amount

¹⁶ “Domed Stadium Studied As Atom Fall-Out Shelter,” *Chronicle*, 4 August 1961, sec. 1, p. 1; “Kennedy Backs Plan for Bomb Shelter in Stadium,” *Chronicle*, 12 August 1961, sec. 1, p. 1; Tom Omstead, “Fallout Shelter In Arena Could Hold 150,000,” *Post*, 13 August 1961, sec. 1, pp. 1, 20.

¹⁷ Omstead, “Fallout Shelter In Arena Could Hold 150,000,” *Post*, 13 August 1961, sec. 1, pp. 1, 20; “\$8 Million Aid Is Sought For Stadium Shelter,” *Chronicle*, 13 August 1961, sec. 1, pp. 1, 16.

of federal money resulted in “minimum protection” for Houstonians anyway and, therefore, should be abandoned.¹⁸

Even as the County awarded contracts to the stadium architects, it did not completely own the site. The Hilton Hotel Corporation still controlled 494-acres at South Main. HSA stockholders Robert E. Smith and Hofheinz purchased the land from Hilton and pledged to sell 180-acres of it to the County at cost or \$10,121.46 an acre. Smith pledged to sell an additional seventy acres to the county at the same rate. The County would pay \$2,528,182 for 250 acres. This action allowed the County to buy the entire stadium location for less than the \$3 million originally appraised. Hofheinz asked, in return, that the county pay the cost of draining the site for the HSA’s temporary stadium. Smith and Hofheinz also promised to cooperate with the State Highway Department, providing it with the right-of-way for the South Freeway.¹⁹

Commissioners were determined to protect the county’s investment by helping the HSA control competing businesses adjacent to the stadium. The Commissioners asked four property owners adjacent to the Kirby Drive extension, on the western border of the stadium, to avoid building things like parking garages and potentially dangerous service stations. If they refused, Elliott threatened to realign Kirby Drive just like the county did on Fanin Street, placing the road within the stadium site. By doing this, the county guaranteed the HSA, in the words of the lease agreement, “the exclusive right to...control the leased

¹⁸ “Architects Hired To Plan Stadium; May Add Shelter,” *Chronicle*, 21 August 1961, sec. 1, p. 1; “County’s Hopes For \$8 Million In Aid Dashed,” *Chronicle*, 21 August 1961, sec. 1, p. 1 “Stadium-Shelter Idea Fades; Not Enough Federal Money,” *Post*, 22 August 1961, sec. 1, pp. 1, 3.

¹⁹ “Architects Hired To Plan Stadium; May Add Shelter,” *Chronicle*, 21 August 1961, sec. 1, p. 1; “Stadium-Shelter Idea Fades; Not Enough Federal Money,” *Post*, 22 August 1961, sec. 1, pp. 1, 3; “Smith, Hofheinz Buy \$5 million Stadium Tract,” *Chronicle*, 29 August 1961, sec. 1, pp. 1, 2; “Hofheinz, Smith Buy Land, Assure Arena Site,” *Post*, 30 August 1961, sec. 1, p. 12.

premises...and other streets, roadways and other areas contained therein.” If the property owners were unwilling to cooperate with the county, Elliott threatened the use of harsher tactics. “We will build a fence on that strip and make it impossible for cars to get to that property to work,” warned Elliott. Only one owner, however, agreed to the county’s demand. Commissioners decided to align south Kirby completely within stadium property. Commissioners acted, they argued, only to protect the HSA revenues that would be used to amortize the bonds. On the eastern side of the stadium, then, Fanin ran 2,050 feet and on the western flank Kirby ran 4,169 with the South Loop abutting the southern boundary of the stadium.²⁰

Thirteen contractors picked up the bid forms from the county for the excavation and subdrainage work. Only one firm, W. S. Bellows Construction Corporation, returned a completed bid to the commissioners court. The offer of \$857,769 was much more than the original estimate of \$500,000. The court then sent the lone bid to the architects for recommendation even though it was understood it would be rejected. According to Morris, “There’s no point in taking such a high bid just because it’s the only one.” The lack of enthusiasm from excavation contractors lessened the hopes that the stadium would be completed for the 1963 baseball season. “The target is not out of our reach yet, but it’s getting rather shaky,” lamented Elliott.²¹

A brief glimmer of optimism returned in early December 1961 when A. V. Looper told the Court that his contracting company would accept the entire stadium construction job.

²⁰ “County Determine H.S.A. to Get Stadium Parking, Gas Monopoly,” *Chronicle*, 31 August 1961, sec. 1, p. 1; “H.S.A. Appears to Have Monopoly On Parking, Stations at Stadium,” *Chronicle*, 29 September 1961, sec. 1, p. 16.

Although this was not a new proposition, Looper said his company “will do the work on the stadium, including the excavation, according to the plans of architects and engineers, at the cost of labor and materials.” The commissioners “enthusiastically” recognized this offer and informed Looper that he would receive an interview with the court. Looper had not seen architect drawings or engineering specifications, but said “I’m willing sight unseen to do the job at whatever its costs.” He would do this because he formed his new firm, Lindco, only five weeks previous to his offer. “I am willing to do this for recognition,” Looper informed the media. If the commissioners and Looper could come to amicable terms, the stadium just might be built for the \$15 million estimate. If this was just a ruse by Looper, however, the county could not expect to build the stadium for the earlier estimate.²²

Before the County opened the excavation bids, Ned Gill returned to the forefront, armed with another lawsuit threat. This time Gill opposed “piecemeal” contracting of the commissioners. Only by awarding one contract for the entire stadium project, he argued, could the stadium be constructed for \$15 million.” Gill said that he did not think the stadium could be constructed for this estimate, but would cost at least \$10 million more. Gill now argued that the voters should decide if they want a stadium that will cost more than they had been promised. The only way his lawsuit could be averted, said Gill, would be “absolute assurance” from the commissioners that this piecemeal contracting would result in a \$15 million domed stadium. Elliott responded to this news with skepticism. Elliott expected

²¹ Verniaud, “Lone Bid Is Received On Stadium,” *Post*, 31 October 1961, sec. 1, p. 9; “New Stadium Job To Await Hearing,” *Chronicle*, 4 November 1961, sec. 1, p. 1, 2; “High Bid Delays Work on Stadium,” *SN*, 8 November 1961, p. 8.

²² “Offers to Build Stadium at Cost,” *Chronicle*, 7 December 1961, sec. 1, p. 1.

another legal challenge from Gill. But he would not dwell on this information. Bids for stadium construction would be received, Elliott said, early in 1962.²³

The second round of excavation bids ended in December. The apparent low bid came from an El Paso firm, C. H. Leavell & Company, that bid \$664,906 for 120-days of work on both subdrainage and excavation. This combined low bid was still almost \$60,000 more than the revised estimate Morris had presented three weeks previous. Instead of the combination bid from Leavell, the court selected John Kraak Construction Company, based on the recommendation of the architects and consulting engineers, Lockwood and Andrew, and Newman, Inc. Instead of saving a paltry sum of money, the Court deferred to the expertise of their architects who wanted to work with a familiar client. In the endorsement of Frank H. Newman, Jr., the architects said that they preferred that all excavation and earthwork be completed without delay, which would, in turn, ready all future construction projects. Kraak Inc.'s bid of \$430,311 for only excavation was \$689 lower than Morris's revised estimate.²⁴

On New Year's Eve, Judge Elliott announced that in just four days, "a tremendous relief to me," the start of excavation work would finally begin. Said Elliott, "Getting this hole started means the construction of the stadium has actually begun." The Judge not only confirmed the economic importance the stadium would have on Houston, but would also provide "symbolic greatness of the leading city of the South." "The stadium will typify Houston's imagination and vision," wrote Bob Rule because "[N]ever before in history has any city dared build a gigantic outdoor arena seating 52,000 persons and put a roof over it,"

²³ "Building Bids For Stadium Planned Later," *Chronicle*, 14 December 1961, sec. 1, pp. 1, 28.

²⁴ Verniaud, "Commissioners To Let Stadium Contract Today," *Post*, 19 December 1961, sec. 1, pp. 1, 4; Rule, "First Contract On Stadium Awarded," *Press*, 19 December 1961, pp. 1, 4.

complete with air-conditioning. "It will be a world showplace," not just a Texas or American monument.^{25 26}

On Wednesday, 3 January 1962, Judge Elliott, every member of the Commissioners Court, members from the Houston Chamber of Commerce, and four officials from the HSA (Roy Hofheinz, Craig Cullinan, Jr., Paul Richards, and R. E. Smith) symbolically fired Colt .45s into the Texas soil to commence the excavation of the domed stadium. "Events in the National Baseball League led to the rapid planning of this stadium," said Elliott, "Its quick development is a tribute to the co-operation of everyone in Harris County who helped make it possible." Hofheinz spoke a few words on this "historic occasion." In typical Hofheinz bravado, he said, "One of the greatest buildings in the world is about to start," built for the entire community, the county, and the state. The planned work by John Kraak, Inc. entailed excavating twenty-four feet in depth and 700 feet in diameter in 120 days.²⁷

The exuberance of the groundbreaking ceremony did not last long. *Post* reporter Marshall Verniaud revealed that he had sorted through the county auditor's records over the last several days. What he found was most discouraging. Harris County only had \$15 million left of the original \$22 million to actually build the stadium.²⁸ It appeared to Verinaud that the County could not construct the stadium with the available funds. With a looming desperate fiscal future, Looper's proposition might find a favorable audience within the Commissioners Court. The Commissioners, however, unanimously rejected Looper's offer to

²⁵ Rule, "Sidelights," *Press*, 19 December 1961, p. 16.

²⁶ "First Work On Sports Stadium Set Wednesday," *Post*, 1 January 1962, sec. 1, pp. 1, 7.

²⁷ "Officials Fire .45s to Launch Sports Stadium," *Chronicle*, 3 January 1962, sec. 1, pp. 1, 12; "Breaking the Ground With a Bang," *Chronicle*, 4 January 1962, sec. 4, p. 3; "Ground Breaking With a Boom," *Press*, 4 January 1962, p. 10; Nealon, "Excavation Work Begins on Colts' New Domed Park," *SN*, 10 January 1963, p. 25.

build the domed stadium at cost. Looper's scheme involved the County buying and renting the equipment for the construction of the stadium while Looper and his construction manager supervised the labor. Essentially, this arrangement asked that two private contractors be paid like county employees. Commissioner Lyons opposed the formula, saying it was not "in good taste or in good business."²⁹

With work on the temporary stadium speeding towards completion for the 1962 baseball season, Hofheinz spoke to Bob Rule about the domed stadium. "There's no doubt in my mind that this stadium will be second only to the Ship Channel in its economic impact on Houston," boasted Hofheinz, "and after it's finished it may not be second." The tireless effort that Hofheinz brought to the realization of the stadium could not be overlooked, asserted Rule. Only a "genius that he is" was able to coordinate the money and energies of the disparate local, state, and federal government agencies into the domed stadium. Rule did not want to reduce the importance and influence of Cullinan, Kirksey, nor the County Commissioners, "But the man who provided the jet fuel was Hofheinz... Without him Houston wouldn't be in the major leagues... Without him there would be no stadium."³⁰

Houston Chronicle reporter Zarko Franks was not as conciliatory to Hofheinz as Rule. Hofheinz did have a "midas touch" and "silver tongue," conceded Franks, but he also had an "insufferable" ego to match. He was "controversial," and oftentimes confrontational and disagreeable. Franks reminded those who had forgotten, that Hofheinz was nearly impeached by the Houston city council because of Hofheinz's refusal to work with others. Hofheinz, who invented long dugouts for the stadiums and color-coded tickets, liked the

²⁸ Marshall Verinaud, "Stadium Bankroll Down \$5.7 Million After Year," *Post*, 7 January 1962, sec. 1, pp. 1, 13.

seventy-five foot long dugouts because “everybody wants a box seat behind the first or third base dugout.” The longer the dugout, then, the more box seats available to the baseball fan and the more boxed seats that the HSA could sell. The color-coded ticket helped the fan locate his seat easier, in theory. For example, if the grandstand section was red, then the ticket for that grandstand section was also red. This would allow the HSA to reduce the number of ushers to help the fans locate the seats. Hofheinz, asserted Franks, was indeed interested in the baseball fan: his money.³¹

John Kraak’s excavation work proceeded on schedule. Two months into the four month contract, twelve feet of earth had been removed and relocated for the auxiliary stadium’s parking lot. Kraak needed to remove another twelve feet before the job was finished. Elliott said that the county hoped to have the stadium ready for the 1963 baseball season. But due to the labor and Ned Gill lawsuits, 1964 seemed more likely. Along with excavation, work on utilities, roads, and sewers advanced, too. When the Architects submitted their final designs for the stadium, the County would present them for bids and award the contracts. Elliott wanted to do this while Kraak worked so that when excavation ended, construction would begin immediately.³²

Elliott confirmed his prediction that the stadium would not be completed in 1963 in early April. The Commissioners still hoped for additional federal money, up to \$2 million, to incorporate fallout shelter modifications in the stadium’s designs even though they had apparently been informed that a large amount of money was not available from the federal

²⁹ Ernest Bailey, “No \$80-a-Day Stadium Builder,” *Press*, 8 January 1962, pp. 1, 4.

³⁰ Rule, “Sidelights,” *Press*, 22 January 1962, p. 12.

³¹ Zarko Franks, “Colts’ Roy Hofheinz Has Midas Touch,” *Chronicle*, 12 February 1962, sec. 3, p. 2; Franks, “\$8 Million Spent on Colts,” *Chronicle*, 9 February 1962, sec. 1, pp. 1, 11.

government. Once the federal government responded, then the Architects could resume their work on the stadium blueprints. "Although excavation will be completed around May 1 as scheduled, we will not be ready to ask for bids then because we do not know how much the Federal government will participate in the project," said Elliott. The Judge told reporters that the County already assumed \$750,000 even though this was an error. Harris County was offered, but never accepted, \$750,000 from the Defense Department. At any rate, Elliott continued, "this amount would not do the job, so we asked for \$1,200,000 additional for a total of \$1,950,000." Once the Commissioners received the fallout specifications and the money from the Defense Department, then the architects could design the system accordingly. "We have no word yet whether we will get this money, so we cannot complete plans and specifications to call for bids," Elliott concluded. According to S. I. Morris, "We don't know and the federal government doesn't know, exactly what its fallout shelter requirements are." These standards affected stadium wall thickness, for example, and the number and size of internal generators to provide electricity. Until then, the Commissioners Court would not begin the construction bidding process until they heard from the Department of Defense, until June.³³

Houstonians pondered the fiscal realities for four months before they could be distracted by big league baseball. The HSA's major league baseball team, the Colt .45s officially began play on Tuesday, 10 April 1962 in Colt Stadium, the temporary ballpark adjacent to the domed stadium. The .45s defeated the Chicago Cubs on opening day, 11-2.³⁴

³² "Complete Picture on the Domed Stadium," *Press*, 9 March 1962, p. 11; Perkins, "Architects Revisited: 345 to a Dome Homer," *Post*, 18 February 1962, sec. 3, p. 4.

³³ Carol Foley, "Domed Stadium Delayed until '64," *Chronicle*, 4 April 1962, sec. 1, p. 1; "Our Domed Stadium Now Due in 1964," *Press*, 4 April 1962, p. 1, 6.

³⁴ Nealon and Herskowitz, "Colt .45s Bow In With Cannon-Like Boom," *SN*, 18 April 1962, pp. 19-20.

The next day, a “soft rain, fanned by a northeast wind” delayed the baseball game over an hour, demonstrating the future benefit of the domed stadium.³⁵ Although the .45s and the Cubs finished the game, the rainfall wreaked havoc on the domed stadium’s excavation next door. With a significant amount of rainfall, the hole quickly filled with water. To resume digging, the water had to be pumped out of the hole. To keep the hole dry, the County paid \$3,200 a week. Commissioner Chapman argued that it made financial sense if the County started accepting subdrainage bids immediately. “We can’t let the hole fill up with water,” Chapman said, because “it would fall in, and we’d have to do the job all over again.” Chapman’s plan, however, required a revision of the entire contracting system for the stadium. The commissioners decided to let the contract on the stadium include subdrainage. Stadium construction bids could not be accepted until the federal government made its decision about the fallout shelter plan. The cost of pumping the stadium hole would make the final cost of the stadium greater than expected with this continued inaction.³⁶

Three members of the Court, Judge Elliott, and Hofheinz made two trips to Washington to petition for federal money for the stadium.³⁷ The first trip was made in May 1962, before the end of the fiscal year, June 30. After this date, the stadium would not be suited for federal fallout shelter funds under the Kennedy administration's shelter incentive program. The Houston contingent met with Assistant Secretary of Defense Stewart Pittman and other Defense Department officials in an effort to receive a \$2 million federal grant (nearly one quarter of the original \$8.7 million the County desired). Pittman said that the stadium would not receive any additional funds because the was not considered a “welfare

³⁵ Zarko Franks, “Rain Ruins Blondes’ Hairdos; Woodshick Dampens Cubs,” *Chronicle*, 12 April 1962, sec. 3, p.1, 2.

orientated” public facility. Furthermore, the original \$750,000 had already been used for other programs and would probably be unavailable for the domed stadium project. Without a generous grant from the Defense Department, the County could not justify meeting the fallout shelter plans in the stadium design. Elliott, therefore, wanted to eliminate all the fallout shelter specifications from the stadium design and hopefully reduce the final estimates of construction. “I think we ought to strip out the fallout idea, come up with plans retaining the dome for which the people voted, call for bids, and see exactly where we are,” said Elliott. Stadium architect William Morgan did not know if excluding fallout shelter specifications would keep the costs within the \$15 million estimate. “Nearly completed plans call for fallout specifications,” he said, adding that eliminating these would take the architects another two weeks. Even though Elliott did not know the stadium’s final price tag, he hoped the architects and engineers could estimate the stadium’s final cost without federal money to determine if the remaining \$13.3 million of bond funds would suffice. Elliott confirmed that the original \$20 million revenue bonds voted in 1958 would not be used to complete the stadium. “The Commissioners Court is on the record as opposing the use of them, and the Legislature has been asked to invalidate them,” Elliott said. He then was asked if the County would require another bond issue to build the stadium. “Of the possible need for a new tax-backed bond issue, we don’t know,” he said. What Elliott did affirm was that the stadium would not be fallout shelter. After the quixotic chase of federal money, Harris County faced the possibility that the remaining \$13.3 million would not be enough to build

³⁶ “County Facing Dilemma Over Stadium’s Drainage,” *Post*, 13 April 1962, sec. 1, p. 17.

³⁷ “Five Officials to Seek Stadium Shelter Aid,” *Chronicle*, sec. 1, pp. 1, 2.

the stadium. This comedy of errors cost the County and the HSA money, time, and public confidence.³⁸

Since the commissioners already rejected the idea of building the stadium without the dome, they began to investigate alternative means to reduce the cost. “An informed source” told *Chronicle* reporter Carol Foley that Harris County needed an additional \$5 million in bonds to complete the stadium. Elliott rejected this claim. “I have never been given any such figure,” he said, “nor have I been told by our architects and engineers that we were short that much.” Each Commissioner wanted to discuss the stadium plans with the architects before they decided on another bond election. The architects did not know the final cost of the stadium, said architect Hermon Lloyd, “until the Commissioners Court tells us what it wants done.” Elliott admitted that if a “stripped down” dome kept the costs under the \$15 million price tag, then this altered design would be explored. Elliott would not consider any designs that eliminated the dome. “This stadium will not be just for baseball,” he said, but “used for many purposes.” Besides, he continued, “The people voted for a domed stadium and that’s what it’s going to get.” “We have relied on the opinion of professional architects and engineers that the stadium can be built with what we have,” Elliott concluded. “I believe it can.” “We must be careful that the cutting of construction costs does not increase maintenance costs to where the difference will be lost.” Sayers expressed his frustration with the Department of Defense and the Kennedy administration and regretted trying to get federal funds. “The county has wasted a lot of money trying to get federal aid,” Sayers lamented, “We will have spent maybe \$1 million in digging the hole specially and getting

³⁸ William MacKaye, “Domed Stadium Shelter Fund Decision Expected ‘Very Soon,’” *Chronicle*, 15 May 1962, sec. 1, p. 5; “Bomb Shelter For Stadium Out—Elliott,” *Press*, 17 May 1962, pp. 1, 2; Verniaud, “County

architectural designs for the shelter.” “The excavation for the stadium had to be made much larger to take care of the fallout shelter we expected to get,” Sayers said. He continued, “Now with that bigger hole, the stadium walls will have to be stronger than would have had been needed if the excavation had been made with the slopes planned at first.”³⁹

The continual delays in construction began to erode the average Houstonian’s faith that the stadium would ever be completed. County officials and the HSA were blamed for the “continued delays and double talk.” These leaders needed to determine the final plans to overcome growing public apathy. On one hand, Judge Elliott seemed to say that the County would build a “modified stadium,” while on the other hand reports suggested that another \$5 million was needed to start and finish the stadium. The entire episode demonstrated the increasing cynicism in Houston. No longer was the stadium viewed with admiration and verve, but increasing skepticism and derision.⁴⁰

At the scheduled Monday meeting between the members of the commissioners court, the architects, and engineers, all fallout shelter plans were abandoned and any potential federal money that was tied with it. According to Elliott, the Court rejected federal money because of unknown federal standards for the fallout shelter. Since the federal government never provided the building standards, members of the court decided that the paltry sum was not worth further changes to the stadium design. Only Commissioner Sayers, who did not make the trip to Washington, wanted to give the federal government one last chance and send them design specifications. His colleagues, however, denied this last plea. Commissioner

Admits Stadium May Need More Bonds,” *Post*, 17 May 1962, sec. 1, pp. 1, 19; Foley, “Stadium Sill Big Hole; County Plans Uncertain,” *Chronicle*, 20 May 1962, sec. 1, pp. 1, 5.

³⁹ Verniaud, “Modified Dome Stadium To Be Built, Elliott Says,” *Post*, 18 May 1962, sec. 1, pp. 1, 6; Carol Foley, “Election on More Bonds for Domed Stadium Studied,” *Chronicle*, 18 May 1962, sec. 1, pp. 1, 13; “Architects to Say Whether \$13.5 Million Can Build Stadium,” *Press*, 18 May 1962, pp. 1, 9.

Chapman articulated the general consensus among the Court, "I'm in favor of building what we want and forgetting what they want." The Architects were asked to return in a week with a clear revised estimate of overall costs as well as a figure that included the elimination of some "frills." Commissioners Chapman and Lyons wanted the estimates for "a first class stadium," "something we can be proud of," said Lyons. Elliott concluded the meeting by informing the architects and engineers that he and his fellow Court members understood that the stadium costs had increased since the original estimates of 1960.⁴¹

The *Press* editor disagreed with Elliott's idea of "cutting corners" from the stadium and asserted that it "seems to be entirely out of order," for several reasons. First, architectural and engineering experts testified that the \$22 million of obligation bonds would be sufficient to build a first-class stadium. The idea of cutting some frills seemed premature, because no definite plan had been formulated. Second, "not a cotton-picking thing has happened to date to throw the stadium off track," not even the deeper than needed excavation. The "fall-out flop or failure," according to the *Press*, apparently shook up not only the public officials involved but also some of the expert planners." The perception was that these experts could not come up with a remedy to the deeper stadium design or anything else. Judge Elliott needed to step forward and "get on with the stadium." The people of Harris County demanded a stadium plan, complete with specifications to obtain contract bids. Once this simple formula had been done, "then and only then," would the Commissioners, architects,

⁴⁰ Rule, "Sidelights," *Press*, 18 May 1962, p. 14.

⁴¹ Verniaud, "Call for Showdown On Stadium Is Due Today," *Post*, 21 May 1962, sec. 1, pp. 1, 8; Margaret Davis, "Stadium Estimates Ready in a Week," *Press*, 21 May 1962, pp. 1, 3; "County Junks Domed Shelter Plan," *Chronicle*, 21 May 1962, sec. 1, pp. 1, 7; Ellen Middlebrook, "Stadium Fallout Shelter Is Ruled Out by County," *Post*, 22 May 1962, sec. 1, p. 5.

engineers, and Houstonians finally know if the remaining \$13 million was enough, if corners needed to be cut, and if another bond election was necessary.⁴²

After meeting all week, the architects and engineers tried to design a first-class domed stadium. Even before the official meeting, S. I. Morris announced that the remaining money was not enough.⁴³ Morris affirmed his earlier sentiment when he presented to the court the results of the revised stadium cost study. "We have progressed to the point that we can say the cost will exceed \$15 million," he told the Commissioners. Morris revealed the type of stadium Harris County could get with the remaining \$13.4 million: a "first class, domeless, and therefore un-airconditioned stadium usable (sic) primarily for sports only, and not as an all-purpose stadium and convention exhibition hall." Morris was less sure about the final cost of the domed stadium. "If this were a standardized type of structure," Morris continued, "we could project a reasonably exact estimate." To get that number, he said, the court had to wait until it received bids from the contractors. Commissioner Lyons retorted, "I can't conceive of a businessman making this kind of bid when the money is not available." The only recommendation from Morris was to call for another bond issue to come up with the remaining funds. Asked what kind of stadium could be constructed with the remaining funds, Morris said that the dome and air conditioning would have to be eliminated. Morris defended himself by saying that the stadium was so revolutionary that many factors could not be immediately known or calculated. Morris provided an example of the difficulty in pinpointing a firm construction cost for the dome alone. He said that dome estimates had varied by \$4 million "at one time," from \$1.5 to \$5 million. Only by opening bids and

⁴² "Get on With the Stadium," *Press*, 23 May 1962, p. 8.

⁴³ "Stadium Fund not Enough, Says Architect," *Chronicle*, 25 May 1962, sec. 1, p. 1

receiving them from contractors could a realistic price of the dome be determined. Said Morris, "If I give you an unsafe estimate, we are going to be in a pickle. If we estimate on the up side or the down side, we could jeopardize the whole project unjustifiably." Morris remained optimistic that the stadium could be ready for the 1963 baseball season. Elliott, Lyons, and Sayers disagreed with Morris. They argued that it would take at least four months to receive construction bids and then begin the task of another bond issue. Sayers said that they would be "lucky" if the stadium was ready at the end of 1964.⁴⁴

Another problem concerned the HSA. The County was asking the Association to make three lease payments before the stadium was complete. The second payment of \$566,900 was scheduled for July 1. Resweber warned that the HSA had the right to cancel the lease since the County would be unable to comply with completed construction by 1963. R. E. Smith precluded any further delays when he promised that the HSA would cooperate fully with the County. Heartened by Smith's promise, Chapman was ready to ask the HSA for an "advance" to help the County. The HSA would be reimbursed the money, Chapman professed, from the seat option sales. The only option for the Court was, in the words of Commissioner Sayers, "another bond issue." "The only thing to do is get the picture, present it to the people and follow their dictates," Sayers continued. Once the court procured the picture, it would relay it to the public, who would then decide the fate of the stadium. "If they want it, fine. If they don't, we've got a nice big hole in the ground," Sayers concluded. Elliott contemplated a plan to start the stadium and call a bond election when the funds ran out. "We aren't going to kid people by putting in a foundation and then ask them for sufficient money

⁴⁴ Forrest Fischer, "\$13.4 Million Not Enough To Build Domed Stadium," *Press*, 28 May 1962, pp. 1, 3; "Stadium Can't Be Built With Present Funds," *Post*, 29 May 1962, sec. 1, pp. 1, 2; Foley, "Elliott hopes for

to complete the stadium,” averred Sayers. With much uncertainty and disappointment emanating from the discussion, Elliott wanted to affirm his steadfast intentions to get the project started and completed. At the end of the meeting, Elliott emphasized to all present that Harris County would build a domed stadium. “All I can say for sure is that we will have a stadium,” he said, and “it will be domed.”⁴⁵

The County meeting did not clarify every issue. Instead of receiving a precise estimate of construction costs, Morris said that the stadium would cost more than \$15 million. The “fuzzy thinking and talking by all concerned” at the Court house revealed that neither the architects and engineers nor the commissioners knew what it would take to build the domed stadium. Over two years and two bond elections since the domed stadium idea was presented by the park board, the only accomplishment was the large hole at South Main Street.⁴⁶

Once the stadium architects were unable to determine a concrete estimate, Welden F. Appelt returned to the County Court house to sell his design for a covered stadium. Appelt’s primary engineering experience revolved around designing bridges for natural gas and oil pipelines. In addition to these structures, Appelt submitted a design for a professional football stadium in 1954. Appelt claimed that his “colisadium” design could be built for the remaining amount of bond money available. He based his claim on his fabrication of the arches and spans, “the jigs and tools” his company already possessed, and his knowledge of the final cost of construction. “We can put up the building alone, and put it up quickly, for

Stadium Without New Bond Vote,” *Chronicle*, 29 May 1962, sec. 1, pp.1, 10; “\$13.3 Million Is Short For Domed Stadium,” *Chronicle*, 28 May 1962, sec. 1, pp. 1, 2.

⁴⁵ “Stadium Can’t Be Built With Present Funds,” *Post*, 29 May 1962, sec. 1, pp. 1, 2; Fischer, “\$13.4 Million Not Enough To Build Domed Stadium,” *Press*, 28 May 1962, pp. 1, 3; Foley, “Elliott hopes for Stadium Without New Bond Vote,” *Chronicle*, 29 May 1962, sec. 1, pp. 1, 10.

about \$5.2 million,” Appelt proclaimed. He stated that the coliseum could be completed within nine months and, if he began immediately, it would be ready for the 1963 baseball season. Appelt said that he had originally presented these designs to elected officials and civic leaders of Houston in 1949. At that time, Appelt’s plan did not receive the support of engineers who questioned its safety. Since then, Appelt said that he had proved this design in practice. Elliott was concerned that Appelt never built a stadium or coliseum, but only pipeline bridges. Although Appelt approached members of the HSA concerning his stadium design, the Park Board did not invite him to submit a proposal because the Park Board only accepted plans by architects and not engineers. Appelt’s design had already been considered and reviewed by architects and engineers. “I’m satisfied that had another workable proposal been in existence, it would have come up,” Elliott said.⁴⁷

Appelt’s scheme incorporated a “parabolic arch” roof, instead of a dome, “covered with a skin of panels, consisting of sandwiches of sheet aluminum and insulation.” The arched roof would slide on rails to allow sunlight inside the stadium. “What better light can you get on a pretty day than from the clear blue sky?,” pondered Appelt. This arched aluminum roof, according to Appelt, would reduce the cost of cooling the stadium by eliminating the transparent dome and by using the arch supports to carry the air conditioning systems vents and ducts. Appelt said that his design resembled the Architects’ only in that both were “covered, all-weather and air-conditioned.” By employing welded “hollow box section members” to frame the ceiling that he used to build his pipeline bridges, Appelt

⁴⁶ “Stadium Showdown Needed,” *Press*, 29 May 1962, p. 4.

⁴⁷ Harold Scarlett, “Covered Arena Can Be Built At Less Cost, Engineer Says,” *Post*, 31 May 1962, sec. 1, pp. 1, 6; “‘Roofed’ Stadium Idea Is Surprise,” *Chronicle*, 31 May 1962, sec. 1, pp. 1, 22; “Engineer Says He Can Build Stadium For \$13.4 Million,” *Press*, 31 May 1962, pp. 1, 9; Pluenneke, “Appelt Says His Stadium Plan Would Be Architectural Beauty,” *Press*, 1 June 1962, pp. 1, 3.

boasted that using beams and pulleys the roof could be hoisted in just a few days. These internally reinforced “welded box sections” could withstand the stresses of being raised into position, quickening the pace of construction. According to Appelt, while preparing the foundation, these “box girders could be prefabricated right here in Houston by October.” Aspects of this arch mechanism also carried the load for the two seating sections of the stadium. “The fittings and furnishings can meet the same or similar specifications that are set up for them now—seats, ramps, lights, etc. can be conventional...The dome's the thing,” he said.⁴⁸

Stadium architect F. Talbott Wilson told reporters that he had never heard of Appelt’s stadium design. “Personally—and I think that goes for the rest of the stadium architects—this is the first I’ve heard about this design,” Wilson avowed. Judge Elliott responded to Appelt’s newest proposal with guarded interest. Early in the day, Elliott said that Appelt’s reemergence was just a cheap means to generate publicity for his business. Later on, however, Elliott professed, “It would be a good idea to listen to this fellow.” Appelt’s design, he said, “has been considered by architects in recent months,” but this design did not muster the support of the County’s experts. “However,” cautioned Elliott, “if there is something new in the proposal, I’d definitely be willing to get some expert opinion on whether it would work and how it would work.” Commissioner Ramsey voiced his willingness to review Appelt’s design to determine if it would be workable. Ramsey wanted a chance to interview Appelt and review his blueprints for the coliseum, but wanted additional information from Appelt. Commissioner Chapman concurred with Ramsey that Appelt must bring his designs to the court house so all the commissioners could peruse them. Only then, he said could the

⁴⁸ Ibid.

Commissioners be truly satisfied that the domed stadium was “The very best stadium, that it is possible for us to build.” “Frankly, I don’t think this is the kind of stadium the people expected when they voted \$15 million for stadium construction,” he concluded, “they voted for a domed, air-conditioned stadium.” Ethically, it was unclear whether the Commissioners Court could talk with another engineer even though it already signed a contract with two other firms. Commissioner Lyons said that it could jeopardize the accord, but he and his fellow commissioners needed to learn all possible design schemes so they could act in the public’s best interest.⁴⁹

Stadium architects S. I. Morris and Hermon Lloyd disclosed their arguments against Appelt’s design to the Commissioners Court. Morris cited several major disadvantages of Appelt’s scheme as compared to the circular dome plan. Firstly, for the paying spectator, the seating arrangements inside the quonset were problematic. The back seats “would place back seats only inches above front seats,” resulting in poor visibility for those sitting in the back rows. The topmost level of seating was eight stories. This required a climb of eight stories or the installation of expensive escalators. Secondly, the structure actually required more air conditioning than Appelt planned, said Morris, because the building would have “much unused dead space.” Appelt alleged that only 3,000 tons of refrigerant would be needed to cool the quonset. Morris, however, disagreed. Morris argued that at least 4,900 tons was necessary for the minimal comfort of 46,000 spectators. Thirdly, an opaque roof would kill the grass if it could not be opened for ten days. In each of his examples, Morris concluded that the circular domed stadium design was superior. After the presentation, Commissioner

⁴⁹ “‘Roofed’ Stadium Idea Is Surprise,” *Chronicle*, 31 May 1962, sec. 1, pp. 1, 22; Harold Scarlett, “Covered Arena Can Be Built At Less Cost, Engineer Says,” *Post*, 31 May 1962, sec. 1, pp. 1, 6.

Chapman said, "We don't want this quonset hut business." Chapman then asked his fellow commissioners to give their architects "a vote of confidence" because they are designing the domed stadium, which was what the people of Harris County wanted. Hofheinz was pleased with the decision of the Commissioners Court to proceed with the dome design. "From our (the HSA) standpoint," said Hofheinz, "making this facility pay is most important, and we never could have done it relying on a quonset hut with...seats so far removed from the sports arena that binoculars and transistor radios would have been necessary for the fan to know what was going on."⁵⁰

The Commissioners did not invite Appelt to the Monday conference and instead relied on Morris' interpretation of Appelt's proposal. "The county judge and several commissioners agreed last Thursday to have me explain the features of my design," said Appelt, but then they commissioners refused to invite Appelt to the meeting. But, the County officials had rebuffed his proposal, contended Appelt, based on "misleading information offered to them by their architects." Appelt questioned the "reckless" decision-making of the County leaders as well as the integrity of Morris and Lloyd. Morris gave his presentation based on his opinion of Appelt's supposed design, not anything specific. "This information was given without any of my plans being seen by those architects," Appelt charged. Despite this ignorance, he continued, "they came into Commissioners Court on Monday and made an elaborate, fourteen-point presentation about them, picking them apart in detail." Not only could the "accuracy" of Morris' facts be disputed but also his "objectivity." Despite his disappointment with the County's decision, and the means it used to make it, Appelt promised he would not pursue his plan any further. Appelt did take the opportunity to throw

⁵⁰ "County Rejects 'Quonset' Stadium," *Chronicle*, 4 June 1962, sec. 1, pp. 1, 2.

one last jab at Morris and Lloyd. "The county's architects," Appelt said, championed a plan that "cannot be built for the money remaining in the fund" while he said his could.⁵¹

The HSA neglected to remit their second lease payment of \$209,760 set for 29 June.⁵² The County gave the HSA another two weeks to make its installment. When this date came and went, a tense situation became worse. Hofheinz charged that Harris County was in default of the contract agreement because it failed to acquire the land and start construction of the stadium. Hofheinz also claimed that the payment due date was August 16. "Should we make payment before the payment is due?" he wondered. An incensed Commissioner Chapman replied with a threat to cease all work at the stadium site, including the \$3,200-a-week pumping of "Lake Elliott" that began on June 11. "By Monday (July 23) we will have spent \$19,200 keeping that stadium hole pumped dry," said Chapman. The easiest way to end this was to stop pumping and not award a subdrainage contract until the HSA cooperates. "I don't know what will happen if we take those pumps out," Chapman said, "But in my opinion not much damage will be done." Chapman was prepared to stop draining the stadium hole immediately if the HSA did not send the check. He also wanted the HSA to stop procrastinating on the escrow deed for R. E. Smith's sixty-acres of land that completed the entire acreage for the stadium site.⁵³

Chapman was still upset two days later. Commissioner Sayers concurred with his colleague and pondered a real possibility of removing the pumps. "If the deed to that land has not been put in escrow by Thursday and some arrangement made on the payment of the money," Sayers announced, "I say let's pull those pumps out of there." Chapman, bolstered

⁵¹ Verniaud, "Stadium's Dome Plan Reaffirmed," *Post*, 5 June 1962, sec. 1, pp. 1, 13; "Architects Didn't See His Plan, Says Appelt," *Press*, 5 June 1962, pp. 1, 2.

by Sayers's support, even hinted at aborting the stadium project. "Maybe it's time to take a look at all of this and decide if Harris County wants to operate a sports stadium," concluded Chapman. Judge Elliott tried to calm Chapman and Sayers. Elliott said that in a conversation with Hofheinz, Roy maintained that HSA attorneys were working on the deed. Chapman remained unmoved. "They may have said they are working on an escrow agreement, but we haven't seen it," he retorted. "Unless the HSA shows the responsibility incumbent upon it, I don't see why we should go further without new consideration," concluded Chapman.⁵⁴

In the midst of the wrangling over the lease installment and the deed, speculation that the County would have to ask for another \$8 million appeared in the media. The original bond issue contained the provision of \$15 million for stadium construction. Architects and engineers based this calculation on the 1960 estimates for stadia built in Los Angeles, Washington, and San Francisco. These estimates were too optimistic, resulting in a low assessment for the domed stadium. The extra \$8 million bond was "sure money" to avoid another "goof." Raising the tensions, the HSA refused to provide any financial support and even threatened to void the lease contract and force the County to operate the stadium. HSA leaders defended their tough stance. Baseball economics, they insisted, could not tolerate the HSA spending more than the \$1.25 million a year that it was already spending for the lease and operation of the Colt .45s. Therefore, the sole responsibility for the new bond issue remained with the County. Commissioners wanted to determine if another bond election could raise the taxes. If not, the next issue was whether to call the election before receiving construction bids or waiting until the bids were opened and the County could ascertain how

⁵² "Stadium Bonds Interest Of \$209,760 Past Due," *Post*, 29 June 1962, sec. 2, p. 6.

⁵³ "Domed Stadium Sets Off County, Hofheinz Clash," *Chronicle*, 21 July 1962, sec. 1, pp. 1, 2.

much more money was necessary to build the stadium. If the County opted for the latter option, based on the seventeen-month construction timetable, the building would not be finished in 1964, eliminating the city's lofty (and unrealistic) goal of holding both the Republican and Democratic nominating conventions in 1964. If the former course was taken and the electorate approved of the bond issue, the County could offer the construction bid in November 1962.⁵⁴

The HSA responded to the threats from Chapman and Sayers by issuing its own warning and a series of demands. HSA attorney John M. Jamison advised the County to complete the stadium by 31 January 1965. If it failed, the HSA might exercise its right and nullify the stadium contract. Jamison told the Commissioners that the HSA could immediately abandon the pact, based upon a section within the original lease that stated "any unreasonable delay" during the stadium's construction allowed the breaking of the lease agreement. Along with this threat, Jamison presented the Commissioners Court, in addition to the deed for R. E. Smith's 61-acres of land, a supplement to the lease in which the HSA promised to remit the 1962 installment, but would not make another payment until construction finished. If the County refused, the HSA could not guarantee its 1962 installment of \$209,670. Jamison hoped the Commissioners understood that the HSA wanted the stadium built as soon as possible to protect its investment. Hence, the HSA would not pour any more money into the stadium until it was finished. By accepting the supplement, Harris County assumed \$1.5 million of additional bond debt with the HSA reimbursing the County in the latter years of the lease. Commissioner Chapman, instead of escalating the

⁵⁴ "Forget the Stadium, Chapman Threatens," *Chronicle*, 23 July 1962, sec. 1, pp. 1, 2; Marie Dauplaise, "County Toughly Tells HSA—Sign Land Pact or Else," *Press*, 23 July 1962, pp. 1, 13.

tension, seemed satisfied with the HSA's actions. "If we get the county attorneys approval, then we might be able to let contract on subdrainage ," he said, which saved the county \$3,200 every week. The HSA agreed to one of his stipulations by presenting the deed for Smith's land. Pending approval from Resweber, Chapman did not voice any concern of the lease supplement but wanted to move forward and sign a contract for stadium subdrainage.⁵⁶

Chapman's desire to sign a subdrainage contract became a reality when the Commissioners Court voted three to two in favor of awarding John Kraak, Inc. the contract. Even though Chapman professed to be ready to move forward, let a contract, and relieve Harris County of the cost of \$3,200-a-week pumping bill, he voted against the measure. Chapman said that only by delaying any construction until November, when the County received the construction bids, would the Commissioners Court have better insight into the cost of construction and determine what additional funds were required. Sayers also voted against the measure with Chapman. Sayers said that his dissenting vote should not be viewed as a disintegration of his support for the stadium. Instead, he said, "I object to spending another quarter of a million dollars in that hole until the people let us know by a bond vote whether they want us to go ahead with this." For Sayers, he wanted another public vote for more bonds before acting in a unified and determined manner. Chapman and Sayers said they wanted to delay any further spending until the County received answers to its financial questions. A divided Commissioners Court proved the indecisiveness of the stadium project. Without a concerted direction to start construction, the timid actions of Chapman and Sayers demonstrated the increasing doubt facing the future of the stadium. Chapman and Sayers

⁵⁵ "Domed Stadium Doomed Unless \$8 Million More Bonds Voted," *Press*, 24 July 1962, pp. 1, 10.

hoped the residents of Harris County would vote for more bonds, but delaying further action showed their increasing uncertainty of its success.⁵⁷

In addition to letting the subdrainage contract, Commissioners reviewed the HSA's supplemental contract. County attorney Resweber said that some sections of the supplement were outright illegal while other sections reduced protection for the County. The new contract allowed the HSA to recover all its expenses and sue for damages, whereas the original contract stated that the HSA had to sue to recover its lease payments. He also revealed that legally the HSA could make its lease payments on 16 August. Hofheinz told the Court that the HSA would pay the 1962 lease on 8 August to assist the County for tax reasons. But, he continued, the HSA would not make another payment until the County finished the stadium. According to Hofheinz, the HSA in advanced the supplement in an effort to "help the county" and demonstrate its "good faith." Judge Elliott and Commissioners Ramsey and Lyons understood that the HSA was acting in "good faith." By awarding the subdrainage contract, therefore, the commissioners confirmed its confidence in the HSA. The actions of the Court also showed that the County needed another bond issue to complete the stadium.⁵⁸

After rumors swirled that the County needed another \$8 million, the stadium continued to receive some support, most importantly from the Houston newspapers. The public, however, began to question the increasing cost of the stadium. Originally, the

⁵⁶ Foley, "H.S.A. Threatens to Break Lease," *Chronicle*, 26 July 1962, sec. 1, pp. 1, 2; "HSA Offers County New Deals On Stadium—Asks Guarantees," *Press*, 26 July 1962, pp. 1, 4; "County Faces Stadium Debt of \$1.5 Million," *Chronicle*, 27 July 1962, sec. 1, pp. 1, 2.

⁵⁷ Foley, "Stadium Drainage Given Green Light," *Chronicle*, 1 August 1962, sec. 6, p. 1; Verniaud, "Court OKs More For Arena," *Post*, 1 August 1962, sec. 1, pp. 1, 2.

⁵⁸ Foley, "Stadium Drainage Given Green Light," *Chronicle*, 1 August 1962, sec. 6, p. 1; "We're on the Way With the Stadium," *Chronicle*, 1 August 1962, sec. 4, p. 10.

Houston public had been promised that the stadium could be constructed for \$15 million. This turned out to be a false assumption. Could the public trust that another \$8 million would do the job? County leaders promised their voters that they would not have to use tax money to pay for it. With the HSA's lease supplement, Harris County became responsible for the next two bond payments of \$1.5 million. Should Harris County voters approve additional funds before County leaders and the HSA reach a full and satisfying lease agreement and before the final stadium blueprints were finished? Did not the County and the HSA already agree to contract? Now both parties were wrangling over the facts and figures within the signed document. The obfuscation and "wasteful nonsense" of the last few months, as one *Press* editorial called it, must be remedied by County officials.⁵⁹

Attorney General Will Wilson approved the supplemental contract. Judge Elliott said that it would be signed within a week, contingent on the HSA's second lease payment.⁶⁰ The "bright prospect" offered to Harris County voters of a stadium constructed without raising taxes dimmed, as the HSA failed to remit its second lease payment. The \$15 million voted in 1961 would not be enough to pay for construction and only \$785,000 of the \$3 million bond remained to buy the last sixty-one acres at South Main. Seat options were not sold, hence there was not any funds to pay for the land. Of the \$22 million, \$6.7 had been spent for preliminary excavation and road work. The \$15 million bonds eventually would cost almost \$30 million including interest. "Far from getting something from nothing," wrote Verniaud, "the county taxpayers have already laid out \$587,000 this year to pay for the bonds sold last August." In the 1963 "tax levy," Houstonians were asked to pay at least one million dollars

⁵⁹ "The Stadium Situation," *Press*, 9 August 1962, p. 4; "Domed Stadium, Tower of Babel, Both Aimed Too High, He Fears," *Press*, 9 August 1962, p. 4; "For Having Stadium Ready for Conventions," *Press*, 9 August

“for debt service” even if the county failed to complete the stadium. Even though the tax rate could not be increased, the amount of money to pay for the bond debts came from the County’s general tax fund. Thus, the bond debt occupied 8.6 cents out of the 80-cent tax limit that was used to pay for other County operations. The bonds could not be recalled either, meaning that the County was still obligated for the \$39,410,875 that the bonds would cost. The HSA refused to pay its lease until the stadium was ready for baseball.⁶¹

As the date to assess the County’s 1962 tax rate approached, the HSA remained silent. County officials hoped to receive the lease payment of \$142,000 before Friday, 17 August. If the HSA’s installment did not make it in time, the County would be forced to use one-cent more from the 80-cent general fund to provide the debt service on the bonds. When the payment never arrived, Commissioner Sayers threatened that he would not sign the modified contract. “I want to see that check before I sign,” Sayers promised his colleagues. Sayer’s consent, however, was not required by the Court to approve the supplement. Commissioners Court inaction delayed fixing the 1962 tax rate. If the HSA continued its torpor, County officials would be forced to raid the road and bridge maintenance funds of \$56,000. A modified lease with the HSA would force the HSA to make its 1962 payment in return for a solid promise that the County would begin construction by July 1, 1963 and finish the stadium by January 31, 1965. Additionally, the HSA would be exempt from further lease payments until it fully possessed the stadium’s lease.⁶²

1962, p. 4; “For Letting Our Officials know We Want Stadium—Built Right,” *Press*, 15 August 1962, p. 8.

⁶⁰ “County and HSA Agree on Revised Stadium Contract,” *Press*, 16 August 1962, pp. 1, 8.

⁶¹ Verniaud, “Harris Taxes Diverted To Interest on Bonds,” *Post*, 16 August 1962, sec. 1, p. 7.

⁶² Verniaud, “County Awaits Word On Stadium Lease Payment,” *Post*, 16 August 1962, sec. 1, p. 1; “Sayers Won’t Sign Pact, Wants Stadium Check,” *Chronicle*, 17 August 1962, sec. 1, p. 10.

Even as the HSA seemed in control in its skirmish over the addendum to the contract, another battle front opened within the HSA. A once apparently unified syndicate, organized to obtain big league baseball and a big league stadium, experienced internal dissension. HSA stockholder and owner of the AFL Houston Oilers Bud Adams “blasted” the HSA, and Hofheinz in particular, for the cost of renting Colt Stadium. Adams’s “blast” could not come at a worse time for the HSA. “The prolonged period of silence,” wrote Bob Rule, “on what’s to be done about Houston’s long-talked domed stadium continues to befuddle the general public, and continues to spawn rumors of all sorts.” Adams told the media that he and the season ticket holders decided to remain at Jeppesen Stadium, and not move to the HSA-owned Colt Stadium. Even though Adams risked Hofheinz’s threat of a seeking a competing NFL franchise, he remained resolute in his decision. Adams complained that his previous inquiries as to the cost of renting Colt Stadium had gone unanswered by Hofheinz. But what really irked Adams was the way Hofheinz was running the HSA. Adams remarked that he had invested \$600,000 of his money in the HSA solely for a future home for his football team in the domed stadium. “I just own 10 per cent of the Houston Sports Association,” he said, and “I don’t know whether I have a home or not.” “This is the only business I ever had any money invested in where I didn’t know what was going on. I don’t know whether we’re making money or losing money. There’s never been a financial statement of any kind issued. I don’t know what’s going on and neither do the other stockholders. I guess only Mr. Smith and Mr. Hofheinz know.” The HSA’s internal squabble threatened the possibility of getting another \$8 million in bonds. Houston could not withstand another professional sports war

like it did over the Buffs. Disunity and dissension only added to the pessimism effervescing in Harris County.⁶³

The HSA revealed that Adams offered his football team to the syndicate for \$2.5 million. In a public statement, the HSA also affirmed that as a stockholder, Adams could have learned of the syndicate's finances if he had ever attended a meeting. Since Adams continually missed these meetings, he could have requested for the book of HSA stockholders and other financial information at the HSA offices. The apparent "friction" between the HSA and one of its stockholders was a bad omen of possible future difficulties. With another bond election eminent, any strife in the once united stadium front could spell disaster, since the previous bond issue had passed by only a slim margin. Adams rebutted the charge that he was financially destitute. According to Adams, he wanted complete professional sport "unity" to protect Houston. (At the time, the NFL and the AFL were vying for supremacy in Dallas.) According to Adams, he wanted to avoid the entrance of another professional football team into Houston, which could financially jeopardize both teams.⁶⁴

At a two-hour "amiable" meeting between the HSA and County officials on 24 August 1962, the HSA tendered \$99,898 as its lease payment for 1962. Although County Auditor Bruce and County Attorney Resweber desired the original payment of \$142,672, they agreed to accept the smaller amount with the remaining \$42,774 to be credited on the next lease payment. The County accepted as part of the lease supplement a delay in future

⁶³ Frank A. Godsoe, "Adams Decides To Keep Oilers At Jeppesen," *Press*, 22 August 1962, p. 16; Rule, "Sidelights," *Press*, 22 August 1962, p. 16; Gallagher, "Oilers Will Stay at Jeppesen; Adams Blasts Officials of HSA," *Post*, 22 August 1962, sec. 3, p. 1, 4; "Oiler Owner, H.S.A. Feud Over Stadium," *Chronicle*, 22 August 1962, sec. 1, pp. 1, 14; "H.S.A. Replies To Charges Of Bud Adams," *Chronicle*, 22 August 1962, sec. 1, pp. 1, 14.

⁶⁴ Gallagher, "Bid Offered Oilers For Sale, Says HSA," *Post*, 23 August 1962, sec. 6, pp. 1, 4; "Tried to Avert 'Another Dallas,'" *Post*, 23 August 1962, sec. 6, pp. 1, 4.

lease payments until the stadium was complete. The HSA charged that since the County had failed to begin stadium work by the dates specified in the original contract, the syndicate was free from paying its lease.⁶⁵

On September 17, the Architects submitted the final stadium blueprints and specifications to the Commissioners Court. The structural steel frame domed stadium complete with 4,596 plastic skylights promised to seat 47,004 for baseball, 53,614 for football, and 66,000 for conventions. The playing surface remained beneath the ground at 36-feet below ground level. The stadium's cooling system would operate at 75-degrees throughout the year, regardless of the number of spectators, time of day, or season. Over 20,000 cars were provided for in a radial parking lot. "While economy has dictated elimination of decorative features, we believe the design is one which should be a source of pride to the community," said S. I. Morris, Jr. "For example," he continued, "we have used the less expensive framing for exterior structural wall supports, and we have specified an asphalt floor for the first level exhibit area." The architects affirmed that they had solved all the nagging problems surrounding the design of the dome, growing natural grass indoors, and the former fallout shelter space. Hermon Lloyd dismissed qualms about building the dome, "there was never any real doubt" that it could be designed and built, while the grass questions were answered "satisfactorily." He also explained that the Architects successfully utilized the former fallout shelter space for added exhibition area. "The additional space provided in the new plans will make the stadium an even greater convention center," posited Lloyd. More exhibition space meant that the stadium would figure more prominently as a convention center than previously believed. The HSA's baseball team needed, at most, eighty-one dates

⁶⁵ Verniaud, "Sports Association And County OK Stadium Plan," *Post*, 25 August 1962, sec. 1, pp. 1, 12.

for scheduled play. The HSA, then, had to exploit the stadium's convention space for the rest of the calendar year. The remaining question was the dome's price tag. Morris reaffirmed the "pointless speculation" concerning the stadium's final cost, but affirmed that it would cost more than \$15 million. Regardless, Lloyd said, "There isn't a thing in the world now to prevent construction from going right ahead whenever the county is ready."⁶⁶

When the HSA submitted its revised supplement, one clause further deterred an agreement. The objectionable provision allowed the HSA to receive as compensation land or money if the County failed to start construction before July 1, 1963 or finish construction by January 31, 1965. The County could refund to the HSA \$666,798 (the total amount of the syndicates' lease payments) or 66.679 acres of land adjacent to Colt Stadium. The County bought this land for \$667,000 and also spent \$716,000 for its excavation. Judge Elliott took exception to the clause allowing the HSA to be remunerated in county land instead of money. "Actually," Elliott continued, "not only is the one clause objectionable, but much of this supplement disturbs me." He wanted to discuss the supplement with the Court and the HSA to hammer out an agreement. After reviewing the HSA's amendment, Commissioners rejected it. Commissioner Chapman said that it was "foolish" for the Court to even consider the proposal. Commissioner Sayers said, "Within five years that land will be worth \$8 million, even with no more work on it." Even though the Commissioners opposed the amendment (Judge Elliott did not offer an opinion), they expressed their desire to complete the stadium regardless of the final cost.⁶⁷

⁶⁶ Rule, "Sidelights," *Press*, 14 September 1962, p. 12; "Domed Stadium Plans Accepted," *Chronicle*, 17 September 1962, sec. 2, p. 7; Marie Dauplaise, "County Gets Stadium Plans," *Press*, 17 September 1962, p. 1, 2; Verniaud, "Harris Gets New Dome Arena Plan," *Post*, 18 September 1962, sec. 1, pp. 1, 18.

⁶⁷ Verniaud, "Lease Supplement Adds 6 Acres If No Stadium," *Post*, 14 September 1962, sec. 1, p. 4; Dauplaise, "County Balks At Stadium Lease Offer," *Press*, 28 September 1962, p. 3; Thorne, "County Says

Almost two months after presenting its lease supplement, the HSA submitted its final proposal. The new contract eliminated the two clauses that Elliott and the Commissioners found objectionable. Thus, the HSA returned to the original lease. Elliott lauded the HSA for abandoning the questionable articles. This was a “victory” for the County, exclaimed Elliott, who added, “I’m ready to sign now.” Now what remained was an approval from the County attorney and signing of the agreement by County and HSA officials. This they eventually did on 14 November. “Perhaps this is not an agreement entirely satisfactory to each side, but its terms seem like an agreement we can all live with,” said Elliott. With the signing, the County was responsible to start construction before 1 July 1963 and complete it by 31 January 1965. As part of the signing ceremony, the County purchased the land (61.4 acres) underneath Colt Stadium for \$1,647,898. As part of the agreement, the HSA would not make a lease payment until the stadium was finished.⁶⁸

The contract dispute epitomized the growing skepticism towards the stadium and the HSA. Judge Elliott claimed the county “won” the battle and “defeated” the HSA. It implied that there were two completely different sides, one “right” and the other “wrong.” And the resulting contract was a set of terms and limits imposed by the victor on the vanquished. But the fact that one side asserted that it was victorious was part of the problem. The appearance that the county was on one “side” and the HSA on the other, illustrated the change taking shape in Houston. On one hand, the actions of the county could be interpreted as an attempt to maintain order and control over the HSA. By doing this, the county would be assured a

‘No’ To Stadium Lease Proposal,” *Chronicle*, 28 September 1962, sec. 1, pp. 1, 11; Verniaud, “County Not in Accord On Stadium Lease Proposal,” *Post*, 28 September 1962, sec. 1, p. 1, 14.

⁶⁸ “Revisions To Ease Stadium Dispute Filed,” *Press*, 2 November 1962, pp. 1, 11; “County, H.S.A. Sign Stadium Agreement,” *Chronicle*, sec. 1, p. 1; Nealon, “Colts Okay Lease, Paving Way for Construction Bids,” *SN*, 24 November 1962, p. 29.

fair rental payment for decades to come. On the other hand, the HSA's actions were seen as an attack on the county. The HSA selfishly and deliberately obfuscated the facts to cheat the county of its deserved money. The HSA forced the county to take action and thwart its nefarious intentions. This clearly was thinking that would not have appeared a mere two years earlier. The HSA and the County Commissioners were allies in the campaign to alter Houston's future. They collectively fought for big league sports and worked hand-in-hand to make the domed stadium a reality. Before the stadium even began to rise from the Texas prairie, the battle line between the county and the HSA had started to form.

CHAPTER 7: THIRD TIME THE CHARM

The division between the Houston Sports Association and Harris County leaders that had bubbled to the surface during the lease negotiations momentarily receded after the agreement. With this squabble behind both parties, they needed to put aside their differences and begin the process of constructing the stadium for the common good. Their first task was to advertise for bids, open the bids, determine which was most satisfactory, award a construction contract, and sit back and watch the domed stadium take shape. This was hardly a period of inactivity, but instead a calm before the storm. County engineer Richard Doss recommended that the County advertise construction bids immediately, with opening of the bids set for mid-November. "We have to advertise now if we're going to complete the stadium in time for the 1965 baseball season," he warned Elliott and the members of the Commissioners Court. Doss speculated that it would require 432 days to finish the stadium. With cooperation from the weather, a completion date of early 1965 was not impossible. The HSA and the County, however, would require more than just help from mother nature. As can be seen in the stadium's brief history, the best laid plans often went awry.¹

The Commissioners Court received six construction bids. The lowest came from a joint bid by the Minneapolis firm of Johnson, Drake and Piper with H. A. Lott of Houston (Lott-Drake) for \$19,440,000. Lott-Drake's bid pushed the cost the stadium to \$22 million, exceeding the remaining construction bond money by \$6,640,000 and a total of \$7.5 million of the entire bond account. Lott-Drake's also included several other bids based on the elimination of six nonessential items. Expunging all six items could save the County

\$790,000. The extras included escalators from ground level to upper stands (\$381,000), pneumatic tubes for the ticket offices (\$75,000), kitchen equipment (\$128,000), eliminating 2,000 top level seats (\$111,000), 8,000 grand stand seats (\$36,000), and replacing the removable stands with temporary seating (\$59,000). Once the Court opened the binds, speculation turned to the probable bond election. Commissioners planned on a bond election after 18 December but before Christmas Day, making Saturday, December 22 the likely date. They were set to ask the public for at least \$8 million more to complete the stadium. The \$22 million price tag meant that Houston's new domed stadium would be in the price class of stadiums in Washington, D. C. and Los Angeles.²

When Commissioners debated the bond issue, Commissioner Ramsey desired \$10 million to insure the completion of every facet related to the stadium. Elliott agreed. Chapman, on the other hand, only wanted what was "absolutely necessary to assure completion of that job" because this money would come from public tax revenues. "A minimum of funds...is all I'm going to be in favor of submitting to the people," Elliott confirmed. The County needed at least \$7 million to erect the stadium, but also enough money to build parking facilities (estimated at least \$1 million) and to pay R. E. Smith for his 61-acres of land. Elliott leaned towards keeping the stadium first class by retaining the six nonessential items highlighted by Lott-Drake. Although by nature all construction estimates gravitated towards the conservative side, the County could still build its first-class stadium

¹ "County Sets Domed Stadium Bids Nov. 15," *Chronicle*, 4 October 1962, sec. 1, pp. 1, 16.

² Ernest Bailey, "Stadium Bid \$19.4 Million--\$6.6 Million Above Funds," *Press*, 29 November 1962, pp. 1, 4; "Stadium Low Bid \$19.4 Million," *Chronicle*, 29 November 1962, sec. 1, pp. 1, 4; Verniaud, "\$15-20 Million 3-Part Harris Election Due," *Post*, 30 November 1962, sec. 1, pp. 1, 14; Mike Thorne, "Stadium Bonds Planned Without Tax Hike," *Chronicle*, 30 November 1962, sec. 1, pp. 1, 17; Nealon, "\$9.6 Million Bonds Up to Voters," *SN*, 15 December 1962, 11.

and save money by reducing some frills. Still, the new estimated cost for “the showplace of the Southwest” was now nearly \$22 million.³

As Harris County voters faced yet another stadium bond issue, *Press* sports editor Bob Rule asked them to keep in mind that the stadium was merely “under estimated.” Rule agreed that several errors and gaffes had been committed in the stadium’s early history. But no one individual or group associated with the project, he continued, “deliberately lied, or mis-represented facts.” This was not a case of stealing from the public or someone grabbing “an undeserved profit.” Rule attempted to squelch possible beliefs that something was not quite right. The rhetoric Rule used revealed the changing attitude in Houston. “Nobody has discriminated against you or me,” he wrote, nor has anyone “gone back on a promise,” or “raised our taxes.” The HSA and County leaders were not trying to fleece the public, he continued, but merely fighting for the public to get the best facility for Houston. “If there’s a city in the world that should build a domed stadium first, Houston is that city,” Rule added, because Houston “isn’t just an ordinary place.” Rule asked to try and find any other city that experienced the “explosive progress you find in Houston.” This progress, the result of the hard work of every Houstonian, proved that the city had earned the domed stadium. Thus, the people would continue to make it better by keeping the stadium on track and accepting the inevitable bond issue.⁴

County Engineer Doss faced the task of reviewing the alternate bids of Lott-Drake and proffer his recommendation to Judge Elliott and the Commissioners on 3 December 1962. When Doss finished, the Commissioners Court would award the contract. After Doss

³ Bailey, “Bond Issue Only to Meet Stadium Cost,” *Press*, 30 November 1962, p. 1, 2; “The Stadium Comes Clear,” *Press*, 30 November 1962, p. 8; “Let Your Pride Show,” *Chronicle*, 30 November 1962, sec. 2, p. 4;

recommended the lowest bid by Lott-Drake, the Commissioners Court set the \$9.6 million bond election date for the 22 December, the Saturday before Christmas. Doss estimated that the entire construction costs would be \$22,681,068. He broke down the \$22 million cost as follows: \$19,470,000 for stadium construction, \$1,594,000 for parking lots, \$428,068 for extra architect fees, \$150,000 for soil testing and examination, \$1,033,000 to R. E. Smith and the HSA for improvements on the 61.4 acres under Colt Stadium and the 21,213 seats within the stadium. With only \$13,068,489 remaining from the original 1961 bond issue of \$18 million, the County needed \$9,612,579 more. Commissioner Chapman suggested that the bond issue be limited to \$9.6 million with the County covering the difference. If voters approved the new \$9.6 million bond issue, the cost of the stadium would balloon to \$31.6 million, with the HSA required to pay for \$15 million of the total.⁵

As happened the two previous times, Houston's "civic, labor, and sports leaders" implored voter approval of the \$9.6 million bond issue. Again, these individuals said that Houston's prestige and civic pride were at stake, but now even more so. Failure to pass the bonds meant that Houston would be the laughing stock of the entire nation. A vote against the bonds, the supporters said, represented a vote against progress, further city development, and Houston's economic future. Their justification echoed the sentiments used during the

"Do the Stadium Job—Right," *Press*, 1 December 1962, p. 6.

⁴ Bob Rule, "Sidelights," *Press*, 30 November 1962, p. 14.

⁵ Thorne, "Stadium Bonds Planned Without Tax Hike," *Chronicle*, 30 November 1962, sec. 1, pp. 1, 17; Ernest Bailey, "\$9.6 Million Asked for Stadium," *Press*, 3 December 1962, p. 1, 2; "Stadium Bond Vote Is Set, Contract Let," *Chronicle*, sec. 1, p. 1; Verniaud, "Dec 22 Vote On Stadium Bonds Set," *Post*, 4 December 1962, sec. 1, pp. 1, 15.

first two bond elections. But this bond issue was scheduled in 1962, not 1958. It worked during the era of optimism, but would it succeed in an increasingly pessimistic Houston?⁶

While supporters and opponents mustered their forces, the *Press* announced its continued recommendation for the stadium. “Yes, we are still for the stadium, all the way,” it went, but “we also are against spending one dime more above what is absolutely necessary to get it.” Tax revenue was slated to finance \$16.6 million of the \$31.6 stadium. “If 80 cents interest per dollar on the \$16.6 million the county will borrow via bond insurance is added, the tax money total will go up another \$13,280,000,” wrote the *Press*. With such a large financial responsibility facing the County, the *Press* hoped Commissioners would “cut every possible corner” to lessen the burden. Instead of an immediate sale of tax bonds, the *Press* asked that the County Commissioners “use the county’s ready money, and save the taxpayers of the future something like \$2.5 million in interest charges.” The *Press* editorial revealed the rising concern over the spiraling cost of the stadium and what it meant for the future. On the one hand, the future seemed certain with a \$15 million stadium that would bring prestige to Houston and infuse its economy with an seemingly unlimited source of entertainment money. On the other hand, with the rising cost of the stadium and the increasing pessimism revolving around it, the future looked bleak and worrisome. “What county officials must keep in mind is the way this project has pyramided,” the editorial continued, and make sure that all means are taken to eliminate increasing costs. Once the Commissioners Court “exercise total

⁶ “Dome Stadium Bond Passage Strongly Urged,” *Chronicle*, 4 December 1962, sec. 1, p. 1, 13; Bailey, “Stadium Voting Starts Thursday,” *Press*, 4 December 1962, pp. 1, 2;

prudence in the way they approach this gigantic public investment,” voters will most assuredly pass the new bonds issue.⁷

Voters wrote to the three newspapers expressing their opinion concerning the stadium and the upcoming election. The letters that were printed tended to denounce the stadium, the bond issue, and the HSA, signifying increasing skepticism in Houston. For example, Milton Edwards could not endorse more tax bonds for a “white elephant.” The money, he argued, should be used for the less advantaged and not millionaires. He tabulated the cost of the first year’s interest of the bonds to be \$800,000, short of the HSA’s promised lease payment. Milton wrote that it simply was his Christian duty to oppose the bonds. Milton questioned the true intentions of the HSA who tyrannically controlled a public facility.⁸ Walter E. Liljestrand echoed the previous opposition of using tax money to finance a private corporation. Liljestrand envisioned two choices facing the people of Houston. The first was to eliminate all tax money for the stadium. Thus, the HSA would assume all costs for the stadium. The second was for the County to operate the stadium. Although he professed that he could live with the second choice, Liljestrand wanted the bond issue to go down to defeat because “[N]o self-respecting person with community pride can vote for continuing this mess.”⁹ Clyde Thomasson questioned the timing of the election, the Saturday before Christmas. Did stadium supporters hope for a light voter turnout, he wondered, which would aid their cause? Regardless of their motivations, Thomasson wrote, County and HSA

⁷ “Keep Down Stadium Load,” *Press*, 5 December 1962, p. 10.

⁸ Milton Edwards, “Domed Stadium Top—As ‘White Elephant,’” *Press*, 10 December 1962, pp. 6.

⁹ Walter E. Liljestrand, “Our Editorials Favoring Stadium Bonds Criticized by Non-Fan,” *Press*, 13 December 1962, p. 10.

officials had already demonstrated their able mismanagement techniques by wasting \$3 million to pump out a large hole for months on end.¹⁰

The more vociferous opponents were the same ones who had fought the last bond issue. Dan E. Goodykoontz, Ned Gill, and Gail Reeves each made separate public announcements attacking the bond issue. Goodykoontz, a former US Treasury Agent, Houston Crime Commissioner and attorney, lamented the increased financial burden the stadium bonds would heap upon Harris County taxpayers. Goodykoontz focused his tirade on repudiating the promise of stadium boosters that the bonds would not increase the tax rate. Goodykoontz agreed that the tax rate could not and would not be increased, but not the tax assessment. Speaking of his personal experience, "So many people have already had their tax assessments doubled, he said. Because the HSA promised to pay \$15 million to the County, the rest of the \$16.5 million fell upon taxpayers. He defended himself attesting to his support of the stadium, but not its control by a private corporation. "I would be for it if the county had control of it," he concluded. Printing executive Gill concurred with Goodykoontz that the public was going to finance the bulk of the stadium bill. "We are going to be for it and it comes out of tax money," said Gill. "The simple expedient will be to increase the assessments on property which will increase taxes," he said. Former councilman Reeves calculated the public subsidy to the HSA for each baseball game played under the dome for the next thirty years at \$16,000. Reeves opposed the public subsidy for the HSA as well. "The domed stadium has been misrepresented, mishandled, and mismanaged to a degree

¹⁰ Clyde Thomasson, "'Mishandling' Charged On First Stadium Funds," *Press*, 6 December 1962, p. 10; For other arguments, both for and against, see "Readers Discuss Stadium," *Chronicle*, 18 December 1962, sec. 4, p. 6; "The Mailbag," *Press*, 18 December 1962, p. 8; "City's Civic Pride, Community Spirit Call for Domed Stadium," *Post*, 22 December 1962, sec. 1, p. 1; "Progressive Future of Houston Riding in Stadium Bond

which is unparalleled in Harris County,” said Reeves. By selecting December 22 as the election date only proved that some kind of fiendish conspiracy between County and HSA leaders existed. Reeves asked for every voter to head to the polls and resoundingly defeat the bond issue.¹¹

The *Post* and its sports editor Clark Nealon wrote in favor of the bonds, but with less enthusiasm than used for the prior elections. Harris County and its citizens “are now so deeply committed to the project that it is only good sense and good business to go ahead and finish the job.” They agreed with others that maybe the bond money could go to other worthy causes, but was not that the case of every governmental expenditure? Similarly, they continued, it was not atypical for estimates to be wrong nor “for costs to turn out to be higher than first anticipated” much like the Harris County Courthouse.¹² Clark Nealon was not as reserved as his newspaper. “A vote for the bond issue is a vote to separate Houston from other cities in the country in feature sports events of the future,” he wrote, “a vote to make Houston the unquestioned leader as a Sports City as well as The Space City, not only nationally but internationally.” Nealon wanted the rest of Houston to remember what the stadium meant to their city. He asked that they remain optimistic and confident in the city's future. If they believed their city was destined for leadership, then they could not vote against it. A better future was at stake.¹³

At a Pasadena breakfast meeting for businessmen attended by Judge Elliott, architect S. I. Morris, and Commissioners Ramsey and Lyons, questions were asked about financing

Election,” *Post*, 21 December 1962, sec. 1, p. 1; “Sound-Off,” *Post*, 19 December 1962, sec 3, p. 6; “Sound-Off,” *Post*, 20 December 1962, sec 8, p. 2; “Sound-Off,” *Post*, 21 December 1962, sec 3, p. 2.

¹¹ Bailey, “Stadium Bond Foes Charge ‘Subsidy’—Predict Higher Taxes,” *Press*, 14 December 1962, pp. 1, 6.

¹² “Supplemental Stadium Bond Issue Should Be Approved,” *Post*, 18 December 1962, sec. 3, p. 2.

¹³ Nealon, “Post Time,” *Post*, 16 December 1962, sec. 4, p. 2.

and cost comparison of the domed stadium. First, the County officials wanted to make absolutely clear that the money being used for the stadium was not being taken from other projects like the hospital. Funds for city-county hospital came from the general fund while bonds would pay for the stadium. Elliott promised county funds for the hospital. "The money will be available," he vowed. Second, the supplemental bonds would not, and could not, increase taxes. Morris added that these bonds were needed because the early estimate was much too low. Any attempt to nail down a concrete estimate proved difficult, Morris continued, because they had no post-war stadium on which to base their estimate. Third, the seemingly astronomical cost of the domed stadium compared favorably with the new, open-air stadiums in Los Angeles, New York, and Washington, D. C.¹⁴

Judge Elliott again appointed William A. Smith and Gus Wortham to chair the Committee for the Domed Stadium. Smith announced his desire to start "construction immediately" once County voters approved the new bond issue. "Our city is destined to be one of the greatest cities in the world, and certainly the many uses for which the domed stadium will be available make its construction now a must," Smith said. Wortham said that the stadium would alter the county-wide perception of Houston for the better. "There may be some who still think us as an oil town on the bayou," he said," but this was already under assault. The stadium could be counted along with the Manned Spacecraft Center and the Texas Medical Center as proof that Houston was "reaching the heights" in just about every important community asset.¹⁵

¹⁴ "Labor Leader Urges Stadium Bond O.K.," *Chronicle*, 12 December 1962, sec. 1, pp. 1, 23.

¹⁵ "Leaders for Stadium Bond Drive Selected," *Chronicle*, 13 December 1962, sec. 1, pp. 1, 16; Bailey, "Top Civic Leaders Smith and Wortham Head Stadium Drive," *Press*, 13 December 1962, pp. 1, 2.

Smith and Wortham focused on the positive effect the stadium would have on Houston's economy and its prestige. Wortham said the dome would "excite the imagination of anyone with any amount of imagination." These individuals would come to Houston, spend massive amounts of money, and pump-up the local economy. These types of benefits would "create more jobs," "produce business and new sources of revenue," "result(ing) in a stronger overall economy" and "more prosperity for Harris County," according to Smith. The stadium itself would achieve these lofty goals by hosting large conventions and spurring construction throughout the city. Smith and Wortham labeled the stadium a sound investment. "This is like acquiring a block of blue chip stocks and paying for them out of the income they yield," the proclaimed. The value of the land alone promised to increase several times what Harris County paid for it. The HSA rental fee would pay off the \$15 million of original construction bonds. The \$9.6 million tax bonds would come from "the regular county bond financing tax rate" within the 80-cent limit. This need not worry the public, they continued, because the county would continue to grow. The expansion of the county's tax rolls would definitely make a dent in paying off the bonds. Any other fund that may be required, they said, could be found by "shifting of tax rates within the 80-cent limit." This idea could be summed up in the saying, "Robbing Peter to pay Paul." Harris County leaders would shift money from one or more projects to amortize the park bond debt. Still, Smith and Wortham doggedly supported the stadium and the financing mechanism. "Any way you look at the project," they said, "the domed stadium is a sound investment for the taxpayers, a wise one which will yield far more in income to this community than its cost to the taxpayers."¹⁶

¹⁶ "Financiers Back Dome as 'Sound,'" *Chronicle*, 16 December 1962, sec. 1, pp. 1, 22; "Stadium a Boon To Tourist Trade," *Press*, 17 December 1962, pp. 1, 2.

Essentially, Houston was in a struggle with other cities across the globe for future industry, tourism, and prosperity. In effect, Houston was involved in a national conflict for limited amenities. If Houston failed to pass the bond issue, the domed stadium most assuredly would not be completed. Bond and stadium opponents, therefore, supposedly doomed their city to a sterile, bankrupt future. Then, Houston would lose its chance to become “a better place to live” Arguments shifted from the optimistic potential of the stadium to the bleak, pessimistic results of failure.

Other bond proponents began to line-up their support before the election. Directors from the Stock Show, the Greater Houston Bowl Association, in which William A. Smith was a chairman, the AFL-CIO, the Houston Chamber of Commerce, and the Harris County Council of Organizations, “a centralized council of 50 Negro organizations,” announced their approval of the bonds and the stadium. The endorsements from such diverse groups only proved that the bonds appealed to a broad constituency throughout Harris County, argued Smith and Wortham. Said Smith, “The variety of organizations endorsing the stadium bonds indicates that a wide cross-section of the public favors supplying the necessary funds to complete the domed stadium.”¹⁷

The Tax Research Association (TRA) performed its own analysis of the tax bonds and announced that it “should not adversely affect the taxpaying public except as it will remove funds from availability for alternative purposes.” The County was responsible for \$16.6 million of the total \$31.6 million cost. The County's funds would come from within the County's eighty-cent rate. Of the eighty-cent limit, the County's park bonds occupied an

extra six cents with the passage of the latest bond outlay that required three cents. The TRA hypothesized that the park bonds could rise from the current 10.45 cents to 16 cents in 1963. By 1964 and especially 1965 when the HSA's lease payments resumed, the rate would decline. The "strong position of the county finances," according to the TRA report, allowed the county to incorporate the additional expense without hindering its ability to finance other projects. The TRA also viewed the leasing of the stadium to the HSA as a benefit to the County, not a liability as stadium and bonds opponents asserted. According to the TRA, the HSA could exploit its own "resources which are not available to a governmental body" that would obtain the "maximum use of the facility." The County would not have to spend its limited amount of money to seek others interested in using the stadium.¹⁸

A *Chronicle* editorial refuted the charge that the stadium would increase everyone's taxes. The *Chronicle* used the same arguments it had implemented from the previous bond election. Firstly, the HSA guaranteed to retire \$15 million of the \$24.6 million through lease payments. Secondly, the tax rate could not be changed without altering the Texas state constitution. These examples were irrefutable. The final argument, however, seemed out of place. Essentially, the *Chronicle* wrote that "through Harris County's fast-growing property values—its tax base" will assuredly generate enough taxable revenue so that the tax rate would not increase. "The homemaker, for example, will pay the same county tax next year as this year," cited the editorial. This defense was out of place in late 1962 Houston. It seemed to have come from Houston's era of unbridled enthusiasm and optimism and did not relate to

¹⁷ "Stadium Gets Stock Show, Bowl Backing," *Chronicle*, 14 December 1962, sec. 1, pp. 1, 7; "Labor Council, Negro Groups Back Stadium," *Press*, 17 December 1962, pp. 1, 12; Labor Chief For Stadium Bonds," *Chronicle*, 18 December 1962, sec. 1, pp. 1, 6.

¹⁸ "Stadium Bonds Won't Affect Taxes, Says TRA," *Press*, 17 December 1962, p. 2.

the city's growing pessimism. Houston's economic future, according to the *Chronicle*, was still one of infinite growth and not scarcity.¹⁹

The editorial staff of the *Chronicle* compared the three newest stadiums with the yet-to-be-built domed stadium. By focusing on the stadiums other cities had constructed, or were in the midst of completing, the article attempted to dismiss the notion that the dome was just too expensive. The open-air, baseball-only stadium at Chavez Ravine for the Dodgers cost \$22 million and only had 55,000 seats. The Washington, D. C. stadium, although the home for the Senators and the Redskins (both sorry sports teams), cost \$20 million and had 50,000 seats open to the climate of the Capitol. And, finally, Shea Stadium in Flushing Meadows, New York was estimated at \$20.5 million with 50,000 seats. These stadiums were fine examples of modern architecture and engineering, but not the best. Houston would have the best stadium in the land, not because it could house baseball and football. The Washington and New York stadiums, as well as others, could do this. The Houston stadium could hold conventions underneath its dome in air-conditioned comfort. Support the bonds and the \$24.6 million domed stadium because "We'll have a stadium that makes the best built elsewhere recently turn green with envy."²⁰

R. E. Turrentine expected a turnout between 100,000 to 125,000 voters for the election or about one-third of Harris County's 357,000 eligible voters. The clerk's office already received 1,712 absentee ballots, 649 more than in the 1962 election. Turrentine did not anticipate a "proportionate increase" in total votes based on the sixty-one percent upsurge in absentee ballots. In the 1962 bond election, "an unprecedented turnout" of 115,803 voted.

¹⁹ "Stadium Won't Hike Taxes," *Chronicle*, 15 December 1962, sec. 1, p. 4.

²⁰ "Our? Tops—Bar None," *Chronicle*, 18 December 1962, sec. 4, p. 6.

If the number of voters also increase sixty-one percent, 189,841 votes would be cast. Judge Elliott attributed the increase in absentee votes to the greater number of voters who were going to be out of town for the holidays. The real question was whether the proximity of the election to Christmas day or the qualification that the voter have a poll tax receipt or exemption and own property would affect voter turnout. Elliott desired a huge turnout, but conceded that less than 100,000 appeared to be the most likely result.²¹

County Commissioners were asking their constituents to pay for \$16.6 million of the stadium's final cost. Roads, sewers, bridges and other "commonplace county improvements" occupied \$4,000,000 of the \$16,600,000. The 310-acres of stadium land cost another \$3 million. This meant that the final \$9.6 million would come from the public.²² But bond proponents consistently pointed to the county's growing population to placate public ire. A growing population meant a continued growth in the county's economy through an increase in the number of taxpayers. County tax assessor-collector Carl Smith predicted a \$60 million increase in property values in the county's immediate future. Smith based this "conservative" estimate on NASA construction in Clear Lake and other construction throughout the county. "I personally can see no future need to have to change the ratio of assessment because of this fast growth," he said.²³

On the eve of stadium "D-Day,"²⁴ Wortham and Smith said that it would actually cost voters less money if they approved more bonds. "We wither pay \$9.6 million for a domed, air-conditioned stadium or \$15 million and no stadium," they said. The County would still

²¹ "150,00 May Vote Saturday On Stadium," *Chronicle*, 19 December 1962, sec. 1, p. 1; Bailey, "Stadium Backers Hope For Big Vote Saturday," *Press*, 19 December 1962, pp. 1, 7.

²² "Do or Don't on Stadium," *Press*, 20 December 1962, p. 12.

²³ Bailey, "Stadium Can't Hike Taxes, Officials Say," *Press*, 21 December 1962, pp. 1, 2.

²⁴ Bailey, "Tomorrow Is D-Day for Stadium," *Press*, 21 December 1962, p. 2.

have to retire the original \$15 million bond issue. The bond money could not be used for any other purpose than for the County parks system and not for a new hospital or jail. “The alternative is simple,” Wortham and Smith ruminated, “It’s merely a question of whether the voters want to pay for fewer bonds and a stadium so great it staggers the imagination, or pay for more bonds—and have no stadium.”²⁵

Ten state representatives who represented Harris County backed the stadium bond issue. Generally, the representatives cited the economic and tourism bonanza the domed stadium would bring to Texas, Harris County, and Houston. National League president Warren Giles reiterated baseball’s interest in the election. It was all the talk of baseball executives and fans across the country. He hoped this issue would pass, but if it failed, Giles again warned that Houston could lose its franchise. He wanted voters to remember that the NL chose Houston because of the domed stadium. Still, Giles did not foresee voters defeating the bonds and the stadium. “I just can’t imagine the pride and progressive thinking people of Harris County not voting approval of the bonds by an overwhelming majority,” he said.²⁶

The facts, as they appeared, pointed to Harris County paying for the stadium, one way or another. If the voters rejected the supplement, the County would repay \$566,000 to the HSA, amortize the \$15 million in bonds without rent from the HSA, a large hole, and 193 acres of valuable land at South Main. Of the \$15 million bonds, \$12 million remained in the bank earning three percent interest totaling \$360,000. But, the County also paid \$450,000 to the bondholders. Beginning in 1963, the County was scheduled to pay off the other \$3 million that would cost \$150,000 each year for forty years. Rejecting the bonds meant that in

²⁵ “Vote Bonds—Save Money,” *Chronicle*, 21 December 1962, sec. 1, pp. 1, 4.

1963 alone, Harris County was required to spend \$806,000. If the bonds received approval, the County would not have to return the HSA's rent. In 1963, then, the cost for Harris County was a half-million dollars each year, including interest. This need not concern the average taxpayer. Houston's growth rate will be aided by the stadium, bringing to the area the much coveted tourism and convention dollar. "With this kind of financial choice and this kind of civic opportunity the choice is for the bonds," voiced the *Chronicle*. The choice was not whether to pay now or pay later. Either alternative meant that County taxpayers would finance the stadium. The choice was to pay a little each year and get a spectacular stadium or pay a little each year and get a spectacular hole.²⁷

Harris County voters stayed away from the polls. Even though Turrentine predicted a possible 125,000 ballots cast and Elliott hoped for at least 90,000 votes, most precincts reported a "slow" to "fair" turnout. The third bond election witnessed the closest approval margin. The final bond issue received 42,911 (54.3 percent) votes of support with 36,110 (45.7 percent) votes against it. Hofheinz, never one to remain idle or rest on his laurels, immediately announced plans to land both the Democratic and Republican conventions in 1964. "The HSA is offering to underwrite...\$500,000 each to the Democratic and Republican parties to defray costs of, and to obtain" both national conventions. Hofheinz understood that construction would have to begin in earnest to complete the stadium in less than two years. "We are working in a tight schedule," Hofheinz said, adding that to complete the "precedent shattering structure" the HSA needed "the whole hearted support and energies" of the city. R. E. Smith echoed Hofheinz's plea for continual community support. "We recognize that the

²⁶ "10 Harris County Legislators Endorse Stadium Bond Issue," *Chronicle*, 21 December 1962, sec. 1, p. 4; "National League Eyeing Stadium Vote, Says Giles," *Chronicle*, 21 December 1962, sec. 6, p. 2; "Giles

HSA is more than a business venture because of the responsibilities we have assumed under our contract with the County,” said Smith. But even if the people of the County did not rally around the HSA, Smith concluded, the HSA would not abandon its “civic responsibility” and “obligation to the public” in building the stadium. Hofheinz agreed. “Now that the public has spoken,” said Hofheinz, “there will be no unnecessary delays in carrying out the mandate.”²⁸

Lott-Drake would need all the 440 days stipulated in the construction contract to attain Hofheinz’s schedule. Alan C. Farnsworth, president of H. A. Lott, Inc., in response to Hofheinz, said, “I think it’s tight, but we believe we can get it done.” He added that his company would need at least 360 working days to finish the stadium and might need all 440 days. “But even given ideal conditions,” he continued, “I don’t believe we could do the job materially earlier than the deadline.” Farnsworth quashed any hope that it could be finished in record time. Even with Farnsworth’s guarded optimism, the HSA had no chance to land either party's national convention. Starting in February 1963 and working five days a week under the best weather conditions, the earliest completion date landed in mid-October 1964. Traditionally, the Democrats held their convention first in July with Republicans following sometime in August. Obviously, Houston and the domed stadium would have to wait for the national conventions. If Lott-Drake worked a six day work week with average weather, it could finish the stadium in June or July 1964. Lott-Drake did have a stake in competing

Arrives, Says Bond Vote Of Vital Interest to League,” *Post*, 21 December 1962, sec. 5, p. 5.

²⁷ “Stadium Dollars and Sense,” *Chronicle*, 21 December 1962, sec. 6, p. 10.

²⁸ “Voting on Stadium Is Sparse and Close,” *Press*, 22 December 1962, pp. 1, 6; “Stadium Bond Ballots Cast Vote-a-Minute,” *Chronicle*, 22 December 1962, sec. 1, p. 1; Verniaud, “Voters Approve Bond Issue for Domed Stadium,” *Post*, 23 December 1962, sec. 1, p. 1, 15; “Stadium is O.K. \$1 Million Offered To Dems, G.O.P.,” *Chronicle*, sec. 1, p. 1, 4; Nealon, “Voters Okay \$9.6 Million Bond Issue for Colts’ Park,” *SN*, 5 January 1963, 33.

construction in time for the national conventions. According to their contract, Lott-Drake would be fined \$100 a day after the 440 day limit.²⁹

The men of the Commissioners Court could finally breathe a sigh of relief. Each commissioner said that he was elated over the outcome and hoped that the opponents would eventually support the stadium. Judge Elliott, not one to agree with Hofheinz on many issues, agreed that the election results should be interpreted as a “mandate” from the people, demonstrating the confidence of the voters to allow the Commissioners Court to proceed “with as much speed” to complete the stadium. Other members of the Court affirmed that speed was of the essence to finish the project and prove that the stadium would be everything its supporters claimed to the future of Houston. Smith and Hofheinz issued a joint statement commending the Commissioners Court, William A. Smith, Gus Wortham, and other volunteers who worked tirelessly for the passage of the bonds. Smith and Hofheinz also wanted to dispel the charges prevalent during the bond battle that the HSA was fleecing the public. They applauded the sagacity and civic awareness of the voters. These individuals were looking toward the future of the city, not its past. The stadium, thanks to their approval, would continue to bring economic prosperity and untold riches to the Houston. In return for their trust, the HSA promised to “continue to operate the H.S.A. with a keen awareness of civic responsibility we have undertaken and of our obligations to the public.”³⁰

Judge Elliott attempted to hasten construction by splitting the contract into two stages. The earlier it began, he argued, the greater the chances of Houston landing both political conventions and the entire Oilers home football schedule that would begin in the late

²⁹ Wagner, “Stadium Start Likely in February,” *Press*, 24 December 1962, p. 2; Thorne, “Stadium Job to Be Rushed For '64 Finish,” *Chronicle*, 27 December 1962, sec. 1, pp. 1, 5.

summer. Elliott conversed with county attorney Resweber and county auditor Bruce about the legality of such a scheme. "There is nothing illegal about handling the work this way," assured Elliott. Construction, therefore, could begin while the new bonds were advertised and sold. With the sale date slated for 24 January 1963, construction could get a two to three month head start. The first stage was for the foundation work and cost \$10 million. The second phase, the stadium's "superstructure" would cost the remaining \$9,476,000. The County could split the contract because it had enough money remaining from the first bond issue to fund the first stage. The second phase's funds would come from the recently passed \$9.6 million issue. Resweber said that the County could do this legally because it had enough money available for the first contract. "It will be up to the architects, engineers and contractors to decide whether the overall contract can be broken up into portions so that part of the work can begin immediately," Resweber concluded.³¹

Judge Elliott, like Hofheinz, wanted construction to begin without any further delay. Elliott hoped to persuade his colleagues in the Commissioners Court to allow construction before they sold the \$9.6 million of bonds. Sayers refused to split the contract awarded, just so building could begin. Sayers said he doubted that the national parties would reverse their decisions to decline Hofheinz's invitation to Houston. "I do not believe that a sufficient guarantee could be made by Harris County that the stadium facilities would be 100 per cent complete in time," Sayers said. Chapman agreed that the County could not guarantee the stadium would be ready in mid-1964. Besides, Sayers concluded, the stadium bids asked for

³⁰ Verniaud, "Voters Approve Bond Issue for Domed Stadium," *Post*, 23 December 1962, sec. 1, pp. 1, 15; "Leaders Hail Bond Vote As A Milestone," *Chronicle*, 23 December 1962, sec 1, p. 4.

³¹ "Quick Start On Stadium Urged," *Chronicle*, 1 January 1963, sec. 1, p. 1, 7; Throne, "County Splits Contract To Speed Stadium Start," *Chronicle*, 28 December 1962, sec. 1, p. 1; "County Hopes for Start On Stadium

by the County were for “ a complete stadium” and the contract should not be split after the fact. If the Court opened this can of worms, it could possibly face yet another lawsuit. Lyons agreed with Sayers. Lyons opined that holding on to the contract as it was would give the County just a little insurance until the bonds were sold or in case another lawsuit was filed. “We ought to take all the safeguards we can,” Lyons opined and what Elliott wanted was “too big a gamble.” Elliott persisted, “If we let the contract right now, the first steel would probably not be moved in until May.” Sayers was unmoved by the Judge’s pleas. “The people are worn out with trying to hurry something,” Sayers told Elliott.³²

Elliott’s companions, however, quashed this ploy to get construction started immediately. Commissioner Sayers called Elliott’s plan “outlandish” and provided the reasons why they opposed splitting the contract. First, he said, the Republicans and Democrats simply could not select Houston for their conventions. The stadium would not be “100 per cent complete in time” and Harris County could not guarantee it would be. Second, the original stadium bid was for a complete stadium, not two separate phases. All the companies that made bids “would have legitimate complaints if the contract were split.” Additionally, once the County split the contract, it would have no recourse against Lott-Drake regarding stadium delays coming from financing, selling the bonds, or legal challenges. Third, the persistent rumors of another lawsuit hastened caution, not recklessness. Sayers did not want to imperil the new bond issue or encourage bond opponents by deciding on something “absurd.” Lyons agreed. “We all want the stadium,” he said, “but a move like this is too big a gamble.” “I don’t think that (the threat of lawsuits) should discourage us,”

Immediately,” *Post*, 28 December 1962, sec. 1, p. 1; “County Judge To Push Split Stadium Work,” *Chronicle*, 2 January 1963, sec. 1, pp. 1, 11.

Elliott said, because voters had approved of the stadium on three different occasions. The Commissioners Court should be more concerned about carrying out the will of the public, he continued, and not baseless rumors.³³

Even though he understood that another lawsuit would stymie construction, Elliott persisted to sway the Commissioners to his plan. "If we signed a contract now," he said, "the steel could not be moved until May." Sayers questioned Elliott on the feasibility of such a plan. "You wouldn't handle your personal business this way?" charged Sayers, who refused to take a risk with public money and faith. Elliott refused to back down. "Why not?," he retorted, "There's nothing illegal about it." "I'm not talking about illegality," Sayers responded but "common horse sense." "Besides," said Sayers as he interrupted Elliott, "We've had too much monkeying around already." Sayers wanted to proceed with extreme caution and wait until the bonds were sold. Although Elliott convinced Commissioner Lyons to the Judge's plan, Elliott's contract-split ploy failed three-to-two. The Court's decision ensured that stadium construction would not begin until after 1 March. If the Court sided with Elliott, building could have commenced on 12 February. A disappointed Elliott wanted the stadium finished so the Oilers could have played their entire 1964 season under the dome.³⁴

The Chicago firm Northern Trust Co. & Associates purchased the thirty-year bonds on 24 January "at the best interest rate" ever received by Harris County. The interest rate of

³² Verniaud, "Commissioners Refuse Quick Start on Stadium," *Post*, 4 January 1963, sec. 2, p. 8.

³³ Thorne, "Split Dome Job Plan Rejected," *Chronicle*, 3 January 1963, sec. 1, p. 1; Bailey, "Stadium Contract Split Rejected," *Press*, 3 January 1963, p. 24; "Quick Start On Stadium Urged," *Chronicle*, 1 January 1963, sec. 1, pp. 1, 7.

³⁴ Thorne, "Split Dome Job Plan Rejected," *Chronicle*, 3 January 1963, sec. 1, p. 1; "Stadium Bonds Sell At 'Lowest' Interest," *Chronicle*, 24 January 1963, sec. 1, p. 1, 7; Bailey, "Stadium Work Starts in March," *Press*, 24 January 1963, pp. 1, 2.

3.155 per cent totaled \$5,301,536 over the lifetime of the bonds. Bonds could be sold after the thirty-day limit to contest the bonds came and went. A jubilant Judge Elliott viewed the low rate as “a tremendous expression of trust in Harris County in view of the pitfalls we have encountered in trying to get our domed stadium program going.” All appeared well in Houston. No new litigation could emerge, the bonds were sold, and construction was finally slated to start sometime in March. County officials, the HSA, and stadium supporters could sit back and patiently wait until the construction contract with Lott-Drake was officially signed. Then, all the hard work, all the effort from everyone involved would pay off as the domed stadium would begin to rise from the Texas prairie.³⁵

Harris County representative Don Shipley had other plans in mind. He introduced a bill that attacked the HSA and its exemption from state and county taxes. The HSA, as a lease holder, did not have to pay state taxes because it was exempt. It could pay county taxes, but only if Harris County chose to do so. The HSA, therefore, was shielded from paying two major sources of income at the state and county levels. To rectify this injustice, Shipley introduced a bill in the Legislature that would allow the collection of state taxes on county owned property. Shipley claimed that he was not specifically targeting the HSA or the domed stadium, but “the domed stadium did bring the situation to my attention.” This action, he explained, was not done out of animosity, spite, or a personal vendetta against anyone associated with the HSA. Shipley’s actions become clearer when viewed with the prevailing spirit of finitude at the time. With a limited amount of funds, the HSA’s exemption seemed to be a downright theft from the public coffers. It was criminal for a private firm consisting of

³⁵ “Stadium Bonds Sell At ‘Lowest’ Interest,” *Chronicle*, 24 January 1963, sec. 1, pp. 1, 7; “Legal Path for Stadium Clear,” *Press*, 23 January 1963, p. 1; Bailey, “Stadium Work Starts in March,” *Press*, 24 January 1963,

millionaires to be absolved from paying their fair share of taxes like everyone else. Shipley made this point evident. "I want it clear that I am not trying to run the county's business or penalize the HSA," he averred, "I am only trying to protect the state's interest and pick up a tax windfall that has been neglected." The HSA, Shipley concluded, "should be taxed like anybody else."³⁶

Shipley's actions, in a nutshell, signaled what historians Alan I Marcus and Howard P. Segal identified as a disillusionment in American society. Marcus and Seal argued that the shift from optimism and plenty to an outlook of skepticism and finitude provided a new framework for American society. "Whenever any person or group received a piece of the pie," according to Marcus and Segal, "there remained that much less to be divide among others." In a world of limits, Marcus and Segal asserted, individuals personalized the actions of others as external forces seemed to threaten the "strivings" of the individual. Shipley's actions summed up this general feeling of limits that began to take over the US. Shipley personalized the tax exempt status of the HSA. The HSA, as a threatening, external force, seemed to be taking more that its fair share from the public pie. Shipley could no longer rely on the good will of the commissioners to check the HSA from taking advantage of the people. Shipley responded in the only way he could, on his own behalf. In Shipley's case, the HSA's exempt status took money away from the people of Harris County. Shipley's actions illustrated that the optimistic era of Houston was almost over.³⁷

pp. 1, 2.

³⁶ "H.S.A. Will Get Stadium Tax Bill," *Chronicle*, 26 February 1963, sec. 1, p. 1, 5; Stuart Long, "Bill Would Clamp State Tax on HSA," *Press*, 26 February 1963, p. 1, 6.

³⁷ Alan I Marcus and Howard P. Segal, *Technology in America: A Brief History*, second edition, (Forth Worth: Harcourt Brace College Publishers, 1999), 303.

The HSA, however, faced paying state and county taxes on the profits from the stadium. According to County Tax Assessor-Collector Carl S. Smith, he could collect taxes on “county-owned property that is leased to private individuals.” The equation for taxing the HSA was based on the difference it paid in annual rental of the stadium and the revenue it generated. Shipley, on the other hand, wanted to tax the assessed value of the entire stadium property. Employing the “usual assessed value,” the \$27 million stadium property, based upon the rate of twenty percent, would be \$5.4 million. With state property rates at 42-cents per \$100 valuation and Harris County rates at \$1.51 per \$100, the HSA faced a \$104,200 of property taxes.³⁸

Judge Elliott disagreed that Harris County would gain revenue by slapping a redundant *ad valorem* tax on the HSA. As mentioned above, the HSA already faced state and county taxes for its use of the stadium. The profit the HSA generated could not escape the taxman. “I had already planned to tax the Houston Sports Assn.’s leasehold interest in the stadium as soon as it built,” promised County Collector-Assessor Smith. Elliott did not want potential county profits, as stipulated in the lease agreement with the HSA, being neutralized. “Under the contract,” Elliott said, “the county will share in the gross profits, and taxing the stadium would only reduce the profits.” Clearly, Shipley was targeting the HSA and the domed stadium with his bill hinted Elliott. “the stadium is the only property of any size that the county has under lease,” Elliott continued, “The bill must be aimed at the stadium.” Even worse than this assault on County profits, Elliott could not understand why Shipley would want to increase Harris County’s share of the state *ad valorem* tax instead of annulling it.

³⁸ “H.S.A. Will Get Stadium Tax Bill,” *Chronicle*, 26 February 1963, sec. 1, p. 1, 5; Stuart Long, “Bill Would Clamp State Tax on HSA,” *Press*, 26 February 1963, pp. 1, 6.

Harris County, one of the state's largest counties, already paid one-sixth of Texas' *ad valorem* taxes. Elliott and the five members of the Commissioners Court formed a resolution denouncing Shipley's bill in behalf of the county and its interests.³⁹

County officials including Judge Elliott traveled to New York to sign the \$9.6 million bonds. After delivering the bonds, receiving and depositing the check, returning to Houston, and convening into session, the Commissioners Court hoped to sign the county's portion of the contract and "get things moving." Since Lott-Drake signed the contract earlier and began initial work, it expected formal construction to begin ten days after the Court awarded the contract.⁴⁰

The Commissioners Court convened on 6 March 1963 to officially award the \$19,476,00 construction contract to Lott-Drake. With the approval of the Commissioners, Judge Elliott reached into his suit pocket for a pen to sign the contract. Elliott tried one pocket then the other and could not find one. After borrowing a pen from one of his colleagues, Elliott signed the contract and breathed a sigh of relief. "It gives me a great deal of pleasure to sign the largest construction ever awarded by a county or municipality in the history of the Southwest," said a relieved Elliott. No lawsuit appeared to challenge the last bond issue; no judicial order prohibiting the sale of the bonds developed; no a disagreement with the HSA materialized.⁴¹ The court, the HSA, and Lott-Drake finally received the formal "go ahead" after years of planning, progression, regression, and hard work . H. R. Fredrich,

³⁹ "H.S.A. Will Get Stadium Tax Bill," *Chronicle*, 26 February 1963, sec. 1, pp. 1, 5; "County Opposes Tax on Stadium," *Chronicle*, 4 March 1963, sec. 1, p. 1.

⁴⁰ "Stadium Work Can Get Started," *Press*, 5 March 1963, pp. 1, 2.

⁴¹ It would not be until 1 May 1963 that Elliott, the Commissioners, and the HSA could no longer fear the retribution of an angry or miffed voter. Representative Tom Bass sponsored HB 984 that validated all bonds for the domed stadium. HB 984 ostensibly certified county parks bonds in Texas counties that claimed a population more than a million. See "Bill Validating Domed Stadium Bonds Passed," *Post*, 1 May 1963, sec. 1, p. 6.

vice-president of Johnson, Drake & Piper, Inc., told those present that work on the stadium's footings would begin in 10 days. "We are all looking forward to hearing the umpire yell 'play ball,'" he added, "or a gavel to ring down for the opening of a convention with 65,000 persons present in our new air conditioned, domed stadium."⁴²

On 27 March 1963, 360 persons, not including construction workers, attended the cornerstone laying ceremony. On the floor of the former "Elliott Lake," HSA president R. E. Smith, never one to crave the limelight, delivered a typical short speech congratulating everyone that helped make the domed stadium a coming reality. Judge Elliott's wife pulled the string that released the first load of concrete from its container to the dirt ground.⁴³ Houston and Harris County, after five long, turbulent years begun the construction of the much ballyhooed multi-purpose domed stadium. In those five years, the excitement and exhilaration that Houston and Harris County viewed the stadium had eroded. The stadium's initial price tag of a mere \$15 million seemed reasonable. Houstonians voted for revenue bonds to cover the cost of building the stadium with the hope of reaping the benefits of becoming a big league city. These idealistic dreams crumbled as the stadium drive experienced problem after problem. When the final costs of the stadium reached \$22 million, Houstonians, still proud of becoming big league, began to view the stadium differently. The domed stadium had become Frankenstein's monster, turning on its creator, wreaking havoc, confusion, pessimism, and disgust.

⁴² Bailey, "At Last! Contract Signed for Domed Stadium Construction," *Press*, 6 March 1963, p. 11; "County Signs Domed Stadium Contract; Work Due in 10 Days," *Post*, 7 March 1963, sec. 1, p. 1.

⁴³ "Domed Stadium Work Starts," *Chronicle*, 27 March 1963, sec. 1, p. 1.

CHAPTER 8: BUILDING THE DOME

Initial construction commenced the day after the 1961 tax bond election. Within weeks, John Kraak, Inc. removed over 260,000 cubic yards of dirt, creating a mile-long drainage ditch. As a result of the myriad legal, financial, and political challenges, additional work ceased until 1963, a full two years. Fans making their way to Colt Stadium to watch a Colt .45 baseball game could gaze at Elliott's Lake before they entered. With the resumption of construction in 1963, the earlier excavation would now benefit the timetable for completion. So too did the state urban expressway engineer A. C. Keyser's forethought to extend highway 610 from South Main Street all the way to the stadium.¹ Time would truly be of the essence since the original stadium plan envisioned total completion before the 1963 baseball season. The HSA and County officials could only hope for the efficient and expeditious completion of the stadium before the Colt .45s 1964 season ended. Stadium boosters wanted to stave off the public's increasing cynicism directed towards the stadium, which came with every obstacle and delay.

Before official construction began, *Houston Press* sports editor Bob Rule interviewed the president of the Colt .45s, Roy Hofheinz. One subject Rule covered was the completion date of the stadium. Under optimal working conditions, speculation on a seventeen-month completion date floated around Houston. Hofheinz wanted the quickest pace of construction so the stadium could be dedicated immediately. "Naturally, we'd selfishly like to see baseball the first event held in the stadium," he promised, "but it should be completed in, say October or November, then you can be certain we wouldn't wait until the next baseball season to

open it.” Hofheinz's assertion should not be construed as a better relationship with Oilers owner Bud Adams. They still loathed each other. Hofheinz was simply being pragmatic. “We certainly couldn't afford to let it stand idle from October or November until April the following year,” he said. Every day that passed without the facility being used cost the HSA at least \$10,000 a day and potentially threatened the future of Harris County. If the HSA failed to make money and defaulted on any of its lease payments, the people of Harris County would face a \$20 million bill. Rule asked Hofheinz how the HSA planned to find stadium sub-lessees, especially since the Houston Stock Show remained aloof. Hofheinz expressed his confidence in his ability to locate, sign, and bring any event to Houston.²

Like Hofheinz, Herbert M. Eyster, vice president of H. A. Lott and project manager of construction, could not confirm any specific finishing dates for the whole stadium or the various construction phases. The stadium, he opined, would begin to rise out of the ground by September or October. In early April, Eyster oversaw the “pouring of concrete and setting anchor bolts for footings, where we will attach the structural steel for the outside walls of the stadium.” With the official start on 18 March, Lott predicted the delivery of the steel in mid-June, and the first phases of erection around the beginning of July. The steel erection towers would be the first to rise into the sky. The towers would place and support the roof trusses until each was welded and would “look like a field of oil rigs.” After the removal of the towers and the free standing of the roof on its base, the installation of the skylights and interior work would commence. Eyster hoped that this would start in January 1964 and be

¹ Thomas Mahr, “State to Speed Loop Road to Stadium,” *Press*, 2 February 1961, pp. 1, 2.

² Bob Rule, “Sidelights,” *Press*, 19 March 1963, p. 10.

ready for the grand opening in October. “When this thing is finished it will mean more to Houston than anything since,” he paused, “well, than anything since they struck oil.”³

While excitement surrounded the start of construction, the American Bridge Division of US Steel (AmBridge) received the structural steel contract from Lott-Drake on 7 April 1963. Lott-Drake projected 9,000 tons of steel for the supporting framework, dome, and movable stands from its Orange, Texas plant.⁴ AmBridge was forced to halt its fabrication of the structural steel almost immediately. Roof Structures was unable to send the completed roof blueprints to AmBridge causing a one month delay. AmBridge required that every detail be ready for fabrication, shipping the steel to Houston, and erection at the site to avoid delays, mistakes, and unsound construction.⁵

Steel was the natural choice for the stadium frame and roof. The properties of steel included high strength, uniformity, ductility (ability to withstand deformation before failure), toughness (ability to withstand and absorb massive amounts of energy), resistance to aging, and speed of erection. It could be used to create any designed frame conceived. No other construction material (wood, concrete, aluminum, or plastic) satisfied the strict requirements as did steel. For example, wood was not uniform, could be damaged during handling and erection, and expanded and contracted under temperature changes. The average tensile strength of wood was a mere 700 pounds per square inch (psi) to steel’s 22,000 psi. Concrete, although deserving consideration, could not be used for the roof because of its low tensile

³ Steve Perkins, “The Domed Stadium Will Be Hoping for A White Christmas,” *Post*, 9 April 1963, sec. 4, pp. 5, 20.

⁴ United States Steel Corporation, press release (7 April 1963), Robert J. Minchew Collection, 94-274/4 “Harris County Domed Stadium Construction Correspondence, File #1, March-April 1963,” University of Texas (Austin, TX).

⁵ N. W. Young of American Bridge to Roof Structures, Inc., 3/29/63, Minchew Collection, 94-274/4, “Harris County Domed Stadium Construction Correspondence, File #1, March-April 1963.”

strength, higher cost than steel, and design limitation. A concrete roof could not incorporate the individual skylights that the HSA demanded. Aluminum could be dismissed as a structural component because of its high cost and its inherent softness. Plastics were reserved only for applications like piping, skylights, and adhesives. But steel was not without its drawbacks. Steel tended to corrode especially when continually exposed to air or water. Steel also lost strength at high temperatures or fire. Stress reversals and various tension levels contribute to fatigue of steel, which, in turn, increases its brittleness. Steel was not a perfect material, but provided the best desired characteristics for construction.⁶

To create steel, carbon is essentially refined from an oxide. This process requires the use of energy. The resultant steel is less stable than the original oxide. The steel, under certain conditions, will revert back to its original oxide form. In this electrochemical process, the steel reacted with water and oxygen to form oxides and hydroxides. During the steel decay, its escaping electrons formed hydroxyl ions with the surrounding oxygen atoms and water. The steel was the anode and the hydroxyl ions were the cathode. Corrosion could only occur if both the anode and the cathode were available for the reaction.⁷

Houston's environment posed a problem for the steel structure. Often, but especially during the summer, Houston experienced humid conditions. The water vapor in Houston's air, however, was not the sole cause for the rusting of steel. Minute quantities of impurities and pollutants, like the sulfur dioxide prevalent in Houston, increased the rate and severity of rusting. Houston was located in a "very high industrial" corrosive environment with its

⁶ McCormac and Nelson, 1-4; James Ambrose, *Structural Materials*, 2d ed. (New York: John Wiley and Sons, 1993), 24-27; Edward Allen, *Fundamentals of Building Construction: Materials and Methods*, 2d ed. (New York: John Wiley and Sons, 1990), 422.

⁷ Petros P. Xanthakos, *Ground Anchors and Anchored Structures* (New York: John Wiley and Sons, Inc., 1991), 241.

humidity, proximity to the Gulf of Mexico, heavy industry, especially petrochemicals, and the number of automobiles, which necessitated proactive measures. This resulted in the painting of every inch of exposed steel framework.⁸

The steel selected for the lamella frame and the grandstands was plain-carbon A36 steel. The American Society for Testing and Materials set the standardized minimum strength of this steel at 36,000 psi. The A36 steel was the most common structural steel employed in the US.⁹ The tension ring consisted of two fourteen-inch wide flange A441 high-strength steel beams. The A441 was a steel alloy containing magnesium and another alloy to increase overall strength. The use of welds throughout the tension ring necessitated A441 steel. In addition to its weldability, the A441 steel promised resistance to corrosion and fissure.¹⁰

A concrete reinforced retaining wall protected the stadium from the backfill and provided support for three levels. Much of the pressure against the retaining wall was relieved by 298 steel tendons, attached to both the wall and deadmen located eighty-five feet from the retaining wall. Each tendon could withstand 240,000 psi. A cathodic protection system preserved the steel tendons from rusting in the corrosive soil. To shield the tendons from water and compacted backfill, a cardboard sheath was placed around the tendon. Once in place, a liquid polyurethane was poured into the cardboard tubes and allowed to solidify. The cardboard would eventually deteriorate, but provided the polyurethane the needed time to set. Steps were taken to protect the steel inside the retaining walls. A coating of asphalt

⁸ D. A. Bayliss and D. H. Deacon, *Steelwork Corrosion Control* (London: Spon Press, 2002), 11-14, 60.

⁹ Albert Hanson and J. Gordon Parr, *The Engineer's Guide to Steel* (Reading, Massachusetts: Addison-Wesley Publishing Company, Inc., 1965), 201; Samuel H. Marcus, *Basics of Structural Steel Design*, 2d ed. (Reston, Virginia: Reston Publishing Company, Inc., 1981), 27.

¹⁰ Hanson and Parr, 203; Marcus, 28.

mastic followed by a glass fabric was applied. It was repeated before the final layer of "asphalt saturated felt."¹¹

Aided by a mostly dry spring, the foundation work, which began in late March, chugged ahead into June. "The period of dry weather has come at the ideal time, and we'll have no trouble being ready for the first delivery of steel in the first week of June," said Hermon Lloyd. The only significant rain delay occurred in mid-May, but did not affect AmBridge's delivery of steel in June. If the weather cooperated, Lloyd did not see why the erection could not be finished by December 1. If the pace held up, Lloyd said the curious would "see the size and shape of the dome by Thanksgiving Day." The early excavation work that resulted in the infamous Elliott's Lake now benefited the HSA's tight schedule.¹²

American Bridge started building the first of an eventual thirty-seven erection towers in late June, three months ahead of schedule. In less than four weeks, "a nest of oil wells," highlighted by "eleven derricks...and giant cranes transporting steel around" pointed to the sky and befitted the oil city. It also demonstrated the rapid pace of construction. Workers had placed steel framing to support the tension ring at a height of three stories on the southwest side of the site. Architects Naman and Morris speculated that the temporary towers would remain until late November when the stadium and the dome frame would be finished. Then work would commence inside the stadium, as workers began installing the seats and the air conditioning system and on the skylights.¹³

¹¹ "Corrosion Control at Houston's Domed Stadium," *Materials Protection* 3 (November 1964), 65-66.

¹² Clark Nealon, "Post Time," *Post*, 12 May 1963, sec. 4, p. 2.

¹³ Bill Porterfield, "Dome Stadium Work Going on Schedule," *Chronicle*, 16 June 1963, sec. 7, p. 6; Steve Perkins, "Dear Colts: How High the Rent?," *Post*, 30 June 1963, sec. 4, p. 3; Nealon, "Post Time," *Post*, 16 July 1963, sec. 4, p. 1.

Reporter Steve Perkins visited the site in late June. "Man, that's a crazy erector set they've got going on South Main," he reported. Workers placed and connected some of the exterior framework. This was joined by the thirty-seven erection towers. At the center of the stadium was a 303-foot tall tower, surrounded by an inner ring of twelve 200-foot towers and twenty-four smaller towers (160-feet tall) in an outer ring. Two cranes lifted the sections of the roof truss and ribs onto the towers. A 100-ton jack that would lower the roof truss after bolting. "You think it looks like something now, wait till we start the span," said superintendent Eyster. He hoped that the roof would be complete in December, so a visitor could really appreciate the vast size of the roof by standing on the playing surface "at second base and break your neck following the sweep of it from one side to the other."¹⁴

Bob Minchew reported a serious transgression committed by American Bridge. Minchew claimed that AmBridge was not following the "Architect's reps specific instructions." The first violation occurred on July 18 when workers from AmBridge erected a steel column a day before the starting date on a concrete footing poured on July 16 late in the afternoon. On July 30, American Bridge crew raised part of the tension ring on three columns contrary to instruction. Due to the nature of the project and the shared responsibility with its successes (or failures), Minchew would not tolerate repeated violations. Another offense by American Bridge or any of its sub-contractors would result in ceasing all operations until the Architect's directions had been fulfilled and "properly observed." American Bridge crews

¹⁴ Perkins, "Dome's Going Up, But Will Grass Ever Grow?," *Post*, 21 July 1963, sec. 4, p. 6; "Record-Span Dome Roofs Air-Conditioned Stadium," *ENR*, 27 February 1964, pp. 27-28; T. B. Jefferson, "Welded Steel Frames World's Largest Clear-Span Domed Stadium," *Welding Engineer* 49 (June 1964): 56-57; "Corrosion Control at Houston's Domed Stadium," *MP* 3 (November 1964): 66-67.

were instructed to return to the work on the tension ring in an effort to quickly complete this portion of the ring.¹⁵

The 750-ton circular tension ring, "the key to the success" of the lamella roof, consisted of five-foot high and 2,105-foot long welded steel truss. Seventy-two sections, each twenty-seven feet, nine inches, were lifted and welded into place to compose the ring. Each section rested on a steel column, 120-feet above the stadium floor. At this nexus "articulated joints" were placed. These joints contained two sets of ball bearings, to allow the movement of the roof upon its base. The expansion and contraction of the roof would not jeopardize the integrity of the structure because of the articulated joints.¹⁶

There were twelve main trusses in the roof. The truss started at the tension ring and spanned the gap to the tower at the center of the roof. Each truss was 110-feet long, made of two fifty-five feet long pieces welded together. Once the crew placed the first two ribs, the lamella trusses were then welded to it. Think of a pie cut into twelve pieces. Each "cut" represented a main truss. If six concentric circles were drawn on the surface of the pie, towards the edge, these would be the lamella trusses. In between each lamella, additional bracings were welded that formed the triangular pattern of the roof. These purlins were about thirty feet long. A crane lifted each truss into place. It was bolted to the tension ring and welded to the other sections.¹⁷

Welds were used extensively throughout the stadium. There were two locations that utilized bolts: the connections between the tension ring and the support columns and segments of the trussed ribs. Bolts were used at these key connections to allow the roof to

¹⁵ Robert Minchew to Alan Farnsworth, (7/31/63); Minchew to Lott-Drake (7/18/63) Minchew Collection, 94-274/4, "Harris County Domed Stadium Construction Correspondence, File #3, March-June 1963."

move depending on various forces and loads. Welding benefits included eliminating bolt heads and the splicing plates between beams. Fusing two beams created a continuous structure that is actually stronger than base metal of the steel girders. Welding allowed the correction of errors during the erection of the steel framework. Also, fewer pieces are used, saving time in the completion of the stadium. Of the two main types of welds available during construction, framers used fillet welds instead of groove welds. Although groove welds are stronger than fillet welds, they were also more expensive. Additionally, groove welds required that each beam be lined up in the same plane and fit perfectly to each other, something almost impossible with the average steel beam.¹⁸

Dr. G. R. Kiewitt informed the architects that "radiographs" should be taken of all welds of the tension ring because they could crack due to the extreme heaviness of the materials. American Bridge wanted to use its radiograph department to take the x-rays and forward the results to the architects.¹⁹ The architects employed Engineering Testing Laboratory (ETL) of Houston to inspect and test every critical weld in the structure. ETL's 9 August report declared that the welding in all divisions of the building were inadequate. Even though all the structural steel had been completed in Division 1, for example, only 97%, according to ETL, was welded. In Division 2, 99% of the structural steel had been completed, but only 75% welded. Even worse, Divisions 3 and 4 had structural steel erected but none of it had been welded. ETL asserted that "hanging of this much steel secured only by erection bolts" was not a good construction practice. Indeed, the report continued, the

¹⁶ Jefferson, 56-55

¹⁷ *Ibid.*

¹⁸ McCormac and Nelson, 430-431, 437-449; Michelle Melaragno, *An Introduction to Shell Structures: The Art and Science of Vaulting*, (New York: Von Nostrand Reinhold, 1991), 315.

small amount of welding was "unsafe." A high force wind, such as the 90 mile/hour one that had hit Victoria, Texas two weeks previous, could knock down the steel structures causing "great damage and possibly the injury or death of a workman resulting in extensive lawsuits to all parties concerned." ETL advocated that additional welders should be employed to rectify the situation.²⁰

A welding shop inspection proposal by ETL asked that one man inspect all welding thus far completed to ensure "sound welding construction practices, such as proper prep for welding, prepare fit-up, proper cleaning of each weld pass" and that all welders have the proper certification. After the three to four day duty, only intermittent checks would be required. ETL also recommended a field inspector of all on-going welding who then could perform the duties of shop inspection, increasing cost by a mere \$8,100 for one man working about 135 days to cover the remaining field construction.²¹

As construction workers raised and placed the steel framework, a disillusioned, skeptical, and unnamed Houston architect pronounced his critique of the stadium. The architect prophesized that grass could not grow under the dome and called the \$19.8 million price tag a farce. Concerning the grass, the architect said, "If you pour in enough air conditioning to cool the customers, then you do not have enough heat to grow the grass." And the stadium cost? Other cities, the architect asserted, were spending much more than \$20 million for a uncovered stadium. "Somebody is being kidded," he claimed. Hofheinz said he

¹⁹ G. R. Kiewitt to Associated Sports Center Architects (6/6/63). Minchew Collection, 94-274/4, "Harris County Domed Stadium Construction Correspondence, File #3, March-June 1963."

²⁰ Structural Steel Filed Inspection by Engineers Testing Lab, Inc. (8/13/63), Harris County Domed Stadium Construction Correspondence, file # 4, June-August 1963; "Gamma Rays Inspect Welds in World's Largest Clear-Span Enclosed Structure," *Welding Design and Fabrication* 37 (August 1964): 58-59.

²¹ ETL to Architects (10/1/63), Harris County Domed Stadium Construction Correspondence, file #6, October 1963.

was “disheartened” to read such reports. New York’s dome-less, single-purpose stadium, he posited, was already at least a year behind schedule. O’Malley’s Dodger Stadium, he continued, was a year late and Candlestick Park suffered from serious design flaws. Hofheinz pointed out that the construction schedule for the domed stadium, on the other hand, was actually ahead of schedule and, more importantly, cheaper than these inferior ballparks. “We are building something nobody on the world has or will have for years to come, something that will set the pattern for the 21st century and we’re doing it for less money,” declared Hofheinz. How could this be?, asked Hofheinz. “This is a prestige project,” he said. “Every supplier has given the Dome Stadium top priority,” he continued, and none wanted to be perceived as the reason for delay. Besides, Hofheinz added, “Everybody connected with this project is going to emerge as the one-and-only, 100-per-cent expert on covered stadiums in his field.” The domed stadium, therefore, was going to have an effect on the future financial well-being for those companies affiliated with the stadium. These companies would be able to use the stadium as a giant advertisement and reap the benefits of its success.²²

The pace of construction slowed in September 1963 when increased rain, combined with the downpours and high winds of Hurricane Cindy, arrived in Houston and stayed for four days. The one-time hope of opening the stadium in 1964 due to a better-than-expected pace evaporated. Even though the HSA wanted to open the stadium in earnest, Hofheinz promised they would wait until the stadium was completed before holding an event under the dome. If this meant that opening ceremonies would have to wait until 1965, then Hofheinz asked that everyone remain patient. “Certainly, nobody wants to see the stadium used before

²² Perkins, “Dome’s Going Up, But Will Grass Ever Grow?,” *Post*, 21 July 1963, sec. 4, p. 6; Perkins, “Hofheinz Reports on Dome: All Systems Go,” *Post*, 28 July 1963, sec. 5, p. 5.

it's completely ready," he said. Hofheinz refused to speculate about the finishing date because, in his words, "There are so many little details in finishing up the stadium that simply can't be accurately gauged as to the length of time it will take to complete." Besides, he concluded, "the public will want to see everything perfect." Anything less than perfection associated with the stadium would tarnish its already damaged reputation. Hofheinz, however, predicted that if good weather reappeared, the beginning of placing the roof on the steel frame would commence in December and finish on the first of February. After that, the next step was placing the skylights (finishing on 1 March) and completing the remainder of the inside work. Despite Hofheinz's exuberance, his construction schedule left less than two months to complete the stadium before the start of the 1965 baseball season in April.²³

Another delay arose as a result of a labor dispute between Lott-Drake and the Local 450 of the International Union of Operating Engineers. This work stoppage postponed construction for eight days beginning on 9 October. The work stoppage was not a strike in the eyes of the labor union because each worker decided that he "did not want to work." The twenty hoisting engineers, according to the Lott-Drake representative, idled an additional four hundred laborers, severely hindering construction. The strike cost Lott-Drake cost \$6,800 each day. Just as important, said Herbert Eyster vice president of H. A. Lott, Inc., the strike cost eight days of decent weather. "The weather is a big factor on this job," said Eyster, "and we have to make hay while the sun shines." The reasons for the strike, the removal and reclassification of a foreman, are not the issue here. What is important is that the fracas delayed construction and threatened the chances of completing the stadium before the start of the 1965 baseball season. Jack McDonald, business agent for the union, said that the real

²³ Bob Rule, "Sidelights," *Press*, 17 September 1963, p. 14.

reason for the dispute was Lott-Drake searching for a scapegoat. "The contractors are behind schedule," McDonald charged, "and are looking for an excuse to get an extension from the county." The HSA timetable could not withstand work stoppages of any kind if it hoped to start the 1964 baseball season under the dome.²⁴

Despite periods of inclement weather and a work stoppage, AmBridge placed the final piece of the dome's steel frame, still three weeks ahead of schedule. To commemorate the occasion, AmBridge workers placed two Colt .45s pennants atop the roof. The next phase required AmBridge to remove the construction towers and allow work to commence on the skylights. Minchew informed Dr. Kiewitt that AmBridge would be ready to start "dome swinging" on 25 November if weather cooperated.²⁵

On Monday, 2 December John Savoy, AmBridge's construction superintendent, illustrated his faith in the strength of the roof's steel frame and the stadium's steel support columns. A large jack on the top of each of the thirty-seven towers held the frame in place until Savoy's order. At 12:30, he communicated via walkie-talkie to workers to began lowering the support towers on to the columns. Even Dr. G. R. Kiewitt, of Roof Structures, Inc. who designed the dome, climbed the two hundred feet to the top of the "A" support tower to observe the process. The "A" tower was the one located at the center of the roof with twelve and twenty-four, respectively, branching out from the center in their own perfect circles. As the workers lowered the jacks, the frame rested squarely upon the steel pillars.

²⁴ J. F. M. Davison of Lott-Drake to Architects (10/11/63), Harris County Domed Stadium Construction Correspondence, file #6, October 1963; Louis Hofferbert, "Stadium's \$31 Million Job Jeopardized," *Press*, 17 October 1963, p. 1, 2; "NLRB Complaint Filed In Stadium Dispute," *Press*, 18 October 1963, p. 2; Charles Turbyville, "Domed Stadium Work Resumed," *Press*, 21 October 1963, pp. 1, 4.

²⁵ "Dome Stadium Flag "Tops Out,"" *Press*, 2 November 1963, p. 2; Minchew to G. R. Kiewitt (11/13/63). Minchew Collection 94-274/4, Harris County Domed Stadium Construction Correspondence, file #7, November 1963.

Herb Eyster of Lott-Drake predicted that once work began, the dome would be complete within ninety days. Eyster said that he was pleased with the progress of construction. "We're just about on schedule," he said with work "ahead on some phases...and behind on others."²⁶

The upbeat atmosphere suffered a slight setback during the lowering operation. The dome's steel frame came to rest on only one of the three internal supporting walls due to the speed of finishing the dome and the wall of steel pillars. As a result, the roof transferred 220,000 pounds of pressure to each of the stadium's "foot-thick" supporting columns. Instead of waiting until they could inspect the remaining walls, the architects decided to place the dome upon the steel columns. The immense weight caused each column to bend slightly, an inch and one-eighth. AmBridge immediately ceased lowering the dome and hastily erected several temporary steel supports between the first and second wall columns. By spreading the dome's weight across two wall columns, AmBridge corrected the deflection and avoided disaster. Morris claimed this was indeed harmless to the structure and actually allowed them to determine the amount of deflection of the columns. Morris tried to quell any concern that the deflection damaged structural integrity. A deflection was not a "bow" or "buckle" of the beam, he said, but a normal and foreseen effect. To position the support beams on the stadium columns retarded construction by three weeks. Morris, however, remained upbeat. If they received only "average breaks on the weather," Morris predicted completion "by November or December." With the steel skeleton firmly in place, American Bridge began the tedious work of removing the roof's support towers.²⁷

²⁶ Rule, "Sidelights," *Press*, 3 December 1963, p. 8; Kent Demaret, "Dome Problem Licked, Stadium Moves Ahead," *Press*, 18 January 1964, p. 2.

²⁷ Demaret, "Dome Problem Licked, Stadium Moves Ahead," *Press*, 18 January 1964, p. 2.

ETL filed its report of the welds in the tension ring and the lamella roof to Minchew who, in turn, informed Dr. Kiewitt and John Savoy of AmBridge. Minchew reported that “in several locations the iron does not make-up satisfactorily” and could jeopardize AmBridge’s proposal to “swing the dome” in just a couple of days. Could AmBridge start swinging the dome into place if several roof welds were defective? Minchew wanted to ascertain Kiewitt’s opinion to the “seriousness” of the finding’s of this report.²⁸ Three weeks later, V. S. Skinner of ETL opined that the defective pieces be removed at once.²⁹

AmBridge began lowering the dome on 2 December 1963. All jacks started lowering the roof one-half inch at a time at a tower at a time. After being lowered the first one-half inch, ETL inspectors surveyed all connections before continuing. The inspectors stopped any additional “jacking down” because of the discovery “that some of the stub columns appeared to be leaning out and some leaning in.” The representatives from the architects, Roof Structures, Walter P. Moore, and Lott-Drake agreed to halt lowering the dome. Ten days later, at another group meeting, it was collectively agreed that the columns be “cross brac(ed)” immediately.³⁰ Working diligently, the cross bracing would be completed by 15 January 1964, at which time AmBridge would swing the dome.³¹

The dome descended on six-feet long “stub columns” that, in turn, settled on the seventy-two main columns. A pin located at one end anchored the “stub column” to the dome while another pin at the opposite end fixed the stub to the support column. The stub columns

²⁸ Letter from Robert J. Minchew to Dr. G. R. Kiewitt, (11/19/63), ETL Folder, WMPA Archives.

²⁹ Letter from V. S. Skinner to Robert Minchew (12/16/63), ETL Folder, WMPA Archives.

³⁰ Structural Steel Field Inspection (12/17/63), ETL Folder, WMPA Archives.

³¹ G. R. Kiewitt to Louis O. Bass (1/7/64), ETL Folder, WMPA Archives.

compensated for expansion and contraction by the dome due to temperature change and the forces of external and internal winds.³²

ETL inspector V. S. Skinner notified the architects of distorted steel at "many connecting points of lamella chords." AmBridge either did not notice this during installation or ignored it. This situation meant, according to Skinner, that the "essential" iron-to-iron bolted connections could not be completed. ETL wanted the "distorted plates removed and new plates inserted."³³ Because of the extremes stresses placed on the welds of the tension ring, no defects could be allowed in any welds on the tension ring or the lamella. ETL inspected the 474 welds. Inspectors from Magnaflux MTL worked 120 feet above the ground and shot 259 gamma ray "pictures" using gamma ray equipment. After all the welds were photographed and evaluated, twenty-three welds were rejected in the tension ring and ten in the lamella roof. Each weld was removed, re-welded, and re-certified. The MTL workers also went around the stadium to perform random inspections on the welds of individual workers. They found ten defective welds, which were corrected.³⁴

Alan Farnsworth of Lott-Drake asked that the exterior drainage work start so as to avoid water damage to the base of the stadium. Farnsworth reported that his firm was preparing to start its work on the roof. This included installing the decking, skylights, flashing, and downspout system. The entire roof system, as designed, was to move water from the ten-acre roof through downspout pipes located in the building to the exterior. The storm drainage, then, carried the water away from the complex. If the system was not

³² Demaret, "Dome Problem Licked, Stadium Moves Ahead," *Press*, 18 January 1964, p. 2.

³³ V. S. Skinner of ETL to Architects (12/18/63), Minchew 94-274/4, Harris County Domed Stadium Construction Correspondence, file #8, December 1963.

³⁴ "Gamma rays inspect welds in world's largest clear-span enclosed structure," *Welding Design and Fabrication* 37 (August 1964): 58-59.

available, warned Farnsworth, "excessive flooding" would result, damaging equipment, delaying the project, and increasing the cost. Farnsworth wanted the contract to be signed by 1 March 1964 so as to be completed by May 1.³⁵

A meeting on 16 January 1964 "to consolidate review work of the past month and determine procedures to be followed to continue the 'swinging' of the dome" was attended by representatives from just about every group involved in the first phases of construction. S. I. Morris representing the architects wanted to deliberate on the statement from Roof Structures that claimed the roof was ready to swing free of the towers. The structural engineers concurred that the structure below dome was ready to receive it, while the "contractor's statement that they were ready and prepared to proceed with the work of swinging the dome." Dr. Kiewitt expressed that he had "no reservations which would prevent work from progressing." Ken Zimmerman said that once the temporary bracing structure was installed, and the inspections completed, the base would be ready for the dome. AmBridge announced that it was ready to proceed, and only needed the go-ahead from all other parties. Lott-Drake's Farnsworth asked about when and how long towers could be removed. Kiewitt said towers could not be moved until the inspection and repairs were finished. The groups "generally agreed" that as inspections continued, repairs made, and inspectors were satisfied, "the towers could be removed from the completed sections." AmBridge said that under good weather conditions, the towers could be removed in a total of three weeks time.³⁶

Construction that had been lauded as ahead of schedule only one month earlier, nearly ground to a halt. The welding problems held up continuing work. Since the welds had to be

³⁵ Alan Farnsworth (of Lott-Drake) to Architects (1/14/64), Minchew Collection 94-274/4, Harris County Domed Stadium Construction Correspondence, file #9, January 1964.

flawless, all other work had to be ceased. The delay assured that the stadium would not be ready for the 1964 baseball season or any other events. As the HSA announced the new schedule, some detractors started labeling the stadium “Houston’s Folly.” Editors of *The Sporting News* wanted its readers to dismiss the criticisms and applaud the effort. The editors called the stadium a “progressive project” that “will bring a new concept to baseball.” The new domed stadium, *The Sporting News* continued, would “produce a new era in the sport, possibly the greatest in history.”³⁷

The HSA celebrated every milestone in the construction process and the removal of the final erection tower was no different. Like a child standing on its own legs, a parent might notify family and friends of the momentous occasion. Hofheinz wanted the Houston family to commemorate a similar milestone in domed stadium history on 12 March. The last of the thirty-seven support towers was removed in its place of roof support. Freed of the towers, the roof rested completely on the stadium walls. Once everything was prepared, the 7.5 million-pound roof was lowered from the tower supports on to the stadium “an inch at a time.” On February 4, the roof joined the rest of the stadium and was no longer supported by the towers. Workers turned the winch that held the roof on the jacks, and lowered it on its steel skeleton. For the rest of the month, the towers were removed one at a time, at a rate of two per day. The stadium sank a little over four inches when the roof was released from the towers. The engineers calculated that the stadium would sink 4 1/4 inches. The target date to

³⁶ Memorandum by Robert Minchew (1/17/64), Minchew Collection 94-274/4, Harris County Domed Stadium Construction Correspondence, file #9, January 1964.

³⁷ “Domed Park to Usher in New Era,” *SN*, 18 January 1964, p. 12.

place the 4,596 skylights was April 1. The seat risers made of concrete were next to be installed.³⁸

Lott-Drake representatives claimed that as of 16 April 1964, "The miracle of South Main" was 62% complete. They speculated a June 1st date for the completion of the dome roof and a finalization of the outside walls by the end of the summer. This meant that all remaining work would be done inside a complete enclosure, free from interference from Houston's weather. "Everything seems to be right on schedule (for a November 25 completion date) and we've had only the normal amount of delays, and they were anticipated in an undertaking of this magnitude," said Hofheinz.

As construction sped towards completion in 1964, the city's congenial and optimistic opinion of Roy Hofheinz and the Houston Sports Association suffered two hits. One of the setbacks Hofheinz inflicted upon himself. During the middle of construction, Hofheinz decided to change the stadium design. He wanted to add dozens of boxed seats at the top of the stadium. But the boxes seats were not just any average boxed seats, they would be personal, luxurious clubrooms for the HSA's wealthy cronies. Suddenly, the stadium funded by bonds voted by the average Houstonian took on an air of elitism. To say that this was at an inopportune time would be an understatement. The other was a result of a growing skepticism of the stadium as well as a personal vendetta against Hofheinz. Simply, Mayor Louie Welch wanted a downtown coliseum in downtown Houston and he would do anything he could to get one. He hoped that the Stock Show would stay downtown if the city built a new coliseum. Stock Show officials, however, remained adamant in relocating to northwest Harris County. Undeterred, Welch took his plan to the people of Houston to get his coliseum.

³⁸ "Domed Stadium Free of Support Towers," *Post*, 13 March 1964, sec. 1, p. 1.

On 10 April 1964 Hofheinz paid a visit to the Commissioners Court to discuss altering stadium designs. Up until now, Hofheinz uncharacteristically kept himself out of public scrutiny. He had been too busy overseeing the various aspects of construction. When Hofheinz visited the Commissioners, it was not just for a friendly chat. Hofheinz, preoccupied with the stadium, conversed only about his investment and ways he could better it for the public. His April call centered on improving and expanding seating under the dome. Hofheinz requested adding forty-two “private clubrooms” on the ninth level, behind the 2,000 seats on the ninth level. The clubrooms, said Hofheinz, would actually increase the sale of seat options and expedite the amortization of the \$3 million bond initiative. The HSA, he told the Court, was willing to pay \$1 million towards the construction of these clubrooms. The plan for these clubrooms, however, required moving air ducts. This would cost an extra \$168,095. Hofheinz asked the Commissioners for this amount to cover the modification. Understandably, the Commissioners neglected to make an immediate response to Hofheinz’s inquiry. The County remained on a tight fiscal budget. County Engineer Doss reported that of the \$500,000 contingency fund, only \$153,000 remained for the duration of construction, which was more than ten months away. And acquiescing to another iron-fisted demand from Hofheinz, without considering the impact on future construction, would be unwise and fiscally dangerous. Hofheinz asked the Commissioners to raid the contingency fund and exploit the interest from the \$9.6 million bond issue, a reported \$335,000. If this was not enough, Hofheinz told the Commissioners to demand the \$750,000 Uncle Sam owed Harris County for the fallout shelter changes.³⁹

³⁹ “Domed Stadium in Need of Cash,” *Chronicle*, 9 April 1964, sec. 1, p. 1; “\$168,095 Asked For Stadium Clubrooms,” *Post*, 10 April 1964, sec. 1, pp. 1, 5.

Hofheinz wanted a little consideration from the County for everything he and the HSA had already provided. But the clubroom spat evidenced the change in attitude towards the HSA, Hofheinz, and the stadium. Only a few years earlier, the people of Houston entrusted the HSA with almost \$30 million in tax backed bonds. Now, the public refused to support the costly, and frivolous, financial additions that Hofheinz craved. If Hofheinz wanted these skyboxes, then he should pay for them, not the public. A change was coming in Houston and, for the HSA, this change was not good. It was not an immediate turnabout against the HSA, but a gradual conversion from allegiance to opposition.

After the meeting, Judge Elliott contacted Assistant Secretary of Defense in charge of Civil Defense William P. Durkee and even traveled to Washington, D. C. in the hopes of obtaining the \$750,000 of civil defense funds. Elliott discovered, however, that not a cent of federal money would be available. Durkee insisted that the Civil Defense Department notified Harris County, and specifically Elliott, back on 26 June 1962 that federal money would not be available. "I am disappointed," said Elliott who insisted that the County should be remunerated due to the incorporation of stadium alterations as alluded to by the federal government. Architect S. I. Morris also expressed his surprise about this revelation and hoped that federal money would become available.⁴⁰

Even though the Commissioners "found" \$194,000 in savings from the paving and drainage contracts, they were unwilling to spend this money on "lavish conference and clubrooms for box seat option holders." Ultimately, the court refused Hofheinz's request "to crown the stadium with forty-two plush conference rooms." In a vote 4-to-1, the

⁴⁰ "Shelter Funds For Stadium Withheld," *Post*, 21 May 1964, sec. 2, p. 6; "U.S. Rejects Harris Domed Stadium Bill," *Chronicle*, 21 May 1964, sec. 1, p. 12.

Commissioners worried that by granting this request, the county would only have \$140,000 remaining for any other “construction emergencies.” County Engineer Doss and County Auditor Bruce said this amount was “dangerously small.”⁴¹

The *Chronicle*, usually a supporter of the stadium and the HSA, questioned the timing of Hofheinz's request. Hofheinz “one of the most aggressive promoters of our times,” the newspaper reported, had wanted the clubrooms since the start of construction. The newspaper wondered why Hofheinz waited until construction was nearly complete before he submitted his plans. The *Chronicle* speculated that Hofheinz waited until the county elections before dropping his bombshell. Some of Hofheinz's friends were running for office. By delaying his request, the newspaper continued, Hofheinz could force the commissioners to relent to his demands or be threatened with defeat. The newspaper agreed that the forty-two clubrooms were a sound investment for the county, but wanted Hofheinz to explain why the HSA needed a small amount of county money (\$23,000 per room) for the \$1 million project. This was not exactly a utilitarian use of County money, the paper concluded, and maybe the money could be best spent elsewhere.⁴²

County Engineer Doss and architect S. I. Morris assuaged the commissioner's fears that the clubrooms would not greatly affect the performance or safety of the stadium. The Commissioners Court relented to Hofheinz's demands and authorized the construction of the clubrooms. The commissioners demanded that the HSA cover all construction costs and absolve the County of all responsibility if the stadium was not completed before the start of the 1965 baseball season. Now that Hofheinz received the approval of his clubrooms, he

⁴¹ “County Balks at Adding to Dome Stadium Cost,” *Chronicle*, 13 April 1964, sec. 1, p. 1; “Plush Stadium Rooms Tabled,” *Chronicle*, 14 April 1964, sec. 1, p. 2.

would have to pay for the relocation of the air conditioning pipes from the top of the stadium to the eighth level, the creation of steel stairs and elevators to the ninth level, the extension of the plumbing system, and the removal of the uppermost wall. Hofheinz got his club rooms, but at the exorbitant financial and personal cost. The people of Houston doubted Hofheinz's intentions and his vision of the stadium.⁴³

R. E. Smith tried to divert negative publicity of the stadium in an interview with a *Post* reporter. Smith wanted the people to remember what the completed stadium would due to the reputation of Houston. It would put Houston on the baseball and convention maps and stimulate the local economy. "Nothing in the world has ever been built that offers the advantages to its general area that this thing does," he said. Smith and Hofheinz affirmed the concerns they held as lessees of the stadium. Baseball by itself, they said, could not pay for the HSA's rent or maintenance. The HSA was forced to create a sales department to find groups interested in using the stadium in 1965 to pay the annual rent. Both Smith and Hofheinz remained confident that they would find enough renters to make a profit on their investment. All that remained, they concluded, was the creation of additional hotel and motel space for the burgeoning conventioners that would most assuredly come to Houston.⁴⁴

After the 1964 Livestock Show and Rodeo closed its doors for another year, E. C. (Dick) Weekley , general manager of the Stock Show, explained the conditions the Show experienced at the Coliseum. Due to the lack of space, the Show only displayed "beef and dairy cattle, breed sheep and lambs, fat lambs, horses, and rabbits." The Show eliminated poultry and hogs while housing horses at Pin Oak Stables. Another problem the Show faced

⁴² "Stadium Compromise?: \$1 Million Should Move Ducts, Too," *Chronicle*, 15 April 1964, sec. 5, p. 2.

⁴³ Verniuad, "HSA Given OK For Clubrooms in Dome," *Post*, 19 June 1964, sec. 1, pp. 1, 12.

downtown was bringing in and moving the livestock. “We have a problem dragging cattle across the street and up concrete ramps, Weekley complained, and “exhibitors don’t like this.” For the rodeo, a bigger arena, 300-feet-long in the stadium compared to 200 in the coliseum, “would give the calves and steers a chance to go full-speed.” allowing cowboys a better opportunity to demonstrating their skills and generating “more excitement for the spectators.”⁴⁵

The Stock Show’s plans to erect its new facilities in northwest Houston came to an end with a report from its consulting engineers. The engineers estimated that at a minimum, new facilities at the northwest site would cost \$2,568,000. The Show’s buildings and grounds committee was authorized to start construction if the report was less than \$2 million. Stock Show officials, including the new president Stuart Lang, signed a report halting future construction. They feared that once construction began, the Stock Show would never complete all facilities nor pay off the debt. Former Show president Neill Masterson told his colleagues that Strain Steel Corporation agreed to construct a “slightly modified show plant,” including parking lots, barns, and an auction arena, for \$2 million. Officials agreed to remain at the Sam Houston Coliseum and to reconsider the South Main location.⁴⁶

After the Stock Show halted its plan to start construction, the HSA opened negotiations with the Stock Show in an effort to relocate the rodeo and related activities to the domed stadium site. HSA representatives wanted the Stock Show to construct an exhibition building adjacent to the stadium where the rodeo could be held. To lure the Stock Show, the HSA revised an earlier proposal to create a new \$3.5 million exhibition hall just

⁴⁴ Ralph Dodd, “Portable Grass?,” *Post*, 14 June 1964, sec. 5, pp. 1, 2.

⁴⁵ Paul Justice, “Cowmen Eye The Dome,” *Post*, 8 April 1964, sec. 9, p. 7.

south of the domed stadium and lease it for free. Upon receiving the HSA offer, Stock Show directors authorized its building committee to draw up a contract with the HSA for a “double-winged,” 500,000 square-foot building. With the stadium’s 300,000 square-feet of exhibition space, the complex would have the largest exhibit space in the nation. The Stock Show would reimburse the HSA up to \$3.5 million for the building. (Stock Show officials said that it could pay for the \$3.5 million at any time due to its vast real estate holdings within the city.) The HSA would provide permanent office space and furnish all facilities to the Show for free during the rodeo. The HSA would also operate on a “non-profit basis” with the Stock Show in this agreement because all income over the general operating expenses would go to the Stock Show. The other eleven months of the year, the HSA could use the hall as it wished. Both the stadium and the exhibit hall had the potential effect of thrusting Houston into the limelight as a major force for conventions and tourism.⁴⁷

The Stock Show’s executive committee reviewed the proposal for almost six months before officially accepting it on 13 February 1964. Labeled “the biggest and finest decision that’s ever been made by this board,” the announcement finally ended several aborted attempts made by the HSA to unite its future with that of the Houston Livestock Show and Rodeo. Said Leopold Meyer, chairman of the Show’s buildings and grounds committee, “[A]fter many ups and downs, differences of opinion and conflicts of emotions” and “many, many years of sweat and bold” both sides were able to reach an amicable resolution. Importantly, the decision would allow the Show to grow in size and scope. “We’ll have more

⁴⁶ Bill Durham, “Stock Show’s Building Plan Is Called Off,” *Post*, 2 July 1963, sec. 1, pp. 1, 6.

⁴⁷ Bill Durham, “Stock Show Considering Site by Domed Stadium,” *Post*, 15 August 1963, sec 1, p. 1; “Stock Show Studies Move to Stadium,” *Chronicle*, 15 August 1963, sec. 1, p. 1; “Stock Show’s Exhibit Space Largest in U.S.,” *Chronicle*, 23 August 1963, sec. 1, pp. 1, 6; “Stock Show’s Hall Could Be Largest U.S. Convention

cattle, more horses, and possibly quarter horse races and chariot races," said Meyer. "In any case," he continued "we'll have a great many accessory attractions that heretofore had not been possible." The ability to hold more events and attractions meant that the Stock Show would be able to broaden its appeal to the public. With more visitors, Meyer hoped that ticket prices could be lowered, thus further widening its popularity. Judge Elliott expressed his elation of the decision by the Stock Show men. "We're finally getting around to what was originally planned" when the domed stadium was first suggested in the late 1950s.⁴⁸

The agreement did not dissuade Mayor Louie Welch from proffering his downtown alternative to anyone who would listen. Welch asked the Stock Show to purchase \$6.2 million of city revenue bonds to build a city civic center and keep the Show downtown. Keeping the Stock Show downtown, he implored, would "maintain the basis of a unified Houston" and enrich the entire downtown district. In the growing convention industry, Houston found itself competing with the HSA as "an arm of the county government." The results of this "unusual competition" could seriously harm the economy of the city. The only way to circumvent this potential financial disaster and take full advantage of the convention boom, posited Welch, was for the city to build its own convention and exposition facilities. To that end, Welch proposed to expand the Coliseum, build a new convention building, and erect two multi-leveled parking lots all for \$15.2 million. Welch's civic center promised 408,000 feet of exhibit space, a miniscule amount as compared to the HSA proposal Welch promised that he would not change his mind or alter his proposal. But Welch's harangue fell

Site," *Press*, 23 August 1963, p. 2; "Domed Stadium's Proposed Exhibit Hall Will Anchor a Tremendous Asset," *Chronicle*, 27 August 1963, sec. 1, p. 12.

⁴⁸ "Stock Show's Hall Could Be Largest U.S. Convention Site," *Press*, 23 August 1963, p. 2; Charles Turbville, "Stock Show Will Move to Stadium," *Press*, 14 February 1964, p. 1, 11; Durham, "Stock Show Votes For Facility at Stadium Site," *Post*, 14 February 1964, sec. 1, pp. 1, 11.

on interested, but skeptical, Stock Show ears. Stock Show leaders feared that this plan would limit the “potential growth” of the Show. Meyer added his own opinion of the decision to side with the HSA. “We have to think of the future,” he said. Welch again announced that the decision “disappointed” him, but pledged to build a new downtown exhibition building without the aid and support of the Stock Show.⁴⁹

Mayor Welch intensified his efforts for a downtown exhibition facility only a few months later. Welch, allied by Stock Show president Stuart Lang, contended that a downtown civic center would make Houston an even greater convention city. Welch asserted that the civic center, the domed stadium and the Stock Show were “not only compatible, but complement one another.” The stadium facilities could adequately handle the nation’s largest convention, argued Welch, but not the smaller ones. The civic center, he continued, would fill this gap. Welch cited a study by the Greater Houston Convention and Visitors Council, which stated that an expanded civic center would accommodate 81% of all national conventions. The remaining 19% could be housed in the stadium, the study continued. The Houston Chamber of Commerce echoed Welch’s sentiments. For the Chamber, additional facilities would provide Houston with greater flexibility, meeting the provisions of any, and all, groups across the nation.⁵⁰

Rebuffed so many times in the past, the civic center idea seemed superfluous especially with the near completion of the domed stadium. The same arguments used to

⁴⁹ Ellen Middlebrook, “\$15.2 Million Civic Center Is proposed,” *Post*, 11 February 1964, sec. 1, pp. 1, 4; “Mayor Wants Rodeo To Stay Downtown,” *Press*, 13 February 1964, pp. 1, 3; Middlebrook, “City Proceeds On Convention Center Plans,” *Post*, 14 February 1964, sec. 1, p. 1; Oscar Griffin, “Welch Says Exhibit Hall Will Be Built,” *Chronicle*, 14 February 1964, sec. 1, pp. 1, 11; “Stock Show Goes Ahead,” *Post*, 24 February 1964, sec. 3, p. 2.

⁵⁰ “New Civic Center, Domed Stadium To Complete Convention Needs,” *Chronicle*, 21 June 1964, sec. 1, p. 24.

justify spending millions of dollars on the domed stadium were implemented in the defense of an expanded civic center. At a cost of a mere \$7.3 million in city bonds, the creation of an exhibition hall and convention center was a real bargain to Houston. Like the stadium, the civic center promised to bring in revenue from every individual attending a convention or meeting. The planners for these meetings, it was argued, previously had avoided Houston because Houston lacked modern, comfortable convention and exhibition facilities, especially in the downtown area that housed large hotels, popular restaurants, and expanding entertainment facilities. Unlike the stadium and the adjacent exhibition hall, the civic center was “centrally located.” The civic center promised to be “more accessible, more convenient, to at least three-fourths of the residents of the county than any other possible location.”⁵¹

Hofheinz and Smith wasted no time in denouncing the civic center. In a press release, they asserted that the civic center would duplicate the facilities of the stadium and the Stock Show hall, but not as well. They argued that the Coliseum, the Music Hall, and the city auditorium failed to generate enough revenue to cover the cost of construction. They even borrowed arguments their opponents used against the stadium. For example, money for needed city infrastructure, they said, was being stolen to pay for this unneeded facility. Even worse, the mayor seemed to seek bankrupting the city to satisfy his own greed and self-centered pleasure, according to Hofheinz and Smith. The people of Houston needed to take a long, hard look at the mayor’s proposal, they continued. Voting for more city bonds, they warned, was a vote for increased taxes and financial ruin for all involved. Hofheinz and Smith were just looking out for the people of Houston and Harris County. Competing

⁵¹ “Civic Center Improvements,” *Chronicle*, 21 June 1964, sec. 3, p. 2; “Civic Center Best Location For Most Conventions, Fairs,” *Chronicle*, 25 June 1964, sec. 4, p. 4.

facilities would only result in limiting the benefits they could provide and financially damaging each while ruining the reputation of Houston.⁵²

Mayor Welch shot back at the two HSA executives. First, Welch said, the bond issue would not raise taxes for the same reason taxes were not increased after the many stadium-related bond issues. Second, a civic center would not preempt any other city improvement needs. These two assertions by Hofheinz and Smith were simply untrue, Welch argued. These type of statements were just attempts to scare the public into opposing the civic center plan. Welch wanted every Houstonian to know that the same men who supported the dome stadium also supported the civic center. “Many of the business interests putting up money for the livestock exposition hall at the Domed Stadium site have endorsed” the civic center as did the Chamber of Commerce, he blared. But most importantly, the Civic Center “will be owned and operated by the community for the benefit of the entire community,” Welch said, “and not for the private profit of two individuals.”⁵³

Welch’s final assertion that the civic center would benefit every Houstonian, not two millionaires, succinctly defined the main argument against the dome stadium and typified the increasing pessimism in Houston. Hofheinz and Smith, representing the millionaires club called the HSA, were just looking out for their own financial well-being, not what was best for the people of Houston. Viewed in this way, the HSA was a menace to the city that corralled, unfairly, a larger amount of Houston’s wealth at the expense of every Houstonian. Welch, then, was empowering his city in an attempt to rectify this disturbing attack in the

⁵² “Smith and Hofheinz Oppose Civic Center,” *Chronicle*, 23 June 1964, sec. 1, p. 9.

⁵³ *Ibid.*

only way available to the city. A competing civic center would level the playing field, so to speak, and allow the city to prosper against an overwhelming threat.

Proponents of the bond issue held a “fund-raising dinner” at the Rice Hotel. Even though the \$7.3 million civic center bond issue was one of twelve propositions, the comments aired by Hofheinz garnered much of the attention. One of the scheduled speakers was Leon Jaworski, the same man who led the drives for the stadium bond issues. Jaworski used the platform to rebuke Hofheinz. To Jaworski, Hofheinz’s view was dangerously myopic. It was this type of improvidence that Jaworski and Hofheinz tried to eliminate when he chaired the stadium bond drives. Now that Hofheinz had his stadium, he was unwilling to foster additional city growth. “If the same shortsightedness had been shown by the citizens of Harris County toward the domed stadium” that Hofheinz was exhibiting towards the civic center, averred Jaworski, “there would be no stadium.” Hofheinz’s charge that an improved civic center merely duplicated stadium facilities was also doubted by Jaworski. “Even if there is some small duplication,” he declared, “anyone having faith in our city’s growth knows that the Civic Center improvements will be needed in addition to whatever Mr. Hofheinz has to offer at the domed stadium facilities—miles from the downtown section.”⁵⁴

Echoing Jaworski’s sentiments was *Chronicle* reporter Morris Frank. Frank wanted those present to understand that this issue was not about damaging the HSA’s baseball franchise or tarnishing the dome’s reputation as the premier convention place. Voting for the improvements, claimed Frank, was a vote in favor of the future for the city and its people. “We want to be in the big leagues with both the city and the people,” said Frank, because it was “one heck of a city.” To make Houston big league in every facet was to endorse the civic

center. But Frank did not end his remarks with just rooting for the civic center. He also bemoaned Hofheinz's dominion of the stadium as his own personal fiefdom. "I thought the dome," he exclaimed, "was for ALL of us," not just Hofheinz's castle. "We need a downtown convention center big enough for all and accessible to all," he maintained, "a convention center where if a person wants to drink Coca-Cola, sip his favorite brand of beer, dip his particular brand of snuff, or park his car, he can do so, without any interference from any deals, manipulations, or negotiations." Frank, displeased that he could not purchase a Coca-Cola at Colt Stadium, did not want some impersonal, unseen force making decision's for him. Hofheinz decided the types of beverages available within the stadium, and Coca-Cola was not one of them. In this light, a vote for the civic center was a vote for personal empowerment over the tyranny of Hofheinz and the HSA.⁵⁵

The *Houston Chronicle* took issue with Hofheinz's contention in its lead editorial. The real reason behind Hofheinz's opposition was not complex, but simple. He wanted a monopoly on the city's convention business. The *Chronicle*, it affirmed, "believe(s) in competition," especially when the public's interest is at stake. If Hofheinz and Smith had their way, it charged, they would have the power to manipulate Houston's "enormous convention business—inviting whom they choose, setting the rates of space rental, for parking, deciding which souvenirs, which brands of hotdogs and cold drinks can be sold on the premises...and what prices to charge." According to the *Chronicle*, Hofheinz was against fair competition in any realm that challenged his power and authority. Without competition

⁵⁴ Mel Young, "Roy Hofheinz Is Roasted By Bond Supporters," *Chronicle*, 25 June 1964, sec. 1, pp. 1, 7.

⁵⁵ Young, "Roy Hofheinz Is Roasted By Bond Supporters," *Chronicle*, 25 June 1964, sec. 1, pp. 1, 7; Morris Frank, "Morris' Speech for Bonds," *Chronicle*, 26 June 1964, sec. 5, p. 3.

from the civic center, conventions would have only one place to go in Houston—the domed stadium operated by a tyrant.⁵⁶

Houston voters went to the polls on 28 June 1964 to decide on the future of Mayor Welch's Civic Center. Over 61,000 Houstonians, the largest in the city's history of bond elections, voted in the special election. Judge Elliott still labeled the number of voters as "a sorry turnout," in part due to his aversion to most of the twelve propositions. Voters approved the Civic Center issue 37,006 for and 24,555 against or a margin of 60.1 percent.⁵⁷

After viewing the election results, a disappointed Hofheinz praised those individuals who supported the HSA's position, while claiming that he "accept(ed) the public's decision with good grace." Still, Hofheinz tried to garner public empathy for the future difficulty the HSA could face as a result of the election. "Three years ago," he said, "we made a commitment to pay the county \$750,000 a year under the assumption that the public wanted this community's convention center to be at the site of the domed stadium." The people had spoken against the success of the domed stadium. Hofheinz wanted his opponents to understand that he, Smith, members of the HSA, and all of Harris County for the matter, had a serious financial stake in the success of the stadium. If the HSA failed to make its lease payments, the HSA would declare bankruptcy and Harris County would be stuck trying to amortize the bond debts. The Civic Center, and its inevitable competition, could seriously jeopardize the financial future of the city and the county. "Had we known that the public was prepared to invest in two convention centers, we would not have been willing to make such a commitment," he continued. Now the HSA was forced to look elsewhere for revenue

⁵⁶ "Proposition 5 Versus Monopoly," *Chronicle*, 26 June 1964, sec. 5, p. 2.

⁵⁷ Young, "Trinity Contract, Bonds Approved," *Chronicle*, 28 June 1964, sec. 1, pp. 1, 19.

to cover its lease with the county. With less than one hundred days scheduled for 1965, the HSA started to look for other tenants. One obvious source would be the Oilers, but would also require a truce between Hofheinz and Adams. Since larger conventions solidified their schedules years in advance, the HSA began scrambling for other events like circuses, auto and boat shows, and political rallies.⁵⁸

The arguments Hofheinz used to justify the stadium and impugn the new civic center reveal more than just simple self interest. For Hofheinz, an assault on the stadium was akin to an attack on his person or family. He vigorously defended the stadium because he was defending his reputation. Doing so, Hofheinz exposed the shift that was well underway in Houston. Hofheinz's rhetoric revealed the growing cynicism in society. Previously, Houston faced a bright, infinite future in which the domed stadium obviously maintained and represented. Even if the sports team were pathetic, the stadium would always generate revenue. There was plenty of room in Houston's economic pie, a feeling of infinitude. In his reappraisal of Houston, Hofheinz could now only see a city beset by serious limits. The once bustling and Houston could not support more than one large convention center. The new civic center would take events, prestige, and money from the domed stadium that Hofheinz perceived was rightfully the County's and the HSA's. Even worse, Mayor Welch and his supporters foisted their new civic center plans on the HSA and Hofheinz. The people had already spoken, and voted for the stadium. But with his meddling, the mayor's civic center would only bring chaos.

⁵⁸ "Hofheinz Says He'll Take Loss Gracefully," *Chronicle*, 28 June 1964, sec. 1, p. 18; Dick Raycraft, "Domed Stadium Is Trying To Fill Out Its Calendar," *Chronicle*, 29 November 1964, sec. 1, p. 10.

Still, Hofheinz would not let his stadium, and the weakening enthusiasm around it, die without a battle. Neither would NL president Warren Giles. On an overcast and rainy September day, Giles paid his fourth visit to the now eighty-five percent complete stadium. Giles expressed his delight with the progress of construction and his relief that Houston was in the National League. As workers placed the standards for the seats, Giles remarked on the brightness inside despite the cloudy skies outside. "Why it's bright enough in here now to play a game without lights," Giles concluded. The NL president also commented on his feeling of the stadium's interior. "I got the idea the structure was so big it might lack warmth" inside the "cold, steel building," he said. Surprisingly, he continued, "[I]t's not like that at all." Hofheinz added that the multi-colored seats would only add additional "warmth" to the atmosphere under the dome.⁵⁹

Taken individually, the clubroom and coliseum battles could be viewed as simply the fickleness of Houston voters and leaders. On one hand, they refused to pay for Hofheinz's stadium alterations. Since he wanted the sky boxes, then he should pay for them. On the other hand, they went to the polls to provide funds for a new downtown coliseum, implementing the same arguments Hofheinz used in the earlier bond skirmishes. But collectively, the results of these two disputes showed a decreasing enthusiasm for Hofheinz and the HSA.

With construction proceeding, an almost impatient atmosphere swirled among dome disciples, the curious, and the skeptical. The HSA and nearly every worker on-site were inundated with requests to tour the stadium or asked questions pertaining to any one of the stadium's facts. Robert Minchew, stadium architect provided just a small sample of the

⁵⁹ "Giles Happy With Dome," *Chronicle*, 6 September 1964, sec. 3, p. 2.

questions he answered. “The man on the street wants the dome to be a big plastic bubble and he wants it to open. It won’t.” he said. “There’ll be a lot of steel up there,” Minchew added, “You’ll be able to see the sky all right, but not through one big picture window.” Mickey Herskowitz, sports reporter for the *Houston Post*, toured the forty percent complete stadium in mid-February. “Hearing about it, and seeing it for oneself,” he wrote, “is the difference between reading that Jayne Mansfield measures 42-19-37, and seeing her in a bikini.” For Herskowitz, it was one thing to hear about the various statistics of the domed stadium, like the 210 feet to the acme of the roof or that the stadium’s stands on 40,000 cubic feet of concrete, and actually touring through the incomplete, but still impressive, structure. “To appreciate the sweeping vastness of this project, the full majesty of it, you have to stand on the ground floor and let the size of it overpower you,” Herskowitz concluded.⁶⁰

Throughout the fall and winter months, the number of tours to the stadium increased. Judge Elliott, British consul general Peter Hop, and seamen from the HMS London, participated in an impromptu “football game,” the first “game” under the dome on 28 September. Eighteen days later, a group of senior citizens from Bellaire, Texas paid a visit. Instead of traveling to Clear Lake, Texas to tour the Manned Spacecraft Center, the forty-six seniors asked to see the domed stadium. In late November, hundreds of major and minor leagues executives and sports reporters strolled through the stadium during baseball’s winter meetings. After viewing the stadium and listening to the tour guide cite dozens of facts and figures, almost every visitor left impressed with the stadium. Some individuals, like *Dayton News* reporter Si Burick, Earl Lawson from the *Cincinnati Post* and *Pittsburgh Press* writer

⁶⁰ Mickey Herskowitz, “The Domed Stadium Is 40 Per Cent Finished, and Seeing is Believing,” *Post*, 17 February 1964, sec. 4, p. 1.

Les Biederman, exited the stadium with positive impressions. Burick cited the “vastness of the stadium,” Biederman labeled it “revolutionary” while Lawson simply said, “I’m awed.” Others, however, remained skeptical. Some like *Sports Illustrated* writer Bill Leggest commented on the un-baseball-like conditions under the dome. “The knuckle ball won’t break,” he said. Other writers, like Harry Jupiter from the *San Francisco Examiner*, boldly denounced the stadium experiment. “It will never leave the ground,” he said. What can be learned is that that the tourist through the stadium was not necessarily a baseball or sports fan. Individuals wanted to see the stadium for themselves and formulate their own opinion of it. All that was certain from these tours was that the dome stadium was generating interest.⁶¹

Hofheinz proudly announced that the Colt. 45s would play the world champion New York Yankees in a weekend series during April 9, 10, and 11, 1965 to “launch” the domed stadium. The Baltimore Orioles would also play the .45s over the same weekend on the 10th and the 11th. “This schedule of pre-season games,” said Hofheinz, “will permit our out-of-county and out-of-state friends to come see the Domed Stadium for the first week end event ever held in the stadium.” The .45s would play three games against the Yankees and two against the Orioles. This “informal inauguration” of the Dome, according to Hofheinz, allowed .45s fans to see as many Houston players as possible competing for a roster spot in 1965. This was an understandable “baseball-savvy” rationale. But the Yankees, then as now, were the most popular team in the major leagues. With names like Whitey Ford, Clete Boyer,

⁶¹ Bob Lee, “Domed Stadium First ‘Game,’” *Post*, 28 September 1964, sec. 1, p. 1, 15; “Citizens Agog at Stadium,” *Post*, 16 October 1964, sec. 1, p. 16; Herskowitz, “‘And None Get Rained Out,’ in the Dome That Is,” *Post*, 30 November 1964, sec. 4, pp. 1, 2.

Roger Maris, and the great Mickey Mantle, baseball fans from across Texas would want to see the lowly .45s battle the Yankee juggernaut.⁶²

The new pitching coach for the Colt .45s, Howie Pollet, asked Hofheinz when he and his staff could start their workouts inside the stadium. Hofheinz tentatively replied that the .45s pitchers might perform some limited practice before Christmas, with batting practice after the new year, and “some full scale tests” in late February, after the installation of the sod. By exploring the conditions under the dome, Pollet wanted his pitchers to get to know their future home. “What we want to do is found out all we can about what problems both pitchers and hitters are going to have in the stadium,” he said. “After all, we’re going to be going down an uncharted course,” Pollet continued, and the .45s needed to be prepared to know, and predict, the possible contingencies they could expect under the dome.⁶³

In between the winter meetings and the trips to the stadium, Hofheinz convened a press conference at the Shamrock Hilton. The sports writers who assembled anticipated the announcement of a major trade for the .45s, maybe the acquisition of a much coveted power hitter. Instead, Hofheinz declared the change of the Houston nickname. Speaking to national sports writers, Hofheinz, with R. E. Smith at his side, proclaimed that, due to a legal skirmish with the Colt Firearms Company, the Houston baseball team “From henceforth and evermore” would be called the “Astros.” (The Colt Company originally gave permission to the HSA to use the “Colt .45” name and symbol, but then asked for a percentage from the sale of souvenirs. Hofheinz refused to share any revenue with the firearm firm and so decided to change the nickname.) Hofheinz garnered the greatest effect by announcing his decision at

⁶² “Colts, Yanks Open Stadium in April,” *Post*, 18 October 1964, sec. 1, p. 1; “Yankees Open Dome With .45s,” *Chronicle*, 18 October 1964, sec. 8, p. 8; “Astros Play 30 Exhibition Games,” *Chronicle*, 10 December 1964,

the baseball winter meetings. Instead of causing just a small, local outbreak, Clark Nealon opined that Hofheinz's "guided missile" secured "national exposure, which was just what Hofheinz wanted."⁶⁴

The newspaper accounts of the stadium still supported the stadium, but with less exhilaration. Hofheinz generated even more favorable press when Houston Oilers general manager, Carroll Martin, agreed to a ten-year lease with the HSA. The Oiler's, it appeared, would play all home games under the dome, ending four months of speculation and the often cantankerous negotiations. Meeting in Hofheinz's personal apartment, Martin said, "Let us say that the Oilers are very pleased to give their fans a chance to see professional football in the most modern stadium in the nation." "In the world," interrupted Hofheinz said in an effort to refine Martin's less-than-accurate statement. Hofheinz also revealed that a synthetic grass would eventually be installed in the dome that would allow different types of events on the same surface. Hofheinz detailed how the playing surface would be converted from a baseball field to a football field. Grass questions, he continued, would cease to exist in 1966 when a synthetic surface would replace the natural grass. "If we were only concerned with sports, we'd have half as many problems," said Hofheinz, "But we have to consider all the ultimate uses of the stadium."⁶⁵

sec. 7, p. 1.

⁶³ Nealon, "Post Time," *Post*, 29 October 1964, sec. 6, p. 1.

⁶⁴ Dick Peebles, "Colt .45 Club Will Unload Name for '65," *Chronicle*, 20 October 1964, sec. 1, p. 1; Herskowitz, "Houston 'Astros' To Play Beneath Big Dome in '65," *Post*, 2 December 1964, sec. 1, p. 1, sec. 3, p. 2; Zarko Franks, "Some Fans Have Stars in Eyes Over 'Astros,'" *Chronicle*, 2 December 1964, sec. 1, p. 1; Nealon, "Post Time," *Post*, 3 December 1964, sec. 7, p. 1; Nealon, "Houston Surrenders .45s; Astros New Name of Club," *SN*, 12 December 1964, p. 23.

⁶⁵ Wells Twombly, "Oilers Sign 10-Year Lease on 'Dome,'" *Chronicle*, 6 December 1964, sec. 8, p. 1; Herskowitz, "Like Dome, Oilers Decide," *Post*, 6 December 1964, sec. 4, pp. 1, 8.

Keeping his winning streak alive a week later, Hofheinz revealed the new Astros insignia. Said Hofheinz, "We feel the new insignia encompasses all aspects of the Houston baseball scene—the dome, the new name, baseball and the space connotation." Hofheinz explained the incorporation of the three almost disparate parts into one seemingly coherent idea. Hofheinz claimed his space-theme insignia "was most logical" because the Houston was "Space City, USA" and Astros trained close to "Launching Pad USA" (in Cocoa, Florida, close to Cape Kennedy). Hofheinz placed the domed stadium at the center of the blue circular emblem. Directly beneath the stadium, "Astros" appeared in block lettering with four baseballs orbiting both stadium and nickname. The colors of the insignia remained orange and blue. "We are a new ball club with the world's most modern stadium and we felt the name and trademark should be on the same theme," said Hofheinz. But Hofheinz provided the most important reasoning for his new nickname and new symbol for the baseball club. "This theme will help dispel the image of Texas as a land of cowboys and Indians," he said, "and it behooves every citizen in this area to call attention to the 20th century aspects of Texas and Houston." A new nickname and new symbol for the Houston baseball nine would eliminate all other erroneous beliefs and opinions of the city and the state.⁶⁶

Hofheinz, ever the promoter, asserted that the new insignia and nickname could even alter the economic landscape of Houston, along with the stadium. "If in the use of the name and insignia we call attention to the great economic impact on the city and cause one family and one industry to move here," he said, "we have put additional dollars into the economy of

⁶⁶ Hal Lundgren, "Astros Unveil Insignia for '65," *Post*, 10 December 1964, sec. 11, p. 1.

the city.” But, Hofheinz continued, the baseball team and the stadium would “encourage many people to move here and many industries to locate here.”⁶⁷

Hofheniz, Smith, Adams, Dr. Philip Hoffman (president of the University of Houston), and Stuart Lang (president of the Houston Livestock Show and Rodeo) announced 12 December 1964 that they planned to call the stadium the Astrodome. Judge Elliott said “They can call it what they like, but the official name is still the Harris County Domed Stadium.” Elliott refused to allow the HSA to exert its influence over the name of the public stadium. The people of Harris County paid for the stadium, therefore it was the public’s stadium, not the HSA. “I am confidant,” Elliott presumed, “the name is not in keeping with the wishes of the people.”⁶⁸

When the Colt .45s closed their first stadium and walked the few hundred feet to the domed stadium, baseball fans could bid “adieu” to many sources of spectator displeasure and player dissatisfaction. From the sport side, “Gone will be the gripes from players on the bad lighting” and “the stiff wind blowing in from right field that frustrated so many lefthand hitters.” Baseball players could expect the perfect playing conditions. For baseball fans, “[G]one will be the mosquito spraying chores” and the “sweltering heat that sent over 100 fans to the first aid room during a Sunday afternoon doubleheader.”⁶⁹ Spectators would be surrounded with splendor and grandeur.

⁶⁷ Nealon, “Astros’ New Home Dubbed Astrodome,” *SN*, 20 December 1964, p. 12.

⁶⁸ “‘Astrodome?’ That Puts A Lid On It,” *Chronicle*, 13 December 1964, sec. 1, p. 1.

⁶⁹ John Wilson, “Colt .45s Say Adieu Today To Stadium,” *Chronicle*, 27 September 1964, sec. 6, p. 7.

CHAPTER 9: DOMESDAY

A long, arduous journey neared its end in April 1965. The Houston Sports Association (HSA) and their newly christened Astros baseball squad, the members of the Harris County Commissioners Court, and the people of Harris County and Houston prepared to unveil the multi-million dollar, multi-purpose domed stadium to the rest of the world. The Harris County Domed Stadium, or the Astrodome according to HSA president Roy Hofheinz, stood prepared to entertain tens of thousands of spectators for any type of event that could be conceived. The “Texas-size solarium” eradicated the hot, humid, muggy Gulf summers and the blood thirsty mosquitoes that had feasted on Houston baseball fans before 1965. “Inside and out,” the Astrodome was “designed to pamper the fan,” entice him from the TV in his air conditioned home, and cajole him to spend his money.¹

Generally, the atmosphere in Houston for the grand opening, or “Domesday,” was electric and optimistic. The Astrodome, the “gigantic plastic-capped edifice that stands like a glimmering gem in South Texas sun,”² was called “bigger than show biz, even Texas style,”³ and a “testimonial to man’s ingenuity,” “a cathedral,” and “Houston’s gaudiest jewel.”⁴ Hundreds of the interested and curious had already toured the stadium through its various stages of completion. Now that Domesday loomed closer, the tours ceased and the workers hurried to finish the interior. The stadium would topple the stereotype that Houston was a “cow town with an oversupply of bricks and bucks.”⁵ Jake Gaudaur, a veteran Canadian

¹ Rain or Shine—Play Ball!” *Life*, 58 (9 April 1965), 86.

² “No Rain Check Needed Here,” *Shamrock*, Spring 1965, 8.

³ Howard Taubman, “Show Biz: The Big Dome,” *N. Y. Times*, (6 June 1965), sec. 5, p. 3.

⁴ John Wilson, “Dome Stadium Kind Of Grabs You,” *Chronicle*, 10 January 1965, sec. 7, p. 4.

⁵ Horace Sutton, “Ballplayers Under Glass,” *SR* (6 March 1965): 36.

stadium operator, opined, “The minute the doors of this Astrodome were opened every sports arena in the world became obsolete.”⁶

Much rode on the success of Domesday. The HSA had faced continual skepticism concerning the stadium's cost and safety, its lucrative contract with the County, Roy Hofheinz's personal apartment behind the scoreboard, and his objectionable demand for his opulent clubrooms. The public demanded that the stadium, therefore, be more than what its supporters claimed. This is where the importance of Roy Hofheinz can not be underestimated. Throughout his public discourse, Hofheinz focused on individual choice and empowerment. In a world of limits, Hofheinz championed ideas of individual autonomy. The stadium would be the great equalizer, socially and athletically. The stadium was supposed to eliminate unforeseen, uncontrollable forces outside while carefully regulating everything that occurred under the dome.

The outside of the Astrodome had been described as “an intricate Viennese torte that had risen nicely on top and was covered with latticework pastry like pies baked by farm wives.”⁷ An average baseball fan could arrive at the stadium via Highway 610 and park his car in the vast lot that could hold 30,000 autos and 100 buses. Even if he parked in the lots furthest distance from the stadium, he had to walk only a few hundred feet to the stadium's entrance or ticket booth. As he entered the stadium, he could see the green grass in the distance, twenty-five feet below ground level. As he walked towards the seats, and peered away from the playing field, he might naturally look upwards at the lattice framework of the roof and the 4,596 skylights. Turning his gaze from the sky, back to the inside of the stadium,

⁶ Andy O'Brien, “The Stadium That Could Revolutionize Sport,” *Montreal Star Weekend Magazine* 15 (15 May 1965): 32.

he would see nothing but the color of the grandstands that “stretched in great bands, first red, then purple, then gold and yellow, black and blue.” Each of these individual colors denoted “a different caste, a different price, and perhaps a different cushion in the seat.”⁸ Similarly, the Astros ticket he purchased was color-coded, corresponding to the seating section where his seat was located. For example, a purple ticket meant the spectator’s seat was located in the purple section, a gold ticket the gold section, red for red, and so forth. The HSA took an additional step to aid the spectator in finding his seat in the stadium. Portable concession stands, outer walls of the section, and even the lavatory walls were painted to match the seat colors.⁹

The color-coded seats, walls, and concession stands were not the only devices that the HSA implemented to help the spectator find his seat while enjoying his surroundings. The t the uniform a stadium employee wore depended on where he or she worked. Hofheinz devised a specific theme for the different places inside the stadium. Hofheinz wanted his employee to wear a costume that demonstrated his idea of this theme. Hofheinz employed costume designer Evelyn Norton Anderson to make these ideas come to life. The result was fifty-three designs for stadium workers. The gate men and parking lot attendants, or “space cadets,” wore “galactic blue” space suits, which included a decorative helmet of fiberglass, adapted from those worn by real astronauts from NASA. Groundskeepers wore red space suits with gold helmets and black boots. “Spacettes,” female ushers, were clad in gold lame. Evelyn Anderson's coordinator, Iris Siff said of the spacette uniform, “We did a real theatre suit for the spacettes” because “You have to have an elegant uniform for that setting.” Siff

⁷ Sutton, 36.

⁸ *Ibid.*

asserted that once a spectator entered the stadium, “it’s more like a huge theatre” that required the elegant uniform and not something just “cute.” “We had the gold lame quilted with lightweight flannel” that Siff speculated would have cost \$200 retail. The hats the spacettes wore had “peek-thru windows like the dome, and they’re deep pillboxes so they won’t mess up a girls’ hair.” Hofheinz told Siff to design what she wanted, regardless of cost. “We were able to select what we wanted,” said Siff, and take the designs to Hofheinz for his approval. In the Bavarian beer garden called the Domeskeller, the waitresses wore “a blue peasant maid costume” with white tights. The colors selected for the Sky Dome Club were gold, green, and blue. The long skirts of the hostesses were “gold metallic boucle, threaded with green and blue.” The bodices were marked with “bright rays” that matched the Club’s emblem. At the Countdown Cafeteria, counter servers wore costumes adorned with numbers so that at the beginning of the line you were served by “10” and at the end, the dessert line, you were served by “1” and you paid the cashier labeled “Blastoff.” The busboys wore shirts emblazoned with the number zero. Butlers of the private boxes wore orange jackets with gold buttons and black trousers and white gloves. The whole thing was “comparable to costuming a dozen operas: Wagnerian style!”¹⁰

Hofheinz explained his reasons behind the color schemes inside the clubrooms on the ninth level and implemented throughout the stadium. Hofheinz made his decisions on the color schemes after several surveys showed that 42% of TV and radio audiences for baseball games were women. “We did a lot of research before choosing the color,” he said, and “made sure that each color complemented the complexion and cosmetics and clothing of women.”

⁹ “The Match Game,” *Post*, 8 April 1965, sec. 9, p. 7; “Arenas,” *Time*, 4 January 1958, p. 68.

¹⁰ “‘At Home’ in the Dome,” *Chronicle*, 4 April 1965, sec. 10, p. 1.

This was by no means an easy feat to create fifty-three different color schemes, he admitted, but it was definitely worth the two weeks he spent on it. “Women will go to the ball game now because there will be no wind to whip their hairdos, no rain to ruin their dress and no sun to turn them red,” he continued. The result, Hofheinz proudly asserted, was that “The Astrodome will get a promenade of the best-gowned, best-looking and most-influential women ever collected.”¹¹

“The colors are exactly as I first projected,” boasted Hofheinz. He started his color study with the green of the playing field. The remaining colors complimented the green and “the color of blue on the skyboxes at the top.” Hofheinz wanted the club rooms painted blue because it was “the best color” he could use “to show off milady’s gown.” Hofheinz then selected the remaining hues “to declare gaiety,” he said, because, “I don’t want people walking in here and falling asleep.” Hofheinz’s emphasis on the color patterns he implemented throughout the stadium pointed to the importance of the individual fan to the success of the stadium. But it also signaled his understanding of personalizing the individual’s experience inside the stadium. Providing an appealing atmosphere, with complimentary colors that proved gentle on the eyes, would enhance the individual experience. Hofheinz promised, “I could change the color of this stadium and change your mood.”¹²

In addition to the concession stands, or as they were called the “Lunching Pads,” the stadium’s amenities included five separate restaurants. Two of the five were private clubs, these were the Skydome Club and the Astrodome Club. The Skydome Club, a replica of a

¹¹ *Texas Magazine*, 4 April 1962, p. 22.

Japanese steakhouse, was reserved solely for those individuals who occupied the private sky boxes. The Astrodome Club served 600 people and was open throughout the year. To become a member of the Astrodome Club, one had to be a season ticket holder. Located at the press box level, the Astrodome Club's décor demonstrated the history of Texas from the early 19th century to Texas's part in the space program. It also had three bars, one 100-foot long, another a 90-foot perimeter bar, and the third was a all-male bar. The Trailblazer Club, located in the purple level, was open to the general public and sat 300. It was also based on a historical theme, but this one was "man's struggle for a better life down through the ages." On the main level, the Countdown Cafeteria was located. The Cafeteria was decorated with statues of athletes from antiquity to modern times. And finally, under the centerfield pavilion, was the Astrodome's version of a Bavarian beer garden, the Domeskeller, complete with artificial trees and a large window to view the playing field during warm ups. The Astrodome seemed more like a luxuriant resort hotel than a stadium. No matter the price of the ticket, every fan could partake in one of the stadium's eating and drinking establishments.¹³

Box seats cost \$3.50 with reserved seats priced at \$2.50. The amenities for these spectators included access to the Trailblazer Restaurant, which served the general spectator in lieu of a separate club. "The great unwashed," according to one observer, will find nourishment in the Count-Down Cafeteria" with its sporting theme.¹⁴ General admission seats cost \$2 while the 4,000 "cheap" seats (seats without a cushioned backrest) cost \$1.50. "See those windows in the centerfield fence?" Hofheinz queried rhetorically, "A man who

¹² Gary Cartwright, "A Barnum Named Hofheinz, A Big Top Called Astrodome," *The New York Times Magazine*, 21 July 1968, p. 10.

¹³ "5 Restaurants Under Dome," *Chronicle*, 8 April 1965, sec. 5, p. 46; "Lost in the Stars," *Newsweek*, 19 April 1965, p. 64.

¹⁴ Sutton, pp. 36-37.

gets here early parks in one of our 30,000 spaces, buys a \$1.50 ticket, watches batting and fielding practice from one of those windows while he eats in the Domeskellar and then sees the game, will spend less than it would cost him to stay home watching television with one light turned on and his air conditioning running.” This was such a bargain, boasted Hofheinz. “He can’t afford to stay home.”¹⁵

Bill Connolly, reporter for the *Houston Chronicle* observed, “The Harris County Domed Stadium has a place for everyone.” The rich occupied the top of the stadium and the Skydome Club. The “almost rich” resided in the fifth level in their Astrodome Club.¹⁶ Season ticket holders bought access to the Astrodome Club. On one wall of the Club a Toulouse-Lautrec mural was recreated created using formica (looking closely at the mural, a likeness of Hofheinz appeared as one of the subjects). Over the one-hundred feet long bar was a model spaceship, complete with its floating astronaut. The average fan, which Hofheinz and the HSA desperately wanted to bring to the stadium and make it a paying venture, enjoyed several choices. The average fan that walked up to the ticket office the day of the game needed to develop a personal identity inside the stadium. This was what Hofheinz hoped he was achieving by catering to the various demands of various individuals. Hofheinz spent millions of dollars “to assure complete comfort for the spectators.” The upholstered theater seats and other small details “so essential to spectator convenience” included the sound system, ease of getting to the seats, and the parking facilities.¹⁷

¹⁵ Smith, “It’s Cheaper at Dome Than Stayin’ Home,” *Post*, 15 February 1965, sec. 4, p. 2; Sutton, 36.

¹⁶ Connolly, “Everyone and Everything Is Ready at the Dome,” *Chronicle*, 9 April 1965, Texas edition, sec. 1, p. 1, 11.

¹⁷ “Herskowitz, “Dome Countdown,” *Post*, 4 April 1965, sec. 5, p. 6; “No Rain Check Needed Here,” *Shamrock*, 8, 11.

Speaking of the type of baseball fan who went to the Astrodome, Hofheinz said, "Our fans are more like the ones they have out in California" not the "rowdies or semi-delinquents who follow the (New York) Mets." The spectators who would come out to see an Astros game, claimed Hofheinz, were new fans. These new fans did not make the effort to suffer through the heat, humidity, and mosquitoes of a minor league Houston Buffaloes. Hofheinz even posited that the new baseball fans refused to attend Astros' games when they were called the Colt .45s and played across the street. Hofheinz argued that these new fans were also part of the new rich in Houston. "We have by far a higher percentage of fans in the upper economic brackets than you'll find in any other park," boasted Hofheinz. But he reassured the common fan that the Astrodome had plenty of amenities for him. This was due to the competitive nature of the sports business. "You're competing for attention," he added so "we *also* have the best seats and service at the dollar-fifty level." All the frills and superfluous amenities were designed by Hofheinz in an attempt to create new kinds of fans.¹⁸

Each of the fifty-four private club rooms were decorated in a different theme. Although Hofheinz allowed the lessee to select the theme for the club room, he still maintained veto authority and eliminated anything he deemed objectionable. Still, none of the lessees attempted to personalize the private box. This allowed Hofheinz to determine the motif for each luxury suite. In one suite, for example, Hofheinz offered his interpretation of the American West with a pair of longhorns and flintlock guns in a gun rack. In another, Hofheinz decorated like the interior of a ship's cabin, complete with wood-paneled walls, portholes, wheels, and lanterns. The HSA sold each box "on a firm five-year contract." Spectators could choose from either a 24- or a 30-seat private room (\$14,800- and \$18,6000-

¹⁸ Roger Angell, "The Cool Bubble," *New Yorker*, 14 May 1966, p. 135 (italics in original).

a-year, respectively) complete with a sixteen by eleven and one-half private clubroom, personal waiter, refrigerator, closed-circuit television set, private washroom, and access to the Skydome Club, open every day of the year so “When Joe Hunk from Timbuctoo (sic) comes visiting in the winter you’ll bring him out here for lunch and tell him ‘If there was a ball game on, you’d watch it from here.’”¹⁹

Although to some it seemed that Hofheinz cared more for his wealthy friends of Houston than the commoner, Hofheinz assured everyone that they would experience nothing but ease and comfort under the dome. HSA officials claimed the reason they chose a domed stadium was due to competition “against more entertainment activities conducted in more comfortable conditions.” This was the reason the stadium would be air conditioned, the aisles would be wide, the myriad colors, and “theatre-type seats” were chosen.²⁰ Hofheinz was “also determined that the common man of Harris County," who voted for the tax bonds to build the Astrodome, "should feel that he is being treated just as well as the kings of petroleum, gas, and cattle in the upper tiers” with air-conditioned comfort on upholstered seats that Hofheinz claimed “reduce(d) the length of a baseball game by an hour.”²¹

Hofheinz deflected additional criticism that the stadium’s opulence was just a result of his amazing selfishness. Hofheinz, the critique went, was foisting his vision of the stadium upon the people. The Harris County Domed Stadium, it continued, was not Hofheinz’s personal playground. He should not decorate it in such a garish fashion or make it into an edifice to aggrandize himself. The stadium, Hofheinz countered, was not only the great equalizer among sports players, but also the great equalizer for the fan. “Now let’s talk about

¹⁹ Smith, “It’s Cheaper at Dome Than Stayin’ Home,” *Post*, 15 February 1965, sec. 4, p. 2; Gary Taylor, “End of an AstroEra,” *Houston City Magazine* 6 (June 1982): 43.

real grandeur, about the guy who spends \$1.50 to see a ball game, and can sit on foam rubber, and have a reasonable meal without having to eat hot dogs.” He insisted that he did not forget about the needs of the common Houston fan. “If we’ve established grandeur we’ve done it for the bleacher fan,” he continued “and the country club member.” Both individuals would be able to satisfy their own personal tastes under the dome. Hofheinz said, “A man can pick his budget.” He can choose what type of experience he could have inside the stadium, within reason and within Hofheinz’s own conception. “Baseball people,” he continued, “will tell you that just give them a crackerbarrel seat and a stale frankfurter and they’ll be happy.” Hofheinz was unwilling to follow this pedestrian formula, partly because it would prove financially disastrous. “Maybe you can do that with a real baseball fan” in cities with an established heritage of big league sports franchises, “but we’re just educating the people to baseball here.” Besides, concluded Hofheinz, “why shouldn’t they feel good and comfortable.”²²

Liz Smith of *Sports Illustrated* toured the Astrodome before its grand opening and offered her report on the interior. According to Smith, “Judge Hofheinz has gilded the Houston Astrodome with \$6 million worth of luxuries that have little to do with baseball—except to coddle the fan as he has never been coddled before,” she wrote.²³ “But nowhere is his Midas touch, and taste, more evident than within the confines of the Dome itself,” she continued. True, he had spent millions for the HSA office, with “yards and yards of deep gold carpet, lush velvet scarlet-and-gold chairs supported by rampant Austrian lions

²⁰ “Dome Will Revamp Baseball’s Image,” *Texas Magazine*, 4 April 1962, p. 22.

²¹ L. Smith, 52.

²² Lipsyte, “Astrodome Opulent Even For Texas,” *N. Y. Times*, 8 April 1965, p. 50. Lipsyte, “Hofheinz Says Yanks Will Be Awed in Game Tomorrow,” p. 50.

²³ Liz Smith, “Giltfinger’s Golden Dome,” *Sports Illustrated*, 12 April 1965, p. 45.

or gold metal frames, specially designed gold telephones on every gold-trimmed Louis XIV desk.”²⁴ Even the toilet facilities were spray painted with yellow-gold Velvutex, seat, lid, pipes, everything. A unnamed architect asserted to Smith that the baseball team “was the last thing on the judge’s mind.”²⁵

Since the dome was designed to be the biggest and the best, Hofheinz incorporated a \$2 million, 474-foot long, four stories high, electronic scoreboard. Containing over 50,000 individual light bulbs, the flashing scoreboard promised to provide “the biggest spectacle in lights ever constructed.” Controlled in the press box by six technicians, the 300-ton scoreboard required over 1,200 miles of wiring. A typical scoreboard recorded balls, strikes, and outs. This was too blasé for Hofheinz, who wanted a scoreboard that exemplified the entertainment aspect of the stadium. The scoreboard, like the game itself, was entertainment, said HSA publicity man Bill Giles. “Anything we can do to put a little more entertainment into it,” Giles said, “we want to do.” The scoreboard was another amenity on a grand scale for the average fan. When an Astro hit a homerun, the scoreboard erupted in electronic fireworks and skyrockets. The heads of two steers appeared, snorting fire. Then, a cowboy emerged on the left of the screen and chased a steer that appeared on the right. Similarly, if the opposition hit a homerun, the words “tilt” flashed across the screen.²⁶

In a 1966 interview, a reporter questioned the Hofheinz about baseball attendees whom did not seem devoted to the game because these spectators did not keep score. “This park keeps ‘em interested enough so they don’t *have* to keep busy with a pencil and scorecard,” Hofheinz replied. In his rejoinder, Hofheinz told the reporter that the stadium was

²⁴ L. Smith, 46.

²⁵ L. Smith, 51.

designed completely for the fan, not for himself. “Why, in most other parks you got nothing to do but watch the game, keep score, and sit on a hard wooden seat,” but the Astrodome was wholly different. “This place was built to keep the fans happy,” he continued, complete with “good seats, fine restaurants, and our scoreboard to look at.” Fans who traveled to the stadium should not “have to make a personal sacrifice to like baseball” especially since the Astrodome “removed baseball from the rough-and-tumble era.” We’re in the business of sports entertainment. Baseball isn’t a game to which your individuals come alone just to watch the game. They come for social enjoyment. They like to entertain and *be* entertained at the ball park.”²⁷

“The place wouldn’t be anywhere near as elegant as it is if it weren’t for Roy,” said business partner R. E. Smith. “We’ve spent \$8 million of our own funds because he wanted it to be just so. That super-duper score board of his was a \$2 million item that won’t cost the taxpayers a cent. Roy said he had to have it,” concluded Smith. Others agreed with R. E. Smith that the Astrodome had become a reality thanks to Hofheinz. “It was he who insisted that it could be done,” who hastened its completion for the 1965 baseball season, and moved into his personal office inside the incomplete stadium six months ahead of schedule “to make sure that every detail was perfect.” According to Hofheinz, what sold the major leagues on Texas baseball was the idea of a domed stadium. “The idea of a showplace stadium” was the reason major league baseball backed the HSA’s move for a team over Marty Marion.²⁸

Hofheinz viewed the Astrodome as his own “personal living room” in his mansion, even though he owned a 110-acre property he called Yorktown, a beach house on Galveston

²⁶ “Dome Stadium Will Have ‘Eye Poppingest’ Scoreboard,” *Chronicle*, 20 December 1964, sec. 7, p. 5; Joe Jares, “The Big Screen Is Watching,” *Sports Illustrated*, 31 May 1965, p. 31; Taylor, 86.

Bay called "Huckster House," a 550-acre farm, and two hunting camps, the Kwik Kwack Klub and the Loose Goose Lodge. Hofheinz decorated each room in Huckster House in a different theme, the Old West, the South Seas Lounge, a Buccaneer Room (complete with "The Brig") a Circus Room, the Gay Nineties Room, the French Room, and the Harem Room. This vision of theme areas paralleled Hofheinz's interpretation of the Astrodome.²⁹

Behind the scoreboard, Hofheinz created his own personal apartment of rooms that spanned from the ground level to the roof. At the ground level, or the third level inside the stadium, was Hofheinz's office. On the sixth level, Hofheinz installed a conference room decorated in New Orleans-French Quarter-style, a barber shop, ten-seat movie theater, a billiards room, an arcade-styled shooting gallery (with a western theme, of course), and "the judge's pride," the "Topsy Tavern." Inside the Tavern, the floor and bar were slanted. If one ordered a beer, the bartender would send the mug careening down the bar. Just when it looked as if the mug would spill off the bar and onto the floor, a magnet located under the bar, near the edge, stopped the mug before its suicidal plunge. Other Hofheinz-related novelties in the Tavern included flickering lights, wobbly tables, and a bar stool that could be moved up and down. The Tavern's lavatory was located in an elevator just outside the entrance. An individual would experience the sense of dropping several stories, thanks to a window view of simulated bricks. At the bottom of the "ride," the individual would discover an outhouse with a barrel and Sears catalog (instead of tissue).³⁰

²⁷ Angell, p. 135 (*italics in original*).

²⁸ "Hofheinz Impressed Stengel," *Chronicle*, 8 April 1965, sec. 5, p. 18.

²⁹ Frady, 89; Terrell, 36, 41, 43; Cartwright, 26; Ray, 157-160, 276-277.

³⁰ Cartwright, p. 26; Frady, 89; Taylor, 45, 68. The Astrobowl and miniature gold course were not added until 1967 and solely for use by the HSA and its friends. I include them to show Hofheinz's grand vision. See Edgar W. Ray, *The Grand Huckster: Houston's Judge Ro Hofheinz, Genius of the Astrodome* (Memphis: Memphis State University Press, 1980), 362.

On the eighth floor, behind the scoreboard, Hofheinz had built a replica medieval-inspired chapel, a beauty parlor, puppet theater, a playroom, and rooms for “maids and nannies.” Hofheinz wanted guests and friends of the HSA to feel right at home while visiting the stadium. A half-floor below, on the seventh level, was the Presidential Suite complete with library, bedroom, and reception area. Bedrooms for the Secret Service had to be cobbled together because Hofheinz forgot to include them in his original plan. On the ninth level, the HSA offices and the Caribbean Room were located to allow Hofheinz to entertain important guests and personal friends. The Caribbean Room, a party room for fifty people, contained blue carpet, rattan furniture, and life-sized statues.³¹

Hofheinz's private apartment was also on the eighth level. The HSA president justified the elaborate décor of his personal suite (which included stained glass windows, Oriental masks, a completely gilded washroom, private kitchen and dining room, thirteen-foot rosewood desk, and sauna) because he wanted members of Madison Avenue to take him, the HSA, and the Astros seriously. “If you look just like a tobacco-spitting venture, it won’t work. Whether you like it or not your in show business.”³² Hofheinz explained why he decorated his office the way he did. After visiting his son in Tokyo, he and his wife traveled “to Hong Kong, Bangkok, and all.” All of the décor, he explained, came from Hong Kong, his last stop. “Then I bought 26,000 pounds of junk for this place,” he said because he “didn’t want anybody to come in here and say, ‘I saw the very same thing last week in Joe’s Bar.’”³³

³¹ Cartwright, 26; Frady, 89; Taylor, 43, 45.

³² Sutton, 37.

³³ Red Smith, “It’s Cheaper at Dome Than Stayin’ Home,” *Post*, 15 February 1965, sec. 4, p. 2.

Hofheinz said, "I got into this because the city has needed a multi-purpose stadium from the beginning. The stadium actually served as a vehicle to get major league ball here."³⁴

Chronicle reporter Wells Twombly wrote that the domed stadium allowed man to conquer nature, since baseball could now finally be freed from the weather. Hofheinz's vision of indoor baseball, he continued, made "the most improbable fantasy" and imagination a reality, "nothing will ever seem impossible again." But the question remained, despite preseason experiments and scrimmages, could baseball be played under the dome?³⁵

A special "stadium preview" for Texas and Southwest sports editors and writers occurred on 8 February 1965. Ostensibly, local Astros players would participate in a batting practice to test the effect of air conditioning on the flight of a baseball and see if the lighting system's 1,906 lamps adequately lit the field. The "stadium preview" promised game-like conditions and the best account of what might be expected in the inaugural season of the stadium. At the \$150,000 party, "The Houston Sports Association introduced science fiction baseball to the world...in the most pompous batting practice setting ever held." Hofheinz welcomed almost three hundred guests to "the first full dress preview" of "the greatest stadium ever constructed by man." He then proceeded to rattle off the facts and figures of the stadium in a forty-seven minute presentation. After Hofheinz's speech, singer Anita Bryant threw out a ceremonial ball, and the sound system played the national anthem. Once the pomp ended, the batting practice began. Rusty Staub was the only Astro to hit a home run as he belted two, one during day conditions and the second with the lights on later that night. Fellow Astro Bob Lillis explained that the hitting conditions under the dome were no

³⁴ "No Rain Check Needed Here," *Shamrock*, 8.

³⁵ Wells Twombly, "History in the Making," *Chronicle*, 10 April 1965, sec. 1, p. 9.

different than those outside. "It's just like hitting a ball outdoor under normal conditions, without a lot of wind," he said. Bob Aspromonte concurred with his teammate. "Everybody wants to know if the ball is going to jump out of here—I'll tell them no," Aspromonte said. Aspro added that the ball would not be "dead" either.³⁶

The Astros ended their spring training in Florida early so they could get acquainted with the stadium before their exhibition games against the Yankees and Orioles. The Astros played two intra-squad games against their minor league affiliate the Oklahoma City 89ers. The first on Wednesday, 7 April, the Astros and the 89ers took the field to practice under the dome for the first time before their evening scrimmage. Both teams worked out in an effort to ascertain the playing conditions they would experience that night. Throwing and hitting the baseball was no different than outdoors, they again reported. The most disturbing result was that the players had difficulty locating a batted baseball amidst the skylights and steel girders of the roof. The early evening glare from the sun wreaked havoc on several fielders. Astros outfielder Jim Beauchamp trotted off the field in disbelief. "First you see it, then you don't," he said in frustration. Minor leaguer Ronnie Davis confessed that he could not follow the ball accurately. "I was losing the ball in the glass," he lamented, "and picking it up in the girders." Other fielders said that they would lose the flight of the ball when it passed in front of the roof's framework. Astros catcher Ron Bran agreed that catching fly balls could prove difficult, but he still expressed his amazement over the stadium when he said "This park is

³⁶ Bill Giles to R. E. Smith, Herbert Eyster, Robert Minchew, Roy Hofheinz (1/15/65), Minchew Collection 94-274/5, Harris County Domed Stadium Construction Correspondence, file #21, January 1965; Nealon, "Post Time," *Post*, 21 January 1965, sec. 6, p. 1; "Domed Stadium Preview Monday for Writers," *Chronicle*, 3 February 1965, sec. 7, p. 2; Wilson, "Fabulous Dome Gets Dress Rehearsal," *Chronicle*, 9 February 1965, sec. 3, p. 1, 2; Hal Lundgren, "Bat and Ball Meet at Last Beneath Dome," *Post*, 9 February 1965, sec. 4, p. 1; "Dome Overwhelming With Lights On," *Chronicle*, 9 February 1965, sec. 3, p. 2; Nealon, "The Curve Ball Curves in Domed Arena," *SN*, 20 February 1965, pp. 7, 10.

fantastic.” Houston Astros General Manager Paul Richards wanted to foist blame upon the time of day. “It’s this time of day (4:30) that we may have problems,” he said, but added that he thought it would be fixed with little trouble. For the scheduled scrimmage on Thursday in the afternoon, Richards promised that the lights would be turned on, just in case.³⁷

The Thursday afternoon game revealed that a glaring problem did exist for fielders. The intra-squad scrimmage was halted after seven innings, due in large part to the problems of the outfielders. Luman Harris, manager for the Astros, did not want any of the players injured and so he halted the exercise after seven innings. Ron Davis, center fielder for the 89ers, said, “I caught two flyballs out of about 10 or 12.” “Outdoors, you can shade the glare with your glove,” he added, “But here the glare with your glove is so strong it just surrounds the glove.” Davis, fearing for his safety, wore his batting helmet in the field in an effort to obtain some semblance of protection. Fortunately, neither Davis nor any other player suffered a glare-related injury during the scrimmage. The HSA sent out for dozens of pairs of sunglasses in various tints and shades to try and discern a quick solution. The brief experiment, however, provided no relief. Astros outfielder Al Spangler offered his summation of the stadium and its fault. “A routine fly ball is no longer routine,” he said.³⁸

The failure of sunglasses to provide protection further exacerbated the “ding dong dilly” of a flaw. Players, coaches, and management wanted to find any remedy as soon as possible. The Astros were scheduled to play twenty-one day-games and threatened the three upcoming afternoon exhibition games against the Yankees and Orioles. According to Astros

³⁷ “Astros, Yankees Open Fabulous Dome Friday Night,” *Chronicle*, 4 April 1965, sec. 7, p. 2; Herskowitz, “Fielders Find Dome Flies Hard To Follow,” *Post*, 8 April 1965, sec. 8, p. 1, 4; John Wilson, “Dome Gets Daytime Test,” *Chronicle*, 8 April 1965, sec. 5, p. 1, 3.

manager Luman Harris, a baseball could not be caught under those conditions. GM Richards agreed with his manager, "It's impossible to play under these conditions." The immediate, knee-jerk solution to the glare problem was to alter the dome itself by "blacking out" the sunlight. This would definitely reduce the glare and entry of sunlight into the stadium but could also kill the natural grass. Astros general manager Paul Richards felt no reservations about this solution. He expressed his personal satisfaction with substituting any synthetic surface to replace the natural grass. But before any action was taken, Richards wanted to reaffirm his faith that a solution could be found. "I know that people who can build a wonderful stadium like this can solve this one little problem," he said.³⁹

During the evening "dress rehearsal," the players did not experience any difficulty catching, throwing, or hitting a baseball during the eight-inning contest. In an otherwise typical baseball game, Astros second baseman Joe Morgan performed the only notable feat. Morgan pounded a second-inning fastball over the right field fence, sparking the celebratory explosions from the scoreboard.⁴⁰

Herman Lloyd claimed to have recognized the potential problem after a "few hundred" of the skylights had been installed, but no individual from the HSA had responded to his concern. "I told the HSA what might happen," he said, and "They seemed to think that it was a situation that would be easily resolved." Lloyd reassured the public that any future remedies would involve the ballplayers and their equipment, not costly alterations to the

³⁸ Lundgren, "Hard Helmets in Outfield?," *Post*, 9 April 1965, sec. 5, p. 1; John Wilson, "Flaw in Dome a Ding Dong Dilly," *Chronicle*, 9 April 1965, sec. 6, p. 1, 6; Herskowitz, "Catching A Fly Ball at Dome, In Daytime, No Laughing Matter," *Post*, 9 April 1965, sec. 5, p. 2.

³⁹ Herskowitz, "Catching A Fly Ball at Dome, In Daytime, No Laughing Matter," *Post*, 9 April 1965, sec. 5, p. 2; Wilson, "Flaw in Dome a Ding Dong Dilly," *Chronicle*, 9 April 1965, sec. 6, p. 1, 6; Twombly, "Flaw In The Dome," *Chronicle*, 9 April 1965, sec. 6, p. 6.

stadium. "I don't think that we will have to make any major changes in the dome," he posited, "I think the answer is probably outfielders." Lloyd opined a simple solution of "colored baseballs" to aid the fielders. Architect Seth Morris disagreed with Lloyd. The answer to the glare, according to Morris, could not be rectified so easily as merely altering the playing equipment. The answer would require a bit more time to discover. Morris did elucidate his confidence in an eventual conclusion to the glaring conundrum. The HSA's Bill Giles speculated on using a canvas to cover the dome during day games and then removing it after the games, thus allowing the grass to get its requirement of sunlight. Tinting or other permanent alterations to the skylights would result in killing the grass and require installing an artificial playing surface, he continued. Any changes to the stadium, asserted Judge Elliott, would be the territory of the HSA.⁴¹

With opening day looming on the horizon, a "nervous as hell" Bill Giles promised that all the restaurants would be ready. "However," he added, "we'll have construction men in the stadium working until late June, finishing up little things." One of the more embarrassing and lingering problems concerned the roof: it leaked. Workers climbed to the roof to perform maintenance duties on over seventy leaks. "The last time there was a storm we had only three leaks, just small ones," admitted Giles. Other small, "nit-picking things" still required the attention of Giles, Hofheinz, and workers who toiled "around the clock" trying to get the stadium ready. The "major things," installing the 50,000 lights for the gigantic scoreboard, for example, were already completed, but over two hundred little things (like removing masking tape around toilet fixtures and painting the stairwells and rusted

⁴⁰ Nealon, "Morgan Raps 1st 'Domer,'" *Post*, 8 April 1965, sec. 8, p. 1, 2; "Morgan First to Light Dome Pinball Machine," *Chronicle*, 8 April 1965, sec. 5, p. 2.

areas on the roof) still required attention. “These items are such a magnitude that we do not feel we can finally accept the stadium until the work has been performed,” Hofheinz threatened. The reputation of Hofheinz, the HSA, County Commissioners, Houston, and Texas was on the line for the world to critique. Only careful attention to the completion of the minute details could assuage some of the detractors and skeptics.⁴²

Thursday night, the race was on. Hundreds of Houston’s social elite made their way to the exclusivity of the Stadium Club to eat, drink, and cavort with Hofheinz. Houston’s “almost rich” did the same in the Astrodome Club. Meanwhile, throughout the stadium, dozens of workers rushed around the stadium to ready it for the grand opening on Friday. Groundskeepers inspected the playing field for any defects. Signs still needed to be hanged, lights installed, seats cleaned, trash cans set out, and the Stadium Club’s outside walls painted.⁴³

“Domesday” arrived in spectacular fashion on 9 April 1965 when “fantasy met reality.” In a “mighty splash of color and sound,” the long awaited grand opening of the stadium took precedence over the baseball game. The stadium’s gates would finally be thrown wide-open to those lucky enough to procure tickets. The HSA expected more than 51,000 spectators to fill the stadium, after selling 5,000 standing room only tickets in addition to the 46,000 seats. Adding to the excitement of the festivities, rumors abounded that President Lyndon Johnson, a long-time friend of Hofheinz, would attend the baseball

⁴¹ “Architect Says He Warned HSA of Glare in Dome,” *Chronicle*, 9 April 1965, sec. 1, p. 1, 11.

⁴² Hofheinz to WMCS (2/11/65), Minchew Collection 94-274/5, Harris County Domed Stadium Construction Correspondence, file #21, January 1965; Twombly, “Domed Stadium Even Has Indoor Air Force,” *Chronicle*, 21 March 1965, sec. 6, p. 6; Herskowitz, “Dome Countdown,” *Post*, 4 April 1965, sec. 5, p. 6.

⁴³ Connolly, “Everyone and Everything Is Ready at the Dome,” *Chronicle*, 9 April 1965 (Texas Ed.), sec. 1, p. 1, 11.

game.⁴⁴ Opening night represented the culmination of a little more than two years of construction work and almost a decade of planning. The stadium was finally “official, professional, and competitive” at 7:30 that evening.⁴⁵

“The Dome was everything its creators said it would be including a perfect place to play baseball,” wrote Peebles. The playing conditions were impeccable for both athlete and spectator. Officially, at 7:11 pm, the Spring Branch High School band started “My Country ‘Tis of Thee.” Texas governor John Connally gave a speech at 7:30 pm and distributed bouquets of flowers to “those responsible for this magnificent structure,” Hofheinz and Smith, “men of vision.” “This stadium is a monument to (their) true faith,” announced the governor. Connally and Smith also thanked the people of Harris County for building the stadium. Connally then threw out the ceremonial first pitch to Astros catcher Ron Brand. Dick Farrell, facing Mickey Mantle, made the first official pitch. After catching the toss, Brand jogged over to NL president Warren Giles, sitting in box seats, and handed over the baseball. A few minutes later, LBJ arrived at the stadium. Hofheinz welcomed LBJ and Lady Bird to the stadium and escorted the couple to his office and then to his private clubroom. The game halted when the scoreboard acknowledged LBJ’s appearance with the message “Welcome, Mr. President.” At the top of the ninth inning as the Astros took the field, scoreboard operators started the 45-second home run spectacular, usually reserved for Astro home runs only. A crowd of 47, 876 watched the Astros beat the Yankees, 2-to-1, in twelve innings as Astros coach Nellie Fox (the Astros ran out of players) batted in the game winning run with two out. In addition to a victory for the home team, the crowd witnessed “the first

⁴⁴ Peebles, “LBJ May Visit the Dome Tonight,” *Chronicle*, 9 April 1965, sec. 1, p. 1, 11; Herskowitz, “A New Order Cometh to Baseball,” *Post*, 9 April 1965, sec. 5, p. 2..

genuine home run.” Mantle, playing despite a strained hamstring, walloped a home run, 406-feet over the right-center field wall. The ball ricocheted back into the outfield and fielder Jimmy Wynn picked up the ball and tossed it to a fan, unaware of its importance to the Hall of Fame. Said Mantle of his home run, “I hit that ball and it barely got there.” Mantle also recorded the first hit of the game as he led off the first inning.⁴⁶

“The glamour of the dome, not just here in these Skyboxes, but the whole thing,” chimed Charles Manning, a TV executive from Corpus Christi, TX, “will draw fans and bring baseball into a new phase.” Manning asserted that Hofheinz’s formula not only achieved its goal, but would continue to work long into the future. “Things like this will really appeal to people and make baseball what it was, the great American pastime,” concluded Manning.⁴⁷ He was echoed by President Johnson. Upon leaving Hofheinz’s sky box, LBJ anticipated that every American would some day come to the stadium. He also said that every Houstonian “ought to be very proud of this stadium.” “It is massive, beautiful, and it will be a very great asset,” he added. Lady Bird congratulated Hofheinz, saying, “Roy, it was simply marvelous.”⁴⁸

Another reporter who covered Domesday for the *Houston Post* was Sandra ByBee. “Opening night at the Domed Stadium was a tableau of society and fashion, entertainment and prestige,” she wrote. The “enthusiasm and excitement about the stadium,” she continued,

⁴⁵ Nealon, “Post Time,” *Post*, 9 April 1965, sec. 1, p.1, sec. 5, p. 2.

⁴⁶ Herskowitz, “In a Mighty Splash, It’s Open,” *Post*, 10 April 1965, sec. 1, p. 1, 12; Betty Ewing, “Grissom Meets Another ‘Spaceman’ in Big Dome,” *Chronicle*, 10 April 1965, sec. 1, p. 1, 12; Peebles, “Fox, Mantle Show Dome Is a Winner,” *Chronicle*, 10 April 1965, sec. 1, p. 1, 9; “Connally Hands Out Bouquets for Dome,” *Post*, 10 April 1965, sec. 1, p. 12; “LBJ, Lady Bird Help Open Astrodome,” *Post*, 10 April 1965, sec. 1, p. 1, 12; Saul Friedman and Oscar Griffin, “LBJ: ‘Everybody Will Visit Dome,’” *Chronicle*, 10 April 1965, sec. 1, p. 1, 7; Twombly, “History In The Making,” *Chronicle*, 10 April 1965, sec. 1, p. 9; John Hollis, “‘I Hit That Ball,’ Says Mick,” *Post*, 10 April 1965, sec. 4, p. 1, 5; Nealon, “Little Nell’s Hit Wins It in 12, 2-1,” *Post*, 10 April 1965, sec 4, p. 1, 3.

⁴⁷ Joe Adcock, “No Smell of Popcorn, Hotdogs and Beer,” *Chronicle*, 10 April 1965, sec 1, p. 12

“was reflected by the fans in their eyes and smiles as they stepped through the gates.”⁴⁹ Her colleague Bob Cargill affirmed the “carnival-like gaiety about the crowd.” As Hofheinz planned, Cargill witnessed the “cross section of the county’s society, the chic and the shabby.” Although most of those who could get tickets for the opening game were from the more affluent of Houston, the common Dome-seeker still was able to get some tickets. Cargill saw “men in business suits and men in faded work clothes.” The female spectators, on the other hand, “were decked out in spring finery of vibrant colors.” Female spectators wearing extravagant clothing to a baseball game “would have looked out of place at an ordinary ball park, but they harmonized beautifully with Friday night’s mad mood.” Most women would not have worn some of their best clothes to a baseball game in any other open-air ballpark.⁵⁰

Chronicle writer Wells Twombly wondered “[D]o you think outdoor baseball will ever make a comeback?”⁵¹ “The color Friday night was deafening,” wrote *Post* sports reporter Mickey Herskowitz. He was also impressed with the various colors of the Dome employees. “There were the vendors in iridescent blue coveralls, of the type worn by airplane mechanics; the grounds crew in burnt orange spacesuits and helmets.” Herskowitz echoed the descriptions of many types of fans who viewed the opening night spectacle. “Male spectators dressed in suits and neckties,” Herskowitz said, while “women wore evening gowns, attire more befitting opera or the theater, not baseball.” For many like Herskowitz, it just did not seem that the Dome’s surroundings were befitting a sporting event. Herskowitz was used to

⁴⁸ Friedman and Griffin, “LBJ: ‘Everybody Will Visit Dome,’” *Chronicle*, 10 April 1965, sec. 1, p. 1, 7.

⁴⁹ Sandra ByBee, “Opening Night: A Society Tableau,” *Post*, 10 April 1965, sec. 1, p. 12.

⁵⁰ Bob Cargill, “Like...a Foreign Country,” *Post*, 10 April 1965, sec. 1, p. 1, 13.

⁵¹ Twombly, “Color It ‘Vanish,’” *Chronicle*, 11 April 1965, sec. 7, p. 5.

Houston fans in casual clothes and not their finest evening wear.⁵² HSA official Paul Richards jokingly questioned how the Astrodome could be considered merely the “Eighth Wonder of the World.” Richards answered his own query. “This is the ultimate,” he boasted, “and no one yet can conceive how great will be its contributions to the sport.”⁵³

The people who witnessed Domesday lauded nearly everything about the Astrodome. They voiced nothing but accolades and superlatives. For example, H. S. Allums pulled his son from school so he could attend the exhibition game. Allums explicated his reasoning for making the four-hour drive from his home in Premont, Texas. “I figured that this is more educational than anything he could get in the classroom,” he said.⁵⁴ The playing conditions, on the other hand, received more of a dubious reception. Al Spangler said, “It’s not bad...it’s worse.” Rusty Staub expressed his difficulty in picking up the baseball from the pitcher because of the background in centerfield. Bob Lillis concurred. “You have to concentrate very hard on following the ball,” said Lillis, “The pitcher will be throwing out of the third row of centerfield seats.” He added, “The worst thing is the glass doors in the centerfield section and the people moving about on the third level.” Roger Maris said that the steel girders should be painted green to help the players see and follow the ball.⁵⁵

The following Saturday the Astros played the Orioles in the afternoon and the Yankees at night. The attendance for the Orioles game was 22,457 and the Yankees game was 48,145, pushing attendance to 118,478 for the three exhibition games. The HSA learned that people in the Houston area were interested in major league baseball, if not the Astrodome itself. But the HSA also learned what was in store for the upcoming baseball

⁵² Herskowitz, “In a Mighty Splash, It’s Open,” *Post*, 10 April 1965, sec. 1, p. 1, 12.

⁵³ Arthur Daley, “Dome Baseball ‘Laboratory,’” *Chronicle*, 11 April 1965, sec. 7, p. 7.

season. First, the stadium would yield homeruns and not just to the reputed home run hitters like Mickey Mantle and Roger Maris, but also from the likes of Astro Jim Beauchamp. Second, the skylights and the frames challenged the fielders to catch fly balls. Third, the natural grass did not perform as hoped. Solving the glare problem still concerned Hofheinz. The easiest answer to the brightest days of summer, he said, was to “pray for rain.” He promised that he would exhaust all possibilities before painting the skylights. Blacking out the sunlight would kill all the grass and reduce the playing surface to dirt and dust. In the outfield, the grass had grown unevenly and turned brown in some areas. Immediate speculation centered on the idea of getting synthetic turf to replace the natural grass. “We are aware of the advantages of synthetic or plastic type grass, but we haven’t given up on growing natural grass in the Astrodome,” Hofheinz said. The HSA had invested too much time and money in the A&M experiments to determine the if grass would grow under the dome. To abandon natural grass this early, before the completion of the exhibition homestand, would be a rash, knee-jerk reaction. “There is a chance we might go to plastic grass in 1966,” Hofheinz confirmed, “but I think speculation about it at this time is premature.”⁵⁶

The HSA received numerous suggestions concerning the glare before the Saturday exhibition with the Baltimore Orioles. Du Pont dispatched a research team to view the problem and offer suggestions. From Kansas City Athletics owner Arnold Johnson who offered orange-colored baseballs to a Massachusetts women’s belief that blue floodlights

⁵⁴ Gallagher, “They Came Early and Stayed Late in the Public Dome-ain,” *Post*, 10 April 1965, sec. 4, p. 2.

⁵⁵ “You Got To Go First Class, Keane Says About Dome,” *Post*, 10 April 1965, sec. 4, p. 2.

⁵⁶ “Record 48,145 Jampack Dome,” *Chronicle*, 11 April 1965, sec. 1, p. 1, 12; “Synthetic Grass for Big Dome?” *Post*, 11 April 1965, sec. 1, p. 1; Herskowitz, “Hofheinz Offers Answer For Dome: ‘Pray for Rain,’” *Post*, 11 April 1965, sec. 4, p. 6; Red Smith, “Cooperstown to the Countdown Café,” *Post*, 11 April 1965, sec. 4, p. 6.

would solve the visual nightmare, all types of solutions were offered. In the first line of defense, players wore “extra-thick red sunglasses” to fight the glare. When this failed, the HSA used different colors of baseball. The first experiment with orange baseballs fell short of a miraculous resolution. Fielders, and now batters, could not follow the flight of the ball. Players tried various shades of sunglasses, but fared no better. A third alternative was to reschedule the twenty-one day games to night contests. The HSA dismissed this suggestion, despite receiving approval from NL president Giles. The reason was financial. Since the Dome eliminated inclement weather, television selected Astros home games as the alternative “Game-of-the-Week” in case the regularly scheduled game was postponed. The HSA stood to lose \$300,000. A fourth, and permanent, solution was to paint the skylights.⁵⁷

Grounds superintendent George Myers gazed at the turf after the six-game exhibition. The area around home plate and right field, in particular, did not fare well. “You can’t use the same amount of water as on the outside because you don’t have the sun, wind and air to dry it out,” Myers said, “If I tried over-watering it I’d wind up with a bunch of mud puddles.” Myers said that the amount he watered was “just enough to keep the moisture in the ground.” Despite its appearance, Myers maintained the grass would eventually thicken and thrive in the artificial conditions under the Dome. Once the baseball team left for a road trip, the ground crew replaced the bare areas with sod. The amount of use, asserted Myers, had been atypical and greatly contributed to the rapid deterioration of the turf. Hofheinz's alternative, synthetic grass, would require more time to install than the ground crew had available. Even though the baseball team was gone from the stadium for two weeks, removing the turf,

⁵⁷ Herskowitz, “Dome Puzzle Deepens,” *Post*, 10 April 1965, sec. 4, p. 2; Gallagher, “They Came Early and Stayed Late in the Public Dome-ain,” *Post*, 10 April 1965, sec. 4, p. 2; “The Dome Must Be Blacked Out,”

pouring a concrete base, laying cables, and then replacing the dirt could not be completed in the time allowed. "It is unlikely they'll put in synthetic grass this year because they don't have time," Myers said. He paused and then looked around at the stadium and replied, "Then again, nothing is impossible."⁵⁸

The Astros faced the Philadelphia Phillies in the stadium's first, official major league baseball game on Monday, 13 April. Since this was a night game, players did not have to fret about catching fly balls. The HSA tried to come up with a special guest of honor for this game on par with President Johnson's attendance at the Yankee exhibition. The HSA selected twenty-three astronauts from nearby NASA, including Gus Grissom and John Young. NL president Warren Giles presented each spaceman with lifetime passes to baseball games held under the dome. Said Giles as he presented the passes to the spacemen, "This is a proud day for baseball, for Houston, and for the National League." As it did for the Yankee game, the stadium still garnered most of the attention, even with real astronauts in attendance. Giles continued to applaud all those involved with the stadium, from the average Houston voter and construction worker to Craig Cullinan, Jr., George Kirksey, and Roy Hofheinz. "It took vision, imagination and courage to complete this stadium," Giles added. Major league baseball commissioner Ford Frick also made a brief speech. The domed stadium, he said, "opens a completely new field not just to baseball, but to all municipal activities." He asserted that Houston should remain proud of its stadium even in the face of criticism.⁵⁹

Engineering News-Record, 15 April 1965, p. 31; "Lost in the Stars," *Newsweek*, 19 April 1963, p. 64..

⁵⁸ Gallagher, "Growing Grass Beneath Dome As Easy as Catching Fly Ball," *Post*, 12 April 1965, sec. 3, p. 2.

⁵⁹ Hank Ezell, "Astros Fete Astronauts," *Post*, 13 April 1965, sec. 1, p. 1, 10; Twombly, "Astros and Astronauts," *Chronicle*, 13 April 1965, sec. 2, p. 5; Nealon, "Post Time," *Post*, 13 April 1965, sec. 4, p. 1, 4.

Before and after Domesday and its related hoopla, individuals from other American cities expressed their interest in building similar domed stadiums. New York City's sports commissioner Ben Finney, for example, promised to put a dome on just completed Shea Stadium. "The original contemplation was that we would go far beyond what was done in Houston and construct a retractable roof," Finney said. However, the construction on Shea began before these plans were implemented, he continued, and the city decided that it did not have enough financial resources to add the roof. But, Finney promised, Shea would get a "transparent plastic" dome in the near future that would also be "air-conditioned and heated." Finney promised that the new and improved Shea Stadium "will serve as a mode or prototype for many existing stadium throughout the nation which can and will be roofed in the comparatively near future when America learns how important this kind of facility can be to the economy of its great cities." Because of the current design of Shea (it looked like stadium, an arc or unfinished circle), Finney's plan faced several obstacles, but nothing that New York could not handle. The result would make New York City "the true sports capital of the world," Finney guaranteed.⁶⁰

By early June 1965, Finney met with architects and engineers to discover if a Shea dome was feasible. One New Orleans engineer promised Finney that not only could a roof be added to Shea, but that it would cost less than Finney originally conceived. Finney assured fellow New Yorkers that the increased revenue of a larger stadium would offset the costs of the alterations. "Moreover, we have the men behind it who have enough faith in this entire program to handle the financing on a private basis," Finney continued. Increased revenue from the enlarged seating capacity, plus private capital meant "the entire project would be

⁶⁰ Carl Lundquist, "Dome for Shea Stadium—N.Y.'s Next Bid Goal," *SN*, 27 February 1965, p. 19.

self-liquidating” and not require a penny of civic money. The result of Finney’s scheme would be a reemergence of New York as the sports capital of the world. Finney never did mention the American city that ousted New York as the sports capital. But the comparisons of Shea Stadium with the Astrodome could only suggest that Finney considered Houston the new leader and that Finney was conceding a new truth: the Astrodome was the Taj Mahal of sport.⁶¹

Oakland, California, entered the stadium sweepstakes in mid-1965. The proposal was for a \$30 million stadium, combined in the same location with a indoor coliseum and a convention center. Supporters launched a \$25.5 million bond issue that combined the financial resources from the city of Oakland and Alameda County to amortize the debt.⁶² Not to be outdone, Jackson County, Missouri unveiled a plan for a “sports and convention complex” that included a domed stadium. The preliminary report instigated by county leaders affirmed that a tax bond would be needed to build this complex. Although this was just a preliminary report, Kansas City and Jackson County leaders expressed the need for these facilities to the economic and entertainment future of the community as being so vital that they would consider spending over \$100 million for it.⁶³ And in 1968, Los Angeles architect Charles Luckman showed Ohio Governor James Rhodes, Cleveland Mayor Carl Stokes, and City Council President James V. Stanton, as well as representatives of the Browns and Indians a model of his domed stadium.⁶⁴

The final stadium of this era to be built for an expansion team was in Anaheim for the California Angels in May 1965. The gimmick the Anaheim stadium would employ,

⁶¹ Lundquist, “Roof on Shea by ’66, Sports Boss Forecasts,” *SN*, 5 June 1965, p. 7.

⁶² Joe King, “New Oakland Stadium Threat to S.F.” *SN*, 26 June 1965, p. 14.

according to its mayor Odra Lawton Chandler, was “progress, an orange grove setting and weather.” The Angels did not need a domed stadium because of the southern California weather. Construction magnate Del Webb’s firm handled the building of the Anaheim stadium. Chandler said he had no qualms that the stadium would stand out among the latest arenas. “I don’t have any doubts about our stadium being the most modern and best in the land,” he said, “Nothing is too good for Anaheim.”⁶⁵

The Astros finished in ninth place after the 1965 season. The home attendance, however, was not predicated on the play of the baseball team. The Astros drew 2,151,470 people, as compared to the 725,773 gate at Colt Stadium in 1964. Some of the increase could be attributed to the seating capacity of the Astrodome to that of Colt Stadium, 45,000 versus 35,000. But the on-field play of the team was basically the same: at, or near, the bottom both seasons. The significant increase in attendance was because of the new domed stadium. The gate receipt was “barely second” to the LA Dodgers. Even though the stadium held baseball games, concerts, a Billy Graham Crusade, and the Ringling Brothers Circus, it still welcomed almost half-a-million visitors to tour it. The most expensive seats, the Sky Boxes, were also “the worst seats for baseball” but also gave users entrance into the exclusive Skydome Club with its Oriental restaurant and picturesque view of downtown Houston.⁶⁶

The Astrodome, and Hofheinz, seemed to silence some of the criticism. Although “nature finally was completely blotted out,” spectators could sit in air conditioned comfort in a “absolutely self-contained” environment. The Astrodome experience was labeled “the ultimate of Disney aesthetic, the simulation of nature,” by writer Marshall Frady. But like

⁶³ Joe McGuff, “K. C. Plans Domed Stadium as Part of \$109 Million Layout,” *SN*, 12 March 1966, p. 25.

⁶⁴ Russell Schneider, “Proposal for Domed Stadium Makes Big Hit in Cleveland,” *SN*, 6 July 1968, p. 15.

Disneyland, Hofheinz tried to control every individual's experience. The Astrodome seemed to promise a respite from the conditions of Houston, a respite. "Under Hofheinz's hermetic glass-bell ornament," Frady continued, "there do continue to be certain small fretful infiltrations of nature, but, after a short while inside the Dome, one feels abstracted even out of time, arrested and suspended in a kind of hiatus of eternal shadowless daylight."⁶⁷ But it was also billed as something out of time, from the future. Ironically, the Astrodome had been conceived during a period of optimism. Domesday coincided with the shift in Houston society, from this optimism to pessimism. After its grand opening, the Taj Mahal of Sport seemed just that—a large, elaborate tomb, a mausoleum to the uplifting infinitude of postwar America.

⁶⁵ James Enright, "Anaheim Park Caps Major Building Boom," *SN*, 1 May 1965, pp. 9-10.

⁶⁶ Angell, 125 (*italics in original*).

⁶⁷ Frady, 89.

CHAPTER 10: THE ASTRO-DOOMED STADIUM

Houston, Harris County Commissioners, Roy Hofheinz and the Houston Sports Association initially received mostly accolades for the domed stadium from all across Texas and the United States. Some called the stadium “The Taj Mahal of Sport” and the “Eighth Wonder of the World.” Others labeled it as “fantastic,” “incredible,” “indescribable,” “science fiction,” and “the greatest stadium ever constructed by man.” President Lyndon Johnson simply called it “beautiful.” New York Yankee icon Mickey Mantle said, “It’s the prettiest park I’ve ever been in.” Despite all of this, the Astrodome was far from perfect. There were problems with the structure, problems with the HSA, and concerns about the future of the stadium itself. These problems could not be swept underneath the rug, so to speak. Each necessitated immediate resolution. However, the solutions underwent additional scrutiny. Since Hofheinz made most of the decisions that involved the stadium, he proved unable, or unwilling, to recognize the change that had occurred in American society. It revealed that the effervescent optimism of Houston and American society was gone and replaced with a nagging cynicism.

The stadium's most apparent problem was the skylights. Experts promised that the sunlight would be diluted, but still grow natural grass. Instead, during the late afternoon, the skylights focused the sunlight, creating a glare that blinded players and spectators. One reason was the translucent Lucite panels. As sunlight passed through the panels it was diffused into a powerful and blinding glare. Normally, an outfielder would experience this situation only if he looked directly at the sun. Under the dome, however, he encountered this if he just looked domeward. Secondly, the roof’s steel beams were painted with a light color

that looked dark against the skylights and the frames. The consequence was “akin to camouflage.” A baseball player, or fan, could not follow the path of a baseball as it traveled from the bright light of the ceiling into the “dark light” of the stadium’s interior. Thirdly, the sunlight reflected off of these beams merely adding to the brutal glare. According to Ralph Anderson, the Architects expected a level of glare, but just not this intense.¹

Furthermore, the Lucite panels adversely affected the Tifway 419 bermuda grass. The HSA contacted several agronomy experts to find the best type of grass to grow under the unusual stadium conditions. The grass had to grow under low light conditions and withstand the traffic of professional athletic events. The Texas A&M experiments determined that this grass could tolerate low light conditions and withstand the wear and tear of sporting events, high traffic, and the conversion process to various events. But, in general, the bermuda grass struggled to survive in shady conditions. Compounding the turf’s poor performance, it was planted during the worst possible time of the year, December, to be ready for Domesday in April. During the winter months, bermuda became dormant and could not recuperate as readily from adverse conditions. Tifway sod was typically planted during the spring for quick and rapid growth. By installing the sod in December, the bermuda could not establish itself in the stadium soil. Once installed in the climate controlled stadium, a constant 75° F to avoid high humidity and condensation, the turf never reached its optimal temperature of 80° to 95° F. This adversely affected the growth of the root system, hindering the absorption of nutrients and water in the soil. Therefore, it struggled to survive and remained unhealthy after the

¹ “What a Wonder! What a Blunder!” *Life*, 58 23 April 1965, p. 78; “Small Flaw in Houston’s Diamond,” *Business Week*, 17 April 1965. pp. 31.

transplantation. The number of preseason games exacerbated the delicate condition of the grass.²

Augmenting the disastrous December installation, Houston experienced cloudy conditions throughout the new year. The stadium limited the quality and duration of natural light. The optimal conditions for “sturdy growth” depended on at least twelve hours of natural light, especially from the UV, violet, and blue areas of the spectrum. The yellow and red regions spurred the shoot growth from seeds. The greatest amount of red and yellow wavelengths occurred during sunrise and sunset. This light could not enter the stadium. The more natural light the grass received, the sturdier it was. The artificial lighting system created an artificial photoperiod. The refraction or deflection of these wavelengths jeopardized heartiness and continual growth. Even though photosynthesis occurred in lower light levels, the grass became weak, frail, and unable to endure and rebound from heavy use. Similarly, in some areas, the light entering the stadium was more intense than natural light. These sprigs grew horizontally, not vertically. The grass in these areas experienced destruction of chlorophyll.³

Grounds superintendent George Myers gazed at the turf after the six-game exhibition and concluded that it did not fare well, especially around home plate and right field. “You can’t use the same amount of water as on the outside because you don’t have the sun, wind and air to dry it out,” Myers said. Continual watering, he continued would only result in a mud bog. Myers said that the amount he watered was “just enough to keep the moisture in the ground.” Despite its appearance, Myers maintained his optimism that the grass would

² Robert J. Minchew Collection, 94-274/16, Grass Research through December 1962 file; Beard, 133-142; “What a Wonder! What a Blunder!” *Life*, 23 April 1965, p. 78; Beard, 221-227, 235-239, 368-374, 524-529.

eventually thicken and thrive under the dome. Once the baseball team left for a road trip, the ground crew removed the bare areas and placed it with sod from the Wharton farm. Some of the turf was discarded, while the grass with live roots was returned to the farm to regrow it. The amount of use, asserted Myers, was atypical and greatly contributed to the rapid deterioration of the turf. The popular alternative that pundits debated was synthetic grass. Although a popular solution, it required more time to install than the HSA had available. Even though the baseball team was gone from the stadium for two weeks, removing the turf, pouring a concrete base, laying cables, and then replacing the dirt could not be completed in the time allowed. "It is unlikely they'll put in synthetic grass this year because they don't have time," Myers said. He paused and then looked around at his surroundings and replied, "Then again, nothing is impossible."⁴

Du Pont tried to determine the cause of the glare problem. They sent engineers to Houston to view the glare themselves while working on the enigma back in the lab in Wilmington, Delaware. The Du Pont group faced a difficult time schedule. They had to find a tenable solution before the Astros' first day game on 25 April, less than three weeks. Unfortunately for the Du Pont group, they failed to produce a solution that Hofheinz liked. Hofheinz said, "The duPont (sic) people had their shot at correcting the problem," but now he was "taking charge." He promised to those who would listen that he would come up with a solution before the first daytime game.⁵

Regardless of what Hofheinz's imaginative solution might be, there would be no glare problem during the 1966 baseball season. Instead of natural grass, a synthetic playing

³ "What a Wonder! What a Blunder!" *Life*, 23 April 1965, p. 78; Beard, 181-208.

⁴ Gallagher, "Growing Grass Beneath Dome As Easy as Catching Fly Ball," *Post*, 12 April 1965, sec. 3, p. 2.

surface, or "undertaker's grass" as Hofheinz labeled it, would be installed. Just two days after the grand opening, Hofheinz announced that "plastic grass" would replace the natural turf. Said Talbot Smith, "These synthetics are not in experimental stage because they've been on the market several years." Some of the companies vying for the contract included Minnesota Mining and Manufacturing of St. Paul, Minnesota (3M) and American Biltright Rubber's Boston Woven Hose and Rubber Division of Cambridge, MA. 3M's Floyd Dahlberg said that his company's product, Tartan, had been tested under football conditions in Seattle. The advantage of tartan was it could be shipped in pieces and installed in the stadium. A disadvantage from an aesthetics point of view was that it did not look like grass at all. Tartan Turf, a similar product, was tufted like natural grass but risked damage from the movable stands. Neo-turf, according to Charles Davis of American Biltright, on the other hand, was tufted but did not allow athletes to use spiked shoes. Neo-turf, manufactured in squares for installation, did not react well to a flame, which would damage it. Davis argued that Tartan was nearly impervious to fire. "It would take a blowtorch to discolor Tartan." Essentially, there was no difference between Tartan and natural grass. Tartan was installed for \$2 a square-foot and Neo-turf for \$1 a square-foot.⁶

After receiving thousands of letters and the disappointing visit from du Pont engineers, Hofheinz decided to paint the Lucite skylights. He said that several greenhouse operators suggested the painting of the skylights. A crew of ten painters began applying the first gallons of the "off-white shade" of acrylic paint on the outside roof of the dome on 20 April. The color closely approximated the color of the plastic skylights. "We're reasonably

⁵ "What a Wonder! What a Blunder!" *Life*, 23 April 1965, p. 78; "Small Flaw in Houston's Diamond," *Business Week*, 17 April 1965, p. 31.

certain this will stop the glare,” but still allow light, Hofheinz said at the press conference before the painters commenced painting. Hofheinz promised that this “permanent coating” would “make the dome glitter on the outside and glow on the inside” during evening events the “enhancing the stadium’s beauty.” Asked if the paint would guarantee the elimination of the glare, Hofheinz grinned and chimed, “It’s guaranteed to cover the dome.” These “shots of paint heard around the sports world” required three days and almost seven hundred gallons to completely apply to all 4,596 skylights. Hofheinz also said that the paint would reduce twenty-five to forty percent of the sunlight coming into the dome. Reducing the amount of sunlight most assuredly would harm the natural grass, but this did not concern Hofheinz. Publicity director Giles informed the press crew that the HSA was ready to either install an artificial surface to the areas most affected by dying grass or play the remaining games on a dirt playing surface. The HSA paid for the \$20,000 painting bill of the exterior side of the skylights because it was expected to be at least four to five times less than trying to cover the ceiling of the roof.⁷ Red Smith of the *Houston Post*, chimed in on the natural and ersatz grass conundrum. Smith did not have a problem with fake grass at all. “If baseball was going to be played under an artificial sky with artificial lighting in artificial temperatures, why bother the Almighty about furnishing grass when man could do it just as well, if not better?” wrote Red Smith.⁸

The glare and the poor quality of the natural grass, Dome defenders argued, should not cloud the greatness of the stadium. “One worm in the apple,” wrote Red Smith,

⁶ “Dome to Get Plastic Grass Next Season,” *Chronicle*, 11 April 1965, sec. 1, p. 1; Lundgren, “Will The Glare Question Be Answered This Week?,” *Post*, 19 April 1965, sec. 4, p. 1, 6; Ray, 307.

⁷ “Lundgren, “Top Of Dome To Get Paint,” *Post*, 20 April 1965, sec. 1, p. 1, 11; Peebles, “To Catch a Fly...Dome Gets Paint,” *Chronicle*, 20 April 1965, sec 1, p. 1; “Thousand Ideas, One Solution: 700-Gallon Paint Job on Dome,” *SN*, 1 May 1965, p. 24.

“shouldn’t obscure the fact that something truly revolutionary has been accomplished.” The Astrodome still provided what Hofheinz promised: perfect indoor conditions at all times, comfort, and sport. “Regardless of the conditions outside, the game will be played as scheduled and fans will watch in perfect comfort, relaxed on upholstered theater seats in a climate tailored to their taste,” Smith added.⁹ Professional baseball players echoed Smith’s gushing defense of the stadium. Pittsburgh Pirate reserve third baseman Gene Freese said, “This place is the greatest thing to come along since Noah’s Ark.” Pirate skipper Harry Walker echoed Freese’s sentiments. “Anybody who doesn’t like this place has to be nuts,” said Walker, “This park is the biggest thing that ever hit Texas. It might be the biggest thing to hit anyplace.” The paint job seemed to better the playing conditions. Rusty Staub said that the paint eliminated the glare. “It’s a whole lot easier to see the ball,” declared Staub although he tempered his delight with a cautionary observation. “Following the ball is still a little rugged,” he added, warning other fielders to be diligent when trying to catch the baseball.¹⁰

The Astrodome was comfortably billed as the means for man to overcome Houston’s weather, once and for all. Regardless of the event held, Hofheinz said, the conditions as well as the creature comforts were guaranteed inside the stadium. “When it’s raining and miserable in New Orleans to El Paso and from Amarillo to the Rio Grande Valley people are going to say ‘Let’s get away from all this drudgery, let’s go on up to the dome’” to see a ball game or some other event. These travelers, Hofheinz argued, wanted to be pampered and

⁸ Red Smith, “Plastic Grass and Aida,” *Post*, 23 April 1965, sec. 4, p. 5.

⁹ Smith, “Despite Flaw, Dome Is Revolutionary,” *Post*, 12 April 1965, sec. 3, p. 8.

¹⁰ Lundgren, “Dome Glare Doomed,” *Post*, 23 April 1965, sec. 4, p. 1, 2.

experience fine dining and see an event "on the upholstered seats."¹¹ "Up to now baseball has been a fair-weather game," Hofheinz proclaimed, "We expect to do our biggest business on week ends when the weather is bad." He continued, "When it rains people won't fish or swim or go boating, play golf or tennis or take a drive. They'll get in their car and come to the ball park."¹² The perfect place for baseball, eliminating rain outs, gale force winds, oppressive humidity, and Hades-like heat. First it was the glare. A problem, not unforeseen, but still a chink in the Astrodome's mighty armor. Then an even more embarrassing fault emerged.

In the middle of a seven-game losing skid, the Astros faced the Dodgers Tuesday evening, May 18. Earlier that day, a steady and heavy downpour fell all across the Houston area. The rain would not affect the evening ballgame, thanks to the weather-proof stadium. But as the amount of rain increased during the day, several areas throughout the stadium began to experience moisture leaking from the roof. Quickly and efficiently, stadium workers covered the seats under the leaks and two locations on the playing surface. Astros publicity guru Bill Giles said that the leaks were not a "major problem" and were actually "expected" by the HSA. Giles reminded everyone that the roof leaked before the grand opening, only to be stopped. These new leaks, according to Giles, were the result of the roof painting. With the number of painters and the nature of their movements, Giles speculated that they must have jarred a few skylights loose from their aluminum frames. When the weather cleared, Giles promised that all the leaks would be stopped, ensuring no more rain inside the Astrodome.¹³

¹¹ Lipsyte, "Hofheinz Says Yanks Will Be Awed in Game Tomorrow," p. 50.

¹² Smith, "Bad Weather a Dome Crowd Booster," *Post*, 16 February 1965, sec. 4, p. 4.

¹³ Mike Clark, "Suffering Cats! It Rained in the Dome," *Post*, 19 May 1965, sec. 1, p. 1.

Charles Fritts of Socony Paint Products Company ventured to the roof to survey the structural steel support beams. To his dismay, Fritts observed several areas of rust on the beams and bolts, some an eighth of an inch thick. Fritts judged that the initial coats of protective paint had failed miserably. Fritts fingered the hard and brittle paint, chipping it away from the steel. The rust seemed to be progressing under the paint, further damaging the steel. Fritts speculated that the steel was not wire brushed to remove scaling as had been reported. He recommended that workers return to the roof, remove “rust, dirt, and loose paint,” then prime, and repaint the steel. The HSA eventually had the surface cleaned and repainted.¹⁴

Talbot Smith wanted the roof leaks repaired once and for all. Smith tired of receiving notifications of “so many leaks on movable stands and the playing field itself” and worried that the HSA would have to cancel an event.¹⁵ Louis O. Bass of Roof Structures, Bill Glaze of Walter P. Moore, Roger McDonnell from the HSA, and Robert J. Minchew representing the Architects walked on the roof to visually inspect its condition. Bass and Glaze warned that inaction would be disastrous to the stadium. The first remedy was to clean plugged weep holes in the skylights, which could be a source of water buildup and leakage. Second, remove all rust and scaling apparent in the roof and exposed interior structural steel. Third, repaint the steel lamella roof and the interior steel to prevent further corrosion. Preventative action was critical this early in the stadium’s history. Inaction could prove deadly. “Within five

¹⁴ Charles J. Fritts to Paul Knobloch of Tex-Kote, Inc. (11/10/65), Talbot M. Smith to Architects (11/30/65), Paul Knobloch to HSA (11/17/65), Minchew Collection, 94-274/8 Legal Documents and Notes, 1964-1971.

¹⁵ Talbot M. Smith to Architects (10/2/65), Minchew Collection 94-274/5, Harris County Domed Stadium Construction Correspondence, file #28, September-October 1965.

years too much damage” would occur and result in “extensive repair and replacement,” according to Bass and Glaze.¹⁶

After another rain, the roof leaked again. This time J. R. Watson of Roof Decking, Inc. climbed to the top of the dome to determine where the water could be leaking into the stadium. Watson discovered six holes, in particular, in several horizontal joints where the neogard coating failed. In Watson’s estimation, the holes were created during other roof repair efforts and exacerbated the stresses from expansion. Water entered through the holes and coagulated between the neoprene and the butyl sheet. Watson opined that the materials failed, not the work of the roofers.¹⁷

Minchew performed his own inspection of the skylight. He agreed that by all outward appearances it seemed undamaged. After closer scrutiny, however, Minchew discovered something more ominous. The plastic panels had come free along the entire length of the metal frame. He then removed the skylight’s screws to determine the extent of the damage. The vinyl gasket that was suppose to seal the metal frame and the plastic panel, he reported, “had been displaced along the majority of the long dimension of the frame.” A detached gasket eliminated the watertight seal and allow the entrance of moisture. This would not matter if the amount of moisture was little. The torrential downpours that plagued Houston, however, would quickly expose the failed seal. Minchew immediately rejected the skylight and asked that the screw be placed closer to each other in the new skylight design. Two tests,

¹⁶ S. I. Morris to Richard P. Doss (12/6/65), Minchew Collection 94-274/5, Harris County Domed Stadium Construction Correspondence, file #30, December 1965; S. I. Morris to Farnsworth (2/11/66), Minchew Collection 94-274/7, Depositions, Insurance Reports, Construction Reports, Correspondence, 1961-1973 file.

¹⁷ J. R. Watson to LD (4/15/66), Minchew Collection 94-274/9, Recommendations for Completion, 1966 file; J. R. Watson to The Neogard Corporation (4/29/66), Minchew Collection 94-274/14, Drawings of Roof Structures, Houston Astrodome, 1973 file.

and two designs later, they came up with a design that seemed to work. Minchew gave the go-ahead after the successful dead load experiment and water leakage test.¹⁸

Farnsworth performed his separate investigation. He concluded that there was not one simple reason for the leaks. A source of some leakage was the skylight's outer plastic dome. Under heavy rainfall, the size and number of weep holes could not handle the amount of water. Water settled in the collection gutter and eventually spilled over the interior frame. The water then spilled over the skylight's interior frame and into the stadium. "The top plastic of the skylight," he opined, "was not designed to be waterproof sealed against the retaining angle and great quantities of water can enter the trough at this point." All previous stop-gap measures did not work. Farnsworth prescribed a coat of neoprene for every skylight frame on entire roof. But, others reported that the hypalon coating and rubber stripping foundered, allowing the leaks.¹⁹

The off-white paint seemed to work until Astro outfielder Jim "The Toy Cannon" Wynn lost a routine fly ball that resulted in a three-run home run for the visiting Giants. "I saw the ball as it left the bat, but never after that," lamented Wynn. Wynn's misplay was blamed for the Astros' 5-2 defeat. Instead of focusing on Wynn's error, the roof again foisted the blame. (Wynn also misplayed a routine fly ball the previous day that resulted in a three-base hit.) Giant outfield Jesus Alou also lost a fly ball during the game. Alou, however, shouldered the responsibility for missing the catch. "I took my eye 'out' of the ball," he said

¹⁸ Robert J. Minchew to I. B. Weathers, (10/31/63), Minchew Collection 94-274/8, Skylight Correspondence, 1961, 1975 file; V. S. Skinner and R. C. Hudson to Architects (11/8/63), (11/21/63), Minchew Collection 94-274/8, Skylight Correspondence, 1961, 1975 file; Robert J. Minchew to Eyster (5/5/64), Minchew Collection 94-274/8, Skylight Correspondence, 1961, 1975 file..

¹⁹ Farnsworth to Architects (10/27/65), Minchew Collection 94-274/8, Legal Documents and Notes, 1964-1971; Robert Minchew Summary of Meeting (8/23/66), Minchew Collection 94-274/5, Harris County Domed Stadium Construction Correspondence, file #31, January-April 1966.

as he tried to locate teammate Willie McCovey playing first base. When he tried to relocate the baseball, he said he could not find it before it hit the turf. Astros general manager Paul Richards, Hofheinz assistant Tal Smith, two coaches, and three players met on the field after the loss to determine some way to handle the glare. After coach Jim Busby hit fly balls to the players, Smith suggested another coat of paint for two sections of skylights above the home plate area of the roof. "This one will have to be darker than the off-white we used before, probably green, blue, or black," he said.²⁰

The weekend the Giants were in town, rain fell almost continually from Friday to Sunday. The Dome permitted all four games to proceed, sheltering 130,514 spectators to watch the games. "It isn't stretching things too far to say that the Dome meant 130,000 paid admissions to the Astros and the Giants: paid admissions that would have been lost to the weather without the Dome."²¹ Before the bond elections, stadium boosters most often cited the economic boom the stadium would most certainly have upon the city. The stadium, they argued, would pull hundreds of thousands of tourists, and their money, to Houston. In addition to the mere tourism dollars, the stadium would also attract industry and other large firms seeking a national headquarters. Although the stadium did bring more spectators through its turnstiles for the Astros, other economic benefits it brought were harder to assess.

Restaurant and night club managers attested to an unforeseen negative economic impact of baseball and the stadium. Even though a night baseball game at the Dome could mean more money for motels and clothing stores, it could have an opposite effect on local restaurants, bowling lanes and night clubs. Local restaurant owner Ray West reported that his

²⁰ Lundgren, "Ah-Oh, Glare In Dome Again," *Post*, 24 May 1965, sec. 4, p. 1, 4.

²¹ Nealon?? *Post*, 28 April 1965, sec. 3, p. 2.

establishment the “Old Hickory Stick” lost anywhere from \$200 to \$400 every day of an Astros homestand. “I would rather see horse racing instead of baseball,” he said, because horse racing “would bring in people who would spend money.” Sonny Look who also owned a restaurant said that he lost \$250 a day. But unlike West, Look said that in the long run, the Dome would be the best for the city economically. George J. Lewis of “Ye Olde College Inn” complained that baseball spectators were eating at the stadium and would not need a restaurant after the game. One night club owner said that the length of the game determined baseball’s effect. The longer a baseball game, the argument went, a night club would experience reduced amount of business and after a shorter game, baseball fans would patronize the club.²²

In the face of mounting problems, the glare, the dying grass, and the leaking roof the people of Houston could not point to the Astrodome as the city’s preeminent shining star. The money that cost over \$30 million seemed to be a giant failure. The stadium was not perfect despite the tens of millions of tax backed dollars poured into it and despite the boasts of Hofheinz. Whatever good graces and enthusiasm Hofheinz earned for his stadium, evaporated amidst a personal squabble with R. E. Smith. The team that created the Astrodome was no longer. The two former business associates and friends went their separate ways just after the paint on the roof began to dry. Although Smith and Hofheinz kept the squabble out of the newspapers, *Post* sports writer Mickey Herskowitz reported that Smith grew more and more upset with Hofheinz’s “autocratic” ways over the baseball team and Hofheinz’s boorish people skills. Smith owned 63% of the HSA’s stock and Hofheinz controlled 33%. Hofheinz had ninety days to purchase all but 10% of Smith’s stock at a cost

²² Gerald Egger, “How Dome Affects Houston Business,” *Post*, 5 June 1965, sec. 1, p. 1, 5.

of \$7 million. If Hofheinz failed, Smith promised to remain and take a greater role in operation of the baseball team.²³

With Hofheinz searching for the means to buy out Smith, Oilers owner Bud Adams announced that his Oilers would not play its home games under the Dome as had been previously believed. Instead, Adams moved from the high school facility Jeppeson Stadium to Rice Stadium. Disagreement over several aspects in the lease arrangement resulted in the rift between the two parties. Adams charged that the rent Smith demanded was not only exorbitant, but unfair. “The lease was to be renegotiated every year,” said Adams, which meant that the HSA could alter the terms every year if it wanted. The HSA was to blame, asserted Adams, not the Oiler owner. “Before I’d sign the Oilers’ life away, I’d have sold them or moved the franchise to another city,” brayed an upset Adams. Hofheinz expressed his “surprise and disappointment” over Adams’s decision. Hofheinz had hoped that the Oilers would call the Astrodome their home for years to come. Without the AFL Oilers, Hofheinz promised to look for a professional football team from the NFL. Hofheinz would have to lure an established franchise to Houston. Adams expressed his lack of concern for such a measure. “I say let ‘em move,” he said, “They’ll find the Domed Stadium is the eighth wonder of the world, but at the same time they’ll find Hofheinz’s terms as the ninth wonder of the world.”²⁴

Gallagher viewed Adams’ decisions as bad for Harris County taxpayers. Hofheinz’s “unreasonable rental demands” pressured Adams to search for a new home and sign a lease with Rice University. County residents, he continued, were plain and simply “duped” by

²³ Herskowitz, “Picture Begins To Take Shape On Smith-Hofheinz Transaction,” *Post*, 23 May 1965, sec. 4, p. 4; Ralph Dodd, “Smith and Hofheinz—How Serious the Rift?” *Post*, 6 June 1965, sec. 4, p. 11.

Hofheinz. Hofheinz persuaded the voters to pass the bond issue because he promised both professional football and baseball teams playing under the domed stadium. Gallagher even stated that if voters had the chance to vote again on the bond issue, “it would probably lose because of the highhanded, autocratic tactics of Roy Hofheinz.”²⁵ Bud Adams announced, “Mr. Hofheinz is the reason, the only reason, we will be playing our games at Rice Stadium.”²⁶

Hofheinz refused to be labeled as the bad guy by Adams and the Houston media. He called a press conference to explain his position in the Oilers contract dispute. Before he left for Montreal, Hofheinz believed he had an agreement with Adams. He learned of Adams’s decision only after he arrived in Montreal. The real reason for Adams’s decision, according to Hofheinz, was financial. Rice University charged a ten percent rental of the gross receipts versus seventeen-and-one-half percent of the HSA. A ten percent rent for 70,000 seats meant that Adams stood to make more money using the Rice facility. If Adams had a problem with the rental amount, Hofheinz said that he never heard it from Adams. “The American Football League had agreed that 17 1/2 per cent was a fair rental,” Hofheinz charged, “and it had made allowances in Bud’s contract (with the visiting teams) to take this off the top.” So not only was Adams shorting the HSA and the people of Houston, but fellow owners in the AFL.²⁷

One interested Houstonian wrote an editorial to the *Post* absolving Bud Adams in the contract dispute with Hofheinz. Adams just wanted a top-notch facility for his players and his

²⁴ Gallagher, “Oilers Will Play Games in Rice Stadium,” *Post*, 5 June 1965, sec. 1, p. 1, 2; Herskowitz, “Houston, Dome Wide Open to NFL,” *Post*, 5 June 1965, sec. 4, p. 1, 3.

²⁵ Gallagher, “Harris County Taxpayers Suffer In Switch From Dome to Rice,” *Post*, 5 June 1965, sec. 4, p. 2.

²⁶ Herskowitz, “Judge Failed To Act In Good Faith, Adams Says,” *Post*, 11 June 1965, sec. 1, p. 1, 4.

fans, but ran into the stubborn Hofheinz. The Oilers occupying the Astrodome was beneficial for all of Houston. The rent Adams paid to the HSA would be used to amortize the yearly rent. Every rental check Hofheinz gave to the County assured that the people of Houston would not be saddled with the debt. Without a major tenant like the Oilers, the HSA's ability to make its rent seemed precarious. Hofheinz's actions betrayed the promise that the stadium was owned by Harris County with the HSA merely renting and operating the facility. "Roy Hofheinz must think he owns the Harris County Domed Stadium," wrote A. L. Stahl. It was "no wonder," continued Stahl, that Bob Smith renounced his partnership with the "greedy and selfish" Hofheinz and Bud Adams ended contract negotiations.²⁸

Sports reporter Clark Nealon, although no close friend with Hofheinz, ardently supported the stadium and other vestiges of professional athletics in Houston. Clark echoed the public's concern with Hofheinz's seeming inability to cooperate with anyone. Clark pledged his support of the stadium, he averred, based upon the "combination" of Smith, Hofheinz, the Astros, and the Oilers, "not complete control to any one man." As a result of Hofheinz's mishandling of just about every facet of stadium operation that required cooperation and understanding, "a battleground of personalities" revolved around Hofheinz. "Hofheinz has extended his individual and public relations losing streak which helped cause and had its first major blow in the rift with Smith," according to Nealon, while "Adams ran out of patience and bolted to take away a major source of some revenue and Rice was willing to provide the Oilers a haven." Maybe the pressure of paying the yearly rent was getting to Hofheinz. Maybe he wanted an NFL team as a tenant of the stadium and not the Oilers of the

²⁷ Herskowitz, "Judge Appeals Dome Rent Case to Public," *Post*, 10 June 1965, sec. 1, p. 1, 9; Herskowitz, "Hofheinz-Adams: Blow by Blow," *Post*, 10 June 1965, sec. 5, p. 1, 4.

third-rate AFL. But whatever the reason, the truth of the situation was that Hofheinz's actions seriously damaged the reputation of Houston, continued Nealon. But more importantly was the dictatorial control of the HSA by Hofheinz who continued to amass more authority and power of the syndicate. "There is a major departure from the premise of the election, and personalities, however strong, seem to be more important than responsibility." The notion of the stadium as a boom to Houston was undergoing rapid transformation. A facility for the entire community had been commandeered by a lone tyrant who not only lived in stadium but considered it his own property and personal fiefdom.²⁹

Hofheinz promised to exercise the option and purchase Smith's HSA stock. At the scheduled HSA board meeting on August 3, Hofheinz would officially take control of the syndicate. "I obviously couldn't exercise the option unless I had the money or knew I had it," he told reporters. Once completed Hofheinz would own 86 percent of the HSA, Smith 10 percent, George Kirksey 2 percent, and 1 percent owned by Earl Allen and John Beck each. Other than these minor stockholders, Hofheinz would not have anyone else as a "partner." "I think a baseball club can best serve its area interests if it owned by aggressive, full-time local people," Hofheinz announced. Hofheinz did not say one local person should shoulder all the responsibility, but that was what he desired.³⁰

During the meeting held in the Astrodome, Smith formally resigned as the HSA chairman of the board. Once the meeting was completed and Hofheinz became the sole man of power, Smith vented to the public and blasted his former business associate. "This business about us being friends is not true, not true at all," professed Smith. "I'm unhappy

²⁸ "Sound-Off," *Post*, 11 June 1965, sec. 3, p. 3.

²⁹ Nealon, "Post Time," *Post*, 18 June 1965, sec. 4, p. 4; Nealon, "Post Time," *Post*, 4 August 1965, sec 4, p. 1.

with every arrangement I've had with him. There is no such thing as a friendly relationship with him," he continued, "He's too autocratic." Smith retained ten percent of his HSA stock and quipped that that amount gave him the same clout when he was chairman of the board: none. Smith guaranteed that all other partnerships he had with Hofheinz were to be dissolved immediately. At his press conference, Hofheinz beamed, "I am pleased to announce that we have completed the transaction by which I have acquired 86 per cent of the stock in the Houston Sports Association." Hofheinz acquired the money to purchase Smith's stock from the Houston Bank and Trust Company. Immediately on the horizon for Hofheinz was the lease payment of \$750,000. He wanted to dispel any ideas that he did not have enough money left to pay the year's rent. "The money's already in the bank and the payment will be made," assured Hofheinz.³¹

The many disagreements that appeared between Hofheinz and his one time partners signaled the beginning of the end for the optimism of the Dome. As Nealon put it, "The Harris County Domed Stadium (notice that he failed to use the Hofheinz colloquialism of Astrodome) premise has strayed far afield from what was voted on by citizens in the bond elections to finance the structure and grant a lease to the Houston Sports Association." Nealon did not pretend to understand the rift between the one-time partners, but the animosity between Hofheinz and Adams could prove disastrous. "Whatever the reasons between Hofheinz and Adams, one basis was that the Astros and the Oilers would be tenants to help assure a return to pay off the general obligation bonds," continued Nealon, "Now the rift between Hofheinz and Smith...further distorts the original stadium picture. The

³⁰ "Roy Says He'll Buy Smith Stock," *Post*, 25 July 1965, sec. 1, p. 1; "Roy's Takeover Set for Tuesday," *Post*, 1 August 1965, sec. 1, p. 1.

combination of Hofheinz's accepted business acumen and Smith's immense wealth, responsibility and civic enthusiasm was another fundamental reason that many voters approved the bonds, \$31,600,000 of them."³²

Hofheinz escaped the increasing bitterness and traveled to Chicago to meet officials of the American Football Coaches Association to offer the Dome as the site for an all-star football game. He also wanted to establish a relationship with NFL commissioner Pete Rozelle for the purpose of landing a future franchise for Houston and the Dome.³³ Rozelle then decided to go to Houston to meet with Hofheinz, watch a baseball game, and inspect the Dome. Rozelle informed Hofheinz that NFL policy banned an owner from controlling more than one professional sports franchise. Rozelle agreed with the policy when he said, "The primary business purpose of a pro football owner is football, and he can't do that if he's devoting full time to baseball." Hofheinz responded that his primary interest was getting a football tenant for the stadium although he did not rule out the possibility of becoming a minority owner. Now that Hofheinz could not count on the deep pockets of R. E. Smith nor the rental fee from Bud Adams, the search for a major tenant became even more important.³⁴

Without the Oilers occupying the stadium, Hofheinz came up with an event never seen before in Houston, a bloodless bullfight. This ploy, in addition to generate more revenue for the HSA, brought Hofheinz more publicity. The State of Texas, arguing that this type of event violated state law, sued the HSA to prohibit the bullfight. The 1895 law outlawed holding, showing, and participating in "a fight between a man and a bull." HSA attorney David Searls argued that the bloodless Portuguese-style bullfighting would not technically be

³¹ "Judge Too 'Autocratic' for Friendship, Smith Says," *Post*, 4 August 1965, sec. 1, p. 1, 20.

³² Nealon, "Post Time," *Post*, 4 August 1965, sec. 4, p. 1.

a fight between man and bull. Instead, the matador would only attempt to “entice” the bull to charge at the red cape, much akin to a rodeo clown. State Attorney General Waggoner Carr rebutted Searls’s reasoning, positing that it did not take the killing of a bull to necessitate a fight. “This has been advertised as a bullfight,” said Carr, “the statue says it is illegal to have a fight between a man and a bull.” Carr, who would not appeal the decision, must have determined the case was important enough to personally try it himself.³⁵ Hofheinz always in search for another way to generate revenue looked to the newly formed North American Soccer League (NASL). Hofheinz, not the HSA, received the franchise after he personally invested \$25,000. Hofheinz was confident that soccer would take off in Houston and the rest of the US. “I think that in a few years soccer will be one of the top four sports in the county,” he proclaimed, but only through “time, effort, and the proper promotion.” The eleven-team league was scheduled to start in 1968.³⁶

Even though the Oilers did not call the Astrodome their home, the University of Houston Cougars still did. On 11 September, the Cougars played the University of Tulsa Golden Hurricane in the first collegiate football game under the Dome. NBC televised the game, paying \$300,000 for the rights to broadcast it. The Golden Hurricane defeated the Cougars, 14-0, and the story was the low score. One possibility was the condition of the playing surface. Tulsa player Howard Twilley said, “The field was terrible. Like playing on rock.” The other possibility was the players unfamiliarity with the stadium. Twilley complained that the skylights distracted a receiver from catching the football. These were

³³ Gallagher, “Hofheinz Shopping in Chicago for NFL Team,” *Post*, 6 August 1965, sec. 1, p. 1.

³⁴ Gallagher, “NFL Policy Bans Roy as Club Owner,” *Post*, 10 August 1965, sec. 4, p. 1, 2.

³⁵ Molly Sinclair, “Bullfight Here Gets Court OK,” *Post*, 1 February 1966, sec. 1, p. 1, 6.

³⁶ “Houston, Judge Put Foot in It,” *Post*, 24 August 1966, sec. 4, p. 1; Nealon, “Post Time,” *Post*, 26 August 1966, sec. 4, p. 1.

fixable problems, however. His coach, Glenn Dobbs, agreed with his star of the game. “Any flaws are so minor that I predict conditions will be absolutely perfect when next football season opens.” The HSA, to assure the image of perfection inside the stadium, had to cover large areas of the field with a “green sweeping compound” to make it look like grass for the television audience. Other discolored sections received a coat of green paint.³⁷

Financially, Hofheinz faced an unwelcome and unexpected tax bill. The HSA received notification that it would have to pay the full tax bill of Colt Stadium. Additionally, the special contract between the HSA and Lott-Drake neared its expiration on 15 March. This special contract stipulated that Lott-Drake repair any defects with the stadium. Hofheinz claimed that the HSA faced at least a \$500,000 bill to repairs these “defects.” Hofheinz asked for reimbursement for the improvements and repairs made to the roof the previous summer. He sent a letter to Lott-Drake, its bonding companies, and the county engineer demanding action on these problems. Hofheinz listed the extensive and intrinsic “defects” that remained as well as those that the HSA was forced to fix. Hofheinz “demanded” that every defect from the leaking and rusting roof to cracks in walls and floors “be corrected” and the stadium “be completed to specification without further delay.” In addition to those defects, Hofheinz “demanded” compensation from Harris County and Lott-Drake “for all costs and expenses incurred” to complete and repair the stadium. He also met with the members of the Commissioners Court to personally demand satisfaction. Hofheinz, however, found an unsympathetic Commissioners Court. Judge Bill Elliott, Phil Sayers, and E. A. Lyons all scoffed at Hofheinz’s request. The Court simply refused to become entangled in the latest

³⁷ Hollis, “Hurricane Watch at Dome: UH vs Tulsa,” *Post*, 11 September 1965, sec. 1, p. 1, 4; Lundgren, “Tulsa at Home in Dome,” *Post*, 12 September 1965, sec. 5, p. 4; “Pitcher’s Mound Gone, But Tulsa Still Threw a

Hofheinz skirmish. “He’s in the Dome, and it’s up to him to make changes that are not defects,” the Court announced. None of the this concerned the County, they agreed. The HSA, as stipulated in the contract, was responsible for all improvements to the stadium. Hofheinz, however, argued that since the stadium was still unfinished, the County was legally bound to completely bring construction to an end.³⁸

A man of his word, Hofheinz confirmed that synthetic grass would be installed in the stadium for the 1966 baseball season. The first artificial grass surface was installed in 1964 at Moses Brown School in Providence, Rhode Island. Developed by Chemstrand, a division of Monsanto,³⁹ this “Chemgrass” was one of the earliest entries to replace the natural grass inside the Astrodome.⁴⁰ Besides Monsanto, 3M had a version of artificial grass called Tartan Turf. The main difference between the Monsanto and 3M synthetic surfaces revolved around installation. To prepare the surface for Tartan, workers began with a twelve inch layer of compacted and leveled soil. On top of the soil was six inches of gravel, then an inch and one-half of asphalt. The “shock-absorbing pad” was poured directly onto the asphalt surface.

Shutout.” *Post*, 12 September 1965, sec. 5, p. 4.

³⁸ Sinclair, “\$500,000 Dome Job Demanded,” *Post*, 1 March 1966, sec. 1, p. 1, 5; “Hofheinz Dome Demands Given Cool Reception,” *Chronicle*, 1 March 1966, sec. 1, p. 1.

³⁹ Monsanto ventured into the world of synthetic fibers in 1949 after allying with the American Viscose Corporation. The joint venture resulted in a new company called Chemstrand. Monsanto provided the chemical know-how and Viscose lent its experience with the fibers to the venture. Chemstrand’s goal was to make inroads in the burgeoning man-made fiber market. Du Pont held a substantial lead in the research and development of synthetic fibers that began in the late 1920s and resulted in nylon. By the time Viscose dissolved its relationship with Monsanto in January 1961, Chemstrand experimented with nylon (after Monsanto entered into a financial agreement with Du Pont to manufacture the resin in 1951) and its own Acrilan acrylic fibers for carpets. In addition to standard carpets, Chemstrand worked on a means for a synthetic turf. The usual fibers used for carpets proved as unworkable material for synthetic turf due to its inability to shirk water and promote drainage. The new and improved synthetic turf could be fabricated to meet the demanding conditions for outdoor use. The heavier “ribbonlike pile” could resist water, promote drainage, and provide a uniform surface in color and conditions. See Dan J. Forrestal, *Faith, Hope, and \$5000: The Story of Monsanto* (New York: Simon and Schuster, 1977), 121-134, 207-280; Jeffrey L. Meikle, *American Plastics: A Cultural History* (New Brunswick, New Jersey: Rutgers university Press, 1995), 125-152.

⁴⁰ Chauncey A. Morehouse and William E. Morrison, *The Artificial Turf Story: A Research Review* (College of Health, Physical Education, and Recreation: The Pennsylvania State University, 1975), 1.

Then the Tartan was directly bonded to the wet pad. Monsanto's AstroTurf had a similar base of dirt, gravel, and asphalt. The difference was that the AstroTurf was a removable rug. The half-inch Nylon monofilament, woven into a polyester base, was folded down and secured to a wood cleat bolted to a reinforced concrete anchor. Hofheinz eventually selected Chemstrand's grass in large part because Hofheinz experimented with it at Colt Stadium.⁴¹

The first installation phase would be for the infield and foul territories of the playing surface. The outfield would be converted later in the baseball season, but only if the artificial surface performed well. "If the AstroTurf works out as well as we anticipate, we plan to have the entire field converted midseason," declared Hofheinz. This "AstroTurf," developed by Chemstrand, Inc., a division of Monsanto, promised to be more durable than natural grass and allow for quicker and cleaner conversion because it was developed especially for golf courses. Robert E. Smith of Chemstrand promised that the AstroTurf would easily resist moisture and mildew while providing similar, if not better, playing conditions than natural grass. HSA director of publicity Warren Giles observed that up close the synthetic grass looked like "a green hairbrush with bristles extremely close" but at a distance it resembled a lush, green carpet. A January experiment that included Astros fielders demonstrated that the synthetic surface was more than adequate for a light practice. Ball players said that baseballs bounced and rolled normally and their footing was fine. Only Rusty Staub remained guarded in his enthusiasm. "It's got to be better than our field last year," said Staub. Always optimistic, Hofheinz concurred with his red-headed outfielder. "With the installation of

⁴¹ William Johnson, "Goodby (sic) to Three Yards and a Cloud of Dust," *Sports Illustrated*, 30 (27 January 1969), 38. [37-39]; H. R. Whitaker, "Magic carpet for all outdoors," *Science Digest*, 66 (July 1969) 33-37; "Great—Phony—Outdoors," *Newsweek*, (30 May 1966), 92; "Mod Sod," *Time*, 89 (12 May 1967), 57; John Carew, "Synthetic Grass," *Horticulture*, 48 (January 1970), 38; Ray, 343-344.

Astroturf, we will have eliminated the last pitfall in conjunction with the stadium,” guaranteed Smith.⁴²

The HSA installed the Astroturf before the Astros’ first exhibition games in the Astrodome in 1966. The Astros’ faced the world champion Los Angeles Dodgers minus three all-stars: Sandy Koufax, Don Drysdale, and Maury Wills, each of whom was in the middle of contract renegotiations and would not be in uniform. *Chronicle* sports editor Peebles poked fun at the timing of Hofheinz’s Astroturf decision. According to Peebles, Hofheinz decided to install the artificial grass to keep the stadium packed with inquisitive fans that wanted to see the artificial turf in addition to the Dodgers.⁴³

The synthetic grass received favorable reviews after the first exhibition game. Wes Parker, Dodgers’ first baseman, said, “This used to be the worst infield in the majors. Now it’s only the dirt here in the Dome (that was the worst).” Parker’s teammate, Nate Oliver agreed and said that the artificial turf was a definite improvement over the previous natural grass. The only problem the fielders reported was that the dirt underneath the surface needed to be firmer before the season began.⁴⁴ After viewing the surface, one reporter commented, “The infield looked and felt like a billiard table.” “They came at us with this stuff. They asked us what we needed and we gave them about 20 specifications. They fulfilled every one of them,” said Hofheinz. “Let’s face it, they had to pick the Dome as the first place for artificial grass. This was the only showcase. By tomorrow every person in Houston is going

⁴² “Dome Will Get Artificial Grass,” *Chronicle*, 13 March 1966, sec. 1, p. 1, 20; John Wilson, “Astrodome Switching to Synthetic Grass,” *SN*, 26 March 1966, p. 23.

⁴³ Peebles, “Voice of the Peebles,” *Chronicle*, 14 March 1966, sec. 2, p. 1, 3.

⁴⁴ Twombly, “Old Pros Love That Astroturf,” *Chronicle*, 20 March 1966, sec. 1, p. 1, 15.

to start thinking about using this stuff for his back yard. In another few years, all the outdoor stadiums will have the same thing on their playing fields," boasted Hofheinz.⁴⁵

Before the first test of the Astroturf, Hofheinz fielded reporters' questions regarding the fake grass. At the conclusion of the press conference, he then invited them to walk around on the Astroturf, kick at it, poke it, pull it, and judge for themselves the nylon's durability. The press then watched as Astros infielders performed a short practice. Bob Aspromonte, one of the fielders who tested the turf in January, again participated. The Astros third baseman said, "The ball came off much faster this time" and blamed a harder dirt base. Unlike the January test, the stiff subsurface added some "zip" to grounders that was not there previously. Although Aspromonte remained certain that fielders would eventually "get used to it," the bigger problem would be the footing on the turf. Aspromonte said that when he directly charged the ball, he had good footing. But if he moved laterally left or right, his cleats slipped. The uneasy footing, he said, might require a new type of shoe with rubber stubs and sides to lessen the amount of sliding. Until this shoe arrived, baseball players would still use their cleats and try to eliminate the amount of slipping on the turf.⁴⁶

During the exhibition game, the Astros and the Dodgers committed a total of five errors. The fake grass could be blamed for two of the miscues, and should have been credited for another. At the bottom of the first inning, Dodgers first baseman Wes Parker misjudged a sharp groundball off of the bat of Joe Morgan and was credited with an error. In the fourth inning, Parker again was the center of attention. He failed to glove a ground ball hit right at him. The ball sped under Parker's glove, but fortunately for Parker, he was not given an error

⁴⁵ Twombly, "The Grass Is Fake," *Chronicle*, 20 March 1966, sec. 6, p. 3.

⁴⁶ Chuck Myers, "Problems With Dome's Toupee?" *Post*, 20 March 1966, sec. 2, p. 1, 8.

by the official scorer. The next batter, catcher John Bateman, hit a grounder to second baseman Nate Oliver. Oliver could not get his glove on it and received an error.⁴⁷

Natural grass, painted green to disguise its sickly appearance, remained in the outfield. Hofheinz promised that the outfield would get Astroturf on 10 June. The turf arrived at the stadium in twelve-foot-wide strips, which were connected, via zippers. The dimensions of the turf was quarter-inch stiff base with a layer of nylon strands nine-sixteenths of inch long. Trenches eighteen-inches deep were dug. Workers placed a “floor” of two-by-fours, imbedded with hooks placed on springs inside trench. The borders of the “Astorug” were folded into the trenches and tied to the series of springs. The turf would remain taut due to the continuous tension of the springs. Players' spike shoes could not reach the base of the rug. The strips were placed from third base across the diamond to first base. This meant that the grain of ersatz grass was also laid crosswise, reducing the effect of the grain on the spin and roll of a baseball. Hofheinz asserted that the artificial grass would reduce operation costs by eliminating the \$4,000 to \$5,000 cost to convert the playing surface for other events and ending the watering, fertilizing, mowing, and other maintenance of the grass each year.⁴⁸

The performance of the Astroturf remained at the mercy of its dirt base. Bob Aspromonte and Joe Morgan agreed that softening the underlying dirt would only improve the fake grass. “If they’ll fix the dirt the grass will be better,” said Morgan who railed against the dirt. “The dirt was lousy last year and it’s lousy this year,” he said. “Soft in one place, hard in another.”⁴⁹ Like the other playing conditions under the dome, the Astroturf would be an equalizer. No longer could the home team’s groundskeeper “doctor” the infield to benefit

⁴⁷ Nealon, “New Infield—But Same Old Astros,” *Post*, 20 March 1966, sec 2, p. 1, 8.

⁴⁸ Red Smith, “Wall-to-Wall Baseball,” *Post*, 21 March 1966, sec. 4, p. 5.

the home team and hinder the visitors.⁵⁰ The HSA listened to the opinions of its players and began working on the dirt base. The HSA wanted to soften the dirt in an attempt to decrease the speed and lessen the bounce of a ground ball. Joe Morgan said that the alterations did make a difference in the velocity of a baseball across the Astroturf.⁵¹

Hofheinz purchased George Kirksey's HSA stock in May 1966. Kirksey ended his almost six year association with the HSA on friendly terms so that he could take a much desired vacation. Kirksey, a long time champion to bring major league baseball to Houston, said, "I was standing on the corner of Main and Texas in 1951. Bob Smith came along and I told him that the Philadelphia Athletics could be purchased for \$2.5 million and moved to Houston." Smith replied that he would be in for \$250,000. "Get nine more to put in that much and we're in business," Smith purportedly said. Because of this early effort and his activity in the Continental League, Hofheinz said that Kirksey made a "real contribution" to major league baseball in Houston. Hofheinz controlled eighty-eight percent of the HSA along with Smith's ten percent, Earl Allen, president of the Associated Pipeline Co., owning one percent, and Boheck Engineering Co.'s co-president John Beck also owning one percent.⁵² With Hofheinz's near absolute control of the HSA, he "emerged as judge, jury, executioner and general manager."⁵³

Hofheinz promised that the entire playing surface, except the dirt part of the infield and the cinder track, would be covered with Astroturf. "The Astroturf has really worked out better than we expected, and I think everyone...likes the playing surface," boasted Hofheinz.

⁴⁹ Don Gardner, "Grass OK, but Dirt," *Post*, 21 March 1966, sec. 4, p. 5; Smith, "Wall-to-Wall Baseball," *Post*, 21 March 1966, sec. 4, p. 5; Twombly, "Players Flash Green Light on Astroturf," *SN*, 2 April 1966, pp. 9-10.

⁵⁰ Nealon, "Post Time," *Post*, 24 March 1966, sec. 4, p. 1, 2.

⁵¹ Herskowitz, "Trying to Follow Astroturf Hops," *Post*, 8 April 1966, sec. 4, p. 2.

⁵² Gallagher, "Astro Stockholder Kirksey Sells Interest to Hofheinz," *Post*, 10 May 1966, sec. 4, p. 1, 3.

Once the field was covered with the synthetic grass, the time to convert the playing surface from any event to another would require less than a full day without any damage, according to Hofheinz.⁵⁴ The HSA began the installation of the outfield AstroTurf on Wednesday, 13 July to coincide with the league's All-Star break. It required three days to place the 90,000-square-foot of synthetic grass. The All-Star break allowed the installation to proceed at a deliberate pace without interruptions.⁵⁵

The HSA scheduled daily tours of the Astrodome and charged one dollar to take the tour, which made stops at the air-conditioning and weather control room, the Domeskeller, the Trail Blazer restaurant, the press boxes, but not a visit to a private skybox. The Trail Blazer, "the nicest place to eat in the dome if you aren't a member of either private club," cost \$2.50 to enter, but included the price of the ticket. A meal at the Trail Blazer meal consisted of an entrée, salad, sourdough bread, and dessert. Beer cost extra. Once the baseball game began, the Trail Blazer closes its doors. The Domeskeller remained open until 8 p.m. After the game, baseball fans were forced to look beyond the Astrodome's walls for their meals because none of the restaurants remained open. "Baseball used to be a dull game with not much to occupy a woman's mind between the rare home runs" wrote *Post* reporter Pat Reed. "But at the Astrodome something is always happening" thanks to the "super-duper scoreboard."⁵⁶

The HSA did not remit a payment for its state or county taxes by the end of January. They awaited a decision on the ownership of Colt Stadium. According to the HSA, the

⁵³ Herskowitz, "Blastoff at the Astrodome," *Baseball Digest*, 25 March 1966, p. 52.

⁵⁴ Joe Heiling, "Carpet Job For Dome Outfield," *Post*, 12 June 1966, sec. 2, p. 6; "Synthetic Turf to Be Installed In Astrodome Garden by July 19," *SN*, 25 June 1966, p. 6..

⁵⁵ "The Green Treatment," *Post*, 14 July 1966, sec. 5, p. 1.

county owned the stadium, not the syndicate. The Harris County attorney opined that even though the county owned the land, the HSA maintained ownership of the stadium. How could this be possible? The county attorney used the wording of the deed for the basis of his decision. Bob Smith transferred the land to Harris County, not the stadium, which remained titled to the HSA. Smith valued the land at \$167,080. The HSA, then, owed \$3057 in taxes. When this \$3057 was added to the January tax bill (\$10,575 in county taxes and \$3,150 in state taxes), the HSA's owed \$16,782.⁵⁷

Carl Smith, Harris County Tax Assessor-Collector, notified the HSA that it failed to "render its property" to the county, five months past the official deadline. The results of Smith's negligence jeopardized the HSA's finances. The HSA would be unable to plead its case in front of the County Tax Equalization Board before the year ended. The result was that the County could set the value of the HSA's leasehold and personal property, costing the syndicate millions of dollars. The HSA responded in the only way it could. It sued the county, claiming its leasehold was tax exempt. Thus, the HSA should not be forced to pay property taxes on these holdings. The HSA also asked for a temporary injunction that would prevent Harris County from solely determining the monetary value of HSA property. According to Texas law, parties that leased state property for less than three years was exempt from *ad valorem* taxes. When the lease was longer than three years, however, the same Texas law provided that a leaseholder was subject to property taxes. The HSA petition asserted that this law was unconstitutional because it erroneously discriminated between

⁵⁶ Pat Reed, "The Dome Offers Much More Than Baseball," *Post*, 21 July 1966 (North ed.), "Vacation in Houston" section, p. 5.

⁵⁷ "HSA to Get Colt Stadium Tax Bill," *Chronicle*, 1 March 1966, sec. 1, p. 16.

lengths of leases “and therefore does not provide for equal and uniform taxation of all leaseholds.” The HSA, therefore, could not be taxed.⁵⁸

Smith assessed HSA holdings at \$11.3 million and would be the value for the syndicate’s 1966 taxes. The HSA, on the other hand, rendered the “true values” of its personal property at \$1.6 million and the leasehold at \$1. The one dollar value included the stadium, everything inside it, all 270-acres of land, and all other improvements, which had cost over \$30 million in public and private money. The HSA justified this seemingly paltry sum. Anyone interested in buying the leasehold, according to an unnamed HSA official, would face the \$750,000 rental obligation. And face paying the rent without the Astros, which was the property of the HSA. No one would knowingly accept a lease of that magnitude. Smith rejected this rendition based on the advice of the Harris County attorney who questioned its accuracy and integrity.⁵⁹

Before the year ended, Harris County wanted to determine if the HSA was legally forced to pay taxes on its personal property and its leasehold with the County. Assistant County Attorney Charles F. Mitchell asserted that \$50,000 was a stake in this issue. If the HSA could delay the hearing as long as possible, its position that the leasehold was valued for \$1. For obvious reasons. Hofheinz was upset with Mitchell’s and county tax assessor-collector Carl Smith’s assertion. Hofheinz vehemently denied that it should pay state and county taxes for its operation of the county stadium. According to Smith, Hofheinz openly speculated moving his baseball team to another city if the County pursued its present, and according to Hofheinz, illegal course of action. The HSA imposed a \$1 tax valuation on its

⁵⁸ Molly Sinclair, “HSA Sues To Block Tax on Dome Lease,” *Post*, 5 October 1966, sec. 1, p. 1, 6.

⁵⁹ Molly Sinclair, “HSA Sues To Block Tax on Dome Lease,” *Post*, 5 October 1966, sec. 1, p. 1, 6.

leasehold. HSA assistant treasurer John K. Easter testified that the HSA generated a \$3 million net profit after grossing \$11 million operating the stadium in 1965. Easter also testified that the HSA did not pay federal tax on this \$3 million in 1965 because of the financial losses it accrued before moving into the Astrodome. Smith valued the HSA's leasehold at \$9,736,457 and its personal property at \$1,615,184. One of the key components of the hearing was Smith's admission that he failed to follow state law in his handling of this tax suit. According to law, Smith should have notified the HSA of his tax assessments before any other action took place. During his testimony, Fred Hofheinz, son of Roy and HSA first vice president, maintained that the HSA did not generate much money from its non-baseball events during 1965. Mitchell offered an opinion that the HSA could not exclusively use and operate the Harris County Domed Stadium because it was a public park, a public facility. But the reality was that a private corporation did indeed completely control the stadium. It decided who could use it and for how much money. The HSA could close the public roads adjacent to the stadium if it so desired. And, the syndicate charged an entry fee for any person who wanted to look at the stadium. Since of this had occurred, the lease between Harris County and the HSA was null and void.⁶⁰

In his decision, District Judge Solomon Casseb told the HSA to resubmit all of its tax valuations to the county assessor-collector. If the assessor-collector disagreed with the HSA's estimates, the Commissioners Court would review the materials and make the final, incontrovertible, decision on the valuations. Judge Casseb opined that the HSA's leasehold was taxable, but that the County and the HSA needed to determine the value. Both Mitchell

⁶⁰ "Hofheinz Hint Of Astros Shift Told," *Post*, 16 November 1966, sec. 1, p. 12; Ernest Bailey, "HSA '65 Profit \$3 Million," *Post*, 20 December 1966, sec. 1, p. 1, 6.

and Smith expressed their excitement over Casseb's decision. Mitchell and Smith wanted the Commissioners Court to set the value in the first place back in April. The HSA, Mitchell said, was "between a rock and the hardest place they ever saw." They could try and declare their leasehold at \$1, which would confirm that it is taxable. If they refused to declare an amount on their leasehold, Smith could decide that the value was \$9.7 million. Texas law was clear in this case. Any leaseholds that operated more than three years were subject to taxation.⁶¹

Hofheinz notified the Commissioners Court about the condition of the gondola and its concern to the HSA. According to Hofheinz, several "imperfections of construction and installation of the gondola" jeopardized the integrity of the stadium and the safety of workers and spectators. These imperfections required immediate attention by the County and H. A. Lott, Inc, not the HSA. The importance of this complaint is not the seriousness of potential injury or the exact condition of the gondola. It is Hofheinz's supercilious. Not only did he neglect to cite any of these so-called imperfections, any problems were the result of the County and its contractor. Hofheinz responded in typical fashion of the times: someone else caused the problem and therefore should solve it. This seemingly indifference to a potential threat further eroded the public's confidence in Hofheinz.⁶²

The HSA, however, could not rest on the first year success. It still faced a yearly \$750,000 rent for the next thirty-one years. Continuing to schedule as many diverse events as possible every year ensured a steady stream of visitors and their money. But what the HSA needed to avoid was increasing its negative publicity. Although Hofheinz could not control

⁶¹ Bailey, "HSA Must Resubmit Valuations," *Post*, 21 December 1966, sec. 1, p. 1, 2.

what reporters wrote about him and the HSA, he could limit the amount of material upon which they could consistently draw. For example, Hofheinz's personal feuds with Bob Smith and Bud Adams only hurt his declining reputation and that of the HSA. But this was easier said than done. It is too easy to blame the Hofheinz's ego and his many public quarrels. He was still the same man who rescued the domed stadium idea five years ago. He was still the same man who staved off impeachment as the mayor of Houston. What really changed was American society, and Houston specifically. The optimism evaporated in the face of increasing cynicism. Earlier, the people of Houston had viewed Hofheinz's antics as charming, the HSA as a benevolent, and the \$31 million Astrodome as the testament to the insight, ingenuity, and technological advancement of Houston. By 1966, however, those same Houstonians had had enough of the odious Hofheinz, the menacing HSA, and the flawed Astrodome. The era of optimism was long gone, never to return. In its place, the age of cynicism had arrived.

In less than a year, 3,780,000 individuals visited the Astrodome in one form or another. Astros home games tallied 2,539,470. Six University of Houston football contests attracted 210,106. From the Astros games to the Houston Boy Scouts, from the evangelical crusade of the Rev, Bill Graham to the Ringling Bros. and Barnum and Bailey Circus, just about every type of event was available to the people of Houston.⁶² These numbers confirmed that the Astrodome was a bona fide "tourist attraction and business bonanza." The Astros and their stadium attracted 2.5 million spectators. In 1964, 725,000 fans paid to see the Colts and

⁶² Dick Raycraft, "Hofheinz Says Imperfections In Dome Gondola Hazardous," *Chronicle*, 10 January 1966, sec. 1, p. 14.

⁶³ Dick Stanley, "The Year of the Dome...What It Meant to Houston," *Chronicle*, 2 January 1966, sec. 1, p. 1, 16; "From Dome to Disneyland, We're Always in the Go," *Chronicle*, 13 February 1966, "Go Coast '66" special section, sec. 1, p. 19.

925,000 paid to see the Colts in their first season in 1962. The effect the inaugural year of the Astrodome had on the local economy was apparent.⁶⁴

The HSA sent a survey to 50,000 “out-of-town fans” to determine how much money the stadium injected into the local economy. The HSA estimated that one-half of the four million visitors came from outside Harris County. The average stadium visitor then spent \$40, totaling the \$80 million infusion. The survey also demonstrated that not all of this money went straight to the HSA. For example, motels and hotels benefited from the stadium’s existence. According to the HSA, 62 percent of these visitors stayed in the hotels and motels during their stay. Though hardly scientific, the HSA claimed to have proved its economic importance to the city. Seen in another way, the HSA survey was an attempt to reverse negative public perception of the stadium. Instead of a malevolent, selfish organization, the HSA helped everyone in the city prosper through its existence. Attacking the HSA only harmed the city and the county.⁶⁵

N. Y. Times reporter Robert Lipsyte wrote that the average Houstonian was “hardly wild” about the domed stadium. He continued, “the average Houstonian is not really impressed.” This notion was based on the statistic that fifty-five percent of those in attendance for the exhibition games were from outside Harris County and forty percent from outside Texas. Hofheinz dismissed this idea by saying, “Your people at home so frequently realize last what they have.” Although Hofheinz’s unflattering picture of locals could be true, an additional reason for the “lack” of Houstonian turnout for the exhibition games could be the constant press the stadium received. Maybe the locals felt like they had already been

⁶⁴ “Domed Stadium: Spark To City’s Economy,” *U.S. News and World Report*, 11 October 1965, pp. 10, 12.

⁶⁵ “Dome Has Put \$80 million Into City’s Economy,” *Chronicle*, 6 March 1966, sec. 2, p. 1.

inside the stadium thanks to the thousands pictures and articles on local television and in the newspapers. Or maybe they saw the stadium in its various construction phases during .45s games at Colt Stadium. Or maybe they ventured on several sight-seeing excursions to South Main. Hofheinz continued with his explanation for the “low” local turnout. “A man who’s never passed Taxarkana,” Hofheinz said, “he thinks for sure there’s gotta be something better out there than he’s got at home.” The reason the average Houstonian was not impressed with the stadium was the bubbling pessimism taking over society. Robert Lipsyte provided his rationale, “Perhaps the lack of enthusiasm was based on the feeling that something was foisted on them.”⁶⁶

But Lipsyte argued that major league baseball was not that important to Hofheinz and Smith, but the potential of the stadium to bring conventions and other large gatherings to the city. But even more important, Lipsyte continued, was “the empire” they could create seven miles south of downtown Houston that contained an amusement park, and industrial park, office buildings, and other service businesses. “Eventually they will move the center of town” to the Astrodome community.⁶⁷

“Curiously, no one knows much about the loyalties and passions of the Houston baseball audience, in spite of those enormous attendance figures (of 1965), for it is impossible to guess how many of these two million ticket-buyers came to see the Astros and how many to see the Astrodome.”⁶⁸ (When asked about the Astros or other sporting events, Hofheinz always focused on the setting before the teams or sport itself.) Angell gave his opinion of baseball inside the Astrodome. “The expensive Houston experiment does not truly

⁶⁶ Robert Lipsyte, “Houston Is Hardly Wild About Its Astrodome,” *N. Y. Times*, 11 April 1965, sec. 5, p. 3.

⁶⁷ Robert Lipsyte, “Houston Is Hardly Wild About Its Astrodome,” *N. Y. Times*, 11 April 1965, sec. 5, p. 3.

affect the players or much alter the sport played down on the field, but I think it does violence to baseball—and, incidentally, threatens its own success—through a total misunderstanding of the game’s old mystery. I do not agree with Judge Hofheinz that a ball park is a notable center for socializing or propriety, or that many male spectators will continue to find refreshment in returning to a giant living room—complete with manmade weather, wall-to-wall carpeting, clean floors, and unrelenting TV shows—that so totally, so drearily, resembles the one he has just left. But these complaints are incidental. What matters, what appalls, in Houston is the attempt being made there to alter the quality of baseball’s time.” For Angells, he saw baseball as a sport ruled by “rural time—a slow, green time of removal and concentration” that suspends every spectator. At best, he contended, the Astrodome tried to upset this balance, at worse, it tried to transform it into just another type of sterile entertainment. “It seems to me that the Houston impresarios are trying to build a following by the distraction and entire control of their audience’s attention—aiming at a sort of wraparound, programmed environment” of the electronic age. “I do not wish them luck with this vulgar venture.”⁶⁹

The Astrodome, obviously, was not a technology considered noxious or life threatening like nuclear power. Like nuclear power, however, the Astrodome incorporated established, familiar technology that was supposed to typify the advancement of American society, making it better and more aesthetically appealing. And like nuclear power, the Astrodome experienced the “individualistic onslaught”⁷⁰ of the 1960s. This onslaught, the death of postwar optimism, cast the Astrodome in a different light than its boosters originally

⁶⁸ Roger Angell, “The Cool Bubble,” *New Yorker*, 14 May 1966, p. 138.

⁶⁹ Angell, pp. 140, 142.

envisioned. They gambled that Houstonians would constantly view the domed stadium as a boom, a wealth magnet, a symbol of Houston's greatness of sophistication. What Dome boosters could not predict was the alteration in American society during the stadium's construction and grand opening. In the new era of limits and finitude, public disillusionment with the Astrodome, and its hand maiden Roy Hofheinz, proved a powerful force. The Eighth Wonder of the World had become the Astro-doomed stadium.

⁷⁰ Alan I Marcus and Howard P. Segal, *Technology in America: A Brief History* (2d ed.), 305.

CHAPTER 11: CONCLUSION

The idea for the Astrodome, billed as the "Eight Wonder of the World" and the "Taj Mahal of Sport," typified thinking of the 1950s and early 1960s. The people of Houston viewed their city and that of America as a time of peace and plenty. The future of each was seen as bright and infinite. Houston, in particular, experienced unprecedented postwar growth. Its population, for instance, jumped to over a million inhabitants at the start of the 1960s. This placed Houston as the sixth largest city in the United States. A city this magnificent demanded a testament or a monument to its majesty. A multiple purpose stadium, the Astrodome certified the Bayou City's big league status. Houstonians wanted the stadium to be used as an arena to display Houston's postwar growth and commitment to science and technology. The stadium was to overcome the criticism that Houston was still a "frontier town" and an "Oil town." Viewed in this light, the Astrodome succeeded. For example, Billy Sullivan, member of a group that owned the Boston Patriots of the AFL, began to formulate plans for a stadium with a sliding roof. In his presentation to writers, Sullivan said, "Houston is the most forward city in the country" because of its stadium. "The coming of the Houston stadium has made outdoor sports as outdated as the advent of talking pictures did to silent pictures."¹ Til Ferdenezi, sports writer for the *New York Journal American*, informed his readers that the Astrodome "makes all other stadiums and arenas look like something out of the Stone Age" and this included the most modern ballparks like Shea and Dodger Stadiums.²

¹ Gallagher, "Smartest City in Country Is Houston, Says Bostonian Sullivan," *Post*, 9 August 1965, sec. 4, p. 4.

² Quoted in Ray, 316. Ray also lists six written reviews of sports writers who viewed the first game.

The HSA could point to the attendance figures to prove its worth. The HSA grossed more than \$8.5 million during its first year of operating the domed stadium. The eighty-one National League baseball games generated \$6.2 million, but the HSA paid \$765,642 to other NL teams and the league. (The six exhibition games made \$477,508.) This brought the net to a mere \$5,925,218. Parking fees totaled \$525,481 and concession sales from non-baseball events was \$131,041. Stadium rentals totaled \$610,861 and \$110,213 coming from gift shop sales.³

Dick McDowell, Astros ticket manager, said that the demand for baseball tickets for the first year surmounted all preseason hopes. "Before the season we figured on an attendance of between one and a quarter and one and a half million," said McDowell. At the end of May, he continued, "It shows no signs of letting up." McDowell speculated that almost one-half (45%) of the attendance came from beyond Harris County with the figure climbing to nearly two-thirds (between 65% to 70%) for weekend games. "Let's face it," he said, "We're not drawing this many people on the strength of non-contending baseball team." McDowell cited the three factors that he attested were responsible for the Astros breaking the 500,000 attendance mark before June 1, presumably in this order, "the stadium, the scoreboard, and the fact the club is giving us some pretty exciting baseball."⁴

As the Astros' limped to the conclusion of the first year, the Dome became "Houston's first, genuine world-wide tourist attraction." By 31 August 1965, 288,886 people paid for the \$1 guided stadium tour. HSA vice president George Kirksey predicted over half a million people would take the tour within the stadium's first year of operation and these

³ "Houston Sports Association Takes In Over \$8.5 Million During 1965," *Post*, 5 June 1966, sec. 4, p. 2.

⁴ Gallagher, "There's No End in Sight To Crowds at the Domed Stadium," *Post*, 24 May 1965, sec. 4, p. 3.

numbers would only increase each ensuing year. Those who went on the guided tours, Kirksey contended, "go back to their hometowns and tell their friends about seeing the Astrodome, and they can't find the words to describe it." Stadium booking agent Jack O'Connell expected that with more planned events the number of guided tours would similarly increase. Kirksey agreed with O'Connell, pointing to the fact that of the 3,000 guided tourists a day during the month of August, one-half originated from out of state.⁵ Since April 15, over 163,000 people toured the Dome according to the tour department. Of this 163,000, it claimed, 85% of the visitors originated outside Harris County. "On a typical day in June (1965) 1,992 visitors came from 41 states and Canada," the HSA reported. Of these nearly 2,000 tourists, "only 330 of them were from Texas and a mere three from Houston."⁶

When Hofheinz became involved with the stadium project, he had been entertaining ideas for a large shopping center. Although his mall never materialized, he never truly abandoned the concept of an "elaborate entertainment complex." In June 1968, Hofheinz's Astroworld theme park opened. Located south of the Astrodome, the amusement park was to be another aspect of Hofheinz's Astro-Domain, along with Astrohalls and Astro-Lodge. Rumors persisted that Hofheinz dreamed up the amusement park to bolster lagging attendance (it fell from 2,151,470 in 1965 to 1,872,108 in 1966, and 1,333,962 in 1967). Visitors would have another attraction to keep them staying in the Astro-vicinity to spend

⁵ Dodd, "Dome IS First Bona Fide Tourist Attraction Here," *Post*, 5 September 1965, sec. 1, p. 1, 6.

⁶ "All Roads Lead To Domed Stadium," *Post*, 27 July 1965, sec. 1, p. 1. As the one-year anniversary approached, the HSA surveyed 50,000 visitors to the stadium. According to this unscientific survey, the "average visitor" expended about \$40 when he came to town for a Dome event. The HSA also estimated that over the four million people who attended Dome events, two million lived outside Harris County. Through eleven months, 479,337 individuals took the stadium tour; almost half of these (48.15%) resided outside Texas. "Dome Has Put \$80 Million Into City's Economy," *Chronicle*, 1 March 1966, sec. 1, p. 16.

their money.⁷ Historian John M. Findlay argued that one of the motivations behind the creation of "magic lands" in the American West was to create "alternatives to downtowns," be it Los Angeles or Phoenix. The magic lands (Disneyland, Stanford Industrial Park, Sun City, and the Seattle's World's Fair) were responses to rampant growth and chaos, Findlay posited, that sought to bring order and legibility to the Western cityscape. These downtown alternatives, according to Findlay, located several amenities and activities "to one relatively cohesive" suburban area. Viewed in this light, Hofheinz envisioned his own alternative to downtown Houston, much like Sun City, Arizona. As a planned substitute, Astro-Domain contained the similar amenities of downtown Houston, but at one dependable and convenient location. This potential threat could make downtown Houston irrelevant to visitors and residents alike. This was one reason why Mayor Lewis Cutrer fought so desperately for a downtown convention center. But as Findlay also noted, these "magic lands" or "alternatives" rarely lived up to the designer's lofty optimism. The Astrodome and the related complex never replaced downtown Houston nor fulfilled Hofheinz's promise as a wonder of the world.⁸

The earliest expectation of Astrodome reflected the optimistic tone of the late 1950s. The stadium would bring notoriety, prestige, influence, culture, and meaning to the people of Houston. Like other downtown alternatives, the Astrodome's controlled environment forced spectators into a world devoid of external influences and problems. Unlike other ballparks, the Astrodome eliminated the distractions of wind, heat, and rain. It offered a modern improvement over the old standard. Houstonians and visitors could use it as a physical

⁷ "Twombly, "Hofheinz Expanding Astro-Domain," *SN*, 2 March 1968, pp. 5, 20; Karen Guenther, "Judge Roy's Playground: A History of Astroworld," *East Texas Historical Association* 36, no. 2 (1998): 58.

reference amongst in miles of streets and highways. Just as important, the Astrodome would symbolize post-war Houston and be the city's urban landmark. Even though Harris County owned the stadium, no one ever called the Astrodome by its true name, the Harris County Domed Stadium. Instead, people referred to it as the Houston Astrodome. In this sense, the Astrodome did bring Houston the respect and distinction Houstonians thought it deserved.⁹

Houston in the mid to late 1960s, however, changed as its optimism gave way to pessimism. The Astrodome was "not designed for an era of contraction and limits" and could not possibly live up to the hype. The Astrodome did not usher in a new era of baseball. It ushered in a new era of something like baseball. Fans were pushed further from the action in an effort to make the stadium multi-purpose. Even worse, Hofheinz made the stadium the source of entertainment. Spectators came to the stadium not to watch baseball, but to see the Astrodome and the spectacle of the scoreboard. Sporting events, concerts, and other venues took second billing to the major attraction. Hofheinz asserted that part of his duty was to make the stadium a focal point of the action because "Whether you like it or not, you are in show business." What the Astros did underneath the dome was no longer traditional baseball. Critics claimed that the HSA doctored the playing surface to take advantage of the Astros' limited strengths. And the technology incorporated in the Astrodome was viewed differently. Astro turf was originally hailed as a great alternative to natural grass. Despite its cost, in the long run the turf would pay for itself. In the pessimistic Houston, Astro turf was viewed not as beneficial but as a bane. After its installation, skeptics wondered what the turf would do to

⁸ Findlay, 284-295.

⁹ Findlay, 295-299.

athletes. Would the synthetic turf increase the number and severity of injuries? But even more salient, should the Houston athletes be given a voice in the decision?

One of the loudest arguments used to bolster pro-stadium arguments was the economic boom it would bring to Houston. The HSA confidently predicted the stadium would attract tens of millions to Houston and local merchants. But the economic benefits of the stadium were hard to determine. Sure the stadium brought new entertainment to Houston that were not there before like bullfights, conventions, and circuses. Says Jay Taylor, Economic-development manager of the Houston Chamber of Commerce, Jay Taylor dismissed the notion that the Astrodome was a financial boom. "I know of almost no case," he said, "in which the Astrodome was a factor in a business moving to Houston." ¹⁰

This optimism and pride in the Astrodome tuned into resentment and embarrassment. One could not mention the Astrodome and not mention Roy Hofheinz. A pugnacious and determined man, Hofheinz's actions and words generated negative publicity. After the death of his wife, Dene, in 1966, Hofheinz moved into the stadium permanently. The stadium, his opponents charged, was built by and for the people of Harris County, not one man. His unilateral decision to paint the roof and install Astroturf proved their point. After he usurped control of the HSA and booted Bud Adams out as a tenant, Houstonians could only shake their head in disbelief and disappointment. In a world of limits, Hofheinz became a menace, a self serving tyrant. Hofheinz biographer Edgar W. Ray cited a *Houston Chronicle* article that spelled out the opinion of Hofheinz. Hofheinz hoped the Astrodome would be a success for he and his family because of their business interests in the city. A monument that originally

¹⁰ Findlay, 301; "The Business of Baseball," *Newsweek*, 26 April 1965, p. 66; Charles G. Burek, "It's Promoters vs. Taxpayers in the Superstadium Games," *Fortune*, 87 (March 1973): 105.

was to signal the status of Houston to the rest of the world had become a symbol of one man's desire to leave his mark on the city.

In 1965, before the stadium was completed, the Reverend Billy Graham toured the stadium with Roy Hofheinz. At the end of his visit, Graham said, "This is in truth one of the great wonders of the world." Hofheinz eventually took Graham's quote and altered it slightly. The revised version had Graham labeling the stadium "The eighth wonder of the world." Graham, however, "never claimed he was misquoted."¹¹ After a commercial break during the first televised baseball in the Astrodome, ABC broadcaster Chris Schenkel said, "Welcome back to the Taj Mahal of baseball."¹² These two opinions echoed much of the popular belief of the Astrodome. It was an architectural achievement equivalent to the great engineering triumphs of past ages like the pyramids, Greek temples, and medieval cathedrals.

The comparison between the Astrodome and the Taj Mahal, on one level, did not seem inappropriate. The Taj Mahal can be viewed as the pinnacle achievement of the Mughal dynasty and particularly of one individual Shah Jehan (or Jahan). Museum curator Pratapaitya Pal claimed, "To most people around the world the expression 'Taj Mahal' means a standard of excellence."¹³ The Astrodome can be seen as the greatest achievement of postwar Houston and Roy Hofheinz. Both structures conjured ideas of grandeur, greatness, and perfection to those who saw them. Even the inspiration for the structures lingered in the air of mystery. According to one story, Hofheinz purportedly received his inspiration from a visit to the Roman Colosseum. Another claimed that a visit with Buckminster Fuller

¹¹ Gary Cartwright, "A Barnum Named Hofheinz, A Big Top Called Astrodome," *The New York Times Magazine*, 21 July 1968, p. 11; Marshall Frady, "Hofheinz and the Astrodome," *Holiday*, 45 (May 1969): 89.

¹² Mickey Herskowitz, "Dome's First Game on TV a Dull One But Leo and Chris," *Post*, 23 May 1965, sec. 4, 1, 9.

convinced Hofheinz that a domed stadium could be constructed. The folklore surrounding the Taj contained myths of a European architect, Geronimo Veroneo, who designed the structure.¹⁴ Each structure was conceived to be the focal point of a large complex. The Astrodome would be the keystone of Astro-domain, complete with a convention building (Astrohall) and an amusement park (Astroworld). The Taj was the main structure of a vast garden, complete with reflection pools and a mosque. Both buildings encouraged paler, inferior copies. The Superdome in New Orleans, the Pontiac Silverdome (both finished in 1975), and the Kingdom in Seattle (completed in 1976), for example, all took their stimulus from the Astrodome. Northern Indian kingdoms looked to Agra and the Taj for its architectural inspiration.¹⁵

But in all its glory, the Taj Mahal was simply a tomb. Shah Jehan commissioned the construction of the Crown of the Palace in 1632 (finished in 1648) to honor and celebrate his wife Mumtaz Mahal (Exalted One of the Palace) who died during child birth. Pratapaditya Pal wondered how this mausoleum was transformed into a standard of excellence. Few not only failed to realize that the Taj Mahal was a tomb, but that it was “a man’s perennial quest for immortality as well as his love for a woman.”¹⁶ In Muslim tradition, a woman who died during childbirth was revered as a martyr and her tomb a pilgrimage site. The need to accommodate pilgrims and other related services necessitated a vast complex. But the tomb

¹³ Pratapaditya Pal, “Introduction,” in *Romance of the Taj Mahal*, ed. Pal Pratapaditya (London: Thames and Hudson, 1989), 11.

¹⁴ R. Nath, *The Immortal Taj Mahal: The Evolution of the Tomb in Mughal Architecture* (Bombay: D. B. Taraporevala Sons and Company, 1972), 55-56. W. E. Begley argued that Ustad Ahmad Lahori was the chief architect for the Taj. See, W. E. Begley and Z. A. Desai, *Taj Mahal: The Illuminated Tomb* (Seattle: The University of Washington Press, 1989), xli-xlv.

¹⁵ Janice Leoshko, “Mausoleum for an Empress,” in *Romance of the Taj Mahal*, eds. Pratapaditya Pal, Janice Leoshko, Joseph M Dye, III, and Stephen Markel, (London: Thames and Hudson, 1989), 84.

¹⁶ Pal, 13.

itself dominates the complex. Similarly, Hofheinz envisioned the stadium commanding a large Astro-domain. The Taj was a double-dome. Essentially, a double-dome created proportionality within and without the structure.¹⁷ Although the remains of Jahan and his beloved are not physically contained entombed in the sarcophagi, this fact in no way takes away from the Taj Mahal as a fantastic mausoleum.

Ironically, Hofheinz's wife Dene died of a brain tumor on 1 December 1966. Therefore, the Astrodome could not be interpreted as Hofheinz's tribute to his wife. As Houston entered the era of finitude and pessimism, however, the Astrodome could be considered as a mausoleum. On the exterior, the glistening white Astrodome appeared to be the embodiment of optimism, of exuberance, of majesty. The stadium represented Houston's twentieth century achievement of becoming big league, of making it, of attaining greatness. But as the ebullience of the late 1950s and early 1960s waned, the view of the Astrodome changed to one of pessimism and resentment. Like the Taj Mahal, it was seen just as a giant gaudy tomb that revealed the vanity of one man.

¹⁷ John Lall, *Taj Mahal and the Glory of Mughal Agra* (New Delhi, India: Lustre Press Private Limited, 1982), 121-122, 128-133.

BIBLIOGRAPHY

- Abbott, Carl. *The Metropolitan Frontier: Cities in the Modern American West*. Tucson: The University of Arizona Press, 1993.
- _____. *Urban American in the Modern Age, 1920 to the Present*. Arlington Heights, Illinois: Harlan Davidson, Inc.: 1987.
- Ackermann, Marsha E. *Cool Comfort: America's Romance with Air-Conditioning*. Washington: Smithsonian Institution Press, 2002.
- "All-American Monument." *Progressive Architecture* 52 (November 1971): 78-87.
- Allen, Edward. *Fundamentals of Building Construction: Materials and Methods*. 2d ed. New York: John Wiley and Sons, 1990.
- "Aluminum Panels Pleated for Strength." In *Architectural Engineering—New Structures*, pp. 7-10. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.
- Ambrose, James. *Building Structures*. 2d ed. New York: John Wiley and Sons, 1993.
- Anderson, Terry H. *The Sixties*. 2d ed. New York: Pearson Longman, 2004.
- Angel, William D., Jr. "To Make a City: Entrepreneurship on the Sunbelt Frontier." In *The Rise of the Sunbelt Cities*, pp. 109-128. Edited by David C. Perry and Alfred J. Watkins. Beverly Hills: Sage Publications, 1977.
- Angell, Roger. "The Cool Bubble." *New Yorker*, 14 May 1966, pp. 125-142.
- Arsenault, Raymond. "The End of the Long Hot Summer: The Air Conditioner and Southern Culture." In *Searching for the Sunbelt: Historical Perspectives on a Region*, pp. 176-211. Edited by Raymond A. Mohl. Knoxville: The University of Tennessee Press, 1990.
- Ashworth, V. "The theory of cathodic protection and its relation to the electrochemical theory of corrosion." In *Cathodic Protection: Theory and Practice*, pp. 13-30. Edited by V. Ashworth and C. J. L. Booker. Chichester, England: Ellis Horwood Limited, 1986.
- Astrodome*. Houston, Houston Sports Association, Inc., 1968.
- Austin, Texas. Robert J. Minchew Houston Astrodome Architectural and Engineering Collection, 1958-1957, Center for American History, the University of Texas at Austin.

- "Ballplayers Under Glass." *SR*, 6 March 1965, pp. 36-38.
- Bass, Louis O. "Unusual Dome Awaits baseball Season in Houston." *Civil Engineering-ASCE* 1 (January 1965): 63-65.
- Baumann, J. A. "Permanent Fixtures." In *Plastics in Building*, pp. 329-338. Edited by Irving Skeist. New York: Reinhold Publishing Corporation, 1966.
- Bayliss, D. A. and D. H. Deacon. *Steelwork Corrosion Control*. 2d ed. London: Spon Press, 2002.
- Beard, James B. *Turfgrass: Science and Culture*. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1973.
- Bedichek, Wendell M. and Neal Tannahill. *Public Policy in Texas*. Glenview, Illinois: Scott, Foresmann and Company, 1982.
- Begley, W. E. and Z. A. Desai. *Taj Mahal: The Illuminated Tomb*. Seattle: The University of Washington Press, 1989.
- Benjamin, B. S. *The Analysis of Braced Domes*. Bombay: Asia Publishing House, 1963.
- Berkeley, K. G. C. and S. Pathmanaban, *Cathodic Protection of Reinforcement Steel in Concrete*. London: Butterworths, 1990.
- Bernard, Richard M. and Bradley R. Rice. "Introduction." In *Sunbelt Cities*, pp. 1-30. Edited by Richard M. Bernard and Bradley R. Rice. Austin: University of Texas Press, 1983.
- Berstein, Mark F. "Sports stadium boondoggle." *Public Interest* 132 (Summer 1998): 45-72.
- "Biggest Dome in the World." *The American City* 76 (February 1961): 99.
- "Biggest Dome of All--for Texas, of Course." *Business Week*, 5 October 1963, pp. 56-60.
- Billington, David P. *Thin Shell Concrete Structures*. 2d ed. New York: McGraw-Hill Book Company, 1982.
- Birley, A. W. and R. J. Heath, and M. J. Scott. *Plastics Materials: Properties and Applications*. 2d ed. Glasgow: Blackie and Sons, Ltd., 1988.
- Bohnes, H. and D. Funk. "Impressed Current Anodes." In *Handbook of Cathodic Corrosion Protection: Theory and Practice of Electrochemical Protection Processes*, 3d ed., pp. 207-224. Edited by W. von Baeckmann, W. Schwenk, and W. Prinz. Houston: Gulf Publishing Company, 1989.

- Bohnes, H. and G. Franke. "Galvanic (sacrificial) Anodes." In *Handbook of Cathodic Corrosion Protection: Theory and Practice of Electrochemical Protection Processes*, 3d ed., pp. 179-206. Edited by W. von Baeckmann, W. Schwenk, and W. Prinz. Houston: Gulf Publishing Company, 1989.
- Boles, John B. *The South Through Time: A History of an American Region*. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1995
- Bomar, George, W. *Texas Weather*. 2d ed. Austin: University of Texas Press, 1995.
- Boner, C. P. and C. R. Boner. "Equalization of the Sound System in the Harris Count Domed Stadium." *Journal of the Audio Engineering Society* 14 (April 1966): 105-106.
- Borton, Homer T. "Stadium Design Is a Challenge." *Consulting Engineer* (August 1956): 48-51.
- Bowen, Hartley Jr. and Dominick V. Rosato. "Radiation." In *Environmental Effects on Polymeric Materials*, Vol. I, pp. 589-732. Edited by Dominick V. Rosato and Robert T. Schwartz. New York: John Wiley and Sons, Inc., 1968.
- Brady, George S.; Clauser, Henry R.; and Vaccari, John A., eds. *Materials Handbook*. 14th ed. New York: McGraw-Hill, 1997.
- Briley, Ron. "The Houston Colt .45's: The Other Expansion Team of 1962." *East Texas Historical Association* 32 (2), 1994: 59-74.
- _____. "More Legacy of Conquest: Long-Term Ramifications of the Major League Baseball Shift to the West." *Journal of the West* 36 (April 1997): 68-78.
- Bromberg, Joan Lisa. *NASA and the Space Industry*. Baltimore and London: Johns Hopkins University Press, 1999.
- Brownlee, W. Elliot. *Dynamics of Ascent: A History of the American Economy*. 2d ed. Chicago: The Dorsey Press, 1988.
- Bruun, Svend W. and Joseph R. Loring. "Plastics in Lighting." In *Plastics in Building*, pp. 312-328. Edited by Irving Skeist. New York: Reinhold Publishing Corporation, 1966.
- Burck, Charles G. "It's Promoters vs. Taxpayers in the Superstadium Game." *Fortune*, March 1973, pp. 104-107, 178-182.
- Burk, Robert F. *Much More Than a Game: Players, Owners, and American Baseball Since 1921*. Chapel Hill: The University of North Carolina Press, 2001.
- Burton, G. W. "Breeding Bermudagrass for Turf." In *Proceedings of the Second*

International Turfgrass Research Conference, pp. 18-22. Edited by Eliot C. Roberts. Blacksburg, Virginia: American Society of Agronomy, Inc. and the Crop Science Society of America, Inc., 1973.

_____. "Registration of Crop Varieties." *Crop Science* 6 (January/February 1966): 93-94.

"The Business of Baseball." *Newsweek*, 20 April 1965, pp. 66-69.

Byrnes, Mark E. *Politics and Space: Image making by NASA*. Westport, Connecticut and London: Praeger, 1994.

Carew, John. "Synthetic Grass." *Horticulture* 48 (January 1970): 38.

Carroll, David. *The Taj Mahal*. New York: Newsweek, 1972.

Carter, Paul A. *Another Part of the Fifties*. New York: Columbia University Press, 1983.

Cartwright, Gary. "A Barnum Named Hofheinz, A Big Top Called Astrodome." *New York Times Magazine*, 21 July 1968, pp. 10-26.

Casler, Michael D. and Ronny R. Duncan, eds. *Turfgrass Biology, Genetics, and Breeding*. Hoboken, New Jersey: John Wiley and Sons, Inc., 2003.

Chanda, Manas and Salil K. Roy. *Plastics Technology Handbook*. 2d ed. New York: Marcel Dekker, Inc., 1993.

Cobb, James C. *The Industrialization and Southern Society, 1877-1984*. Lexington: The University Press of Kentucky, 1984.

Cohen, Edward. "A Change Ahead for Structural Design: 1. Background and Implications." In *Architectural Engineering—New Structures*, pp. 182-185. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.

_____. "A Change Ahead for Structural Design: 3. Plastic-Limit Design of Steel Frames." In *Architectural Engineering—New Structures*, pp. 191-195. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.

_____. "A Change Ahead for Structural Design: 2. Ultimate Strength Design of Concrete." In *Architectural Engineering—New Structures*, pp. 186-190. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.

"The Colossus of Houston—Harris County Domed Stadium." *Edison Electric Institute Bulletin* 33 (August 1965): 259-261.

"Convertibility." *The American City* 81 (August 1966): 100-101.

- Cooper, Dale S. "Houston Astrodome—Power Plant Mechanical Services Design." *ASHRAE Journal* 8 (June 1966): 90-91.
- _____. "Houston's Domed Stadium...A Report." *Air Engineering* 6 (November 1964): 32-36.
- Cooper, Gail. *Air-conditioning America: Engineers and the Controlled Environment, 1900-1960*. Baltimore: The Johns Hopkins University Press, 1998.
- "Corrosion Control at Houston's Domed Stadium." *Materials Protection* 3 (November 1964): 64-69.
- Cowan, Henry J. *An Historical Outline of Architectural Science*. Amsterdam: Elsevier Publishing Company, 1966.
- Cowan, Henry J., ed. *Handbook of Architectural Technology*. New York: Van Nostrand Reinhold, 1991.
- Cowan, Henry J. and Peter R. Smith. *The Science and Technology of Building Materials*. New York: Van Nostrand Reinhold Company, 1988.
- DeFord, Frank. "Your Time. Not Your Dollar." *Sports Illustrated*, 12 May 1969, pp.72-83.
- Degler, Carl N. *Affluence and Anxiety, 1945-Present*. Glenview, Illinois: Scott, Foresman and Company, 1968.
- Diggins, John Patrick. *The Proud Decades: America in War and Peace, 1941-1960*. New York: W. W. Norton and Company, 1988.
- Divine, Robert A. "Lyndon B. Johnson and the Politics of Space." In *The Johnson Years, Volume Two: Vietnam, the Environment, and Science*, 217-253. Edited by Robert A. Divine. Lawrence: University of Kansas Press, 1987.
- "Dodger Dome Generates City Center Proposal." *Architectural Record* 119 (April 1956): 217-220.
- "Does Big-League Baseball Pay?" *Business Week*, 5 October 1957, pp. 41-42.
- "Domed Stadium: Spark to City's Economy." *U.S. News and World Report*, 11 October 1965, p. 10.
- "Domed Stadium for Air-conditioned Baseball." *Popular Science* 185 (July 1964): 70-71.
- Donaldson, Gary A. *Abundance and Anxiety: America, 1945-1960*. Westport, Connecticut:

Praeger, 1997.

"Environmental Control." *Progressive Architecture* 46 (June 1965): 184-187.

Fairbanks, Robert B. "Responding to the Airplane: Urban Rivalry, Metropolitan Regionalism, and Airport Development in Dallas, 1927-1965." In *Technical Knowledge in American Culture: Science, Technology, and Medicine Since the Early 1800s*, pp. 171-188. Edited by Alan I Marcus, Hamilton Cravens, and David M. Katzman. Tuscaloosa: The University of Alabama Press, 1996.

Farshad, M. *Design and Analysis of Shell Structures*. Dordrecht, Switzerland: Kluwer Academic Publishers, 1992.

Findlay, John M. *Magic Lands: Western Cityscapes and American Culture After 1940*. Berkley: University of California Press, 1992.

Fischer, Robert E., ed. *Architectural Engineering*. New York: McGraw-Hill, 1964.

Fisher, Robert. "Urban policy in Houston, Texas." *Urban Studies* 26 (February 1989): 144-154.

_____. "The Urban Sunbelt in Comparative Perspective: Houston in Context." In *Essays on Sunbelt Cities and Recent Urban America*, 33-58. Edited by Robert B. Fairbanks and Kathleen Underwood. College Station, Texas A&M University Press, 1990.

"Fluid Applied Roofing for Houston Stadium." *Architectural Record* 137 (January 1965): 185-186.

Forrestal, Dan J. *Faith, Hope, and \$5000: The Story of Monsanto*. New York: Simon and Schuster, 1977.

Fraday, Marshall. "Hofheinz and the Astrodome." *Holiday* 45 (May 1969): 42-45, 87-90.

Fuermann, George. *Houston: The Once and Future City*. Garden City, New York: Doubleday and Company, Inc., 1971.

Furlong, William Barry. "That 'Big League' Yearning." *The New York Times Magazine*, 16 June 1957, pp. 14, 16.

"Gamma Rays Inspect Welds in World's Largest Clear-Span Enclosed Structure." *Welding Design and Fabrication* 37 (August 1964): 58-59.

Geddes, L. A. "Engineering and Architectural Aspects of the Harris County Sports Stadium and One of Its Predecessors." *The Slide Rule*, July 1961, pp. 4-5.

- “Geodesic Roundhouse: the biggest dome yet built.” *Architectural Forum* 108 (June 1958): 127-128.
- Gowans, Alan. *Images of American Living: Four Centuries of Architecture and Furniture as Cultural Expression*. New York: Harper and Row, 1976.
- Gray, Kenneth E. *A Report on the Politics of Houston*. Cambridge: Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard, 1960.
- “Great—Phony—Outdoors.” *Newsweek*, 30 May 1966, p. 92.
- Guenther, Karen. “Judge Roy’s Playground: A History of Astroworld.” *East Texas Historical Association* 36 (2) 1998: 58-97.
- Halberstam, David. *The Fifties*. New York: Villard Books, 1993.
- Hann, Gordon E. “Sealants.” In *Plastics in Building*, pp. 188-218. Edited by Irving Skeist. New York: Reinhold Publishing Corporation, 1966.
- Hanson, Albert and J. Gordon Parr. *The Engineer’s Guide to Steel*. Reading, Massachusetts: Addison-Wesley Publishing Company, Inc., 1965.
- Havell, E. B. *A Handbook to Agra and the Taj, Sikandra, Fatehpur-Sikrî and the Neighbourhood*. 2d ed. Calcutta and Simla: Thacker, Spink and Company, 1924.
- Heilbroner, Robert L. *The Economic Transformation of America*. New York: Harcourt Brace Jovanovich, Inc., 1977.
- Heim, G. and W. Schwenk. “Corrosion in Aqueous Solutions and Soil.” In *Handbook of Cathodic Corrosion Protection: Theory and Practice of Electrochemical Protection Processes*, 3d ed., pp. 139-152. Edited by W. von Baeckmann, W. Schwenk, and W. Prinz. Houston: Gulf Publishing Company, 1989.
- Henderson, Cary S. “Los Angeles and the Dodger War, 1957-1962.” *Southern California Quarterly* 62 (Fall 1980): 261-289.
- Herskowitz, Mickey. “Blastoff at the Astrodome.” *Baseball Digest* 25 (March 1966): 52-54.
- Hinchen, Rick. “Take Me Back to the Ball Park.” *Historic Preservation* 31 (July/August 1979): 42-50.
- “Home Runs on the Balance Sheet.” *Business Week*, 14 April 1956, pp. 163-170.
- Houndshell, David A. and John Kenly Smith, Jr. *Science and Corporate Strategy: Du Pont R&D, 1902-1980*. Cambridge: Cambridge University Press, 1988.

The Houston Chronicle, 1957-1967.

The Houston Post, 1957-1967.

The Houston Press, 1957-1964.

Houston, Texas. Walter P. Moore and Associates, Inc., Archives.

"Houston's Big New Bubble." *Sports Illustrated*, 10 August 1965. pp. 26-27.

Howard, H. Seymour, Jr. *Structure: An Architect's Approach*. New York: McGraw-Hill Book Company, 1966.

Hughes, Thomas P. *American Genesis: A Century of Invention and Technological Enthusiasm*. New York: Penguin Books, 1989.

Hunter, Jack D. "Indoor Outdoor Playing Field." *DuPont Magazine* 58 (March/April 1964): 25.

Huntington, Whiney Clark and Robert E. Mickadeit. *Building Construction: Materials and Types of Construction*. 5th ed. New York: John Wiley and Sons, 1981.

Hurley, Marvin. *Decisive Years for Houston*. Houston: Houston Chamber of Commerce, 1966.

Isecke, B. "Cathodic Protection of Reinforcing Steel in Concrete Structures." In *Handbook of Cathodic Corrosion Protection: Theory and Practice of Electrochemical Protection Processes*, 3d ed., pp. 427-440. Edited by W. von Baeckmann, W. Schwenk, and W. Prinz. Houston: Gulf Publishing Company, 1989.

Janney, Jack R. "How Structural Models Are Used in Practice." In *Architectural Engineering—New Structures*, pp. 196-199. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.

Jares, Joe. "The Big Screen Is Watching." *Sports Illustrated*, 31 May 1965, pp. 30-31.

Jefferson, T. B. "Welded Steel Frames World's Largest Clear-Span Domed Stadium." *Welding Engineer* 49 (June 1964): 55-57.

Johnson, William. "Goodby (sic) to Three Yards and a Cloud of Dust." *Sports Illustrated*, 27 January 1969, pp. 37-39.

Jones, Jesse H. *Fifty Billion Dollars: My thirteen Years with the RFC*. New York: Macmillan, 1951.

- Jones, W. P. *Air Conditioning Engineering*. 4th ed. London: Edward Arnold, 1994.
- "Jungle Under Plexiglas." *Rohm and Haas Reporter* (May-June): 12-16.
- Kammer, David John. "Take Me Out to the Ballgame: American Cultural Values as Reflected in the Architectural Evolution and Criticism of the Modern Baseball Stadium." Ph.D. dissertation, The University of New Mexico, 1982.
- Kaplan, Barry J. "Houston: The Golden Buckle of the Sunbelt." In *Sunbelt Cities: Politics and Growth Since World War II*, pp. 196-212. Edited by Richard M. Bernard and Bradley R. Rice. Austin: University of Texas Press, 1983.
- Kauffman, James L. *Selling Outer Space: Kennedy, the Media, and Funding for Project Apollo, 1961-1963*. Tuscaloosa and London: The University of Alabama Press, 1994.
- Keene, Kerry. *1960: The Last Pure Season*. Champaign, Illinois: Sports Publishing Inc., 2000.
- Kiewitt, G. R. "The New Look of Lamella Roofs." In *Architectural Engineering—New Structures*, pp. 20-24. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.
- Kinney, Gilbert Ford. *Engineering Properties and Applications of Plastics*. New York: John Wiley and Sons, Inc., 1957.
- Kirksey, George. "Houston: The Next Major League City." *Baseball Digest* 18 (March 1959): 21-27.
- Lall, John. *Taj Mahal and the Glory of Mughal Agra*. New Delhi, India: Lustre Press Private Limited, 1982.
- Launius, Roger D. *NASA: A History of the U.S. Civil Space Program*. Malabar, Florida: Krieger Publishing Company, 1994.
- Leoshko, Janice. "Mausoleum for an Empress." In *Romance of the Taj Mahal*, pp. 53-87. Edited by Pratapaditya Pal, Janice Leoshko, Joseph M Dye, III, and Stephen Markel, (London: Thames and Hudson, 1989), 84
- Leuchtenburg, William E. *A Troubled Feast: American Society Since 1945*. 3rd ed. Boston: Little, Brown and Company, 1973.
- Lipsitz, George. "Sports Stadia and Urban Development: A Tale of Three Cities." *Journal of Sports and Social Issues* 8 (Summer/Fall 1984): 1-18.

- Logsdon, John M. *The Decision to Go to the Moon: Project Apollo and the National Interest*. Cambridge, Massachusetts: The MIT Press, 1970.
- "Lost in the Stars." *Newsweek*, 19 April 1965, p. 64.
- Lotchin, Roger W. "The City and the Sword through the Ages and the Era of the Cold War." In *Essays in Sunbelt Cities and Recent Urban America*, pp. 87-124. Edited by Robert B. Fairbanks and Kathleen Underwood. College Station: Texas A&M University Press, 1990.
- Lowenfish, Elihu. "A Tale of Many Cities: The Westward Expansion of Major League Baseball in the 1950's" (sic). *Journal of the West* 17 (July 1978): 71-82.
- Macdonald, Michael C. D. *American Cities: A Report on the Myth of Urban Renaissance*. New York: Simon and Schuster, 1984.
- Maguire, Robert. "Daylight and Ventilation Through the Roof." *Architectural Review* 119 (June 1956): 353-358.
- Maheshwari, Anil. *Taj Mahal: Moon Still Shines*. Delhi: Ajanta Publications, 1996.
- Makowski, Z. S. "A History of the Development of Domes and Review of Recent Achievements World-Wide." In *Analysis, Design, and Construction of Braced Domes*, pp. 1-85. Edited by Z. S. Makowski. New York: Nichols Publishing Company, 1984.
- Makowski, Z. S. "Braced Domes, Their History, Modern Trends and Recent Developments." *Architectural Science Review* 5 (July 1962): 62-79.
- _____. *Steel Space Structures*. London: Michael Joseph, 1965.
- Marcus, Alan I and Howard P. Segal, *Technology in America: A Brief History*. 2d ed. Fort Worth: Harcourt Brace Publishers, 1999.
- Marcus, Samuel H. *Basics of Structural Steel Design*. 2d ed. Reston, Virginia: Reston Publishing Company, Inc., 1981.
- Marczoch, Sigrid. "The New Look In Stadiums." *American Engineer*, 35 (September 1965): 33-40.
- McBee, George G. "Association of Certain Variations in Light Quality with the Performance of Selected Turfgrasses." *Crop Science* 9 (January/February 1966): 14-17.
- McCormac, Jack C. and James K. Nelson, Jr. *Structural Steel Design: LFRD Method*. 3d ed. Upper Saddle River, New Jersey: Pearson Education, Inc., 2003.

- Meikle, Jeffrey L. *American Plastic: A Cultural History*. New Brunswick, New Jersey: Rutgers University Press, 1995.
- Melaragno, Michelle. *An Introduction to Shell Structures: The Art and Science of Vaulting*. New York: Von Nostrand Reinhold, 1991.
- Miller, Char and David R. Johnson. "The Rise of Urban Texas." In *Urban Texas: Politics and Development*, pp. 3-29. Edited by Char Miller and Heywood T. Sanders. College Station: Texas A&M University Press, 1990.
- Miller, Douglas T. and Marion Nowak. *The Fifties: The Way We Really Were*. Garden City, New York: Doubleday and Company, Inc.: 1977.
- Miller, James Edward. *The Baseball Business: Pursuing Pennants and Profits in Baltimore*. Chapel Hill: The University of North Carolina Press, 1990.
- Miller, Ray. *Ray Miller's Houston*. Austin: Cordovan Press, 1984.
- "Mod Sod." *Time*, 12 May 1967, p. 57.
- Monkkonen, Eric H. *America Becomes Urban: The Development of U. S. Cities and Towns, 1780-1980*, Berkley: University of California Press, 1988.
- Morehouse, Chauncey A. and William E. Morrison. *The Artificial Turf Story: A Research Review*. College of Health, Physical Education, and Recreation: The Pennsylvania State University, 1975.
- Morgan, John. *Cathodic Protection*. 2d ed. Houston: National Association of Corrosion Engineers, 1987.
- Moser, Leonard. "Part B: Carpeting." In *Plastics in Building*, pp.270-277. Edited by Irving Skeist. New York: Reinhold Publishing Corporation, 1966.
- Motro, R. "Review of the development of geodesic domes." In *Analysis, Design and Construction of Braced Domes*, pp. 387-412. Edited by Z. S. Makowski. New York: Nichols Publishing Company, 1984.
- Naman, I. A. "Domed stadium air-conditioning design." *ASHRAE Journal* 9 (August 1966): 82-84.
- Nash, Gerald D. *The American West Transformed: The Impact of the Second World War*. Bloomington: Indiana University Press, 1985.
- _____. *The Federal Landscape: An Economic History of the Twentieth Century West*.

Tucson: The University of Arizona Press, 1999.

_____. *World War II and the West: Reshaping the Economy*. Lincoln: University of Nebraska Press, 1990.

Nath, R. *Agra and Its Monumental Glory*. Bombay: D. B. Taraporevala, Sons and Company, 1977.

_____. *The Immortal Taj Mahal: The Evolution of the Tomb in Mughal Architecture*. Bombay: D. B. Taraporevala Sons and Company, 1972.

Nealon, Clark; Nottebart, Robert; Siegel, Stanley; and Tinsley, James. "The Campaign for Major League Baseball in Houston." *The Houston Review* 7 (1), 1985: 3-46.

"A New Approach to Structure." *Architectural Forum* 106 (January 1957): 125-143.

Nilson, Arthur H. and George Winter. *Design of Concrete Structures*. 10th ed. New York: McGraw-Hill book Company, 1986.

"No Rain Check Needed Here." *Shamrock*, Spring 1965, pp. 8-11.

Oates, Stephen B. "NASA's Manned Spacecraft Center at Houston, Texas." *Southwestern Historical Quarterly* 67 (January 1964): 350-375.

Oakley, J. Ronald. *God's Country: America in the Fifties*. New York: Dembner Books, 1986.

O' Brien. "The Stadium That Could Revolutionize Sport." *Montreal Star Weekend Magazine*, 15 May 1965, pp. 30, 32, 33.

O'Neal, Bill. *The Texas League, 1888-1987: A Century of Baseball*. Austin: Eakin Press, 1987.

Orton, Robert B. *The Climate of Texas and the Adjacent Gulf Waters*. U. S. Department of Commerce: Washington, D. C., 1964.

"Outdoor Sports with Indoor Comfort." *U. S. News and World Report*, 22 February 1965, p. 16

Pal, Pratapaditya. "Introduction." In *Romance of the Taj Mahal*, pp. 9-13. Edited by Pratapaditya Pal; Janice Leoshko; Joseph M. Dye, III; and Stephen Markel. London: Thames and Hudson, 1989.

Penn, W. S. *Plastics-in-Building Handbook*. London: Maclaren and Sons, Ltd, 1964.

Peskin, Hy. "Baseball Under the Dome." *Sport*, July 1965, pp. 22-25.

- "Pittsburgh Dome Gets Ready." *Architectural Forum* 114 (March 1961): 122-125.
- Plastics in Building Structures*. Oxford, London: Pergamon Press, 1966.
- "Plastics Score in Stadiums." *Chemical Week*, 17 April 1965, pp. 87-90.
- Poehner, Lester Louis, Jr. "The future's not what it used to be: The decline of technological enthusiasm in America, 1957-1970." Ph.D. dissertation, Iowa State University, 2000.
- Polner, Murray. *Branch Rickey: A Biography*. New York: Athenum, 1982.
- "Pop! goes the ball game." *Look*, 8 August 1967, pp. 52-55.
- Praeger, R. Q. and John W. Waterbury. "Convertibility." *The American City* 81 (August 1966): 100-101.
- Prane, Joseph W. "Plastics in Roofing." In *Plastics in Building*, pp. 359-367. Edited by Irving Skeist. New York: Reinhold Publishing Corporation, 1966.
- Provoost, Michelle. *The Stadium: The Architecture of Mass Sport*. Rotterdam, The Netherlands: NAI Publishers, 2000.
- Rader, Benjamin G. *Baseball: A History of America's Game*. Urbana: University of Illinois Press, 1992.
- _____. *Baseball: A History of America's Game*. 2d ed. Urbana and Chicago: University of Illinois Press, 2002.
- "Rain or Shine—Play Ball!" *Life*, 9 April 1965, pp. 86-88.
- "Record-Span Dome Roofs Air-Conditioned Stadium." *Engineering News-Record*, 27 February 1964, pp. 25-32.
- Reichler, Joseph L. (ed.) *The Baseball Encyclopedia*. 6th ed. New York: Macmillan Publishing Company, 1985.
- Reinert, Al. "The Eighth Wonder of the World." *Texas Monthly* 3 (April 1975): 82-90, 98.
- Richter, D. L. "Developments in Temcor Aluminum Domes." In *Analysis, Design and Construction of Braced Domes*, pp. 521-539. Edited by Z. S. Makowski. New York: Nichols Publishing Company, 1984.
- Riess, Steven A. *City Games: The Evolution of American Urban Society and the Rise of Sports*. Urbana and Chicago: University of Illinois Press, 1989.

- _____. "Power Without Authority: Los Angeles' Elites and the Construction of the Coliseum." *Journal of Sport History* 8 (Spring 1981): 50-65.
- _____. "Historical Perspectives on Sport and Public Policy." *Policy Studies Review* 15 (Spring 1998): 3-16.
- Rodwin, Lloyd and Robert M. Hollister, eds. *Cities of the Mind: Images and Themes of the City in the Social Sciences*. New York: Plenum Press, 1984.
- Rorabaugh, W. J. *Kennedy and the Promise of the Sixties*. Cambridge: Cambridge University Press, 2002.
- Rose, Warren. *Economic Impact of the Port of Houston*. Houston: Center for Research in Business and Economics, College of Business Administration, University of Houston, 1965.
- Rossi, John P. *A Whole New Game: Off the Field Changes in Baseball, 1946-1960*. Jefferson, North Carolina: McFarland and Company, Inc., 1999.
- Rugger, George R. "Weathering." In *Environmental Effects on Polymeric Materials*, Vol. I, pp. 339-411. Edited by Dominick V. Rosato and Robert T. Schwartz. New York: John Wiley and Sons, Inc., 1968.
- Sale, Kirkpatrick. *Power Shift: The Rise of the Southern Rim and Its Challenge to the Eastern Establishment*. New York: Random House, 1975.
- Salvadori, Mario G. "Thin Shells: 1. Structural Behavior and Forms." In *Architectural Engineering—New Structures*, pp. 26-31. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.
- _____. "Thin Shells: 3. Examples Here and Abroad." In *Architectural Engineering—New Structures*, pp. 38-44. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.
- _____. "Thin Shells: 2. Effects of Loads and Forces." In *Architectural Engineering—New Structures*, pp. 32-37. Edited by Robert E. Fischer. New York: McGraw-Hill, Inc., 1964.
- Scherwitz, Wallace W. "Natureproof Astrodome Gets Controlled Lighting." *Illuminating Engineering* 61 (December 1966): 714-717.
- Schnabel, Harry and Harry W. Schnabel. *Tiebacks in Foundation Engineering and Construction*. Lisse, Netherlands: A. A. Balkema, 2002.

- Schoettle, Enid Curtis Bok. "The Establishment of NASA." In *Knowledge and Power: Essays on Science and Government*, pp. 162-270. Edited by Sanford A. Lakoff. New York: The Free Press, 1966.
- Schrieber, C. F. "Sacrificial Anodes." In *Cathodic Protection: Theory and Practice*, pp. 78-93. Edited by V. Ashworth and C. J. L. Booker. Chichester, England: Ellis Horwood Limited, 1986.
- Schulte, George J. "Adhesives in Building." In *Plastics in Building*, pp. 219-233. Edited by Irving Skeist. New York: Reinhold Publishing Corporation, 1966.
- Schultz, T. J. "Acoustical Design of the Houston Astrodome Sports Arena." *Journal of the Audio Engineering Society* 14 (April 1966): 100-104.
- Siegel, Stanley E. *Houston: A Chronicle of the Supercity on Buffalo Bayou*. Woodland Hills, California: Windsor Publications, Inc., 1983.
- Shah, Vishu. *Handbook of Plastics Technology*. 2d ed. New York: John Wiley and Sons, Inc., 1998.
- Shreir, L. L. and P. C. C. Hayfield. "Impressed Current Anodes." In *Cathodic Protection: Theory and Practice*, pp. 94-127. Edited by V. Ashworth and C. J. L. Booker. Chichester, England: Ellis Horwood Limited, 1986.
- Skeist, Irving. "The Role of Plastics in Construction." In *Plastics in Building*, pp. 1-9. Edited by Irving Skeist. New York: Reinhold Publishing Corporation, 1966.
- Skinner, Wickham and Joel D. Goldhar. "An Introduction to the Plastics Industry." In *Environmental Effects on Polymeric Materials*, Vol. I, pp. 1-221. Edited by Dominick V. Rosato and Robert T. Schwartz. New York: John Wiley and Sons, Inc., 1968.
- "Small Flaw in Houston's Diamond." *Business Week*, 17 April 1965, pp. 30-32.
- Smith, Alan H. "Jobs in Texas and New York Show Feasibility of Open Air Cooling." *Heating, Piping, and Air Conditioning* 36 (December 1964): 133-135.
- Smith, Liz. "Giltfinger's Golden Dome." *Sports Illustrated*, 12 April 1965, pp. 44-63.
- The Sporting News*, 1955-1968.
- Stafford, James. "Behind the NASA Move to Houston." *Texas Business Review* 36 (April 1962): 90-94.
- "A Retractable Stainless Steel Dome for Pittsburgh." *Architectural and Engineering News* 1

(June 1959): 6-10.

Stevens, David E. and Gerald S. Odom, "The Steel Framed Dome," *Engineering Journal*, 1 (July 1964): 83-91.

Strong, A. Brent. *Plastics: Materials and Processing*. 2d ed. Upper Saddle River, New Jersey: Prentice Hall, 2000.

Sullivan, Neil J. *The Dodgers Move West*. New York: Oxford University Press, 1987.

"Super Stadiums." *Parks and Recreation* 4 (May 1969): 33-34.

Taylor, Gary, "End of an AstroEra." *Houston City Magazine*. 6 (June 1982):40-45, 68-74, 86-89.

Temko, Allan. "How Not to Build a Ball Park." *Harper's Magazine* 223 (August 1961): 25-28.

Terrell, Roy. "Fast Man With a .45." *Sports Illustrated*, 26 March 1962, pp. 32-36, 41-43.

"The Dome Must Be Blacked Out." *Engineering News-Record*, 15 April 1965, 31.

Thomas, Robert D. and Richard W. Murray. *Progrowth Politics: Change and Governance in Houston*. Berkeley: The Regents of the University of California, 1991.

Tipp, G. and V. J. Watson. *Polymeric Surfaces for Sports and Recreation*. London: Applied Science Publishers, 1982.

Toncre, A. A. "Cathodic Protection of Fixed Structures—Land-Based." In *Cathodic Protection: Theory and Practice*, pp. 183-190. Edited by V. Ashworth and C. J. L. Booker. Chichester, England: Ellis Horwood Limited, 1986.

"Tractor Rides On Inflated Rubber Bags; Gently Smooths (sic) Playing Field at Houston Astrodome." *Midwest Engineer* 17 (March 1965): 5.

Tygiel, Jules. *Past Time: Baseball as History*. Oxford: University Press, 2000.

Ullman, Edward L. "Amenities as a Factor in Regional Growth." *Geographical Review* 44 (January 1954): 119-132.

"Under the Big Dome in Houston." *Newsweek* 64 (17 August 1964): 68-70.

United States Census Bureau, *Census of Population: 1950*, vol. 2, part 43. Washington, D.C.: United States Government Printing Office (USGPO), 1952.

United States Census Bureau, *Census of Population: 1960*, vol. 1, part 45. Washington, D.C.: USGPO, 1962.

“Unusually Large Cooling Duty.” *Journal of Refrigeration* 8 (July 1965): 222-223.

Van Dyke, Vernon. *Pride and Power: The Rationale of the Space Program*. Urbana: The University of Illinois Press, 1964.

Voigt, David Quentin. *American Baseball: Volume II: From the Commissioners to Continental Expansion*. Norman: University of Oklahoma Press, 1972.

_____. *Baseball: An Illustrated History*. University Park and London: The Pennsylvania State University Press, 1987.

von Baeckmann, W. V. and W. Prinz. “Local Cathodic Protection.” In *Handbook of Cathodic Corrosion Protection: Theory and Practice of Electrochemical Protection Processes*, 3d ed., pp. 309-322. Edited by W. von Baeckmann, W. Schwenk, and W. Prinz. Houston: Gulf Publishing Company, 1989.

_____. “Impressed Current Ground Beds and Interference Problems.” In *Handbook of Cathodic Corrosion Protection: Theory and Practice of Electrochemical Protection Processes*, 3d ed., pp. 243-264. Edited by W. von Baeckmann, W. Schwenk, and W. Prinz. Houston: Gulf Publishing Company, 1989.

Wahl, Norman E. “Rain Erosion.” In *Environmental Effects on Polymeric Materials*, Vol. I, pp. 281-338. Edited by Dominick V. Rosato and Robert T. Schwartz. New York: John Wiley and Sons, Inc., 1968.

Walker, H. B. “Design and Construction of Braced Domes.” In *Analysis, Design and Construction of Braced Domes*, pp. 461-478. Edited by Z. S. Makowski. New York: Nichols Publishing Company, 1984.

“Welded Steel Frames World's Largest Clear-Span Domed Stadium.” *Welding Engineer* 49 (June 1964): 55-57.

“What a Wonder! What a Blunder!” *Life*, 23 April 1965, 76A-78.

Whitaker, H. R. “Magic Carpet For All Outdoors.” *Science Digest* 66 (July 1969): 33-37.

Wilkins, N. J. M. “Cathodic Protection of Concrete Structures.” In *Cathodic Protection: Theory and Practice*, pp.172-190. Edited by V. Ashworth and C. J. L. Booker. Chichester, England: Ellis Horwood Limited, 1986.

Wilson, Talbott. “Acoustic-Architectural Considerations in the Harris County Domed Stadium.” *Journal of the Audio Engineering Society* 14 (April 1966): 98-99.

Woolrich, Willis R. and Willis R. Woolrich, Jr. *Air Conditioning*. New York: The Ronald Press Company, 1957.

Wright, Russell O. *The Evolution of Baseball: A History of the Major Leagues in Graphs, 1903-1989*. Jefferson, North Carolina: McFarland and Company, Inc., 1992.

Xanthakos, Petros P. *Ground Anchors and Anchored Structures*. New York: John Wiley and Sons, Inc., 1991.

Youngner, Victor B. "Accelerated Wear Tests on Turfgrass." *Agronomy Journal* 53 (July/August 1961): 217-218.

Zilg, Gerard Colby. *Du Pont: Behind the Nylon Curtain*. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1974.

Zimbalist, Andrew. "The Economics of Stadiums, Teams, and Cities." *Policy Studies Review* 15 (Spring 1998): 17-29.