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A century of military training at Iowa State University 1870-1970

James Leftwich Lee Jr.
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A century of military training at Iowa
State University 1870 - 1970

by

James Leftwich Lee Jr.

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of
The Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Major: Education
(Educational Administration)

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Signature was redacted for privacy.

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For the Graduate College

Iowa State University
Ames, Iowa

1972

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CHAPTER I: INTRODUCTION

Too few Iowans realize the significance and importance of the role played by military training at Iowa State University. Even fewer Iowans know that Iowa State has been a pioneer in military education and that its success was due to the application and initiative of the early Professors of Military Science and Tactics with the support of the College administrative staff. Nevertheless, military training was a part of the curriculum and the military units have been a part of the pomp and ceremony throughout the history of the University.¹

Although this investigation is concerned with a century of military training at Iowa State University, Ames, Iowa, it seems appropriate to begin with a brief review of the historical development of the program on the national level. Such a preview will provide the setting for a better understanding of the scope, growth, and changes which took place as the program developed at Iowa State University.

The National Scene

The idea of a citizens army is deeply rooted in the American tradition and is closely related to the early

¹The use of Iowa Agricultural College (IAC), Iowa State College (ISC), Iowa State University (ISU), Iowa State, the College, and the University will be used interchangeably throughout this paper.

political development of the United States:

George Washington was a firm believer in military education. Many of his writings expressed in the strongest language his feelings in regard to this matter. In his polite but vigorous manner he depreciated on more than one occasion the lack of proper military preparedness in the way of trained and educated officers....He advocated the founding of a military academy for the education of officers for the army, and it was largely through his efforts that the academy now at West Point was created by Act of Congress in 1802.¹

If one were to select an individual who was most responsible for the idea of military training in civilian institutions, the name of Alden Partridge would come to the forefront. Captain Partridge, a former superintendent of the United States Military Academy, founded the American Literary, Scientific, and Military Academy (now Norwich University) at Northfield, Vermont, in 1819. Here we find for the first time in the history of American education that, with the exception of West Point, military studies were prescribed in the curriculum. It was very rare to find military studies in the colleges and universities of the United States up to the time of the Civil War.² The South was the exception where such famous military

¹Captain Ira L. Reeves, Military Education in the United States (Burlington: Free Press Printing Co., 1914), p. 19.

²Paraphrased from The Army Almanac (Washington: Government Printing Office, 1950), p. 325.

schools as Virginia Military Institute (1839) and the Citadel (1842) were established.¹

According to Gene Lyons and John Masland, in Education and Military Leadership, "the experience of the Civil War, and the lack of trained military leadership in the North, particularly, were directly responsible for the inclusion of military instruction in the curriculum of the colleges and universities founded under the terms of the Land Grant Act of 1862. There had been no provision for military instruction in an earlier version of the Land Grant bill which President Buchanan had vetoed in 1857. It was, however, included in the version presented to the Congress five years later."²

This act, frequently called the Morrill Act, was sponsored by Justin Smith Morrill, and it provided for military training. In speaking before the house in favor of his bill he made these remarks:

Something of military instruction has been incorporated in the bill in consequence of the new conviction of its necessity forced upon the attention of the loyal States by the history of the past year. A total unpreparedness presents too many temptations, even to a foe otherwise weak. The national school at West Point may suffice for the regular Army in ordinary years of peace, but it is wholly inadequate when a large army is to be suddenly put into service. If we ever expect to

¹John W. Masland and Lawrence I. Radway, Soldiers and Scholars (Princeton: Princeton University Press, 1957), p. 79.

²Gene Lyons and John Masland, Education and Military Leadership: A Study of the R.O.T.C. (Princeton, N.J.: Princeton University Press, 1959), p. 30.

reduce the army to its old dimensions and again rely on the volunteer system for defense, each State must have the means within itself to organize and officer its own force. With such a system as that are offered--nurseries in every State--a efficient force would at all times be ready to support the cause of the nation.. ..Not one in fifty of these young men who apply to us to be nomimated as candidates for the military or naval schools can be gratified. All these young men feel conscious of their ability to do something honorable for themselves and their country, and their ambition takes the direction of these schools mainly because they know not how elsewhere to obtain a fitting education. The numbers of this class will now be greatly augmented. The ability of parents to educate their children will be curtailed, while the desire to obtain an education, especially a military one, will have been increased. These young men, if this bill should pass will find a field open to them large enough to satisfy all reasonable ambition....Those colleges founded in every State will... to some extent guard against sheer ignorance of all military art which shrouded the country and especially the North, at the time when the tocsin of war sounded at Fort Sumter.¹

The Morrill Act itself makes but a single reference to military instruction in Section 4:

the leading object shall be, without excluding other scientific and classical studies, and including military tactics to teach such branches of learning as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.²

This one phrase, "including military tactics," changed the whole course of federal support for military education. Rather than establish further military or naval academies, the

¹Congressional Globe, Thirty-Seventh Congress, Second Session, Part 4, Appendix, June 6, 1862, p. 256-257.

²U.S., Statutes at Large, Vol. 12, ch. 130, Act of July 2, 1862, 37th Cong., p. 503.

Federal Government decided to promote military education through civilian colleges and universities.¹

Unfortunately, very little beyond the phrase "including military tactics" was contained in the law to provide guidance on how to administer these military programs. Nothing was specified as to exactly what was to be taught or how it was to be taught: "Congress, in other words, established the policy of limited military training for civilians (students) in 1862 and for the next half century either ignored the matter or did little to make it work."²

Although The Iowa Agricultural College was founded on March 22, 1858, its doors were not formally opened to students until eleven years later.³ By this time the previously mentioned Morrill Act of 1862 had been passed. The Ninth General Assembly of Iowa was already in special session and accepted the provision of the Morrill Act on Sept. 11, 1862. Thus Iowa became the first state to ratify the act.

¹Price D. Rice, "The History and Development of the Air Force Reserve Officers: Training Corps Program" (unpublished M.A. thesis, The American University, 1960), pp. 5-6.

²James E. Pollard, Military Training in the Land-Grant Colleges and Universities ([Columbus] Ohio State University, [1961]), p. 41.

³Earle D. Ross, The Land-Grant Idea at Iowa State College (Ames: Iowa State College Press, 1958), p. 27.

The question whether military instruction was to be required or an optional course is one that was never spelled out by the Federal Government. The result of the wording of the act, however, was that each of the participating institutions conducted its military training according to its particular concept and circumstances. The duration of the course, the hours of instruction per week, and even the content of the instruction varied greatly between colleges. James Pollard (an authority on military training in land grant colleges) states, "In fairness, it must be admitted, too, that on their part these colleges often did less than was expected of them or less than the Morrill Act seemed to require."¹ Therefore, the controlling factor seemed to be the degree to which the authorities of the college considered it important to furnish military instruction. At the Iowa Agricultural College military training must have been considered important since a Professor of Military Training was hired as early as 1870, one year after the college opened its doors for students.

Statement of the Problem

The purpose of this study was to provide a history of military training at Iowa State University, Ames, Iowa, from its inception in 1870 until 1970. The problem was to collect

¹Pollard, Military Training in the Land-Grant Colleges and Universities, p. 41.

and record in a single source much of the pertinent information concerning military training at Iowa State University. This information reveals how Iowa State provided military training for its students during the University's history, and furnishes a background of understanding for a discerning approach to the University's current and future association with the Reserve Officers Training Corps (ROTC).

Need for the Study

Extensive accounts of the establishment and development of Iowa State University and several of its departments have been compiled. None of these accounts treat the development of military training in any detail. The extent of the traditional association between Iowa State and the military is not widely known. Few people realize that military training was interpreted to be required for all land grant colleges. The following questions about military training at Iowa State serve to define the problem. Why was military training offered at the Iowa Agricultural College? When and how did military training start at the College? How effective was the military training? How was the training accepted over the first one hundred years? Who were the early leaders of military training and what impact did they have on the college? What changes have occurred in the training from its inception in 1870 and what caused these changes? What were the influences of the four

major military conflicts during this period? What is the future of ROTC (Reserve Officers Training Corps) at Iowa State University?

Procedure

The function of the historian is not limited to a bare listing of events. Such a listing is often impedimenta unless accompanied by scholarly interpretation. This investigation will include the compilation of a mass of data, but will also provide analysis and interpretation which it is hoped will be a unique contribution to the history of military training at Iowa State University.

The time line for gathering data actually started in 1964 when an attempt was made to compile a brief history of military training at Iowa State University for a ROTC promotional brochure. The intensive research started in June, 1970. This search consisted of reviewing the military files, and the World War I and World War II records in the special collections room of the Iowa State University Library. Also a cursory review of the 1880-1970 catalogs of Iowa State University, the early student newspapers--the Aurora, 1873-1891, the Iowa State Student (later The Daily), 1890-1970, and the school yearbook the Bomb, 1894-1970. These publications, along with military inspection reports, minutes of the Iowa State faculty, minutes of the ROTC advisory committee, the Iowa Agricultural College

biennial reports and numerous other Iowa State publications, convinced this writer there was sufficient data to pursue the subject of military training at Iowa State University for a dissertation topic.

The next several months were spent in reviewing numerous secondary sources dealing with Iowa, Iowa State University, and military training on the national level. The most helpful secondary sources dealing with Iowa State were A History of the Iowa State College of Agriculture and Mechanic Arts, and The Land Grant Idea at Iowa State College both by Earle D. Ross; History and Reminiscences of Iowa State College, by the class of '97; and an unpublished Early History of Military Training (1922) by Colonel Pearl M. Shaffer.

Numerous secondary sources dealing with military education in the United States were read in detail. The most important were Military Training in the Land-Grant Colleges and Universities, by James E. Pollard and Education and Military Leadership by Gene M. Lyons and John W. Masland.

Literature dealing specifically with the history of military studies at Iowa State University was limited to four sources: (1) an early unpublished report (1922) by Colonel Pearl M. Shaffer; (2) a six page history of Naval ROTC at Iowa State University (1966); (3) twelve pages in A History of the Iowa State College of Agriculture and Mechanic Arts by Earle Ross (1942); (4) a short history of the first nine months of the Air Force ROTC detachment at Iowa State (1951).

This inquiry lead to interviews with several persons on the Iowa State campus who had been associated with military training. The interviews were made using an unstructured interview schedule designed to gain two types of information, details or confirming information about the period or periods of the history of military training at Iowa State University with which the interviewee was most familiar and a general background of the history of military training at Iowa State. Requests for information dealing with military training at Iowa State were published in several Iowa publications.

During the summer of 1971, research trips were made to the State Historical Society of Iowa (Iowa City), the State University of Iowa Library (Iowa City), and the Herbert Hoover Library, West Branch, Iowa. A one-week research trip was made to the Air Force Archives and the Air University Library at Maxwell AFB, Montgomery, Alabama. All of these research trips produced some documents dealing with military training at Iowa State that were not available locally or even known to exist, i.e., the Air Force Archives contained three brief histories covering three months each of the early operation of the Air Force ROTC unit at Iowa State. Staff members of the local AFROTC detachment did not realize these brief histories existed.

The last six months of 1971 was spent examining every student newspaper published at Iowa State University from 1878 until 1970 and recording the information dealing with military

training. None of these papers were indexed, and consequently, this search involved an issue-by-issue review. Extensive use of the many different files located in the special collections room of Iowa State University produced much valuable information. The papers of Dr. Louis H. Pammel contained an interview with General James Rush Lincoln (an early professor of military training at Iowa State) in which General Lincoln stated he had trained a total of 715 men at Iowa State. This information on the number of men that General Lincoln trained and numerous other data were not available in the normal military records because the armory was destroyed by fire in 1922 and many previous military records were lost. All three military departments at Iowa State made their complete records and files available throughout this research project.

Finally, related research was examined viz., theses dealing with military training at certain schools and ROTC programs in general. Numerous articles dealing with ROTC were reproduced and later studied to insure a fair comprehension of the problems affecting military training in higher education nationwide. Further, a review of the abstracts of research reports that were written at the major military professional schools was also completed. Fifty of these research reports and other documents dealing with ROTC and military training were obtained through the interlibrary loan for intensive study.

Methodology

Most of the data were recorded on 5 x 8 cards and subjected to external criticism concerning the questions of authorship, time, place, genuiness and actual language of the original document. They were then subjected to internal criticism concerning questions of accuracy and value of the statements made. If any material contained internal inconsistencies, it was subjected to further verification. Whenever possible the materials were checked against one another for agreement. The actual writing of the thesis took place in late 1971 and early 1972. However, the major research was accomplished during the past two full academic years.

A chronological approach was used throughout most of the thesis with each chapter normally covering a specified period of time. The introductory chapter included a brief look at the national scene and the process of how military training became a part of the institutions of higher learning. The first chapter also included the statement of the problem, need for the study, research procedure and methodology.

The second chapter on "The Early Years" covers the time period from 1870 until 1916, and deals with the early military training under the first three professors of military science. A brief chapter is devoted to World War I years of 1917-1918, followed by a chapter on the starting of Army ROTC in the

"between the war years," and then ensues a World War II chapter. Next, a separate chapter is devoted to the formation and growth of each of the three present-day ROTC departments of the Army, Navy and Air Force at Iowa State University from the end of World War II until 1959. Then one chapter is presented to compare and contrast the similarities and differences of the three ROTC units. Another chapter describes the important years of 1960 to 1970 in which the ROTC programs underwent many changes as the result of new legislation, dropping of the compulsory military training requirements, campus unrest, and the effects of the Vietnam War. The last chapter is devoted to a brief summary of "A Century of Military Training at Iowa State University 1870-1970."

CHAPTER II: THE EARLY YEARS 1870 to 1916

The attitude of an institution towards military training can be reflected by the manner in which a program was introduced. Since the Iowa Agricultural College was a land grant institution, it was just an accepted fact that military tactics would be a part of the curriculum. Consequently, the working relationship of the College and the Military Department has been quite good since the two virtually grew up apace of each other.

Edward M. Eddy in his book Colleges for Our Land and Time: The Land-Grant Idea in American Education stated:

Because of the traditional emphasis on discipline of mind and body, military tactics was welcomed in some quarters as a practical method of achieving this long pursued objective, as well as providing healthful exercise. It sounded like rationalization, but the colleges had no other course in the face of the requirement.¹

The above statement could very well explain the attitude and atmosphere at the Iowa Agricultural College in the early years. The College operated with the barest of necessities and under very strict discipline. Military training and its often alluded to benefit of good physical exercise just seemed to be appropriate for the College.

¹Edward D. Eddy Jr., Colleges for Our Land and Time: The Land-Grant Idea in American Education (New York: Harper and Brothers, 1957), p. 64.

Lyons and Masland point out that the Morrill Act itself had not provided for assistance to the colleges from the Federal Government in conducting their military courses. Further, they indicate that most colleges pushed off the military courses as an added burden onto faculty members who had retired from the regular Army or had been volunteer officers during the Civil War.¹ This statement by Lyons and Masland also seems to apply to the Iowa Agricultural College since the early Professors of Military Tactics fit this description.

Beginning of Military Training at
Iowa Agricultural College

The implementation of the military provisions of the Morrill Act was left up to the colleges with no guidance whatsoever from the Federal Government. The controlling factor seemed to be the degree to which the authorities of the College considered it important to furnish military instruction. At Iowa Agricultural College military training must have been considered important since in the Third Biennial Report of the College President² (which marked the completion of the first active school year) it was stated that a Professor of Military

¹Lyons and Masland, Education and Military Leadership, p. 34.

²Iowa Agricultural College and Farm, Third Biennial Report of Trustees (Ames, Iowa, 1870), pp. 11-12.

Engineering would be appointed to add to the present faculty of nine.

The First Military Department

In the Fourth Biennial Report¹ the college president explained that the Department of Military Tactics and Engineering was established pursuant to the Act of Congress and would be sustained in conformity with the United States Army Regulations. The course included the study of military engineering, military tactics, and military law. The following subjects were taught in the different college years during the drill period:

- (1) Freshman - school of soldier and company;
- (2) Sophomore - field artillery;
- (3) Junior - bayonet and broad sword exercises, dismounted cavalry tactics; and
- (4) Senior - field fortification, topographical drawing, and small sword exercises.

All able-bodied male students of the college were expected to drill in their respective classes and in the College battalion once a week. The students were expected to purchase a uniform of the approved pattern.

¹Iowa Agricultural College and Farm, Fourth Biennial Report of Trustees (Ames, Iowa, 1871), p. 141.

The authorities of Iowa Agricultural College could have requested a Regular Officer to head its Military Department, however the Fourth Biennial Report points out that General James L. Geddes, an experienced military officer, was hired at an annual salary of \$1,400.00. This salary was for the duties as the head of the Military Department and as college steward. In the same report General Geddes reported that a class of forty-five students was instructed and drilled three times a week in the "School of the Soldier and Company" and that nineteen sophomores received instruction in field artillery. Since this was the first term (1870) of military training, the very basics had to be taught. The artillery instruction was confined mainly to the different parts and nomenclature of the weapon. Artillery instruction was also conducted for three one-hour sessions per week.¹ The Cadet Officers had weekly recitations dealing with military tactics, military engineering or military law.

Any history of military training at the Iowa Agricultural College should include considerable information on the early professors of military science and tactics. General Geddes was the first Professor and head of the Military Training and served from 1870 until 1882. Colonel John Scott headed the Military Department from 1882 until early 1884 and was followed

¹Ibid., p. 141.

by Captain (later General) James Rush Lincoln who served for over thirty-five years. General Geddes and Colonel Scott both served in the Iowa Militia before the Civil War and fought on the side of the North. General Lincoln fought for the South, but after the war he moved to Iowa and subsequently held several commands in the Iowa National Guard.

General James L. Geddes

The most significant biography of General James Geddes, by Dr. Earle D. Ross (the renowned Iowa State College historian), is in the Dictionary of American Biography and is paraphrased here but is included in its entirety as Appendix A.¹

James Loraine Geddes (March 19, 1827-February 21, 1887) has been described by Ross as a soldier and a college administrator. He was born in Edinburgh Scotland and educated in Canada and in the British Military Academy in India. He served in the Royal House Artillery for seven years before moving to Canada where he was made a Colonel of the Canadian Cavalry. In October of 1857 he resigned his commission in the Canadian service and came to Iowa where he farmed and taught a country school.

Before the Civil War he had been drilling a local company of the Iowa Militia and when the unit was mustered into service

¹Dictionary of American Biography (New York: Charles Scribner's Sons, 1931), Vol. VII, pp. 205-06.

in September, 1861, he was commissioned a captain. In less than six months he was promoted to colonel and placed in command of the 86th Iowa Infantry. Colonel Geddes fought in several important battles and was captured at Shiloh when his unit was defending the "hornets' nest". He was later exchanged and fought at Vicksburg and Jackson. In October, 1863, he was placed in charge of a brigade and served in Texas and later in Memphis, Tennessee as a Provost-Marshal of the District. He was made a Brevet Brigadier-General for his conspicuous part in the Mobile Campaign. He resigned from service on June 30, 1865.

After the war he became the Superintendent of the Iowa Institution for the Education of the Blind from June, 1867, to July, 1869. General Geddes had always been interested in Iowa's Land Grant College at Ames and became its steward (in charge of the student mess and dormitories) in 1870. During the fall of that same year he was appointed professor of military tactics and engineering. During his tenure he also taught free hand drawing, bookkeeping, served as deputy treasurer, treasurer, vice president and acting president of the College. His teaching was most notable in connection with the launching of military instruction in a land grant college. He and his cadets achieved gratifying results despite the handicaps of limited funds and the lack of facilities and equipment. His sudden dismissal from the service of the College in 1882 brought considerable protest from students, soldiers, friends and faculty

which resulted in his reappointment as treasurer and recorder in 1884. Two years later he was appointed land agent, and he held these three positions until his death in 1887.

General Geddes had the personality, appearance and gentlemanly conduct to be considered a true soldier. He gained the respect and affection of soldiers, students, fellow officers, and colleagues. He was well-travelled, widely-read, and a man of many talents including that of amateur artist and writer of war songs.

One of the songs that was written while he was a prisoner of war in Selma, Alabama, was published in 1863 and was titled "The Bonnie Flag with the Stripes and Stars." It was sung by his regiment in answer to the "Bonnie Blue Flag."¹ This song was arranged by Henry Werner, was dedicated to Major General S. R. Curtis, and was located in the State Historical Collection (Iowa City).²

There are several accounts of General James L. Geddes's association with the Iowa Agricultural College, the Iowa Militia, and the Grand Army of the Republic (G.A.R.).³ Also,

¹James L. Geddes, The Bonnie Flag with Stripes and Stars, arranged by Henry Werner, (St. Louis: Balmer and Weber, 1863), pp. 1-4.

²The words to General Geddes's song are included in Appendix B.

³One of the most colorful but not the most accurate (especially when he discusses the removal of General Geddes from IAC) was by John B. Hungerford, "Sketches of Iowa State College" (copy of original manuscript prepared 1935-40, Ames, Iowa, 1941), pp. 116-123; Alumnus, December 1908, p. 17.

any publication in Iowa that dealt with the subject of the Iowa Agricultural College, the Civil War, and military training in the early years invariably had several references to this well-known and talented man. One can only conclude that General Geddes by nature, training, and experience was well qualified to serve as the first Professor of Military Tactics and Engineering. Hungerford points out that although he was vice-president of the College, the General was seldom identified with executive affairs, preferring to devote his time to active department work where lay his prime responsibilities.¹

General James L. Geddes and the
Military Department 1870-1882

In 1870 Congress authorized the War Department to issue small arms and artillery pieces to the land grant institutions and military colleges.² General Geddes, the first professor of Military Tactics, lost no time in procuring the available equipment for the College. His first report to the College president and the Ninth Report of the Adjutant General of the State of Iowa dated 1871, showed that the College received the following arms and accoutrements:

¹Hungerford, "Sketches", p. 116.

²Lyons and Masland, Education and Military Leadership, p. 34.

40 U. S. Breech loading muskets
 40 Enfield Rifles, cal. 58, complete
 40 sets of accoutrements
 1 light, 12-pounder, bronze gun
 1000 rounds center fire cartridges
 96 rounds fixed ammunition for the 12 pounder
 40 sets light cavalry sabres and belts
 4 non-commissioned officers swords¹

General Geddes was glad to get the weapons and thanked the State of Iowa for sending them at no expense to the College. In his first report (a rather lengthy affair) to the College president, General Geddes mentioned that he was responsible for \$3,500 worth of State and U. S. Property with no place to store it. A temporary shed for the protection of the "piece" had been erected by the members of the class in artillery from odd scraps of lumber found on the farm. The General went on to explain how hard it was to keep the weapons in proper condition even with trained personnel and the best of facilities, whereas he had sixty or seventy inexperienced boys and virtually no facilities.² This served as the first of many such requests for a proper armory needed to support the military training.

General Geddes made a strong plea for maintaining military discipline which would be considerably different from the discipline of the recitation room. He gave a detailed outline

¹Report of the Adjutant General of Iowa, January 1870-January 1871, p. 5; Iowa Agricultural College and Farm, Fourth Biennial Report of Trustees, p. 142.

²Iowa Agricultural College and Farm, Fourth Biennial Report of Trustees (Ames, Iowa, 1871), pp. 142-143.

of how the military discipline could be tied in with the system of self-government of the College and carried out within the limits of the code of discipline of the United States Army Regulations. The General concluded: "to make the department a success, a thorough and recognized organization must be made; greater interest taken in its progress and welfare than has been heretofore evinced, and the Professor in charge allowed more time to carry out its requirements."¹

Iowa Agricultural College did not follow General Geddes recommendations for strict military discipline throughout the college nor did they go as far as some other institutions that offered military training. At the University of Illinois, when the military training unit was first commanded by an active duty officer in 1878, the military salute became the regulation form of recognition between professors and students.² General Geddes did see to it that the cadets were subject to military discipline while they were attending military classes and drill sessions.

The facilities furnished the Military Department during General Geddes's twelve years as the department head ended up

¹Ibid., p. 144.

²Winton U. Solberg, The University of Illinois 1867-1894: An Intellectual and Cultural History (Urbana: University of Illinois, 1968), p. 207.

being in the basement of Old Main. This may appear to be inadequate, but one must consider that for several years the College was Old Main. It housed all the students, the classrooms, the faculty, the College president and his family, and naturally the military tactics and engineering department. Since the whole College was operating under rather austere conditions for the first several years, the Military Department was treated about as well as any department as far as facilities were concerned. However, as the College enrollment grew and other departments' facilities gradually expanded, we find the Military Department was still restricted to the basement of Old Main, until almost the turn of the century. Needless to say this was not large enough to conduct the drill laboratory; as a result, the drill was regulated by the weather.

According to Ross military tactics at Iowa Agricultural College was planned most elaborately:

The designation "military tactics and engineering" was intended to emphasize the technical aspects of the training. For two bienniums, [sic] (1870-1873), the instruction was listed as a co-ordinate course of study, although it was explained that "the classes for military instruction are interspersed through the different courses." From 1874 the military was listed with the special departments.¹

The early reports of General Geddes were fairly detailed and listed what was taught each term and the number of students

¹Earle D. Ross, A History of The Iowa State College of Agriculture and Mechanic Arts (Ames: Iowa State College Press, 1942), p. 129.

in each school year. The freshman and sophomore years included virtually all the male students of these college years, whereas the junior and senior years showed about one-fourth of the male students taking the advanced or officer training. According to the Fifth Biennial Report (1873) of the College President, General Geddes added a new branch of military instruction to the three already taught. Gunnery and ordinance, which covered theory of projectiles, siege, artillery and mortar practice, was added to military engineering, military tactics and military law.¹ The first Professor of Military Tactics and Engineering at the College continued to introduce new subjects to keep the military training interesting and accepted. Naturally, he was delighted that one of the twenty oratory topics chosen for the first graduation from IAC in 1872 dealt with military training. Mr. S. R. Churchill of Scott County argued that every educational institution in the country should have a Military Department. He also concluded that the instruction ought to be an equal footing with every other department and should be compulsory.²

According to the roster of organized militia companies, January 1, 1873, in the Adjutant General Report of the State of Iowa, the college militia companies were listed the same as the

¹Iowa Agricultural College and Farm, Fifth Biennial Report of Trustees (Ames, Iowa, 1873), p. 66.

²Ross, A History of the Iowa State College, pp. 379-380.

other twenty-eight units of the Iowa State Militia. The officers of the cadet unit carried commissions in the Iowa National Guard with the same rank they held within the College company. In the 1876-77 time period the Adjutant General's report listed the College unit as unattached organization but the cadet officers still held their commissions in the Iowa National Guard. After the 1877 time period the cadet officers were not shown as having commissions in the Iowa Guard. If any held commissions in the Iowa National Guard, they did so in their home units.

According to these early Adjutant General reports (1870-1890) the Iowa Agricultural College unit was as well armed as any of the Iowa National Guard units. In fact, the January 1, 1874, Roster of Militia in Iowa showed that the College artillery battery called "Geddes' Battery" had one 12 pounder cannon, which was one of the few in the state.¹

According to Colonel Pearl M. Shaffer, Professor of Military Science and Tactics 1920-24, in his "Brief History of Military Training in the Iowa State College":

A study of the reports of the operations of the college in the early years will reveal the struggle for appropriations to keep abreast with the increasing enrollment, the demand for the new buildings and improvement for increased teaching force and equipment, and it is interesting to note how small a proportion of the endowment fund found its way to direct support of military instruction. With the efforts to recover

¹Report of the Adjutant General of Iowa, 1874, p. 7.

from the stress of the Civil War, the immediate interest of the people turned to the development of Iowa's greatest industry, agriculture, it is not surprising that military instruction received secondary consideration...the records indicate that considerable stress was laid upon labor in workshop and on the farm as a means of practical education, students being required to perform an average of three hours labor per day. This was the birth of the laboratory method of the present day, and has always presented a serious obstacle in the way of securing sufficient time for military work in industrial colleges.¹

Colonel Shaffer goes on to report that the interest in other departments overshadowed the military department. General Geddes testified in February, 1874, that drill was conducted only once a week and only given to freshman due to the fact that drill was inadvertently omitted from the daily schedule by the faculty. There appears to be a gradual encroachment on the time of the head of the military department until in the same testimony, General Geddes reports that in addition to his military duties he was treasurer, steward, and instructor in bookkeeping and drawing.²

In spite of the many difficulties and the increased work load of General Geddes, the military training program continued with over-all good acceptance on the College campus. The Sixth Biennial Report of Trustees included the requirement of

¹Pearl M. Shaffer, "A Brief History of Military Training in the Iowa State College" (typewritten manuscript in military folder, Special Collection's Room, Iowa State University Library, Ames, Iowa, 1921), p. 3.

²Ibid., p. 4.

a uniform for military formations. The uniform was to consist of a regulation hat, blue blouse, and a pair of blue pants. The whole cost was not to exceed \$20.00 and the material was to be of good enough quality to be suitable for ordinary wear on the college farm.¹

In 1875 all of the military classes were formed into a college battalion. The staff and field officers were from the junior and senior classes and the non-commissioned officers and other enlisted rank were from the freshmen and sophomore classes according to merit. During this time period the first mention is made as to how the military graduates could serve. Those who were deemed eligible by the commander of the battalion [General Geddes] and the President of the College would have their names forwarded through the Adjutant Generals office to the Governor of the State for a commission in the Iowa National Guard.²

General Geddes reported in 1876 that the textbooks used were Upton's Infantry Tactics, McCellan's Bayonet Exercise, Mahan's Military Engineering, and Smith's Field Artillery.

¹Iowa Agricultural College and Farm, Sixth Biennial Report of Trustees (Ames, Iowa, 1874-75), pp. 79-80.

²Ibid., p. 80.

Works of reference were Scott's Military Dictionary, Duparero's Military Art, and the United States Army Regulations.¹

Five years after the announced requirement for uniforms the cadets did have blue uniforms even if they did not match very well. The Professor of Military Tactics would see to it that the dress was truly "uniform". In the "locals" section of the Aurora (March, 1880) it was noted that: "General Geddes is in Chicago on business. He took with him, to a military tailor, the measurements of more than a hundred young soldiers, and soon the royal blue will be more common."² In all of these early student papers and college reports there was never any hint of objection to having to buy a uniform for military training. On the University of Nebraska campus there was considerable discussion over the requirement to purchase a uniform, the result being outright refusal of some students in the 1877 to 1879 period which lead to part of the cadets drilling in a "ragamuffing squad" without uniforms.³ This problem did not occur at Iowa Agricultural College since the administration had the foresight to require a uniform that could be worn during all other college activities rather than just during drill.

¹Iowa Agricultural College and Farm, Seventh Biennial Report of Trustees (Ames, Iowa, 1876-77), p. 114.

²Aurora, March 1880, p. 15.

³History of the Military Department University of Nebraska (Lincoln: University Printing Department, 1942), p. 4.

General Geddes was highly regarded on the College campus and had the distinction of being the second highest paid person on campus at \$1,800.00 a year, which was \$200.00 more than any other full Professor.¹ Naturally this salary was based on all of his duties in addition to his position as the Military Department head. His stature on the campus was evidenced by his participation in so many campus activities. He designed the heading for the Aurora, the first Iowa Agricultural College student paper, and was one of the most prolific faculty writers in the early issues. Being one of the "most travelled" faculty members (he had lived in England, India and Canada in addition to the United States) gave him a chance to expound on his travels to the very interested students. Another indication of his stature on campus was shown by the faculty in 1879 when General Geddes was awarded an honorary Master of Philosophy by the Iowa Agricultural College.

Colonel Shaffer in his 1921 summary of early military training reported on how some of the early college classes prided themselves on being the finest body of soldiers the College ever produced. He quoted Dr. O. H. Cessna, who was the college chaplain for many years: "Elementary, as the instruction may have been, one has only to interview one of the early graduates to be convinced that the enthusiasm created by the

¹Iowa Agricultural College and Farm, Seventh Biennial Report of Trustees, p. 173.

personality of General Geddes, was not without a very considerable military value." Shaffer goes on to report:

Perhaps the most marked instance of the results of the training of those days is exemplified in the person of Professor Herman Knapp, present treasurer and business manager of the college, who still retains the Military bearing acquired under General Geddes. The inspiration gained in these early days of the Department led him to engage actively in National Guard work of the State for many years, where he gained the rank of Major. He does not hesitate to state that the habits of discipline and system acquired from this early training and so well exemplified in the able administration and executive organization of his office, were largely the result of his early Military training in the College, and that he considers that his training as a Cadet Officer has contributed largely to his success.¹

Herman Knapp would be in the service of the College for many years, and would help play a big part in the acceptance of military training on the Iowa State College campus in the late 1800's and early 1900's. He would actually be in charge of the cadet corps when a later Professor of Military Tactics would be called away to the Spanish American War. Needless to say, any Military Department head would like to have an avid supporter like Herman Knapp on the faculty.

General Geddes made several attempts to get his IAC cadets in the limelight. A typical example was in 1878 when the College military company marched in the first position of the soldiers reunion parade in Des Moines.² In fact, it is from

¹Shaffer, "A Brief History of Military Training in the Iowa State College", p. 6.

²History of Reminiscences of Iowa Agricultural College, Class of 1897, Ames (Des Moines: Miller Publishing Co., 1897), p. 48.

these early parades, later drill performances and inspections, that most people around the state might have gotten the idea that drill was the only thing taught in the Military Department at Iowa Agricultural College. In later years the Military Department at IAC would introduce sham battles, maneuvers, special demonstrations of bridge building and other military tactics to show that something other than drill was taught.

General Geddes's treasurer's report in the Eighth Biennial Report of the College for the years 1878 and 1879 listed \$300.00 spent on an armory.¹ Evidently the General did finally get an adequate place to store the artillery piece and some supporting equipment. Nevertheless, the armory must not have been adequate for mustering all of the College cadets since most of the annual reports of the military department head's for the next thirty-six years requested an adequate armory to support the Military Department.

In 1879 the military courses were basically the same as in 1873 except that because of its size the whole unit also drilled as a battalion rather than as a single company. General Geddes continued to give lectures throughout the four year course. These lectures were mainly for the junior and senior cadet officers, who virtually ran the cadet drill sessions. The juniors and seniors had one hour of recitation

¹Iowa Agricultural College and Farm, Eighth Biennial Report of Trustees (Ames, Iowa, 1879), p. 22.

a week dealing with infantry tactics, artillery tactics, army administration, and military engineering or military law, depending on which subject was being taught in a particular term. The first college catalogue (1880) listed several different areas that did not lead to any degree, but any student completing these studies would receive the College certificate showing his standing in these studies. These areas were domestic economy, military science, literature, language, mathematics, physics, chemistry, biology, and philosophy.¹ According to the catalog a person could come to Iowa Agricultural College and use the College facilities with the expressed purpose of gaining a certification in one of these areas which naturally included military science. This certification (though not required) could have been important in getting a winter job since many IAC students taught in local schools when not attending college. Some of the Iowa Agricultural College students and graduates did serve as military instructors at other schools. There are no records to indicate that any of those who later taught military training came to the College specifically for the purpose of certification in military tactics. They probably received the necessary military training while pursuing the regular college work. This should and does speak highly of the military training they received.

¹Iowa Agricultural College Catalogue, (Ames, Iowa, 1880).

The comments in the Aurora would lead one to believe that General Geddes and the military training was well accepted.

The July, 1882, edition of the Aurora pointed out that:

The military companies have been drilling during the past term with no small amount of interest. The General [Geddes] takes pride in seeing the "boys" out on the parade grounds, ready and willing to obey every command. The exercises in this line, when taken properly, certainly add much to the carriage of the student and are conducive to his health. We are fortunate to have General Geddes, so able an instructor in this department, for he makes it one of the pleasant features of the college.¹

In July, 1882, General Geddes became acting President of Iowa Agricultural College when President Adonijah Welch was granted a leave of absence.² Needless to say, that kind of work load was bound to have some effect on the performance of his military duties. His military reports to the president from 1870-1878 had been lengthy and had given a good accounting of the military department. The reports from 1879-82 were short and virtually a repeat of the previous year. One might conclude that General Geddes was too involved in affairs other than the military department.

Nevertheless, neither this massive involvement nor his efficiency had anything to do with his sudden dismissal by a new administrative board. The terse announcement in the

¹Aurora, July, 1882, p. 76.

²Iowa Agricultural College and Farm, Tenth Biennial Report of Trustees (Ames, Iowa, 1882-83), p. 148.

November, 1882, annual meeting of the Board of Trustees (second item of business) listed "the services of General J. L. Geddes were discontinued."¹ It appears that General Geddes was dismissed by a new board of trustees that was of a different political party than the General. This could not be verified but was alluded to in different sources.

As the biography of General Geddes pointed out there was a considerable uproar across the state and on the Iowa Agricultural College campus. The Aurora and other Iowa papers loudly condemned the dismissal of the General. It did take quite a while before an organized effort by his fellow soldiers of the Grand Army of the Republic (G.A.R.) would be able to muster forces and then present their case to the Board of Trustees of the College. The Board of Trustees then appointed a committee to investigate the matter. This naturally took a considerable amount of time to investigate and answer the charges of the G.A.R. During the period of time from General Geddes's dismissal and the final report of the investigating committee of the Board a new Professor of Military Tactics had been appointed and had served for one full year and then resigned. Another Professor of Military Tactics had been appointed and was serving capably. The investigating committee politely pointed

¹Ibid., p. 149.

out that they could not necessarily be held responsible for another board's action. (A new board had been elected during the period of time after General Geddes' dismissal and subsequent protest of his removal.) Further, the committee pointed out there were some misstatements of facts in the case. The G.A.R. was under the impression that a former confederate soldier had immediately replaced General Geddes and this raised the ire of the Iowans who had fought for the North. Actually a former colonel in the Iowa Militia had replaced General Geddes for one year and then the confederate soldier took the job in the Military Department. This confederate soldier had been in Iowa since 1868, had commanded an Iowa Company of the National Guard for several years, and was a thoroughly loyal man. The new Board of Trustees had high praise for General Geddes but felt that removing the present head of the military department just to reinstate the General would be an injustice equal to that done to General Geddes in the first place. The final conclusion of the investigating committee was that they would rather hire a union soldier if there was an opening, but there was none.¹

The next item of business for the 1884-85 Board of Trustees pointed out that the term of office of the College

¹Iowa Agricultural College and Farm, Eleventh Biennial Report of the Trustees (Ames, Iowa, 1884-1885), pp. 138-39.

treasurer having expired December 1st, General Geddes was elected to that position. The duties of College recorder and manager of the book department were added to those of treasurer for the salary of \$1,000.00 per year.

According to Ross, "the delicate military situation was adjusted by a vote of confidence in Captain [James Rush] Lincoln, warm praise of General Geddes, and the more substantial relief in his [General Geddes's] election to the college treasurership. The relations of the two military men were reported to be most cordial."¹

Taking a quick preview of the biography and the previous information presented on General Geddes, one can conclude that he did have a significant impact on the Iowa Agricultural College, the most significant impact being the initiating and conducting the military training at Iowa Agricultural College. We must remember that General Geddes had no model to follow in setting up the military training program. There was no syllabus, no provisions for equipment or uniforms, and no clearly defined objectives. The financial support and facilities for military training at the College were extremely limited. In spite of all these impediments, General Geddes did start and create a viable military training program that allowed Iowa Agricultural College to feel it was carrying out the intent of the Land Grant Act.

¹Ross, A History of the Iowa State College, p. 103.

It is interesting to note that the University of Nebraska which opened in 1871 did not have an instructor of military tactics until 1876.¹ The first step toward the establishment of military instruction at the State University of Iowa (Iowa City) was taken during the early days of the Civil War.² The first military training at the State University was in 1863 under a teacher of gymnastics and military drill. This was dropped in 1864, resumed in 1865, and dropped in 1866. In 1874 a "chair of military instruction was established."³

The University of Minnesota started its military department under a retired Major General Richard W. Johnson in 1869. The training was dropped when General Johnson resigned in January 1871. There was no military department head until the Fall of 1872 when a new Professor of Military Science and Tactics was assigned.⁴

Compared to the University of Nebraska and the University of Minnesota (land-grant institutions) and the State University of Iowa, the Iowa Agricultural College was off to a more effective start in providing a program of military training. As

¹History of the Military Department University of Nebraska (Lincoln: University Printing Department, 1942), p. 2.

²Alan C. Rockwood, "A History of the Military Department of the State University of Iowa," Iowa Journal of History and Politics, Vol. XXI (April, 1923), 183.

³Ibid., p. 190.

⁴James P. Kress, "A History of Military Training at the University of Minnesota 1869-1969," (n.p., n.d.), p. 3.

stated earlier, the military training at IAC started only one year after the College officially opened its doors and has been continuous except for a brief period during World War II.

It is also interesting that the University of Nebraska and the State University of Iowa both applied for and received active duty officers, once they had made a firm commitment towards a military training program. The University of Minnesota also received an active duty officer after the military department had been started by a retired officer. These active duty officers were paid by the Army with a small additional compensation from the schools. At Iowa Agricultural College, however, an experienced military officer, now a civilian, was hired and paid by the College. This is just one example of the many differences in the early military training in the United State institutions of higher learning.

The University of Nebraska, the University of Minnesota, the State University of Iowa, and most any other school that had active duty officers assigned as Professor of Military Science and Tactics had a frequent turnover of military department heads (and periods of time when no officer was assigned) as the Regular Army Officers could only be assigned for a short period of time. The rapid turnover of personnel has been a continuing problem in maintaining an efficient and effective program in many institutions of higher education. However, since only three men served in the capacity as head of the

military training department and one officer served as acting department head during the Spanish-American War, it was not a problem at Iowa State College during the first 45 years of military training. One might also doubt if many of the active duty lieutenants and captains who served as Professors of Military Science and Tactics at other schools were as well qualified as those military department heads at Iowa Agricultural College. Even Lieutenant John J. Pershing who served at the University of Nebraska from 1891 until 1895 gained his fame and experience after he left his post at Lincoln, Nebraska.

Colonel John Scott 1882-1884

The second head of military training at Iowa Agricultural College was Colonel John Scott. He too was well qualified in military tactics since he had served as an enlisted man in the Mexican War and had commanded an Iowa company during the Civil War. He rose to the rank of colonel with the Thirty-Second Iowa Infantry and commanded it in several battles of the Civil War. Colonel Scott was also well known in Iowa for other than his military exploits; he was a teacher, lawyer, had served in the Senate of Iowa in 1859, and became the Lieutenant-Governor of Iowa in 1867. His complete biography covers six pages in the Biographical and Historical Memoirs of Story County Iowa.¹

¹Biographical and Historical Memoirs of Story County Iowa (Chicago: The Goodspeed Publishing Co., 1890), pp. 412-418.

Colonel Scott was also an avid writer and historical buff. It was reported in the July 4th, 1876 issue of the Nevada Representative that Colonel Scott delivered the centennial oration at Nevada. The oration was a sketch of Story County and was prepared "in pursuance of the Proclamation of the President, and in accordance with the recommendation of the Governor of the State."¹ In the same paper, a brief background on the Agricultural College (meaning Iowa Agricultural College) listed Colonel Scott as present at a meeting of Story County residents seeking to get the College located in their county. Colonel Scott was one of the two main speakers at a July 4, 1859, celebration on the College farm in a grove north of the present armory.² Colonel Scott was also present for the inauguration of the first College president on March 17, 1869. In addition to being the chairman of a committee to write up the happenings of the inauguration event, as the Lieutenant Governor of Iowa, he gave a few extemporaneous words of welcome to the gathering of over 1200.

One can only conclude that Colonel Scott had an interest in the Iowa Agricultural College long before he was appointed Professor of Military Tactics at a salary of \$500.00.³ Colonel

¹Nevada Representative (Story County Iowa) July 4, 1876.

²Ross, A History of the Iowa State College, p. 27.

³Iowa Agricultural College and Farm, Tenth Biennial Report of the Trustees, p. 148.

Scott evidently lived in Nevada and commuted to the College campus. The March, 1883, issue of the Aurora, in the "personal" section, pointed out that "Colonel Scott had been here only once this term, but we shall probably see more of him in the future."¹ This article got results as Colonel Scott appeared forthwith. The April, 1883, Aurora reported that the Military Department would "boom" under the guidance of Colonel Scott and the planning of the cadet officers.² The August, 1883, issue of the Aurora reported that Colonel Scott had entertained the whole college battalion at a social gathering.³

Colonel Scott had little time (one school year) to make an impact on the military training at the Iowa Agricultural College. He did initiate a social gathering of the college battalion that would be repeated by the later Professors of Military Tactics for several years. His one year tenure also pointed out the need to hire a younger, more dynamic, and interested person who would remain in the employ of the College for a longer period of time and serve as the head of the Military Department. There was no report filed for the Military Department during Colonel Scott's year as Professor of Military Tactics. The 1883 College Catalogue retained the same

¹Aurora, March, 1883.

²Aurora, April, 1883, p. 31.

³Aurora, August, 1883, p. 101.

statement about the Military Department that had been listed for the past few years.

Captain--General James Rush Lincoln

The third Professor of Military Tactics at Iowa Agricultural College was Captain James Rush Lincoln. The March, 1884, issue of the Aurora mentions the big squabble across the state when Captain Lincoln was hired as the Professor of Military Tactics at Iowa Agricultural College, since he had fought for the Confederacy during the Civil War. The reaction on the IAC campus itself was favorable to Captain Lincoln's appointment since he had been associated with the College earlier in another capacity. He was hired as steward at the second meeting of the College Board of Trustees in November, 1882 and his salary was fixed at \$1,000 per annum plus board during the school year.¹

Since the College school year was from March until November we can see that Captain Lincoln probably worked as steward from the start of the 1883 school year until early 1884. Colonel Scott resigned as Professor of Military Tactics in early 1884 (actually before the school year started). Captain Lincoln was readily available and was probably "as qualified" as any other interested person in the state.

¹Iowa Agricultural College and Farm, Tenth Biennial Report of Trustees, p. 150.

Nevertheless, there is considerable conflict in the different sources as to what the situation was and when Captain Lincoln assumed the duties of the Professor of Military Tactics.

The Tenth Biennial Report of IAC listed him hired as steward¹ and Colonel Scott Professor of Military Tactics in 1882.² Hungerford writes as if Colonel Scott never existed and that Captain Lincoln took over the Military Department immediately after General Geddes was removed.³ Colonel Shaffer in his 1921 History of the Military Department stated that Captain Lincoln was elected as steward and Professor of Military Tactics on March 1, 1884.⁴ General Lincoln, in an April 16, 1922, interview (a few months before his death) with Dr. L. H. Pammel, stated he came to Ames "on October 1, 1883, in charge of the Military Department and Steward of the College."⁵ Dr. Earle D. Ross in his book A History of the Iowa State College of Agriculture and Mechanic Arts, stated, "Captain James Lincoln, an officer in the National Guard who as a loyal young

¹Iowa Agricultural College and Farm, Tenth Biennial Report of the Trustees, p. 140.

²Ibid., p. 138.

³Hungerford, "Sketches", p. 119.

⁴Shaffer, "A Brief History of Military Training in the Iowa State College," p. 7.

⁵L. H. Pammel Papers, Iowa State University, Special Collections, Interview with General J. R. Lincoln, April, 16, 1922, p. 2.

Marylander had seen active services as a Confederate soldier, was made steward 1883 and at the beginning of the new college year 1884 Professor of Military Tactics."¹

It suffices to say that Captain Lincoln at the age of thirty-nine was on campus and held both jobs as steward and Professor of Military Tactics. The controversy which arose over his hiring is quite interesting. Evidently it was all right for a former Confederate soldier to be the steward (in charge of students mess and dormitories) but not to teach military tactics to Iowa farm boys. One must also consider the political environment of the College scene after the sudden removal of Geddes just the year before. It is also interesting to note that Captain Lincoln had moved to Boone, Iowa, after the Civil War in February, 1868, and had been a Captain in command of a Iowa National Guard Company in 1876, eight years before his appointment of Professor of Military Tactics.² The students at the College supported the initial appointment of Captain Lincoln as Professor of Military Science and Tactics. At the end of the school year the November, 1884, Aurora happily announced Captain Lincoln would be retained in his position.³

¹Ross, A History of the Iowa State College, p. 99.

²L. H. Pammel Papers, p. 2.

³Aurora, November 1884, p. 200.

The November issue of the Aurora also mentioned that General Geddes had been hired as treasurer and recorder for the College.¹ This helped soothe the Iowa Agricultural College campus scene since both General Geddes and Captain Lincoln were now in the employ of the College.

Captain Lincoln, once past that controversial first year, remained in charge of the Military Department until 1919, except during the period of the Spanish American War when he served as a Brigadier General of the U. S. Volunteers. The cadet corps was then under the charge of Professor Herman Knapp. Shaffer explained that even after 1919 General Lincoln continued to be associated with the Military Department and was carried on the faculty as Assistant Professor of Military Science and Tactics, under the employ of the college.²

The most often quoted biography of Captain (later General) James Rush Lincoln states he was born in Frederick County,

¹Ibid., p. 201.

²Shaffer, "A Brief History of Military Training in the Iowa State College", p. 7.

Maryland, February 3, 1845, to a wealthy family.¹ He spent much of first nine years of his life traveling with his father throughout the North American Continent. His education was not neglected during this time, a private tutor accompanied him in his travels. At age nine he was placed in a military school. When the Civil War broke out he was a cadet in the Pennsylvania Military Academy and elected to fight for the Confederate cause. Following the military spirit he had inherited from his ancestors, the lad accepted a commission at the age of sixteen. He took part in many great battles of the Civil War as a Captain of the cavalry and also served as a staff officer in several capacities, which service gave him an intimate acquaintance with practically all the leaders of the Confederacy. He was at the Battle of Gettysburg and was also present at the surrender of Appomattox.

After the war he moved to Boone, Iowa, in February, 1868, where he first homesteaded, then became Superintendent of the Northwestern mines in Boone. Had he not possessed rare

¹A biography of General James Rush Lincoln is in Appendix C and will be briefly paraphrased. Also one of the most glowing tributes ever paid to a faculty member of the Iowa State College was rendered by Colonel Guy S. Brewer (class of '97) during the Armistice Day exercises, November 11, 1922, shortly after General Lincoln's death. It is included in Appendix D. Each of these should be read to gain some idea of the background of this great soldier who had considerable impact on the Iowa Agricultural College by serving as the head of the Military Department for over thirty-five years. General Lincoln also had considerable impact on the Iowa National Guard. A clearer picture of the magnitude of his overall impact should become clearer within the next few pages.

qualities for winning men to him and inspiring confidence, he could not have overcome the prejudice against a man of Northern birth fighting for the Confederacy.¹ In 1883 General Lincoln moved to Ames as the Steward of Iowa Agricultural College and the following year became the head of the Military Department.

Captain James Rush Lincoln 1884-1889

Captain² Lincoln took charge of the Iowa Agricultural College Military Department in early 1884. The department had received little motivation or guidance from Colonel Scott during his one year tenure. Also the last few years of General Geddes's service as the Professor of Military Tactics had seen little change from the original military course he devised. The opportunity was ripe for a younger, more dynamic officer who was endowed with superior military knowledge and had the burning desire to prove that a former Confederate was more than capable of fulfilling the position of instructing the youth of Iowa in Military Science.

¹Hungerford, "Sketches", p. 120.

²Captain was his present rank in the Iowa National Guard. (1884) The early Professors of Military Tactics had gone by the highest rank they held in the Civil War. Captain Lincoln would be identified on campus by his rank in the Iowa National Guard up to Brigadier General and thereafter was identified as General Lincoln, except when he was a Major in the United States Army (unassigned) during World War I.

Eddy stated that "the teaching of military tactics remained in [a] chaotic state throughout most of this period" [1880-1899].¹ Even though the College Military Department would require lots of hard work and would have to be operated with limited funds and equipment, the conditions of military training could not be termed chaotic.

Captain Lincoln pointed out in this first report that

It is not intended in this department to complete the education of the thorough soldier, but to fit young men for filling intelligently positions in the State Troops as line officers and company instructors. The constant demand for men thus trained emphasizes the value of a thoroughly organized and well sustained military course. The chief advantages derived are the acquirement of a dignified carriage of the person, gentlemanly deportment and self-respect with habits of neatness, order and punctuality.²

Captain Lincoln went on to report that a cadet could extend his studies in Military Science to include infantry, artillery and signal tactics and would receive lectures on military subjects throughout these courses. The military training was required for all male students during the first two years except those excused by proper authority [Captain Lincoln and the College President]. The cadets were required to wear the uniform during military exercises.²

¹Eddy, Colleges for Our Land and Time: The Land-Grant Idea in American Education, p. 93.

²Iowa Agricultural College and Farm, Eleventh Biennial Report of Trustees (Ames, Iowa, 1884-1885), p. 46.

From the very beginning Captain Lincoln was looking for ways to make the training more effective and was keeping the ultimate goal of training officers uppermost in mind. He organized the College battalion into several companies with a minimum number of privates and a maximum number of officers. He remembered very well the problems of both sides during the Civil War; neither side had an adequate number of trained officers. He felt that if another war should come there would be plenty of enlisted men available but the real need would be for trained officers to lead these men.

In his second report that is printed in the Twelfth Biennial Report of Trustees of the College, Captain Lincoln was granted an extra hour of time to teach Military Science. The result was added efficiency of the cadet officers in their work.¹ For his additional time and effort Captain Lincoln's salary for the Professor of Military Science was raised from \$300.00 to \$500.00, which was in addition to the \$1,000.00 he received as steward. This raise made his salary comparable to other professors of the College.²

Captain Lincoln was probably quite pleased to report that several of the College cadets had taken positions in the Iowa

¹Iowa Agricultural College and Farm, Twelfth Biennial Report of Trustees (Ames, Iowa, 1886-1887), p. 81.

²Ibid., p. 168.

National Guard, were looked upon with great respect, and were recognized as young officers of knowledge and ability. He also mentions that the young ladies of the College had formed a company for drilling, which was of great benefit to them as a health exercise, as well as creating an interest in drill.¹ Captain Lincoln had several key elements working for him and his military training. He now had more time to teach, and the girls, sometimes called the "Broom Brigade" because they drilled with broom handles, naturally added something to the weekly dress parades on Wednesday afternoon. Another element was that the requirement for mandatory manual labor for all college students had been dropped in 1884. This gave the very busy students an extra two or three hours per day and one of these hours was now devoted to the military tactics. Finally, the fact that his students were being accepted as officers in the Iowa National Guard gave them the added incentive to pursue the last two years of voluntary officer training. Before this time it had virtually been impossible to get a commission in the Regular Army.

One can see that the late 1880's could very easily be considered growing years for the military department when Captain Lincoln reports that the graduating class of '89

¹Ibid., p. 81.

numbered forty-five. Of this number eighteen were enrolled in the battalion.¹ Captain Lincoln also concluded that military training and discipline were generally recognized as desirable factors in education, and that drill is also important since it requires a quick action of the mind in the interpretation and execution of orders in military maneuvers.¹ The Captain once again mentioned in the same report that his cadets were still in demand as officers in the National Guard and that two from the class of '89 had taken jobs as military instructors in other schools. Finally, he stated that the ladies' company continued to do good work and that other colleges had followed the lead of Iowa Agricultural College and had companies of ladies that were drilling regularly. The University of Nebraska and the University of Minnesota did not have ladies companies formed until 1888, which was two years after Iowa Agricultural College.

Colonel (later General) James Rush Lincoln 1890-1900

The 1890 College Catalogue lists Colonel James Rush Lincoln as the Professor of Military Science and Tactics.² His promotion to Colonel in the Iowa National Guard is confirmed

¹Iowa Agricultural College and Farm, Thirteenth Biennial Report of Trustees (Ames, Iowa, 1888-89), p. 58.

²Iowa Agricultural College Catalogue, (Ames, Iowa, 1890).

in the Report of the Adjutant General of Iowa.¹ The first three years of this decade would be considered years of growth, followed by a leveling off in 1894-95 and a gradual decline in 1896-97. National events of 1898 would once again bring the Military Department back into the limelight for the last two years of the 1890 decade.

In 1890 the one and only special edition of the College Clipper, which was the forerunner of today's modern student newspaper, appeared. Though the paper did not have the college administration approval, it did set the format of the IAC Student, which was published less than two months after the Clipper. These papers reported more adequately the events and activities of the times than had the early Aurora. It is interesting to note that the editor of the Clipper F. E. Davidson relied very heavily on Colonel Lincoln to help put the newspaper idea over. The paper included an order of the cadet corps of the College dealing with patriotism and Memorial Day. It was also high in praise of the Military Department and pointed out that "since Colonel Lincoln took charge of this department he has raised its standards to a height excelled by none outside of the United States Military Academy."² Colonel Lincoln was also referred to as an avid supporter of the

¹Report of the Adjutant General of Iowa, 1891, p. 11.

²Clipper, June 18, 1890, p. 8.

athletic association and aided the organization in every way possible.

Even Colonel Lincoln's stature on campus could not help pull the Clipper through without the approval of the administration. The Clipper did lay the foundation for the approval of the IAC Student and the same editor F. E. Davidson once again appeared. Needless to say, the paper was pro-military. There is an interesting parallel to make here. General Geddes had been a prime backer of the Aurora and one of its most prolific writers. Now we see Colonel Lincoln as a backer of a new college paper that would more adequately promote his Military Department than the Aurora had. The new paper had a military notes section, and other articles dealing with the military appeared from time to time. These papers were invaluable in drawing together the Military History of the College. Now one could get a much better idea of the students' opinion and faculty attitude, in addition to the information given in the official College reports.

Colonel Lincoln was always looking for ways to give his student officers experience. As steward he was required, or at least someone appointed by the steward was required by the Board of Trustees to inspect the students' rooms every morning. Colonel Lincoln turned the work over to the Captains and 1st Lieutenants who took turns as officer of the day. The very first IAC Student reported that there was a marked improvement

in the appearance of the rooms and that Colonel Lincoln's plan met with the approval of the students. In fact there was a hint to drop the old proctor system and make the officer of the day responsible for the good order of the school.¹ General Geddes, the first Professor of Military Tactics, would have been quite proud of this system since it reaked with the idea of military discipline which he had strongly advocated. It suffices to say the students were under rather strict rules and that the living and working conditions of the College were austere to say the least.

The early student papers were definitely pro-military, and this was normal for the times. With the enrollment of the College less than 500 and more than half of the student taking military training it was only natural to get caught up in the considerable pomp and ceremony that occurred at several events during this time period. It seemed only fitting that the activities should be reported. The second issue of The Student had a list of eight items which it condemned. One was "the lazy loot who hates military drill." An item to be commended was "the new system of room inspections." The same issue of The Student gave a slightly biased summary of the drill contest between the two college battalions: "During this one and one-half hour performance the Brigade is reported to have executed

¹IAC Student, August 7, 1890 (hereafter referred to as The Student).

more movements than any brigade of the National Guard would have executed in a week."¹ After reading some of Colonel Lincoln's early Inspector General Reports for the Iowa National Guard one could almost believe the above statement. Just in case some of the students might think the College was getting carried away with this military inspection and military discipline, The Student would occasionally carry an article telling of the cadet life at West Point. Needless to say, the College cadets very easily could have realized the atmosphere on their campus may have been strict but also that it was considerably more relaxed than at West Point.¹

Colonel Lincoln had a series of lectures that he was asked to give periodically. Being a college professor allowed him to repeat these lectures every four years or so since he would have a completely different audience. One was on "the rifle and its ammunition" in which he gave a brief account of the revolution in the art of warfare caused by the breach loading rifle. He also covered other details on gunpowder and bullets. His closing comment always made a vivid impression on his audience and pointed out that things should always be kept in perspective: "He closed with a comment of General McClelland about becoming a marksman. You need nerves of steel, muscles of iron, intelligence, patience and that most valuable quality

¹The Student, August 21, 1890, p. 1.

of all, of being not unduly elated by success."¹ Another lecture "Our Nation's Flag" was a favorite of Colonel Lincoln because he was a very patriotic person and he saw to it that the flag got proper respect.² Still another lecture was on "The Battle of Gettysburg" in which he had fought. In his account of the battle, Lincoln's excellent literary arrangement and polish as a lecturer show.³

The early 1890's were boom years for the Military Department. Poems were published about the College cadet.⁴ The women's interest in military drill increased so that the Colonel Lincoln had to form two companies. "These forty girls in blue speaks well for the Colonel's efficiency and will not detract from the line on dress parade. We are ready to compare military departments with any school."⁵ Colonel and Mrs. Lincoln continued to have their annual reception for the senior officers and the ladies of the third battalion.⁶ Since the women now had two companies they became known as the third battalion.

¹The Student, October 23, 1890.

²The Student, May 29, 1891, p. 46.

³Aurora, June, 1887.

⁴The Student, August 22, 1891, p. 18.

⁵The Student, April 10, 1891, p. 15.

⁶The Student, November 11, 1891, p. 80.

Colonel Lincoln had many ways to motivate the cadets to get more out of their training. A band was organized as music always helps raise the spirit of the troops during dress parades. The Colonel built a complete artillery battery in miniature which he used in the classroom to instruct the cadet officers in artillery.¹ He organized a cavalry class and a bugle corps in 1892. As the Colonel became more involved with the Iowa National Guard, he saw to it that some high ranking officers, including the Adjutant General of the State, attended some of the special drills.² Favorable comments from the Adjutant General of Iowa served to motivate the cadets even more. The June 17th, 1892, closing drill of the term was witnessed by over 500 spectators.³

Ross points out "that [Colonel] Lincoln was able to direct some of his zeal for organization to his department, combining with the instructional aspects the interest of an 'activity'. Sham battles had the excitement and thrill of a football contest."⁴ The cadets were able to apply the actual tactics they had been taught during the simulated battles in and around

¹The Student, April 9, 1892, p. 57 3/4.

²The Student, June 4, 1892, p. 77.

³The Student, June 22, 1892, p. 90.

⁴Ross, A History of the Iowa State College, p. 22.

the College campus. Realizing that this was such an effective technique, the Colonel quit spending some of the department's money on live ammunition that was used for target practice and invested it in blank cartridges so realism could be added to the battles.¹ Colonel Lincoln did not let class scheduling problems get in his way during these years. Wednesday and Friday afternoons were traditionally reserved for military drill. To insure that all who wanted could attend the voluntary portion of the training in military tactics, he arranged the classes during the evening: the senior class on Monday; the juniors on Tuesday; and the sophomores on Wednesday evening.² The Professor of Military Tactics truly was an organizer, by forming a hospital corps under Dr. Fairchild, the school doctor, he even found a way to handle those students who had some moral objection to bearing arms. For those who had received a failing grade in military training, or who did not take an interest in their work, he formed a Company Q.³

A person may find it hard to believe that one man could do so much with an almost complete lack of facilities, a minimum amount of equipment, and an extremely limited budget that averaged less than \$250.00 a year. The Military

¹The Student, August 20, 1892, p. 124.

²The Student, April 9, 1892, p. 45.

³The Student, March 4, 1892, p. 7.

Department at the Iowa Agricultural College was no different than most; it was a one man operation. Colonel Lincoln was just a man who made maximum use of his cadets. When in 1891 he was chosen to conduct gymnastics classes, he set up and organized the facility and trained his first Lieutenants and Captains to conduct the classes.¹

From 1884 until 1892 Colonel (now General) Lincoln was able to confine his energies mainly to the Military Department and his position as steward. He resigned the steward's job in 1892 but took on two much more imposing and time-consuming duties. Like General Geddes before him, General Lincoln now began teaching other subjects. He was chosen as the new head of the Mining Engineering Department at a salary of \$1,800.00.² His other "career" the Iowa National Guard became more demanding. He had been promoted to Colonel in 1890 when he was appointed as the Chief of Engineers and the Chief Signal Officer of the Iowa Guard. In 1892 we find he had been promoted to Brigadier General and appointed as the Inspector General of the Iowa National Guard.³ These two jobs would take

¹Ross, in his History of the Iowa State College (p. 221) stated that General Lincoln seems to have conducted classes in gymnastics as early as 1894. This was not the case, as it was in 1891 shortly after Morrill Hall was dedicated and the gymnasium was setup in the basement. The Student, August 8, 1891.

²Iowa Agricultural College and Farm, Fifteenth Biennial Report of Trustees (Ames, Iowa, 1892-1893), p. 140.

³Report of the Adjutant General of Iowa, 1893, p. 146.

considerably more time than the steward's job and would tend to detract from his duties in the Military Department. Nevertheless one could assume there might be some advantages that could accrue to the College Military Department, now that the Commandant was a General in the Iowa National Guard. Also now that the General was teaching other academic subjects and was heading another department, his fellow faculty members just might feel he had more credibility as a college Professor of Military Tactics.

There are numerous references that attest to the considerable amount of time that General Lincoln put in with the Iowa National Guard during the 1890's.¹ These sources show that he initiated and taught the Iowa National Guard Officer School, gave several lectures and speeches throughout the state, conducted inspections, attended summer encampments, and wrote his Annual Inspector General's Report. All of this time he spent with the Guard did not appear detrimental to the Military Department at the Iowa Agricultural College. When the Twenty-Fourth General Assembly of Iowa authorized the loan of certain arms and accoutrements to the schools in the state, the Iowa Agricultural College [because of General Lincoln] received 222 such weapons, whereas the most another school received was 80.²

¹The Student, March 26, 1892, p. 22, March 18, 1893, pp. 24-28; Report of the Adjutant General of Iowa, 1891, p. 11, 1893, p. 146, 1895, p. 77, 1897, p. 10, 1899, p. 24.

²Report of the Adjutant General of Iowa, 1893, p. 14.

The stature of the IAC cadets naturally rose in the eyes of the Iowa National Guard since the skills taught in the school of the officer for the Guard which was originated, designed and conducted by General Lincoln were virtually what he had been teaching the cadets at the College.¹ Consequently, several of the Guard companies wrote to General Lincoln for IAC cadets to fill out their quota for officers.²

The cadet corps continued to bear a peculiar and indefinite relationship with the militia of the State. In the 1870's the College organization had been listed as a regular unit of the State. Later the cadet organization appeared as an "unattached organization" until 1893 when the unit was dropped from the roster.³ From 1892 until 1903 the Adjutant General Report of Iowa listed the three names of graduates of universities and colleges that showed a special aptitude for military duty. The listing varied from five schools in 1893 to three schools in 1903 with the Iowa Agricultural College and the Iowa State University (Iowa City) always being two of the schools. At the Iowa Agricultural College the three men who

¹Report of the Adjutant General of Iowa, 1897, p. 155.

²The Student, October 8, 1892, p. 168.

³Rockwood, "A History of the Military Department of the State University of Iowa," p. 204. This information was also verified in the yearly Reports of the Adjutant General of Iowa.

were designated as having special aptitude for military duty were usually the highest ranking cadets. This was not true all the time. General Lincoln gave a comprehensive written exam as part of this selection procedure and a few times one of the highest ranking cadets did not come out on top. The cadets from Iowa Agricultural College that were listed as having special aptitude for military duty were:

1892	1893	1894
S. A. Knapp	G. A. Ketterer	Lee Campbell
L. B. Spinney	E. F. Green	Charles S. Lincoln
F. C. Stewart	W. E. Henry	Frank H. Campbell
1895	1896	1897
E. E. Reed	C. H. Speers	C. A. Hartman
N. C. Hurst	F. J. Mahoney	F. H. Lincoln*
C. H. Eckles	I. J. Mead	Ole Davidson
1898	1899	1900
F. H. Lincoln	George M. Rommel	C. S. Welsh
W. S. Duncan	Emil C. Patterson	A. T. Jenkins
R. D. Goble	Elbert B. Tuttle	G. A. Mereness
1901	1902	1903
E. C. Myers	A. E. Elder**	Rush B. Lincoln
C. A. Welsh	G. S. Gearhart	A. R. Boudinot
A. E. Elder**	R. J. Lewis	C. B. Wilson ¹

¹Report of the Adjutant General of Iowa, 1893, p. 48, 1895, p. 101, 1897, p. 114, 1899, p. 33, 1901, p. 83, 1903.

* F. H. Lincoln was listed in both 1897 and 1898. He didn't actually graduate either year but left school early in 1898 to serve in the Spanish American War. He definitely did have special aptitude for the military since he attained the rank of Colonel later on.

** A. E. Elder was listed in both 1901 and 1902.

Three of General Lincoln's sons who are listed above became Regular Army Officers. The exact number of graduates who went on to serve in the Iowa National Guard is unknown. Nevertheless, one can assume that some of them did, since most of the early graduates of the College remained in the state.

General Lincoln's teaching duties in Mining Engineering were pursued with the vigor that he applied to all tasks which he accepted. He had gained field experience to teach Mining Engineering when he had been the Superintendent of the Northwestern mines in Boone, Iowa. General Lincoln took advantage of these neighboring mines and used them as laboratories for his students.¹ The general would remain as the Professor of Mining Engineering until his departure for the Spanish American War in 1898. After the war he would be assigned to be an instructor for a couple of years in the Mining Engineering department, which in 1900 had three staff members.

It would appear that General Lincoln was well read on all military matters and especially alert to adopt any new technique that was developed by the Regular Army. In the 14th Biennial Report of Trustees it was reported that "the new drill regulations of the United States Army have been used during the entire year, and fourteen officers in the class of

¹History of Reminiscences of Iowa Agricultural College, Class of 1897, p. 298.

'91 leave our institution throughly drilled and capable of instructing in the new system."¹ The General also explained that Iowa Agricultural College was the first institution in the United States to use the new drill regulations and he was quite proud of being at the forefront.¹ These new drill regulations and the military training the College graduates received did get put to use quickly. In April, May and June issues of The Student of 1892 one can see that four graduates had become military instructors.²

Special Events in the Early 1890's

There were several special events that the Iowa Agricultural Cadet Corps participated in during this period of time. Typical would be the annual inspection, drill competitions, guard duty at the Iowa State Fair, sham battles, and the officers receptions that have been mentioned. Other events were the annual field day of the Military Department where the students demonstrated all of the techniques that they had learned in the classroom and drill periods.³ A funeral of a student of the College could almost be termed a special event

¹Iowa Agricultural College and Farm, Fourteenth Biennial Report of Trustees (Ames, Iowa, 1891), p. 54.

²The Student, April 9, 1892, p. 45, May 14, 1892, p. 69, June 4, 1892, p. 81.

³The Student, October 8, 1892, p. 160.

for the Military Department. Invariably the uniformed cadets participated in the funeral procession, playing of taps and the firing of weapons in a salute to the deceased. These funerals sounded almost like a complete military affair.¹ Another special event that attracted considerable attention for the military was the dedication of Morrill Hall in 1891. The opening exhibition drill and dress parade of the cadets actually started the ceremony. A considerable part of the remarks during the ceremony dealt with the necessity of teaching military training in colleges.² This would be expected since the Morrill Act actually was the impetus that started military training on an expanded scale in institutions of higher learning.

The most significant event of the early 1890's for the Military Department would be September 21, 1893, when the entire cadet corps, ladies' battalion, band, General Lincoln, the College President and the Governor of Iowa represented the State on Iowa day at the World's Fair. Preparation for the event was extensive and by July 21, 1893, over fifteen hundred dollars had been raised for the trip. The Board of Trustees had voted a week's vacation to allow participation.³ Several

¹The Student, May 13, 1893, p. 62.

²The Student, June 17, 1891, pp. 67-69.

³The Student, July 21, 1893, p. 1.

college papers for the months of August and September devoted considerable space to the extra preparation the whole college was going through to insure a successful representation of the state.

There are several reports of the trip, events of the fair and, of course, the Iowa Agricultural College's military participation. An objective analysis (with good publicity for the College) was in the Chicago Tribune.¹ The Student and the Alumnus gave a detailed report from start to finish and concluded that the Iowa Agricultural College cadets and gals had truly represented the college and state in outstanding fashion.² The 1894 Bomb has the cleverest description capitalizing on some funny happenings.³ A reading of all these accounts puts the whole affair in perspective.

It was back to school for the College cadets. After dominating the student paper before and during the big trip to the World Fair, the military at Iowa Agriculture College took a back seat for five weeks and little mention of military activities was made until the "military" column was restarted. In October of 1893 one can see that General Lincoln had his annual reception and the editors of The Student got a dig in at

¹Chicago Tribune, as quoted in the 1894 Bomb, p. 137.

²The Student, September 30, 1893, Alumnus, March 1906, pp. 220-22.

³Bomb, 1894, pp. 180-182.

West Point. It seems a news release reported that the new regimental parade had just been introduced at West Point (1893), whereas, the new drill regulations had been carried out for three years at Iowa Agricultural College.¹

1894 - 1897

If the years between 1884 to 1893 were considered the growth years, then 1894 and 1895 would be characterized as the slowdown or start of a four year period of decline. This could be attributed to several factors. One of the most important factors was General Lincoln's seven month illness.² The senior cadets gamely attempted to carry on but they needed the General for guidance and motivation. Other contributing factors could have been the natural tendency to let down after the 1893 World's Fair. There was just nothing to do that could possibly top the 1893 trip. Also we see the growing interest in athletics tended to detract from the limelight of the Military Department. It was also inevitable that the additional teaching load accepted by General Lincoln as the Professor of Mining Engineering took a considerable amount of time. He was falling into the same position that General Geddes found himself. The Sixteenth Biennial Report of the Trustees lists General Lincoln

¹The Student, October 28, 1893, p. 6.

²The Student, October 23, 1894, p. 1.

as also teaching a course in farm drainage, commercial law and bookkeeping.¹ Finally, General Lincoln did not get the armory he had so often requested for the Military Department. One must remember he had been requesting an armory for over ten years with no success and that was bound to have an effect on his motivation and attitude.

Probably the most significant thing that happened in the Military Department in 1894 to 1895 was a week trip to the State Fair in September, 1895. While there the cadets participated in sham battles, regimental drill and conducted a retreat ceremony that was supposed to have originated with General Lincoln.² The General was also triumphant in raising a 126 ft. wooden flag pole on the campus which could be seen for miles.³

A student of General Lincoln's during this period, became a famous IAC graduate, but not in the military. That student was George Washington Carver. George knew that he could never become an Army officer--Negroes simply did not. Nevertheless, since military training was required, he did participate. He went from cadet to Captain [one of] the top student ratings. General Lincoln's tribute to Carver was: "This most gentlemanly and efficient cadet has risen to the rank of Captain

¹Iowa Agricultural College and Farm, Sixteenth Biennial Report of Trustees (Ames, Iowa, 1895), p. 59.

²The Student, September 24, 1895, p. 6.

³The Student, October 8, 1895.

through personal determination and merit alone, and I couldn't be prouder of him."¹

If the previous two years were slow years for the military, then 1896 to 1897 were even slower. General Lincoln conducted the Iowa National Guard Officers school at the College in January and February of 1896 with 150 officers attending. The military band evidently became a rag tag outfit with about twelve members and was dropped some time during these years.² In the fall of 1897 military drill conflicted with football practice two days a week. It appears the military was definitely taking a back seat to athletics as the military column of the ISC Student (name change from the IAC Student and hereafter called The Student) was dropped and was included under the coverage of an assistant editor of athletics and military. The result was a lot of information on athletics and little on the military. General Lincoln's reports did not reveal any new tactics or techniques during this time period. He kept repeating his request for an armory and occasionally it would be included in the President of the College request to the Board of Trustees.

¹Lawrence Elliott, George Washington Carver: The Man Who Overcame (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1966), pp. 76-77.

²The Student, September 15, 1896.

The class of 1897 supported the military training during this time period. It was pointed out by the class of '97 that the Armies are made strong by its officers and officers were what General Lincoln was training. It was also emphasized that considerable time was spent on extended drill (which is vastly different from close order drill which is most often associated with military training), advanced and rear guard services, scouting and reconnaissance, administration, engineering, military law, small arms regulations and unlimited artillery instruction.¹

General Lincoln U. S. Volunteers

In 1898 the Spanish American War brought the military back into the spotlight at Iowa Agricultural College. The spotlight was focused mainly on General Lincoln rather than the military training or the Military Department. In the early part of the school year there were articles dealing with the possibility of going to war over the Maine affair.² Since there was more interest in the military, the idea of forming a new military band was discussed. General Lincoln was against it at first for fear it would be second rate, but when Professor Resler decided to head it up, General Lincoln whole-

¹History of Reminiscences of Iowa Agricultural College, Class of 1897, p. 303.

²The Student, March 8, 1898, p. 1.

heartedly gave his support. The band would serve as an adjunct to the Military Department but would be available for concerts, banquets, picnics and other occasions.¹

In late April 1898, by the order of Governor Shaw of Iowa, General Lincoln at the age of fifty-three departed the campus and took command of the Iowa troops. He was given a rousing send off at the railroad station in Ames. The band and the cadets marched to the Lincoln house and escorted the General to the station. As the train pulled away they gave three hearty cheers and the college yell to assure the soldier that the confidence and best wishes of the College went with him.²

For the next month The Student kept track of the General and quoted the Des Moines State Register and the Chicago Record of May 2, 1898, about the possibility that General Lincoln [General of the Iowa National Guard] might be appointed Brigadier General or Major General of the U. S. Volunteers to command the Iowa troops at the front. General Lincoln was held in very high regard in Iowa. This regard caused the newspapers to report: "If Virginia has her General Lee, Iowa has her General Lincoln...and he is styled as the Lee of Iowa."³

¹The Student, March 15, 1898.

²The Student, April 26, 1898.

³The Student, May 10, 1898, p. 8, as quoted in the State Register of May 2, 1898.

The good news of General Lincoln's appointment as Brigadier General did arrive and The Student reported it to the hilt:

We don't want to crow, but we wish to say that is just what we expected. The General is undoubtedly the most popular military man in the state considering the fact that he was a Southern commander during the Civil War his present position could not have come unmerited. It takes something more than a mere braggadocio to overcome the prejudice against a man in his former position.¹

The war was short-lived and General Lincoln was the last U. S. Volunteer Brigadier General to be mustered out of service.² The Iowa State campus was not mobilized as it would be in later conflicts. There were several graduates who did serve in the Spanish American War but no actual record was kept. There was considerable patriotic feeling on campus and the Bachelor Debating Society passed a resolution that they appreciated their brothers' heroic actions and hoped they would return safely.³

The Military Department was under Major Herman Knapp during General Lincoln's absence from the campus. Evidently drill was the main event for the freshmen and sophomores with the juniors and seniors conducting the training. The cadets did participate in an "Iowa Day" in Omaha, Nebraska, and the

¹The Student, May 31, 1898, p. 1.

²Report of the Adjutant General of Iowa, 1899, p. 386.

³The Student, May 10, 1898, p. 5.

first "Excursion" at Iowa State (which was the forerunner of Veishea) where the dress parade was attended by approximately six thousand people who were on campus.¹

General Lincoln came back to campus in March, 1899, and was reinstated as Professor of Military Science and Tactics. He was also to lecture to the classes in Mining Engineering.² The 1899 Bomb (actually written in 1898) gave a brief history of the Military Department: thirteen years under General Geddes, a Union General; one year under Colonel Scott, a Union Colonel; and fifteen years under General Lincoln a true soldier who in youth fought on the Southern side. The Bomb went on:

During these twenty-nine years, thousand of young men have drilled in the cadet corps and attended the officers' school. These thousands have drilled other thousands, and thus the effect of our department upon the Volunteer Army during the war with Spain can scarcely be estimated. In the war of 1898 we count among our Patriots, Privates by the score, Corporals, Sergeants, Line, Staff and Field in the Volunteer and Regular Army. We also count one Naval Officer, Louis B. Craig, First Assistant Engineer Cunboat Wilmington. ...In the Volunteer Army we have one Field officer with Iowa troops, one Field officer with Louisiana troops; Soldiers with Iowa, Soldiers with Georgia, Soldiers with Pennsylvania, Soldiers with Nebraska, Soldiers with Grigsby's Cavalry, Rough Riders with Roosevelt - Alumni, Undergraduates and Students. Soldiers in Cuba, Soldiers in the Philippines, ten thousand miles apart, serving one country and one flag.³

¹The Student, August 17, 1898, p. 1, September 27, 1898.

²The Student, March 7, 1899, p. 1.

³Bomb, Iowa Agricultural College, 1899, p. 16.

The 1900 or Century Bomb was dedicated to General James Rush Lincoln and the fifty-six Iowa State College boys who left their homes and college to serve their country.¹

General Lincoln 1900 - 1910

The 1900 to 1910 years for the Military Department could be characterized as better than the middle-late 1890's but not as effective as the early years under General Lincoln. The Professor of Military Tactics was out of the Mining Engineering Department except for an occasional lecture. The bulk of his time was devoted to the Military Department and his National Guard duties. The student papers carried the usual reports of the annual reception by General and Mrs. Lincoln during which he usually told the cadet officers and their ladies of his early military experiences. It cannot be over emphasized the importance the young ladies of the College placed on getting to attend one of the receptions of General and Mrs. Lincoln. The reception was referred to as the social event of the year many times. The 1903 cadet officers' reception was a little larger affair and was held in the dining room of Odd Fellows Hall. It was similar to what the modern day Air Force ROTC Corps' would call a Dining In, where toasts were made to General Lincoln,

¹Bomb, Iowa Agricultural College, 1900; The Student, May 22, 1900, p. 1.

the ladies, and the cadet officers.¹ In the spring of 1908, General Lincoln saw to it that the new steel flag pole, which was presented to the College by the class of '06 and '07, was erected and dedicated with appropriate ceremonies.²

General Lincoln would continue his special lectures on the "Battle of Gettysburg," "Old Glory", and he added a new one for the History Department on "Napoleon, the Military Genius and Statesman."³ The cadets would naturally march in the excursion day opening ceremonies and with twelve companies on the line they performed before a large part of the 10,000 persons on campus.⁴ Other activities included the formation of a special drill team called "Cummins Rifles" which performed at the dedication of Fort Des Moines, the Louisiana purchase exposition at St. Louis, Memorial Day exercises at Nevada, and engaged Simpson College and Company C of the 55th Iowa National Guard in competitive drills.⁵ It appears that the Cummins Rifles were named after Governor Albert B. Cummins of Iowa.

¹The Student, November 25, 1903, p. 1.

²The Student, March 31, 1908, p. 1, Alumnus, May 1908, pp. 220-21.

³The Student, September 16, 1907, April 6, 1908, May 5, 1906.

⁴The Student, October 11, 1902, p. 1.

⁵Bomb, 1908.

General Lincoln's annual reports, the College Catalogs, and the Biennial Reports of the Trustees of the College reveal that the basic portion of the military training consisted of mostly drill for the freshmen with an occasional lecture on military tactics by General Lincoln. The sophomores attended non-commissioned officers school and received a few additional lectures by the General on leadership and military tactics. The juniors studied drill regulations, guard duty, and army regulations. The seniors ran the cadet corps' and did much of the cadet instruction. The officers' school, which was three hours a week in addition to drill, included a class in fencing with the broadsword and different subjects taught under the major headings of military engineering, military law and military tactics. In General Lincoln's 1901 report, we see particular attention was given to road-making in the engineering class. The General also requested additional funds to replace the military equipment that was lost in the December 1900 fire that destroyed Old Main.¹

¹J. R. Lincoln, "Report of Department of Military Science and Tactics 1901" (handwritten report, Iowa State College, Ames, Iowa, May 21, 1901), p. 1. This 1901 handwritten report is one of the few original documents dealing with the early Military Department and is included as Appendix E with eight documentary edited footnotes and comments.

In the Biennial Reports from 1900 to 1905 the College President and General Lincoln continued to use every appeal possible to convince the Board of Trustees of the need for an armory to no avail.¹ According to the 1906-07-08 Catalogues, the sophomores could be excused from military drill if they were regularly enrolled in physical training.² Now that drill was no longer mandatory for sophomores and the inclement weather caused the cancellation of much of the freshman drill, The College president felt he could conclude that the College was actually not meeting the requirements of the Federal Government in any adequate measure.³ The president's report went on to explain that the excellent results attained under the Commandant with these limitational hinderances, no armory and no military drill requirement for sophomores, were due to his recognized ability as a tactician and instructor as well as his standing as a military officer.³ This must have been the leverage needed, since most schools were afraid of being brought to task for not meeting requirements of the original Land Grant Act. In the next Biennial Report of the College

¹Iowa State College of Agricultural and Mechanic Arts, Nineteenth Biennial Report, (Ames, Iowa, 1901), pp. 7-8, 1903, p. 34, 1905, p. 30.

²Iowa State College Catalogue, 1906-07, p. 288, 1907-08, p. 293.

³Iowa State College of Agricultural and Mechanic Arts, Twenty Third Biennial Report, (Ames, Iowa, 1908), p. 112.

mention is made of the approval of a gymnasium, auditorium and armory.¹ However, it would be several years (1921) before the College would actually get its armory for the Military Department.

General Lincoln's association with the Iowa National Guard from 1900 until 1910 was extensive. On March 26, 1900, he was appointed colonel in the Iowa National Guard in command of the 51st Iowa Regiment with headquarters in Ames. This was one of only four regimental commands in the Iowa National Guard. His unit's name was changed from the 51st to the 55th, and he remained in command until July 4, 1909. On the following day the Iowa regiments were organized into a Brigade. Colonel Lincoln was commissioned as a Brigadier General, and he took command of all the Iowa troops. During these years General Lincoln always attended the annual encampments and reported on the training and its effectiveness.²

In the fall of 1909, a little publicized event took place on the Iowa State campus. A group of military cadet officers formed an honorary fraternity named Delta XI. Its colors were red, white and blue. This fraternity would become the fore-

¹First Biennial Report of the Iowa State Board of Education (Des Moines, Iowa, 1910), p. 19. (Note the name change.) On July 1, 1909 the Iowa State Agricultural College along with the other state institutions in Iowa came under the Iowa Board of Education.

²Report of the Adjutant General of Iowa, 1901, 1903, 1905, 1906, 1908, 1910.

runner of Scabbard and Blade (a national military honorary founded in 1905 at the University of Wisconsin) on the Iowa State campus. This fraternity would have considerable impact on the military training over the next sixty-one years.

The National Scene 1889 - 1916

During the early years of military training at Iowa State, the Federal Government took very little interest in the college level military program nationwide. In fact at schools that did not have active duty officers assigned as Professors of Military Science and Tactics (PMS&T) the Government took even less interest. In 1889 the War Department, through the Adjutant-General's office, proposed measures which would include faculty status for the PMS&T with all the rights that went with the position.¹ This did not affect Iowa State in the least as the Professor of Military Tactics had been a full member of the faculty since the inception of the military program in 1870. The 1900-1910 era found the War Department more interested in military training in colleges but it was not able to do much about it. The Acts of 1903, "the General Staff Act" and the "Militia Act" had provisions that could have affected military training on the campus. Nevertheless, the

¹Eddy, Colleges for Our Land and Time: The Land-Grant Idea in American Education, p. 93.

other major provisions took priority.¹

The 1910 to 1920 period saw the Government take an intense interest in military training on the college campuses. In the 1913 Land Grant convention Dean Edward Orton, Jr. of the Ohio State University presented a paper "The Status of the Military Department in the Land-Grant Colleges." Orton made one of the most effective pleas for a strong and viable military program on the college campus. He pointed out the advantages that accrue to the college and individual from proper military training, but he concluded that the colleges were not carrying out the intent of the Morrill Act. He then proposed a way to attain a viable Military Department within the academic framework of higher education. Orton concluded that the needs of the country and the colleges were identical in that if war should come the U. S. would need a large body of officers who should be college trained. He gave specific proposals for legislative acts that should be passed to implement his plan.²

¹Lyons and Masland, Education and Military Leadership, p. 33.

²Edward Orton, Jr., "The Status of the Military Department in the Land-Grant Colleges" (paper presented at the joint meeting of the Land-Grant College Engineering Organization and the Association of American Agricultural Colleges and Experiment Stations, November 13, 1913) Washington, D.C.: Government Printing Office, 1914.

Dean Orton's talk was followed by an address by Major General Leonard Wood, Chief of Staff, United States Army in which he had high praise for the Dean's ideas and that the War Department would support his thesis. General Wood pointed out some of the problems the Army faced in manning and operating the Military Departments on college campuses, but he concluded they would have to be overcome because the need for a large reserve of officers was vital to the defense of the country.¹ Pollard gives an extensive critique of Orton's paper and points out the impact it had on the discussion of military training in colleges over the next several years. He further concludes that many of Orton's ideas were basically incorporated in the National Defense Act of 1916.² Another good analysis of military education in land grant colleges and universities up until 1914 was provided by Reeves.³

As the storm clouds of war gathered in Europe, the Government took a much more active interest in military training on the college campus, at least to the extent of finding out how many college trained officers might be available in an emergency. A 1915 War Department study concluded that of the

¹Ibid.

²Pollard, Military Training in the Land-Grant Colleges and Universities, pp. 63-72.

³Reeves, Military Education in the United States, chapter 4.

44,529 military students trained between 1905 and 1913 only those graduated after 1912 (15,323) would be the ones anywhere near proficiency. Of these 15,323 only about 1,100 had been recommended for commissions in the Regular Army and Volunteer forces. The conclusion of the study was that enough officers would be available to man the Army, assuming it would not be increased to over 100,000 total personnel.¹ Several other reports and studies on a national scale dealing with military training on the college campus were printed in the Congressional Record as testimony dealing with the National Defense Act of 1916.

In 1913 a move was made in the campaign for national preparedness to establish experimental military camps for students who were attending institutions of higher learning. These camps were held in 1913, 1914, 1915 and 1916.² None of these camps were attended by any Iowa State students from 1913 through 1915. According to General Lincoln, the prospects for anyone from ISC attending in 1916 was doubtful since the students had to pay the bulk of their own expenses.³

¹U. S. Army, Army War College, Study on Educational Institutions Giving Military Training as a Source of Officers for a National Army. October, 1915. (Carlisle Barracks, Pa., 1915), pp. 1-8.

²Henry S. Drinker, "The Story of the Training Camps" (typewritten manuscript, Lehigh University Library, December 9, 1918), pp. 1-5.

³The Student, March 30, 1916, p. 1.

Iowa State 1911-1916 Before the War

This six year period were years of growth in size, interest, motivation and visibility of the military training. Most of the growth was due to the continued growth of the College and the interest created by national events. The Government's increased interest in military training had some impact, since an active duty officer was assigned to assist General Lincoln and more arms and equipment were made available to the College.

As the size of the student population grew and the lack of facilities remained the same, some of the sophomores were allowed to substitute physical training for military drill. This was the policy until 1916.¹ During the 1911-1914 time period the sixty-six year old General tried several techniques to keep up the interest in military training. His lectures on military tactics dealt with modern and scientific methods of warfare which the cadet used in the sham battles.²

In drill competitions the General offered an \$8.00 saber to be given to the Captain of the winning company and this offer evidently created considerable competition for the prize.³

¹Iowa State Catalogue, 1911-12, p. 325, 1912-1913, 1913-1914; Iowa State General Catalogue, 1915-1916, p. 260.

²The Student, February 10, 1912.

³The Student, December 10, 1912.

The General experimented with drill only once a week rather than twice a week as in the past. He used the "kicker" that if everyone performed faithfully the one hour drill might remain. It didn't last because General Lincoln overcame a complicated scheduling problem and went back to drill twice a week.¹ Another innovation that was discussed often during this time period was an annual encampment in which the students would live under military discipline and use the tactics they were taught in the classroom.² The cadets received new uniforms to replace the old blue that had the Corps looking somewhat like Kelley's Army. The new yellow and brown looked more in tune with the times.³

Naturally the cadets continued to participate in Memorial Day Services, excursion day programs and in the annual military inspections, which were now conducted by active duty officers. The inspecting officer could select three cadet officers and recommend them for commissions in time of trouble or when volunteer companies might have to be raised.⁴ This was the

¹The Student, November 1, 1913, p. 4.

²The Student, January 27, 1914.

³The Student, October 12, 1912, p. 5.

⁴The Student, May 13, 1913, p. 5.

gradual lead into a reserve of officers for the Federal Army as well as a ready supply of officers who were qualified to serve in the forces of the different states. This type of a recommendation for a commission carried more weight than the previous method of listing the names who had shown a special aptitude for military duty in the Iowa Adjutant Generals Report.

Four events occurred in 1914 that helped promote the Military Department to new heights of acceptance and efficiency. They were: (1) the war in Europe; (2) the first military ball; (3) the voting of the faculty to allow credit for drill and officers' school; and (4) assignment of Lieutenant Rush Lincoln, an active duty officer, to assist his father.

The war in Europe, though it would be almost three years before the United States would enter, did create an interest in the military training at Iowa State. A typical article in the September 1914 Student mentioned that militarism had been the topic of the hour since war began in Europe and there were more cadets in the program.¹ The article also stated that "the upheaval in Europe should cause all students of the state institution which requires military drill to regard the freshman cadets and their work with greater respect and esteem.

¹The Student, September 20, 1914, p. 4.

For when the war which involves America does come, should it ever come, the people of this country will look to those fellows who this week are in the awkward squad to serve their nation as officers and men..."¹ Iowa State College had gradually increased the numbers of weapons used by the cadets. In May 1914 one hundred and twenty new rifles arrived, yet five months later we find General Lincoln's prep army had grown to the point at which he needed 200 more rifles.²

Another event that attracted attention for the Military Department at Iowa State was the first military ball held on April 25, 1914, in the new gymnasium (State gym) and was attended by 300 couples. This dance caused considerable excitement and raised the patriotic spirit of the campus. The Student reported how involved the whole campus had been in preparing for the first military ball. The gymnasium was decorated in red, white and blue crepe paper with large American flags hanging from the beams. General James Rush Lincoln, Major Herman Knapp, and the officers of the cadet corps led the grand march that introduced the campus to the pomp and ceremony of a military event that would be a part of the campus for many years to come.³

¹The Student, September 17, 1914, p. 2.

²The Student, May 9, 1914, November 8, 1914, p. 5.

³The Student, April 11, 1914, April 14, 1914, p. 8, April 21, 1914, p. 4, April 28, 1914, p. 1.

In December, 1914, the faculty of Iowa State College voted to give credit for military drill and the officers' school. In the past drill had been required with no credit given and the officers' school had just been a voluntary overload on those that participated. In the future one credit would be given for the officer's school which normally involved one hour of classroom work. One hour of credit would also be given for the two hours of drill and the attendance at special maneuvers and summer camp. This was similar to the credit given for regular laboratory periods in the other courses.¹

The war in Europe, the military ball, the allowing of credit for drill, and the officers school all had a significant impact on the College. Nevertheless, just as significant was the assigning of a active duty officer of the United States Army to assist General Lincoln in his work. This was the first time that two officers had been assigned to the Military Department. It was also the first time an active duty officer was assigned to the College. This new officer was not just any officer and he had been requested by the College president. He was Lieutenant Rush Lincoln, the son of General James Rush Lincoln, the present commandant. Lt. Lincoln was an ex '04

¹The Student, December 10, 1914, p. 1; Iowa State College General Catalogue, 1915-1916, p. 260; Iowa State College Faculty Minutes, December 7, 1914, p. 12; Alumnus, February 1915, p. 25.

of Iowa State who had practically finished the science course when he enlisted as a private in the Army. He rose rapidly through the ranks to Corporal, Sergeant, Second Lieutenant and attained the rank of First Lieutenant in 1907 while stationed at Fort Leavenworth. The Lieutenant had just returned from a tour in the Phillipines and was especially current on the modern techniques of warfare. At the age of approximately twenty-nine Lt. Lincoln was able to identify more closely with the College cadets than General Lincoln and served as advisor to a variety of activities. One group that he organized was a special drill unit that would compete with the University of Iowa.¹ Another was a rifle team that would gain considerable attention in national events of intercollegiate rifle matches. Iowa State definitely needed help in the Military Department. General Lincoln was over sixty nine years old and no man, not even General Lincoln could have stayed on top of the rapidly changing events. Lt. Lincoln was an outstanding officer and a valuable addition to the military staff. He would later attain the rank of Major General in the United States Army.

It was during this time period that General Lincoln was retired from the Iowa National Guard. He had seen almost continuous service with the Guard from the time he was first

¹The Student, October 8, 1914, p. 8, January 7, 1915, p. 1, April 22, 1915, p. 6, November 1, 1914, p. 1; Bomb, 1916, p. 339.

chosen Captain of Company F. Third Regiment I. N. G. in October, 1876, until his retirement as a Brigadier General in command of the one and only Iowa Brigade on December 31, 1913.¹ His services to the Guard had been so valuable that he was permitted to retain his commission until he was almost sixty-nine nearly five years past the retirement age. Evidently the Guard did not want him to retire, but the War Department insisted. It has been said "that the Iowa National Guard is a product of General Lincoln and if it earned any credit in the Spanish-American and in the World Wars, [World War I] it was the result of his training."²

The last two years of the 1911 to 1916 time period saw considerably more changes in the Military Department and its training than the first five years. One could almost conclude there were more changes during 1915 and 1916 than during the first forty-five years of military training at Iowa State College.

The cadets continued to participate in several of the annual events, Memorial Day services, cadet officers reception, military ball and annual inspection. Memorial Day services at the flag pole on central campus attracted more attention than in the past. The cadets served as escorts for the old soldiers

¹Report of the Adjutant General of Iowa, 1914, p. 34.

²Guy S. Brewer, "A Tribute to General Lincoln," Alumnus, 1922, p. 137, March 1919, p. 198.

and the decorating committee from the central campus ceremony to the college cemetery where the graves were decorated.¹ The annual officers' reception was expanded to include the juniors as well as the seniors. Rather than just General Lincoln telling about his war experiences, Major Herman Knapp and Lieutenant Rush Lincoln also told of some funny experiences of camp life. In 1916 the cadets turned the tables and entertained General Lincoln, Lt. Lincoln, and their families.²

The military ball was proclaimed an annual affair and included much more than dancing. There were skirmish battles, officers drill, escorts for the honored guest, and for the dancers special favors of small American flags which followed the overall theme of respect for the Star Spangled Banner.³ The annual military inspection took on a more important significance due to the war in Europe and the Mexican border problems. The active duty officer who served as inspecting official usually brought the campus up to date on the effectiveness and efficiency of the other ninety-six colleges that were offering military training and concluded that Iowa State cadets were better trained than most.⁴

¹The Student, May 27, 1915, June 1, 1916, p. 1.

²The Student, May 6, 1915, May 16, 1916, p. 2.

³The Student, January 23, 1915, p. 7, May 2, 1916, p. 1.

⁴The Student, May 5, 1915, April 13, 1916.

Several new or special events brought the Military Department into the spotlight. The "special company" introduced a field meet, which included competition in bayonet, close order, squad and signal drills, and the manual of arms.¹ As the size of the cadet corps continued to grow and more companies were available the cadets formed their own baseball leagues for company competition which was intergrated into school league play.²

On May, 14, 1915, the College honored General Lincoln and five other professors by forming the "Twenty-Five Year Club" in honor of those who had served on the staff for twenty-five years. The speeches of the convocation pointed out that these men had their part in the building of Iowa State: "General Lincoln is one of the great campus characters, a man, who has made students feel that right discipline is a beautiful thing, and that manliness and character are well worthwhile."³ All of the men who were the first to be honored had accomplished much more than just putting in twenty-five years in the employ of the College. Each man had made significant contributions to his field. General Lincoln was no exception; he was

¹The Student, May 22, 1916, p. 1.

²The Student, April 3, 1915, p. 1.

³The Student, May 13, 1915, p. 2; Ross, History of Iowa State College, p. 276.

considered a giant in the field of military tactics and officers training in the state of Iowa. Based on the evidence at hand, not one person is known to have served as the head of a Military Department as long as General Lincoln did at Iowa State.

The most significant new innovation for the military training at Iowa State in 1915-16 was a required summer camp.¹ This idea had been advanced by the cadet officers and their General several times in the past. Therefore considerable planning had taken place which helped insure the camp's success. General Lincoln had also conducted or inspected summer camps for the Iowa National Guard over a twenty year period. He and the cadet officers took advantage of his experience to make "Camp Pearson" (named after the College president) a success in every way. General Lincoln pointed out that "Drilling does not make a soldier. Camp life, where actual problems are encountered does. This is what the boys will get in camp. A practical application for the theory they have learned in eight months of classroom work and drilling."² Some of this practical application consisted of camp duties,

¹The Student, January 12, 1915, p. 1; Iowa State College General Catalog, 1914-1915, p. 223.

²The Student, September 9, 1915, p. 4; Report of the Iowa State Board of Education, Fourth Biennial Report, (Des Moines, Iowa, 1916), p. 250.

military regulations, personal hygiene, guard duty, scouting, trench digging, inspections, target shooting, manuevers everyday, sham battles and the general problems of maintaining a group of fighting men at their best under varied conditions.¹ The 1916 camp also included a trip to Des Moines where the cadets marched in the preparedness parade.² It wasn't long until some of the Iowa State cadets were required to show their preparedness. There had been rumors on campus in the spring of 1916 of the possibility of the guardsmen being called to active duty to serve on the Mexican border. By the fall of the year this had become a reality and the Iowa State cadets served as police for a week at the State Fair. This duty was normally accomplished by the regular milita, but it had been called to active duty.³ The border problem with Mexico in which the United States tried to capture Poncho Villa resulted in sixteen Iowa State cadets being mobilized with their respective guard units, eleven as officers and five as privates. Lt. Rush Lincoln, who had served as an assistant in the Military Department, had been promoted to Captain in the Regular Army and was now serving on the Arizona border.⁴ General Lincoln was quick

¹The Student, May 2, 1915, p. 3; September 9, 1915, p. 4, May 4, 1916, p. 3, May 25, 1916, p. 1; Alumnus, July 1916, p. 3.

²The Student, June 1, 1916, p. 1.

³The Student, March 14, 1916, p. 1, September 11, 1916, p. 3; Alumnus, October 1916, p. 18.

⁴The Student, September 11, 1916, p. 1.

to request that the Iowa State cadets be allowed to return to school as soon as the border situation had settled down. The General needed some of his top cadet officers back to lead his ever increasing "prep Army," which now had six hundred freshmen and four hundred sophomores divided into four battalions of infantry, one signal company, one hospital corps, one engineering company and one artillery detachment. The engineering company and artillery detachment had been added in the fall of 1916.¹

The tempo of military activities rapidly accelerated on the Iowa State campus. Drill was required for sophomores, it had been voluntary or at least physical training could serve as a authorized substitute since 1906. On December 6, 1915, the general faculty had adopted a resolution requiring two years of military tactics. This was not to support any particular policy but rather to meet the requirement that all land grant colleges must offer military tactics for two years.²

The cadets were beginning to feel the power of strength in numbers and organization. In February, 1915, the cadets formed a "Cadet Officers' Society" to promote the Military Department.³ The honorary Delta XI Military Fraternity was

¹The Student, September 11, 1916, p. 1, September 14, 1916, p. 4, September 26, 1916, p. 1.

²The Student, December 7, 1915, p. 1; Iowa State College Faculty Minutes, December 6, 1915, p. 2.

³The Student, February 17, 1915.

notified in April that its petition for a charter of Scabbard and Blade (a national military society) had been accepted and the Iowa State unit would be designated as Company A, Second Regiment.¹

The Scabbard and Blade organization was installed on May 8, 1915, with eighteen charter and three honorary members. The honorary members were: General James Rush Lincoln, U. S. Volunteers; Lieutenant Rush B. Lincoln, U. S. Army; and Major Herman Knapp, Iowa National Guard. One of the charter members of the first Scabbard and Blade Society at the University of Wisconsin, A. W. Foster had pointed out how necessary it was to have honorary members so the society could get recognition through these important people. Scabbard and Blade at Iowa State was no exception. Only seven months after its original charter the Society initiated the President of Iowa State R. A. Pearson and Dean R. E. Buchanan. President Pearson had served as a Cadet Captain at Cornell and Dean Buchanan as a First Lieutenant at Iowa State. In 1917 the society initiated Lieutenant W. G. Langwell (who was stationed at Iowa State as an active duty officer), a Brigadier General, and Lt. Colonel of the Iowa National Guard, and the Adjutant General of the Iowa Guy E. Logan.² The cadets at Iowa State made good use of

¹"A Brief History of Scabbard and Blade, 1905-1930" (Silver Jubille Convention, Minneapolis, n. p., 1930), p. 51.

²Ibid.; The Student, May 11, 1915, December 20, 1915, January 9, 1917; Alumnus, June 1915, p. 24, November 1915, p. 18, June 1917, p. 402.

its honorary members and in December, 1915, the Scabbard and Blade Society had already found its place in the life and activity of the College.¹

In January, 1916, the cadet officers started testing the newly gained power by requesting pay for cadet officer duties. The cadets mentioned that cadet officers at some institutions were receiving from fifty to one hundred and seventy-five dollars per year. Using a plea that should have hit right at the heart and purse strings of the Board, the cadets admitted that in those institutions where the cadets received pay "the cadet corps were admitted to be better officered and better trained than at Iowa State."²

In April, 1916, the cadets petitioned Cardinal Guild, the student governing body, for representation on the body. The two reasons given were: (1) Cadets have several activities that are of student interest, i.e., military ball, competitive drill, summer camp and pay for officers; (2) Cadets have organized teams that compete in intercollegiate activities, i.e., rifle team and special competition. The petition closed with the plea to help raise the standards of military training.³

¹The Student, December 20, 1915, p. 1.

²The Student, January 18, 1916, p. 1; Iowa State University, Special Collections, World War I Records, Newspaper Clippings 1915-1917.

³The Student, April 11, 1916, p. 1.

Exactly one month later the cadets were granted membership in the Cardinal Guild.¹ This success and the appropriation of \$800.00 by the State Board of Education (in the fall of 1916) to pay the officers of the cadet corps enhanced the acceptance and prestige of the cadet officers on campus.²

As the academic year 1915-16 was drawing to a close, one could see that the campus was being motivated towards the idea of all-out military preparedness and the possibility of the United States entering into the war in Europe. From 1912 until 1916 General Lincoln had been interviewed several times by The Student about the necessity of preparedness, the implication of the Mexican border incidents, and the possibility of victory or defeat in Europe.³ Ex-President Taft gave three speeches on the campus dealing with military preparedness for war. He applauded the military training at Iowa State and made a strong plea for a larger army and navy.⁴ The students and faculty did get both sides of the situation by having a speaker from "The League to Enforce Peace" who spoke a few days after

¹The Student, May 11, 1916, p. 1.

²The Student, September 16, 1916, p. 4.

³The Student, March 16, 1912, April 28, 1914, September 17, 1914, May 18, 1915, December 11, 1915, March 4, 1916, March 28, 1916.

⁴Ames Tribune, March 30, 1916, p. 1; The Student, March 21, 1916, March 25, 1916.

ex-President Taft.¹ However, the majority of speakers were largely in favor of more military preparedness.

The National Defense Act of 1916

As America approached involvement in World War I, interest of both the government and school officials increased in the military training programs. Pollard describes the series of conferences between land grant college educators and the War Department and how the resulting recommendations became part of the National Defense Act of June 3, 1916. This act represented the most far-reaching military preparedness measures that had taken place to date. It allowed for a reorganization of the Army into a Regular Army, a National Guard, a Officers Reserve Corps, and, most important for military education, authorization of the creation of the Reserve Officers' Training Corps (ROTC).²

The new act and subsequent regulation offered the opportunity for commissions, more and better equipment, standardization of training and an increase in the number of officers who could serve as Professors of Military Science and Tactics (PMS&T) to 300. The regulations implementing the ROTC portion of the act came too late in September, 1916, to implement the

¹The Student, March 30, 1916, p. 1.

²Pollard, Military Training in the Land-Grant Colleges and Universities, pp. 64-74.

ROTC program effectively. Some units were organized but were curtailed when America entered the war.

The Iowa State Campus--Late 1916

The first mention in The Student about the possibility of forming an Officers Reserve Corps on campus was an article that reported General Lincoln and President Pearson were taking the plan under consideration but would not decide until the plan was worked out at other schools.¹ This time of consideration (or delay in making a decision) probably was the smartest move the college administration could have made. It seems that some schools which had quickly launched ROTC programs were later disheartened when the units were virtually disbanded and the active duty officers were called back for duty in the War.

The faculty at Iowa State in December, 1916, voted unaminously to petition the War Department for immediate establishment of an officers' corps. It also voted to constitute the Military Department as a major department of the college, the same as any other department, under the Industrial Science division.² The Student reported the possibilities for different units such as infantry, engineering, artillery, or cavalry. A ROTC unit would be authorized at Iowa State and a

¹The Student, November 21, 1916, p. 1.

²The Student, December 19, 1916, p. 1.

retired officer would report to head up the unit. However, several problems would prevent the ROTC unit from being a success at this time. The new unit would be started again after the war.

The military training at Iowa State continued with little change prior to the entry into the war. General Lincoln did get a small auxiliary armory at a cost of \$2,500.00 which contained a rifle range and storage facilities for the 600 new rifles from the Rock Island arsenal.¹ The old cadet officers' rank insignia, identical to "old army" shoulder straps were replaced by the present day Army ROTC "pip and diamond" type insignia.²

Summary of the Early Years

Military training was interpreted to be required by the Land Grant Act of 1862. Consequently, the Iowa Agricultural College (a land grant institution) formed a Military Department in 1870 which grew apace with the College.

The first fifty years were dominated by two military leaders, General James L. Geddes, 1870-1882, and General James Rush Lincoln, 1884-1918. Both men had been educated in military academies and had been exposed to actual combat. They fought

¹The Student, September 19, 1916, p. 2.

²The Student, September 21, 1916, p. 1.

on opposite sides during the Civil War and the transition between their employment as Professors of Military Tactics was stormy. Nevertheless, they both had considerable impact on Iowa Agricultural College far surpassing the normal duties of Professor of Military Tactics.

General Geddes, the first Professor of Military Tactics, implemented the Military Department one year after the college opened its doors. Scholarly, much traveled, and having considerable military experience, Geddes was held in high regard by his students and fellow faculty members. General Geddes also held several other important positions with the college. Captain (later General) Lincoln, though not as scholarly, was also well-qualified to serve as Professor of Military Tactics. He had to prove himself as a military officer and also as a person since he had fought for the Confederacy during the Civil War. A man of lesser talents and motivation would have given up under the conditions he endured, but once past that first controversial year he remained the head of the Military Department for over thirty-four years.

Both General Geddes and General Lincoln felt that military instruction was more than just drilling under arms. They included instruction in ballistics, gunnery, ordnance, military engineering and tactics. In each area an attempt was made to apply the students' theoretical knowledge learned in other academic courses, i.e., mathematics used in ballistics and

gunnery. The early college presidents and faculty at Iowa State supported the military training which helped considerable in its acceptance by the students. The most serious deficiency, for the Military Department during the early years was the lack of an appropriate armory to conduct its drill and other practical training exercises. Therefore, much of the practical work had to be accomplished out-of-doors and was controlled by the weather.

In evaluating the effectiveness of the early military training at Iowa State, it appears that the Military Department was training officers who could serve as instructors in "the school of the soldier and the company" and also as officers in the Iowa State Militia. In fact, the Iowa National Guard units reaped the benefits from the service of several Iowa State military training graduates. The Iowa National Guard also profited from the services of General Lincoln for over thirty years. Much of the early success of the Iowa Guard up through World War I is often credited to General James Rush Lincoln, the "Dean of Iowa fighting men."

Iowa State College was most fortunate to have had only three Professors of Military Tactics during these first forty-six years. The military training was therefore assured of continuity of effort, growth, acceptance and effectiveness. In comparison with several other schools that offered military

training, Iowa State was superior. The college could very easily feel it was meeting the intent of the Land Grant Act by "including military tactics" in its curriculum.

CHAPTER III: WORLD WAR I YEARS 1917-18

Earle Ross, the Iowa State College historian, described the entrance in World War I.

Then came the Great War...the land-grant colleges with their obligations of military training and their diversified programs of instruction, research and extension were challenged to "do their bit" which with the paramount demands of technical military training, adaptation and conservation of resources, and increased food production loomed as a major service. The world struggle was to provide the first real test of the military provisions of the Morrill Act; the Spanish-American War had not made sufficient demands upon the system to give adequate demonstrations of its possibilities.¹

Iowa State Prepares for Mobilization

Prior to the actual entry into World War I, the Iowa State campus continued to work towards self-mobilization. In January, 1917, 5,000 dollars was raised at Iowa State for the relief of college students in the war prisons of Europe.² The drive was the first of many fund raising campaigns at the college. During February The Student interviewed General Lincoln about the capability of his cadets to serve as officers. The General felt they were more than ready and that he would also go if the

¹Ross, A History of the Iowa State College, p. 303.

²Iowa State University, Special Collections, World War I Records, Newspaper Clippings 1915-17.

Government would give him half a chance.¹ Other Student articles point out that the cadet officers association had formed a special company of officers to receive additional instruction so they would be better prepared to assume Regular Army Commands. The services of over 1,000 Ames cadets were volunteered to the President of the United States by the Ames Chamber of Commerce.²

The month of March, 1917, saw the patriotic spirit running stronger on the campus at Iowa State. General Lincoln was asked to speak at a campus convocation dealing with the possibility of war with Germany. The General fully expected us to be at war very shortly. He deplored our state of military preparation and predicted there would be a call for volunteers. He advised the ranking cadet officers not to look for positions better than lieutenant in a volunteer corps', they could start low and rise to the higher ranks as they gained more experience.³

There were several articles in The Student dealing with patriotism and topics associated with the cadet corps and military training.

¹The Student, February 8, 1917, p. 1; The General knew that he had little chance of going off to fight a war at the age of 72. Nevertheless he was honest in saying he would go if given the chance. He did get the chance to serve his country again as an Active Duty Major, unassigned, with the military training at Iowa State.

²The Student, February 15, 1917, p. 1, February 17, 1917, p. 1.

³The Student, March 1, 1917, March 6, 1917, p. 1.

Typical themes of articles were: The Iowa State coeds discussing the possibility of forming a Red Cross school under the guidance of Lieutenant Langwell; Plans were started on the military ball; Lt. Langwell successfully passed the War Department examination for Captain; General Lincoln has been journeying to Des Moines to put in a special appeal before the military committee for the construction of a new armory; General Lincoln drilled the largest number of cadets (800) ever assembled on this campus on March 28, 1917; Sixty-one faculty men form a military training company; A special faculty meeting declared the faculty was in favor of universal military training and that a full holiday would be observed during the coming Federal inspection, and a committee would be appointed to survey the College's military resources.¹

All of these previously listed events had some impact on the Iowa State Campus. The two that were most significant for the Military Department were the formation of the faculty military company and the granting of a school holiday on the occasion of the annual Federal inspection.

The faculty military company which was formed by sixty-one members of the Iowa State staff was later to grow to almost two hundred. The company included the College President R. A. Pearson in the number one position in the rear rank of squad

¹The Student, March 1, 1917, March 27, 1917, March 22, 1917, March 8, 1917, March 6, 1917, March 29, 1917.

number six. Dean Anson Marston was a corporal in the fourth squad; Registrar Herman Knapp was First Lieutenant; and General Lincoln was Captain. The President of Iowa State College offered the services of the company to the President of the United States should the country need volunteers.¹ These faculty men started out with the basic rudiments of military training. Actually, the idea of the unit was to educate the college staff so they would have a fundamental knowledge of the way an army works. Then should these individuals be called into the service they would be able to apply their educational expertise much more effectively. This voluntary training by the College staff should have convinced the most skeptical that Iowa State would be prepared to do its part if war should come. It also helped to demonstrate to the faculty the type of training General Lincoln had been requiring of his cadets. The faculty members who had not paid very close attention to the military training in the past were probably quite amazed at the capabilities of the seventy-two year old General who was known as the "Dean of Iowa fighting men."

In a special faculty meeting on March 28, 1917, the faculty showed their zeal for military preparedness by endorsing compulsory military training, whereby the burden of military

¹The Student, March 6, 1917, April 10, 1917.

service would be fairly distributed. They voted a full holiday for the coming Federal inspection of the Cadet Corps; in the past the cadets had been excused from other classes only during the hour that the final inspection parade was held. In the same meeting, the faculty also initiated a survey to determine the military resources of the college.¹ It was very interesting to see that the preliminary report of "facilities of Iowa State that were available for training of men in a mobilization camp" was fairly comprehensive and almost identical to the facilities that the College actually did contribute during World War I.² Each of the faculty members and students were asked to evaluate their own capabilities as to how he could best serve the country in the armed forces.

By the end of March the campus was ready to be mobilized. The drilling of 800 cadets and eighty-six faculty members added a lot to the spirit of mobilization. The editor of The Student, Harold E. Pride (who took his military training under General Lincoln, served during World War I and later attained the rank of Colonel during World War II) vividly described what it was like observing the drill, "Eight hundred armed men marching to the martial music is a sight to stir the patriotism of the most

¹Minutes of Iowa State Faculty, March 28, 1917, p. 2; The Student, March 29, 1917.

²Iowa State University, Special Collections, World War I Records, SATC Folder.

phlegmatic. Our regiment of trained infantry is a vivid example of national preparedness and the increasing interest in this activity here is indicative of the sentiment of our college community. Certain it is that in case of dire necessity, Iowa State will not be found wanting in numbers of trained men to offer in defense of American rights and liberty."¹ The interest in military preparedness was not confined to the campus; several Iowa State Alumni were writing to General Lincoln asking for their certificates of military training and recommendations for commissions in the Army.² Iowa State was well motivated and prepared for mobilization when it came.

The Iowa State campus kept track of the events in Europe during this time of terrible conflict. When the Germans returned to their unrestricted submarine warfare in early 1917, it became evident that the United States would be drawn into the war very soon. On the evening of April 2, 1917, after several American ships were sunk by the Germans, President Woodrow Wilson told congress that German submarines were waging war "against all nations." The President asked for a declaration of war saying: "the world must be safe for democracy."

¹The Student, March 29, 1917, p. 2.

²Iowa State University, Special Collections, World War I Records, Newspaper Clippings 1915-1917.

Congress declared war on April 6, 1917.¹

The campus became fully mobilized in early April, 1917. It was a hectic time for all. The campus radio station was closed down by the government and everyone knew the U.S. was at war. Of the fifteen articles on the front page of The Student in a given day, thirteen were about Iowa State and the war effort. There was considerable information on how the students could serve as civil engineers, marines, and (as coastal artillerymen). The women became active in Red Cross work. Many students left school early to enlist for active duty and special rules were adopted by the College to allow them to complete their college work early.² The Student kept the campus up-to-date on the events of the war throughout the conflict.

This was the first time that colleges and universities were faced with a rapid loss of enrollment. Some stop-gap measures were recommended, such as trying to persuade the students to stay in school and not to enlist immediately. President Pearson sought the aid of the Adjutant General of Iowa Guy E. Logan, who wrote a letter advising the students to

¹Richard N. Current et al., United States History, p. 521.

²Ross, A History of the Iowa State College, Chapter 13. This twelve page analysis of the World War I years is a must reading for anyone interested in the war effort at Iowa State during this time period.

stay in school and to take advantage of the military instruction of General Lincoln. The Adjutant General stated:

...I am very well acquainted with the line of instruction which General Lincoln is giving and it is the best that can be given to equip them [the students] for service in the coming trials of this nation. If I may take the liberty, I would suggest that in so far as it is consistent, that it would be of greater benefit to our nation at this time, to give the military department of your school all the latitude possible in training the young men of that institution in military tactics, thereby equipping them to secure advance positions in the military duties for their government which would be much more valuable than duties of a private soldier.

Adjutant General Logan went on to explain that by continuing their military training the students would be able to secure a more important position in the service of the country at the end of the year, especially if they applied themselves strictly to the study of military science and tactics.¹ Adjutant General Logans appeal to the student and to the college probably did have some effect, even though five hundred students did depart the campus with about two hundred leaving for active service.

The President of Iowa State R. A. Pearson took the Adjutant General's advice and on the same day issued a letter to the instructing staff which announced a meeting to arrange more military drill for those looking forward to active duty. The

¹Letter, Adjutant General Guy E. Logan to President R. A. Pearson, Iowa State College, April 11, 1917, Iowa State University, Special Collections, World War I Records, SATC Folder; The Student, April 14, 1917, p. 1.

last paragraph read: "In view of the national emergency before us we should do all in our power to prepare ourselves to render the best service possible to our country. This is a patriotic duty and I trust the men of the student body will be unanimous in their response."¹ Probably because of Adjutant General Logan's recommendation, President R. A. Pearson's letter to his staff, and the other events of the time, General Lincoln received additional appropriations from the Board of Education. The General was authorized to employ additional officers to assist in his training. These officers selected were from the higher ranking cadet officers.² These officers were in addition to Lt. Langwell, an active duty officer (and an Iowa State graduate), who had replaced Lt. Rush Lincoln in 1916.

The Military Department was allowed more convenient hours for drill 11:00 to 12:15 each day. All of the college classes were shortened to forty-five minutes and physical training classes were dropped so the extra time could be applied to military tactics in addition to the required drill. The students and faculty voted to drill in battalions by college, "ags", engineers, scientists, "vets", post graduate and faculty. With the increased size and number drilling (virtually the

¹Letter, R. A. Pearson to the Iowa Agricultural College Instructional Staff, April 11, 1917, Iowa State University, Special Collections, Military File.

²Ames Times, Ames, Iowa, April 13, 1917.

whole male population of the campus) there was a shortage of uniforms. When General Lincoln was asked what he would do about this situation, he explained that uniforms would not be required for drill duty, but students would show a distinct patriotic spirit if they did wear uniforms. The General said, "I don't care what kind of uniforms are worn, just so they are neat and are not German or Mexican."¹

On April 19, 1917, the College President was called to Washington, D.C., as an assistant on special agricultural problems, and in August he was appointed Assistant Secretary of Agriculture. President Pearson also served on the advisory committee of the "Committee on Education and Special Training" which drew up the plans for the Student Army Training Corps. Naturally Iowa State had such a unit.² A considerable number of the Iowa State faculty members followed President Pearson's example of serving the country in some capacity away from the campus.

If April of 1917 was a hectic month, then May was even more so. Early in the month the idea of the war getting closer

¹Iowa State University, Special Collections, World War I Records, Newspaper Clippings 1915-1917; The Student, April 14, 1917, p. 4, April 17, 1917, p. 1.

²President Pearson's Service Record, Iowa State University, Special Collections, World War I Records, June 11, 1919; The Student, April 19, 1917, p. 1.

to Ames was dramatized by the Board of Deans at Iowa State: they decided it would be necessary to post men for police duty on campus. General Lincoln and some cadets were sworn in and posted around key locations, such as the power plant and water tower. The Student explained that if one heard an order to halt, he had better do it because the guards were armed and lawful officers. Less than five days later the cadet guards fired upon and wounded a person attempting to break into one of the important college buildings.¹

The Military Department gradually saw the "College Army" grow until two thousand two hundred men were formed up on the central campus during the first formal review of the spring. There were thirty-six companies in all.² General Lincoln continued to give his annual examinations to the cadets who desired to be officers in the fall. In an attempt to keep some students interested in coming back the next year General Lincoln and the faculty made it possible for a student to major in the Department of Military Science.³ The effectiveness of General Lincoln's training of his cadets was surely standing the test of reality since many students who had left school

¹The Student, May 3, 1917, p. 1, May 8, 1917, p. 1.

²The Student, May 3, 1917, p. 3.

³The Student, May 17, 1917, May 10, 1917, p. 1.

early to attend the Officer Training Camps of the Army wrote back saying how much the previous training was helping them. There was a lot of speculation about a special camp during the summer and General Lincoln did make plans to offer his military course during summer school. It could be taken in addition to the regular course work or as a special course by itself.¹ This was the first time that the Military Department had offered the course during the summer term. General Lincoln was keeping as many options open as possible.

Four events affected the military training at Iowa State during the remainder of the school year. One was the Selective Service Law passed by Congress on May 18, 1917, in which the President was authorized to recruit the new army by drafting.² The impact of the Selective Service Law at Iowa State could not be evaluated accurately. It probably caused some students to leave school early, to enlist, or to apply for one of the several Officer Reserve camps that the War Department was using as its major source of officers. The Selective Service Act also caused General Lincoln and the college staff to consider the options that it might present for the College. Evidently this did stimulate consideration of forming an ROTC unit in

¹The Student, May 19, 1917, p. 1.

²Weldon J. Brown, "The Organization and Financing of Military Training in the Land Grant College 1916-38" (unpublished M.S. Thesis, Iowa State University, 1939), p. 9.

addition to the regular Cadet Corps. Also, to insure having some male students the next fall, the possibility of different types of war training were further evaluated.

Another event that hindered or at least handicapped the Military Department was the notice to General Lincoln on May 21, 1917, that his active duty assistant Lt. Langwell would be leaving Iowa State. The mobilization of the Armed Forces resulted in the recall of all active duty officers assigned to college Military Departments. The colleges and universities were advised to put the military work under the supervision of a faculty member or cadet officers.¹ Fortunately, Iowa State had General Lincoln to carry on with the aid of his cadet officers. It appears that the military training at Iowa State continued on virtually unchanged until the end of the school year. If General Lincoln had not been in charge there is a good chance the program would have come to almost a complete halt as it did in other schools who only had active duty officers conducting their training.

Other events of May, 1917, that had implications for the Military Department, mainly affected the College and the patriotic atmosphere of the campus. Dean Buchanan received word that Iowa State College had been assigned one of the

¹Letter, War Department, The Adjutant Generals Office to PMS&T, Iowa State College, May 21, 1917, Iowa State University, Special Collections, World War I Records, SATC; The Student, May 26, 1917, p. 1.

thirty-six units of ambulance workers which would be raised and sent to France.¹ When the announcement was made that an Ambulance Unit would be formed over eighty volunteers were received immediately. The Ambulance Unit would be the first and only distinct organization to be recruited and sent from the college.² General Lincoln was somewhat involved with the unit and participated, as the whole college did in a rousing May 31 convocation which sent the Ambulance Unit on its way.

The final event of the school year of 1917 was the War Commencement on June 6, with the spirited Ex-President William Howard Taft as the speaker. President Taft had spoken on the campus a year earlier. His previous three talks in 1916 did much to create a patriotic atmosphere in Ames. The commencement address was a rousing patriotic appeal and the ex-President was supposed to have held the audience "spell-bound." The enthusiasm created by Taft would carry through the many stresses and strains of these hectic times.³ The June 6th commencement was the first of two commencements. The second was held at Ft. Snelling, Minneapolis, Minnesota, on June 9th and was a unique

¹The Student, May 12, 1917, p. 1.

²Alumnus, July, 1917; Iowa State University, Special Collections, World War I Records, Iowa State Ambulance Corps biographies; The Student, May 12, 1917.

³Iowa State University, Special Collections, World War I Records, Newspaper Clippings 1915-1917; Ross, A History of the Iowa State College, p. 306.

commencement. This ceremony was conducted by Acting President Edgar W. Stanton, Dean Anson Marston and Dean R. E. Buchanan for the men from Ames who had departed the campus early to attend the officers training camp from which they would receive commissions in the Army.¹

During the summer of 1917 General Lincoln did conduct a small summer camp with only thirty men enrolled. The low attendance was credited to the short notice of actually having such a military camp.² Other departments started teaching courses that were directly related to military training. The Civil Engineering taught military topography, and mapping, military bridges, military roads and railroads, and field fortifications. The Electrical Engineering Department taught telegraphy and wireless, while the Mechanical Engineering Department taught work and repair of motor cars.³

The fall term of the 1917-18 school year found the College offering the same war courses taught in the summer with the addition of courses in farrier work, horseshoeing and auto truck driving. The College had also started in an all-out campaign to advertise its Military Department. One 1917-1918 publication featured the Military Department - "Military

¹Alumnus, July 1917, p. 438.

²Ibid., p. 474.

³Alumnus, June 1917, p. 407.

Science and Tactics, Physical Training and related subjects." Other special publications contained information about the military "the verdict on going to college" and "the way to opportunity." The College Catalog also listed several options available in the Military Department.¹ Military training was required for all students, whereas in the past it had been required for only freshmen and sophomores. The venerable General Lincoln was still in charge and students could major in military science subject to the commandant's approval of certain courses. Juniors and seniors could be classified in two ways; those who wanted to take Reserve Officer Training which involved two hours of drill and three hours of theoretical work for three credit hours. And those who did not want to pursue the Reserve Officers Training and who would be required to take two hours of drill and one hour theoretical work for one hour credit.² (Actually the Reserve Officer work did not really start until early 1918).

In October General Lincoln received a set back to some of his future plans for the Military Department. Earlier in the year the General and Captain Mumma, the Professor of Military

¹Iowa State College. "Military Science and Tactics, Physical Training and Related Subjects" (Ames, Iowa, 1917-18); "The Verdict on Going to College" (Ames, Iowa, 1917-18); "The Way to Opportunity" (Ames, Iowa, n. d.), These documents are in the Iowa State University, Special Collections, World War I Records, SATC Folder; Iowa State College Catalog (Ames, Iowa, 1917-18), p. 300.

²The Student, September 10, 1917, p. 1.

Science and Tactics at Iowa City, made several trips to appear before the legislators to convince them of the need for an armory at both schools. The thirty-seventh General Assembly (1917) was properly convinced and on April 10 appropriated \$250,000 for two armories.¹ One-half of this was to go to Iowa State and the other half to Iowa City. However in the fall the building of the much needed armory was postponed due to the high price of steel and the scarcity of labor. Wood could have been used instead of steel to stay within the cost but even this idea was rejected.² This was an especially hard blow for General Lincoln since he probably felt that for the first time he would finally get the armory he had been requesting since 1884.

The Student kept the College well informed on its faculty, students and alumni who were serving in the armed forces. Dean Marston had resigned his post in favor of army service and was a Major in command of three Iowa companies of Engineers. There were numerous reports from the Officer Training Camps with some information about the mammoth guns they were using in the Coastal Artillery. President Pearson kept in close touch

¹Frederick G. Davis, "History of the State University of Iowa: The College of Liberal Arts 1916-1934" (unpublished Ph.D. Thesis, State University of Iowa, Iowa City, 1947), p. 337.

²The Student, September 15, 1917, p. 1; Letter from Acting President Stanton to Supt. Sloss and General Lincoln, October 4, 1917, Iowa State University, Special Collections, World War I Records, SATC Folder.

with the College and visited the Ambulance Unit in Allentown, Pennsylvania, where it was undergoing training.¹ In November The Student reported that over 700 Iowa State people were off serving their country with ranks from Private to Brigadier General. This number would grow to 1,055 in less than three months.²

Ross explains that there was remarkable unanimity of sentiment at the College and in the community in support of the war. Ames was spared the suspicions, espionage, and coercive demonstrations which estranged and embittered many college communities.³ About the only coercive demonstration occurred when a dozen college students bodily ejected a fellow student from his rooming house and marched him down town where he publicly retracted his previous pro-German remarks.⁴

ROTC at Iowa State

On the national scene the Reserve Officers Training Corps (ROTC) had been left floundering when the active duty officers who were serving as Professors of Military Science and Tactics

¹The Student, September 10, 1917, p. 1, September 20, 1917, p. 1, September 11, 1917, p. 4, September 13, 1917, p. 1, December 1, 19, 1918, p. 1, September 27, 1917, p. 4.

²The Student, November 15, 1917, February 7, 1918.

³Ross, A History of the Iowa State College, p. 306.

⁴The Student, November 27, 1917, p. 4.

(PSM&T) had been recalled from the college campuses. At Iowa State College no ROTC unit had been started since the administration had elected to wait and evaluate its success at other schools. Once again we see the Federal Government attempting to revive the ROTC program by hiring retired officers to serve as PMS&T. The first discussion of an ROTC unit in the fall of 1917 occurred in October when the Secretary of War authorized the College to establish an Infantry Unit of the Senior Division Reserve Officers Training Corps. The retired officer assigned to start the unit was Lieutenant Colonel Charles B. Byrne, who had received his commission in 1877 and had retired after thirty-one years of service.¹

Lt. Colonel Byrne did arrive on campus and working with General Lincoln began to lay the groundwork for the ROTC program. The possibility of the ROTC program created some excitement since this appeared to be a way to insure that the College could have some students deferred from the Selective Service Act and this just might help bring a little stability to the junior and senior year male enrollment.

Dean Buchanan gave a detailed report to the College faculty quoting extensively from the General Orders No. 49, War Department, dated September 20, 1916, which was the first ROTC Regulation that described the instructions governing the

¹The Student, October 4, 1917, p. 1, October 11, 1917, p. 3, November 13, 1917, p. 1.

establishment, administration, maintenance and training of the Reserve Officers Training Corps.¹

Technically ROTC was a four year program, but due to the world conflict the government elected to implement the senior or advanced portion at the same time. General Lincoln asked for a clarification of Section 50 of the basic National Act of 1916 which explained that a member of the ROTC had to complete the first two basic years of ROTC to be eligible for the senior program. The General was advised by a message that since the College was founding a unit during the 1917-18 school year the cadets could graduate in the Spring of 1919.² This meant that the War Department felt that the two years of required military training received under General Lincoln were more than adequate to meet the requirements of the first two years of ROTC.

ROTC at Iowa State finally got started on a very limited scale in the spring of 1918. The program required five hours per week for the juniors and seniors, two hours of which had to be spent as officers conducting the freshman and sophomore drill. The remaining three hours were devoted to lectures and

¹Iowa State College Faculty Minutes, December 17, 1917, p. 1; U.S., War Department, General Orders No. 49, Reserve Officers Training Corps Regulations, September 20, 1916 (Washington, D.C.: Government Printing Office, 1962).

²Message, Adjutant Generals Office, to General Lincoln, December 18, 1916, Iowa State University, Special Collections, World War I Records, SATC Folder.

class work. Some of the benefits to the participants were free uniforms, a small monthly pay for rations which would amount to from nine to fifteen dollars per month, and the opportunity to be granted a commission in the United States Army. The cadet was required to sign a contract stating he would continue his ROTC course at Iowa State, devote the five hours per week, and attend a summer camp if prescribed.¹

ROTC at Iowa State had little chance to get going and attract a large number of cadets. Technically, a school was supposed to have at least 100 cadets signed up in order to have a ROTC unit. Actually only thirty-eight signed up at Iowa State. In early 1918 when the program was implemented the lure of more active war participation drew heavily upon its potential members. Also the College shortened its academic year allowing early graduation on April 19 for those who could complete all the academic requirements.² There was just no room to include the five hour per week workload of ROTC if a person hoped to complete his academic work a full six weeks early. The potential advanced cadets could see that they probably would not be able to remain on campus long enough to finish the last two years of an ROTC officer program. Most felt it was

¹The Student, January 10, 1918, p. 1; U.S. War Department, General Orders No. 49, p. 9.

²The Student, January 24, 1918.

best to accelerate their graduation and try to attend one of the officer training camps.

One might speculate that the poor working relationship between Lt. Colonel Byrne and the Iowa State faculty could have contributed to the lack of initial acceptance of ROTC. Colonel Byrne had been assigned to Iowa State with the idea that he would be the head of the ROTC department. He arrived in late 1917 and found General Lincoln firmly entrenched as the head of the Military Department which he had been running for over thirty-two years. The College had made a unique interpretation of the instructions for implementing ROTC and assigned General Lincoln as the head of the Department of Military Science and Tactics in all matters dealing with the college requirements, and Lt. Colonel Byrne would be in charge of the ROTC and responsible for all matters dealing with the War Department.

Evidently the Colonel did not like this arrangement and one could hardly blame him for feeling the ROTC program was being slighted. Colonel Byrne countered this arrangement by refusing to even accept the military department in the Industrial Science Division and insisting that he should deal directly with the acting president. This conflict necessitated a letter from the acting president explaining in writing the previous arrangement of the military department existing in the

Industrial Science Division.¹ Colonel Byrne once again refused this arrangement and the acting president carried his case to the Commanding General of the Central Department, who was responsible for the Iowa State ROTC unit within the War Department administrative structure. Acting President Stanton carefully documented Iowa State's case for the special administrative arrangement allowing General Lincoln to head the department and to hold the normal position in the Industrial Science Division. Other Administrative matter and interpretations on which the College and Colonel Byrne disagreed were also mentioned. Finally, the President of Iowa State stated, "Colonel Byrne is not mentally equipped to handle the executive work of a large department in all its detail."²

There is no correspondence available to indicate the answer from the War Department. However, a letter from Colonel Byrne dated April 25, 1918, to the Adjutant General of the Army does shed some light on the subject. The Colonel explained several of the problems he was facing at Iowa State. It seems there had been a vast amount of correspondence between the college, Colonel Byrne and the War Department dealing with the

¹Letter, Acting President Iowa State College to Member of the Staff of the Department of Military Science and Tactics, March 27, 1918, Iowa State University, Special Collections, World War I Records, SATC Folder.

²Letter, Acting President of Iowa State College to the Commanding General, Central Department, April 3, 1918, Iowa State University, Special Collections, World War I Records, SATC Folder.

many administrative matters of accepting an ROTC unit. There had been honest differences of interpretations in the implementing of regulations and instructions at several schools, so Iowa State was no exception. It seems that in the previous differences the War Department had accepted the Colonel's interpretations, especially dealing with the commutation of rations, furnishing of uniforms and other minor matters. Evidently Colonel Byrne felt he could convince the War Department of his right in refusing to accept the administrative set-up at Iowa State.¹ There is no information on the final outcome. Nevertheless it can only be concluded that the quibbling over the administrative arrangement of ROTC within the structure of Iowa State probably created some roadblocks in getting the ROTC program accepted.

General Lincoln sheds some more light on the conflict with Colonel Byrne when the General answered some questionable comments on a 1918 annual inspection report of the Military Department by the U.S. Army. Some of the information in the report had been furnished by Colonel Byrne; he explained that the faculty at Iowa State had little importance attached to military instruction; the faculty did not support the program; the military spirit at Iowa State has been developed and

¹Letter, Professor of Military Science & Tactics, Iowa State College to the Adjutant General of the Army, April 25, 1918, Iowa State University, Special Collections, World War I Records, SATC Folder.

nurtured very little; the military professor was not entirely satisfactory to the authorities of the institution; finally, the condition at Iowa State did not warrant the continuance of the detail of an officer as Professor of Military Science and Tactics. General Lincoln emphasized that the faculty and administration did support the military department financially, morally, and they also allowed additional hours for training. The General further explained that the so called annual inspection was an impromptu affair, with no prior notice given to the college as was custom in the past, so the lack of support could have been misconstrued by the inspector. General Lincoln concluded that Iowa State wanted to cooperate with the government in establishing the ROTC program on a high plane and that if someone was detailed who could cooperate with the institution it would work admirably.¹

Actually this conflict of personalities probably had little effect on the number of persons entering the ROTC program. The acceleration of the completion of the 1918 school year a full six weeks early simply left no time to add a five hour per week overload of military training in addition to the required outside preparation. The problem was solved after Lt. Colonel Byrne was transferred from Iowa State before the end of the

¹Letter, J. R. Lincoln to Acting President Stanton, May 15, 1918, Iowa State University, Special Collections, World War I Records, SATC Folder.

official school year. Also, President Pearson of Iowa State in his capacity on the Committee on Education and Special Training in Washington, D. C., kept the college informed on the forthcoming Student Army Training Corps (SATC) which would replace the ROTC program. Consequently, the effort of General Lincoln and the college administration would be devoted to the implementing of the SATC program.

Both the War Department and the college administration profited from their previous mistakes and conflicts when the ROTC program was reinstated in 1919. The War Department realized that it had made a mistake in using retired officers who were recalled to active service for ROTC duty especially if they did not have a working knowledge of higher education. In the future highly qualified and motivated active duty officers were used. Iowa State College also realized its thinking must be reevaluated on the organization of the Military Department and responsibilities the school incurred in accepting a federally run program.

The Student Army Training Corps--The National Scene

World War I was the first conflict during which educators were faced with serious enrollment problems because of the loss of male students to the military draft. Without some sort of government help, the campuses would have been depleted of male students. The Army at the same time was faced with a serious

shortage of technically trained personnel. It was only natural that the Army's needs could be met on the college campuses. The War Department issued General Order number 15, on February 10, 1918, which established the Committee on Education and Special Training. The Committee's duties were to evaluate the needs of the different services and to work out some plan for the use of the educational institutions. A special civilian advisory board composed of representatives from several fields of education was organized. R. A. Pearson, President of Iowa State College, was the land grant college representative.¹

The first plan submitted by the Committee on Education and Special Training dealt with the training of men in the technical or vocational trades in the shortest possible time. By April 1918, agreements had been signed with fifteen schools for approximately six thousand men.² Iowa State was one of these fifteen institutions. In addition to the vocational or technical training the Committee on Education and Special Training decided to establish a cadet reserve corps in collegiate institutions in which young men between the ages of eighteen and twenty-one might voluntarily enlist. College presidents were notified of the intention of creating comprehensive

¹Weldon J. Brown, "The Organization and Financing of Military Training in the Land Grant College 1916-1938," p. 11.

²Ibid., p. 13.

military training in all colleges at the beginning of the 1918 fall term. This plan had to be changed just before school started because the draft eligibility was lowered from twenty to eighteen years of age. Under the Selective Service Act there was no way for the previously planned voluntary enlistment. This meant the new plan for the college training had to be voluntary induction rather than voluntary enlistment. Otherwise the college program would be a deferment haven.¹ It was still a ticklish situation and the Student Army Training Corps (SATC) was sometimes called "Safe At The College."

If some procedures for induction into a college unit had not been made, virtually all college students could have been drafted. The War Department simply did not have the facilities to carry out all the desired training, and the colleges were glad to offer their campuses since this would insure them the ability to stay open. The SATC was purely a military measure designed to utilize the colleges for the training and discipline of students prior to the time they would be called into service. The authors of the plan hoped to keep as many students in college as long as possible, and by giving them military status, they thought that indiscriminate volunteering would be discouraged. This plan resulted in the formation of the Student Army Training Corps (SATC) which would temporarily replace ROTC.

¹Ibid., p. 13.

It appears that the United States was preparing for a protracted war. The March 1918, offensive of the Germans and the delay of committing American troops to battle (as the first troops that went to France had to undergo additional training) further convinced the Allied countries that the duration of the war might be extended for some time.¹

SATC at Iowa State College²

It was fortunate indeed for Iowa State that President R. A. Pearson was on the civilian advisory board of the Committee on Education and Special Training. When the call from this committee went out for colleges to train soldiers in vocational-technical programs, it was only natural that Iowa State would be one of the fifteen schools selected. The first discussion on the campus about the soldiers arrival for training appeared in The Student on March 7, 1918, with subsequent reports until the arrival of five hundred men on April 15, 1918.³ These

¹Charles B. MacDonald, "World War I: The U.S. Army Overseas," in American Military History, ed. by Maurice Matloff, Office of the Chief of Military History, U.S. Army (Washington, D.C.: Government Printing Office, 1969), pp. 381-387.

²Ross, in his book A History of the Iowa State College, gives an outstanding report on the Student Army Corps at Iowa State College, pp. 308-312. The analysis by this writer adds little that is new to the Ross information since the same sources covering the same period of time were used. However, more details are given on the actual happenings as they affected the military training at Iowa State.

³The Student, March 7, 1918, April 2, 1918, p. 1, April 16, 1918.

military students in the mechanical training program were the responsibility of Professor W. H. Meeker of the Mechanical Engineering Department. They were at Iowa State for eight weeks, training as auto mechanics, blacksmiths, machinists and were separate from the regular collegiate work. A new group of 500 men arrived to replace the preceding class every eight weeks. By the time the Armistice was signed over two thousand had been trained in the mechanical programs.

The Fifth Biennial Report of Iowa State Board of Education (1918) was very frank when it said there would have been few students at Iowa State (and the other State schools) if it had not been for the Student Army Training Corps.¹ The report on the SATC by the chairman of the War Issues course at Iowa State in 1919 reported that the collegiate attendance declined from 2,561 in 1916-17 to 2,091 in 1917-18.² This was a drop of almost 500 students but the additional 500 soldiers in the "non-collegiate" or mechanical program made the overall enrollment about the same. The SATC would make its most significant impact on the college campus during the fall of 1918.

General Lincoln and Lt. Colonel Byrne continued the regular military program until the end of the school year 1918.

¹Fifth Biennial Report of Iowa State Board of Education, (Des Moines, Iowa, June 30, 1918), p. 8.

²Iowa State College "Report on Collegiate Section 'A' of the Student Army Training Corps" (unpublished report, Ames, 1919), p. 1.

There was little change from the past "officer type" training because the ROTC program only had eight people signed up for the advanced course. General Lincoln was interviewed occasionally on the war in Europe and was of the definite opinion that if the United States did not speed up its mobilization we would lose the war. He went on to comment, "It's too bad we don't have the officers for the Army that General [Leonard] Wood states we need."¹ A new special unit was formed and called "Lincoln's Rifles" in February, 1918. This unit was fully armed, outfitted and trained by the time of the annual inspection in late March.² Another change in late May saw Lt. Colonel Byrne, the retired Army officer who had been assigned to head up the ROTC program at Iowa State, reassigned to the Mexico Military College.³ Once again General Lincoln was the only person assigned to the Military Department at Iowa State.

During the summer of 1918 the mechanical training of the five hundred soldiers continued. General Lincoln started preparation for the collegiate portion of the SATC that would be implemented during the fall. The collegiate training was separated from the technical training which was under Professor Meeker. A letter to all college presidents from the War

¹The Student, March 7, 1918, March 26, 1918, p. 1.

²The Student, February 21, 1918, p. 1, March 28, 1918, p. 1.

³Waterloo Courier, May 31, 1918.

Department Committee on Education and Special Training, dated August 5, 1918, provided the information on the future status of ROTC and SATC. The committee explained that ROTC and SATC would both be under the committee's control and that the War Department preferred everyone operate under the SATC arrangements. It was also emphasized that SATC would cease its operation at the end of the War and ROTC could be continued or resumed with no implication drawn as to whether ROTC had been dropped or continued by the college during the war.¹

Iowa State had been advised that the collegiate portion of the SATC program would be implemented on October 1, 1918. The college administration realized the opportunity that the SATC program offered and sent letters to all high school graduates in Iowa explaining that Uncle Sam wanted men and that the opportunity existed to enter Iowa State on October 1, 1918, in the SATC.² Evidently this letter and other means of advertising the Student Army Training Corps did have some effect on the number of people who attended college primarily because of the SATC. At Iowa State it was estimated that 800 of the total 1,600 students who served in the collegiate

¹Letter to all College Presidents, from War Department, Committee on Education and Special Training, Washington, D.C., August 5, 1918; Iowa State University, Special Collections, World War Records, SATC Folder.

²Letter, Dean R. E. Buchanan to all High School Graduates, September 11, 1918, Iowa State University, Special Collections, World War I Records, SATC Folder.

section did so because of the SATC.¹ At Iowa City, it was estimated that only 150 to 250 of the 1,478 inducted into the Student Army Training Corps came solely because of the SATC program.²

The inauguration of the Student Army Training Corps program increased rather than eased the financial burden of the Board of Education. There had been an expected drop in enrollment during fall 1918, consequently not enough money was appropriated to handle even the normal enrollment, much less an increase in students. Even though the Government was obligated to pay the per diem cost of room, board, and tuition of the inducted men, there was the additional expense of caring for some men between the time of their arrival on the campus and their actual induction date of October 1. Additional instructors were needed for special courses required by the War Department with no expected additional charge to the Government other than the normal per diem payment. These extra instructors resulted in a considerable amount of state funds being used to take care of the large initial expenditures. The State Board of Education actually authorized these extra expenditures without any legal sanction but took it for granted that the

¹Iowa State College "Report on Collegiate Section "A" of the Student Army Training Corps," p. 1.

²Frederick G. Davis, "History of the State University of Iowa: The College of Liberal Arts 1916-1934," p. 369.

board must do the best they could in this emergency situation.¹

General James Rush Lincoln at the age of 74 was once again called on by the college and his country. He was restored to the active service list of the U.S. Army with the rank of Major, and he assumed command of the Student Army Training Corps. The General (now a Major on the active duty roster) had fourteen officers to assist him in the command of the 1,200 soldiers whose numbers grew even greater later on. According to several reports the swearing in of the 1,200 men into the national army was an extremely impressive ceremony. There were speeches by the acting president of the college, the Governor of Iowa, and General Lincoln administered the oath. Iowa State was one of 525 units with a total membership of approximately 140,000 that were inducted on October 1, 1918.² The General was in charge of the SATC until in late October when he was succeeded by his adjutant, Captain A. L. Lane. General Lincoln still had considerable contact with the SATC, but his primary duty in the later part of 1918 was with the cadet corps which now numbered only 150 cadets since most of the men were in the SATC.³

¹Fifth Biennial Report of Iowa State Board of Education, pp. 8-9.

²The Student, October 1, 1918, p. 1, October 11, 1918, p. 1. Iowa State University, Special Collections, World War I Records, SATC Folder.

³The Student, October 25, 1918, p. 1.

The SATC program had just been launched when the campus and the city were hit with a "flu" epidemic. The October 11, 1918, Student (which was published just ten days after the SATC started) reported that five deaths had already occurred and a strict quarantine was put on the fourth ward.¹ Everyone was refused admittance to the campus unless they had a signed pass from General Lincoln. Four days later there had been twenty-five deaths and about 630 cases of the flu were being treated.² Before the epidemic subsided there were fifty-one deaths at Iowa State.

An appraisal of the Student Army Training Corps was compiled by Professor L. B. Schmidt, the Chairman of the War Issues Course at Iowa State, and forwarded to President R. A. Pearson on February 1, 1919. Professor Schmidt was extremely familiar with the SATC since he taught the War Issues course "[which] helped to relieve the soldiers of much perplexity and mis-information that they had when the war opened in 1914 or even when the United States entered the war in 1917."³ Some people might interpret Professor Schmidt's report to be an indictment of the program; however, it was not. He was very honest and pointed out some very serious problems that occurred

¹The Student, October 11, 1918, p. 1.

²The Student, October 15, 1918, p. 1.

³Iowa State College "Report on Collegiate Section 'A' of the Student Army Training Corps," p. 4.

in all programs nationwide. Most of the problems at Iowa State were of less intensity than those at other institutions.

Professor Schmidt reported that one of the most serious problems was caused by the influenza epidemic when classes were adjourned for one week and there was excessive absences from later classes. Other problems that created difficulty were: not enough time was allowed for the war issues course; the "supervised study" was a failure since it was implemented after the signing of the armistice; the amount of interest shown by students in their academic work was considerably less than in peace time; extra military duties caused considerable interruption of academic work. Probably the most frustrating problem was the unsatisfactory relations between the academic and military authorities: "There was too much conflict of authority due to the lack of a definite coordination of their powers and the conflicting instructions received from the War Department." Professor Schmidt explained that a two-headed system of administration would not work and that if an administration was to be efficient it must be centralized in the hands of one governing authority.¹

Evidently there had been considerable conflict between General Lincoln, the Military Commander, and Acting President Stanton, the academic or educational leader. Ross reports,

¹Ibid., pp. 2-6.

that the dual authority had caused an open rupture of civil and military relations in other schools but was avoided at Iowa State. However, feeling at times became so tense that it took mutual friends to mediate and reestablish harmony between the experienced executive Stanton and the veteran commander Lincoln.¹ Lyons and Masland characterized the nationwide SATC program as "disastrous" and explained that "College administrators gave over their institutions to young military officers who, for the most part, had little experience in directing large-scale activities and no appreciation for the educational process."² This simply was not the case at Iowa State as General Lincoln was not a young man and he very definitely had vast experience directing large scale activities of the College and the Iowa National Guard. Further the General had considerable appreciation for the educational process since he had been associated with Iowa State for over thirty-four years. It appears the difference between Lincoln and Stanton were amplified by the two headed administration, but a part of the problem was an honest conflict over establishing priorities. General Lincoln had studied military tactics all his life and he knew from first hand combat experience that the academics

¹Ross, A History of the Iowa State College, p. 311.

²Lyons and Masland, Education and Military Leadership, p. 311.

the students would learn during their forecast short stay at Iowa State would not be nearly as important as the military training.

Professor Schmidt's report on the SATC mentioned several positive aspects of the program. Of the estimated 800 men who came to Iowa State strictly because of the SATC about one hundred stayed on in college when the program was demobilized and others were expected to reconsider and return at a later date. The professor explained that neither the late inductions nor the withdrawal of men for officers training caused serious work interruption.¹ Evidently Iowa State was better organized at the start when the 1200 men were inducted on October 1, 1918, than Iowa City where only about ninety men were actually sworn in on that date. The report explained that the institution encountered no insuperable obstacles in meeting the requirements of the War Department committee. It seems the attitude of the faculty towards the combination of military instruction with the academic work was uniformly good. The staff recognized that the country was at war and for all practical purposes the school was a war college. The faculty made every attempt to make the academic work count and as a result most of it was later credited toward the requirements for a degree at Iowa State College.

¹Iowa State College "Report on Collegiate Section 'A' of the Student Army Training Corps," p. 2.

Professor Schmidt also reported that the military discipline upon the general morale and conduct of the student body was beneficial. Some of the critics in November later came around to their senses and later expressed their appreciation of what the academic and military authorities attempted to do under such trying circumstances. The effect of military training and discipline on the physical condition of the men was generally good. The overall general conclusions of the faculty were that the SATC did not have an opportunity to demonstrate its real usefulness and effectiveness since it lasted such a short time. Had the war continued, it was felt all the problems could have been solved adequately before the end of the school year.

Professor Louis B. Schmidt's final conclusion was:

When all of these [difficulties] are considered the S.A.T.C. was a good experiment. It demonstrated the place of the college as a constituent part in the scheme of military training and enabled the institution to feel that it had a definite work to perform in preparing the men for more efficient service and contributing something to the program of winning the war. The experiment was worthwhile and should our country ever again be confronted with a war, the colleges and universities of the country could be counted upon to render a real service to the Government. In short the S.A.T.C. has justified the college in the scheme of national military training and service.¹

When the Armistice was signed November 11, 1912, the Iowa State Campus generally went wild. The victory bell was rung at

¹Ibid., pp. 7-8.

10:30 a.m. for an extended period of time, the SATC men paraded, speeches were made by acting president Stanton, Professor F. W. Beckman and Major J. R. Lincoln.¹ Everyone was glad the war was over. Several months would pass before the final report of the Iowa State war effort could be compiled. For instance the death notice of Major W. G. Langwell, who had served as General Lincoln's assistant from 1916 to 1918 was not received on campus until eight days after the Armistice had been signed. The Iowa State campus would be a long time forgetting World War I.²

The SATC had been a "war baby", thus its termination followed the Armistice in November, and the ROTC program was implemented in early 1919. President R. A. Pearson returned to the campus in late November, 1918, after a one and one half year absence. He thanked the faculty for keeping the college going and was quoted in the Ames Times and Des Moines Register of November 25, 1918:

Mr. Pearson declared there was perfect harmony between the Military authorities and the College Officials. Major Lincoln is to be commended on the manner in which he handled the huge task...

¹The Student, November 12, 1918.

²The Student, November 19, 1918.

He further added:

there would be a swift return to a peace time footing. The students will be given more time for study. Instructors, I believe have understood the position of the haste caused during the war time; Major Lincoln appreciates the change and is working hand in hand with us.¹

A circular letter from the Committee on Education and Special Training of the War Department dated November 23, 1918, to the heads of all the SATC units notified them that they should make plans for early demobilization. This process took about one month at Iowa State since the collegiate and the vocational sections had been demobilized by December 22, 1918.²

The war record of Iowa State College was an impressive one. Students, former students, graduates and faculty members served in many capacities. There are several records that tell the story of service during the war. The total numbers who served in each report varies. It suffices to say that almost six thousand served and over one hundred gave their lives. The 1918 Bomb devoted fourteen pages to the military activities and the 1919 Bomb used thirty-three pages to tell the military story.³ Professor L. B. Schmidt in his report on the SATC

¹Ames Times, November 25, 1918; Des Moines Register, November 25, 1918, Iowa State University, Special Collections, World War I Records, Newspaper Clippings, 1918.

²Iowa State University, Special Collections, World War I Records, SATC Folder.

³Bomb 1918, 1919.

reported that about 1,600 served. President R. A. Pearson sent a letter (March 18, 1920) to the State Board summarizing the total of students and faculty who served and those that were killed in action.¹

	<u>In Service</u>	<u>Dead</u>
Regular College Students	632	13
S.A.T.C.	1,536	25
Naval	136	
Mechanical training units	2,028	26
Alumni, ex-students and faculty	<u>1,514</u>	<u>39</u>
	5,846	103

The War Records Committee of Iowa State summarized the service of the College in "A short record of Iowa State College in the World War" (an undated sixteen page publication). It showed that approximately 6,000 names appeared on Iowa States' service roll and that the college had the honor of furnishing 2 Brigadier Generals, 3 Colonels, 14 Lieutenant Colonels, 33 Majors, 117 Captains, 224 Lieutenants, 430 Second Lieutenants and 55 Ensigns. There were 103 Gold Stars on the Service Roll indicating those that gave their life during the War. Of those 103, one was a woman. Miss Hortense Wind ('15, H.Ec.) "died while serving as Chief Dietitian of the Naval Hospital at Norfolk, Virginia. She was buried with full officer's services at Council Bluffs, December 17, 1918."² General Lincoln's three

¹Letter, R. A. Pearson to State Board of Trustees, March 18, 1920, Iowa State University, Special Collections, World War I Records, Miscellaneous File.

²War Records Committee, Iowa State College, "A Short Record of Iowa State College in the World War" (n. d.), pp. 4, 5 and 13.

sons who had attended Iowa State served, with two attaining the rank of Colonel and one of Lt. Colonel. It is reasonable to assume that most of the senior ranking officers from Iowa State during the war took the officer training under General Lincoln. There is a good possibility that even the majority of the junior ranking officers took the officer training under the General also.

In summary, it can be said that Iowa State College responded worthily to the national crisis of 1917-18, and that its sons and daughters acquitted themselves in a fitting and patriotic manner. The college accepted the suggestions of the War Department and conducted the Student Army Training Corps program. This land grant school and its military contribution to World War I was evidence that the often quoted phrase of the Morrill Act which refers to military training "and including military tactics." had been justified on battlefields of Europe.

Impact of World War I

The impact of World War I on the military training at Iowa State College was considerable. Before the war the entire male student body was required to take two years of military training and a few elected to complete the last two years of officer training. As the war approached more time was set aside for military training. The faculty formed a volunteer company and

the cadets volunteered for additional training. Shortly after the war started military training was made compulsory for all four years. Iowa State attempted to start an ROTC unit but with only limited success. The needs of the country became so great for trained military personnel that the campus was virtually mobilized with the Student Army Training Corps. After the armistice the College quickly returned to a peace time footing and plans were made to implement the modern day Reserve Officers Training Corps.

CHAPTER IV: BETWEEN THE WAR YEARS 1919-1941

The National Scene, 1919-1920 Reactivation
and Reorganization

Following the cessation of hostilities and the signing of the Armistice, the demobilization of the Student Army Training Corps and the reorganization of the Reserve Officers' Training Corps (ROTC) was undertaken at once. During the war President Wilson had been granted emergency authority to make 1,000 commissioned officers available for ROTC duty. Consequently, by the close of the academic year June, 1919, units had been established in 191 colleges and universities.¹

The Committee on Education and Special Training of the War Department (to which Iowa State's President Pearson had been an advisor) issued its first Unit Memorandum on January 2, 1919, explaining that the ROTC program would be under its auspices and that Professors of Military Science would be assigned soon after January 1, 1919.² When the Committee was ordered demobilized on September 1, 1919, the ROTC program came under the newly formed Reserve Officers' Training Corps Branch of the War Department. The actual administration and supervision of the ROTC units would come under the twelve territorial inspection

¹War Department Annual Reports, 1919, pp. 21-22.

²War Department Committee on Education and Special Training, Unit Memorandum #1, January 2, 1919, Iowa State University, Special Collections, World War I Records, SATC Correspondence 1916-1920.

districts.

The National Defense Act of June 3, 1916, had stood a rigid test and evidenced some of its shortcomings. To facilitate the more rapid reactivation of Reserve Officers' Training Corps and to make it more attractive to the colleges and students, the National Defense Act of 1920 was passed. This act authorized summer camps for ROTC cadets, raised the number of officers who could be detailed for ROTC duty, and authorized the Secretary of War to set up uniform curricula, standards, and number of hours for all ROTC programs.¹ This required curricula and the specified number of hours made the military training much more uniform than in the earlier years.

Each school had a two year basic course that required an average of three hours per week. After completing the basic, or first two years, a student could apply for the advanced course and if selected by the president of the institution and the Professor of Military Science and Tactics, and if he signed a contract, he could then be accepted for further training. The contract stated that the student agreed to continue the ROTC program during his remaining two years in school and devote five hours per week to military training. He could also be required to attend a summer camp. The advanced student

¹U.S., Statues at Large, Vol. 41, Part 1, Chapter 227, (1920).

would receive a small payment which would not exceed the cost of the garrison ration.

There were certain advantages to the sponsoring college since the Government was furnishing all the uniforms, arms, equipment, military staff and special ROTC insignia.¹ This support specifically for military training was considerable and compared to what the colleges had received in the earlier years it was almost unbelievable. Nevertheless, the colleges still incurred numerous expenses. The land grant schools could justify their additional expenses by the very nature of their formation and the original requirement for teaching military tactics. These schools still continued to receive land grant funds and certain income from the original land grant endowments. However, it must have been difficult for private schools to justify the additional expense of the military training offering. Naturally patriotism and the feeling of helping the country entered into some justifications. Another practical explanation for incurring additional expenses might have been the realization that if another war should come an ROTC unit would be to the school's advantage in helping to retain its student population. Also a school which was offering ROTC might be in a better bargaining position to gain other

¹Paraphrased from General Orders, No. 49, War Department. Washington, D.C., September 20, 1916, Reserve Officers' Training Corps Regulations.

military education and training projects like those acquired during World War I.

The reactivation of the ROTC programs was well accepted throughout the United States. Schools which hadn't implemented programs before the war now requested permission to do so. This positive attitude toward military training in institutions of higher learning was indicative of the attitude of the students, the cooperation of the schools, and the material and financial support of the War Department. This idea of military training on the campus had evolved from the old "military tactics" instruction of the land grant institutions, through the brief introduction to the ROTC program in 1916, just before the outbreak of hostilities and through the mass accelerated collegiate and technical training of the SATC during World War I. The colleges had proved themselves to be a part in the scheme of military training. These early post war years contributed much to the future of the Reserve Officers' Training Corps and for all practical purposes could be considered the birth of the modern day ROTC program.

Iowa State College 1919-1920
Reactivation of Army ROTC

On the Iowa State campus the venerable General Lincoln (who was still holding his rank of Major on the active list, U. S. Army, unassigned) was called upon for the last time to head the Military Department and reactivate the ROTC program.

On January 3, 1919, General Lincoln reported some of the tentative plans for military training the following year. Two years of drill would be required of every male student just as it was before the war.¹ The Iowa State College General Catalogue of 1919-20 reveals that Iowa State had already requested an infantry and an engineering unit of the senior division of the Reserve Officers' Training Corps. The ROTC unit for all practical purposes, supplanted the old college cadet corps. Whereas the earlier school catalogues had referred to the training of officers for the State Militia, one now finds the training primarily directed to preparing officers for the United States reserve forces.² The Industrial Science Division still reported that a person could major in Military Science and Tactics with the idea of being qualified to enter the Regular Army.³ This entry remained in the College Catalogue until the 1924-25 issue.

In addition to the preparations for the infantry and the engineers' unit there was considerable correspondence about the possibility of starting an artillery unit at Iowa State.⁴

¹The Student, January 3, 1919.

²Iowa State College General Catalogue, 1919-20, pp. 260-61.

³Ibid.

⁴Correspondence from the War Department, Chief of Field Artillery, dated February 4, 1919, February 7, 1919, May 9, 1919, Iowa State University, Special Collections, World War I Records, SATC Folder.

The Student had several news releases about active duty officers reporting for duty with the ROTC program. Major W. R. Grunow was the first Army officer to be assigned to the Iowa State campus after the war. The Major worked with General Lincoln but was discharged from service prior to school starting in the fall. There was lots of interest in April, 1919, when it was announced the Lt. Colonel D. P. Olson, a former student of General Lincoln would be coming to head the ROTC department.¹ Iowa State was probably more than happy to have one of its graduates to serve as the Professor of Military Science and Tactics (PMS&T). Two previous Iowa State graduates Lt. Lincoln and Lt. Langwell both served as General Lincoln's assistants and their service had been excellent. Also, the college administration had probably not forgotten it's sad experience with Lt. Colonel Byrne during 1918. Lt. Colonel Olson did report to Ames in April but left one month later when he received his discharge from active duty. It seems Colonel Olson had applied for his discharge from active duty earlier but he had been turned down. He took the job at Iowa State as a step towards getting his eventual discharge which he received in May, 1919.²

¹The Student, April 18, 1919, p. 1.

²Alumnus, June 1919, p. 296.

General Lincoln and Major Grunow saw to it that an article appeared in The Student frequently to explain the upcoming ROTC program which would be implemented in the fall. Naturally each of these men was available for personal consultation about the program. It was hoped that everyone who would be in the unit the next fall would become fully informed of the requirements and benefits of the ROTC program.

The most significant implications for Iowa State students was that every male (unless he was a veteran) would be required to take the first two years work of three hours per week (two hours of drill and one of classwork) for which one credit per quarter would count towards graduation. The granting of college credit for military training had started during the World War I time period at Iowa State. Prior to that time the first two years were required with no credit allowed.

It was originally planned that everyone take the same training during the first year and then in the sophomore year the students would specialize in one of the three units offered at Iowa State. Engineering students would mainly make up the engineering unit, with the remainder of the student body divided among the infantry and artillery unit. Immediately before the war, a summer camp had been required of the freshmen and sophomores, no such requirement existed during the basic course in the new ROTC program. The required summer camp took place before or during the junior year after the student had

volunteered for further training.

The advanced course or junior and senior year at Iowa State was similar to the old officer training; the advanced cadets served as the officers and noncommissioned officers of the cadet corps and conducted the two hours drill required for the basic course. Three extra hours of classroom work were required in the advanced course, which allowed more opportunity for an in-depth study of the subjects which were considered necessary to be a fully qualified officer in the Army Reserve Forces. General Lincoln was probably pleased to know the advanced cadets would have this extra time for practical and theoretical work, especially since he had been limited to only one hour per week for the earlier officer training school. The previous credit for officer training had been one hour per quarter, but now for five hours work each week, three hours of college credit were awarded each quarter, nine hours credit per year and eighteen hours total credit for the advanced course. The entire twenty-four hours for the four years of ROTC at Iowa State counted towards graduation.

There were several benefits of the ROTC program: the junior and senior cadets received a small reimbursement, which amounted to twelve dollars per month; the participants had the opportunity to be commissioned officers in the reserves; and they had the opportunity to serve as temporary second lieutenants with the Regular Army for six months; the cadet

uniforms and equipment were free and the expenses of summer camp were paid by the Government. Other benefits that were extolled by General Lincoln sounded like those he had claimed for his earlier officer training; possibility for increased leadership, discipline, and physical improvement; a feeling of service to country; and readiness to perform military duty in time of war.¹

By the time school had started in September, 1919, the rapid turnover of assigned officers stabilized somewhat. Major James Rush Lincoln had been discharged from the active duty list and was a civilian who was still in employ of the college as an assistant in the Military Department. Lt. Colonel J. K. Boles had reported in late spring to be the Professor of Military Science and Tactics. Captain J. H. Jones had arrived to head the engineering unit and Captain T. F. Hardin headed the infantry unit. The artillery unit (which had just been accepted in late summer) was headed by a Major L. N. Jones who was also on campus. Major Jones's situation was similar to the case of Lt. Colonel Olson and he was discharged from active duty in September. Since Lt. Colonel Boles was an artillery

¹This information was paraphrased from the Iowa State College General Catalogue, 1919-20, 1920-21; General Orders, No. 49, War Department Washington, D.C., September 20, 1916, Reserve Officers' Training Corps Regulations; The Student, March 11, 1919, p. 3; Alumnus, November 1919, p. 42.

officer he took on the duty of the artillery unit in addition to PMS&T.¹ When The Student and the Alumnus commented about General Lincoln's retirement and service only in a guest lecturer capacity, one of the alumni commented:

I can hardly believe it possible. Whoever heard of General Lincoln retiring? He always advanced. No retrograde movement for him. He never taught us rearguard action. It was always advance guard tactics,--carrying the fight into the enemy's territory. It seems impossible he has retired from the Campus and turned over to other hands the command of the Iowa State College Cadet Corps.²

Nevertheless, General Lincoln virtually retired except for serving as a guest lecturer. The General no doubt took pride in the fact that Iowa State had been selected to have three different types of ROTC branches since the early years the training had been mostly in infantry. Iowa State had one of the 148 infantry units in the United States, one of the only 22 field artillery units and one of the only 19 engineering units in the country.³

¹The Student, September 22, 1919, p. 5, September 24, 1919, p. 4; Alumnus, June 1919, p. 308, October 1919, p. 11.

²Alumnus, December 1919. The two page letter to the Alumnus from D. A. Thornberg Class of '91 had much to say of General Lincoln's character, the effectiveness of the early military training, how the girls always looked forward to his annual officers reception, the method he used to help people get through school financially, the General's respect for the Flag, and what a change it would be to have a constant succession of officers after his almost forty years of service.

³War Department Annual Reports, 1919, p. 22.

Lt. Colonel John K. Boles 1919-1920

Lt. Colonel Boles is normally considered the first active duty officer to be the Professor of Military Science and Tactics at Iowa State College since Lt. Colonel Olson was assigned to Iowa State for such a short time in 1919 and only served in a planning capacity. He never really commanded the ROTC Unit since it was formally established when school started in September with Lt. Colonel Boles in command. Colonel Boles's military career included service in the New York National Guard prior to his entry into the Regular Army in 1912. He was promoted to first lieutenant in 1916, and in the following year made captain. In early 1918, he was promoted to major and in the latter part of the year became a lt. colonel. His previous service was in the artillery and he had just returned from over six months with the expeditionary forces.¹ Colonel Pearl M. Shaffer described Lt. Colonel Boles's qualifications:

Perhaps no more competent and suitable officer could have been selected for the difficult task of reorganizing the military work during the immediate relaxation in Military preparedness and training following the War. Colonel Boles had just returned from distinguished service with the Field Artillery on the battle front in the Argonne Sector with the 89th Division. Young, prepossessing in Military appearance and bearing, an expert rifle and pistol

¹The Student, September 24, 1919, p. 4; Alumnus, October 1919, p. 11.

shot, an athlete, he entered enthusiastically into the College life and at once became popular with faculty and students alike.¹

Colonel Boles as the head of the Military Department had the title of Professor of Military Science and Tactics with the academic rank of Professor at Iowa State. The PMS&T actually wore two hats, one as the commander of the military personnel assigned to the ROTC unit and the other as the department head of a regular college department.

Colonel Boles had many problems to resolve in implementing the ROTC program. Under General Lincoln the officers' course had actually been conducted during the evening and the mass college drill periods had been held late in the afternoon. The new ROTC course necessitated that classroom recitations be conducted in small sections like regular college courses. Evidently the college faculty and administration was most cooperative and the first year of the ROTC course was established on a creditable basis. Only the freshman level curriculum was taught during the 1919-20 school year since it was the first year of the new program and very few students enrolled in ROTC. This lack of interest in ROTC was a nationwide phenomenon in that most schools allowed credit for military service towards graduation and the veterans elected not to take military training. At Iowa State not one veteran elected to sign up for the

¹Shaffer, "A Brief History of Military Training in Iowa State College," pp. 12-13.

advanced course.¹ The 1919-20 school year was a frustrating one for the PMS&T because the enrollment was below his expectations. Colonel Boles was not alone in his frustration. Iowa State President R. A. Pearson at the November, 1919, meeting of the Association of American Agricultural Colleges and Experiment Stations agreed with his other land grant college presidents that the interest in military training was "at low ebb" and there was "a reaction from the war itself."² Another frustration or set back to Colonel Boles occurred when he was notified on January 20, 1920, that he was to revert back to the rank of captain which he had held prior to the war. Actually he had been expecting the demotion since it was in line with the national army depleting its ranks from 4,000,000 men during the war to 225,000 men during peace time.³ Nevertheless it was a blow as Boles knew a more senior ranking officer would be assigned the professorship of Military Science and Tactics at Iowa State.

The one year tenure of (the now captain) Boles as PMS&T had several highlights. He did implement the new ROTC and acquired a close working relationship with the college administration. He succeeded in getting the college to allow eighteen

¹Ibid., p. 13.

²Pollard, Military Training in the Land-Grant Colleges and Universities, p. 77.

³The Student, January 21, 1919, p. 1; Alumnus, April 1920, p. 234.

hours of advanced course credit in ROTC as possible electives in all courses of the College. The College also furnished a female typist and a part time assistant in charge of the property records. He someday could look forward to the completion of an armory for the Military Department since the money had been appropriated and early in 1919 the announcement had been made that the armory would be built. The annual military ball had been held and was the greatest yet with General Lincoln once again leading the grand march. Captain Boles was inducted into Scabbard and Blade as an honorary member. The College also received some recognition when Captain Boles won the national rifle shooting contest.

Finally, Captain Boles helped coordinate the military portion of the 1919 semi-centennial of the College (which was actually held in June, 1920). Each division of the College had a symposium for every department as a part of the celebration. It was only appropriate that the Military Department, which was in the Industrial Science Division, should have Lt. Colonel Rush B. Lincoln speak on "Military Science and Tactics in Land-Grant Colleges". Colonel Lincoln was the Chief of Staff for General Pershing and was very familiar with the problem of the new ROTC program nationwide and especially acquainted with the situation at Iowa State. There was no record made of any of the semi-centennial speeches but one might speculate that Colonel Rush Lincoln spoke on some of the problems encountered

implementing the ROTC program and some of the implications for the future of the military training, especially since the National Defense Act of 1920 had been passed just a few days before his speech.¹

Captain Boles had accomplished about as much as could have been achieved by anyone during the 1919-20 school year. It was a massive undertaking to implement the ROTC program especially during the times when the nation and its colleges were ready to forget about military training and return to a peacetime footing. Many of the problems with the ROTC program had not been thought through and the National Defense Act of 1916 had inherent weaknesses which were just then coming to light. The National Defense Act of 1920 rectified most of those weaknesses and ROTC was established on a more stable footing. The Iowa State College administration, like those of other land grant institutions, was kept advised of the ROTC problems on the national level through the Special Committee for Military Affairs of the Association of American Agricultural College and Experiment Stations. The next PMS&T Lt. Colonel Pearl M. Shaffer reaped some of the benefits from Captain Boles' first year effort. Captain Boles remained at Iowa State, served as an Associate Professor of Military Science and

¹The Student, February 18, 1919, May 3, 1920, May 17, 1920, September 29, 1919, June 7, 1920; Alumnus, June-July 1920, p. 283.

Tactics, and headed up the artillery unit for three more years.

The National Scene--1920-1930--
Rise and Stabilization

The reorganization and reactivation phase of the Reserve Officers' Training Corps was fairly well stabilized at the end of 1920. The total number of ROTC units varied only slightly from the 213 units in 1921 to the 218 units in 1930. The total enrollment of ROTC nationwide increased from 51,742 in 1922 to 73,030 in 1930. Likewise, the second year of the advanced course grew from 2,930 in 1922 to 5,734 in 1930 with the average number from 1925 to 1930 being 5,880. The most noticeable gains were made in the number of commissions granted; by 1922, 2,031 had been commissioned, whereas 5,028 new second lieutenants graduated in 1930. A total of 38,362 officers were commissioned from the Army Reserve Officers' Training Corps in the ten years 1921-1930.¹

Evidently the voluntary advanced ROTC course and the opportunity to gain a commission as a reserve officer did have some appeal for the college student. The Secretary of War Mr. Dwight F. Davis thought ROTC had a valuable resource to offer the country. In his June 30, 1925, annual report of the

¹Russell Stompler, "The Origin and Growth of the Reserve Officers' Training Corps 1916-1950" (unpublished M.S. Thesis, University of Alabama, 1951), pp. 101-111.

War Department, he stated:

The Reserve Officers' Training Corps has quite aptly been termed the West Point of the Organized Reserves. The time is near when that splendid body of commissioned officers now enrolled in the Organized Reserves, by far the greater proportion of whom are veterans of the World War, will begin to decline steadily in numbers from year to year due to superannuation. Were the Reserve Officers' Training Corps not prepared to meet this future loss by graduating increments of lieutenants equal to the annual losses, into the Officers' Reserve Corps, the Organized Reserves would soon become so ineffective as a potential defense force that its continuation would be of little or no benefit to the nation.¹

Much of the success of the Reserve Officers' Training Corps in the 1920's on the national level can be attributed to the leadership, guidance and cooperation of the Special Committee on Military Affairs of the Land Grant Colleges. Each year at the annual association meetings the head of the ROTC Division of the War Department would appear before the Military Affairs Committee and discuss current problems and issues. During the 1920's the committee went on record as: opposing the voluntary ROTC that was introduced at the University of Wisconsin in 1923; recommending that officers be assigned at least for four full years and that more officers be made available for ROTC duty; changing the rules for selecting "distinguished colleges" or dropping the rating altogether; requesting that Congress appropriate more money for ROTC and that the commutation funds for uniforms be increased. The

¹War Department Annual Reports, 1925, p. 15.

efforts of the Special Committee on Military Affairs also had some impact in countering the pacifist or anti-ROTC movements in the late 20's and early 30's.¹

Colonel Pearl M. Shaffer 1920-1924

On July 24, 1920, Captain Boles was succeeded by Lt. Colonel Pearl M. Shaffer as the PMS&T at Iowa State College. Shaffer was promoted to full colonel in November, 1920, with an effective date of rank of July 16, 1920.² Colonel Shaffer was a native of Iowa and an honor graduate of the Military Department of Iowa State Teachers College at Cedar Falls. He had served during the Philippine insurrection, the Mexican Punitive Expedition and the World War. The Colonel was eminently well qualified to head the Military Department at Iowa State. His experience before the war as the PMS&T at the State Agricultural College of Kansas was a very helpful at Iowa State. Colonel Shaffer studied the acceptance of the military at Iowa State as he prepared "A Brief History of Military Training in Iowa State College" which was forwarded to

¹Pollard, Military Training in the Land-Grant Colleges and Universities, pp. 76-90.

²The Student, November 10, 1920.

to the Army Corps Headquarters in August, 1921.¹ This was an eighteen page historical account of the early military training at Iowa State and devoted almost half of the report to the 1919 and 1920 formation of the ROTC program at Iowa State. At the request of Dr. L. H. Pammel, the chairman of a committee to develop a history of Iowa State College, Colonel Shaffer also prepared a six page summary of the 1921-22 school year and a five page report on the 1922-23 academic year which were additions to his original 1921 brief history.

Colonel Shaffer's first year was similar to Captain Boles's one year as PMS&T since there were many problems to overcome to implement and conduct a growing and ever-changing program. Probably the most significant problems facing Colonel Shaffer and the Military Department were: the necessity to

¹Shaffer, "A Brief History of Military Training in the Iowa State College." This report was quoted occasionally by Earle Ross in his book, A History of the Iowa State College. This writer referred to Colonel Shaffer's short history only briefly during the early years since the major portion of the information on General Geddes time period was from two Biennial Reports of the college. The data on General Lincoln's long tenure came from one year of the College Catalogue (1885), one year of the Bomb (1899) and was supplemented with less than one page of information derived from conversations with General Lincoln. Every bit of information that was used from Colonel Shaffer's report covering 1919-1923 time period was verified from some other source, with the exception of the numbers enrolled in ROTC during 1920 and the discussions with the Dean of Industrial Science and the College president over some of the administrations concerns involving problems dealing with ROTC.

change the 1920-21 military course of study just one day before school was to start; lack of centrally located classrooms and adequate storage facilities for the massive amount of government equipment issued to the College; the lack of a facility to conduct drill; the practical aspects of instruction for over 1,200 students enrolled; the high turnover of military personnel (some staying only three months); the lack of textbooks for the course work (the texts were really reference books or army manuals prepared for active duty officers and not college cadets). Unbelievable as it may seem, most of these problems and many more were solved in one school year. The solution of the several problems can be attributed to the hard work of the Military Department, the increased state funds, and the cooperation of the College faculty and administration.

Colonel Shaffer reports that the War Department revision of the course of study just the day before school started did not go over very well with the College. Nevertheless, the Colonel concludes that the change was for the best since the new curriculum was more progressive. The older course of study called for a repetition of the same subject matter content each year in the hopes that the principles "would soak in a little better".¹ The new course of study implemented in 1920

¹Shaffer, "A Brief History of Military Training in the Iowa State College," p. 15.

was finally printed in the 1921-22 College Catalog and with minor modification for the 1922-23 school year remained basically the same until the 1934-35 academic year.

Iowa State started its ROTC program with three units; infantry from 1919-1924; engineers and artillery from 1919 until 1964. A fourth ROTC unit was added in 1921. This new unit was the veterinary corps and was active at Iowa State from 1921-1934. Each of the ROTC units, some time called "branches" conducted a separate course of study and they are included in Appendix F. The freshmen and sophomores (basic program) spent considerable time on drill, military courtesy, fundamentals of military science, and map reading. The engineer basic cadets also did some elementary military bridge building, minor tactics and field fortifications. The field artillery basics devoted some time to ordnance and material, mounted instruction, topography and reconnaissance. The infantry unit basics had some work with the infantry weapons. The veterinary freshmen and sophomores naturally worked more with animals and had animal sanitation, equitation, administration and field regulations. The advanced course for juniors and seniors in all three units devoted more time to command and leadership, tactics, and problems dealing with their specific branch, in addition to studies of military law and military history.¹

¹Iowa State College General Catalog, 1922-23, pp. 182-83.

The lack of centrally located classrooms, adequate storage facilities, and an armory for drill presented several difficulties but also created an opportunity for the faculty and administration to show their interest in coordinating and supporting the Military Department. The space under the concrete bleachers which had served as the barracks for the Student Army Training Corps during World War I was adapted for gun sheds, and an abandoned cantonment building in another part of the campus housed the infantry rifles and gallery range. Stables were provided by the Veterinary Department and the basement of the men's gymnasium was used for drill during inclement weather. According to Colonel Shaffer, everyone was most cooperative, but he had the highest praise for General Lincoln and President R. A. Pearson on their foresight and perseverance in convincing the state legislature to appropriate the money (in 1917) for an armory which was finally completed during the fall of 1921. Thus, for the first time in fifty-one years, the Military Department had an adequate facility.¹

The problem of a high turn-over of officer personnel was solved with the persistent help of President Pearson through the Special Committee on Military Affairs in the Land Grant College Association. The result would be that the next five PMS&T's at Iowa State had an average tenure of four years.

¹Shaffer, "A Brief History of Military Training in the Iowa State College," p. 16.

The problem of not having an adequate textbook was partially solved by Colonel Shaffer and the heads of the three units working with their instructors to summarize the content of the reference books into a useable document for the use of the ROTC cadets. This summarizing of the textbooks was only moderately successful and would be a recurring problem until an adequate text was furnished by the United States Army.

Colonel Shaffer reported that the enrollment at the opening of the 1920 school year was 1,242 out of a total male enrollment of approximately 3,200. Four hundred were Federal Board students who were physically unfit for military service and 1,400 claimed exemption from ROTC because of previous war service. The enrollment gradually dropped throughout the year until 857 students remained on the Military Department rolls. Actually this drop was about normal compared to the loss of the regular college enrollment. During the 1920-21 year there were only eight cadets who were classified in the first year of the advanced course and fifty-five attended summer camp.¹

The Military Department received some favorable publicity from several events during the 1920-21 school year. The rifle team was consistently in the top five teams in intercollegiate competition and as a result, the team was authorized by the

¹Ibid.

Cardinal Guild to wear the school letter of "A" (for Ames).¹ The military ball was also a success and was attended by over 600 dancers including Iowa Governor Nate Kendall, General Lincoln, and President Pearson who led the Grand March.² The engineering unit was represented for the first time in the Engineers' yearly campfire event. The Student reported that if noise was any criteria the Military Department part of the afternoon entertainment was by far the feature of the celebration.³ Evidently the artillery fire, the building of an emergency bridge, the retreating across the bridge and the resulting explosion in destroying the bridge got everyone's attention.

Other announcements throughout the year put the Military Department in a good light: Captain Boles, the well-liked former PMS&T, was promoted to major; it was announced that the Army had authorized enough equipment to start a seventy piece band the next year; during the annual military inspection, the inspecting officer had high praise for the cadets and said it was the best of the units he had inspected. Likewise, there was considerable praise for the College for placing the

¹Alumnus, June 1912, p. 300.

²Alumnus, June 1912, p. 301.

³The Student, October 13, 1920, p. 1, October 20, 1920, p. 1.

Military Department on the same plane with the other departments and special praise for the cooperation of the several departments which were sharing their facilities with the Military Department. Finally, before the inspecting officer departed the campus, he paid a visit to General Lincoln and expressed the view that the General had much to do with the acceptance of the ROTC unit at Iowa State.¹

The effective implementation of the Reserve Officers' Training Corps at Iowa State can be attributed to the high caliber of the military officers assigned and the cooperation and support of the faculty and administration. Colonel Shaffer's previous experience as a Professor of Military Science and Tactics was invaluable in knowing how to operate within an institution of higher learning. Captain Boles had accomplished much in his one year to lay the foundation for the successful growth of the Military Department. However, it can be concluded that virtually nothing of significance could have been accomplished without the complete support of the faculty. President Pearson's experience in Washington and his association with the Committee of Special Education and Training had given him insights into the problems of military training in colleges that few other administrators had gained. The presence

¹The Student, October 22, 1920, p. 1; Alumnus, March 1921, p. 198, December 1920, p. 92; The Student, November 26, 1920, p. 4.

on the Iowa State staff of several persons who had served as officers during the World War undoubtedly contributed significantly to the faculty cooperation and coordination. Finally, General Lincoln's long association with the faculty and the student body continued to give the Military Department that extra measure of bargaining power to meet its needs.

The next three years 1921-24 could very easily be considered the most important and successful years in the growth and development of the Military Department in the "between-the-war-years". This three-year period saw the State of Iowa spend more money on the Military Department at Iowa State than had been spent during the entire fifty-one years of the department's existence. The majority of the funds were devoted to building an armory in 1921 and replacing the armory when it was destroyed by fire in 1922. The original expenditure for the armory (which was appropriated in 1917) was \$125,000.00. This amount however, did not cover the \$40,000 additional cost that was spent for the extension of the steam tunnel to the armory, the necessary heating equipment, and fixtures for the office and classrooms. Another \$8,400 was expended on the construction of horse stables, shoeing shop and guard house. The salaries of the Military Department for the 1921-22 school year which were paid by Iowa State totaled \$5,810.00. The majority of the salary expense went to General Lincoln, who was still carried as an assistant, a civilian accounting officer who handled the uniform account, and a stenographer.

However, the PMS&T and the commanding officers of the three military units also received a small gratuity; \$500.00 for the PMS&T and \$300.00 for the different unit commanders. Four hundred and fifty dollars was made available for current expenses.¹

The small gratuity paid to the military officers serving on college campuses had long been in effect at other campuses and was necessitated by the low pay of the military and the added expense of living a considerable distance from an Army post. The total gratuity granted for all the officers assigned was less than the amount that required to hire just one full time civilian to head the Military Department. It is interesting to note that the Professor of Military Science and Tactics at the State University of Iowa was paid twice the gratuity as the Military Department head at Iowa State. It cannot be concluded that the total amount spent for the armory construction was specifically for the Military Department since the whole college made considerable use of the facility. Nevertheless, one can conclude that the legislature and the college did give liberal financial support to the Military Department in addition to the splendid faculty and administrative cooperation.

¹Shaffer, "A Brief History of Military Training in the Iowa State College," Appendix B; Seventh Biennial Report of the Iowa State Board of Education, (Des Moines, Iowa, 1922), p. 198.

The fall of 1921 saw the Military Department located in the new armory with eleven acres of adjoining land set aside exclusively for the use of the military.¹ The dedication ceremony and formal opening of the armory on September 30, 1921, was an impressive service. Colonel Shaffer and Dean Marston delivered the main addresses emphasizing the value of military training even in time of peace, in making men physically fit and inculcating principles of citizenship. A young lady read the "Fight Ames Fight" song and Professor W. F. Coover gave a general pep talk. There were some predictions on the future success of the Military Department such as expecting Iowa State to become an "Honor School" in the military ratings.² This prediction would come true, but would take a little longer than expected. There were several other advantages that accrued to the Military Department and the College because of the new armory. Naturally, its size stood out and was visible proof of the support given to the Military Department. Also Iowa State and the State University (which built a similar armory) were able to claim, for several years, to have the finest facilities in the country. Another advantage of having a new armory put the military in such a

¹Shaffer, "A History of Military Training in the Iowa State College," p. 17.

²The Student, October 3, 1921; Alumnus, November 1921, p. 48.

position to almost never have to request any large amount of funds for facilities to support the military training program. As the size of the College enrollment increased, the number in the required military training also grew. The second armory, with later additions built mostly from Federal W.P.A. funds, kept the College financial support of the Military Department facilities at a minimum. At other schools as the size of the military enrollment grew, more facilities were needed and tight budgets subjected the Military Departments to considerable scrutiny, especially during the pacifist movements in the late 20's and 30's.

The Military Department continued to receive equipment from the government that attracted attention. What other department could claim ownership of a White reconnaissance car, a Dodge touring car, two motorcycles with sidecars, ponton bridge equipment, several horses, artillery pieces and weapons of all sizes.¹ Other means of promoting the military activities found the cadets once again elected to the Cardinal Guild, the revival of the old Cadet Officers Association, the formation of a "Sponsor Corps" of girls to promote the different units, the establishment of a veterinary unit in January, 1922, conducting of the annual review and sham battle during the first Veishea, and the first annual military circus which

¹Shaffer, "A History of Military Training in the Iowa State College," p. 17.

featured some of the work accomplished by the military units. The military circus also offered a lot of entertainment for the crowds which filled the armory.¹

Colonel Shaffer readily admitted the Military Department started a systematic publicity campaign to increase the interest and the popularity of the work with the faculty and students. Scabbard and Blade, the national honorary society, two rifle clubs, one among ex-cadets and the other made up of ex-servicemen under the guidance of Major Boles, served to develop some support from people not associated with the military training. The ROTC department also served as the point of contact for ex-servicemen to apply for their campaign badges from World War I and this helped make them more sympathetic towards what the military units were trying to accomplish.²

Based upon the considerable publicity and many activities one might think that all was well and there were no problems associated with ROTC in the early 1920's. This simply was not the case. Colonel Shaffer further reports that the total Military Department enrollment went up but the advanced course

¹The Student, November 14, 1921, January 20, 1922, p. 4, March 1, 1922, p. 1, April 5, 1922, p. 1, May 12, 1922, p. 1, March 3, 1922, p. 1, March 4, 1922, p. 1; Alumnus, May 1922, p. 248; Bomb, 1924, pp. 460-469.

²Shaffer, "A History of Military Training in the Iowa State College," p. 18.

now was ever so small. Out of the 1,160 total cadets only 28 were in the advanced course. Also another officer was transferred from Iowa State by the Army in mid-year and this brought a strong protest from the College. An effort by the military staff to enforce the required amount of outside preparation for ROTC classes brought an uproar from the students that was carried to the College president. After an investigation, it was concluded that the military courses required no more outside preparation than any other college course. It appears that the investigation, about outside preparation helped to raise the acceptance of the ROTC courses to the same scholastic plane as other college subjects.¹

Colonel Shaffer requested more time to conduct the military training but was overruled since the classroom time and the total of twenty-four credits towards graduation was the absolute maximum the college would allow. The Colonel also requested a new method of commutation of uniforms where the Government would make a cash payment to the College which in turn would purchase new uniforms. This was disapproved because of the complicated accounting procedures and the feeling of the Board of Deans who favored the old army uniforms as a factor in instilling patriotism.² Evidently the old army uniforms were

¹Ibid., 1921-22, pp. 1-3.

²Ibid., p. 4-5.

pretty bad in both fit and appearance. One retired faculty member at Iowa State, who took his military at Ames during this time period, elaborated at length on how bad his uniform fit. In fact he would walk several blocks out of the way enroute to his military drill period to avoid being seen and would take the same route back immediately after the class.¹ The 1921-22 school year ended on a positive note since the first group of six cadets were graduated and commissioned from the Reserve Officers' Training Corps on June 10, 1922. This group of six officers, two in the infantry, one artillery and three engineers, was a small start but at least it was the start of Iowa State College doing its part to prepare officers for the reserve forces should they ever be needed to serve their country. Colonel Shaffer explained that sixty-two men had enrolled for the advanced course for the next year and predicted that the number of Iowa State military graduates would increase until a maximum production was reached.²

¹Interview with Harry J. Schmidt.

²Shaffer, "A History of Military Training in the Iowa State College," 1921-22, p. 6; The Student, May 29, 1922, p. 1, reported that there were five members of the first class of ROTC seniors to graduate. This writer would tend to believe Colonel Shaffer's report as he listed the six names. Other attempts to verify the actual number were futile since the Armory was destroyed by fire in 1922 and the only record of enrollments and commissioning that is now available starts with the school year of 1922-23.

The last two years of Colonel Shaffer's tenure as the Professor of Military Science and Tactics saw the program and course of study stabilized with little change. The enrollment in ROTC gradually rose resulting in an increase of advanced cadets and a larger number of Reserve Officers being commissioned. The faculty and administration continued to support the Military Department both financially and morally. Dean S. W. Beyer of the Industrial Science Division under whose supervision the Military Department was placed took an intense interest in the military activities. He visited the annual ROTC summer camps as the representative of the College president and thereby established a precedent that is still being upheld in the 1970's. Dean Beyer also attended a 1922 conference for college representatives and Professors of Military Science and Tactics at Fort Snelling, Minnesota. While at the conference, the Dean emphasized how important it was to assign military officers for a full four year tour on a college campus. He further voiced a policy which he would enforce at Iowa State, that no officer would be acceptable to the college unless he was a graduate of the Military Academy or a standard college and unless he had experience managing young men. This type of policy was not implemented on a nation-wide basis until after World War II. Iowa State administrators have never been reluctant to impose additional requirements for special qualifications of military officers assigned to the

College. The present Dean of the College of Science and Humanities has rejected Colonels who have been nominated to the college if it appears this assignment was the officer's last before retirement. The Dean had stated on more than one occasion that he would prefer a senior lieutenant colonel or a young full colonel who is still in there pitching.¹

On August 6, 1922, Iowa State College lost a long and faithful servant when General James Rush Lincoln passed away. He was buried with full military honors and is the only former Professor of Military Science and Tactics to be buried in the College cemetery. The 168th Iowa Infantry, one of his old units, acted as honor guard and formed a hollow square around the yard of the General's home at 1326 Lincoln Way. Soldiers detoured the traffic on Lincoln Way while the funeral was in progress. The funeral procession to the cemetery included his horse "King" who had been, presented to the General by the officers and men of the old 55th Iowa Infantry. The horse was caparisoned and the General's military boots reversed in the stirrups. As the procession proceeded through the campus the artillery fired a salute of eleven guns and the chimes played hymns.² The General was honored in many ways by the College

¹Interview with Dean Chalmer Roy.

²The Student, September 25, 1922; Alumnus, October 1922, p. 3.

he served for almost forty years. An Iowa State faculty resolution in appreciation of the General's long and faithful service was adopted shortly after the General's death and was entered into the faculty minutes. The secretary of the Iowa State Faculty was instructed to send a copy of the resolution to each member of General Lincoln's family, to the Alumnus, to The Student, to the Iowa Agriculturist, to the Iowa Engineer and to the Ames Tribune. His portrait was later hung in the Memorial Union and once again, he is the only PMS&T who has been so honored. One of the most glowing tributes ever paid a faculty member of Iowa State College was delivered by Colonel Guy S. Brewer (class of '97) during the Armistice Day exercises November 11, 1922. (It is included in slightly condensed form as Appendix D.) General Lincoln was a great soldier and was known as the "Dean of the Iowa Fighting Men." The Iowa National Guard virtually grew up with the General from the time he headed a company in 1876 as a captain until his retirement while in command of the entire Iowa National Guard. At Iowa State he trained 715 officers for the Army throughout his long tenure. The General was always there to take the reins of command no matter how many changes and different programs were implemented at Iowa State. It was only fitting that he should be the one to make the plans for implementing the modern-day Reserve Officers' Training Corps at Iowa State in 1919. By the time of the General's death it

was evident that the new Military Department was well on the way to be becoming an accepted partner in the realm of higher education.

Colonel Shaffer summarized General Lincoln's later years by saying:

General James Rush Lincoln who had continued under the employ of the College and whose age and health would not permit his doing more active work than the delivering of a few lectures a work for which he was eminently fitted. Superseded in command by a younger officer, he lent splendid support to the work by the prestige which his military experience and education and long association with the faculty and student body had established, and by his magnanimous efforts to revive the esprit de corps of prewar days among Cadet Officers and popularize the work of his successor. His faithful attendance at the meetings of the "Scabbard and Blade", and his inspiring advice to its members, is but an instance of the influence he wielded. For many years it had been the custom for him to lead the Grand March at the annual Cadet Military Ball, and at great risk to his health on May 5, 1921, he lent his presence to the opening of perhaps the most successful annual ball ever given by the Corps.¹

The Military Department suffered another great loss when on December 16, 1922, the new armory was destroyed by fire with loss of all government equipment and military records. The damage to the building was over \$100,000 and the total loss including equipment was estimated at \$260,000. Naturally this was a severe blow to the Military Department and placed a serious strain on the military staff, students, faculty and

¹Shaffer, "A History of Military Training in the Iowa State College," p. 15.

administration. However, the loss of the armory served as a unifying force and once again the whole college was called upon to demonstrate its resourcefulness and ability to cooperate to the utmost. The military offices were set up in the hall of Central Building (now Beardshear Hall) just outside of the President's office. Military classes were conducted without interruption and there was a smaller percentage of absences for the remainder of the term. It was only a short time until news was forthcoming about the rebuilding of the armory and resupply of equipment. The Iowa legislature appropriated the money after much support was built up across the state by President Pearson, Colonel Shaffer, and the people of Story and Boone Counties.¹ The mystery of how the fire started remained just that. It seems that John Cenic, a former custodian of the military property, was brought to trial on charges of larceny and arson but was found not guilty.² The armory was rebuilt in 1923 as a fireproof building and with the exception of some additions and modifications is the same structure that is on the Iowa State campus today. Any visitor to the present

¹The Student, December 18, 1922, p. 1; Alumnus, January 1933, p. 107, May 1923, p. 237; Eighth Biennial Report of the Iowa State Board of Education, (Des Moines, Iowa, 1924) p. 177; Shaffer, "A Brief History of Military Training in the Iowa State College," 1922-23, p. 304; Bomb, 1924, p. 460.

²The Student, March 26, 1923, p. 6, April 2, 1923.

day armory should look very closely at some of the "still warped" beams that were salvaged and used from the first armory that was destroyed by fire.

In 1923 a young Army Private First Class Jesse Thornton (commonly called Jess) reported to Iowa State College for duty with the Army ROTC unit that began a forty-one year association with the Military Department. Jess served as the clerk in the artillery office from 1923 until 1943, when he became the Sergeant Major of the Army Student Training Program (ASTP) at Iowa State. He remained with the ASTP until it was terminated in late 1944 and then attended Officers' Candidate School and was commissioned a second lieutenant in June 1945. After the war Lieutenant Thornton was discharged from service and re-enlisted as a Master Sergeant and returned to Iowa State College as the chief clerk which is equivalent to the job of Sergeant Major. Jess Thornton served in this capacity until his retirement from active duty on August 31, 1951, and on the following day assumed the duty of chief clerk as a civilian in the same office of the Army ROTC at Iowa State. Jess then served for fifteen years in the ROTC office until his second retirement on August 31, 1966.¹ Consequently, Jess Thornton

¹Interview with Jesse Thornton on March 9, 1972. Master Sergeant Jess Thornton, U. S. Army (retired) through his help and much friendly conversation (over the past eight years) has helped to humanize and verify the events and happenings in the Iowa State Army ROTC program from 1923 until 1970.

attained the longest tenure of service with the Iowa State Military Department, even surpassing the thirty-nine year mark which General Lincoln had held. Jess Thornton served under twelve different Professors of Military Science and Tactics from 1923-66.

During Colonel Shaffer's four years at Iowa State, the total ROTC enrollment averaged 1,259 per year with almost all the cadets registered in the required first two years of the basic course. The advanced program increased from twenty-eight in 1921 to one hundred thirty-three in 1923. The number of reserve officers commissioned from Iowa State was six in 1922, twenty-six in 1923, and fifty-one in 1924.¹

Under Colonel Shaffer's guidance the Military Department continued to make maximum use of The Student, the Bomb, local newspapers, speeches and activities to tell the story of military training and the ROTC program at Iowa State. Colonel Shaffer and Captain Boles spoke on several occasions before campus and local groups. The rifle team and its many victories were publicized almost as much as the military ball, military circus, and the annual military review which was held during

¹Iowa State College, Report of Enrollment--Reserve Officers' Training Corps, 1921-1924; Iowa State College, List of Graduates Commissioned from Reserve Officers Training Corps advanced course, 1922-1924. The entire enrollment and commissioning data for the between-the-war-years (1919-1941) is listed in Appendix H.

Veishea. New events included a banquet (similar to the modern day Air Force Dining-In) sponsored by Scabbard and Blade and the Cadet Officers Association in honor of Colonel Shaffer and the other departing military officers. This banquet was just one of several military events described on the front page of the March 5, 1924, Student which was devoted entirely to the Military Department.¹ This was the only time that The Student ever devoted a full page to the Military Department during peacetime.

Lt. Colonel Frederick S. Young 1924-25

Lt. Colonel Young, an infantry officer, arrived at Iowa State during the summer of 1924 as the replacement for Colonel Shaffer. Like the two previous Professors of Military Science and Tactics, Colonel Young was well qualified for his new position. He had been in service since the Spanish American War, had served in the Philippines, had completed several tours in the Washington, D.C. area and was a distinguished graduate of the Fort Leavenworth Service School and the War College. In his most recent assignment before coming to Iowa State, he was the commander of the 12th Infantry in Maryland, and had directed the ROTC summer camp that was held there during the

¹The Student, March 25, 1924, p. 1.

previous year.¹ Therefore he was very familiar with the ROTC program. This familiarity with the program was of little help to Colonel Young because his tour was only one short year. It seems that due to the overproduction of infantry officers nationwide, the Iowa State Infantry Unit (also the one at University of Iowa) and several others were dropped at the end of the 1924-25 school year.²

During Colonel Young's one year tour the normal ROTC activities continued in the department. The third Annual Military Circus was held with a little more emphasis on the military training program that was taking place at Iowa State, rather than simply entertainment. The theme of the circus was "A Day in Camp", in which the life of a soldier at an ROTC summer camp was demonstrated.³ Probably the most significant importance of these early military circuses was the favorable publicity the Military Department received and the experience the cadets gained in planning, preparing, organizing and conducting such a large scale production. These events provided a practical lesson in leadership and management and were just one of the reasons the Military Department encouraged so many extra curricular activities.

¹The Student, September 22, 1924, p. 6; Alumnus, October 24, p. 27.

²The Student, September 22, 1924, p. 7.

³The Student, March 7, 1925, p. 1.

Several new events occurred that helped publicize the Military Department. The cadets marched in the downtown Ames parade during the Ames Harvest Festival. Since the Military Ball was an all-college affair the cadet officers' association started having its own "Hop" at the country club since this type of a dance was becoming the fad at Iowa State. The advanced cadets were quick to publicize that they had received new uniforms. However, it was a few years before the whole cadet corp got away from the old World War I issue that didn't look much like a uniform.¹ The newest activity that created the most excitement was the discussion of starting a polo team. It was restricted to advanced cadets (so maybe it might motivate a few more to apply for the advanced course) and the military horses that were assigned to the artillery unit would be used. Thirty students signed up for the initial training under Lt. J. M. Bevins. Polo was a fascinating game but it required a good horseman, so it was said that only time would tell if Iowa State would develop any Paul Reveres. There was also some discussion on developing the competition into a "minor sport" at Iowa State and playing intercollegiate matches since other colleges were also introducing the game.² However,

¹The Student, October 6, 1924, May 4, 1925, February 9, 1925, September 24, 1924, p. 3.

²The Student, January 23, 1925, p. 1, March 4, 1925, p. 6.

it was about five years before the polo team was a reality.

Colonel Young was also present when the first discussions dealing with dropping compulsory military training at Iowa State occurred. On the national scene as early as 1922 there had been some agitation about dropping compulsory military training. All the land grant colleges maintained military training on a compulsory basis for their physically fit male students until 1923. In that year, the Wisconsin legislature passed a statute eliminating the compulsory feature of military training at the University of Wisconsin. The University of Minnesota followed suit eleven years later.¹ At Iowa State the agitation to make ROTC voluntary was never very severe and the agitation was from outside organizations rather from the students and faculty on campus. According to Ross:

At Iowa State the sentiment never reached large proportions. The high caliber of the officers detailed, the strong support of the work by the administration, as well as a full opportunity for discussion, and a rational provision for the relatively few "C.O.s" largely accounted for this lack of the extreme demonstrations that were made in some colleges.²

One of the keys to the above statement is the fact that there was plenty of opportunity for discussion. The debating

¹James L. More, "A Study of the Reserve Officers' Training Corps Program as administered by the United States Army, the United States Navy, and the United States Air Force" (unpublished M.S. Thesis, University of Southern California, 1953), pp. 21-22.

²Ross, A History of the Iowa State College, p. 319.

societies were still functioning at Iowa State and the first mention of a debate dealing with military training during this time period was in November, 1924, when the Bachelor Debating Society debated the question, "Resolved that Military Training should be abolished at State Institutions."¹

Colonel Young did his part to keep the students and faculty informed of the importance of having an ROTC unit by releasing information to the college paper. The Student published more articles that supported the military training program than those that opposed the training. A typical example was on March 6, 1925, when a brief early history explained that the college had long had military work. It was also explained that at present (1925) Iowa State had been paid \$85,000 by the Government and that all the military equipment and instructors were furnished. The equipment was valued at \$236,000 and there were nine Regular Officers on duty with the College.² One of the last events of Colonel Young's one year tour was the annual military inspection during the spring. The 1925 inspection at Iowa State resulted in General Lincoln's

¹The Student, November 28, 1924, p. 1.

²The Student, March 6, 1925, p. 1; the \$85,000 payment to Iowa State could not be verified. It appears this might have been the sum paid the College for commutation of uniforms. It is known that Iowa State College had received some funds from the Federal Government as the annual budget for ROTC had averaged about three million dollars per year since World War I.

long cherished dream finally coming true. The Iowa State College Military Department was placed on the "Distinguished List" as one of the twelve top schools out of forty-four in the Third Army Area.¹ The Iowa State administration was probably quite happy that their school had been selected as a distinguished school, especially after furnishing so much financial and moral support to the initiation of the new ROTC program. However, the selecting of schools for the "Distinguished List" was dropped in the 1930's since it created so much ill feeling at the schools who were not selected. Iowa State did get more than its share of the distinguished ratings before the rating system was dropped.

Major John E. Mort 1925-28

Major John Mort had already served two years at Iowa State as the head of the artillery unit when he was selected to replace Lt. Colonel Young and become the fourth Professor of Military Science and Tactics since the World War. Major Mort's five year assignment at Iowa State made him have the longest tenure of all officer personnel who have been associated with the College excepting General Geddes and General Lincoln.

Major Mort headed the Military Department at a time when the Coolidge economy was affecting the nation and the Iowa State

¹Alumnus, July 1925, p. 331.

campus. The financial support on the national level had more of an impact than the funding for the Military Department on the local level. The Military Department was required to restrict the number of students taking the advanced ROTC course because there were limited funds available from the Federal Government to pay the normal commutation of rations the advanced cadets had been receiving. It was possible for the students to continue taking the advanced military training for college credit without pay from the government. The Iowa State College units were restricted to 120 in the advanced artillery, 49 in the engineers and 14 in the veterinary unit.¹ It was rather ironic that ever since the ROTC unit had been established at Iowa State, one of the main efforts was to try to increase the advanced enrollment. Now a restriction on the advanced corps was being implemented. The artillery unit was eleven below its maximum number of 120, the engineering unit had three over the maximum of 49 and the veterinary unit had seven over its maximum number of fourteen authorized to receive the small payment for participation in the advanced corps. Probably the main reason the artillery unit was below its authorized maximum number is that the unit had just been authorized to expand to make up for the loss of the infantry unit at the end of the 1924-25 school year.

¹The Student, September 25, 1925.

The College financial support of the ROTC unit can be judged as adequate. The cancellation of the infantry unit and expansion of the artillery unit necessitated some additional facilities to support the program. The College built a new military stable to house the additional horses that were needed to manuever the large artillery pieces.¹ Some state funds were also available for furniture. The average inventory of furniture in the Military Department owned by the College increased from about \$1,000 in the early 1920's, to \$3,986.76 during the 1928 school year. The \$1,200 inventory of state equipment remained fairly constant throughout the 1920's. The current expenses of the Military Department in 1920-21 was \$690.17 and increased to over \$1,000 per year. The overall expense of the college (other than facilities) for the Military Department averaged over \$7,500 per year for the 1922-30 time period. The majority of these expenses were for the salary of the property clerk, stenographer and armorer.² Naturally these expenses were considerably lower than almost all other departments in the College since the major portion of the military personnel salary and the equipment was furnished by the

¹The Student, October 16, 1925.

²Information based upon an average of all the expenses incurred by the college in behalf of the Military Department extracted from the Eighth, Ninth, Tenth and Eleventh Biennial Report of the Iowa State Board of Education, (Des Moines, Iowa, 1924, 1926, 1928, 1930).

Government. However, it does appear that the Military Department had more than adequate financial support from the College, especially during this period of extremely tight financing.

Major Mort was the only Professor of Military Science and Tactics at Iowa State (other than General Lincoln) to serve under three college presidents. Serving under three different college presidents could have been an area for concern especially when President Pearson a firm supporter of military training at Iowa State, resigned in 1926. However, this was not the case since Herman Knapp became acting president for one year. President Knapp's strong support for military training at Iowa State had been evidenced from the time he was a cadet under General Geddes throughout his continuous employment by the college which included his service as acting head of the Military Department during the Spanish American War. When Raymond M. Hughes became president of the College in September, 1927, the Military Department had a person who understood some of the problems of military training in higher education since Hughes had served as a district director of the ill-fated Student Army Training Corps during the World War.¹

The Military Department continued to participate in much of the pomp and ceremony of the College which included: firing of the French 75 guns to open the Veishea ceremonies, annual

¹Ross, The Land-Grant Idea at Iowa State College, p. 188.

military parade during Veishea, military ball, rifle team intercollegiate matches, annual military circus, Armistice and Memorial Day services, and the annual military inspections. Iowa State was rated as a distinguished school during all three years of Major Mort's tenure as Professor of Military Science and Tactics. The total value of the military equipment increased from \$200,000 to over \$450,000 during the same time period.¹

Major--Lt. Colonel Phillip W. Booker 1928-34

Major Phillip Booker reported to Iowa State College as the Professor of Military Science and Tactics during the summer of 1928 and served for a period of six years. Major Booker was a 1905 graduate of Virginia Military Institute (VMI) and entered the Regular Army one year later. His military duty had included assignments in the Philippine Islands where he made captain in July, 1916. During the World War he was promoted temporarily to colonel. After the war he reverted to his previous rank of captain but a short time later he was promoted to major. His previous teaching experience at the Officers' School at Camp Knox, Kentucky, and his attendance at the Staff

¹The Student, May 10, 1926, May 21, 1926, May 27, 1927, December 3, 1927, March 3, 1928, May 18, 1928, September 29, 1927, December 2, 1926.

and Command College put him in good standing with the Iowa State faculty.¹ Major Booker's six year assignment to Iowa State surpassed Major Mort's five year tenure and Booker had for the time being, the third longest tour as a Professor of Military Science and Tactics.

The most succinct way to summarize Major Booker's accomplishments (he made lieutenant colonel in 1930) during his six year tenure is: continued growth and stabilization of the ROTC program, more military events, maximum publicity to counter rising pacifism, and continued acceptance of the Military Department on campus. The College enrollment continued to increase until the 1930 depression years. Consequently the numbers in the compulsory military training during the first two years, also increased. It is important to note that the number of cadets elected to go into the voluntary advanced course remained fairly constant even during the worst years of the depression. The fewest number enrolled in the junior and senior years was 152 in 1929 and the average enrollment from 1928-33 was 171. The number of reserve officers commissioned climbed from fifty-six in 1928 and averaged seventy-two per

¹The Student, September 24, 1928; Alumnus, November 1930, p. 150.

year for the six year period Colonel Booker was PMS&T.¹ This is significant in that the tight Federal budget continued to reduce funds available for the payment of the small fee that was supposed to be paid to all advanced ROTC cadets.

Colonel Booker, his staff, and the cadets continued to be involved in much of the pomp and ceremony in which the Military Department always took part, such as Armistice day, Memorial day, military circus, military ball, rifle team matches, Scabbard and Blade meetings, Cadet Officer Association functions, annual inspection, and the annual parade during Veishea. New events that attracted favorable attention to the Military Department were the starting of the Drum and Bugle Corps, the College Cossacks, polo team, and the conducting of a sham battle in lieu of the annual Veishea parade which was too expensive to put on during 1933.

The Drum and Bugle Corps was formed in 1928 when the military personnel found some old drums and bugles in a store-room that had been used by cadets before World War I.² The College band had become a separate organization and was no

¹The Student, September 22, 1930, p. 1, April 26, 1930, p. 3, June 3, 1930, p. 1, May 21, 1931, September 29, 1931, p. 1, April 26, 1932, p. 1, April 25, 1933, p. 4; Iowa State College, Reserve Officers Training Corps, List of Graduates commissioned from ROTC advanced course, Army ROTC Files, 1928-34.

²The Student, September 29, 1932, April 10, 1934, p. 1, June 2, 1934, p. 1.

longer sponsored by the Military Department. Consequently, the Drum and Bugle Corps (which was claimed by the Student and the Bomb to be the only one of its kind in the country) was a welcome addition at the regimental parades and the military circus.¹ Another of the "one of a kind in the country" organization was the College Cossacks which was formed in 1928 and became operational in 1930. The original College Cossacks was a daredevil riding and acrobatic unit composed of twelve men who performed stunts on the backs of several horses. These stunts were similar to a monkey drill on horseback. Military horses and equipment were used but the organization was open to any student. It appears that most of the participants were ROTC cadets. The size of the Cossacks grew until thirty-six riders were used in a twenty-six minute routine that added much to the annual military circus and garnered some favorable publicity for Iowa State. The College Cossacks even gave one performance at Fort Des Moines in early 1934.² The competition to be a cossack was so great that the organization was increased to eighty performers and the first forty were the primary team. However, someone from the second group was always ready to step in to take the place of anyone who dropped

¹The Student, September 29, 1932.

²Bomb, 1932, p. 146; Alumnus, December 1939, pp. 90-91; The Student, October 5, 1933, p. 1, September 25, 1934, April 7, 1934.

out for any reason.¹

Another feature of the military training program that made it popular was that the horses were also available for polo. At Iowa State the polo team was started strictly by the Military Department and the coach was one of the officers assigned to the College. Actually few players were involved since only four men made up the team. The first polo team became outfitted in 1930 even though there had been plans for the sport in the late 1920's. Evidently the team was progressing satisfactorily in 1932 under the guidance of Lt. John Lewis Jr. who had arranged for the polo team to practice during the winter inside the armory. In 1933, the team had graduated three of its top four players and went through a period of rebuilding. The games were played on the 13th street field and were enjoyed at least by some spectators. The 1933 schedule included games with the University of Missouri, Oklahoma, Oklahoma Military Academy and two games with Fort Des Moines.² In the middle and late 1930's the polo team of Iowa State was a contender for the championship as a full-fledged sport under the Cyclone athletic council.

Colonel Booker's six year tenure at Iowa State saw the most active period of agitation against compulsory military

¹Interview with Jesse Thornton on March 9, 1972.

²The Student, September 20, 1930, p. 3, November 1, 1932, October 17, 1933; Bomb, 1932, p. 146.

training. However, as Ross pointed out it never created too much of a problem at Iowa State. On the national scene during the 1925-1935 time period the Committee on Militarism in Education had published a pamphlet (1925) written by Winthrop Lane which warned that ROTC was militarizing the youth of the country. Some bills were introduced in Congress to remove the compulsory feature of ROTC, but none passed.¹ Lane's pamphlet was somewhat countered by a study in the early 1930's by Ralph C. Bishop entitled "A Study of the Educational Value of Military Instruction in Colleges and Universities." Bishop's questionnaire was sent to 16,416 ROTC graduates of the 1920 to 1930 time period. Of the 10,000 answers received, almost all had high praise for ROTC: 97.1 per cent said military training had definite educational value; 80 per cent of the respondents credited their military training with favorably affecting their ability to supervise and to cooperate with others; 93.6 per cent stated that ROTC courses of instruction did not produce a militaristic attitude; and 81.2 per cent favored two years of required training.²

¹Lyons and Masland, Education and Military Leadership, pp. 46-48.

²Ralph C. Bishop, "A Study of the Educational Value of Military Instruction In Colleges and Universities" Pamphlet No. 28 (U.S. Office of Education, 1932), pp. 14-18.

A close look at the discussion of the topic of compulsory military training at Iowa State reveals that there was some debate. The Student reported that there was a meeting in November, 1930, to form a society to oppose compulsory military training at the same time a guest speaker from the National Committee on Militarism appeared on the campus. The group was not allowed to meet in the newly opened Memorial Union since the union management felt the talk should not be held in a building that was built as a memorial to the 103 young people (some sources say up to 118) who died during World War I. When a conflict of this nature arises on a college campus it evokes quite a bit of attention and a meeting place was arranged at the Collegiate Methodist Church for the speaker from the National Committee on Militarism.¹ The Student reported that a petition was circulated around campus opposing military training and 755 students (less than one-sixth of the student body) signed the petition. The conclusion drawn by The Student was that generally the student body felt the military training should become optional.² The Iowa State Alumnus in November, 1930, probably presented the conservative and majority point of view of the Iowa State students and faculty when the discussion of "peace and preparedness" and

¹The Student, November 20, 1930, p. 1, November 22, 1930, p. 1, December 9, 1930, p. 1.

²The Student, December 16, 1930, p. 14.

"military training" was presented. It seems the Iowa State administrators and members of the State Board of Education still felt that every able-bodied young man who had availed himself of the opportunity to go to college at Iowa State should take military training. The editor of the Alumnus Harold Pride, '17, reported that the State Board of Education had held a public hearing on the subject of compulsory military training and that no one from Iowa State had appeared since they refused to get excited about the matter and had gone about attending the military class and other classes as they should. Pride concluded: "Judging from the number of them who are preparing themselves for reserve commissions in the army, there is still a wholesome feeling of willingness to serve the State and Nation in return for the bountiful and numerous education advantages enjoyed at Iowa State."¹ The issue of compulsory military training at Iowa State continued throughout most of the thirties, but was in the form of an occasional debate, a questionnaire, or an article in The Student rather than any organized protest movement.²

In reading The Student during Colonel Booker's six year stint at Iowa State, it appears that the Military Department

¹Alumnus, November 1930, pp. 152-53.

²The Student, November 5, 1932, p. 1, May 6, 1933, April 9, 1935, March 5, 1936, p. 2, March 4, 1936, p. 2, May 7, 1936, April 30, 1938, p. 8, May 5, 1938.

had an outstanding information officer and he was not the least inhibited by the protest movement and the discussions of making ROTC voluntary. In addition to publicizing all the old and new events already mentioned, there were numerous lists of Iowa State cadet promotions, biographies of new officers being assigned to the College, many announcements of the cadet corps awards and decorations, reports on cadet activities at summer camp, and articles about new uniforms. There was one article about the cadet officers demonstrating military law by holding a practice court martial. The Student also reported that the Iowa State cadet corps took over the responsibility of conducting a sham battle in lieu of the more expensive annual Veishea parade. The idea of conducting a sham battle during Veishea did not go unnoticed by the opponents of military training, but Colonel Booker very quickly side stepped the issue and passed it on to the Veishea central committee which had requested the military participation instead of the regular parade. The Veishea central committee politely explained that they did not believe the sham battle would unduly influence the high school guests and that the battle was an inexpensive substitute for the parade. Therefore the sham battle was held as planned.¹

¹The Student, May 9, 1933, April 28, 1934, January 10, 1933, April 24, 1930, p. 1, May 23, 1933, p. 1, June 1, 1933, April 20, 1933, p. 1.

Evidently the academic portion of the Reserve Officers' Training Corps continued with little change from the program that was implemented in the early 1920's under Colonel Shaffer. The first analysis of the ROTC program on a nationwide basis occurred in a 1931 Military Education survey. This survey included statements by presidents of universities and colleges dealing with the value of ROTC as an educational component. President R. M. Hughes of Iowa State stated:

The R.O.T.C. is a part of the educational work of Iowa State College at Ames, Iowa. The work is required for freshmen and sophomores and is elective for juniors and seniors. We have a fine group of officers here and the work has been handled in a very effective way. I believe the educational value is about par with other courses. We are graduating each year a considerable number of officers and I have reason to believe they are quite well trained ¹ in comparison with graduates of other college units.

President Hughes statement was one of the most subdued of the fifty-one published in the report. However, when one understands the normal conservative nature of Iowa State, President Hughes's statement appears to indicate that he supported the program and that the Military Department is accepted on campus.

The Military Department continued to function effectively through the depression even though the College suffered a drop of 25 per cent in enrollment in the 1932-34 period and a 27

¹Military Education Survey, "Statements of Presidents of Universities and Colleges upon the Value of the R.O.T.C. as an Educational Component" (Research on Military Education, Washington, D.C., 1931), p. 18.

per cent decrease in state appropriation for the 1933-35 biennium.¹ This decrease in state support had less impact on the Military Department than other departments since the salaries for the military staff and equipment were furnished by the government. The Iowa State Military Department was also in an outstanding position as far as facilities were concerned. In the "Iowa State College Twenty Year Program Survey" conducted in the 1930's Colonel Booker and his successor Major H. R. Odell both concluded that present Military Department facilities were more than adequate and that the department would not have any problems if there was to be a large increase in enrollment after the depression years.²

Major--Lt. Colonel--Colonel Herbert Odell
1934-1940

In early 1934 there had been two articles in The Student telling about Major Herbert Odell being considered as a replacement for Lt. Colonel Booker who was completing his sixth year at Iowa State. Major Odell did visit the campus on January 30, 1934, for an interview with President Hughes of Iowa State. The Major was a 1910 graduate of West Point and

¹Ross, A History of the Iowa State College, p. 363.

²Iowa State College, "Twenty Year Development Program" (Division of Industrial Science, Part 5, January 1933), p. 51, May 1935, pp. 83-85.

held the rank of lieutenant colonel in the World War. Major Odell was familiar with ROTC since he had served as the Professor of Military Science and Tactics at Oregon State College after the war.¹ A large portion of the Major's military career would be on a college campus. In fact eleven years would be spent at Iowa State. The first six years were from 1934-1940, during which time he was promoted to lieutenant colonel in 1934 and colonel in 1939. The Colonel was away from Iowa State for the 1940-41 school year and then returned to serve as the PMS&T from 1941-1946, during the World War II time period. Colonel Odell's total tenure as head of the Military Department was only two years less than General Geddes. The Colonel had the third longest time of service of any PMS&T at Iowa State during the first one hundred years of military training.

Under Colonel Odell the Military Department made the only major change in the ROTC course of study during the time period between the World Wars. The 1934-35 Iowa State College Catalog showed that the curriculum included more subject matter content aimed at citizenship training, especially during the freshman year. Some of the subjects listed were: the National Defense Act, military obligations of citizenship, and current international situations. Military history and policy which had

¹The Student, January 25, 1934, p. 1, February 1, 1934, p. 1.

only been taught in the last two years of the four year program was now introduced briefly during the freshmen and sophomore years. The branch courses (i.e., artillery and engineers) which had been taught in the junior and senior year were now taught at the sophomore levels.¹

During the time period between the wars the Military Department had often expressed the idea that the military training was good citizenship training and now they had some lessons devoted specifically to citizenship subjects. Also by moving some of the branch material, e.g., the organization and duties of engineers, down to the sophomore level, the cadets could gain a better idea of what an officer in the Corps of Engineers, U.S. Army, might be doing. It was hoped that the better knowledge of the engineer's duties might motivate a few more cadets to enter the voluntary advanced corps. Inspection of existing records did not indicate that the change in course content affected the number of engineers who graduated from the ROTC program since the College continued to commission about 20 engineers per year throughout the between-the-war years.

Colonel Odell was fortunate that the tide of anti-compulsory military training was slowly turning. According to Pollard, in his analysis of the Proceedings of the Association of Land Grant Colleges during 1937 and 1938, the American

¹Iowa State College Catalog, 1934-35, p. 260-262. The entire course description for the Engineers and the Field Artillery is included in Appendix G.

sentiment was going in the direction of approving--even demanding--more effective defensive military preparation and ROTC was considered a part of this necessary preparation.¹ Colonel Odell knew how much it meant for the Military Department to be, as much as possible, an integral part of the College. The Colonel, like his predecessors, capitalized on some of the resources that the Military Department had available, mainly the horses used in the artillery unit. The horses had been used for the military circus, the cossacks performance and the polo team. Now women were given the opportunity to take riding lessons under the tutelage of Captain Jesse Matlack and Lieutenant John Lewis. The cost was \$15.00 per quarter and the money went to the people who had to do the extra work to care for the horses. Any funds left over went into a cadet fund. The women's riding classes were limited to forty members with two sections of twenty each.² Another use of the military horses that helped attract the interest of the women of the College was the opportunity for the young ladies to go on Sunday rides with the advanced ROTC cadets. No one will ever know if any young man was enticed into the advanced ROTC program just so he could take a lady for a Sunday ride. However, this special opportunity came to a sudden halt late in

¹Pollard, Military Training in the Land-Grant Colleges and Universities, pp. 96-97.

²The Student, October 2, 1934, p. 1, October 18, 1934.

1938 when an Iowa State coed was seriously injured in a riding accident.¹

The Military Department polo group soon developed into quite a team and became a full-fledged Cyclone sport under the athletic council. The team went on to win the Midwest conference championship in 1935 and 1936. The sport was attracting so much interest that Colonel Odell arranged to have the polo coach's term extended one year past the normal four year assignment to keep the team going. It also seemed appropriate that a well-qualified polo coach should replace Captain Lewis. Consequently when Captain Lewis's five year assignment at Iowa State was up, it was more than just a coincidence that one of the four new officers assigned in 1937 included a Captain Potter who had coached polo in Oklahoma, Texas, the Philippines and in China.² Colonel Odell felt the horses were such an integral part of the ROTC program at Iowa State that in 1938 he turned down the opportunity to have a partial motorization of the artillery unit. The Colonel realized that the unit would someday be motorized (as other college units were also being motorized) and if it was accomplished all at once it would be just fine but not half and half. A partial motorization could have created considerable scheduling problems each

¹The Student, November 23, 1938.

²Alumnus, October 1935, p. 88; The Student, April 3, 1937, September 30, 1937.

quarter if for some reason a person had had all his training in horse-drawn artillery and a schedule conflict only allowed him to be in the motorized section. Colonel Odell also pointed out that Iowa State could very easily be the last ROTC unit to be motorized since the stable equipment built by the state was the best available anyplace.¹ If the Iowa State artillery unit had become motorized the Military Department would have lost its horses which had been used extremely effectively in the past to promote and publicize the military activities.

The artillery unit at Iowa State was always much larger than the engineering unit since only engineers were in the latter unit. There was considerably more information about the artillery unit just by virtue of its size. Another possible reason for more information on the artillery units might be that all the PMS&T at Iowa State, except Colonel Shaffer and Colonel Young were field artillery officers. In fact ten of the twelve PMS&T from 1919-1965 were field artillery officers. However in the late 1930's the engineers found ways to publicize their unit. First they formed a crack drill team early in 1937 to represent the engineers in the military circus and other special events. Then, an honorary engineers' society called the Pontoniers was organized in late 1937. It is assumed that the name "Pontoniers" was chosen since the

¹The Student, December 5, 1936, p. 1.

engineers used pontoons in building military bridges. Major H. A. Skerry, the engineering officer assigned to Iowa State, was adviser to both units. In the fall of 1939 the Pontoniers applied for acceptance into the Society of American Military Engineers (SAME) which was a national organization formed in 1920. The application was accepted and the local unit of SAME was organized on October 11, 1939.¹ The Society of American Military Engineers was organized strictly for engineers in the advanced corps and served to bring the cadet officers of the engineers' corps closer together and to enhance better cooperation. The Iowa State chapter is still operational in the 1970's and is now the second oldest military honorary on campus, second only to Scabbard and Blade which was formed before World War I.

The Student continued to give more than adequate coverage to all the annual events, quarterly inspections, and promotions of both cadets and active duty officers. Articles also publicized the value of the vast amount of government equipment available for the ROTC students to use. The Student explained the awards and decorations which included shoulder cords for making an "A" in ROTC and a blue star which indicated the Iowa State unit had been rated excellent in the previous year's inspection. The production of reserve officers continued at

¹The Student, January 12, 1937, October 6, 1939, p. 6, October 13, 1939, October 19, 1939; Bomb, 1937, p. 154.

an optimum pace as it seemed that the maximum number of advanced cadets allowed by the government was always attained each year at Iowa State.

Two other military events associated with the Military Department that occurred during Colonel Bookers tenure at Iowa State included the first Governors' Day which was held on May 18, 1933, and the selection of a young lady as an honorary cadet colonel at the annual military ball on April 27, 1937. Governor Clyde L. Herring of Iowa served as the reviewing officer on Governors' Day and also presented a trophy to Lt. Colonel Harold Pride who was the commander of a reserve anti-aircraft regiment.¹ This was the first formal Governor's Day at Iowa State, however, it was not the first time that a Governor of Iowa had served as the reviewing officer. Before the war, General Lincoln had occasionally invited the Governor of the state to act as reviewing officer. Having the governor of Iowa serve as a reviewing officer is in marked contrast to the situation during 1933 in the State of Minnesota. Governor Floyd B. Olson of Minnesota opposed compulsory military training in his message to the state legislature in 1933. It was not too long before voluntary military training was in effect at the University of Minnesota.² In later years (1965-66) when

¹Alumnus, June 1935, p. 285; The Student, May 13, 1935, p. 1, April 1, 1937, p. 1, April 27, 1937, p. 5.

²James P. Kress, "A History of Military Training at the University of Minnesota 1869-1969," (n.p., n.d.), p. 15.

legislature of Iowa authorized a Governor's days awards it seems that Iowa State University was not very successful in arranging for the Governor of Iowa to be on campus to make the presentation. The president of the college or a representative of the Iowa Adjutant General's office usually did the honors. In 1970 when the campus was subjected to anti-military protest the Governor awards were presented in the Governor's office in Des Moines.

The other event during this time (1937) that created some publicity for the Military Department was the decision and announcement to select honorary coed cadet colonels. It seems Scabbard and Blade was always looking for different ways to promote the military ball and the honorary coed cadet colonel idea was just the thing. The first four honorary coed candidates were announced in early April, 1937, and the final selection was made at the annual military ball. Miss Beth Cummings was selected the first honorary cadet colonel of Iowa State. Her duties included appearing at the military ball, military circus and other special events. Miss Cummings had quite a thrill at the 1938 military circus when her horse got excited and fell down during the playing of the National Anthem. However, Miss Cummings jumped clear and quickly came to attention and saluted.¹ The honorary cadet colonel selection in

¹The Student, April 1, 1937, p. 1, April 27, 1937, p. 5, February 24, 1938, p. 3.

later years always occurred at the annual military ball and resulted in the young lady serving as the queen of the ball. Having an honorary cadet colonel did add another dimension to the ROTC program at Iowa State. Coeds had helped promote the military department by forming their own drill unit under General Lincoln many years before. A sponsor corps of young ladies was started after World War I and now the honorary cadet colonel was just another step in which women figured into the plans of the military program at Iowa State. In later years there were other groups of young ladies who helped promote the military training at Iowa State such as Angel Flight and the Dress Blues. Finally, in 1970 women were allowed to enroll in Air Force ROTC for credit and to complete the advanced course which qualified them for commissions as reserve officers. All of the activities associated with the military training had some impact on the acceptance of the Military Department at Iowa State. The actual impact of each event or activity could not be estimated but the sum total of their effect definitely helped present a positive influence on the acceptance of the military training at Iowa State. As has been pointed out before, the faculty and administration generally supported the military training both financially and morally during the between-the-war years.

Another possible reason for the military training acceptance could have been the conservative nature of the campus and the ability for all concerned to keep things in perspective.

There was a "good sense of humor" at Iowa State and the military training was subjected to its share of jokes and stories. The Green Gander, the College good humor magazine, and The Student printed several jokes about the military, particularly about the fit of the uniforms. A typical example was in October, 1937, when The Student reported on how the cadets had to wait in long lines to get badly fitting uniforms. One cadet was supposed to have remarked that only his military tie fit and it was frayed.¹ Other articles from The Student included crazy ways of how to tell a student officer from an enlisted man. One article explained funny incidents about the cadets learning to ride horses with the conclusion that Iowa State had very few Paul Reveres since it was not uncommon to see some of the sophomores fall off during every riding class.² The Green Gander commented on the cadets new uniforms and how the women threw more keys to the cadets.³ It was assumed the keys were supposed to be to the girls dorms. Another article in a 1930 Gander was supposed to be a debate on the subject of war involving two former Green Gander editors who were brothers. The article made some wisecracks about compulsory military training. The funniest part of the article gave a cadets'

¹The Student, October 12, 1937.

²The Student, October 20, 1934.

³Green Gander, October, 1930.

possible point of view of the armory fire in 1922:

I was sailing along in my fifth quarter when the armory burned down. Boy! What a bonfire that turned out to be! Shells exploding, gas tanks blowing up, walls bulging, cadets cheering--what more could a patriotic American desire?¹

One might conclude that had the above statement been published immediately after the armory burned in 1922 it might not have gone over so well. However, the Iowa State campus was pretty broad-minded. Many people at the College had become more concerned about military preparedness after Hitler had invaded Austria in the spring of 1938. This desire to be militarily prepared grew even more after Germany invaded Poland on September 1, 1939. Still the Green Gander could make jibes at the compulsory training in 1939. In an anonymous original poem a cadet gave his views of compulsory ROTC.

(1)

I are new college student
Take physical exam
I make round shoulders
Stand flat foot
Read chart backwards
Cough
No can hear
Doctor say I have excellent health
I must take ROTC

(2)

I drill
In rain
In sun
In mud
Man behind Rush gun in my
back
Officer spit at me
I decide
I must get out
Gym are better.

¹Ibid., p. 6.

(3)

I play sick
 I play dead
 It no help
 Maybe they like me too much
 I ask captain
 He look up my record
 He say mistake are been made
 My name are mixed with other
 But he say he are sorry
 No can change record
 I begin to cry.

(4)

I walk in street
 I stop runaway horse
 On it are general's daughter
 But I not know her
 She ask
 What you want most
 I say
 Want to get out of ROTC
 She sore
 She like army

(5)

Next day I go to school
 I are told I now take Gym
 I faint.....¹

There are inaccuracies in the content of the poem: as there was no general on campus, and the opportunity to substitute gym for ROTC was not allowed. Nevertheless it does convey a message in light-hearted form.

The latter part of the 1930's sounds much like the years leading up to World War I. The cadet corp enrollment continued to grow until 1938 when the total ROTC enrollment finally surpassed the previous high of 1,621 which was in the pre-depression days. As the situation in Europe continued to gain the attention of the campus, more interest in the military training developed. In 1939 over 200 cadets were in the advanced program and by 1940 the total enrollment for the entire cadet corps was 1,900.² It seemed only natural that the

¹Green Gander, Valentine Issue, 1939, p. 22.

²Iowa State University, Army ROTC Report of Enrollment, 1922-40.

ROTC enrollment should increase some after the Selective Service Act of 1940 was passed and ROTC students were allowed to be deferred from the draft.

On the national scene President Roosevelt announced in October, 1938, that he was going to devote a special sum of 300 million dollars to armaments. In President Roosevelt's January, 1939, annual message to congress, he pointed out that he had given up on the idea of neutrality.¹ At Iowa State the idea of the necessity for military preparedness was slowly coming into focus. There had been an article in The Student on January 18, 1939, about Naval ROTC starting up at other schools and two days later there was an article about Air Training ROTC being implemented on an experimental basis at seven schools. The results of a nation-wide survey was also published on January 20, 1939, which showed that seven-tenths of the American college students approved the plan to train 30,000 civilian pilots a year in colleges and universities.² In early February, 1939, the discussion of military training brought a flurry of letters to the editor and articles in The Student about ROTC but the writers were not as outspoken against compulsory ROTC as they had been in the early 1930's.

¹Richard N. Current et al., United States History (Glenview, Illinois: Scott, Foresman and Comapny, 1967), pp. 614-616.

²The Student, January 18, 1939, January 20, 1939, p. 5.

By late February, 1939, the letters to the editor and articles had switched from the few anti-compulsory ROTC articles to more discussions favoring military preparedness. In April, 1939, the first announcements appeared in The Student about traveling boards of the U.S. Army coming to campus to conduct examinations for students interested in army flying training.¹ By the fall of 1939 these announcements appeared more frequently. The Army Air Officers flew into Ames in one of the latest Army Air Corps bombers and one of the newest attack planes to give physical examinations for prospective military pilots. Forty-one of the Iowa State men out of the one hundred ten who took the physical exam passed. This was the highest number who took the exam and the highest percentage who had passed from any college.² These men did not go to active duty immediately but definitely saw service in the early part of the war. Two names out of the forty-one who took the physical stand out to an observer of military training at Iowa State. One future Army Air Force officer on the list was Henry Schwane who became the second Professor of Air Science of Air Force ROTC in 1950. The other conspicuous figure was Charles O'Neil who lost his life during World War II. The local Chapter of Arnold Air Society at Iowa State was named the O'Neil Squadron

¹The Student, April 22, 1939, p. 1.

²The Student, November 10, 1939, p. 1, November 18, 1939, p. 1.

in honor of Charles and his brother James O'Neil. It appears that the military services were going to rely once again on the college campus to obtain their supply of officers, especially in the early part of the war.

The last year of Colonel Odell's first tour at Iowa State saw the ROTC program continued to increase in size. The number of Reserve Officers commissioned approached 100 per year. One of the last events of the 1939-40 school year was the 50th class reunion of the 1890 class and it was duly publicized that General A. E. Kreger, the highest ranking military officer to graduate from Iowa State (who took his college military training under General Lincoln), would attend the reunion with his wife, who was also a '90 graduate.¹

Colonel John E. Hatch 1940-1941

It had been announced in April, 1940, that Lt. Colonel John E. Hatch would replace Colonel Odell during the summer of 1940. The Lt. Colonel was promoted to Colonel prior to him becoming the seventh PMS&T at Iowa State since World War I.² By the time Colonel Hatch arrived in 1940, President Friley of Iowa State had already offered the services of the College to the Government and had pledged full cooperation in defense

¹The Student, May 25, 1940.

²The Student, April 18, 1940, p. 1.

training.¹ It was not long before the College was called upon for several types of military training.

Colonel Hatch had little time to make any impact on Iowa State. The Colonel's senior ROTC cadets helped conduct the student draft sign up on campus, once the rules for the national conscription were defined.² All the regular military events were continued and the normal news releases about promotions, awards, and activities were printed in the Iowa State Daily (hereafter referred to as The Daily). None of the special military events were canceled or dropped during the 1940-41 school year. However, the annual military circus was held for the last time in the spring of 1941 because in 1942 the world events necessitated more time and preparation be devoted strictly to military training. An addition to the armory was completed under the sponsorship of the W.P.A. during Colonel Hatch's one year tour. Two-thirds of the cost for the west side addition to the armory was from the W.P.A. funds and one third supplied by the College.³ Shortly before the armory addition was scheduled to be completed, Colonel Hatch was ordered to the headquarters of the Third Army and was succeeded by Lt. Colonel Peyton Winlock (an assistant to Colonel Hatch)

¹ Ross, The Land-Grant Idea at Iowa State College, p. 212.

² The Daily, October 16, 1940, p. 1.

³ The Daily, December 11, 1940, p. 1, January 24, 1941, p. 1.

who was named as acting head of the department for the remainder of the school year.¹ In the summer of 1941 Colonel Herbert R. Odell returned to serve his second tour as PMS&T at Iowa State. This tour included the World War II time period.

Summary and Conclusions of the
"Between-the-War-Years"

Following the cessation of hostilities of the World War in 1918, the Student Army Training Corps was demobilized and the venerable General Lincoln started making preparations for the ROTC program. The General had the course content already printed in the College Catalog when the first active duty officer arrived at Iowa State to implement the ROTC program. The modern day ROTC training was required for the first two years and included two hours of drill and one hour of classwork for one credit towards graduation. The advanced course was voluntary and involved five hours of work for three hours of college credit. At Iowa State all twenty-four hours of ROTC credit counted towards graduation. The advanced cadet also received a small monetary payment, free uniform, pay for summer camp, and in return accepted a commission as a reserve officer in the United States Army.

During the "Between-the-War Years" seven men served as Professors of Military Science and Tactics:

¹The Daily, May 13, 1941, p. 1.

1919-1920	Lt. Colonel John K. Boles
1920-1924	Lt. Colonel--Colonel Pearl M. Shaffer
1924-1925	Lt. Colonel Frederick S. Young
1925-1928	Major John E. Mort
1928-1934	Major--Lt. Colonel Phillip W. Booker
1934-1940	Major--Lt. Colonel--Colonel Herbert R. Odell
1940-1941	Colonel John Hatch

Lt. Colonel John Boles implemented the ROTC program at Iowa State after the war in 1919 and did so on a creditable basis even in the face of many obstacles. One year later Colonel Shaffer became the PMS&T and Colonel Boles remained for three years as the head of the artillery unit. Colonel Shaffer and his staff overcame many problems and secured the cooperation and help of the faculty and administration in putting the Military Department on an equal and firm basis. The lack of facilities required the extensive cooperation of several departments until the new armory was built in 1921. When the armory was completed this was the first time in the fifty-one year history of the Military Department that it had adequate facilities. The State of Iowa and the College gave outstanding financial support to the ROTC unit by building the first armory and also by replacing it when the first structure was destroyed by fire in 1922. The College also furnished a budget for the Military Department that averaged over \$7,000 per year during the 1920's and 30's.

Iowa State started its ROTC program with three units: Infantry from 1919-1924; artillery from 1919 throughout the between-the-war years; engineers from 1919 throughout this time

period. A fourth ROTC unit was added in 1921. This new unit was the veterinary corps and was active at Iowa State from 1921-1934. The curriculum of the ROTC program was designed to train officers for the reserve forces of the United States Army. Therefore, to insure a standardized military program on a nationwide basis the operation and control of the ROTC units was under the War Department. At Iowa State the Military Department was under the administrative structure of the Division of Industrial Science. This arrangement proved satisfactory and is still the same in the 1970's.

The between-the-war years saw the first real signs of agitation to make ROTC voluntary rather than compulsory. At Iowa State because of the high caliber of the officers assigned to teach, the strong support of the administration and the full opportunity for discussion, the sentiment for voluntary ROTC never reached large proportions. It was also important that the campus was able to have a sense of humor and keep the events of the times in perspective.

The ROTC enrollment at Iowa State steadily increased from 1,242 in 1920 to 1,621 in 1927 and then dropped to a low of 910 during the depression years. As the College enrollment proceeded to increase in the late 1930's the ROTC enrollment climbed to 1,900 cadets in the four year program. Naturally almost all of the ROTC cadets were in the basic or required program. However, the number of commissioned officers

graduating from Iowa State rose from the six in 1922 to a high of ninety-five in 1929 and then leveled off at an average of seventy-two officers per year during the depression. By the time World War II began Iowa State was producing almost 100 officers per year. The total production of Reserve Officers from the ROTC program from 1920 to 1941 was 109,847 and Iowa State commissioned 1,445 officers during the same time period.¹ Considering that there were over 200 senior ROTC units during this time period, it can be seen that Iowa State produced more than its share of reserve officers.

Throughout this time period 1919-1941 cadets were encouraged to participate in extra curricular activities. Many of the organizations within the corps of cadets offered leadership opportunities, built esprit de corps, increased the level of ROTC prestige on campus, and helped to integrate the Military Department with the Iowa State campus. In fact this period could very easily be called the highest pinnacle of success of the Military Department. Many Ames, Iowa, residents still remember the polo matches, the cossack riders and military circuses even more than they recall the military training that

¹George E. Lynch, "The Post-War Senior ROTC," ROTC Branch, G-3 Section, Headquarters Army Ground Forces, Washington, D.C., 31 March 1947; Iowa State College, Report of Enrollment-- Reserve Officers' Training Corps, 1921-41; The total enrollment and commissioning information for Iowa State from 1920-41 is presented in Appendix H.

took place at Iowa State. It appears that the Military Department would never again be able to attain the stature and favorable attention it received at Iowa State during the 1920's and 1930's.

One can conclude that during the between-the-war-years Iowa State College accepted the provisions of the National Defense Act of 1916 and 1920 and established a viable ROTC program. This program was furnished with outstanding facilities, more than adequate financing, and good cooperation from the faculty and administration, all three of which helped to insure the success of the ROTC program. Iowa State did more than its share to produce commissioned officers for the Officers Reserve Corps. Thus the College could feel that it was meeting the intent of the recent National Defense Acts and the original Land Grant Act of 1862 which had the requirement of "including military tactics."

CHAPTER V: WORLD WAR II 1941-46¹

The National Scene

The armed forces of the United States had undergone an almost continuous decline between World War I and World War II. In the thirties, when the war clouds were mounting over both Europe and Asia there was ample time for the military force to grow but there was little money. When the war did break on the nation in 1941, almost unlimited amounts of money were given to the military, but the precious element of time was gone. The developments of World War I and World War II followed almost the same cycle; American's felt that the war would not come to America. When the war did come there was a belated rush for arms, equipment and men to overcome the nation's demonstrated military weakness. Between the wars the military had to fight for its life. The Regular Army had been authorized 280,000 men but only had 118,750 officers and enlisted men in 1935. The Reserve Officers' Training Corps, was producing approximately 6,000 junior officers every year who would provide the backbone of the country's military might during the coming war.²

¹Even though World War II ended in late 1945 it took the Iowa State campus until well into 1946 to conclude its special military programs. ROTC programs were not restored until 1946-47 school year.

²Russell Stompler, "The Origin and Growth of the Reserve Officers Training Corps 1916-1950" (unpublished M.S. Thesis, University of Alabama, 1951), pp. 151-53.

Pollard describes how the Association of Land Grant Colleges and Universities was active in the late 1930's and early 1940's to insure that another unsuccessful program like the Student Army Training Corps of World War I would not be thrust upon the colleges during these critical times. In the Association's meeting of 1941, just four weeks before Pearl Harbor, there had been hopes that the ROTC program would be able to expand and meet the country's needs for officers.¹ However, when the war really did get underway, ROTC was not able to meet the rapidly increasing demand for more officers. Ross quotes I. L. Kandel to explain the unsettled and precarious times of World War II: "The story of the relationship between the Federal Government and the institutions of higher education in the country in the years immediately preceding and during the war is one of confusion and uncertainty."² There is no doubt that there was unprecedented demands made upon institutions of higher education during World War II that exceeded any previous demands. Once again the colleges responded with all their resources.

¹Pollard, Military Training in the Land-Grant Colleges and Universities, pp. 97-103.

²Ross, The Land-Grant Idea at Iowa State College, p. 210.

Iowa State College Prepares for Mobilization

Iowa State College was well aware of the world situation and was prepared to give full support and participation in the war. The Daily published several articles in the fall of 1940 and early 1941 that lead one to believe the College was better prepared for mobilization in World War II than in World War I. Ross, also came to the conclusion that Iowa State was in the forefront in awareness of the crisis and in readiness to participate fully in the conflict.¹ Colonel Odell had returned to head up the ROTC detachment when Colonel Hatch was recalled from the campus.

Colonel Odell and his staff attempted to keep the ROTC Department operating normally and to also serve as a point of contact and source of information for the many different special military programs for which students could volunteer for. It is doubtful if anyone on campus really knew what was going on as the information received was contradicted or changed a few days after the original release. The campus was also the scene of many conflicting rumors but this was true of most campuses. Nevertheless, the Colonel interpreted the selective service regulations and the many special programs as fast as they came out of the nation's capital. Plans were made

¹Ibid., p. 210-212; The Daily, October 23, 1940, p. 1, November 15, 1941, p. 2, December 9, 1941, p. 1.

in early October to start practice for the annual military circus. However, two weeks later Colonel Odell announced that because of the world conditions the Military Department felt the circus should be dropped and the time devoted to more serious training.¹ There were numerous advertisements in The Daily from all the services detailing how the students could enlist for special programs and become officers. However, the advice to the students from the College and, the Adjutant General of Iowa was to stay in school and wait until they were called to service. General Rush B. Lincoln, who was an Iowa State graduate and had served at Iowa State under his father prior to World War I, was on campus in late October and was a good advertisement for the Army Air Corps, especially when he circled the campus in his large silver plane before landing in Ames. Actually the General was on campus to visit his daughter Miss Virginia Lincoln of the Household Equipment Department. However, with all the recent publicity on the aviation cadet program it seems the General was doing a little unofficial advertising for the Army Air Corps.²

¹The Daily, October 9, 1941, p. 4, October 25, 1941, p. 1; Alumnus, January 1942, p. 134. Anyone interested in the early military circuses should study the military circus folder in the Iowa State University, Special Collections.

²The Daily, October 14, 1941, p. 1, October 24, 1941, p. 1.

If there were any doubts about Iowa State's need to prepare for mobilization, they were completely removed on December 7, 1941, when Pearl Harbor was bombed by the Japanese. The reaction on the Iowa State campus was immediate as the students and administration formed a "War Council" which enabled students to do their part in winning the war while continuing their academic work. The War Council served many purposes such as instigating war stamp and bond drives, red cross drives, and scrap iron drives. The War Council also formed an education committee to educate the people on the background of war, progress of the war and student responsibility in the war.¹ The patriotic spirit was evident on campus and the College made many significant contributions to the war effort.

ROTC at Iowa State

ROTC continued throughout the active war years of 1941 to 1945 but with significant changes made in 1943. During the early part of the war, Colonel Odell and his ROTC cadets continued to participate in many of the special events held by the Military Department. It had been previously announced (October, 1941) that the military circus was dropped. However, the polo

¹History of the Iowa State College War Council 1941-1945," Iowa State University, Special Collections, World War II Records.

team continued to play as an intercollegiate sport until 1943 and the Cossacks gave their final performance in March, 1943. The Trumpet and Drum Corps continued and the cadets won their divisional basketball tournament title in the Physical Education Department. Scabbard and Blade, the Society of American Military Engineers, the pontioneers, and the military ball also operated until the 1943 time period. The only special activity to continue throughout World War II was the rifle team. The rifle team was only moderately successful in its matches until in early 1945 when the Iowa State team won the William Randolph Hearst Trophy which is symbolic of the national champion.

The facilities of the ROTC unit were expanded when school started in the fall of 1941 as the new west wing of the armory was completed as a W.P.A. project. The curriculum of the Military Department had one change in early 1942: An additional lecture was added to replace the normal two week camp that a reserve officer usually attended sometime after graduation while he was serving in the reserves. This additional lecture was required since it could easily be seen that the ROTC graduates in 1942 were going on active duty immediately rather than participating in a reserve summer camp.¹ Other changes in

¹The Daily, September 23, 1941, p. 6, January 15, 1942, p. 2.

1942 saw the Military Department move its annual graduation parade and inspection from the end of the school year up to the Veishea time period (Veishea is the all-college carnival and exhibition). Previously the cadets had participated in the Veishea events but had held their graduation and inspection parade separately. Colonel Odell and the College administration felt that in view of the present world situation the military graduation parade and demonstrations would be well received and more people would be able to gain some insights into the military training at Iowa State. The military parade of 1,500 cadets and the "Review Militaire" in which over 200 men of the Military Department demonstrated the many aspects of the military training were all well received."¹

During the fall of 1942 the cadet enrollment was 2,128, two hundred and forty-six of whom were in the advanced corps.² A new ROTC unit of the signal corps branch was added to the previously offered field artillery and engineer branches. However, the new signal corps unit was just started when it was announced in early 1943 that all of the advanced ROTC students would be called to active duty at the end of spring quarter.³

¹The Daily, January 23, 1942, p. 1, May 13, 1942, p. 1, May 14, 1942, p. 1.

²Iowa State College, Army ROTC Report of Enrollment, 1942.

³The Daily, August 4, 1942, p. 1, January 15, 1943.

The 1943 Iowa State military graduates were allowed to finish their senior year and then rather than being commissioned they went to Officer Candidate School (OCS). By this time the need for commissioned officers in the Army was so great that the advanced ROTC program was virtually dropped and all future officers in the Army went through OCS.

Throughout the war years the Iowa State Catalog carried a full listing of course descriptions for the field artillery, engineers, and signal corps. However, only the new modified war time program, sometimes called "branch immaterial," was taught in the ROTC training during 1943-46. This new branch immaterial program was one year long and consisted of three quarters' work of five hours per week in which the essential portions of the old two year basic program were compressed into one year's work. This one-year accelerated course was intended to prepare the students more adequately for active military service should they be called into the armed forces. Those students who had completed one year of the basic ROTC program were excused from the new branch immaterial; otherwise it was mandatory for all physically qualified male freshmen at Iowa State. All students were taught the same course material because there was no separation into different branches. Colonel Odell and his staff (which was reduced in size)

continued to be the instructors in the ROTC program.¹ The enrollment in ROTC dropped from 2,128 in the four year program in 1942 to 505 freshmen in 1943; 218 during 1944; and 280 in 1945.

The closing down of the advanced ROTC program and the different branches called for removal of the military horses from campus and marked the end of the Iowa State polo team, the Cossacks, and the military circus. These three special events never made their appearance again on the Iowa State campus. The military horses had served the Military Department in many ways, not the least of which was the favorable publicity from the many special events that were made possible by using the horses. Evidently there was considerable competition to be in the Cossacks. According to Jesse Thornton (who served from 1923 to 1943 as an enlisted man in the Iowa State Military Department) there was more competition to be in the Cossacks than there was to be on the College football team.² The military stables and military barracks (next to the stables) had been built by the College for the Military Department, and the stables and barracks were turned over to the Veterinary Department in the fall of 1943.³

¹The Daily, January 15, 1943, p. 1, September 25, 1943, p. 6; Iowa State College Catalog, 1944-45, p. 232.

²Interview with Jesse Thornton, Master Sergeant U.S. Army (Ret.) March 9, 1972.

³The Daily, August 13, 1943.

The elimination of the advanced course of ROTC at Iowa State was not the end of the ROTC program during the war years. The freshmen continued to take the branch immaterial and the rifle team still was functioning. The Iowa State ROTC unit continued to have its annual inspection, but rather than a team of inspection officers one man did the job. The College Catalog continued to explain that the ROTC program would be reinstated after the war.¹ The Military Department also kept records on its graduates. In 1942 there were 117 officers commissioned in the Army Reserve, 82 in 1943, and 113 in 1944. The officers commissioned during 1943 and 1944 had taken their advanced course training at Iowa State and were commissioned through the OCS program. The seniors who graduated from the Iowa State military training had to go through OCS training because the summer camp that they would normally have attended between their junior and senior year had been cancelled because of the war. In effect they were getting a three month OCS course to take the place of the summer camp and any other reserve camps they might have attended before going on active duty.

Some of the graduates of the 1943 class have said they were glad they had the opportunity to go through OCS training as they had much more confidence in their abilities to lead the

¹The Daily, April 29, 1944; Iowa State College Catalog 1945-46, p. 251.

troops into combat. The 1943 graduates pointed out that the ROTC cadets did much better in academics during OCS but were at somewhat of a disadvantage because they had not had their normally required summer camp or field training. Most of the other members of the OCS classes were enlisted men who had already had considerable experience in the field. Nevertheless, overall the ROTC graduates out-performed the other members of the OCS classes. The completion rate (meaning those who were commissioned) for ROTC graduates was from 75 to 85 per cent. Whereas, the other OCS graduates' (non ROTC) completion varied from 45 to 79 per cent.¹ Iowa State's ROTC graduates who attended the Fort Sill Oklahoma Officers Candidate School from July 8, 1943, to May 13, 1944, were definitely an exception to the previous quoted statistics on the completion rate of OCS. Iowa State actually had a 100 per cent completion rate since out of the 126 ROTC graduates who entered OCS, 125 received their commissions and the one Iowa State graduate who was not commissioned actually completed the school successfully but was physically disqualified for a commission. Dean H. V. Gaskell of the Division of Science gave three reasons the Iowa State men did so well: (1) the highly functional military training they received at Iowa State; (2) the excellent background of

¹Russell Stompler, "The Origin and Growth of the Reserve Officers Training Corps 1916-1950," (unpublished M.S. Thesis, University of Alabama, 1951), pp. 164-165; Interview with Robert Barnett, March 18, 1972.

the men in technical course work; (3) and the men who enter Iowa State are typically serious students with above average appetites for hard work.¹ The junior class of 1943 was also called to active duty and most attended army basic training and then were returned to Iowa State on August 28, 1943, to complete their college work and to attend OCS in 1944. One of the main reasons the juniors were returned to Iowa State is that in late 1943 the requirement for officers in the Army had been reduced somewhat and the OCS camps were already overflowing with the 1943 senior ROTC graduates.² While the junior class of 1943 was at Iowa State they were attached to the ROTC unit.

Iowa State College War Effort During World War II³

Earle Ross, the Iowa State College historian, titles chapter five "A Mobilized College" in his book The Land Grant

¹The Daily, October 19, 1944, p. 1; Iowa State University, Special Collections, World War II Records; Alumnus, July-August 1943, p. 7.

²The Daily, July 21, 1943, p. 1; Stompler, "The Origin and Growth of the Reserve Officers Training Corps 1916-1950," pp. 162-63.

³There is considerable information about the Iowa State effort during World War II. However, only brief mention will be made of this effort since it dealt with technical type training and the major thrust of this dissertation is aimed at the officer type military training. Several publications and documents about the Iowa State war effort are located in the four large folders of World War II Records in the Iowa State University Special Collections. The 1940 to 1947 Bomb, Alumnus, and The Daily devote an enormous amount of space to the Iowa State participation in World War II. The most significant publication dealing with the war effort is an eleven volume "War Training Program" compiled by Iowa State College in 1946.

Idea at Iowa State. This twelve page summary of the Iowa State war effort briefly explains the situation on the campus leading up to the war and devotes six pages to the military training programs. Ross explained that:

The College entered upon special war training programs as soon as contracts could be negotiated and the trainees brought to the campus. In June, 1942, a non-collegiate naval training program was organized for three groups of specialists-- electricians, diesel firemen, and cooks and bakers--to which was later added amphibious firemen. The school was housed in Friley Hall which was given the time schedule and appointments of a ship. The course for the electricians and cooks and bakers was sixteen weeks, that for the diesel trainees eight weeks, and for the amphibious firemen five weeks. By the closing of the program in December 1944, more than twelve thousand had been trained in various skills.¹

Ross goes on to explain that, the College also trained eighty-four young women for the Curtiss-Wright Airplane Corporation. Two other groups that were trained included twenty-two aircraft machinist specialists and 220 veterinary students. A large contingent of students were trained under the Army Specialized Training Program (ASTP) which lasted from September, 1943 to March, 1944. Navy aviators were trained under the V-5 program at the newly constructed Ames airport from January, 1943, until July, 1944. The Navy collegiate V-12 instruction, which was to produce Navy officers, started on July 1, 1943, with 800 cadets. The V-12 students followed the regular collegiate engineering

¹Ross, The Land Grant Idea at Iowa State, p. 213.

curriculum and were not under military discipline while in the classroom. The V-12 officer candidates were encouraged to participate in all forms of student activities. Two V-12 students John Potter (1943) and George Gallaher (1944) became president of the Iowa State student body, and it is doubtful if Iowa State could have had a football team or any other sport if it had not been for the V-12 students participation.¹

It suffices to say that Iowa State was an almost mobilized college during World War II as the number of military students on campus outnumbered the civilian students during 1943 and up to the fall of 1944 when the total enrollment finally shifted just slightly in favor of the regular students.² In the fall of 1944, 4,375 students were on campus and 2,332 were civilian. All of the military services were on the campus at one time or another to explain the many active duty programs available (other than those already offered on the campus). There were numerous special bond drives, tin drives, and scrap iron drives. One of the scrap iron drives at Iowa State even took the old twelve pounder cannon that General Geddes and his cadets had used in 1871. The cannon had been remounted by J. S. McDowell, an alumnus of the class of 1872, and was retained on campus as a relic, but the pressing needs for metal overcame the symbolic

¹Ibid., pp. 213-16; The Daily, November 18, 1943, p. 1, November 16, 1944, p. 1, June 30, 1943, p. 1.

²The Daily, June 11, 1943, September 28, 1944, p. 1.

importance of the cannon.

President Friley kept the faculty and students advised during the changing times and emphasized that Iowa State was proud to be able to serve the nation through its many programs of technical training. He explained that all the facilities of the College that the military services needed to use would be made available and that the College would make any adjustments necessary to accomodate the services.¹ The College met the war-time challenges in many ways: several of the faculty and students departed the campus for active service. In 1942 the Physical Education Department even designed and built an obstacle course to improve the physical fitness of the Iowa State students being drafted for military service; women students of the College knitted sweaters, took ambulance driving courses, made "defense stamp corsages", and organized school "defense dances."² The Daily kept the faculty well informed on the overall effort of the Allied forces and gave a blow by blow account of the war as it progressed. There were numerous articles about former students and faculty and how they were serving.

Throughout the war the Navy had the largest contingent of troops at Iowa State; the many pictures available in the Iowa State University, Special Collections Files testify to the fact

¹The Daily, April 18, 1942, p. 1, September 25, 1943, p. 3.

²The Daily, June 25, 1942, August 13, 1942.

that the College campus was almost a sea of blue or a sea of white depending upon which uniforms the sailors were wearing. The working relationship of the College with the Navy during World War II was much better than with the Army and the SATC program in World War I. The Navy also made a fairly smooth transition from the wartime V-12 program to the present day Navy ROTC (NROTC). The transition to a peacetime campus was given substantial thought on the national level starting as early as 1942 in the Association of Land Grant Colleges. The postwar discussions were carried on throughout the war and the member colleges were well informed on the different possibilities for ROTC training after the war.¹ The Daily in a October 13, 1942, editorial explained that some thinking ought to be done on what the future peacetime Army should be like and where it would obtain its officers.² The College also planned ahead for its postwar military and civilian programs. In January, 1943, the College announced that it would grant up to twelve hours credit for military service in an effort to get students to return to college after the war.³ The College also saw that there was going to be a cut back in military training programs in early April, 1944, when the Army transferred 166 students

¹Pollard, Military Training in the Land Grant Colleges and Universities, pp. 106-116.

²The Daily, October 13, 1942, p. 3.

³The Daily, January 5, 1943.

from campus and reduced the military staff to only Colonel Odell and two other officers to conduct the one year modified wartime ROTC program.¹ One month later the Navy announced that it would start reducing its training requirements with the V-5 class that would arrive in the latter part of the month and that the program would close in August, 1944. In July, 1944 it was announced that all the students in the programs of diesel, electricity, cookery and baking would be leaving by November. At the start of the new school year in the fall of 1944 President Friley predicted the end of all special Army and Navy training programs during the 1944-45 school year.²

Iowa State College was more than ready for the war to end when Japan agreed to surrender on August 14, 1945. The following day classes were dismissed, there was liberty for the V-12's, and a special convocation was held to honor the 212 Iowa State students who were known to have lost their lives during the war. In November, 1945, memorial services were held in the Gold Star Room of the Memorial Union in which Major General Rush B. Lincoln (who had retired in 1944) spoke on "Patriotism and Preparedness" and paid tribute to the 228 who were known to have died during the war.³

¹The Daily, April 8, 1944.

²The Daily, May 5, 1944, July 19, 1944, September 23, 1944, p. 1.

³The Daily, August 15, 1945, p. 1, November 8, 1945, November 10, 1945.

In the fall of 1945 Captain R. B. Levin arrived and assumed command of the Navy military training program with the additional title of Professor of Naval Science (PNS). The Captain (which is equivalent rank to a Colonel in the Army) had several announcements in The Daily about the final disposition of the V-5 and V-12 students and the initiation of the first Navy ROTC (NROTC) at Iowa State.¹ In April, 1946, Colonel Odell announced that the Army advanced ROTC program was to be reactivated beginning fall quarter, 1946. The same month it was announced that Colonel Odell would retire effective August 31, 1946, and would start his four month terminal leave immediately. The other members of Colonel Odell's staff retired or were reassigned and a complete new unit reinstated the postwar Army ROTC (AROTC).²

ROTC and Its Impact During World War II on the National Scene

The early part of the war was when ROTC graduates probably made their most important impact. General George C. Marshall, Chief of Staff of the U. S. Army has been quoted in several sources on the importance of the ROTC graduate in the

¹Alumnus, November, 1945, pp. 59-60; The Daily, January 4, 1946, p. 1, January 30, 1946, p. 1, March 30, 1946, p. 1, June 8, 1946.

²The Daily, April 5, 1946, p. 1, April 11, 1946, p. 1, April 13, 1946.

early part of the war:

Just what we would have done in the first phases of our mobilization and training without the ROTC graduate I do not know. I do know that our plans would have had to be greatly curtailed and the cessation of hostilities on the European front would have been delayed accordingly.¹

The impact that ROTC graduates had in the later part of the War could not be determined but it must have been important.

According to The Army Almanac:

Approximately 100,000 ROTC graduates served in grades from second lieutenant to brigadier general during World War II. They permeated the entire army, a sample analysis of the officer personnel of five combat divisions showed that 52 per cent of the lieutenant colonels, 83 per cent of the majors, and 70 per cent of the captains were Reserve officers. Of these, a large majority were ROTC graduates.²

The advanced ROTC program nationwide went out of operation in 1943, and the ROTC class members of 1943 and 1944 gained their commissions through the Officer Candidate Schools.

Impact of ROTC and the Military Training Programs at Iowa State

ROTC training continued at Iowa State through the war years of 1941 to 1945 except no advanced course (junior and senior years) was taught from the fall of 1943 to the end of the 1945-46 school year. The freshman and sophomore course was compressed into a one year modified wartime program. This one

¹Eddy, Colleges for Our Land and Time, p. 224.

²The Army Almanac, p. 326.

year program was an accelerated course that provided the necessary training to prepare students more adequately for active military service should they be called into the armed forces. The cadets who were in the advanced course were called to active duty and sent to Officer Candidate Schools. One hundred per cent of Iowa State's advanced cadets completed the Fort Sill Officers Candidate School from 1943 to 1944. There were 312 officers commissioned from 1942 to 1944 through the ROTC program at Iowa State. When the advanced course was dropped and the other special military training programs virtually took over the College, the ROTC Department definitely took a back seat to most of these special military programs.

The managing editor of The Daily (1945) summarized very effectively the impact of the V-12 Navy military training program on the Iowa State campus:

Certainly the presence of these men on the campus has increased student's awareness of the war. But at the same time it has made possible a far more normal functioning of the school. Without these men the Division of Engineering would have only a handful of students, the social program would be practically at a standstill. The success of the cyclone athletic teams during the past year may be attributed almost entirely to the presence of the V-12 players. The last two student body presidents have been members of the unit...Whether they wear gold [officers] or bell-bottomed trousers [enlisted] navy men who have been stationed at Iowa State have won the respect of the faculty and students alike.¹

¹The Daily, February 24, 1945, p. 3.

It is not known how many of the graduates from ROTC at Iowa State served during the war but it must have been a sizeable number of the almost 1,500 who had graduated from Iowa State since 1922. A quick look at the class notes in the Alumnus during and immediately before World War II reveals that some Iowa State graduates from almost every school year of the "between-the-war" years served as officers. In addition, there were some officers who served during World War II, who had completed their officer training under General Lincoln prior to and during World War I. Two most notable examples were General Rush B. Lincoln and Colonel Harold Pride. It appears that the graduates of Iowa State accepted the call to arms and served their country well during World War II. Once again the College accepted the fact that the country was at war and devoted the school's major efforts, facilities, and programs toward meeting the requirements of mobilization for fighting another world war. The College furnished hundreds of its ROTC program graduates who served as officers. It also provided 12,000 enlisted men who had completed the various technical training programs.

On November 15, 1945, President Charles E. Friley of Iowa State gave a speech entitled, "Higher Education and Universal Military Training" at the meeting of the Association of Governing Boards of State Institutions in which he paid tribute to the World War II contributions of the ROTC graduates and the

other wartime efforts of the nation's colleges and universities. President Friley also spoke on the pros and cons relative to Universal Military Training and urged that an exhaustive study be made before accepting or rejecting such training.¹ Since Iowa State had a college president who was so well informed on the matters of military training in higher education, it seemed only appropriate that the postwar ROTC program expanded from the one Army ROTC unit before World War II until the College offered ROTC training in all three of the armed services.

¹Charles E. Friley, "Higher Education and Universal Military Training" (unpublished, Ames, Iowa, Iowa State University, 1945) pp. 1-6.

CHAPTER VI: ARMY ROTC AT IOWA STATE 1946-59

Beginning with the school year 1946-47 at Iowa State the Army ROTC program was reinstated on a full scale basis, which included the normal two year required basic course and the optional advanced course. The advanced course was still branch oriented and Iowa State offered four branches. The same three branches that were offered before the war: engineers, artillery, signal, were now joined by a new branch of "air". This air unit was the forerunner to the formation of a separate Air Force ROTC unit which was gradually developed over a four year period. The 1946-47 school year also saw a new Naval ROTC unit activated at Iowa State.¹ Consequently when the Air Force unit became a separate and equal ROTC program, Iowa State was one of the only thirty schools that offered ROTC in all three of the armed forces.²

After a brief look at the background of the organization and implementation of the ROTC programs following World War II, one chapter will be devoted to each of the Army, Navy, and Air Force ROTC units from 1946-59. The chronological treatment of each of the ROTC programs at Iowa State will be based on the

¹Iowa State College Catalog, 1947-48, p. 245.

²Lyons and Masland, Education and Military Leadership, p. 96.

different Military Department head's and their length of tenure at the College.

The National Scene--ROTC and the Postwar Years

The postwar years which saw the rapid expansion of educational facilities to absorb the enthusiastic response of those entitled to the GI Bill also saw a resumption and rapid rise of the ROTC programs. During 1944 and 1945 national planning conferences were held to determine the future of ROTC. These planning conferences were joint sessions with representatives of the Army, Army Air Force and Navy. All of the services concluded that the service academies could not provide the required number of officers for the armed forces. The Army planned for a large citizen reserve program whereas the Navy desired to produce officers for the Regular or active duty Navy. The Army pursued the idea of a combination ROTC-Universal Military Training (UMT). The original UMT program was to require all male citizens to undergo a year of military training (not service) upon reaching the age of eighteen or after completing high school.¹ The UMT would take the place of the old first two years of the required basic ROTC program and only the advanced course would be taught on campus. The Navy, on the other hand, elected to have a small, four-year program

¹Maurice Matloff, American Military History, p. 529.

(completely independent of the UMT) that would produce Regular officers who would serve on active duty immediately and reserve officers who would be assigned to the naval reserve.

The Navy used the wartime legislation to convert the V-12 programs to Naval ROTC and in 1946 received legislation to implement the new Regular program under the "Holloway Plan." Consequently the Navy was able to make a smooth transition from a wartime V-12 program and duly impressed many college administrators. The Army, however, was at a distinct disadvantage because the Universal Military Training legislation was not enacted by Congress. Since the Army had no firm alternative plan from the original UMT program, an interim ROTC program was initiated. This interim program was almost identical to the prewar Army ROTC. About the only difference was that veterans who had served over one year of active duty could have the basic program waived. According to several sources, the reaction by the participating colleges and universities were much more favorable to the postwar plans of the Navy than of the Army.¹ During the first few years after the war the Army devoted quite a bit of effort to gain legislation that would

¹Lyons and Masland, Education and Military Leadership, pp. 64-81, Eddy, Colleges for Our Land and Time, pp. 225-226, Pollard, Military Training in Land Grant Colleges and Universities, pp. 113-115; Monro MacCloskey, Reserve Officers Training Corps: Campus Pathways to Service Commissions (New York: Richards Rosen Press, Inc., 1965), pp. 39-40.

offer some of the benefits of the Holloway Plan which actually subsidized the education of the Navy ROTC candidate. The Army's requirement for a much larger number of ROTC graduates to man its reserve forces and severe budget limitations prevented getting legislation similar to the Holloway Plan. It was almost twenty years later before a ROTC Revitalization Act was passed and the ROTC programs were treated on an equal basis.

Colonel Charles M. Busbee 1946-49

Colonel Busbee, a 1915 West Point graduate, had held the rank of Brigadier General during World War II while he was the commander of the 102nd Division Artillery. Consequently, reverting to Colonel and being a Professor of Military Science and Tactics was quite a change for him. The ex-general set about the task of reactivating the Army ROTC program at Iowa State in the spring of 1946. Colonel Busbee relieved Colonel Odell and was in command when the annual spring inspection took place with only 120 cadets who were in the one year modified basic course. It took Colonel Busbee and his staff two full years to get the Army ROTC (AROTC) program functioning in its entirety. The first full year in 1946-47 saw the AROTC program with 453 freshmen and 58 juniors enrolled as of October 1, 1946.¹

¹Iowa State University, Army ROTC Report of Enrollment 1946; Interview with Jesse Thornton, March 16, 1972, interview with Rolland Knight, March 18, 1972.

There were no sophomores or seniors during the first year since only the freshman course was taught for the new entering freshman and the sophomore course was not implemented until 1947-48. The fifty-eight juniors were almost all veterans who were allowed to substitute their previous military service for the basic program. It is interesting to note that none of the Iowa State students who had taken the one year modified course during the war (which was really two years of the basic program compressed into one) were accepted into the advanced course. Technically they were supposed to have completed the equivalent of the basic course, but Army Regulations stated that no part of the basic course could be compressed. Therefore, the students who took the modified course during the war still had to complete one more full year of basic AROTC if they wanted to qualify for the advanced course.¹

The College Catalog points out that:

The four-year course is conducted by Regular Army Officers and selected officers of the Officers Reserve Corps, with equipment furnished by the United States Government, and consist of a two-year elementary course providing training in military subjects common to all branches of the army, and two-year advanced course providing training in the duties of a junior officer...[the] new program of instruction embraces the latest tactics and technique of our military science.²

¹Interview with Jesse Thornton, March 16, 1972.

²Iowa State College Catalog, 1947-48, p. 245.

Consequently, everyone in the basic program took the same course and the branch or specialized courses were taught in the advanced course. All of the equipment used by the Army ROTC unit was mechanized since the horse drawn artillery was practically obsolete. However, this did not keep Colonel Busbee from requesting some horses to be assigned to Iowa State since he realized how much the horses had added to the unit before the war. The Colonel also wrote a letter requesting that women be allowed to enroll in Army ROTC. According to Master Sergeant Jesse Thornton, U. S. Army (Ret.) the Colonel was turned down on both requests.¹

If one compared the new postwar AROTC curriculum (Appendix I) with the 1934-35 prewar curriculum (Appendix G) one can see they are very similar. In the postwar courses there appears to be a little more time devoted to the latest tactics learned during World War II. The most important changes in the AROTC course offering was the reinstatement of the signal corps (that operated for only one year during the war), the new air unit offering in 1946, and the addition of the veterinary course in 1948. The Army ROTC unit remained branch-oriented (field artillery, engineer and signal) in its course offerings up until the 1960's even though most colleges went to a general military science (or branch immaterial) curriculum in the 1950's.

¹Interview with Jesse Thornton, March 16, 1972.

The air unit remained a part of the Army ROTC program until 1949 when it became a separate and equal Air Force ROTC (AFROTC) program. The veterinary program continued from 1948 until 1955 when the veterinarians were allowed to enter the Army through another program. It is interesting to note that all the heads of the veterinary ROTC units at Iowa State (even those from 1921-1934) were graduates of the Iowa State veterinary program.

Colonel Busbee finished his first year of AROTC with a staff of eight officers, twelve enlisted men, and an enrollment of 400 students. Plans were made for the 1947-48 school year when the enrollment was predicted to be 1,400.¹ Also during the first full year of AROTC after the war, the Scabbard and Blade Society was reactivated; it had been deactivated when the advanced cadets were called to active duty during 1943. Scabbard and Blade revived the military ball which had been dropped during the war. The ball was attended by most of the AROTC cadets and several faculty members, including President Friley, Dean Helser, Dean Gaskell and the military staff. The Military Science Department (or Army ROTC Department) got back into the swing of things by having a large display of Army weapons during Veishea and having an "Army Week". It was also announced that the annual required AROTC summer camp was to be

¹The Daily, June 17, 1947.

started during the summer of 1947.¹

Colonel Busbee and his staff did get the AROTC program reinstated and somewhat stabilized on the Iowa State campus. The Military Science Department became just one of several different departments at Iowa State and tended to be involved with its own special problems and activities. These were the years during which the College experienced a steadily mounting enrollment which created emergencies in housing and taxed the instructional facilities to the limit. Other than a slight altering of some of the armory space to provide more classrooms in the fall of 1947, the problems of the Army ROTC Department seemed minimal, especially when compared to the problems Lt. Colonel Boles and Colonel Shaffer faced immediately after World War I. It appears that the military had good cooperation from the College and all reasonable requests were honored. Just scanning the several publications on the campus during the years immediately after the war leaves one with the impression that the Military Department's would never again have much of an impact on the College as a whole. Probably the most significant result was that the ROTC basic course was required for all physically qualified males. This basic course was the one common denominator for all freshmen males.

¹The Daily, January 10, 1947, p. 1, April 5, 1947, p. 2, January 17, 1947, p. 7, January 30, 1947, p. 3, April 3, 1947, p. 2.

The last two years of Colonel Busbee's three year tour saw some more reviving of military organizations and events. The armory interior was altered slightly to provide more classrooms for the well over 1,000 cadets expected in the AROTC during 1947. The classrooms were added at the time that other changes in the armory were made so the College basketball team could play its games in the armory. Thus the Military Science Department got a chance to show its willingness to cooperate and share its facilities for other campus functions. Because of the increased enrollment the Military Science Department arranged to have some Iowa State veteran students who were in the Officers Reserves Corps voluntarily called to active duty for 90 day periods of time to serve as instructors in the Military Science Department. Thomas E. Hannum, a 1941 Iowa State graduate, who was commissioned as a reserve officer and served during World War II was back in Ames and more than glad to serve for 90 days as an ROTC instructor. During the same time Hannum taught Army ROTC and also carried five graduate credit hours. Hannum explained that the military was well accepted on campus and there were few complainers about having to take ROTC. In fact there were so many veterans on campus that the students wouldn't dare complain for fear that some of the veterans might give them a few words of wisdom on how it was much easier to be in ROTC than to serve in the war.¹

¹Interview with Thomas E. Hannum, March 18, 1972.

Several events did attract some attention on the campus. It seems that Army ROTC cadets received a different style or kind of uniform almost every year from 1946 to 1950. The engineers received a 16-1/2 ton bulldozer and a truck mounted air compressor unit while the artillery branch received a 90mm artillery weapon; the veterinary unit was reestablished in 1948; Pershing Rifles a national honorary named after General John J. Pershing made its first appearance at Iowa State when a new unit was formed on February 14, 1948. The Society of American Military Engineer (SAME) and the pontoniers were re-activated in 1948 and later combined into one unit in 1950. The cadets staged a mock battle during the 1949 Veishea. This mock battle was similar to General Lincoln's sham battles that attracted attention to the earlier Military Department and demonstrated some of the latest Army military tactics. One cadet accompanied by an active duty sergeant served as a flying forward observor in a light aircraft and circled the mock battle area relaying information to the artillery fire control officer. The Military Science Department promoted an Army Day and published a large ad in The Daily which was a message by General Omar Bradley on the importance of ROTC. President Friley did the honors of presenting the minor sport letters to the rifle team and the Deans were always ready to make

presentations of awards during annual inspections and spring review.¹ However, the Military Science Department, even with its many activities and special events had to accept that it was just one of many departments in the College and the Department would carry on most of its activities within the confines of the armory and the nearby drill field with little attention from those not associated with the Army ROTC.

Several studies about Air Force ROTC right after World War II point out that the Army Air Corps officers were determined in their efforts to get out from under the wing of the Army and to become a separate service ASAP (As Soon As Possible). When the National Defense Act of 1947 was passed by Congress and signed into law the Air Corps personnel redoubled their efforts to pull away from the Army. However, it took a few years before complete separation of the Army and Air Force ROTC program occurred. At Iowa State a "petty" incident demonstrates the Air Corp's desire to be separate and the Army's determination to show who was boss at least until the final break was made. The Army ROTC offices were on the east side of the armory and the Air Corps offices were located on the west side. It seems

¹The Daily, July 22, 1947, p. 1, August 16, 1947, p. 1, September 25, 1947, p. 1, October 31, 1947, p. 1, November 4, 1947, p. 1, November 26, 1947, p. 1, December 2, 1947, p. 1, March 13, 1948, p. 2, February 17, 1948, p. 1, May 10, 1949, p. 2, May 19, 1948, p. 1, May 20, 1948, p. 1; Interview with Jesse Thornton, March 9, 1972, interview with Rolland Knight, March 18, 1972.

that the Army staff had a coffee room on the east side of the armory and the Air Corps personnel opened up their own coffee room on the other side of the building. This evidently ruffled the PMS&T and he subsequently started conducting daily staff meetings at 9:00 am in the Army coffee room which was required attendance for the Air Corps personnel. It suffices to say that the Air Corps personnel attended but they also continued to maintain their own coffee lounge.¹ Colonel Busbee was described by several persons as a little on the flamboyant side. Yet it was acknowledged that he did much to continue the esprit de corps and traditions of the prewar days. However, the major disadvantage was that Colonel Busbee didn't have the artillery horses to help promote the Military Science Department.

Colonel G. B. McConnell 1949-1954

Colonel McConnell reported to Iowa State in late summer of 1949 to be the second PMS&T after World War II. This was Colonel McConnell's second tour in Iowa since he served from 1936-1940 as an instructor for the Army Reserve in Davenport, Iowa. The Colonel was a 1924 graduate of West Point and had served continuously on active duty. His five year tenure as PMS&T was followed by another sixteen years of association with Iowa State since he was employed in engineering graphics from

¹Interview with Jesse Thornton, March 9, 1972.

1956 until 1972. The Colonel retired from active service in 1954 upon completing his ROTC assignment and remained in Ames, Iowa, for the two year interim until his employment by the College in 1956. Colonel McConnell's five year duty at Iowa State covered the time period that saw the final separation of the Army and the Air Force ROTC and the period of the Korean War. Colonel McConnell also saw to it that the Army ROTC program remained branch oriented even when many other schools went to a general military science curriculum.

Colonel McConnell described the Air Force ROTC and the Army ROTC association as an "unhappy marriage" and that each was ready to terminate their association as rapidly as possible. The Army ROTC continued to operate a joint bookstore where the Army and Air Force cadets purchased their textbooks for the ROTC course. Colonel McConnell mentioned on more than one occasion how the Army and the Air Force cooperated successfully on joint ventures such as the bookstore and also in areas of supply at least until the Air Force supply channels were worked out. The Military Science Department continued to give up some of its space in the armory as the Air Force (or Air Science Department) expanded.¹

¹Interview with G. B. McConnell, Colonel, U. S. Army (Ret.), March 17, 1972.

The Korean War--The National Scene

The sudden attack on the Republic of Korea on Sunday, June 25, 1950, brought renewed interest in ROTC. The passage of the Universal Military Training and Service Act of 1951 was the first time in the history of our country we had compulsory military training during peacetime. The Act made every able-bodied young man liable for eight years of military service, two of which would be served on active duty. At first ROTC students received special deferment privileges but, these privileges were changed when the need for more active duty personnel prevailed. At the end of the sophomore year ROTC cadets had to agree to serve on extended active duty for at least two years after graduating and being commissioned. Those who did not sign the agreement were immediately dropped from the ROTC programs and were liable to be drafted as enlisted men. Therefore, several young men (including this writer) were highly motivated towards one of the advanced ROTC programs. The ROTC candidate takes two years to be available once he enters the advanced program. The results of the expanded Army ROTC program became available in 1952. Large numbers of second lieutenants were also available in 1955 and 1956 long after it was evident that Korea was not going to expand into World War III and the Army (like the Air Force) had very few active duty position vacancies for the many new officers. It

should also be noted that it takes two years to slow down or reduce the number of officers commissioned through an ROTC program. Consequently, the Army came up with a new six-month active duty program and seven and one-half years in the reserve.¹ This short tour of active duty helped alleviate the over-production of officers in 1954 and 1955.

The Korean War and the Iowa State Campus

Iowa State College, like most of the colleges, was not ready for the Korean War. Ross described the situation:

The Korean conflict with the renewal of mobilization and the threat of general war was not only unsettling but constructively sobering. Henry A. Wallace's observation, in 1948, that Iowa State College students were not aware of what was going on in world gave perhaps an added spur to efforts already being undertaken to make the campus community more conversant with national and world affairs.²

The most immediate impact of the Korean War for the Army ROTC at Iowa State was an increased enrollment in spite of the overall college male enrollment drop of almost 400 persons. The freshman and sophomore classes increased more than fifty in each class but the most significant increase was in the numbers electing to go into the voluntary advanced course. Whereas

¹Monro MacClosky, Reserve Officers Training Corps: Campus Pathways to Service Commissions, pp. 41-42.

²Ross, The Land Grant Idea at Iowa State College, pp. 245-246.

only an average of seventy cadets had entered the junior year of Army ROTC from 1946 through 1949, a total of 173 entered in the fall of 1950. Iowa State commissioned the first group of Army second lieutenants from the postwar ROTC program in 1948. The first class of 44 added to the three succeeding years produced a grand total of 166 while 168 were commissioned in 1952, the first year of graduation from the Korean War class. The average number of Army ROTC cadets commissioned at Iowa State during the Korean conflict was 158 per year.¹ At Iowa State the Korean police action put the Military Department back into the spotlight and there was a notable increase in the release of cadet promotions in The Daily.² There had been few publication of cadet promotions in the school paper in the years immediately after World War II.

The Daily started keeping the Iowa State campus more informed on the Korean conflict and the early setbacks of the United States Forces. Since the United States did not have a large enough armed forces "in being" to fight the war, a quick call was put out for the reserves. The Daily articles told about some of the reserve personnel on the Iowa State campus being called to active duty. A typical Daily article in early 1951 explained that the College was losing three professors

¹Army ROTC Report of Enrollment, 1946-1956. The entire enrollment and commissioning data for the Iowa State Army ROTC unit from 1942-1970 is given in Appendix J.

²The Daily, October 28, 1950, p. 3.

and a program manager of WOI as a part of the 150,000 reservists called up for active duty with the Air Force.¹ Two of these officers, Professor (Lt. Colonel) Archie Higdon and Professor (Major) Jean Hempstead, remained on active duty and completed the required number of years of service for normal retirement. Professor Higdon retired as a Brigadier General and Professor Hempstead retired as a Lt. Colonel.

During the last two years of Colonel McConnell's tour, the U. S. Army developed a plan to convert the AROTC branch curriculum to a more general type. This new curriculum, called "branch general," was started on an experimental basis in the 1952-53 school year at fifty schools. The experiment apparently was successful because all colleges and universities sponsoring senior ROTC units were invited the following year to make the change to branch general, if they desired. Several units did make the change to the branch general curriculum.

The branch general contained most of the elements of the former infantry branch curriculum which had been updated with the latest infantry tactics. Two new additions to the branch general were the "American Military History" and "The Role of the Army in World Affairs."² Colonel McConnell did not desire

¹The Daily, January 19, 1951, p. 1, April 25, 1951, p. 3.

²Lyons and Masland, Education and Military Leadership, pp. 180-181.

to change to the branch general because he felt the Iowa State graduates could profit more from the technical training they received in engineering and artillery especially if they were utilized in these technical fields. The Colonel also argued that if Iowa State remained branch material the graduates would have greater assurance of being assigned to the branch in which they were trained. Colonel McConnell was proud of the many activities that the Army ROTC cadets participated in during his five year tour at Iowa State. The Pershing Rifles honorary fraternity became quite active by participating and conducting competitive drill meets. However, the Colonel was the proudest of his 1953 rifle team since they won first place in the Army ROTC division of the national intercollegiate meet and brought home the William Randolph Hearst Trophy.¹ Colonel McConnell's five year tour saw the Army ROTC unit become more businesslike and respond to the needs of the campus. The Colonel welcomed the opportunity to cooperate and open the armory to many college functions.

Colonel Wayne Hardman 1954-57

Colonel Hardman replaced Colonel McConnell in 1954 and became the third PMS&T at Iowa State since World War II. Colonel Hardman was the first Iowa State graduate to be

¹Interview with G. B. McConnell, March 17, 1972; The Daily, June 5, 1953, p. 6.

assigned as the PMS&T at Iowa State. The Colonel was a 1932 Iowa State graduate with a B.S. in Electrical Engineering and was commissioned a second lieutenant in the field artillery reserve. He was called to active duty in 1933 and served with the CCC (Civilian Conservation Corps) and attained the rank of captain. In 1940 he was transferred to duty with the Army. During World War II he commanded the 276th armored field artillery battalion and took part in five campaigns. He later took command of the 182nd field artillery group. Colonel Hardman attended Command and General Staff College in 1947. He was stationed in Japan when the Korean conflict broke out and served with the Eighth Army in Korea. In 1951 he returned to Fort Bragg, North Carolina and in July, 1954, reported to Iowa State.¹ Colonel Hardman still holds the distinction of being the only Iowa State graduate to serve as the PMS&T at Iowa State.

During the Colonel's three year tour (the shortest of all postwar PMS&T's), the Military Science Department was kept under the fairly tight rein of the Colonel. Iowa State remained branch material with the artillery, engineer, and signal remaining after the veterinary unit was terminated in 1955. Colonel Hardman continued to resist the branch general

¹Iowa State University, Special Collections, Military Science Folder, Personnel File.

curriculum even though the new "American Military History" course (from the branch general) was introduced during the freshman year.¹ The size of the Army ROTC cadet corps reached its postwar high of over 1,500 which would not be surpassed until 1961 (the last year of compulsory basic ROTC). The military balls continued to be all-college affairs but with such a large cadet population it was mainly attended by ROTC cadets. Occasionally a high ranking officer attended the military ball. This was the case when General Philip F. Linderman, Chief of Army Reserve and ROTC Affairs, attended the 1956 ball.²

One of the Colonel Hardman's assistants, a Lt. Colonel Harold A. Dye attracted quite a bit of attention at Iowa State. Lt. Colonel Dye had served with the U. S. Army at the Panmunjom Armistice talks during the Korean conflict. Dye was faculty advisor to the varsity "I" club, participated in many campus activities, spoke at several functions, and in general was well liked by the Army ROTC cadets. Lt. Colonel Dye was tapped as member of the Cardinal Key, the Iowa State Men's leadership honorary, and is the only military officer ever honored by Cardinal Key. The September 9, 1956, issue of The Daily went so far as to say the Lt. Colonel "had become one of the most

¹Iowa State College Catalog, 1957-59, p. 206.

²The Daily, February 17, 1956, p. 1, February 22, 1956, p. 1, February 25, 1956, p. 1.

widely known faculty members on campus."¹

Colonel Henry W. Ebel 1957-1962

Colonel Henry Ebel, the fourth postwar PMS&T at Iowa State arrived in 1957 after serving a tour of duty with MAAG (Military Assistance Advisory Group) Vietnam and headed the Military Science Department into the 1960's. Colonel Ebel's five year tenure was in direct contrast to the previous PMS&T since he (Colonel Ebel) allowed his subordinates an almost free rein in the conducting of their duties. According to two persons who worked for Colonel Ebel, this new freedom was well received and each branch of the Army ROTC concentrated their efforts on the education program and the raising of the cadets esprit de corps. The Army ROTC at Iowa State continued to teach the branch material curriculum even though 90 percent of all the senior ROTC units had switched to the branch general.²

During the second year of Colonel Ebel's tour (1958) the Military Science Department offered its initial Flight Instruction Program (FIP). This new class consisted of five

¹The Daily, March 24, 1956, p. 5, April 19, 1958, p. 1, September 9, 1958, p. 1; Interview with Harold Ellis, Lt. Colonel, U. S. Army (Ret.), March 17, 1972, interview with Rolland Knight, March 18, 1972.

²Interview with Harold Ellis, March 17, 1972. Interview with Jesse Thornton on March 9, 1972; Edward J. McGraw, "A Study of the Compulsary and Voluntary Training of Reserve Officers for the Army at University of California, Los Angeles, 1955-1965," p. 33.

seniors who had completed the required ground school and then took 36.5 hours of dual and solo flying at the Ames airport.¹ The purpose of the flight training was to motivate persons to enter the Army flight training and also to serve as a screening device to determine if the cadet had the capability to become an Army pilot.

The 1958 school year included a special visitor at the military ball in the person of Governor Herschel Loveless. The Governor of Iowa had been asked to pick the military ball queen from the pictures of the three candidates that were sent to him. Evidently the Governor decided to come and make the selection in person and then to crown the young lady. Certain portions of the military affair were televised over the College TV station.²

Colonel Ebel's tenure saw the first concerted effort during the postwar era to make basic ROTC voluntary at Iowa State. The Daily had several articles during the fall of 1958 and early 1959 that quoted polls taken at other colleges in which about 70 percent of the men were against compulsory basic ROTC. Some of the anti-compulsory ROTC results of the 1920's and 30's were also reported. It appeared that the Cardinal Guild was determined to take action on a bill to make military

¹The Daily, March 24, 1959, p. 4.

²The Daily, April 10, 1958, p. 6.

elective. However, The Daily felt this would be a little drastic and recommended that the Cardinal Guild reconsider the action on its proposed bill.¹ The Cardinal Guild, The Daily, and the faculty did carry on a dialogue that lasted into the 1960's and resulted in the ROTC department going to a voluntary basic program in 1962.

The postwar years 1946-1959 saw the Army ROTC program reinstated with a course content similar to its prewar curriculum. Four PMS&T's served during this time period. It took two years to get the Army ROTC program fully operational and somewhat stabilized. The Korean conflict brought renewed interest in ROTC and an increase in enrollment even though the total College male population was reduced. After the Korean police action the Army ROTC program continued to produce well over 100 Army second lieutenants each year. The Military Science Department was content to be just one of the many different departments in the rapidly expanding College. Therefore, the Military Science Department was never quite able to make as much of an impact on the college as it had in the prewar days. This lack of impact could be attributed to the size of the college, the importance the college placed on meeting the immediate educational needs of returning veterans (few of which

¹The Daily, September 30, 1958, p. 1, October 4, 1958, p. 2, October 8, 1958, p. 4, January 15, 1959.

took advanced ROTC), the changing values of society, and the proliferation of departments. The conclusion that the Army ROTC or Military Science Department had very little overall impact on the College is not intended as a reflection on the capabilities or the leadership of the Military Science Department but a fact that in the post World War II era at Iowa State, no one department had a significant impact on the College as a whole. Ross explained that the typical attitude of the faculty was that each was interested in his own special field and went his own particular way without getting concerned about the other areas or problems of the College in general.¹ The Military Science Department continued to function successfully within the College to such a degree that no one questioned whether military science and tactics should be offered but only whether it should be voluntary or compulsory.

¹Ross, The Land Grant Idea at Iowa State College, p. 243.

CHAPTER VII: NAVY ROTC AT IOWA STATE 1946-1959

The forming of the Naval ROTC (NROTC) in 1946 was not the first time Iowa State had been associated with the U.S. Navy. The College had a small naval training program during World War I in which 136 men were trained. The October, 1934, Green Gander (the College humor magazine) had made a comment recommending Navy ROTC be formed at Iowa State so the midshipmen could sail their ships on Lake Laverne.¹ This comment in the Gander was brought about by the discussion in Congress for more funds to establish some new NROTC units. The readers of the Gander probably did not really think navy ships would ever be sailed on the College lake. However, fifteen years later the "Sextant" the Naval ROTC honorary would in fact sail their ships on Lake Laverne as a part of their initiation procedure. As noted in chapter six of this thesis, the College had many dealings with the Navy during World War II. There are several pictures in the University archives which reveal that World War II navy trainees did a little sailing (for fun) on Lake Laverne. The present day NROTC at Iowa State dates back to the V-12 program and the naval training school in 1942. The last of

¹Green Gander, October, 1934, p. 17.

these programs was terminated in 1946.¹ "In August, 1945, authorization for establishment of an NROTC unit at Iowa State was granted when the Secretary of the Navy directed the installation of ten additional NROTC units, making a total of 52 NROTC units in operation."²

Naval ROTC--The National Scene

The first post World War I Naval Reserve Training Unit for officers was commissioned at St. John's College, Annapolis, Maryland, in September, 1924. This unit may quite appropriately be called the father of the present day Naval ROTC units. This "volunteer Naval Reserve Unit" at St. John's College, from the viewpoint of the Navy Department, was to show congressmen that the training of naval reserve officers was practical and inexpensive and most importantly, that college Naval Reserve units could provide a source of trained officers to supplement the Naval Reserve Forces. This "pilot" program at St. John's was fraught with many difficulties and was finally dropped in 1926 but did serve as the proving ground for the later NROTC

¹For a brief history of the Navy V-12 program and the formation of NROTC at Iowa State College see the "Iowa State College Schedule and General Information for NROTC, Navy--Faculty Conference," August 8-9, 1945, Iowa State University, Special Collections.

²"History NROTC Unit Iowa State University," (unpublished, NROTC Department, Ames, Iowa, January 1, 1966), p. 1.

programs. The lessons learned at St. John's College were applied to the NROTC program when introduced at other schools in 1926.¹

The U.S. Naval Reserve Corps was authorized in 1916 but no provisions had been made for an organized training function as was the case with the Army. It was not until nine years later (1925) that Naval ROTC was authorized under Public Law 611. "An Act providing for sundry matters affecting the naval service, and for other purposes," passed Congress March 4, 1925. Section 22 of the Law dealt with the Contract NROTC program.² Under the authority of this Act the Navy Department established NROTC units in 1926 at six universities. Two more units were added in 1938, one in 1939, ten in 1940, and eight in 1941.³ Consequently, there were 27 NROTC units in operation by the time of Pearl Harbor.

During the World War II years, the Navy Department recognized the necessity of establishing a program for the training of officers to meet the needs of an expanded U.S. Navy.

¹Gerald E. Wheeler, "Origins of the Naval Reserve Officers Training Corps," Military Affairs, XX (Spring, 1956), pp. 170-174.

²U.S. Congress, Statutes at Large, Vol. 43, Part 1, 68th Congress, 2nd Session Chapter 536, pp. 1269-1279.

³David Maginnis, "The Administration of the Contract Naval Reserve Officers Training Program at the University of Utah" (unpublished M.S. Thesis, University of Utah, August, 1952), pp. 3-4.

Therefore, the Navy Department set up the Holloway Board to study and recommend the form, system and method of education of naval officers. The Board consisted of Rear Admiral James L. Holloway, Jr., two college presidents, six navy captains and two navy commanders. The final Holloway Plan actually had three parts: one dealt with the undergraduate phase of officer procurement which included the Naval Academy, NROTC and the Naval Aviation College Program; another involved the education and training of the officers who had entered the navy and transferred into the Regular Navy but had not completed a college degree; and the third part dealt with the graduate education of permanent commissioned officers. The Holloway Plan was approved by the Secretary of the Navy on October 30, 1945. Nine and one-half months later the Holloway Plan had passed both Houses of Congress unanimously and was signed by the President and became law on August 13, 1946.¹

The main recommendation of the Holloway Plan with regard to the NROTC program was a subsidized education for NROTC midshipmen for the Regular Navy and Marine Corps. In effect, the Holloway Plan authorized the Navy to have two NROTC programs, the prewar program, known as the "Contract" plan, and the new Holloway program, known as the "Regular" plan. The Regular and

¹J. L. Holloway, Jr., "The Holloway Plan--A Summary View and Commentary," Reprint, United States Naval Institute Proceedings, November, 1947, pp. 1-10.

contract programs were administered side by side.

It is interesting to note how smoothly the Navy operated with institutions of higher education during and after the war. The NROTC units that were in operation prior to World War II were converted into V-12 units so a smooth transition was made in the early part of the war. In the latter stages of World War II the Navy took steps to expand the NROTC units to fifty-two while the legislation concerning the training of officers for the postwar Navy was still pending in Congress. The postwar NROTC units were selected from the original twenty-seven schools that had offered NROTC before the war and the schools that had the strongest of the V-12 naval officer programs during World War II. Consequently, the Navy was able to make a fairly smooth transition from the V-12 program to the postwar NROTC program. The opportunity to offer both the Regular and the Contract program gave the Navy a very attractive package in the eyes of the students as well as the colleges and universities.

The principal difference between the Regular and contract programs was the manner of selection of candidates, the benefits the cadets receive, the obligations entailed, and the summer cruises required. The Regular (or scholarship program as it became known in the 1960's) student was selected through a nation-wide competitive examination. Then came the physical examination, interviews, selection through the state or

Territorial Selection Committee, and finally, the prospective midshipman must enroll and gain acceptance at the school he decides to attend. When the scholarship midshipman reported to his school he received free tuition, including fees, textbooks, uniforms and pay of \$50.00 per month. During the four-year course, the cadet was required to participate in three summer cruises of six to eight weeks duration, one of which included aviation and amphibious warfare. After graduation the candidate was commissioned as an ensign in the Regular Navy or as a second lieutenant in the United States Marine Corps. He was obligated to serve on active duty for two years.

The Contract (or nonscholarship) student was selected by the Professor of Naval Science (PNS) at the college they planned to attend. They were provided with uniforms, naval science textbooks and pay of \$50.00 per month during the junior and senior year. These students completed the same course requirements as the students in the Regular program but were required to make only one summer cruise. Upon graduation and completion of naval requirements they were commissioned as an ensign in the U.S. Naval Reserve or as a second lieutenant in the U.S. Marine Corps Reserve and did not have to go on active duty. Students who elected to work towards a commission as a Marine Corps officer studied Marine Corps related subjects during their junior and senior years under a Marine officer instructor. Prospective Marines were required to complete

summer training at the Marine Corps Officer School, Quantico, Virginia.¹

Naval ROTC and Iowa State

The first article (during the War) in The Daily about the postwar Naval ROTC was on March 1, 1945, when an article was reprinted from the United States News. The article explained how the Navy planned to shift its officer training system from the emergency V-12 college program to Naval ROTC training that would prepare officers for active duty during peacetime as well as war. The article also explained it would be beneficial to a school to have a Naval ROTC program otherwise it would lose out all together when the V-12 students were phased out with no prospect for another military program.² On March 19, 1945, Iowa State College made application to the Bureau of Naval personnel for a NROTC unit. The application acknowledged that if accepted Iowa State would establish and maintain "a four year naval training program for its physically fit male students under a Department of Naval Science staffed with naval personnel." The naval science course was to be equal in standing with major courses in other departments. Iowa State agreed to allow

¹This information was paraphrased from several sources.

²The Daily, March 1, 1945, p. 3.

approximately thirty-six quarter hours of naval science towards a degree. The College further agreed to meet the navy's specification for classrooms, offices, storage space, armory, auditorium, drillfield, swimming pool, and to insure an initial enrollment of 100 physically fit male students of the freshmen class. Finally, Iowa State agreed to "promote and further the objects for which the Naval Reserve Officers' Training Corps was established and to conform to the regulations of the Navy Department relating to the operation of the unit and to issue, care, use, safekeep and account for such government property as may be issued to the institution for use by the unit."¹

In May, 1945, The Daily announced that Iowa State had received approval from the Navy to have an NROTC unit and that the College was one of only twenty some schools selected. Actually, this first article about NROTC in The Daily was based on an Associated Press news release and it was a few days before The Daily published a report that the NROTC unit was confirmed. Dean Agg of the Division of Engineering pointed out that the NROTC curriculum would be vastly different from the V-12 program. More Navy instructors were to be assigned

¹"Application for Establishment of a Unit of the Naval Reserve Officers' Training Corps," March 19, 1945, Iowa State University, NROTC Command History File.

and several courses in naval science would be added.¹

When the NROTC unit was confirmed, Dean Harold V. Gaskill of the Division of Science (to which the NROTC unit was assigned for administrative purposes) explained that "the college was extremely proud and gratified to be chosen as one of the NROTC units." The Dean also pointed out that: "the [Naval] personnel would continue to be housed in Friley Hall, and the selection of the new members of the NROTC would be in the hands of the Bureau of Naval Personnel as it was with the V-12 Program." All the V-12 students who had completed four terms or more by July, 1945, were allowed to remain at Iowa State and complete the V-12 program. Those students who had less than four terms could begin the new NROTC program in July, 1945.¹

In June, 1945, The Daily reported that more than 250 new navy students were expected to arrive on July 2nd to raise the strength of the Iowa State V-12 unit to about 600. Lt. Commander C. W. Myers the commanding officer of the school reported that the new trainees and more than 100 of the V-12 unit were to be classed as NROTC candidates in preparation for the opening of the Naval Reserve Officers Training Corps at Iowa State on November 1, 1945. He also explained that five new officers would be assigned to teach the naval science

¹The Daily, May 2, 1945, p. 1, May 8, 1945, p. 2.

portion of the NROTC program. The V-12 program was scheduled to continue concurrently with the NROTC training and the last V-12 would probably graduate in March, 1947. It was further explained that the V-12 and the present NROTC students were to continue on the navy semester system of 16 weeks (which was implemented during the War), but that freshman from now on would enter the regular quarter system and by July, 1946, the Division of Engineering hoped to be back on the regular (pre-war) twelve week term.¹

On August 1, 1945, it was announced that a team of ten Naval officers would be on campus the 8th and 9th of August to complete plans for the NROTC unit. Dean T. R. Agg published the proposed schedule and announced that all the 9:00 am classes on August 8th would be dismissed for the civilian and V-12 classes in naval science, engineering and science so the faculty could attend the general meeting which was to be addressed by Captain A. S. Adams, of the Bureau of Naval Personnel, Washington, D.C. After the general meeting there was to be several group meetings to discuss fiscal arrangements, academic problems, equipment and naval administration.²

It is interesting to note that the Navy Captain, A. S. Adams had been a member of the original Holloway Board that had

¹The Daily, June 22, 1945, p. 1.

²The Daily, August 1, 1945, p. 1.

recommended the revision of the overall Navy postwar education program. The Captain was well informed on the NROTC program and its acceptance as he and his group of naval officers had been visiting all the colleges and universities that were to have an NROTC program.

It is also interesting to observe how cooperative Iowa State College was with the Navy. This cooperation could be attributed to several reasons: the College had developed a good working relationship with the Navy during World War II; a large amount of the College budget was paid by the Navy for the several wartime programs; the Navy had invested a substantial amount of money in facilities at Iowa State; Friley Hall had been built for \$600,000 which was virtually all Federal funds; other college buildings had been constructed with Federal funds for the navy wartime programs such as the Diesel building which is presently the home of the NROTC unit. It had been pointed out that only a few schools would be able to have a NROTC unit after the war and there was quite a bit of effort expended by the colleges and universities to have their schools selected. It was to the advantage of a school to have an NROTC program since it might help the college or university to be in top contention for any expanded military programs should another world conflict develop.

Captain A. S. Adams and his team of naval officers did arrive and conduct the two days of meetings with President Friley, the faculty and staff of Iowa State. The navy team was well prepared and had compiled a publication to serve as a guideline for the Navy as well as the College. The "Iowa State College Schedule and General Information for NROTC, Navy--Faculty Conference August 8-9, 1945" explained the general purposes and the needs of the NROTC:

1. The mission of the postwar NROTC--to train a considerable portion of the future officers for the Regular Navy as well as officers for the Naval Reserve and Marine Corps.
2. The necessity of establishing a Department of Naval Science and Tactics which will have high prestige on the campus and will be a credit both to the institution and to the Navy.
 - (a) The Navy's promise to select highly qualified Naval officers as instructors in the ROTC.
 - (b) The Navy's willingness to sponsor legislation to share the expense of providing suitable quarters for the Unit, with armory, offices, and classrooms preferably in a single building.
 - (c) The institution's responsibility for the academic instruction of NROTC trainees, both under the transitional and the new program.
3. The continuation, in the NROTC of the cooperation, based on shared responsibilities and mutual respect, which has marked the V-12 Program.¹

¹"Iowa State College Schedule and General Information for NROTC, Navy--Faculty Conference," August 8-9, 1945, p. 1, Iowa State University, Special Collections.

Other items that were scheduled to be discussed were: the possibility of granting thirty-six hours of academic credit for naval science; the class size of twenty-five desired for naval science and a teaching load of fifteen class contact hours each week for the instructors; the academic calendar and how the NROTC students could be brought into line with the civilian calendar; size and quota for NROTC and the maximum number of students of all groups that the institution could satisfactorily instruct; to explore physical facilities to handle 250-300 NROTC men with appropriate armory and class space; arrangements for delivery of instructional equipment; and the method of supplying books and training aid.¹ It appears that Iowa State College had made substantial preparation for the conference, including a proposed remodeling of the U.S. Navy Diesel Laboratory as the NROTC building. The proposed modification looks almost identical to the facilities of the modern day NROTC unit at Iowa State. Evidently there was a meeting of the minds as the NROTC unit was established in 1946 and has been functioning successfully ever since.

Lyons and Masland explained that the Navy emphasized the purposes and needs of the NROTC program in such a way that it was bound to appeal to the institutions. These promises were

¹Ibid., pp. 1-3.

particularly reassuring in 1945 when the wartime educational programs had drastically declined even though the war itself was still continuing. The prospect of a stable NROTC program on campus at a time when there was the possibility of some kind of Universal Military Training was the desire of several colleges.¹ Iowa State College was no exception and was extremely cooperative with the Navy in the transition from the V-12 program to the NROTC program.

Captain Richard B. Levin 1945-48

In late October, 1945, Captain Richard B. Levin reported to Iowa State to take over the V-12 program and to be the Professor of Naval Science (PNS) when the Naval Science Department was established. Captain Levin was a 1923 graduate of the Naval Academy and had substantial sea duty in both the Atlantic and Pacific during World War II. He had served as the Commander of the destroyer "Boston" in the Atlantic and took part in the landings of North Africa. His duty in the Pacific was as the navigation officer on the heavy cruiser U.S.S. Canberra and saw action from the Marshall Islands until just before the operation at Leyte when the Canberra was torpedoed

¹Lyons and Masland, Education and Military Leadership: A Study of the ROTC, p. 68.

and had to be towed to dry dock.¹

Captain Levin was on campus a full ten months before the NROTC Unit was officially formed when school started in September, 1946. The Captain gained much valuable experience in dealing with the Iowa State officials during his first year. Since the war was over there were many changes and conflicting estimates as to when the V-5 and V-12 programs were to be phased out. On October 30, 1945, the Navy announced that the V-12 program (that had been on a semester program during the war) would convert to a quarter system. This change created some special scheduling problems to bring the semester and quarter programs in phase. The latter part of 1945 and early 1946 saw many announcements about the military programs. Some announcements said the programs would be reduced and terminated as early as March, 1946; others said it would be extended to July, 1946.² Needless to say, these were trying and confusing times and were not unlike the situation immediately after World War I.

By late April, 1946, the military training at Iowa State had been reduced to only a few V-12 students who were training

¹The Daily, October 26, 1945, p. 1; Iowa State University, Special Collections, Naval Science Records, Personnel File.

²The Daily, October 30, 1945, p. 1, December 11, 1945, p. 1, January 4, 1945, p. 1, January 30, 1946, p. 1.

to be naval officers with strictly electrical engineering backgrounds. Captain Levin now had a little more guidance on the postwar NROTC program. The Captain announced that the peacetime NROTC unit would contain 270 men and would be effective in the fall. The nucleus of the unit was to be made-up of the 67 men in the V-12 program who were to be discharged during the summer and then would re-enter the NROTC program in the fall. About 100 freshmen were selected and the remaining number of the 270 openings were for students with previous military experience. This previous military experience was to be substituted for part of the naval science courses. Men without previous military experience who had completed three quarters or less of school, could apply (as if they were freshmen) as long as they would still be able to complete the four year NROTC curriculum before graduation.¹

Articles in The Daily during the spring and summer of 1946 explained that the NROTC unit had received much of its equipment needed to teach the technical courses in the naval science thirty-six hour curriculum. Plans had been finalized for the Contract (or non scholarship) program. Shortly after President Truman signed the legislation for the Holloway Plan (on August 13, 1946) the Navy announced information about the Regular (or

¹The Daily, April 27, 1946, p. 1.

scholarship) NROTC program.¹ However, only the Contract NROTC program was implemented during the 1946-47 school year. In 1946 the NROTC unit at Iowa State was placed under the management control of the Bureau of Naval Personnel and under the military control of the Commandant, Ninth Naval District at Great Lakes, Illinois. This organizational arrangement was in effect until 1964 when the NROTC Unit reported directly to the Bureau of Naval Personnel for the purpose of military control and primary support. The Ninth Naval District became an area coordinator for all the NROTC units within its area but it had no operational control.²

The fall of 1946 saw the Navy Reserve Officers' Training Corps settled in the remodeled Navy Diesel school building which was adequate for 300 NROTC cadets, a staff of seven officers, and six enlisted men. The first year enrollment was 148. Captain Levin was the Professor of Naval Science and had a executive officer with the title of Associate Professor of Naval Science, and five officers with the title of Assistant Professor of Naval Science. The PNS and Executive Officer were not assigned primary teaching duties; however, they did serve as guest lecturers in their areas of expertise. Four Assistant PNS's were responsible for one complete class (i.e., freshman,

¹The Daily, May 9, 1946, p. 1, August 17, 1946, p. 1, August 24, 1946, p. 1.

²"History NROTC Unit, Iowa State University," p. 2.

sophomore). The fifth assistant PNS was a U.S. Marine and was responsible for the Marine Corps option which was taught in the junior and senior year. Each of the officers were assisted by an enlisted man with the title of assistant instructor. The College furnished two secretaries and also took over the responsibility for the maintenance and upkeep of the (now called) Naval Science armory.¹

The Navy ROTC curriculum is similar to the Army ROTC curriculum since it concentrates on the service itself--on its weapons, mission, organization, operations--and upon the responsibilities of the junior officer. However, the Navy "sticks closer to its knitting" as the curriculum is tied to the concept of an "immediately employable ensign." The NROTC courses are designed to provide the pre-professional and technical training which a young ensign must acquire before he is commissioned. Although most of the NROTC subjects are service-oriented (and some quite technical, i.e., the weapons course and navigation) they are tailored so the liberal arts students and others less technically oriented can comprehend them without the need for prerequisite courses. In the 1960's the weapons course became more theoretical and it was necessary to establish prerequisite courses. At Iowa State the NROTC

¹This information extracted from several documents in the Iowa State University, NROTC Command History File.

unit is the only military training program that offers an approved undergraduate degree program with from five to six students majoring in naval science each year. The curriculum is provided by the Bureau of Personnel but the instructors are allowed substantial leeway in presenting the subject matter.¹

The 1946-47 Iowa State Catalog was published before the NROTC curriculum was finalized and only listed the Naval Science Department with Captain Levin as the Professor of Naval Science. The 1947-48 Catalog gave a listing of the course descriptions, the general objectives of the NROTC program, the basic function of the NROTC program (which is to provide a source of trained officers for the Navy) and points out that Iowa State is the only college in the State of Iowa which has an NROTC unit. The NROTC curriculum had stabilized by the 1949-50 Catalog and is included in Appendix K.²

The freshman year has always included an introduction to naval science that has been called naval orientation since 1949. Naval history was a large part of the freshman year during the first few years of the NROTC program at Iowa State.

¹Lyons and Masland, Education and Military Leadership, p. 183; "History NROTC Unit, Iowa State University," p. 5; Walter J. Them, "A Curricular Comparison of the Army, Navy, and Air Force ROTC Programs" (unpublished Air Command and Staff College Thesis, Air University, Maxwell Air Force Base, 1967), pp. 43-44.

²Iowa State College Catalog, 1946-47, p. 254, 1947-48, p. 248, 1949-50, pp. 270-71.

There was a gradual reduction in naval history and more emphasis on the evolution of sea power until in 1959 naval history was just one portion of naval orientation. In the 1960's the latter part of the freshman year was devoted to ship systems. The sophomore year course work dealt with naval weapons and was taught until the early 1960's when the weapons course was changed to the senior year. The present sophomore course is a seapower and maritime affairs seminar. The junior year course deals with surface navigation, celestial navigation, and rules of the nautical road. In 1959 the navigation portion was reduced and some naval engineering was taught in the junior year. However, in the 1960's the navigation course was expanded back to its original scope. The senior year course consisted of naval engineering, damage control, ship stability, and in 1949 a naval administration and leadership course was added. The Marine option students take a separate course during the junior and senior year that deals with military history and amphibious operations. These same courses are still being taught at the present although the sequence of courses has been varied from time to time.

The NROTC unit commanded its share of attention on the College campus in 1946 to 1948 (the last two years of Captain Levin's tour). The Captain announced that 148 students had joined the Naval ROTC; seventy-eight were freshmen, thirteen

sophomores, forty juniors and seventeen seniors.¹ Technically, the College was to insure that at least 100 male students enrolled during the freshman year but seventy-eight evidently satisfied the Navy as there was no correspondence or records that indicate otherwise. The Daily did report that there were some openings in the Contract program in December, 1946.² Records indicate that thirty midshipmen graduated in 1948. These early graduates were former members of the V-12 program who had been granted advanced standing. The first graduation of the full four year NROTC program did not occur until 1950.³ There were several articles in The Daily that dealt with the NROTC during this time period. The articles covered a variety of events and activities such as the NROTC unit forming a rifle team, NROTC students participating in Golden Gloves boxing matches, listing of NROTC social events, and announcing the details of the annual summer cruises for the NROTC cadets. In 1947 President Friley even accepted an invitation to take a three week cruise on the Battleship U.S.S. Iowa. There were announcements about the unit receiving new training devices

¹The Daily, August 28, 1946, p. 1.

²The Daily, December 5, 1946, p. 1.

³The enrollment and numbers commissioned from 1946-70 are included in Appendix L.

that included a simulated bridge of a small ship and a Sangamo attack teacher.¹ It suffices to say that the NROTC unit was well established at Iowa State at the end of Captain Levin's three years, two of which had been as Professor of Naval Science.

Captain William F. Royall 1948-51

Captain W. R. Royall became the second Professor of Naval Science at Iowa State during the summer of 1948. Like his predecessor he had served on many different naval vessels such as battleships, destroyers, attack transports, and hydrographic survey ships. Captain Royall had extensive experience in the research and development of landing craft. The Captain was a 1927 graduate of the Naval Academy.² Captain Royall's three-year tour saw the formation of the "Sextant", a NROTC honorary society, an increase in the "selective" enrollment of the unit during the early part of the Korean conflict, until 223 midshipmen were enrolled in 1950, and the first Master of Science thesis dealing with the NROTC midshipmen at Iowa State.

¹The Daily, January 23, 1947, p. 7, February 15, 1947, p. 8, March 7, 1947, p. 2, March 12, 1947, p. 2, June 4, 1947, p. 1, July 18, 1947, p. 2, November 22, 1947, p. 2, May 26, 1948, p. 1, June 4, 1948, p. 1, April 15, 1948, p. 5, January 8, 1948, p. 5, June 19, 1948, p. 1.

²The Daily, August 24, 1948, p. 1; Iowa State University, Special Collections, Naval Science Records, Personnel File.

During the summer of 1948 after Captain Levin's departure and prior to the time of Captain Royall's arrival at Iowa State, there had been some publicity about the NROTC unit receiving a Japanese Temple Bell. The bell had been taken as a war trophy at the end of World War II and placed on the Battleship Iowa. In 1948 the Japanese bell was presented to Iowa State. In later years a touring Japanese group saw the bell and correspondence developed over its history and significance. It seems the bell was over two hundred years old and had some religious significance to the Japanese. Therefore, in 1962 the Iowa State NROTC unit returned the bell to the Japanese government.¹

On March 8th 1949, the first professional honorary of the NROTC unit, The Order of the Sextant was formed. The Sextant was named after the navigating instrument used by the Navy, and the unit at Iowa State was one of over thirty such societies formed on the college campuses.² The purpose of The Order of the Sextant was "to prepare its members for careers as Naval Officers by developing comradeship, leadership ability, and maturity through social events, informal discussion, lectures and films, to promote and further the interest of the NROTC

¹The Daily, July 31, 1958; Iowa State University, NROTC Command History File; Iowa State University, Special Collections, Naval Science Records, History File.

²The Daily, March 10, 1949, p. 9.

unit at Iowa State University, and to uphold the traditions of the U.S. Navy." Membership in the Sextant was restricted to 1st class (seniors), 2nd class (juniors), and 3rd class (sophomores) midshipmen in good standing. The Sextant cooperated with Scabbard and Blade in sponsoring the annual military ball and the Sextant also sponsored the annual naval ball.¹

The Korean War and NROTC--The National Scene

The Korean conflict did not cause any radical changes in the NROTC program on any of the 52 campuses that offered it. The Navy took care of a majority of its need for more officers by expanding Officer Candidate Schools. Consequently, when the Korean War did not escalate, the Navy was able to cut back its OCS production of officers and eliminate any chance of an over production of officers. However, like all services, the Navy was confronted with the need for active duty officers. The regular midshipmen were originally required to serve on active duty for two years, whereas the reserve (or Contract midshipmen) could go immediately into inactive reserve duty. The Korean conflict changed this procedure, and Regular midshipmen were required to go on active for three years and the Contract students had to serve for two years of active duty before they

¹Iowa State University, NROTC Midshipman Handbook, August 1, 1970, p. VIII-1.

were eligible to go into inactive reserve status. In later years (1957) the Navy found it was not retaining a sufficient number of Regular officers and the commitment for active duty was increased from three years to four. For those going into flight training the active duty commitment was three and one-half years after completing the eighteen month aviation training.¹

The Korean War and NROTC at Iowa State

The Korean wartime period and its aftermath touched on the tours of three PNS's at Iowa State. In Captain Royall's last full academic year (1950-51) NROTC enrollment increased to a new high of 223. The enrollment under the next PNS (1951-54) went to another high at Iowa State of 271 in 1951, dropped slightly to 262 in 1952, and then climbed back to 272 in 1953. The 271 enrollment figure in 1951 also marked the first time that Iowa State had attained the minimum of 100 freshmen called for the original application for an NROTC unit at Iowa State.² During another PNS tenure the enrollment rose to an all-time high of 291 in 1956 which is the largest enrollment throughout

¹Monro MacCloskey, Reserve Officers Training Corps: Campus Pathways to Service Commissions (New York: Richard Rosen Press, Inc., 1965), pp. 71-72.

²Iowa State University, NROTC enrollment data extracted from documents in the NROTC Command History File and The Daily, October, 1950, p. 1, November 11, 1951, p. 1.

the history of NROTC at Iowa State. These numbers may appear small, but the Navy ROTC program was all voluntary and the U.S. Navy controlled the maximum number allowed to enroll in the program. It should also be remembered that 300 midshipmen was the planned maximum that could be accommodated in the Naval Science building.

It is difficult to judge how much of an impact the Korean conflict had on the NROTC unit at Iowa State. It does appear that more students were interested in taking the last two years of the NROTC program and that the Navy did increase its maximum quota for contract students. The NROTC unit showed a marked increase in total number of students enrolled in the program. Likewise, the number of midshipmen commissioned as ensigns in the Navy and 2nd lieutenants in the Marine Corps increased from 26 in 1953 to 30 in 1954, with a big jump to 51 in 1955, and then dropped to 46 during 1956. The Naval officers commissioned at Iowa State during 1955 and 1956 were the largest numbers ever commissioned during the entire history of the NROTC unit. In only three other years during the twenty-five year existence of the NROTC program at Iowa State were as many as forty naval officers commissioned.

In 1949 a Lieutenant Arthur W. Latta, the first Marine Corps Officer assigned to teach the Marine option at Iowa State, completed a Master of Science Thesis dealing with NROTC students. Lieutenant Latta dealt with predicting naval

officer aptitude and naval orientation achievement of freshmen midshipmen at Iowa State. He found that the students' high school records were the best predictors of the NROTC students' aptitudes and achievement during the freshman orientation course at Iowa State.¹ The Lieutenant's thesis was the first of several theses written by active duty officers (dealing specifically with ROTC programs at Iowa State) during the post World War II era.

Captain E. T. Seaward 1951-54

Captain E. T. Seaward reported to Iowa State on September 15, 1951, to become the third Professor of Naval Science. He was a 1924 graduate of the Naval Academy and completed his thirty years of active duty in 1954. Upon completion of his NROTC duty he retired from active service and has remained in Ames, Iowa, for the past eighteen years. Captain Seaward was promoted to Rear Admiral upon his retirement because he had received certain citations during combat duty. During World War II Captain Seaward served on destroyers and cruisers and

¹Arthur W. Latta, "Prediction of Naval Officer Aptitude and Naval Orientation Achievement at the Iowa State College" (unpublished M.S. Thesis, Iowa State College, 1949), pp. 21-24.

was Chief of Staff of a cruiser division.¹ Captain Seaward was the first PNS to retire from active duty upon completion of his NROTC tour at Iowa State. Both Captain Levin and Captain Royall had five to six years of service remaining before mandatory retirement at thirty years of service. Consequently, they both returned to sea duty upon completion of the NROTC tour at Iowa State. Captain Seaward set a precedent at Iowa State since the two succeeding PNS's also retired at the end of their NROTC duty.

Captain Seaward served at Iowa State during the height of the Korean conflict. His three year tour (which was the normal length for a tour of duty in NROTC) saw the Naval Science Department have the overall largest average enrollment compared to any other time period during the history of NROTC at Iowa State. In a 1952 letter to the Secretary-Treasurer of the U.S. Naval Institute, Captain Seaward explained: "It [NROTC] has been very popular among the students and has had full support of the College administration. Unquestionably, as at all institutions, the Selective Service tends to motivate students

¹Interview with E. T. Seaward, Rear Admiral USN, (Ret.), March 22, 1972. Admiral Seaward stated that the law was changed in 1960 that allowed persons to be retired at the next higher rank if they had held a citation earned in combat. The rank of admiral is in name only as Admiral Seaward receives the retirement benefits for a Navy captain.

here to take an active part in reserve officer organizations."¹ Captain Seaward explained that he could only accept about twenty per cent of the Iowa State students who applied for the NROTC program during the Korean conflict.²

It appears that the NROTC program at Iowa State was a highly competitive program throughout the history of the unit. The Regular midshipmen were selected on a national competition that saw several thousand students competing for one of the approximately 1,000 scholarships offered each year. The other ROTC programs had no scholarship programs until 1964. Many of the students who were not selected for the Regular program would then compete for the local PNS selection for the Contract program with the idea of possibly getting a scholarship under the Regular program later on. Another reason the NROTC program was popular at Iowa State was the opportunity to see the world on the required naval cruises. For some reason visiting Paris, Lisbon, South America and Cuba had more attraction than six weeks at Fort Riley or Forbes Air Force Base, Kansas.

After talking with some of the graduates of the NROTC program at Iowa State one gets the distinct feeling that the program was well accepted and the midshipmen worked hard to be

¹Letter from E. T. Seaward, Professor of Naval Science, to Secretary-Treasurer, U.S. Naval Institute, Subject: NROTC Activities, Information concerning Iowa State College, December 23, 1952, Iowa State University NROTC Command History File.

²Interview with E. T. Seaward, March 22, 1972.

able to maintain their four year scholarship's. Burt Gleason, a 1955 NROTC graduate of Iowa State, is one of the very few persons who was in all three of the ROTC units at Iowa State. In 1950 he took one quarter of required Army ROTC and then switched to Air Force ROTC for two quarters when the Air Science Department separated from the Army. During this same one-year period cadet Gleason applied for the NROTC Regular program and was accepted for the 1951-52 school year. Since he was in a five year curriculum Gleason was able to complete the full four year NROTC program. Midshipman Gleason was the editor of the SpendRift the NROTC midshipmen paper of Iowa State. The SpendRift was named after the spray that blows across the tops of waves and it served as an internal NROTC student paper at Iowa State. Burt Gleason, who is now a Lt. Commander in the naval reserve unit which meets on the Iowa State campus, explained to this writer that the military was well accepted during his time on campus and the advanced midshipmen were looked upon quite favorably by other students as well as student organizations such as fraternities. Gleason also recounts a tragic occurrence during his 1953 summer cruise in which the NROTC midshipmen from Iowa State witnessed a plane crash that killed almost the entire NROTC contingent of Oklahoma University. This crash evidently did not have a serious impact on the Iowa State midshipmen's interest in flying as The Daily of March 24, 1955, also confirms that

seventeen Iowa State NROTC midshipmen 1st Class volunteered for naval aviation training.¹ This was the largest group of NROTC graduates of Iowa State to apply for naval aviation.

Captain J. S. McClure 1954-56

Captain Jesse S. McClure reported to Iowa State on September 1, 1954, to become the fourth Professor of Naval Science. Captain McClure was the first Navy aviator to head the NROTC unit at Iowa State. He had served as an enlisted man in the Navy for two years prior to being accepted for entry into the Naval Academy. Upon graduation from the Naval Academy in 1926, he was commissioned as an ensign in the Regular Navy. In 1929 McClure qualified as a naval aviator and served the majority of his career in active flying assignments with considerable time aboard aircraft carriers. Captain McClure had commanded flying squadrons and his most recent assignment before coming to Iowa State was as the Commander of the Naval Air Station at Patuxent River, Maryland.² Captain McClure's 1926 commission dictated that his tour of duty at Iowa State would only last two years since he completed thirty years of service in 1956 and had to retire.

¹Interview with Burt Gleason on March 23, 1972; The Daily, March 24, 1955, p. 13.

²Iowa State University, Special Collections, Naval Science Records, Personnel File.

It had been noted earlier that the 1955 NROTC class at Iowa State produced the most naval aviators. It is interesting to speculate that Captain McClure, a naval aviator, might have had some impact on the group of eighteen midshipmen who applied (and seventeen of them passed the physical) for aviation training. In the NROTC program a midshipman can apply for special training such as aviation during his 1st class (or senior year). Therefore, Captain McClure had two or three months to make some sort of an impact on the senior class.

During Captain McClure's two year tour, Iowa State gained some additional publicity in 1955 by taking M. D. Helser, who was the Dean of Student Affairs, on one of the summer cruises with sixty-three Iowa State midshipmen on the U.S.S. Wisconsin.¹ In 1955 the Iowa State NROTC program had the largest enrollment (291) of anytime during the unit's history. In the same year James Hilton (ISC President) requested each military department to survey its facilities and equipment to determine whether each were adequate for the present number enrolled. President Hilton was then to forward the report to the American Council of Education to compile a nationwide report. Captain McClure's report showed that the NROTC had \$538,000 worth of equipment and that the facilities were more than adequate for the 291 midshipmen enrolled at Iowa State. The only thing the Captain

¹The Daily, July 29, 1955, p. 1, September 24, 1955, p. 8.

desired was a rifle range with five firing positions.¹

Captain W. M. Drane 1956-59

Captain William M. Drane reported to Iowa State on July 30, 1956, and became the fifth Professor of Naval Science. He was a 1930 graduate of the Naval Academy so technically he would have one year of service remaining when he finished his normal three year tour at Iowa State in 1959.² However, Captain Drane elected to retire upon completing his NROTC duty with 29 years of service. Captain Drane took steps to insure the campus was well informed about the NROTC program. The Captain elected to publish a "NROTC Bulletin" and distribute it to the Iowa State faculty. The first bulletin (which was undated) dealt with a brief history of why NROTC units were started during the 1920's, i.e., no reserve or backup forces available if the Navy had to expand rather rapidly for another war. The Captain explained how the payoff came in World War II when the naval reserve officers were available for duty. In the second "NROTC Bulletin" dated February 8, 1957, Captain Drane explained the Navy's need for more active duty career

¹Letter to Colonel Wayne Hardman from Professor of Naval Science, dated December 19, 1955, Iowa State University, NROTC Command History File.

²Iowa State University, Special Collections, Naval Science Records, Personnel File.

officers than the Naval Academy could produce. He then explained how the Holloway Plan was researched and put into effect to gain more career officers for the Navy. It appears that the Captain intended to publish more such "NROTC Bulletins" (especially since he mentioned future plans to do so); however, no other bulletins are available.¹

Captain Drane wrote a letter to Professor A. L. Walker, who was the chairman of the College Curriculum Committee to make some routine changes to the College Catalogue but also to correct an error that appeared in the 1956 Catalogue. It seems that the Catalogue had listed the three Military Departments together and made it appear that the Naval Science Department was just a section. The Captain enclosed a copy of the Iowa State "Application for Establishment of a Unit of the Naval Reserve Officers' Training Corps" in which the title of the unit was to be a Department of Naval Science.² The appropriate change was made in the next issue of the College Catalogue and from that time on the Naval Science Department has been listed properly.

¹These two NROTC Bulletins were in the papers of Dr. Earle Ross, the Iowa State College Historian and were placed in the Naval Science Folder of the Iowa State University, Special Collections by Dorothy Kehlenbeck, the University Archivist.

²Letter to Professor A. L. Walker from Captain W. M. Drane dated, December 10, 1956, Iowa State University, NROTC Command History File.

Captain Drane seemed to be much more involved with the campus than other PNS's as there were more articles in The Daily about the activities of the NROTC program. The Captain also participated as a panelist on the "news forum" which discussed the weeks news. Captain Drane also took advantage of events of the time to promote the Navy. A typical instance was when the Nautilus submarine had made its historic trip under the North Pole. Captain Drane wrote an article for The Daily in which he lauded the success of the inertial navigation system.¹

Colonel R. M. Crockett 1959-60

Colonel R. M. Crockett was the first Marine officer to command the NROTC unit at Iowa State. He was a 1935 Summa Cum Laude graduate of the University of Tennessee with a B.S. in electrical engineering. He was the Captain of Scabbard and Blade and the cadet colonel of the battalion in 1934-35. Thus Colonel Crockett was the first ROTC graduate to be the PNS at Iowa State. However, he was not a graduate of the NROTC program as the University of Tennessee did not offer NROTC. Colonel Crockett had served in the South Pacific during World War II and also in Korea. He had attended the amphibious warfare school, the Naval War College, and was the Assistant Chief

¹The Daily, February 21, 1958, p. 1, August 14, 1958, p. 4.

of Staff (logistics) at Camp Lejeune, North Carolina, before coming to Iowa State. Colonel Crockett was one of only eight Marine officers who were commanding NROTC units. Colonel Crockett only served one year as the PNS as he died of complications from surgery at the Great Lakes Naval Hospital on September 29, 1960, and was buried in Arlington Cemetery.¹

The present day NROTC unit at Iowa State dates back to the V-12 program of World War II. Iowa State was chosen as one of the twenty-five schools to implement a new NROTC program when the Navy expanded the overall number of NROTC units to fifty-two after World War II. Through much prior planning, coordination, and preparation by both the Navy and Iowa State College, the NROTC program was implemented via a smooth transition from the V-12 program. Shortly after the war, Congress passed Public Law 729, The Holloway Plan, establishing the Regular program, an important addition to the contract plan that had been operating at other schools prior to World War II. Iowa State gladly accepted both programs and the NROTC program was implemented with the first graduates of the four year program commissioned in 1950. Five Navy captains (all graduates of the Naval Academy) and a Marine Colonel served as the Professors of Naval Science from 1946-1959.

¹Iowa State University, Special Collections, Naval Science Records, Personnel File; Iowa State University, NROTC Command History File.

The NROTC unit became a part of the College campus and formed its own special organizations such as the Sextant, rifle and pistol team, drill team, band, and published its own midshipmen paper the "SpendRift." NROTC cadets also became members of Scabbard and Blade, Pershing Rifles, and for the Marine Corps option, Semper Fidelis. Each of these organizations was involved with several activities and events, the most significant being the military ball, navy ball, and Veishea. The Navy ROTC unit (like the other services) had their own awards, special parades, annual cruises, and special activities that helped the midshipmen develop their leadership abilities. The Naval ROTC curriculum was service-orientated so that when a midshipman graduated and was commissioned he was an "immediately employable ensign". The enrollment in the NROTC varied from 148 in the fall of 1946 to the high of 291 in 1955 and stabilized in the latter part of the 1950's at about 220 midshipmen. A total of 380 midshipmen were commissioned in the United States Navy or Marine Corps with an average of thirty-eight per year over the ten year period from 1950-59. It suffices to say that the second ROTC unit formed on the Iowa State campus became firmly established and gained the respect of students, faculty, and administration.

CHAPTER VIII: AIR FORCE ROTC AT IOWA STATE 1946-59

According to General Order, No. 124, Senior division (college and university level) Air Force ROTC units were established effective the beginning of the 1946-47 school year.¹ The founding date for the Iowa State "air unit" was September 24, 1946, and it was a part of the Military Science Department.² The AFROTC unit gained its independence from the Military Science Department in 1949. However, it took the AFROTC Department almost two more years to become completely separate from the Army ROTC at Iowa State. Lt. Colonel Richard C. Bender was the first Air Corps officer to arrive at Iowa State after he had attended an Air ROTC instructors course during the summer of 1946. Colonel Bender attended the registration of students for the 1946 fall quarter and selected thirty students to form the first class of potential Air Corps Officers at Iowa State. During the fall of 1946 the remainder of Colonel Bender's Air Corps contingent arrived which included three enlisted men and two more officers.³ Colonel Bender had the academic rank of Associate Professor of Military Science

¹War Department, General Orders, No. 124, (Washington, D.C., October 22, 1946) p. 1.

²Iowa State College Catalog, 1950-51, p. 270.

³"Unit History of the Air ROTC Unit at Iowa State College" (unpublished, Ames, Iowa, September 24 to December 31, 1946), pp. 1-2.

Tactics.¹ Before an in depth look at the formation and growth of the Iowa State AFROTC unit it is necessary to take a brief look at the early developments of Air ROTC on the national level.

Early History of AFROTC--The National Scene

Air Force ROTC traces its history through the Army ROTC during the 1920's when seven Army Air Corps ROTC units were established. These first Air Corps (then called Air Service) ROTC units were established in 1920 at the University of California (Berkeley), University of Illinois, Massachusetts Institute of Technology, and Texas A&M. The next year, Georgia Institute of Technology and the University of Washington were added and in 1923 the final addition occurred at New York University. Beginning in 1932, these units were phased out for budgetary and other reasons, the last being discontinued in 1935.² However, while these Air ROTC units were in progress the Air Service graduated and commissioned approximately 800 officers.³

¹Ibid., p. 1; Iowa State College Catalog, 1947-48, p. 244.

²Ileana S. Brown "History of Air Force ROTC", Historical Project Officer, (Office of Information, Air Force ROTC, Maxwell AFB, Alabama, 1971) pp. 3-4.

³Price D. Rice, "The History and Development of the Air Force Reserve Officers' Training Corps Program" (unpublished M.S. Thesis, The American University, 1950), p. 45.

The Army Air Force re-entered the ROTC field after participating in a 1944 postwar ROTC planning conference in which the Army and Navy were also represented. In 1945, the Army Air Force Air Training Command surveyed several hundred colleges and universities to determine the suitability of establishing Air ROTC at these institutions. After studying the survey the Army Air Force elected to implement ROTC units at seventy-eight schools that had previously offered Army ROTC.¹ From this modest postwar beginning, Air Force ROTC expanded to a peak of 209 units during the Korean War with an enrollment of over 145,000 cadets.²

The first year of Air ROTC on the national level was fraught with many problems, the most important question was who was responsible for the program. Richard P. Eckles, the historian of Eleventh Air Force, wrote a critical analysis of this first year. Eckles explained that the original Air ROTC office was assigned to one man who proceeded to attempt to create the program. In May, 1946, Air Training Command took over the responsibility for Air ROTC. Five months later Air ROTC responsibility went to Air Defense Command. One month later November, 1946, Air ROTC became the responsibility of

¹Ibid., p. 56.

²"Historically Speaking on Air Force ROTC" (Office of Information, Air Force ROTC, October, 1968), p. 2.

the different Air Force Commanders within the Air Defense Command.¹ As the Air Force gained more experience in dealing with institutions of higher education, it became increasingly apparent that the AFROTC program should be conducted by a command that was associated with the educational field and officer education. Air University, which was responsible for the professional education of Air Force officers, assumed command responsibility for AFROTC on August 1, 1952.² This was the first time that Air Force ROTC had a centralized headquarters and a similar command relationship still exists in the 1970's.

Air Corps ROTC at Iowa State College

The first announcement in The Daily about Air Corps ROTC was on September 24, 1946, and was made by Colonel Charles M. Busbee explained that there would be no flying associated with the air unit at Iowa State at least for the time being. The flying took place at a required summer camp. Since this was the initial year of the air unit, only the first year of the advanced course was taught and the advanced students were all veterans who had the basic ROTC program waived because of their

¹Richard P. Eckles, "Air ROTC the First Year 1946-47--A Historical Critique" (unpublished, Air Force Archives, Maxwell AFB, Alabama, 1947), p. 2-30.

²Maxwell J. Richards, "A Ten Year History of Air Force ROTC (1946-1956)" (unpublished M.A. Thesis, University of Maryland, 1957), p. 7.

prior service during World War II.¹ The Air ROTC cadet completed the same first two years as an Army ROTC cadet. The last two years of advanced Air ROTC entailed a specialized course content. The account of the AFROTC program at Iowa State will be analyzed by looking at the period of time under each of the Professors of Air Science and Tactics (PAS&T-- changed to PAS, Professor of Air Science in 1953).

Lt. Colonel Richard C. Bender 1946-49

The initial task of organizing the Air Corps ROTC unit at Iowa State fell upon Lt. Colonel Richard Bender who had been a P-47 pilot during World War II. The Colonel was assisted by Captain Thomas C. Hanzel who arrived at Iowa State on November 13, 1946 (almost three weeks after school had started), and Major Carlyle L. Truesdell who arrived even later, December 15, 1946. The Colonel and his two assistants were all Air Corps officers and each had attended the special school at Perrin Field, Texas which was designed to prepare the officers and enlisted men to be academic instructors. This same special school, with modifications of the 1946 content moved to Maxwell AFB, Alabama, and is still required attendance for all Air Force officers assigned to AFROTC duty. It is the present day Academic Instructors School and is called the "Teachers College of the Air Force".

¹The Daily, September 24, 1946, p. 1.

Lt. Colonel Bender, the senior ranking Air Corps officer, probably held the title of Professor of Air Science and Tactics (PAS&T) during the first few months of his assignment at Iowa State. In February, 1947, the Army did away with the title of PAS&T and the officer in charge of the Air unit was called the Assistant Professor of Military Science and Tactics for Air. The Army and the Army Air Corps had agreed that for the first year of AFROTC the Air Corps officer would be junior in rank to the PMS&T since the Army Air Force had no previous experience in running a ROTC detachment.¹

Colonel Bender thus had very little control over the Air Corps affairs at Iowa State, especially since Colonel Busbee kept a tight rein on his assigned personnel. It appears that Colonel Bender and his Air Corp officers became primarily engrossed in instruction, preparation of lesson plans and training aids. Only the first year of the advanced course was introduced in 1946 and this was accomplished with great difficulty since there were no textbooks. Apparently the air unit instructors had only a few notes from their special ROTC instructors school they had attended.

The Air Force announced plans for the second year of the advanced course in the spring of 1947 and assigned one or more

¹Richard P. Eckles, "Air ROTC the First Year 1946-47-- A Historical Critique," p. 45.

specialized courses to various schools. The seven specialized areas were: supply, administration and military management, aircraft maintenance engineering, armament, communications, statistical control and transportation.¹ At Iowa State the two specialized courses taught were administration and military management and communications. The cadets in communications were mainly in engineering and everyone else was in administration. According to the College Catalog the students in communications also received a substantial amount of administration and management.²

By the time Lt. Colonel Bender departed Iowa State in the summer of 1949, the Army Air Corps had become the U.S. Air Force as President Truman had signed the Armed Forces Unification Act of July 26, 1947. The Unification Act provided that two years after its approval, personnel (both military and civilian), property, records, installations, agencies, activities, and projects could be transferred from the Department of

¹Russel F. Fisher, "Air ROTC--A Background and Evaluation" (unpublished Air Command and Staff College research paper, Maxwell AFB, Alabama, December, 1948), pp. 14-17.

²Iowa State College Catalog, 1947-48, p. 246, 1950-51, p. 271; The AFROTC course description from the 1952-53 College Catalog included as Appendix M. The 1952-53 course descriptions was chosen because it adequately describes the early course descriptions of the communications and administrations specialized areas taught in the 1946-51 time period and also includes the new specialized options of armament, and flight operations that were implemented in 1951.

the Army to the Department of the Air Force. That two year period expired on July 26, 1949, and the Department of the Air Force stood completely independent and parallel with the Army and Navy.¹

Major Carlyle L. Truesdell 1949-50

Major Carlyle Truesdell had been at Iowa State since December, 1946, as an Assistant Professor of Military Science and Tactics. After Lt. Colonel Bender departed Major Truesdell took command of the newly formed Air Force ROTC unit at Iowa State. It was previously mentioned that the Air Force was completely separate from the Army effective on July 26, 1949. However, the first official announcement of the separate and equal status of the ROTC Departments at Iowa State was released on September 21, 1949. The Daily announced that the "ROTC Air Units Separated" with Colonel McConnell still the head of the Army ROTC, Captain Royall the head of Navy ROTC and Major Carlyle Truesdell the new head of the Air Force ROTC.² Major Truesdell thus became the first official Professor of Air Science and Tactics (PAS&T) at Iowa State. However, for this record Lt. Colonel Bender will be considered the first PAS&T.

¹Maxwell J. Richards, "A Ten Year History of Air Force ROTC (1946-1956)," pp. 50-51.

²The Daily, September 21, 1949, p. 1; Iowa State College, Information Service Newsrelease, September 21, 1949.

Major Truesdell was a graduate of South Dakota College in 1941 and immediately entered the Army Air Corps. He had served overseas during World War II and had flown thirty-five combat missions.¹

The separation of the Army and the Air Force ROTC did not occur immediately in 1949. One of the first things Major Truesdell did was to expand the two years of specialized courses in the advanced course to include the sophomore year of the basic course. Therefore, the Air Force ROTC cadet took one year of basic military science under the Army and three years under the Air Force.² During the 1950-51 school year the AFROTC department assumed a full four year curriculum. After three years at Iowa State Major Truesdell should have had the content of the two AFROTC specialized courses in administration and communications somewhat stabilized. However, Major Truesdell's other problems were amplified by the newness of the Air Force and numerous delays of supplies and equipment. Colonel G. B. McConnell, the PMS&T at Iowa State from 1949-54, explained that the Air Force ROTC unit relied on the Army ROTC unit for some of its support during the first two years after the units were separated.³

¹Iowa State University, Special Collections, Air Science Records, Personnel File.

²The Daily, September 29, 1949, p. 1.

³Interview with G. B. McConnell, March 17, 1972.

Lt. Colonel Henry H. Schwane 1950-51

On August 7, 1950, Lt. Colonel Henry Schwane reported to Iowa State to become the third PAS&T and began a four year tour of duty. During this tour he was the Professor of Air Science and Tactics for one year until a more senior colonel reported in for a two year tour (1951-53). During these two years Lt. Colonel Schwane served as the executive officer or second in command. Then in 1953 Colonel Schwane once again became the PAS&T for the 1953-54 school year. The 1952-53 College Catalog lists both Colonel Evanoff and Lt. Colonel Schwane as PAS&T during the same time period¹ even though Colonel Evanoff was definitely in charge of the AFROTC Department. The listing of both officers as PAS&T was not unusual since Lt. Colonel Schwane had already been designated by the faculty of Iowa State as a PAS&T and there was no reason to demote him to an associate or assistant professor just because a more senior ranking officer was assigned to head the AFROTC unit. The College just complied with its original contract with the Air Force which states the senior ranking officer assigned will be designated as PAS&T and designated Colonel Evanoff as a PAS&T also.

¹Iowa State College Catalog, 1952-53, p. 280.

Lt. Colonel Schwane was a 1940 Iowa State College graduate with a B.S. in Forestry. He graduated from the field artillery advanced ROTC and was commissioned a second lieutenant in the field artillery reserve. While at Iowa State as a student, Colonel Schwane was a member of the College Cossacks, the acrobatic riding team. Colonel Schwane entered the Army Air Force and completed pilot training. From March, 1943, to October, 1944, he served in the campaigns of North Africa, Italy, and Corsica and flew fifty-three bombardment missions. When the Lt. Colonel arrived at Iowa State he held the rating of senior pilot and his decorations included the Silver Star, Distinguished Flying Cross, and the Air Medal with eight oak leaf clusters.¹ Colonel Schwane is the only Iowa State graduate who has held the position of PAS&T at the College.

During Colonel Schwane's first year as PAS&T (1950-51) the AFROTC Department expanded to a full four year curriculum. The AFROTC unit should have been well on its way to solving many of the problems of conducting a new program. However, the outbreak of the Korean War in the summer of 1950 imposed some restrictions on the capabilities of the Iowa State AFROTC unit. With a war going on, a ROTC unit had little priority since the major effort of the Air Force was devoted to fighting the war.

¹Iowa State University, Special Collections, Air Science Records, Personnel File.

The impact of the Korean War on AFROTC on the national level and also on AFROTC at Iowa State is analyzed throughout this chapter since it would be redundant to repeat what has been said about the Korean War in the two previous chapters. The Iowa State unit was somewhat handicapped by the lack of facilities (i.e., classrooms, office and storage space) just at the time the AFROTC enrollment was increasing due to the interest created by the Korean conflict. Most of the basic AFROTC cadets were still drilling in Army uniforms since the problem of uniform supply had not been adequately solved. It was well into 1952 before the Air Force blue uniform started outnumbering the olive drab. The mixture of uniforms was partially solved by having all those in olive drab drill at one time and those in blue drill at another. According to Major Richard Fisher, the detachment supply officer, the blue uniforms were on back order but their receipt was slow and piecemeal.¹

On January 24, 1951, the Air Force ROTC unit at Iowa State started its first honorary organization when the O'Neil Squadron of Arnold Air Society was dedicated to Lieutenant Charles H. O'Neil and Lieutenant James J. O'Neil. The two lieutenant's were the sons of Mr. and Mrs. P. H. O'Neil of

¹Robert C. Hall, "History of Detachment Eleven," AFROTC Detachment Historian (Iowa State College, Ames, Iowa, January 1, 1952 -- March 31, 1952) pp. 29-30.

Ames and had been members of the Iowa State Army ROTC unit before the war and had served in the Army Air Corps during World War II. Charles O'Neil had been shot down during the war and was taken prisoner. Charles was killed when a Japanese prison ship was torpedoed on September 7, 1944. James O'Neil was killed during a training flight on June 14, 1945, after he had flown 182 combat missions in the Pacific. The Arnold Air Society (AAS) is a professional honorary service organization of selected AFROTC cadets that was started as a local organization at the University of Cincinnati in October, 1947. The society got its name from the late General H. H. "Hap" Arnold who headed the Air Force During World War II. Thirty-nine Iowa State AFROTC cadets were initiated into the O'Neil AAS and the dedication ceremony was attended by the College president, two Deans, all three Military Department heads, Mr. and Mrs. P. H. O'Neil, Mr. and Mrs. E. E. O'Neil (a brother to James and Charles O'Neil) and several other interested persons. The mission of AAS was to promote the United States Air Force, American citizenship, and to create a closer and more efficient relationship among the cadets of the AFROTC.¹

¹Ames Tribune, January 25, 1951; News of Iowa State, March, 1951; AFROTC Detachment 250 Scrapbook; The Daily, January 25, 1951, p. 6.

Colonel Alexander G. Evanoff 1951-53¹

Colonel A. G. Evanoff, a native Iowan reported to Iowa State College on August 27, 1951, to serve as the fourth PAS&T. The Colonel was a 1938 graduate of the University of Iowa (Iowa City) and had gone through the ROTC program. During World War II Colonel Evanoff served in Australia, New Guinea, and the southwest pacific theater in which he flew fifty combat missions. The Colonel was the holder of the Silver Star, Distinguished Flying Cross, and the Air Medal. Colonel Evanoff was not new to ROTC duty since his previous assignment (1949-51) was as the PAS&T at Coe College, Cedar Rapids, Iowa.² The Colonel's duty at Iowa State faced several immediate challenges. In the fall of 1951 the AFROTC detachment enrollment nearly doubled from the 1950 figure of 663 to 1,340. There were 96 seniors, 176 juniors, 338 sophomores and 730 freshmen. The large increase of freshmen was brought about by the scheduling of sixty-two per cent of the Iowa State male freshmen in AFROTC

¹There is more information available on AFROTC during Colonel Evanoff's two year tour since the United States Air Force required AFROTC units to prepare a quarterly history with supporting documents from July, 1951 until the requirement was dropped after the January - March 1952 history was completed. During Colonel Evanoff's tour the AFROTC cadets started publishing the first internal cadet paper on March 13, 1952, titled the "Slip Stream." When the unit histories were no longer required the AFROTC staff and cadets started a scrapbook that contains the details of many of the events and happenings of the AFROTC Detachment 250 during the 1950's.

²Iowa State University, Special Collections, Air Science Folder, Personnel File.

which was established by joint Army-Air Force regulations.¹ The large enrollment in the junior class could be partially attributed to the effects of the Korean War. One can imagine the increased administrative and teaching responsibility as a result of an increase of over 600 cadets. A new Commandant of Cadets position was established to coordinate the cadet activities. Several other detachment organizational procedures, boards, and operating instructions had to be developed. The Iowa State AFROTC staff also introduced two new specialized options (armament and flight operations) in addition to the administration and the communication options.

During the 1951 school year the Air Force unit received four new officers and four airmen producing a net gain of three officers and one airman since one officer and three airmen had been transferred from the detachment. Three of the new officers had just been recalled to active duty² when the Air Force Reserves were called up for the Korean War. These three officers helped save the day at the College. Two of the recalled officers were on the verge of completing their Ph.D. and the other officer his M.S. degree; consequently, the education level of the AFROTC staff went up. Based on the evidence at

¹The Daily, September 29, 1951, p. 1; Robert C. Hall, "History of Detachment Eleven," October 1--1951, December 31, 1951, p. 13.

²Robert C. Hall, "History of Detachment Eleven," July 1, 1951--September 31, 1951, pp. 305.

hand, all Air Force officers assigned to the AFROTC staff at Iowa State had at least a B.S. degree. This was not the case at several schools as twenty-four per cent of all the PAS&T's and assistant PAS&T did not have degrees.¹ One of the new officers Major William F. Boore was an armament specialist in the reserves and his graduate work was in metallurgy which made him especially qualified to teach the new armament course. Another recalled officer Major Eugene E. Stish was a pilot, had a M.S. degree in education, was just completing his Ph.D. at the University of Iowa, and was selected to teach the new flight operations course. The third recalled officer (Major Richard O. Fischer) was a welcome addition to teach administration as he had several years of experience as a high school administrator.² It appears that these recalled officers undertook their new duties enthusiastically and used considerable imagination and resourcefulness in their teaching. Major Stish took his flight operations students on Air Force base visits to show them what flight operations was really like.

¹Charles B. Todd, "The Improvement of Instruction for the Air Force Reserve Officer Training" (unpublished Ed.D. Dissertation, Columbia University, 1953), p. 32, as quoted by George D. Oetting, "The Professor of Aerospace Studies--A Descriptive Study of a Military Educational Administrator" (unpublished Ph.D. Dissertation, University of Illinois, 1969), p. 40.

²Robert C. Hall, "History of Detachment Eleven," July 1, 1951--September 31, 1951, pp. 3-5.

The major was a master scrounger (this technique was highly desirable since the Air Force supply was very slow or was usually out of what was needed) and was able to obtain maps and other aids to use in his flight operations course.¹

The problems of Colonel Evanoff and his staff do not sound too unlike the problems that Lt. Colonel Boles and Colonel Shaffer had when they implemented the new Army ROTC program after World War I. The quarterly histories of the AFROTC detachment (known as Detachment Eleven at Iowa State) from July 1, 1951, to March 31, 1952, reveal that the Air Force was faced with several problems. One problem was a shortage of classrooms and the Army ROTC unit was reluctant to give up more classroom or storage space in the armory. However, the College came to the rescue and spent \$5,000 to modify some space in the armory that gave three additional rooms to the Air Force. One of these rooms had been the Army's vehicle workshop, but after being remodeled it was the most suitable room in the armory.¹

Another problem was the lack of textbooks and equipment for the new flight operations option. Frequent requests for equipment and texts through supply channels were almost always futile. It was only through Major Stish's personal initiative that any materials were available.² More than half of the

¹Ibid., p. 14.

²Ibid., p. 8.

AFROTC staff were rated officers on flying status. This created another problem especially since these officers were required to participate in aerial flight each month to maintain their proficiency and the nearest flying facility was over 185 miles away. The problem of obtaining required flying time has not been resolved completely even in the 1970's, but certain accommodations have been made so the flying time situation has eased somewhat.

The AFROTC made a concerted effort to publicize its program and to let the public know they were the U.S. Air Force and not the Army Air Force. Evidently this was a somewhat frustrating task at times as the detachment histories point out that some persons on the AFROTC staff at Iowa State felt it would have been better for the AFROTC detachment to have moved away from the armory and even accepted lesser facilities just so the break with the Army could have been final.¹ The history of the AFROTC detachment prepared in April, 1952, reveals an example of the frustration of the AFROTC staff in their efforts to publicize the Air Force. The detachment historian acknowledged the public had:

...read of new developments in aircraft, but the appearance of military aircraft in this area is a rarity. In the fall of 1951 a B-36, at least 10,000 feet overhead, created much interest; however,

¹Ibid., pp. 15-16.

none have been seen in the area since, not even a jet fighter. With this type of isolation from Air Force activity, it is understandable that so little is known of activity at the operating level.¹

The lack of airplanes did not deter the Iowa State AFROTC detachment personnel from doing everything in their power to promote the AFROTC unit and its many activities. Staff members spoke at student meetings and local service organizations. A Master Sergeant John H. Straka (a personable NCO who was well liked by the cadets)² spoke frequently on campus and did much to enhance the image of the Air Force. Other detachment publicity efforts included a fifteen minute television program on the College Television station about AFROTC, featuring the AFROTC in the "News of Iowa State", news release on cadets visiting Air Force bases, and firepower displays. Other news stories played up the orientation flights, summer camp, rifle and drill team competition, Arnold Air Society functions, annual inspections, award ceremonies, commissioning ceremonies, and AFROTC dances.³ All of these activities served to present

¹Ibid., p. 20.

²Interview with Rolland Knight, March 18, 1972.

³The Daily, September 30, 1952, p. 3, April 17, 1951, p. 7, October 4, 1951, p. 1, January 19, 1952, p. 1, March 27, 1952, p. 1, August 22, 1952, p. 1, October 17, 1952, p. 8, November 11, 1952, p. 1, November 15, 1952, p. 1, March 5, 1953, p. 4, August 7, 1953, p. 1, May 29, 1953, p. 1; The "History of Detachment Eleven" gives a good summary with several supporting documents describing the staff and cadet activities.

the AFROTC as a part of the Air Force and not the old Army Air Corps.

The AFROTC staff was active in the development of a new generalized curriculum that was to replace the specialized options. In answer to a request from the Commanding General of Air University, the detachment submitted its proposal for the new curriculum on March 26, 1952.¹ As the new curriculum was being developed in the fall of 1952, a nationwide conference was held in October, 1952, to discuss the new curriculum. Colonel Evanoff and President Friley participated in this October conference. This conference was also to make final changes and recommendations on implementing the new curriculum. The generalized curriculum for AFROTC was announced in November, 1952, implemented for freshman, sophomores and juniors in the fall of 1953. The seniors (class of 1953-54) continued the specialized options, and the complete four-year generalized curriculum was fully implemented in the fall of 1954.²

When the Air Force introduced its postwar specialized curriculum in 1946 for the juniors and seniors it was strictly to train officers for the Air Force Reserve. The AFROTC graduate was to be the backbone of these reserve forces;

¹Robert C. Hall, "History of Detachment Eleven," January 1, 1952--March 31, 1952, pp. 6-8.

²The Daily, October 17, 1952, p. 8, November 11, 1952, p. 1.

therefore, he had to be trained for immediate assignment to active duty without the benefit of further formal military instruction. It was found that a young man could not be trained fully as an officer and also as a specialist in the academic hours allowed for the AFROTC program. Consequently, it became necessary to drop the specialized options and to go to a more generalized four year AFROTC program with the specialized training taking place after the officer went on active duty.¹ It should be remembered that prior to the Korean War the graduates of ROTC programs (except the Navy Regular program) were not required to serve on active duty and most went into the active or inactive reserve. During the Korean War a two year active duty period was required for all ROTC graduates and the Air Force determined that the active duty specialized schools could perform the training much better than ROTC. Actually the whole philosophy of the Air Force and its reserve forces evolved to the point that active duty was necessary to receive specialized training before being eligible to participate in the reserves.

The last year of Colonel Evanoff's two year tour at Iowa State was the start of the big effort to interest more AFROTC cadets in applying for flying training. In early 1952 the

¹Guide to Air Force ROTC (Montgomery, Alabama, Head-quarter AFROTC, February 1, 1953), p. 1.

AFROTC detachment history explained that few planes ever came over Ames. In the spring of 1953 the possibility for a flyover appeared better. It was announced in several publications throughout the state that during Veishea there was to be an Air Force flyover that was to include three B-29 bombers and fifteen minutes later a flight of twelve jet fighters were to buzz the campus.¹ However there is no evidence that the flyover took place. The AFROTC unit did have a static display during Veishea of a F-80 Shooting Star jet aircraft. Since the AFROTC unit was unsuccessful in its attempt to get an Air Force flyover during Veishea, it seems that the detachment flying officers would occasionally pull their own flyover. It was not unusual to be in or near the armory and see or hear a Air Force plane making a rather low pass at the armory. Anyone familiar with the Air Force ROTC program would stop and wonder which one of the Air Force types was out getting in their flying time.²

The AFROTC detachment officers also took the cadets on local orientation flights. In May, 1953, eighty-seven AFROTC cadets got some "stick time" when an Air Force T-7 trainer was flown by the detachment officers giving orientation rides at Ames airport.³ This type of orientation flying and the

¹The Daily, May 15, 1953; Ames Tribune, May 15, 1953.

²Interview with Floyd Anderson, April 3, 1972.

³The Daily, May 22, 1953.

publicity from the jet orientation rides at summer camp all helped to interest the AFROTC cadet in flying. Other means of motivating a cadet to fly was to reduce the active duty service commitment from four years to three years. Another technique that motivated potential advanced cadets to volunteer for a flying training category was the realization that this was one way to insure his acceptance into the advanced course. By taking the advanced course the cadet could insure he would be allowed to complete school without any fear of getting drafted and then be able to serve on active duty as an officer.

In the latter part of the 1952-53 academic year two announcements in The Daily dealt with the AFROTC unit. The first announcement was about the AFROTC rifle team winning the Air Force Division of the William Randolph Hearst National intercollegiate rifle meet.¹ It seems that Iowa State had two national rifle intercollegiate championships since the Army ROTC team also won its division.² The second announcement dealt with the departure of Colonel Evanoff.³ The normal tour of duty in AFROTC was four years and since Colonel Evanoff had served two years at Coe College prior to coming to Ames in 1951, he completed his total four year tour after serving only

¹Air Force ROTC Detachment 250 Scrapbook, 1952-53.

²The Daily, June 5, 1953, p. 6.

³The Daily, May 29, 1953, p. 1.

two years at Iowa State College. Lt. Colonel Schwane who had served as PAS&T from 1950-51 and then as Colonel Evanoff's executive officer for two years was named the new PAS&T.

Lt. Colonel Henry M. Schwane 1953-54

During Lt. Colonel Schwane's second one year stint as PAS&T at Iowa State, name of the Department of Air Science and Tactics was changed to the Department of Air Science and the PAS&T became known as the PAS (Professor of Air Science). It was also during the 1953-54 school year that Lt. Colonel Schwane was promoted to colonel. During this same year the AFROTC enrollment climbed to a new all time high of 1,952 cadets.¹ This number of cadets still stands as the largest enrollment that any Military Department had throughout the history of military training at the College. There were several announcements in the College paper about the Air Science Department and its many activities. However, two announcements attracted substantial attention. The announcements dealt with the Air Science Department implementing a new curriculum and the overproduction of Air Force officers as a result of the slow down of the Korean conflict, and the new budget limitations imposed on the Air Force by Congress.

¹The Daily, September 30, 1953, p. 3; All the available information on the AFROTC enrollment and commissioning from 1946-70 is included in Appendix O.

The generalized curriculum that Colonel Schwane and his staff introduced in 1953 at Iowa State was aimed at motivating the AFROTC cadet to continue into the advanced course and ultimately to make the Air Force his career. The freshman AS I (air science I) year included an introduction to AFROTC and aviation, fundamentals of global geography, international tensions and security organizations, and instruments of national security. The air science II curriculum dealt with aerial warfare and considerable time was devoted to career opportunities in the Air Force. There was a substantial amount of time devoted to flying opportunities (especially since the Air Force needed flyers), but it appears that all the different major specialities in the Air Force were discussed.

The advanced curriculum (air science III) dealt with command and staff concepts, problem-solving techniques, communicative skills and Air Force correspondence, military law, functions of an Air Force base, and a brief look at applied air science that included aerial navigation and weather. A required summer camp was normally scheduled between the junior and senior year where the cadet spent four weeks at an Air Force base and participated in many of the base activities. In discussions with several graduates of the AFROTC program it seems that the most motivating experience for the cadets at summer camp was usually the jet orientation ride. The air science IV curriculum included a review of summer camp and most

of the major topics covered in the first three years of the AFROTC curriculum. Then some time was devoted to leadership and management, career guidance and a briefing for commissioning which helped prepare the cadet for active duty.¹ In drill or leadership laboratory the cadets were taught the basic fundamentals of military courtesy, military discipline and drill movements. In later years of the AFROTC program, the upper class cadet was the instructor of the basic cadet and attempted to develop his leadership ability by serving in several capacities within the cadet corps. The overall effect of the generalized curriculum was to produce a well-rounded officer, versed in leadership, world affairs, and the fundamentals of flying.

Maxwell J. Richards in his "Ten Year History of Air Force ROTC (1946-56)" titled chapter six as "The Radical Years: 1953 and 1954."² Colonel Schwane probably would agree with Richards since the Colonel was the one who had to inform the College of the Air Force's change of plans which resulted in not commissioning some AFROTC graduates. It was also announced that some might be dropped from the AFROTC program unless they agreed to fly (i.e., pilot or navigator). The Daily carried

¹Iowa State College Catalog, 1954-55, p. 305. This generalized curriculum was implemented at Iowa State in 1953 and is included as Appendix N.

²Maxwell J. Richards, "A Ten Year History of Air Force ROTC (1946-1956)," p. 58.

four major articles on "the changing Air Force rules and ROTC program cuts" from August, 1953, to September, 1954.¹ Due to a variety of reasons Air Force ROTC had produced far more officers than the Air Force needed. One of the main reasons for overproduction was that the initial idea of Air Force ROTC (like the Army) was to train a large group of officers to go immediately into the reserves. The Korean conflict and the Universal Military Training and Service Act of 1951 required all officers to go on active duty for two years. Just as this major influx of officers was to enter the Air Force the requirements for active duty officers were reduced because of a lesser commitment in Korea and Congress also imposed a severe financial limitation on the Air Force. In 1952 the Air Force planned for a 143 wing Air Force but budget cuts necessitated a reduction to only 120 wings by 1953.

The post Korean War overproduction of officers were severe for the Army and the Air Force. The Army received authorization from Congress to commission all of its ROTC graduates and let them serve only six months and then put them into the reserves. The Air Force elected to require the majority of its AFROTC officers to sign up for flying training or be dropped from AFROTC. It seems that (nationwide) only twelve per cent of the AFROTC graduates in 1952 had elected to

¹The Daily, August 21, 1953, p. 1, September 19, 1953, p. 1, December 9, 1953, p. 1, May 28, 1954, p. 5.

take flying training. In 1953, the percentage doubled and as the "fly or get out" edict took effect in 1954 the percentage of cadets signed up for flying jumped to fifty-four per cent: in 1955, the figure increased to eighty per cent.¹ Up until this time the major portion of Air Force pilots was provided by the aviation cadet program. The Air Force could have continued to obtain most of its pilots through the aviation cadet program, however this would have amplified the problem and caused even more nonflying ROTC graduates to be dropped since the total input of new officers had to be curtailed. By using the aviation cadet program the education level of the officer force would have gone even lower since most aviation cadets did not have college degrees. The Air Force had the lowest education level of all the services (in 1953) and there was no desire for it to be reduced even further.

The Air Force announced it was not going to activate 6,400 reserve second lieutenants who had graduated from AFROTC in 1953. These 6,400 officers were the ones who were not eligible or who did not volunteer for flight training. However on July 30th, the Assistant Secretary of Defense in charge of Manpower and Personnel Dr. John Hannah (a later President of Michigan State University) overruled the Air Force and ordered the 1953 AFROTC graduates to active duty. As a result the Air

¹Maxwell J. Richards, "A Ten Year History of Air Force ROTC (1946-1956)," pp. 58-61.

Force problem was compounded even further, and several thousand older officers had to be dropped from service to make room for the new second lieutenants. In September, 1953, Dr. Hannah announced there were 13,000 to 14,000 seniors in the AFROTC program and there would be less than 9,600 active duty officer vacancies when they graduated. After a careful study by the Department of Defense, it was announced that only those in the flight training category (pilots and navigators) and 1,000 graduates in the scientific and technical field (engineering, mathematics, and the physical sciences) would be commissioned. Graduates not commissioned were to be given "certificates of completion." This certificate provided two options: enlist in Air Force as an airman third class for two years and then apply for reserve officer status or elect to be liable for service under Selective Service requirements. In late May, 1954, the Air National Guard came up with a plan that offered a third option in which the AFROTC certificate holder could accept a commission in the Air National Guard. The new Air Guard officer served a period of active duty (mainly for specialized training) and then completed the remainder of his military commitment with an Air Guard unit. There were 3,500 Air Force ROTC graduates of the 1954 school year that accepted the Air National Guard option. This figure was approximately seventy-

five per cent of those eligible for the Air Guard option.¹

Most colleges and universities understood the Air Force predicament, but some still made sharp comments about the mid-stream change of criteria. In March, 1953, additional requirements for selection into the advanced Air Force ROTC were added. A flight physical and a aptitude test for flight training were required. All applicants for advanced AFROTC were advised that their selection for the advanced course was tentative. On March 4, 1954, Mr. Russell I. Thackrey, Executive Secretary of the Association of the Land Grant Colleges and Universities, explained that it wasn't the fault of the Army or the Air Force that the original plan of a large reserve force had been changed to an active duty situation requiring two years of service immediately after graduation. Also, testimony in the Congressional Record reveals that Congress must assume part of the blame for overproduction of Air Force officers since the original plan for 143 Air Force wings was reduced to 120 when the Air Force budget was cut.²

¹Ibid., pp. 61-65; The Daily, August 21, 1953, p. 1, September 19, 1953, p. 1, December 9, 1953, p. 1, May 28, 1954, p. 5.

²Russel F. Fisher, "A Summary of the Developments of Air Force ROTC from September, 1952, to February, 1955, "Memorandum for the Record, (Headquarters United States Air Force, Washington, D.C., February 15, 1955) p. 8.

The effect at Iowa State when the changed Air Force rules governing AFROTC in the 1953-55 time period is difficult to determine. It does appear there was some effect as the number of AFROTC graduates in 1953 was 118, then dropped to 109 in 1954 and increased to 117 in 1955. However, the Army and Navy ROTC units at Iowa State also showed a drop in officer production for this time period. The ROTC supply (Army and Air Force) advanced uniform military deposit book gives a slight hint that a few more than normal advanced AFROTC cadets dropped from the program in 1953 and 1954. Nevertheless the number turning in their uniform is probably not significant. From the 140 cadets who entered the advanced AFROTC in 1953, twenty-six turned in their uniforms; of those who entered in 1954, twenty-two did likewise.¹ These numbers of drops from the AFROTC program are not much different from the following years (there were no uniform turn in records available prior to 1953). It appears that the AFROTC program at Iowa State was not drastically affected by the Air Force change of rules. However, one can hypothesize that some Iowa State students did drop from the advanced AFROTC program because they could not (or did not want to) qualify for the flying training option. It is also probable that some of the Iowa State AFROTC graduates received certificates of completion. It appears that the Iowa State

¹Iowa State University, ROTC Supply, Advanced Uniform Military Deposit Book, 1953-54.

administration did not make any protest because of the change in rules. Colonel Schwane being an Iowa State graduate and his many contacts on campus probably had some bearing on the College understanding the AFROTC situation.¹

Colonel Charles E. Bockman 1954-55

In late May, 1954, it was announced that Colonel Charles Bockman would become the PAS at Iowa State. He was the fifth person to head the AFROTC program and had a B.S. in engineering. He was a command pilot and had served in Japan, Korea, Okinawa, Guam and the Phillipine Islands. Colonel Bockman's tour at Iowa State was only fifteen months long since he elected to retire with just over twenty years of service.² Technically, Colonel Bockman could have continued on active duty for almost ten more years.

During Colonel Bockman's short tour at Iowa State the emphasis was still on motivating sophomore cadets to apply for flight training. On November 4, 1954, ten AFROTC cadets took a flight in a Des Moines Air Guard C-47 and one cadet was given a T-33 jet ride. The Arnold Air Society had a F-86 pilot who flew 100 missions over North Korea speak at their pledge initiation on November 9, 1954. In February, 1955, Colonel

¹Interview with Floyd Anderson, April 3, 1972.

²The Daily, May 29, 1954, October 28, 1955, p. 1; Iowa State University, Special Collections, Air Science Records, Personnel File.

Evanoff, the PAS from 1951-53 (who had recently completed a tour in Korea and was now the commander of a pilot training unit at GoodFellow AFB, Texas), returned to the campus to speak. Colonel Evanoff talked to the sophomores and senior on the benefits of flying.¹ Three weeks after Colonel Evanoff's visit, sixty-four AFROTC sophomore cadets from Iowa State went on orientation flights that were aimed at motivating the cadet towards flying. Two weeks later Colonel David C. Schilling, the commander of a tactical fighter wing at Turner AFB, Georgia, spoke to the cadets on tactical mobility and versatility of fighter aircraft. In early April, 1955, six AFROTC cadets received jet rides during Easter break. Seven days later eleven more cadets were treated to an orientation flight in a C-45 aircraft at the Des Moines Airport.² In reading The Daily it seemed like one big orientation flight after another.

It is ironic that after all of this highly motivational work to increase the interest in the advanced course and especially flying, AFROTC headquarters placed into effect a

¹The Daily, November 9, 1954, February 1, 1955; Several newspaper clippings and pictures in the Detachment 250 Scrapbook amplify on Lieutenant Michael Fellman's talk and participation in the O'Neil Arnold Air Society Initiation.

²The Daily, February 24, 1955, p. 1, March 9, 1955, p. 1, April 5, 1955, p. 5, April 13, 1955. There are several other newspaper articles and pictures that were taken during the various flying motivation trips and are in the AFROTC Detachment 250 Scrapbook, 1955.

detachment quota system for the 1955-56 school year. Until this time Iowa State was allowed to enter as many qualified candidates as desired to enter. The reason for the quota system was to sharply decrease the production of Air Force officers. An idea of how effectively it worked at Iowa State is evidenced by reviewing the AFROTC commissioning data in Appendix O. It took two years for a reduction at the start of the junior year to take effect upon the number graduated. The number of Air Force second lieutenants commissioned in 1956 was 123 but with the quota limitation for the 1955 entry, there were only forty-nine commissioned two years later in 1957.

Colonel Lewis P. Ensign 1955-1958

Colonel Ensign arrived in November, 1955, and became the sixth person since 1946 to command the AFROTC unit. This was the first and only time that a change of command for a PAS took effect after the academic year had started. Colonel Ensign had a B.A. degree from the University of Idaho. During World War II he was a group commander and stationed in England. From 1952-54 he was stationed in Washington, D.C., as an executive officer for the under Secretary of the Air Force. From 1954 until his assignment to Iowa State as the PAS he was the division staff operation officer at Lockbourne AFB, Ohio.¹

¹Iowa State University, Special Collections, Air Science Records, Personnel File.

Colonel Ensign's tenure occurred during the time that the Air Force was unable to provide sufficient airlift support to take cadets on motivational base visits. However, it appears that Colonel Ensign took advantage of his previous contacts (when he was stationed in Washington, D.C.) and was able to arrange several flights to a variety of bases.¹ The Iowa State base visits started including more college staff and on occasion Ames businessmen. One such visit in October, 1957, included twenty faculty members, eleven businessmen, six cadets and three detachment officers. The trip included a stop at Air University, Maxwell AFB, Alabama, the professional education command of the Air Force which is responsible for AFROTC. While at Maxwell AFB, the Iowa State group toured the Air University facilities and received a briefing by Major General T. C. Rogers, the Commandant of AFROTC. Before departing Maxwell AFB, Cyclone coach Bill Strannigan made a special presentation of the coveted "I" blanket to a former Iowa State athlete stationed there. It seems that Major Lewis T. Johnson had played baseball, football, and track at Iowa State from 1940-43 but enlisted in the Air Force before graduation and had never received his "I" blanket. The group of Iowa State dignitaries then journeyed on to Elgin AFB, Florida, where they

¹Iowa State University, AFROTC Detachment 250 Scrapbook, 1955-1958.

witnessed the annual Air Force firepower demonstration.¹

Colonel Ensign was successful in his attempt to arrange for Air Force General officers to visit the campus. In 1956 Major General Richard M. Montgomery, Chief of Staff, Strategic Air Command, spoke on the mission of the command. In 1957 the Commandant of Air Force ROTC Brigadier General Turner C. Rogers paid a visit to the Iowa State AFROTC unit.² General Montgomery was the highest ranking Air Force officer to ever speak at Iowa State and still holds that distinction even though two other Air Force Major Generals visited the campus in later years. General Rogers visit to the AFROTC unit was the first ever by a Commandant of AFROTC. Another officer who attracted quite a bit of attention at Iowa State was only a captain. He was Captain Harold Fisher who was a Korean War jet ace and had shot down ten enemy aircraft. The Captain himself was shot down and captured. After the war he returned to Maxwell AFB, Alabama, and then was assigned to Iowa State.³ During his tour of duty in Ames he completed his M.S. degree and also served as an Assistant Professor of Air Science. Based on the evidence at hand, it appears that Captain Fisher is the only jet ace who was ever assigned to teach in the AFROTC Department.

¹Air University Dispatch, October 16, 1957.

²Iowa State University, AFROTC Detachment 250 Scrapbook, 1955-58.

³The Daily, December 9, 1955, p. 1.

Colonel Elwin F. Quinn 1958-62

Colonel Quinn reported to Iowa State in July, 1958, to become the seventh person to serve as PAS at Iowa State. It was during the Colonel's tenure that the Iowa State College became known as Iowa State University (July, 1959). Colonel Quinn's tour carried over into the 1960's and he was the first PAS to serve a full four years as PAS since the AFROTC unit began at Iowa State.¹ Colonel Quinn received a B.S. degree in radio engineering from Utah State Agriculture College in 1935 and entered the Air Force in 1939. During World War II he served in England, France, Belgium and Germany. In 1953 he was the base commander of the Seoul City Air Base, Korea, and then base commander of Brady Air Base in Japan. His most recent assignment before coming to Iowa State was as the Director of Material for the 4060th Air Refueling Wing, Dow AFB, Maine.²

Colonel Quinn and his staff followed much the same pattern that his two predecessors had followed. There were some base visits and the cadets participated in the normal military events with no one event attracting an unusual amount of attention. The Air Force did make an adjustment in its

¹Colonel Schwane had served for four years at Iowa State but he was second in command for two years under Colonel Evanoff.

²Iowa State University, Special Collections, Air Science Records, Personnel File; The Daily, September 27, 1958, p. 1.

curriculum during 1958 (and printed in the 1959-60 Catalog) that gave a little more emphasis to subjects relating to aerospace power. The advanced course included increased emphasis on leadership and management in the junior year and more on weather, navigation, geography, and international relations in the senior year.¹

One new phase of advanced AFROTC was implemented in 1958 at Iowa State when the Flight Instruction Program (FIP) was introduced. Up until 1956 the AFROTC flying indoctrination and orientation program (base visits) had served as the primary motivating and screening device for flight training. However, most AFROTC detachments had trouble obtaining adequate airlift support to carry out a successful flying indoctrination and motivation program. (It must be noted that Colonel Ensign was able to arrange adequate airlift support.) Therefore Congress passed Public Law 879 on August 1, 1956, that authorized the FIP program.² Basically the FIP program was the same for all three services. However, it was required for Senior AFROTC cadets who were in the flight training category. Each FIP cadet completed a ground school and thirty-

¹Iowa State College Catalog, 1959-60, pp. 136-138.

²"History of the Air Force Reserve Officers Training Corps," Twentieth Anniversary Command Edition, prepared by Lt. Colonel Linwood P. Smith and Ileana S. Brown, (Air University, Maxwell AFB, Alabama, January 31, 1966), pp. 23-24; The Daily, March 24, 1959, p. 4.

six and one-half hours of flying time and could even obtain his private pilot's license at Air Force expense. Thus FIP became an attraction to motivate potential Air Force pilots. It also served as a screening device to determine if the flying category cadets had the capability to become Air Force pilots.

The end of the 1959 calendar year at Iowa State was closed on a positive note on December 8, 1959, when it was announced that Dr. W. Robert Parks, Dean of Instruction, was going to Maxwell AFB to attend an AFROTC conference. This conference was to form a panel of institutional representatives that would attempt to resolve problems dealing with AFROTC and the institutions of higher learning.¹ It seems that by 1959 the countrys growing economy, an increased Air Force service obligation, excessive time required to take ROTC, and the AFROTC quota system had now reduced the graduates to a point that the Air Force needed more officers than they were graduating from AFROTC. Consequently the quota system was lifted and an all out AFROTC recruiting and motivation program was placed in effect. It was during this late 1959 meeting which Dr. Parks attended that the AFROTC Advisory Panel was formed to insure optimum working relationship of the colleges and universities in overcoming the problems that

¹The Daily, December 8, 1959, p. 1.

AFROTC faced on campus. Dr. Parks (after he became President of Iowa State) became one of the nine members of this newly founded national AFROTC Advisory Panel.

Summary

After World War II the AFROTC program was first introduced at Iowa State College in 1946 as an "air unit" in the Military Science Department. The College was selected as one of seventy-eight schools to offer Air ROTC. The early curriculum was a specialized (similar to the branch oriented Army ROTC) course that was aimed at training reserve officers who could go immediately into the reserve forces without any further training. This specialized curriculum continued until the Korean War time period when all AFROTC graduates were required to go on active duty for two years. Thereafter the specialized training was dropped from AFROTC and all specialized training took place after the officer went on active duty. A generalized curriculum was implemented which was to produce a well rounded officer versed in leadership, world affairs, and the fundamentals of flying. The new AFROTC program appeared to be gaining some semblance of stability when the Korean War started and created several additional problems such as the enrollment jump of almost 100 per cent in one year. Just as the AFROTC program stabilized during the Korean War it became evident there would be a substantial overproduction of AFROTC officers;

certain drastic measures were taken to reduce the number of new second lieutenants coming out of AFROTC. All of these ups and downs of the AFROTC program at Iowa State were taken in stride by the College. During the 1946-59 period seven officers served as Professor of Air Science and Tactics (later called Professor of Air Science) at Iowa State. The program grew from an enrollment of 116 in 1946 to a high of 1,952 in the 1953-54 school year. The total enrollment in AFROTC then decreased to an average of 1,423 for the remainder of the 1950's. There were 843 Air Force officers commissioned at Iowa State from 1948 to 1959.

The AFROTC unit formed its own special organizations such as Arnold Air Society, rifle team, drill team, band and published a cadet paper. AFROTC cadets became members of Scabbard and Blade, Pershing Rifles, Society of American Military Engineers, and also participated in many other campus activities. It was through the cadet corps activities, the AFROTC academic program, extra curricular activities, and their regular college major that the potential Air Force officers developed their leadership capabilities. The AFROTC department probably had the most difficult time of any Military Department in establishing a stabilized and viable ROTC program during the post World War II era. It does appear that the AFROTC unit (the newest of the three Military Departments) became an accepted part of the College and accomplished its mission of commissioning officers for the United States Air Force.

CHAPTER IX: THE THREE ROTC PROGRAMS AT IOWA STATE
1946-59--COMPARISON AND CONTRAST

Beginning with the school year 1946-47 Iowa State College offered programs for the preparation of officers for the Army, Navy, and Air Force. Iowa State thus became one of only thirty schools that offered ROTC in all three branches of the armed forces. Earle Ross, the College historian, describes the situation:

The requirement of "military science and tactics" in the organic act [Morrill Act] now came to full and complete stature in a department in which distinct curricula in military science, naval science, and air science were provided, involving the securing of basic training, temporary reserve status, or permanent career. The department was administered in the Science Division by Dean Gaskill, who after two years as chief scientist in the research and development department of the U.S. Army in Washington became a brigadier general in the reserves. The grueling Korean struggle brought startling realization of the need for continuous and progressive training. The presence of a considerable number of reserve officers on the staff lent further support and emphasis to this branch of land grant education.¹

On the national scene, The National Security Act of 1947 (often referred to as the Unification Act) created the National Military Establishment which brought more centralized control

¹Ross, The Land Grant Idea at Iowa State College, p. 256. Ross implies that all three departments were one, however, each Military Department was separate and equal once the Air Force ROTC unit became independent of the Military Science and Tactics Department in 1949.

of the military at the national level. The 1947 Act also created the Air Force as a separate service equal in status with the Army and Navy. In a 1949 amendment the National Military Establishment was renamed the Department of Defense and made into an executive department with still more centralized control over the three military departments.¹ This was the start of a long slow process of bringing some standardization and unification to the armed forces. However, as far as ROTC was concerned it appeared there was more of a separation rather than a unification. All three ROTC programs operated under different laws and appeared to go their separate ways. It was not until 1964 that all three ROTC programs came under the same legislation.

It is extremely difficult to compare and contrast the three ROTC programs from 1946 to 59 since the programs are not vastly different in most cases. Areas in which the ROTC programs showed the greatest difference at the start of the post World War II time period were the same areas in which they later became most similar. The one exception was that the Navy ROTC program had the Holloway Plan approach which was a four-year subsidized education program that the Army and Air Force did not receive until 1964. No one ROTC program is exclusively different in several areas. Therefore all three programs will

¹Maurice Matloff, American Military History, pp. 531-33.

be examined at the same time in relation to a specific topic. Some of the most important topics are: mission, original concept of regular and reserve forces, active duty service commitment, national and local organization (to include staffing), curriculum, and the effect of the Korean War on the ROTC programs.

Although the three ROTC branches operated under different laws during the 1946-59 time frame, the missions of the programs were almost identical. Basically the mission of all three ROTC programs was to select and prepare cadets and midshipmen through a permanent system of training in specific subjects at civilian institutions, to serve as officers in the reserve or regular components of the armed forces. The original concept of the Army and the Air Force mission was aimed at commissioning officers for the reserve forces. The Navy initially trained midshipmen under the Holloway Plan for the Regular Navy which required two years active duty upon commissioning. The Navy also trained several midshipmen through the contract plan to serve in the reserves (with no active duty).

The Universal Military Training and Service Act of 1951 made all qualified males subject to two years of active duty service. Consequently all ROTC graduates had to serve on active duty for two years. Thus in one stroke of the pen the active duty commitment of all ROTC graduates changed to the same length of time that the Holloway Plan officers originally

were required to serve. The Navy then increased its active duty commitment to three years for the Regular program graduates. In the early 1950's the Navy found it was not retaining a large enough percentage of Regular officers and increased their commitment to four years. The Army continued to require its graduates to serve two years on active duty and then to go into the reserve forces thus maintaining its original mission of providing a large supply of reserve officers. The Air Force found that most of its reserve officers spent much of their required two years going through training to learn to operate the complicated weapon systems. This extensive training left little time for the Air Force to reap the benefits of the training. Consequently, the Air Force increased its commitment for flying officers to three years, and when it was found that even three years was not long enough, the commitment was changed to four years of active duty. (In later years the active duty commitment for flyers became five years and then finally six years).

All three ROTC programs started out after World War II with the local unit reporting to some higher level command that was responsible for ROTC in a geographical area. In 1952, the Air Force went to a centralized headquarters that was responsible for all the AFROTC units. The Navy followed suit in 1964 when all NROTC units were placed under the management control of the Bureau of Naval Personnel. Army ROTC was also placed

under one command in 1964 CONARC (Continental Army Command) in regards to overall operations. However, the Army ROTC unit at Iowa State still reports to a geographical command. The local ROTC units are organized similarly since each unit is headed by a senior officer (usually a colonel or Navy captain) who actually wears two hats. First the senior military officer of each service is the military commander of all the assigned military personnel of his service. The senior officer is also the head of the academic department (Army, Navy or Air Force) with the title of PMS&T, PNS, or PAS. Thus the professors of the Military Departments are responsible to higher military headquarters and to the academic division to which their units are assigned.

All personnel assigned to the Iowa State ROTC units are military except secretaries and in one case a civilian clerk. The staffing of the local units vary considerably. The Navy is manned with a Professor of Naval Science, an executive officer (who normally does not teach), an officer instructor for each of the four naval science years, and a Marine officer who conducts the Marine Corps option. Throughout the 1946-59 time period each officer instructor had an enlisted man who served as an assistant instructor. The Air Force is manned based on the number of cadets enrolled in the ROTC program. At one time during the large enrollments of the Korean War, the Air Force had thirteen officers and eleven enlisted men.

The number of personnel of the Army ROTC at Iowa State is based on a minimum of five officers. Then a formula based on the number of students in the basic and advanced course and instructor work load in teaching and additional duties is used to determine how many additional staff members are required. During the 1952 school year the Army also had a large staff; ten officers, two warrant officers and twelve enlisted men. As the enrollments decreased in the 1960's, the Army staff has been reduced to five officers and two enlisted men and the Air Force has four officers and three enlisted men. The number of Navy officers has remained constant with a slight reduction in enlisted men.

With the exception of the Holloway Plan (the Navy subsidized program that was explained in Chapter VII) the most noticeable difference in the ROTC programs is the curriculum. The Navy's basic concept of the curriculum is that it must produce "an immediately employable ensign" who could perform his new duties as an ensign competently and effectively. Therefore the Navy curriculum is much more service oriented and deals with its weapons, mission, organization, operations, and the responsibilities of the junior officer. At Iowa State the Navy is the only military training program that offers an approved undergraduate degree program which requires thirty-six hours of college credit. The course is taught by naval officers except for a two year period in 1959, when a

psychology course was included in the sophomore year and the total naval science credit was reduced from thirty-six to thirty-one hours. The Navy no longer requires the civilian psychology course. The Army curriculum in 1946 was branch material (i.e., artillery, engineer), as it was before World War II. In the early 1950's the Army ROTC units started converting to a general military science curriculum. However, Iowa State remained branch oriented even though over ninety per cent of all AROTC units went to the new branch general. The branch general curriculum was implemented in 1964 at Iowa State. The graduates of AROTC had to go through a branch school upon being commissioned and this training (until 1964) was in most cases a repetition of their branch material course at Iowa State. The Air Force ROTC curriculum started out service oriented and the attempt was made to train Air Force officers in specialized areas so they could go immediately into the reserve forces as fully qualified specialists. The Air Force later realized that they could not train a specialist in the academic hours allotted. Consequently a generalized curriculum was introduced with the Air Force officer's specialized training took place after he reports for active duty. At Iowa State from 1946 to 1959 the Air Force ROTC went to a generalized curriculum while the Army and Navy remained with a service oriented curriculum. The Army maintained its branch material until well into the 1960's and the Navy

curriculum is still service-oriented, preparing fully employable ensigns.

The effect of the Korean War on the ROTC programs at Iowa State has been described in some detail in previous chapters. It suffices to say that the war did affect all three ROTC departments at Iowa State. The Navy ROTC was affected the least since its largest enrollment of 291 was within the planned Iowa State maximum of 300 midshipmen. The Army and the Air Force ended up with almost all the freshman and sophomores who were required to take basic ROTC. The Korean War time period also saw a substantial increase in the enrollment of the voluntary advanced course of the Army and Air Force. The resulting overproduction of Army and Air Force officers put both services in an unfavorable situation. The Army was able to gain legislation that allowed a short active duty tour and then assigned the new second lieutenants to a reserve status. The Air Force attempted to compel its excess officers to apply for flight training, i.e., fly or get out. The end result was that some AFROTC graduates were not even commissioned but were presented certificates of completion.

Another interesting difference existed between the ROTC programs at Iowa State up until 1955. It seems that ever since Colonel Boles and Shaffer started the Army ROTC program in 1919 and 1920, the College had paid a small gratuity to the PMS&T

and his branch heads. This gratuity was expanded to include all officers and enlisted men. When the Air Force became a separate ROTC Department the gratuity continued to both the Army and the Air Force. However, the Navy ROTC staff never did receive the gratuity from the College. The original intent of the small payment was to help off set some of the additional expenses of the military personnel since they were living away from a military post. Some schools still make such a payment to the military personnel even in the 1970's. However, that is not the case at Iowa State since the gratuity was stopped after the 1954-55 school year. Up until 1955 the PMS&T and the PAS&T had been receiving \$540 per year, associate and assistant professors were receiving \$270, and the enlisted men received \$150 per year. Actually when figured on a twelve month basis it was a small amount, but as the ROTC staffs became larger in the 1950's the total Iowa State ROTC budget tended to increase. In the early 1950's the Army and Air Force budget furnished by the College averaged over \$7,000 each year while the Navy budget was just over \$1,000. After the dropping of the gratuity payment to the Army and Air Force ROTC staffs, the three ROTC Departments budget tended to equalize. The Air Force and Navy ROTC budget was \$3,000 per year with over \$2,000 of that amount paid to a civilian secretary; the remaining amount served as an operational budget. The Army ROTC annual budget during the later part of the 1950's remained at \$5,000 per year

of which \$4,000 went for the salaries of civilian help. Iowa State College also incurred an additional expense that varied from \$12,000 to \$15,000 to maintain the joint Army-Air Force uniform supply.¹ It appears that the NROTC unit had more than paid its way at Iowa State just from the funds the College received from the 100 midshipmen who were on the Holloway Plan scholarship. However, it would be well into the 1960's before the Air Force and Army ROTC units would have a number of cadets on scholarships.

In evaluating the effectiveness of the ROTC programs at Iowa State during the time 1946 to 1959 it seems that the three programs were well accepted on campus. The several changes in the ROTC programs generally appeared to be for the best. The College Military Departments furnished 380 Navy officers, 843 Air Force officers, and 1,368 Army officers during this time period. All the Military Departments seemed to go their separate ways at Iowa State during the first few years after World War II as each had its own special problems and interests (not unlike most departments in the College). There appears to have been some problem of coordination to get the three ROTC programs to work together. The conflict of the Army and Air Force could almost be expected since the Air Force

¹Iowa State College Financial Report, 1946-59.

ROTC unit wanted to gain and maintain its independence from the Army as soon as possible. At times it appears that the Army ROTC staff and the Air Force staff hardly spoke. To preclude a complete breakdown of communication and to keep the College administration informed on happenings in the three Military Departments, the Dean of the Science Division or his military coordinator had a monthly luncheon meeting with all three Military Department heads present. On the surface the ROTC programs appeared to be working well. However, once they came under close scrutiny in the 1960's considerable changes had to be made in order for them to remain a viable part of the Iowa State campus.

CHAPTER X: ROTC AT IOWA STATE

UNIVERSITY 1960-1970¹

The 1960's at Iowa State saw the Military Departments in the spotlight because of the extensive discussions of compulsory versus voluntary basic ROTC, the rapidly declining enrollments after voluntary ROTC started, a new national law in 1964 that served to revitalize a lagging ROTC program, and the campus protest associated with the Vietnam conflict. There were other important happenings and events that affected ROTC at Iowa State but they did not receive to much attention. Some of the most significant happenings were: the formation of the Iowa State ROTC Advisory Committee; appointment of President W. Robert Parks to the national Air Force ROTC Advisory panel; and the formalizing of the selection criteria for military faculty. The 1960's also saw the University increase its support and cooperation in an effort to keep the ROTC programs viable when the military was confronted with rapidly declining enrollments as a result of voluntary ROTC and anti war sentiments.

Compulsory vs Voluntary Basic ROTC

The issue of compulsory versus voluntary military training was seldom raised in the early years of military training at

¹On July 4, 1959, the name of Iowa State College was changed to Iowa State University.

Iowa State. However, there was some debate during the late 1920's and early 30's associated with pacifist movements. But it appears that the debate never reached large proportions at Iowa State. It seems that there has been a debate over compulsory and voluntary military training after every war. It could be hypothesized that such a debate probably would have occurred after World War II if the Korean War hadn't come along so soon. The first discussions of possibly going to voluntary military training at Iowa State after World War II was in the late 1950's. There appears to have been some effort on the part of Cardinal Guild (the student governing body) in 1958 to take action on a bill making the first and second year of military training elective.¹ There was some discussion but no immediate action was forthcoming.

In 1960, compulsory ROTC began to become a more active issue on the college campuses. There were rallies against compulsory military training at some of the other land grant schools--Michigan State, Wisconsin and California. Students believed that they should have the freedom to decide whether or not to take ROTC. At first it was feared that this anti compulsory ROTC movement might swing toward pacifism. However, it did not.²

¹The Daily, October 8, 1958, p. 4.

²"Now there's a Campus Revolt Against Military Training," U.S. News & World Report, February 8, 1960, pp. 62-25.

All facets of Iowa State University slowly became knowledgeable on the subject of possibly going to voluntary military training. The Provost of Iowa State, James H. Jensen, attended the Mershon National Security Program at Ohio State University on June 20-21, 1960, in which the "Role of Colleges and Universities in ROTC Programs" was discussed. A large part of the conference dealt with compulsory vs voluntary ROTC.¹ In January, 1961, the Air Force detachment received a letter addressed to "All PAS's of schools considering changing from compulsory to voluntary Air Force ROTC." The letter gave the PAS the view of the Department of Defense and the Air Force and listed some possible options the PAS might want to press for in the discussion of going voluntary.² During early 1961, the Cardinal Guild was actively working on its resolution to abolish compulsory ROTC. However, before the Cardinal Guild resolution was presented, the Provost of Iowa State appointed an ad hoc ROTC faculty committee on March 7, 1961, to evaluate possible future roles of the three ROTC programs at Iowa State University.³ Thus it appears that there was a Cardinal Guild

¹"Role of Colleges and Universities in ROTC Programs," Mershon Committee on Education in National Security Program (Columbus, Ohio: Ohio State University Press, 1960), pp. 5-60.

²Letter, AFROTC (AU) Maxwell AFB, Alabama, to all PAS's of schools considering changing from compulsory to voluntary Air Force ROTC, January 18, 1961, ROTC Advisory Committee Records, 1961-62 File.

³Iowa State University ad hoc ROTC Committee (unpublished report, Ames, Iowa, February 13, 1962), p. 1.

ROTC committee and a Faculty ROTC Committee going on at the same time.

The Cardinal Guild resolution (passed on April 25, 1961) explained that the Guild Senate realized the vital needs for a reserve force of officers and that ROTC had played an important part in the reserve forces but that there were some very definite faults in the Iowa State ROTC program. The Guild made four recommendations; the two most significant were that basic ROTC become voluntary for a four-year trial period and that an interesting and informative orientation program be required to interest and inform students of ROTC possibilities. The twelve page Guild report concluded that the Guild members were "not unpatriotic or unwilling to serve [their] country." "We do not think this issue enters into the picture at all.."¹ The ad hoc ROTC committee interviewed officers from all three military departments, student leaders, and compiled a sizeable folder of information on discussion of voluntary ROTC from numerous sources. The ad hoc committee prepared a preliminary report, then a revised preliminary report (dated July 6, 1961), and presented a final report to President Hilton on February 16, 1962. The final report recommended:

¹"ROTC Program at Iowa State University" (unpublished Cardinal Guild Senate Resolution, Ames, Iowa, April 25, 1961) pp. 1-12; The Daily, April 26, 1961, p. 1.

1. In view of the outstanding record of the army, air and naval ROTC units at Iowa State University in the training of commissioned officers for regular and reserve service, ROTC programs should be continued in all three branches of this institution.
2. In view of the change in the role of basic ROTC resulting from the universal military training and selective service act and clear statements of the Department of Defense that compulsory basic ROTC is not needed to provide adequate number of commissioned officers, students should be permitted to elect either basic ROTC or an equivalent number of credit hours of approved academic subject. It is further recommended that this option be adopted for a trial period of three years beginning September 1, 1962.

When the final ad hoc ROTC committee report was submitted to the Iowa State general faculty February 22, 1962, the recommendations were passed after considerable discussion. In March, 1962, the State Board of Regents approved the authorization to allow voluntary ROTC at Iowa State University effective in the fall of 1962.¹ This was the first time in ninety-two years that military training had not been required at Iowa State.

In discussions with members of the ad hoc ROTC committee, military officers assigned at Iowa State during this time period, faculty, administrators and students, it seems that the time was ripe for the University to go to voluntary ROTC. Two

¹Iowa State University ad hoc ROTC committee report, p. 3; The Daily, February 17, 1962, p. 1, March 7, 1962, p. 1, March 10, 1962, p. 1.

of the most often advanced reasons for going to voluntary ROTC were the cost to the school and the lack of facilities. Neither really entered into the decision at Iowa State. The two most important reasons were that the university administration wanted a voluntary basic ROTC program and the students did also. Consequently, it almost could be boiled down to saying that it was just a "sign of the times."

The Military Departments were cooperative throughout the ad hoc committee's investigation and each of the department heads had a chance to tell their story. The minutes of the ad hoc ROTC committee reveals that the Navy was for voluntary ROTC since they were already voluntary. However, the Navy personnel expressed some caution since they would now be competing with the Army and Air Force for the same freshmen students. The Air Force ROTC staff was actually for voluntary ROTC but there were some doubts as to how it might work out. The Army ROTC staff was the most reluctant of the three ROTC Departments to support a voluntary basic ROTC program. The main reason was that Army ROTC had a larger requirement for officers than the Air Force and the Navy. Thus the Army naturally desired a larger selection base from which to choose. It could easily be seen that a voluntary basic ROTC program would reduce the selection base for the advanced ROTC programs.¹

¹Iowa State University ad hoc ROTC Committee (unpublished minutes, 1961).

Probably the two happiest groups on campus when voluntary ROTC was authorized were the freshman students and the University administration. It is conceivable that if the ad hoc ROTC committee had recommended retaining compulsory ROTC there would have been some strong repercussions from students, faculty and administration.

Voluntary Basic ROTC at Iowa State University
The First Three Years 1962-65

In September, 1962, all three ROTC units at Iowa State offered an elective basic program. The transition from compulsory to voluntary basic ROTC was rather abrupt as far as enrollments were concerned. The Air Force ROTC unit enrollment dropped about 500 in both the freshman and sophomore class. The total enrollment for the entire four year AFROTC program dropped from 1,443 in 1961 to 492 in 1962. The AFROTC numbers continued to decline until there were only 277 in 1965 which was the lowest total enrollment in the pre-Vietnam era. The Army ROTC likewise suffered a decline of almost 1,000 cadets when their entire four year enrollment dropped from 1,632 in 1961 to 646 in 1962. The Army ROTC showed a loss of 700 freshman and almost 300 in the sophomore year. The Army ROTC enrollment also continued to decline until reaching a pre-Vietnam low of 213 in 1965. The Navy ROTC showed a slight increase from 217 in 1961 to 228 total enrollment in 1962. The

reason for the NROTC increase in enrollment was that the total input of freshman Regular (or scholarship) midshipmen for Iowa State increased from thirty-one in 1961 to forty-three in 1962; otherwise the Navy would have shown a decline in total enrollment also. The Navy ROTC program showed a decline to 193 in 1963 and continued downward until it reached its pre-Vietnam low of 165 in 1965.

Even though the basic ROTC enrollment dropped drastically in 1962 the number of officers commissioned was not reduced accordingly. It seems the three ROTC programs had already had a steady decline in the number of officers commissioned in the late 1950's and the early 1960's. The Army ROTC unit at Iowa State had suffered a drop in 1961 from 120 to sixty-four in 1962 and then increased back to eighty in 1963. The first class to graduate without ever being associated with compulsory ROTC was the 1966 class in which forty-three Army second lieutenants were commissioned. Thereafter the Army commissioned an average of forty-nine per year through 1970. The Air Force ROTC graduates had dropped to a low of nineteen in 1962 and 1963. The 1966 AFROTC graduates showed an increase to twenty-five. The remainder of the 1960's saw the AFROTC program at Iowa State produce an average of thirty-two officers. The Navy ROTC program showed a drop from twenty-nine in 1965 to twenty-one in 1966. However, the Navy ROTC program remained the most stable throughout this time period and commissioned an average

of twenty-nine Navy or Marine officers from 1960-70. It should be noted that the Navy had an average of over 100 Regular midshipmen on a full four year scholarship throughout this time period with approximately twenty-five in each school year. Therefore, they did not have to graduate very many contract students to maintain their twenty-nine per year average. The Army and the Air Force did receive scholarship students in 1965 but it was a full four years before their impact was felt in the total number graduated.¹

It appears that Iowa State University was not too different from other schools that changed from compulsory basic ROTC to voluntary. However, the first year drop in enrollment at Iowa State was much more severe than most other schools. It became obvious to even a casual observer that the Military Departments had lost their "captive audience" thus losing the opportunity to sell or even explain their program to prospective officers unless an individual sought out information on his own. Therefore, the Military Departments took it upon themselves to start a massive publicity campaign to inform the freshman students at Iowa State about ROTC.

Lt. Colonel Joseph F. Sage (the Professor of Air Science from 1962-66) summarized some of the special steps the military

¹The enrollment and commission data is given in Appendix J, L, and O.

units took to inform students of their program. First, the University prepared a booklet explaining the ROTC program and included a letter from the University president that endorsed the ROTC program. The registrar then mailed one of these folders to each incoming freshman. During the summer, letters were written to each incoming freshman. The military units also participated in freshman orientation days and the University established an ROTC committee that gave the military a permanent forum for solving their problems. Lt. Colonel Sage described an interview plan where each freshman cadet was interviewed immediately upon entering the program to insure that individual contact with each cadet in order to preclude them dropping the course early in the first quarter. Another important part of the program was to personally brief each faculty advisor on the AFROTC program and furnish them with a pamphlet on the local program so the advisors would have a ready reference. Finally the Colonel's advice was, "Never give up."¹

In late 1963, the Military Departments saw the total ROTC enrollments take a further drop. Consequently there was a coordinated effort to get the University to publish a booklet explaining the ROTC program at Iowa State. This very attractive

¹Joseph F. Sage, "Transition from Compulsory to Voluntary AFROTC at Iowa State University" (unpublished report, Ames, n.d.), pp. 2-3.

publication was finally printed in early 1964 for mailing to all incoming freshman. The booklet gave information on the military obligation, opportunities for active and reserve service, selective service, and the benefits of taking ROTC. Then each of the three military ROTC programs were described in detail. This writer knows from first hand experience that the Military Departments at Iowa State felt the letter from President Hilton was a most important part of the publication. President Hilton's letter showed that the administration supported the program even to the point of an outright endorsement. The President's letter gave a brief background on how Iowa State had acquired an ROTC program from the first time ROTC was available and the important part the ROTC graduate played in World War II. President Hilton went on to explain:

The ROTC program is no less important today than prior to World War II. The growth in the number of colleges and universities offering ROTC, plus the growth in enrollment in these institutions now gives us the flexibility of offering military training on an elective basis. Students entering Iowa State University will have a choice of electing basic ROTC or an equivalent number of academic credits. We believe that in this way our students best qualified for military leadership can be selected for this training.

Participating in ROTC and earning a commission, while earning a degree, is indeed a privilege... It will be a real honor for a person upon graduation with a degree to earn a commission.¹

¹James H. Hilton, "ROTC at Iowa State" (Ames, Iowa, Iowa State University, Bulletin 62, No. 33, 1964), pp. 1-11.

Even with all the efforts by the Military Departments, the University could see that the ROTC units were going to need more help in promoting their program. On March 4, 1964, Dr. W. Robert Parks, Vice President of ISU, formed the ROTC Advisory Committee¹ made up of Dr. Louis Thompson, Chairman (a former member of the ad hoc ROTC committee and a Colonel U.S. Army Reserve), Dr. Arthur Gowan (who had been the educator representative on the Iowa NROTC selection board since 1951), Dr. Harold Ellis (a retired Lt. Colonel, U.S. Army, who had served as an Associate PMS&T at Iowa State), and Dr. William Underhill (who had served as a Air Force Captain in World War II and was also recalled for the Korean conflict).

The mission of the ROTC Advisory Committee (name changed to Officer Education Committee in late 1964) as stated by W. Robert Parks when the committee was appointed in 1964:

This standing committee has been appointed to advise the administration and the faculty on matters pertaining to the ROTC programs. The Committee will serve as liason between the ROTC departments and the Colleges of the University. The Committee will give particular attention to such matters as the enrollment trends in ROTC, the acquainting of high school students with the ROTC programs, and the relationship of ROTC to other education programs of the University.¹

¹W. Robert Parks, inter-office communication, Iowa State University, Ames, Iowa, March 4, 1964.

Dr. Louis Thompson (the chairman of the ROTC Advisory Committee) readily admitted that the mission of the Officer Education Committee was to serve as a liason but other key reasons for forming the committee was to develop a program to help "sell" ROTC at Iowa State, to help the Military Departments adjust to voluntary ROTC, and to let the public know that the University administration supported the ROTC programs.¹ One of the means used to promote the ROTC on campus was to schedule a period of time during freshman orientation for all freshman males at Iowa State during which Dr. Thompson and Dean Chalmer Roy spoke and casually mentioned that their sons had taken ROTC at Iowa State. Then each Military Department head spoke briefly about their program and invited the students to come by the ROTC offices for a more specific and detailed briefing. This type of briefing was modified in 1965 to allow the freshman students to attend a specialized briefing by all three services in different parts of the armory after Dr. Thompson had made a few opening remarks.

The ROTC Advisory Committee accomplished a study of the three ROTC programs at Iowa State and determined that the three departments were not really training officers for the reserves but were really providing pre-professional officer education. Consequently the ROTC Advisory Committee changed

¹Interview with Louis Thompson, April 7, 1972.

its name to the Officer Education Committee and arranged for the three Military Department's course descriptions to be entered in the 1965-67 University General Catalog under Officer Education Programs. The Catalog explained:

The University changed from compulsory ROTC to voluntary ROTC when it was recognized that the philosophy toward ROTC had changed through the years. Basic ROTC was no longer considered by the Department of Defense as needed to help prepare a large number of men for military service in the event of emergency. The concept of basic ROTC had changed to be a prerequisite for officer education. The present purpose of advanced ROTC is that of preparing officers to serve in military forces following graduation rather than merely holding a reserve commission in the event of emergency. The Navy and Air Force in particular are requiring a period of commission service long enough to encourage the officer to make a career of military service. Although the Army continues to require only two years of active duty, it still expects to recruit a high proportion of its career officers from ROTC graduates. Consequently, Iowa State University views ROTC as preparation for a career, or partial preparation for a career, since each graduate will spend two or more years of his career in military service.¹

The Catalog went on to explain that a student could major in naval science applying thirty credits towards the major in the College of Science and Humanities; in colleges where minors were permitted, eighteen hours of ROTC could be applied towards the minor; and that if the student did not select ROTC as a major or minor, ROTC credits could, at the discretion of the college and the department, count toward the elective

¹Iowa State University General Catalog, 1965-67, p. 352.

requirement. Iowa State University allowed six credits of basic ROTC to count as electives in all colleges.¹ It is interesting to note that Iowa State University started calling their military programs "Officer Education Programs" in 1964, whereas the recommendation on the national level for the programs to be known as Officer Education Programs did not occur until 1969.² Iowa State was also one of the few schools that had an ROTC Advisory Committee as early as 1964.

In an undated (probably 1965 or early 1966) analysis of the "Transition from Compulsory to Voluntary AFROTC at Iowa State University," Lt. Colonel Joseph Sage gave a brief background on the change to voluntary ROTC and the drastic enrollment drops. The Colonel explained that the number of Air Force officers commissioned remained about the same but that the "cost-per-graduate"³ was reduced from \$10,345.00 in the early 1960's to only \$5,808.00 in 1964. He estimated that the cost-per-graduate for the first class (1966) under the voluntary program would be \$3,800.00.⁴ The reason the cost-per-graduate went

¹Interview with Arthur Gowan, August 4, 1970.

²Report of the Special Committee on ROTC to the Secretary of Defense (Washington, D.C., Department of Defense, September 22, 1969), p. 1.

³The cost-per-graduate was figured on the total salaries of the military personnel assigned to the AFROTC unit divided by the number of officers commissioned.

⁴Joseph F. Sage, "Transition from Compulsory to Voluntary AFROTC", p. 1.

down was because the AFROTC staff was reduced considerably when the voluntary program was implemented and the smaller total salaries with the same number of AFROTC cadets commissioned resulted in a smaller cost to the government.

Colonel Sage concluded that the voluntary program was highly desirable and that:

The first benefit you reap is the elimination of the dissenters and an improved attitude among the cadets. The negative attitude inherent in the compulsory program will plague you for about four years after the change to voluntary, at least until all the compulsory cadets have left the campus. Their dissatisfaction with being required to take "Rotcy" permeates the fraternities and dormitories and influence adversely many freshman prospects.

Colonel Sage further stated that faculty attitude is extremely important:

If your university votes to go voluntary and at the same time unconsciously votes to forget ROTC, your job becomes extremely difficult. To obtain an acceptable initial enrollment you must have administration and faculty positive support, without it you face an almost insurmountable task.¹

The Iowa State ROTC units were most fortunate that an ROTC Advisory Committee was formed. This group of four men served as the liason to motivate the University administration to support the ROTC programs especially when the enrollment continued to drop.

¹Ibid., pp. 1-2.

It appears that the change from compulsory to voluntary ROTC was the thing to do nationwide and it was obvious that the overall ROTC programs needed to be modernized. The Air Force initiated a long range planning project (in 1959) with the object of developing a proposal for major modification in the AFROTC program which would enable the program to serve the Air Force effectively and economically during the next two decades. According to the "History of the AFROTC" (Twentieth Anniversary Command Edition) the Air Force was responsible for the major planning efforts and resulting enactment in 1964 of Public Law 88-647.¹

ROTC Vitalization Act of 1964

After much advance work by Air Force ROTC headquarters and later coordination with the Army and Navy a new legislative package was submitted to Congress. AFROTC was designated as the action agency for the Department of Defense and General Lindley, the Commandant of AFROTC, was one of the main motivating forces guiding the new program through Congress. This five-year anticipation of the new ROTC legislation became a reality on October 13, 1964, when President Lyndon B. Johnson signed into law the ROTC Vitalization Act of 1964 (Public Law

¹"History of the Air Force Officers Training Corps" (Twentieth Anniversary Command Edition, Air University History Study Series No. 11, Maxwell AFB, Alabama, January 31, 1966), pp. 17-20.

88-647). This was the first major revision in America's traditional ROTC program in nearly fifty years. Because of this law for the first time all three military services would be operated under the same basic guidelines. However, the Service Secretaries were given considerable leeway in the operation of their own ROTC programs.¹

Basically, the law authorized each of the services to initiate a program similar to the Holloway Plan that only the Navy had enjoyed for almost eighteen years. Now all services could offer four year scholarships (or financial assistance) and these scholarships did serve to re-vitalize the Air Force and the Army ROTC programs. More flexibility was added to the ROTC programs since the act provided for two separate programs. In addition to the traditional four year program a new two year program was offered. Thus a student who had not taken ROTC during his first two years of college could now substitute a six week summer camp for the first two years of the program. In addition to the summer camp the two year applicant had to meet the same qualifications as the other four year ROTC cadet to enter the advanced portion of ROTC. This two-year program was originally aimed at the junior college transfer student but graduate students who still had two years of college remaining could enroll in the two year program and take the undergraduate program at the same time. All students in the advanced course

¹Ibid.

received \$40.00 a month non-taxable subsistence allowance, whereas it had been \$27.00 since 1952.

The Army and the Air Force started their ROTC scholarships in the 1965-66 school year by awarding 1,000 and then adding approximately 1,000 more each year until the maximum of 5,500 was reached. These scholarships were almost identical to the Holloway Plan since the cadets received the cost of tuition, laboratory expenses, incidental fees, and textbooks allowances. In addition, scholarship recipients received a non-taxable \$40.00 per month in subsistence allowance throughout the tenure of the scholarship.

The 1964 act also contained a reserve liability clause that required all students who entered the advanced program or the scholarship program to become members of the Enlisted Reserve Corps. The purpose of this requirement was to make the student liable for an involuntary call to active duty in his enlisted grade for a maximum of two years in the event that he failed to accept a commission or elected not to complete the terms of his contract. Other features of the 1964 law included:

- (1) the senior commissioned officer would be given the academic rank of professor;
- (2) the school could offer a two-year program, four year ROTC program or both;
- (3) the program could be compulsory or voluntary at the option of the institution or the state concerned;

- (4) and the program allowed the Military Departments to realign and adjust their curriculums so as to provide better coordination of their military requirements with other academic commitments.

The ROTC Vitalization Act at Iowa State

Iowa State University, after due consultation with the Military Departments and the ROTC Advisory Committee accepted both the two and four year programs. This acceptance of both programs proved to be important since "the wave of the times" pointed to offering a two year program only. Many schools switched to the two year program immediately and later had to change back to both a two and a four year program. The two year program had little effect nationwide as well as at Iowa State during its first year of operation which began with the 1965-66 school year. The Navy ROTC unit at Iowa State did not enroll one midshipmen in the two year program. The Navy elected to stay with the traditional four year program. Captain Coste the PNS said on several occasions that the first two years of the Navy curriculum could not be taught in the six week summer camp.¹ The Army ROTC unit at Iowa State enrolled three juniors in the two year program and the Air Force enrolled only four. A major reason for the lack of participants

¹These ideas were expressed by Captain John Coste, PNS, on several occasions when this writer was present.

in the two year program was because of the lack of national publicity and almost no response from junior college transfer students. However, the 1966-67 school year was a different story. The national publicity on the two year program had been much better and the information about the four year scholarships had attracted some attention.

In 1966 the Navy ROTC unit at Iowa State offered the two year program and four midshipmen were selected. The Air Force increased its number of two year students to ten and the Army ROTC unit had forty cadets enter advanced ROTC through the two year program. There were probably over 200 students who applied for one of the three ROTC two year programs at Iowa State. Normally less than one-fourth of those who applied for the two year program were accepted since there were some who failed to meet the mental requirements and several who did not meet the physical requirements. There were also some students who failed to complete the six week camp satisfactorily and then others who decide not to enroll in the advanced course. The Air Force and Navy also had a maximum number of openings for the advanced program. Consequently only a limited number could be accepted through the two year program in 1966.

The two year program was most successful for the Army ROTC unit at Iowa State. The Air Force only had moderate success; definitely not up to the original expectations. The Navy was obtaining a sufficient number of midshipmen through the four

year program and dropped their two year program at the start of the 1969-70 school year. (The Navy two year program will be re-instated in the 1972-73 school year.) It can be concluded that the two year program offered another important option that allows more flexibility in the ROTC programs. This flexibility was used by some transfer students and several graduate students, a group that became extremely interested in the two year option during the Vietnam conflict.

The 1960-70 time period saw other happenings that brought some attention to ROTC. On the national level President W. Robert Parks of the University was appointed to the Air Force ROTC Advisory Panel in 1966 as the Association of American Universities representative and was one of only nine members on the panel. This advisory panel met annually and advised the Secretary of the Air Force on matters dealing with AFROTC and institutions of higher education. In 1965 on the state level, the Iowa General Assembly authorized the "Governors Award" to be presented to the outstanding cadet of each of the ROTC programs in Iowa. Locally the ROTC programs were changed to Officers Education programs that are more in line with the University academic environment. Each of the three Military Departments continued to function as effective units of the University. Each unit will be discussed briefly with regards to specific events and happenings that occurred from 1960 to 1970.

Army ROTC at Iowa State University 1960-70

The Army ROTC unit at Iowa State was commanded by four Army Colonels during the 1960's. Colonel Ebel's tenure which started in 1957 carried over to 1962. Colonel David S. Keisler served from 1962 to 1965 when he retired from active duty. Colonel Keisler was the last field artillery officer to command the Iowa State AROTC unit. Although not a matter of official record, Colonel Keisler was the first PMS (PMS&T changed to PMS--Professor of Military Science in 1960) to have a master's degree. He completed a Master of Science in education shortly before he completed his tour at Iowa State. In 1965 Colonel Vern L. Joseph became the PMS for three years and presided over the final conversion to the general military science curriculum from the branch material curriculum. Colonel Joseph was an infantry officer and was the third PMS at Iowa State who had been from the infantry branch. All the PMS's since World War I had been field artillery officers except Colonel Shaffer and Young in the early 1920's who were also infantry. In 1968 Lt. Colonel Robert Barnett (he was promoted to Colonel a few days after school started in 1968) became the seventeenth person to serve as the PMS at Iowa State during the first one hundred years of military training. Colonel Barnett was the first officer to serve as PMS that was from the chemical corps.¹

¹Iowa State University, Special Collections, Military Science Records, Personnel File.

The most significant specific happening for the Army ROTC program in the 1960's dealt with the curriculum. In the early 1960's the Iowa State Army ROTC unit moved a little closer to the branch general (or branch immaterial) curriculum. The unit removed some of the specific military training subjects and allowed a substitution of a college taught course in the sophomore and senior year under the guise of academic electives.¹ Colonel Keisler analyzed this early 1960 curriculum in his M.S. thesis "A Proposed Senior Division Army ROTC Curriculum" and concluded that the Army ROTC curriculum should remove more of the courses which taught military skills. The Colonel recommended that some of the military courses should be taught at summer camp and the extra academic time used to teach more generalized subjects that would be of value to a future Army officer.² Colonel Keisler's proposed curriculum is very much like the curriculum of the Army ROTC in 1970. In the fall of 1964 the Army Officer Education program at Iowa State switched to the complete general military science

¹Ames Tribune, February 24, 1960; Iowa State University, Special Collections, Military Science Records, General Information Folder.

²David S. Keisler, "A Proposed Senior Division Army ROTC Curriculum" (unpublished M.S. Thesis, Iowa State University, 1965), pp. 25-64.

curriculum using a two year phase in period.¹

Other developments during the 1960's included conducting a spring bivouac or pre-camp at Camp Dodge, Des Moines, Iowa, the formation of the Black Berets, a counter insurgency unit, and the formation of Dress Blues. It was in the mid 1960's that the pre-camp was started in which the cadets were subjected to two days of comprehensive military tactics in the same basic areas they would be exposed to at the regular summer camp.² In 1966 the Iowa State Dress Blues, a co-ed drill team and service organization, was formed and was affiliated with the Pershing Rifles and the Army ROTC Department. The co-ed's participated in drill meets, assisted at Army ROTC award ceremonies, ushered at University functions, and generally added to the esprit de corps of the Army ROTC cadets.³ Another

¹Iowa State University, General Catalog, 1965-67, pp. 354-55. The general military science curriculum was implemented in 1964 and was printed in the 1965-67 Catalog and is listed in Appendix P. In 1971 the Army ROTC unit at Iowa State required its sophomore students to take American Military History (History 387A) during winter quarter which was substituted for second quarter MS II. In addition all four year program cadets must complete the second of the two quarter sequence of American History (History 387 B) prior to being commissioned. All advanced cadets must successfully complete one of three political science courses (251, 422, or 458). All of these courses are taught by civilians including the American Military History course.

²Interview with Floyd Anderson, April 11, 1972.

³Pass in Review (Iowa State University, Army ROTC paper, Ames, Iowa, November 5, 1970), p. 8.

organization that started during this time period was the Black Berets, later called the counter-insurgency unit, and finally the organization became the tactical platoon of Pershing Rifles. The Black Berets started in 1966 to familiarize the Army ROTC cadets in counter-insurgency tactics with the basic objective of improving the basic military skills of the individual cadet.

The first graduates of Army Officer Education at Iowa State who had started the advanced course under the new general military science curriculum graduated in 1966. Prior to this time a majority of the Iowa State graduates served in the branch in which they were trained. With the new general military science curriculum the Iowa State graduates started receiving assignments in several of the fifteen different branches of the Army. In 1966 the Army started publishing results of the AROTC graduates performances in the branch school they attended. The branch school results were divided into the top, middle and lower one-third. Iowa State AROTC graduates ranked:¹

<u>Year</u>	<u>By Per cent</u>		
	<u>Upper</u>	<u>Middle</u>	<u>Lower</u>
1966	47	29	24
1967	40	43	17
1968	60	23	17
1969	49	28	22
1970	55	27	16

¹Iowa State University Army ROTC, Records of Branch School ranking; 1966-1970.

It can be seen that Iowa State graduates have averaged in the upper one-third over fifty per cent of the time and in the lower one-third less than twenty per cent when compared to the national percentages. This comparative rating speaks well for the Army officers who are commissioned at Iowa State.

During the 1960-70 time period the Iowa State University Army ROTC unit commissioned 745 second lieutenants. One could conclude that the Army Officer Education program at Iowa State was accomplishing its general objective of providing military education at a civilian educational institution for the purpose of qualifying selected students for appointment as officers in the United State Army Reserve and the Regular Army.

NROTC at Iowa State University 1960-70

From 1960 to 1970 the NROTC unit at Iowa State was commanded by three Marine colonels, two Navy captains, and a Navy commander. The normal tour of duty for a Professor of Naval Science was three years. However, only one PNS served that length of time during this time period since there were several extenuating circumstances. Colonel Crockett, who had taken command of the Iowa State NROTC unit in 1959, died on September 29, 1960. Commander R. J. Dannettell who was serving as the NROTC executive officer assumed command for four and one-half months until Colonel V. J. Harwick reported to the University

on February 16, 1961, and assumed command for about two and one-half years. In 1963 Captain John E. Coste arrived at Iowa State and became the only PNS to serve a full three year period during the 1960's. In 1966 Colonel Russell R. Riley replaced Captain Coste and was scheduled to serve as the PNS until his 1969 retirement. However, a change in the Marine promotion system allowed the Colonel to be considered for the rank of general twice in the same year and he was mandatorily retired with twenty-nine years of service rather than the normal thirty years of active duty. Shortly after Colonel Riley's retirement he completed his M.S. degree in Educational Administration at Iowa State. The Colonel joined a growing list of military officers who completed advanced degrees at the University.

In 1968 Captain J. H. McGhee became the eleventh PNS at Iowa State since the NROTC unit was formed in 1946. Captain McGhee was a PNS who had many "first's" associated with his tour at the University. He was the first PNS to have a M.A. degree when he was appointed as PNS. All other PNS's had held Bachelor degrees. Captain McGhee was also the first PNS who had completed a previous NROTC tour as he had served as an Assistant PNS at the University of Utah from 1951-53. The Captain had other teaching experience since he had served on the staff of the Naval War College.¹ Captain McGhee was also

¹Iowa State University, Special Collections, Naval Science Records, Personnel File.

the first military officer assigned to Iowa State who taught a course for the University outside of the Military Department. Captain McGhee taught an honors seminary. It must be noted that Captain McGhee served a full three year tour and his tenure carried over to 1971.

Other than the high turnover of PNS's there was little change in the NROTC Officer Education program at Iowa State from 1960 to 1970. The changes that did take place were in the curriculum and involved moving the weapons course from the sophomore year to the senior year. The sophomore year was then devoted to a seapower seminar and the senior students had a more theoretical weapons course than had been taught previously. The freshman course remained the same throughout the 1960's. The junior year involved teaching two of the three following subjects at the same time: navigation, naval engineering, or naval operations. Before the sophomore course content was changed to the seapower seminar, the sophomores were allowed to substitute psychology 101 for the naval science 212 lecture course. When the seapower seminar was introduced the psychology course substitution was dropped and the total credit hours for the sophomore naval science course was reduced from nine to four hours. Consequently the overall naval science course credit was reduced from thirty-six hours to

thirty-one hours.¹ The NROTC curriculum remained the most comprehensive of any of the three Officer Education Departments and still required several pre-requisites in other University courses such as computer science, physics and mathematics.

The NROTC unit at Iowa State was involved with many activities during the 1960's. Some of the activities included; annual spring review, Navy ball, midshipmen basketball team, drill team, band, rifle team, visits to Navy and Marine installations, and the summer cruises. These summer cruises continued to attract a substantial amount of attention. One midshipmen served his tour on a submarine that was on sixty day patrol. It was reported that another midshipmen even logged a mission over North Vietnam during the time he completed his summer cruise in the Gulf of Tonkin.²

The midshipmen stopped the publication of the Spendrift and started publishing The Log (in 1963) which was an annual that described each year's activities in pictures. The Navy ball, a tradition since the 1940's, was dropped after the 1970 dance. The Navy was the only unit that had continued an individual ball since the early 1960's. Another change made

¹Iowa State University General Catalog, 1959-61, 1961-63, 1963-65, 1965-67, 1967-69, 1969-71; Interview with Donald Gress, Commander, U.S. Navy, April 7, 1972.

²Iowa State University, NROTC Scrapbook, 1960-70.

by the Navy in 1970 was the removal of the clause in the Regular contract that required the scholarship cadet to remain unmarried during his NROTC program. Dean Chalmer Roy and Dr. Arthur Gowan, who were usually the representatives of the University president at the meetings of the Association of NROTC Colleges and Universities, had long argued that the marriage clause should be removed.

During the 1960 to 1970 period the Iowa State NROTC unit commissioned 324 Navy ensigns and Marine Corps officers and approximately sixty-five per cent of these graduates were Regular officers. Therefore it can be seen that the mission of the Navy ROTC unit at Iowa State was being accomplished. The Navy Officers Education program was producing immediately employable officer for the Navy.

Air Force ROTC at Iowa State University 1960-70

The Air Force ROTC unit at Iowa State was commanded by two colonels and two lt. colonels during the 1960's. Colonel Elwyn F. Quinn's tenure had started in 1958 and carried over until 1962. Lt. Colonel Joseph F. Sage reported to Iowa State in 1962 and was the first Professor of Air Science to have a Master's degree.¹ Colonel Sage was confronted immediately with

¹Iowa State University, Special Collections, Air Science Records, Personnel File; Colonel Sage actually had an LLB degree that is rated as equivalent to a M.S. degree in the Air Force Register.

the drastic drop in enrollment since his first year was also the first year for voluntary basic ROTC at Iowa State. The Colonel encountered several problems that took almost two years to overcome. Consequently, he became a prime mover in the coordinated effort of the three Military Departments to keep the ROTC programs viable at Iowa State. In 1964 when the new Air Force ROTC curriculum was introduced, it included a substantial amount of course content about aerospace development. At this same time the Air Science Department's name was changed to Aerospace Department at all schools who had AFROTC detachments. However, Iowa State also had a Aerospace Engineering Department and this created problems in delivery of mail and course listings in the University General Catalog. Thus the AFROTC Department became known as the Air Force Aerospace Studies (AFAS) Department for mailing and Catalog listing at Iowa State. The head of the AFAS was still known as the PAS (Professor of Aerospace Studies). It took the Aerospace Engineering Department a few years before they would let the AFAS Department forget the name of Air Science Department. Whenever any Air Force mail was erroneously sent to the Aerospace Department, it would be re-routed to the armory with the words "Air Science" in big bold letters across the front.

Colonel Sage worked behind the scenes in many capacities to place the Air Force and its Officer Education program before the campus community so more people could become

acquainted with the AFROTC program. Colonel and Mrs. Sage were avid entertainers and became friends with many university and Ames people as they took part in the social affairs of the community, University, and the activities of Arnold Air Society and Angel Flight.¹ By the time Colonel Sage had completed his four year tour, the Air Force Officers Education program had made the transition from compulsory to voluntary basic ROTC and the production of Air Force officers was on the increase at Iowa State.

In 1966 Lt. Colonel Paul W. VonWiedenfield, who had served two years as an Associate Professor and second in command to Lt. Colonel Sage, became the ninth person to serve as the head of the AFROTC department. During VonWiedenfield's four years of duty at Iowa State, he completed his M.S. degree in Education and conducted a study on "Prediction of Academic Achievement using the Air Force Officer Qualifying Test at Iowa State University." Lt. Colonel VonWiedenfield's two years as PAS at Iowa State saw the number of Air Force officers commissioned continue to increase and the overall AFROTC program became a stabilized department in the University. In 1968

¹Most of the information on the Air Force ROTC at Iowa State University is based on first hand observation since this writer was an Assistant Professor of Aerospace Studies at Iowa State from 1964 to 1968 and served as a graduate student from 1969 to 1972.

Colonel Ronald L. Brumbaugh became the tenth person to serve as the PAS since the AFROTC unit was started as an air unit in 1946.

In 1960 the active duty commitment for non-flying Air Force officers was changed to four years and flying officers were required to serve for five years. Consequently the Air Force ROTC program was aimed at producing career officers. In anticipation of the passing of the ROTC Vitalization Act, the Air Force ROTC headquarters formed an Officer Education Planning Group in 1961 which was made up of civilian and military educators who developed a new officer education curriculum. After pilot testing of the curriculum, it was implemented in 1964 to 1965. The new curriculum had two major phases, the general military course (GMC) and the professional officer course (POC). Even the name was changed from air science to aerospace studies. The basic course taught world military systems and the POC started out in the junior year as a survey course that dealt with the nature of war, development of air power, mission and organization of the Defense Department, Air Force concepts, doctrine, and employment. Then considerable time was devoted to astronautics and space operations. The second year of the POC included a study of professionalism, professional responsibilities, the military justice system, leadership theory, functions and practices, management

principles and functions, and problem solving.¹

The new curriculum brought a different approach to the presentation of material. This new approach, called "Dialogue" was basically a seminar activity in which the cadets were actively involved in making presentations and conducting guided discussions. Other techniques include problem solving, case studies and role playing. The emphasis was placed on "how to think" rather than "what to think". Educational specialists were organized at AFROTC headquarters to develop new materials, textbooks, audio-visual aids and to conduct educational workshops to improve the quality of instruction. A continuous evaluation of the curriculum resulted in some changes in the GMC content to make it a little more motivational. However, the POC content has stood the test of time and has received favorable support from Air Force ROTC instructors as well as the university community. The new Officer Education curriculum was well received at Iowa State.

The 1960 to 1970 period saw the Iowa State AFROTC unit gaining a new organization when Angel Flight was formed in 1962. Angel Flight was a national organization that was formed at the University of Omaha in February, 1952. The local unit

¹"History of Air Force", Twentieth Anniversary Command (Edition) pp. 10-13; Iowa State University General Catalog 1965-67, p. 353. The new course descriptions are included as Appendix Q.

at Iowa State was sponsored by O'Neil Arnold Air Society. The objectives of Angel Flight were to promote interest in the Air Force, distribute information concerning military services, and to serve as official hostess for Arnold Air Society.¹ Angel Flight expanded its objectives to include serving as hostesses for Iowa State University. The co-eds in Angel Flight certainly did attract a substantial amount of favorable publicity for the AFROTC unit and the Angels have served the University well. They were awarded the service "I" award only five years after the organization was formed. The service "I" award is presented annually to the organization that through its efforts and service projects does the most to promote the ideals of service at Iowa State University.

Air Force ROTC became even more closely associated with college co-eds when it was announced in 1969 that women at four institutions would be enrolled in the AFROTC two year program and compete for commissions. In May, 1970, the Air Force authorized women to be included in the four-year program and opened the program up to any school that offered Air Force ROTC. In the fall of 1970 Iowa State joined ninety-four other

¹The Daily, January 19, 1962, April 14, 1966; Iowa State University, Special Collections, Student Organizations.

institutions in offering co-ed AFROTC.¹ Consequently, two young ladies enrolled at Iowa State in freshman AFROTC during the fall of 1970. This was the first time women had enrolled in Iowa State ROTC but it was not the first time a woman's commissioning program had been sponsored by the Air Force. In 1956 a female AFROTC program had been conducted for the WAF (Womens Air Force) at ten schools. However, the first WAF ROTC program was short-lived. The only limitations on the women in the present day AFROTC program is that they cannot take the flight instruction program, nor can they be considered for flying training on active duty as a law precludes women in jobs that are subject to combat. The women must serve four years of active duty just like all other non-rated officers.

Another activity that started in the 1960's was the Air Force ROTC Dining-In. This very old tradition probably started back in England and is not exclusively military. General H. H. Arnold started the Dining-In tradition in the Air Force with his famous "wing-dings".² At Iowa State the Dining-In started in 1964 as a means of introducing cadets to some of the situations where ceremony, tradition, awards presentations, and good

¹Patricia R. Muncy, "AFROTC Program Expanded for Women," Air Force and Space Digest, October, 1970, pp. 76-77. It is interesting to note that the Army ROTC started a pilot program of women in AROTC in 1971 and the Navy has announced that women will be accepted in the Navy ROTC in 1972.

²The Air Officers Guide (Harrisburg, Pennsylvania: Stackpole Books, 1967-1968 edition), p. 303.

fellowship play a part in the life of a military organization. At Iowa State the Dining-In served as a means for angels, cadets, civilian and military faculty to socialize and be apprised of the accomplishments of the AFROTC cadet who receive the annual awards.

The mission of AFROTC was changed three times during the 1960's with the emphasis placed on commissioning career officers rather than reserve officers. The current mission of AFROTC is "to commission second lieutenants through a college program in response to Air Force requirements." Iowa State University commissioned 286 Air Force second lieutenants from 1960 through 1970 and that number met the Air Force requirements.

Vietnam War and ROTC at Iowa State University

The effect of the Vietnam war worked both ways on Iowa State's military enrollments. In 1966 there was an increase of enrollment in ROTC and then a decrease in enrollment when the student protest and the backlash of an unpopular war put the military in an unfavorable position. All three ROTC units at Iowa State showed an increase in enrollment during the 1966-67 school year. The Army ROTC total enrollment increased from 213 in 1965 to 311 in 1966 and stabilized above 280 for three years. The Air Force ROTC enrollment expanded from 277 in 1965 to 321 in 1966 and averaged 281 for three years. The Navy

ROTC unit at Iowa State had the most stable enrollment throughout the Vietnam era. An increase of only one NROTC cadet was registered from 1965 to 1966, but then NROTC expanded from 166 to over 180 for two years. All three services then registered a drop of enrollment in 1969.

It is extremely difficult to determine the effect of the Vietnam War on the number of officers commissioned. The number of Air Force officers commissioned had started to increase before the Vietnam conflict escalated, whereas the number of NROTC graduates remained stable throughout the conflict. The Army ROTC graduates had continued to decline until 1966 and then showed an increase except for a one year drop in 1968. It does appear that there was more interest in the advanced course of the three services but the number of officers commissioned did not vary significantly which meant the services were able to be much more selective in the candidates they accepted for the advanced course.

One barometer that could be used to judge the effect of the Vietnam War was the reaction to the Joint Military Review (or Tri-Service Review) that was first conducted on the Iowa State central campus in 1966. The first review was held with no interference at all. In 1967 a few "flower people" joined in and marched by the reviewing stand at the end of the joint review. In 1968 the Tri-Service Review was conducted without

incident even though some sort of a protest was expected by the Military Departments. In 1969 a more active attempt was made to interrupt the review and two persons were arrested. When the time arrived for the 1970 Veishea and the Tri-Service Review, the campus was fairly tense (over the United States incursion into Cambodia) and the Military Departments in consultation with the University administration decided to cancel the review. The Governor awards that had been presented to the outstanding cadet in each of the services since 1966 at the Joint Military Review were presented by the Governor of Iowa in his Des Moines office.¹

Though there was much protest, antimilitary publicity and some destruction of ROTC facilities across the country in 1970, Iowa State remained relatively quiet. Only two incidents in 1970 that were aimed directly at the Military Departments attracted some attention. On May 5th, about fifty persons staged a sit-in protest in the armory during which time a door on the armory was broken and the Army and Air Force staffs were harrassed. On the following day some students at an all-school rally on central campus allowed themselves to be stampeded into disrupting an ROTC drill session. The interruption was peaceful and the drill session was called off shortly after the students arrived on the drill field. Though these were

¹The Daily, April 27, 1966, May 7, 1969; Des Moines Register, May 7, 1967, p. 4L.

tense times on the campus, Iowa State University remained open and the ROTC units continued to function even though the military did assume a lower profile on campus. The protest at Iowa State was not in any way a request for the removal of ROTC from Iowa State but was an expression of the dissatisfaction of the events of the Vietnam War. The ROTC units just happened to be the most visible part of the military available.

The University administrators voiced their continued support of the ROTC programs at Iowa State. Dr. W. Robert Parks expressed his disappointment that the military drill period had been interrupted and indicated that the academic freedom of the ROTC students had been infringed upon.¹ During the summer of 1970 the State Board of Regents voted unanimously to retain the Reserve Officers Training Programs as a part of the university community.² It might also be a surprise to some, but the instruction of military tactics at Iowa State is required by the Code of Iowa, Section 266.2. By the fall of 1970, though the campus atmosphere was uneasy, it appeared that the three ROTC programs at Iowa State were going to remain a viable part of Iowa State University.

¹News of Iowa State, July-August, 1970, p. 6.

²The Daily, September 8, 1970, p. 1.

Selection of Faculty in Officer
Education at Iowa State

Throughout the history of military training at Iowa State the administration has had an active part in the selection of personnel for the Military Departments. In the early days the College president made the recommendations to the College Board of Trustees. When the ROTC program was formalized after World War I, the selection of the military personnel was made by the Dean of the Industrial Science Division to which the Military Department was assigned. Dean Beyer established a precedent in the early 1920's when he said he refused to accept any officer who did not have a college degree. In later years the selection procedure also included an arrangement where the military officers records were submitted to the University. The Military Department and the Dean of Science and Humanities evaluated the officers' records and the Dean determined whether the prospective staff member was acceptable.

Throughout the years Iowa State University added other requirements that the military faculty had to meet in order to be acceptable at Iowa State. These requirements were finalized and put in written form by the Officer Education Committee on August 1, 1970. After several meetings in which all three Military Departments were consulted, the Officer Education Committee arrived at the new approved criteria. In developing the criteria for selection of faculty in Officer Education the

Officer Education Committee explained that "the Officer Education Departments are a part of the Iowa State University academic program and selection of staff should be in accordance with the procedures followed in the selection of faculty in other departments of the university." Basically the criteria state that an officer with only a Baccalaureate degree will be appointed as an instructor and that his academic records must be acceptable for entrance into the graduate college. The officer who is assigned as an instructor is expected to work towards his master's degree. To be an assistant professor, an officer must have a master's degree and be at least a captain (or lieutenant in the Navy) and a graduate of the first professional school of his service. An associate professor must fulfill the requirements of an assistant professor and hold at least the rank of major (or lieutenant commander) and have special academic and administrative responsibilities. The head of each Officer Education program is appointed to the rank of professor and must have a master's degree. Further, he must be a graduate of the Armed Forces Staff College or equivalent, be a lieutenant colonel (or commander) or higher, and have a minimum of six years retainability on active duty upon his appointment to Iowa State University.

The selection criteria may sound normal for a typical academic department. Nevertheless, the criteria are quite a change from the previous criteria used nationwide. Up until

1962, when Lt. Colonel Joseph Sage was assigned to Iowa State, the Military Department heads had only Baccalaureate degrees. From this writer's first hand observation and analysis it seems that Military Department heads have long realized they were in an academic community and they did not have the necessary academic credentials. This lack of academic credentials could very easily account for the tendency of the military personnel not to venture too far afield from the armory or the naval science building.

A positive sign on the part of the armed forces is the expressed requirement that all future ROTC staff will have master's degrees. The Air Force implemented the policy in 1970 and the Army is aiming for a 1976 target date for master's degrees for all ROTC officer staff. There has been discussions within the Navy about insuring all NROTC staff have master's degrees however, no target date has been set. It should be pointed out that several of the military officers in the ROTC Departments have held master's degrees, especially in the late 1950's and 1960's. Approximately fifty per cent of the officers who did not have advanced degrees took graduate courses at Iowa State. Between 1966 and 1968 seven officers completed the requirements for the Masters of Science degree. It is also important to note that since 1970 all three new appointments as Military Department heads have earned advanced degrees. Colonel Wilson A. Kluckman, the Professor of Naval

Science who was appointed in 1971, is the second PNS in a row to have an advanced degree. Colonel John Loye, the Professor of Aerospace Studies who was also appointed in 1971, has a Ph.D. in Educational Administration and is the first Military Department head at Iowa State to hold the Ph.D. Colonel Harold S. Whitlock has been nominated for a 1972 appointment as the PMS and is the holder of a M.B.A. degree.

Summary

There were several significant events that affected the ROTC programs at Iowa State from 1960 to 1970. The debate and ultimate transition from compulsory to voluntary basic ROTC showed that the University and the Military Departments could work together and solve their problems. The 1964 ROTC Vitalization Act no doubt helped stabilize the ROTC program as the enrollment eventually leveled off and the number of officers commissioned increased. Without the 1964 Act it is doubtful if the Army and the Air Force ROTC programs would have been able to survive in the late 1960's.

After voluntary ROTC was authorized, the University cooperated with the Military Department in helping to make the transition from compulsory to voluntary ROTC. During this period, the most significant occurrence was the appointment of the Iowa State ROTC Advisory Committee. This committee of four university professors (later named the Officer Education

Committee) definitely accomplished their mission of liason between the ROTC departments and the Colleges of the University. The committee also helped promote the ROTC program and was an extremely effective sounding board for the ROTC units. It appears that the Officer Education Committee implemented a "signal accomplishment" when it devised the selection criteria for the faculty in the Officer Education program at Iowa State.

During the latter 1960's the ROTC units at Iowa State had accomplished the transition from compulsory to voluntary ROTC. Though the overall total enrollments are small in comparison to the days of mandatory basic ROTC, the number of officers commissioned are meeting the stated requirements of the armed services.

In the 1960's the three Military Departments made attempts to make their curriculums more academically acceptable. The Navy upgraded their weapons course to a more theoretical level and allowed the reduction in naval science credits to drop from thirty-six to thirty-one. The Army converted to a general military science curriculum and moved a number of military training activities to summer camp. The Air Force also generalized its academic course content even more when the new Officer Education Curriculum was introduced. The Army and the Air Force reduced the emphasis on drill as the "leadership training" (Army) and the Corps training (Air Force) became a required laboratory with no academic credit awarded. There

has been a substantial reduction in military drill at Iowa State and more academic subjects are covered during the normal laboratory periods.

The University did have some fairly tense moments during the student protest of 1970 but Iowa State University remained open and the Officer Education Departments continued to function as a viable part of the school. One could conclude that with the State Board of Regents' unanimous vote of confidence in the ROTC departments and the continued support of the University administration ROTC will be a part of the Iowa State campus for many years to come.

CHAPTER XI: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS OF
"A CENTURY OF MILITARY TRAINING AT IOWA STATE
UNIVERSITY 1870 - 1970"

The purpose of this study was to provide a history of military training at Iowa State University, Ames, Iowa, from its inception in 1870 until 1970. At the start of the study eight questions were asked to define the problem. Each of the questions were answered at some time during this dissertation. However a brief answer to each question should serve to focus the key elements of the first century of military training at Iowa State University.

1. Why was military training offered at the Iowa Agricultural College? Military training was interpreted to be required by the Land Grant Act of 1862 and since Iowa Agricultural College was a land grant institution military tactics became a part of the curriculum.

2. When and how did military training start at the College? The first Military Department was established in 1870, one year after the College opened its doors for the first official class of students. The Military Department was a one man operation and the training was originally required of all able-bodied male students. Both World Wars interrupted the officer training programs and several other military training units were operated by the college during the duration of each war. After World War I the four year Army ROTC program was

implemented in 1919 at Iowa State and continued until 1943. Immediately after World War II Iowa State offered military training by all three services. The four year Army ROTC program was reinstated in 1946 and included an "air unit" that later became Air Force ROTC in 1949. The Navy ROTC program was implemented in 1946 and made a smooth transition from the Navy wartime V-12 program.

3. Who were the early leaders of military training and what impact did they have on the College? The first fifty years of military training at Iowa Agricultural College were dominated by two military leaders, General James L. Geddes, 1870-1882, and General James Rush Lincoln, 1884-1918. General Geddes, the first Professor of Military Tactics implemented the military training and established the program on a credit-able basis. Both General Geddes and General Lincoln had considerable impact on the College since they served in many capacities and were men of numerous talents. Each man served as the College steward, taught other courses, and participated actively in the College functions.

General Geddes stature on the campus was increased by his world travels and experience which he freely recounted for the students. Geddes also was a capable administrator and served as treasurer, vice president, and acting president of the College. General Lincoln's impact on the College was more closely related to his military career with the Iowa National

Guard in which he rose from the rank of captain to brigadier general in command of the entire Iowa National Guard.

Lincoln's tenure of thirty-five years as head of the Military Department and his training of 715 officers in addition to the thousands who took the required two years of training, attest to the fact that he had substantial impact on the Iowa Agricultural College and the military forces of Iowa.

Lt. Colonel Boles and Colonel Shaffer implemented the Army ROTC program at Iowa State immediately after World War I. Through the efforts of Boles and Shaffer and a cooperative administration and faculty the Army ROTC unit was well established on the campus by 1923. The Army ROTC program was able to carry through the "antimilitary" times of the 1920's and 30's with very little problem at Iowa State.

After World War II the early leaders of the three military departments had little chance to make much of an impact on the College as a whole. This lack of impact can be attributed to the increased size of the College, short tours of duty of the military officers and the changing values of our society. However Colonel Busbee did re-establish the modern day Army ROTC program and get it stabilized during his three years at Iowa State. Captain Levin was able to make a smooth conversion for the wartime Navy training program to the modern day Navy ROTC. Lt. Colonel Bender started the air unit program under the Military Science Department and was succeeded by Major

Truesdell the first official professor of air science in charge of the modern day Air Force ROTC program at Iowa State.

4. How effective was the military training? It appears that the early military training was effective when it is considered that General Geddes had no model to follow and everything depended on just one man. However, he did obtain a small amount of equipment and made the most of limited facilities and funds. Both General Geddes and General Lincoln felt that military instruction was more than just drill under arms. They included instruction in ballistics, gunnery, ordnance, military engineering and tactics. In each area an attempt was made to apply the students' theoretical knowledge learned in other academic courses.

The main objective of the early military instruction was to train officers who could serve as instructors in "the school of the soldier and the company" and also as officers in the Iowa State Militia. Since General Lincoln virtually grew up with the Iowa National Guard and even designed and conducted much of the Guard training curriculum and tactics, it can be assumed that the IAC cadets did get the best training available and were able to serve as officers in the State Guard.

It appears that the military training after World War I under the modern day Army ROTC program was also effective. The effectiveness of the military training could be attributed to: the quality of the officers assigned (many officers were West

Point graduates) almost all officers had served in the different military campaigns of the time, there was plenty of military equipment available, the training had the support of the College, and the armory provided one of the finest military facilities in the nation. The success of the Iowa State 1943 and 1944 class of the Army ROTC graduates at the Fort Sill Oklahoma Officers Candidate School was indicative of the Army ROTC training.

It is more difficult to determine the effectiveness of the post World War II ROTC program at Iowa State. It appears that the caliber of the Iowa State military graduate must have been highly regarded since the College was one of only thirty schools that was selected to offer ROTC by all three branches of the armed forces. In 1970 the same three services are still commissioning what the services consider as an adequate number of officers from the University. One can assume that Iowa State graduates have served effectively or the military programs would have been subjected to considerable scrutiny by the armed forces. The Army is the only service that has maintained a record of how the Iowa State graduates performed in their branch school. Compared to the national average the Iowa State Army ROTC graduate ranks in the upper one-third of the branch school fifty per cent of the time.

One might also attempt to evaluate the effectiveness of the training by looking at the number of graduates of the

three programs. The Army has commissioned 3,870 officers from 1922 to 1970 while the navy has commissioned 704 from 1950 to 1970. The Air Force has commissioned 1,129 officers from 1949 to 1970 (this does not include the seventeen who were commissioned in the Air Force during 1948 when the air unit was under the Army ROTC). Overall 6,618 students have completed officer training since 1873 if the 715 officers trained by General Lincoln and an estimated 200 who were trained by General Geddes and Colonel Scott (estimated 20 per year for ten years) are added to the total of Army, Navy, and Air Force ROTC graduates. This total does not include the several hundred Navy V-12 graduates nor the Iowa State graduates who undoubtedly have taken some military training at Iowa State and then received commissions through other sources.

5. How was the training accepted over the years? The early military training was handled so efficiently and effectively that there was little or no cause for non acceptance of the military training. The College then operated under very strict rules and the military discipline seemed to fit. In the early years the Military Department had more pomp and ceremony than any other department and commanded more than its share of attention. General Lincoln's long tenure at the College and his stature as a soldier served as a stabilizing influence and little or no discord was heard.

After World War I the military training was still well accepted since the quality of the instruction was good and the

patriotic spirit was still high. The military training at Iowa State did not come under as much "antiwar" feeling as it did on other campuses since the training had the support of the administration and there were a large number of reserve officers on the faculty who tended to serve as a stabilizing influence. The Iowa State campus also had a good sense of humor and could make and accept jokes about the military training. To the average cadet there seemed to be a lot of drill and the acceptance of the military training was declining before World War II. After the war the size of the University and the large numbers taking the military training only because it was required detracted from its acceptance by the students. Interest and acceptance of the military training was fairly high during the Korean War. However the late 1950's saw the status of mandatory training being questioned with the debate being resolved in 1962 when voluntary basic ROTC was started. Voluntary ROTC has had its ups and downs but is better accepted by the students taking the training even though those not in the program may not think too highly of the Officer Education programs. It appears that the University accepted the ROTC Departments as partners in an educational undertaking of furnishing career officers for the armed services. The overall general acceptance of the military training throughout the first century at Iowa State can be attributed to the high quality of training, support of the administration and faculty, and the

high caliber of the Iowa State students.

6. What changes have occurred in the training from its inception in 1870 and what caused these changes? The early military training was aimed at producing a citizen soldier who could serve his country in time of need. The early military training may seem elementary today, however it appears the training was sufficiently based upon the known tactics, weapons available, and the expected limited opportunity for service in the state militia.

After World War I the aim of producing a citizen soldier was still the theme but the military training graduate was to be qualified to serve in the reserve forces of the United States rather than just the state militia. Once the Federal Government became more involved with military training in higher education the programs were conducted by active duty military personnel and had a standardized curriculum over which the schools had little control. World War II pointed out the need for a larger standing military thus the military training programs in higher education were expanded. At Iowa State the expansion included offering military commissioning programs in all three services. After World War II the curriculum was still basically oriented towards the individual service and the main aim was to produce reserve officers. However, the Korean conflict brought about the active duty requirement and with the exception of Navy ROTC, the trend has

been toward providing pre-professional training that could lead to a career in the armed forces. The Navy provides both pre-professional and military skills required to be an immediately employable ensign.

It appears that the changes to the military training in higher education has been brought about by the needs of the country and by Federal legislation. When new demands developed, legislation would be adopted to implement the necessary changes. In the 1960's it appears that the changes in the military training program have been brought about by legislative action and public pressure to create a completely voluntary military training program that would be academically acceptable to the colleges and universities. When it appeared that the Army and Air Force ROTC programs might not be able to survive in a completely voluntary atmosphere, new legislation was passed that made the military programs more attractive. The armed forces have worked to make their academic programs more acceptable, the instructors better qualified academically, and the financial support to cadets more lucrative.

The 1960's have seen many changes in the military training programs: the name of military training was changed to Officer Education; the offering in other academic departments some of the military subjects required for Officer Education; review of military curriculum by the University Curriculum Committee; elimination of college credit for military drill and allowing

majors and minors in officer education. All of these changes are important but two other changes were the most significant. These two changes involved the change to voluntary basic ROTC and the appointment of the Officer Education Committee.

Volunteer ROTC removed the major irritant of "having to take ROTC" and the Officer Education Committee formalized a sounding board and coordination committee for the Officer Education programs.

7. What were the influences of the four major military conflicts during this time period? During the 1870-1970 time period the United States was involved in World War I, World War II, the Korean War, and the Vietnam War. Before looking at the effects of these four conflicts a brief mention will be made of the Spanish American War. This 1898 war helped focus the attention of the campus on the Military Department through its commandant General Lincoln. Through the General's service as a Brigadier General of the U.S. Volunteers the College paid a little more attention to the Military Department for a few years. The General and his cadets needed a lift in morale as the program had definitely taken a back seat to athletics and other campus activities in the middle and late 1890's.

The impact of World War I on the military training at Iowa State College was considerable. As the war approached more time was set aside for military training which was made

compulsory for all four years. The faculty even formed a volunteer company. As the needs of the country became so great for trained military personnel the campus was virtually mobilized when the Student Army Training Corps was formed. After the Armistice the College quickly returned to a peacetime footing and plans were made for the modern day ROTC program.

During World War II the ROTC training continued at Iowa State, except that no advanced course was taught from 1943 to the end of the 1945-46 school year. The freshman and sophomore course was compressed into a one year modified wartime program. When the advanced ROTC cadets were called to active duty in 1943 the ROTC training was reduced to where it was hardly noticeable when compared to the special military programs. Earle Ross described the campus as a mobilized college. The Navy almost took over the whole campus, for its four major technical training areas and the V-12 officer program. During World War II Iowa State furnished hundreds of its graduates as officers and over 12,000 men who were trained in the technical programs. After V-J day, the campus was quick in its desire and action to return to a peacetime footing. However the administration very carefully made sure the College offered ROTC by all three branches of the armed forces. It appeared that having an ROTC program might help the College retain its students should another military conflict arise.

The Korean War brought renewed interest in ROTC and the total enrollments went up even though the total college enrollment went down. This conflict was the first military conflict where the campus could proceed with a business as usual attitude. The ROTC programs probably helped stabilize the College enrollment. The patriotic spirit was much less evident and the objective of the students taking ROTC was mainly a way to stay in school.

By the time of the Vietnam War the ROTC programs at Iowa State were very small in size as the enrollments had continued to drop since compulsory basic ROTC was dropped in 1962. There was some renewed interest in ROTC in 1966 but nothing like in previous wars. It was interesting that rather than seeing students become more interested in ROTC it seems the military units became the target for an anti-war sentiment. This was the first time this situation had arisen on the Iowa State campus. By 1970 the Military Departments had adopted a low profile on campus in the hope that the wave of anti-military sentiment would fade.

It suffices to say that the Iowa State campus was virtually mobilized during World War I and II. The patriotic spirit of the campus was high in support of the two World Wars. During the Korean War the patriotic spirit was less evident but the interest in the ROTC programs was very high since this was one way to at least stay in school until graduation. Like the

first three major conflicts of this time period the interest in the military and the advanced ROTC faded rapidly after the war was over. The Vietnam War at first created some interest in the ROTC programs, however, resentment against the military training being on campus grew as the Vietnam conflict was drawn out over the years. Though the protest on the college campuses had been strong across the nation the Iowa State protests were peaceful and the school remained open.

8. What is the future of ROTC (Reserve Officer Training Corps) at Iowa State University? Military training has survived for over 100 years on the Iowa State campus. The first forty-nine years of the training was to provide officers for the state militia. The last fifty some years at Iowa State has seen the Army ROTC (1919) joined by the Navy ROTC (1946) and the Air Force ROTC (1949) to train officers for the U.S. Reserve and active duty forces. Each of the ROTC units have had their ups and downs but have reached their maturity and are an accepted department within Iowa State University. Virtually every level in the power structure of the State of Iowa has voiced their continued support of the ROTC programs. The ROTC programs at Iowa State have shown their ability to adjust in a rapidly changing environment to meet the requirements of the University and the nation. Therefore, it is likely that the ROTC programs at Iowa State will remain an accepted and effective part of Iowa State University and continue to furnish officers for the defense of our country.

Conclusions

From the findings of the investigation the following conclusions were reached:

1. The Military Departments have been an accepted part of Iowa State for over 100 years and that more than 6,600 graduates have completed the officer training.
2. The Iowa State administration has supported the Military Departments and have long been active on the national scene in the support of military training in higher education.
3. The modern day ROTC program is flexible enough to be able to remain a viable entity of Iowa State University.
4. The military association has been good for Iowa State and Iowa State has been good for the military.

Recommendations

While this study was being made, it became evident that several areas merit future study. The most pertinent recommendations are:

1. The three Military Departments should consider more ways to coordinate their education programs. Two key areas could be, conducting a team-taught interservice military seminar in the sophomore year and the consolidation of the three flight instruction programs. The team-taught sophomore seminar should include a study of the three military services mission, organization, and capabilities.

2. The Officer Education Committee should be continued and a yearly report of the Military Departments and the committee be forwarded to the appropriate University authorities.

3. A periodical follow-up study of the Iowa State graduates should be accomplished by each of the armed forces to determine the effectiveness and ways to improve the officer education program at Iowa State.

4. The Air Force and the Army ROTC Officer Education units should initiate a history file similar to the NROTC Command History File. Further that each Professor--PMS--PNS--PAS--prepare a brief report on the activities and events during his tenure at Iowa State. This report should include enrollment, number commissioned, activities of the staff and cadets, and pertinent changes in the program. The report should be filed in the individual unit history file and a copy placed in the appropriate military file in the Iowa State University Library, Special Collections room.

5. The 1970 "criteria for selection of military faculty at Iowa State" should be followed implicitly.

6. A copy of this dissertation be made available for reading to all presently assigned and newly assigned military personnel to provide a background on what has gone before.

7. A two hour block of instruction on the history of military training at Iowa State University should be included

in the American Military History course taught at Iowa State University.

In summation, to paraphrase Sherman D. Lee, the chairman of the Army ROTC Advisory Panel--"Some critics have charged that ROTC represents the presence of the military in the university. I prefer to think that ROTC represents the presence of the university in the military."

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APPENDIX A: BIOGRAPHY OF GENERAL JAMES L. GEDDES¹

Geddes, James Loraine (Mar. 19, 1827-Feb. 21, 1887), soldier, college administrator, was born in Edinburgh Scotland, the son of a British officer, Capt. Alexander Geddes, and of Elizabeth (Careless) Geddes. When he was ten, his father, who had become deeply religious, feeling that he should seek a simpler and more wholesome environment for the rearing of family, emigrated to Canada. The provincial surroundings were not to young James's liking, however, and at sixteen, by working his passage, he returned to relatives in Scotland. Soon after, in 1845, he visited a soldier uncle in India and entered the British military academy at Calcutta. After two years of study he joined the Royal House Artillery and had seven years of active duty under Gough, Napier, and Campbell. For this service he was awarded a medal, and upon his decision to rejoin his family he was made a colonel of Canadian cavalry. While in Canada, Oct. 14, 1856, he was married at St. Thomas, Ont., to Margaret Moore. The Canadian service was not congenial, and in October 1857 he resigned his commission and removed to Iowa, settling on a farm in Benton County, near Vinton. Wholly inexperienced in farming, he supplemented his income by teaching a country school. He was thus engaged when the outbreak of the Civil War brought a new opportunity.

Before the war began he had been drilling a local company, which upon the organization of the 8th Iowa Infantry became its Company D. When the company was mustered, Sept. 16, 1861, he was commissioned captain, one week later was advanced to lieutenant-colonel, and on Feb. 7, 1862, was promoted to a colonelcy and the command of the regiment. Its initial service was with Fremont in Missouri, but its first real fighting came at Shiloh, Apr. 6, 1862, where the 8th Iowa was one of the regiments called to the support of Prentiss in his crucial buffer position. This reorganized division by holding the "hornet's nest," until after severe losses it was forced to surrender at the end of the day,

¹Dictionary of American Biography (New York: Charles Scribner's Sons, 1931), Vol. VII, pp. 205-06.

helped to preserve the main army for its triumph on the morrow. Col. Geddes, himself among the wounded, was highly commended by Prentiss for his part in the action. He was exchanged in time to be in the fighting at Vicksburg and Jackson, acquitting himself so creditably that, in October 1863, he was placed in charge of a brigade. After brief service in Texas the brigade was transferred to Memphis, Tenn., where Geddes served with tact and efficiency as provost-marshal of the district. His last important engagement was in the Mobile campaign in which his brigade had a conspicuous part in the capture of Spanish Fort. For this achievement he was made brevet brigadier-general, June 5, 1865. He resigned from the service on June 30.

Soon after the war he was called to the superintendency of the Iowa Institution for the Education of the Blind, where for two years (June 1867-July 1869) he dealt with problems of administration and instruction conscientiously and intelligently. He was interested from the first in the state's land-grant college at Ames, and became its steward in 1870. The next year he was appointed professor of military tactics and engineering, and to the duties of this position those of vice-president and deputy treasurer were soon added. His teaching was most notable in connection with the launching of military instruction in a land-grant college. His training, enthusiasm, and high military ideals enabled him to achieve gratifying results in skill and discipline under serious limitations. In November 1882, a board unfavorable to the existing administration among other measures of reorganization discontinued Geddes's services. This action led to great protest from students and other friends throughout the state, and a new board in December 1884 appointed him college treasurer and recorder, and later, June 1886, college land agent also. He held these positions until his death, which was occasioned, in his sixtieth year, largely by war disabilities.

Slender, erect, elastic of step, with sharp, clearcut features, Geddes appeared the true soldier; his personality exemplified the ideal military gentleman. Without relaxing his dignity, he had a kind, modest, considerate manner that won the respect and

affection of soldiers and students, fellow officers and colleagues. His interests, developed by travel and wide reading, were broad and tolerant. He was an amateur artist of some talent and a writer of war songs better in form and more restrained in sentiment than the average of such productions.

APPENDIX B: SONG BY COLONEL JAMES L. GEDDES¹The Bonnie Flag with the Stripes and Stars, by Colonel

James L. Geddes.

1. We're fighting for our Union, We're fighting for our trust
We're fighting for that happy land where sleeps our Fathers
dust
It cannot be dissevered tho' it cost us bloody wars
We never can give up the land where float the Stripes and
Stars!
2. We treated you as brothers until you drew the sword
With impious hands at Sumpter you cut the silver cord
So now you hear our bugles, we come the son's of Mars
We rally round that brave old flag which bears the Stripes
and Stars.
3. We do not want your cotten, we care not for your slaves
But rather than divide this land, we'll fill your southern
graves
With Lincoln for our Chieftain, we'll wear our countrys
scars
We rally round that brave old flag, that bears the Stripes
and Stars.
4. We deem our cause most holy, we know we're in the right
And twenty millions of freemen stand ready for the fight
Our bride is fair Columbia, no stain her beauty mars
O'er her we'll raise that brave old flag, which bears the
Stripes and Stars.
5. And when this war is over, we'll each resume our home
and treat you still as brothers where ever you may roam
We'll pledge the hand of friendship, and think no more of
wars
But dwell in peace beneath the flag, that bears the Stripes
and Stars.

Chorus

Hu-rah, Hu-rah for equal rights hu-rah
Hu-rah, Hu-rah for equal rights hu-rah
Hu-rah for the brave old flag that bears the Stripes and
Stars!
Hu-rah for the brave old flag that bears the Stripes and
Stars!

¹James L. Geddes, The Bonnie Flag with Stripes and Stars,
arranged by Henry Werner, (St. Louis: Balmer and Weber, 1863),
pp. 1-4.

APPENDIX C: BIOGRAPHY OF GENERAL JAMES RUSH LINCOLN¹

This biography of General James Rush Lincoln was in the Military Folder (AD11) of the Iowa State University Library Special collection Room. It was furnished by the member of General Lincoln's family and was published almost verbatim in the August 14, 1922 Ames Tribune. The biography is quoted here in a slightly condensed version with one correction note.

GENERAL JAMES RUSH LINCOLN was born in Frederick County Maryland, Feb. 3, 1845, a son of Thomas Blodget Lincoln and Sophia Julia (Ash) Lincoln, both of whom were natives of Philadelphia, Pa., where they were reared and married. The father was one of the original directors of the Southern Pacific Railroad and also spent considerable time in Texas in the development of railroads in that state. He likewise owned a large stock ranch there. He inherited an extensive fortune, which gave him opportunity to live as and where he pleased, and in many ways his wealth was used for the advantage of the sections in which he resided. He lost his wife when their son, James was but three months old; after which the father spent much of his time traveling.

General Lincoln traveled with his father until nine years of age and had been all over the continent prior to that time. A private tutor accompanied them and thus his education was not neglected. At the age of nine, however, he was placed in school and continued his studies until after the outbreak of the Civil War, attending the Loudon Military Academy of Maryland, the Virginia Military Institute and the Pennsylvania Military College. After the outbreak of hostilities the military spirit which he inherited from his ancestors [several previous generations had attained high rank in the military] was aroused and, espousing the cause of the Confederacy, he joined (the 1st Maryland Cavalry unit to go out from Rockville, Md.)

¹Iowa State University, Special Collections, Military Folder.

J. E. B. Stuart's cavalry, which with Lee's army, surrendered at Appomattox. He was serving on staff duty at the battle of Gettysburg and participated in a number of hotly contested engagements of the Civil War.

General Lincoln afterward spent two years in Virginia (and being dissatisfied with Reconstruction conditions) then came to Iowa, settling in Boone in Feb. 1868. (He first homesteaded, then became Superintendent of the Northwestern mines in Boone.) He remained a resident of Boone until 1883 when he came to Ames and took charge of the military department and stewards department of the Iowa State College, remaining in charge of the military department until 1922 but resigning the stewards in 1892. [General Lincoln headed the military department until 1919 when Lt. Col. John Boles reported as the first active duty officer to serve as Professor of Military Science and Tactics. General Lincoln did continue to be associated with the military department as an Assistant Professor until 1922.] He also taught in the engineering department but was most widely known because of his military work. He mobilized the Iowa troops for the Spanish-American War and sent them to the front. He was appointed a Brigadier General of Volunteers by President McKinley on May 27, 1898. Commanded a brigade in the Fourth Corps, later one in the Second Corps and subsequently the Second Division of the Second Corps. He was the last volunteer general to mustered out of service, this on March 16, 1899. He then returned to Ames and resumed his work with the Iowa State College. At the reorganization of the Iowa National Guard he took command of the 51st regiment and later of the 55th. On the 5th of July, 1906 he was elected brigadier general of the Iowa National Guard (and served thru 1919). During World War (I) he was again called into active service as a Major and placed in command of the Student Army Corps at Iowa State College. This gave him the distinction of being the oldest officer on active duty and one of the very few who had seen service in the three great wars.

General Lincoln was a man of fine personal appearance, whose soldierly bearing was always the evidence of his military training and experience. He always held others to a high standard in his work

at the college and was in return held in the highest esteem by all the students. Both he and his wife died in the home at Ames in 1922, Mrs. Lincoln on July 4, and the General just a month later, August 4. They are interred in the college cemetery.

APPENDIX D: A TRIBUTE TO GENERAL LINCOLN¹

One of the most glowing tributes paid to a faculty member of Iowa State College was delivered by Colonel Guy S. Brewer (class of '97) during the Armistice Day exercises, November 11, 1922, shortly after General James Rush Lincoln's death. It is presented here in slightly condensed form. The full text of "A Tribute to General Lincoln" is in typewritten manuscript form in the Military Folder of the Special Collection Room of Iowa State University, Ames, Iowa.

I deeply appreciate the privilege of speaking on this occasion. General Lincoln was my friend and I feel that in his death I have lost not only a friend but a comrade. This college and community has likewise lost a friend and comrade. His influences marked the students of this institution for nearly forty years--he believed that their most important training was their military education.

His sterling character and indomitable spirit has exerted an influence that I cannot measure by words. It is not possible to picture such a character, but those of us who came in contact with it feel its influence. It is impossible to tell of the breadth and depth of that influence. Those of us who have felt it, value it today as a priceless heritage.

Above everything else, General Lincoln was a soldier. His speech, actions and very presence, more than ordinary knowledge of other affairs, but in military subjects he was a giant. On the surface he often appeared to be a strict disciplinarian and unsympathetic, but after all he was a kindly spirit that loved friendships and appreciated the companionship of comrades... . It was well known (as the military saying goes) that those he liked best he rode the

¹Guy S. Brewer, "A Tribute to General Lincoln," typewritten manuscript, Iowa State University, Special Collections, Military Folder.

hardest, but the twinkle in his eye softened many a rebellious spirit which for the moment mutinied at his stinging reproach. Those that seldom drew criticism or reproof soon learned that, in his judgment, they were hopeless as military leaders.

General Lincoln was in no sense a dreamer, yet his keen mind was constantly ahead of his time. Today his friends are aware of the fact that many of the things he advocated in years gone by are now accepted by recognized authority. It may truthfully be said that in a military way he was a prophet.

.....

Iowa, which has produced many great men has never produced a soldier comparable with James Rush Lincoln.. ..He never sought by platitudes and verbiage to excuse the part he took in the War of the Rebellion. I have heard him say that at that time he believed himself in the right, but had long since learned that he was wrong. That was all he ever said about it, and that illustrates another side to his character. Because of the honesty of his opinion, if he learned that he was wrong he announced it as unhesitatingly as he had originally proclaimed his stand. He detested sham and counterfeit and his acute mind could easily detect these vices.

.....

General Lincoln was on many occasions, extending back to my first acquaintance with him, criticized by representatives of the War Department for not developing a technic in his enlisted man. He always justified his lack of perfection in the school of the soldier by the statement that he was interested only in developing officers. In other words, Lincoln used his enlisted men as pawns in the game that officers might be developed. Twenty-five years ago he insisted that should this nation have occasion to go to war, it would sorely need officers--that enlisted men would readily be secured. That was just the condition this country found itself in in 1917 when we made war against Germany and the Central Powers, and, true to his prediction, officers were needed; the draft procured the enlisted men and it is to his credit that the Iowa State College furnished many officers in the World War.

As a student of tactics his judgment was sound. In the National Guard Camp held at Centerville in 1895 he adopted a scheme of reinforcing the firing line in open warfare similar to the squad columns used in the World War. At that time this formation was not in conformity to drill regulations, but he maintained that it was a correct formation and the only one feasible against heavy artillery fire. And he lived to see this statement fully justified on the fields of France even though our regular army did not adopt it for nearly twenty years after he first used it. In 1895 he published a small handbook on riot drill that was the first publication of that nature that had been issued in the United States and for years it was the only American publication of that character.

His fame as a military man was greatly amplified by his work with the Iowa National Guard. General Lincoln held positive views on a defense system for our country. It was not his nature to wait until an emergency arose before he thought of the remedy. He was a believer in the regular army, but he also believed that our great strength should be reposed in the irregular forces. He was a constant advocate of a small but highly developed regular establishment from which and around which could be mustered our citizen soldiers. He believed it was an economic loss to maintain a large standing army. He admitted the need of such an establishment, but he also believed that it should be as small as possible and yet function.

.....

His constant thought in all his military training was the development of troops for the field. He could never think of his officers and men as peace time soldiers. Not that he loved war nor that he sought conflict, but because he realized that as long as the human race was subject to uncontrolled passion that war was inevitable, it was for that day--the hour of need--that he prepared.

.....

If one element of his character was more outstanding than the rest, it was the intense loyalty to our country. This is the more remarkable when we consider that in the sixties he was a rebel; but perhaps because of that he saw and felt the need of

loyal men and bent his energies that his college, founded and maintained by the state and nation, should in a sense be a citadel upon which the state might draw for loyal men. From the beginning he taught military preparedness; this at a time when others were content in the belief that their country would never again see a great war.

This morning I think of Lincoln as a sentry on post. There he walked in charge of his post and all government property in view, keeping constantly on the alert, observing everything within sight and hearing. As to the sentry, it mattered not if it rained or the sun was hot or the wind was cold, he had a duty and he performed it. The criticisms and debates of others concerning his country did not seriously interest him. He was for the United States of America against anybody and everybody and Lord help him who did not respect the sovereign power of our nation. The flag emblematic was entitled to respect and with General Lincoln in camp, it received it.

APPENDIX E: GENERAL LINCOLN'S 1901 REPORT¹

The following report is a handwritten two page annual report of James Rush Lincoln, Professor of Military Science and Tactics at Iowa State College, dated May 21st, 1901, to President W. M. Beardshear. It is one of the few original documents dealing with the Military Department of Iowa State College in the early days that is still available. It seems the papers of early College presidents retained few original military reports and the files of the Military Department were destroyed by fire in 1900 and again in 1922.

The report was located in the Military Collection folder (AD 11) of the Special Collection room, Iowa State University Library. The report of General Lincoln was placed in the Military Collection folder in 1953 by Mrs. Dorothy Kehlenbeck, University Archivist. It was originally in the papers of former College President William M. Beardshear.

General Lincoln, like most department heads said his department was doing the job, but felt more could be accomplished if they had necessary finances and equipment. Having lost a considerable part of the military equipment during the fire of the 1900, General Lincoln felt he was in a advantageous (or maybe necessary) position to make additional request for funds. The report is as follows:

¹J. R. Lincoln, "Report of Department of Military Science and Tactics 1901" (handwritten report, Iowa State College, Ames, Iowa, May 21, 1901.).

Iowa State College,
Ames, Iowa May 21st 1901.

President W. M. Beardshear,

Dear Sir:

I have the honor to report that the work in the Military Department for the past year has been as successful as usual,¹ with perhaps better results from, and more interest in, the Officers school which occupied 3 hours each week.² In addition a class in fencing with broadsword and one in Military Engineering has been conducted with one hour recitations each week. Particular attention has been given to road-making in the Engineering class. The repair and care of Flag Staff has used most of the money this year appropriated for the department, and prevented getting other necessary articles for this work.³ The fire destroyed over one half of the swords and belts of the department, as well as many rifles.⁴ On this account many officers have to drill without arms.⁵ It will cost about \$75.00 to replace the swords and belts destroyed. The appropriations actually required for the Department for one year should be at least \$200.00, to give the necessary means for conducting the work efficiently.⁶ The halyards of the Flag Staff were cut by some miscreant two weeks before the present College term opened, and it is very desirable to have it replaced. I do not believe it was cut by a student, but probably some outsider.⁷ The carriage of the College Cannon is entirely worthless for use, though all the iron can be used in its repair. Would request that \$100.00, or so much of that amount as may be required, be allowed to restore the gun to a proper condition for use.⁸

With appreciation, I remain, Respectfully,

Prof: Military Science and Tactics
James Rush Lincoln

Footnotes for James R. Lincoln's Report

¹General Lincoln had always prided himself in conducting the military training in an efficient, precise, and successful manner.

²General Lincoln was a firm believer in the military training being aimed at "officer training" so the country would have capable military leaders if the need arose. He was criticized on later federal inspections since he made no attempt to train NCO's. He did not change his main thrust from officer training throughout his many years at I.S.C.

³In previous reports (that were published in the Biennial Reports of the College) General Lincoln had made request for an increase in money for the military department. This reference dramatized the extremely small amount that was received to operate the department in that most of it was used just to repair and care for the Flag Staff. This could have been another way of General Lincoln expressing his patriotism and reverence for the United States Flag, i.e., he would spend a major portion of the department's budget to keep "Old Glory" flying. Anyone that served under him at the college or in the Iowa National Guard knew of his intense patriotism and high regard for the flag.

⁴The "Old Main" (the main campus building) was damaged by fire in the North Wing in 1900. Since the military equipment was stored in the basement some of it was lost or damaged.

⁵The drilling with sword, belt, and arms was specifically reserved for the junior and senior year cadets who served as officers of the cadet corps. Without these prestigious adornments the image of the officer (or advanced cadet) would be tarnished since some of the symbols of advanced leadership positions would not be evident.

⁶It is duly noted that President Beardshear did recommend \$200.00 in his 1901 report to trustees for the coming school year.

⁷General Lincoln had many contacts with all the students. He felt his students would not do such a dastardly thing as to cut the flag staff halyards. Since it occurred two weeks before the school term began it seems unlikely that there were any students on campus. It is also interesting to note the item "Rope on Flag Pole" was included in a report to the Board of Trustees by President W. M. Beardshear on March 13, 1901 (over two months before General Lincoln's report). Evidently the rope or "halyards" had not been repaired by late May, 1901 when General Lincoln made his report.

⁸The college had only the one cannon and artillery training was a part of the sophomore curriculum. The training in the past had been quite limited due to the condition of the cannon carriage and if it was not repaired that phase of artillery training would only be theoretical. This was against the grain of a Land Grant school that had pioneered the idea of the workshop as a practical application of theoretical knowledge.

President Beardshear had in earlier reports (1898-1900) for the annual meeting of Board of Trustees quoted General Lincoln's report in its entirety. This year (1901) his report was paraphrased as it was longer than usual and it dealt with minor details that should not necessarily be of concern to the Board of Trustees. President Beardshear went one step further and restated one of General Lincoln's previous requests for an appropriate Armory which was needed for indoor drill and the storage of weapons.

The annual report of the Military Department has been a part of the Iowa Agricultural College since 1870 and continued for several years. Since the military departments on the present campus are more orientated to the military command structure, monthly and yearly military reports are filed but not to the college. Reports of the military departments to the college president are no longer required and are very seldom initiated by the departments themselves. Occasionally a report is presented to the "officer education committee" of

Iowa State University.

Due to several reasons, one of which is the size of Iowa State University, the department heads no longer deal with or report directly to the college president. The day of personal relationship and direct reporting of the department heads with the college president are but memories of a by-gone era.

APPENDIX F: ARMY ROTC 1922 COURSE DESCRIPTION¹

The Military Department course of study that was implemented just before the 1920 school year and published in the 1921-22 catalogue is presented below as it was revised in 1922-23 academic year. The curriculum would remain basically the same until the 1934-35 year. The Infantry curriculum would be dropped in 1924 and the veterinary course in 1934.

Description of Studies

INFANTRY

21a, 21b, 21c. Drill, Military Courtesy, Physical Training; Infantry Drill and Rifle Marksmanship; Scouting and Patrolling, Inf. Drill and Ceremonies. Fall, Winter, Spring respectively.

22a, 22b, 22c. Map reading and sketching: Command and Leadership; Military Hygiene, Infantry weapons, bayonets, auto rifles, grenades; Musketry. Fall, Winter, Spring.

23a, 23b, 23c. Accompanying weapons, Machine Gun, One-pounder light Mortar, Command and Leadership; Military law, and rules of Land Warfare, Field Engineering; Field Engineering Problems. Fall, Winter, Spring.

24a, 24b, 24c. Tactics, Command and Leadership; Military Law, History, Tactics, Administration. Fall, Winter, Spring.

ENGINEER

31a, 31b, 31c. Drill, Military Courtesy. Physical Training, Elementary Military Bridges, Rifle Marksmanship; Inf. Drill and Engineer Drill; Minor Tactics, Fortification (Demolition) Inf. Drill, Eng'r. Drill. Fall, Winter, Spring quarter respectively.

32a, 32b, 32c. Minor Tactics, Field Fortifications, Inf. Drill and Eng'r. Drill: Military Hygiene, Minor Tactics (Inf. weapons) Map reading and Mapping. Fall, Winter, Spring.

¹Iowa State College Catalog, 1923-24, p. 193.

33a, 33b, 33c. Mapping, Map Reproduction. Inf. Drill, Eng'r Drill, Tactics; Engineer Organization, Military Bridges, Minor Tactics (Combat Engineering) Fall, Winter, Spring.

34a, 34b, 34c. Permanent Fortification. Military Law, Military History, Administration. Military Construction in War. Inf. Drill and Eng'r. Drill. Fall, Winter, Spring.

FIELD ARTILLERY

41a, 41b, 41c. Fundamentals of Military Science. Field Artillery Drill; Ordnance and Material. Fall, Winter, and Spring quarters respectively.

42a, 42b, 42c. Mounted Instruction, F. A. Drill; Topography and Reconnaissance, F. A. Motors and Transportation, Mounted Instruction. Fall, Winter, Spring.

43a, 43b, 43c. Mounted Instruction F. A. Drill; Ordnance and Material, Gunnery. Communications and Engineering Field Artillery Firing. Fall, Winter, Spring.

44a, 44b, 44c. Minor Tactics and Map Maneuvers, Mounted Instruction. F. A. Drill; Mil. Law, Mil. History and Policy of U. S. Administration and Army Paper Work. Fall, Winter and Spring.

VETERINARY

51a, 51b, 51c. Military fundamentals, Animal Sanitation and Equipment, Equitation, Organization. Fall, Winter and Spring.

52a, 52b, 52c. Drill Organization and Equipment, Animal Sanitation, Administration, Courts-Martial. Field Service Regulations. Fall, Winter and Spring.

53a, 53b, 53c. Drill, Equitation, Veterinary hospitals, Organization, Map making and Reading, Veterinary Medicine and Surgery. Fall, Winter and Spring.

54a, 54b, 54c. Drill, Shoeing, Medicine and Surgery, Sanitation, Field Service Regulations, Military Law, and Rules of Land warfare. Organization. Fall, Winter and Spring.

Military was required for Freshman and Sophomores who had one hour of lecture and two hours of drill per week for one hour of credit per quarter.

Juniors had two lectures per week and three hours drill for three hours credit except for the veterinarians who only had one hour drill received 2 hours credit.

APPENDIX G: ARMY ROTC 1934-35 COURSE DESCRIPTION¹

ENGINEER

101, 102, 103. Organization of the Army; military discipline, courtesy and customs of service; military sanitation and first aid; national defense act; military history and policy; military obligations of citizenship; current international situation; leadership; rifle marksmanship; weapons and musketry; scouting and patrolling.

201, 202, 203. Organization and duties of engineers; map and aerial photograph reading; military sketching; map making; rigging; leadership and command; scouting and patrolling; combat principles, the rifle squad.

301, 302, 303. Interior guard duty; care of animals and stable management; military roads, location and construction; military roads, maintenance and repair; military bridging, general; military bridging, floating bridges; military explosives and demolitions; field fortifications, trenches; field fortifications, emplacements; field fortifications, obstacles; field fortifications, protected shelters; combat orders and solution of problems, engineer; combat principles of infantry units; combat principles of engineer units; mechanization; leadership; military bridges, fixed.

401, 402, 403. Supply and mess management; emergency procurement and funds; organization and duties of engineers; construction in war; fixed bridges; combat principles, the company; organization of the ground; defense against chemical warfare; the law of military offenses; courts-martial; administration; military history and policy; leadership.

FIELD ARTILLERY

121, 122, 123. Military fundamentals; Orientation, national defense act and R.O.T.C.; obligations of citizenship; military history and policy; current international situation; military discipline, customs and courtesy of service; military sanitation and first aid; military organizations and organization of

¹Iowa State College Catalog, 1934-35, pp. 261-62. Each of the above listed courses were taught fall, winter, and spring respectively. The courses listed in the 100 and 200 series each required one lecture and two drills for one credit each quarter. The 300 and 400 courses had two lectures and three drills for three credits each quarter.

the field artillery. Leadership (Practical drills). Field artillery instruction; Elementary gunnery; duties of cannoneers and firing battery; field artillery ammunition and material.

221, 222, 223. Leadership. Transport: Care animals, stable management; equitation; driving and draft; automotive vehicle operation. Field artillery instruction: Fire control instruments; map and aerial photograph reading; battery communications; battery detail and reconnaissance, selection and occupation of position.

321, 322, 323. Leadership. Gunnery: Elementary ballistics and dispersion; preparation of fire; conduct of fire. Reconnaissance, selection and occupation of position: Duties of battery officers; the battery detail; field artillery communications; liaison with infantry. Transport: Equitation; driving and draft; automotive vehicles. Pistol marksmanship.

421, 422, 423. Leadership: Command and instruction student organizations; transport (animal). Tactics; military history and policy; military law and administration.

APPENDIX H: ARMY ROTC ENROLLMENT AND
AND COMMISSIONING DATA 1921-1941¹

Year	Fresh- man	Sopho- more	Junior	Senior	Total	College male enroll	No. comm. during calendar year
1920					1242		
1921	692	440	21	7	1160	2900	00
1922	724	415	62	26	1245	2800	6
1923	612	445	73	60	1390	2802	26
1924	783	504	87	69	1443	2800	51
1925	875	447	91	80	1493	2452	60
1926	805	488	64	86	1443	2400	71
1927	899	552	110	60	1621	2130	80
1928	845	503	69	113	1530	2300	56
1929	820	469	66	86	1441	2350	95
1930	747	580	87	80	1494	2250	71
1931	665	500	98	89	1352	2500	61
1932	420	311	93	86	910	2000	63
1933	493	260	69	91	913	1600	85
1934	703	323	73	70	1169	1900	79
1935	768	409	88	71	1336	2100	73
1936	811	470	110	71	1462	2200	66
1937	916	486	74	95	1571	2300	72
1938	948	506	106	65	1625	4000	87
1939	996	578	107	98	1779	4000	66
1940	1042	649	123	86	1900	4500	93
1941	964	579	139	110	1792	4400	86
						TOTAL	1,347

¹Iowa State College, Army Reserve Officers Training Corps, Report of Enrollment and List of Graduates commissioned from ROTC advanced course, Army ROTC Files, 1921-1941. Enrollment figures are for October 1st each year. The total number commissioned from 1922 to 1941 is 1,347. Even though the veterinary unit was dropped in 1934 veterinarians were still commissioned for five more years and consequently with the 1936-1939 veterinarians included the total commissioned is 1,445.

APPENDIX I: POST WORLD WAR II ARMY

ROTC COURSE DESCRIPTION¹

111, 112, 113. Military Science I. (0-1-2) Cr. 1 each.
Military fundamentals; organization; leadership; world military situation; marksmanship; use of maps and aerial photographs.

211, 212, 213. Military Science II. (0-1-2) Cr. 1 each.
Prerequisite: 113 or service in the armed forces, or three years service in a federally recognized Junior ROTC.
World military situation; leadership; administration; evolution of warfare; military law.

ADVANCED COURSES

(primarily for undergraduates)

Courses in Engineer Unit

301, 302, 303. Military Science III.
Prerequisite: 213 or extended service in the armed forces.
Leadership; military problems of the United States; military law; military engineering, including bridge design, camouflage, reconnaissance, explosives, roads.

401, 402, 403. Military Science IV.
Prerequisite: 303.
Command and staff; psychological warfare; geopolitics; leadership; mobilization and demobilization; military engineering; including airborne and amphibious operations, construction and utilities; combat principles; engineer estimates; river crossing operations.

Courses in Field Artillery Unit

321, 322, 323. Military Science III.
Prerequisite: 213 or extended service in the armed forces.
Leadership; military problems of the United States; military law; field artillery tactics and technique, including field artillery material, gunnery, communications, observed fires, reconnaissance and survey.

¹Iowa State College Catalogue 1947-1948, pp. 244-246, 1949-1950, p. 267. All the advanced courses (except veterinary) included three hours of lecture and two hours of drill for three credits each quarter.

421, 422, 423. Military Science IV.

Prerequisite: 323.

Command and staff; psychological warfare; geopolitics; leadership; mobilization and demobilization; field artillery tactics and technique, including fire direction, reconnaissance, selection and occupation of positions, target location, observed and unobserved fires.

Courses in Signal Corps Unit

331, 332, 333. Military Science III.

Prerequisite: 213 or extended service in the armed forces.

Leadership; military problems of the United States; military law; signal corps tactics and technique, including message center procedure, wire and radio communications, signal corps photography.

431, 432, 433. Military Science IV.

Prerequisite: 333.

Command and staff; psychological warfare; mobilization; signal corps tactics and technique, including wire and radio communication, materiel, signal supply and repair.

Courses in Air Unit

341, 342, 343. Military Science III.

Prerequisite: 213 or extended service in the armed forces.

Leadership; military problems of the United States; military law, tactics and techniques of the Army Air Force, including air intelligence, statistical control methods, and guided missiles.

441, 442, 443. Military Science IV.

Prerequisite: 343

Command and staff; psychological warfare, geopolitics; leadership; mobilization and demobilization; tactics and technique of the Army Air Force, including aircraft maintenance engineering, armament, and meteorology.

Courses in Veterinary Unit

(added in 1948)

151, 152, 153. Military Science I. (0-1-0) Cr. 1 each.

Prerequisite: Classification in Division of Veterinary Medicine.

Military fundamentals; organization of the army and the medical department; administration.

251, 252, 253. Military Science II. (0-1-0) Cr. 1 each.

Prerequisite: 153 or service in the armed forces.

Duties of the veterinarian, organization and employment of the Veterinary Service in the armed forces

351, 352, 353. Military Science III. (0-1-0) Cr. 1 each.

Prerequisite: 253 or extended service in the armed forces.

Subsistence procurement; meat and dairy hygiene.

451, 452, 453. Military Science IV. (0-1-0) Cr. 1 each.

Prerequisite: 353.

Veterinary military preventive medicine; veterinary medical aspects of atomic warfare; inspection of foods of animal origin.

APPENDIX J: ARMY ROTC ENROLLMENT AND
COMMISSIONING DATA 1942-1970¹

Year	Fresh- man	Sopho- more	Junior	Senior	Total	College male enroll	No. comm.
1942	1367	515	126	120	2128	4500	117
1943	505				505	1070	82
1944	218				218	794	113
1945	280				280	1541	00
1946	453		58	0	522	7000	
1947	778	272	81	54	1185	7636	
1948	486	230	80	26	822	7850	44
1949	396	215	60	55	726	6600	18
1950	462	262	173	69	966	6215	49
1951	413	290	201	174	1078	4500	55
1952	515	345	177	177	1214	4611	168
1953	618	375	200	188	1381	5135	169
1954	681	366	161	218	1426	5380	149
1955	682	402	158	144	1386	6339	156
1956	726	451	177	148	1502	6764	147
1957	625	417	139	168	1349	6470	148
1958	629	389	138	126	1282	6477	147
1959	544	368	142	152	1206	7929	118
1960	693	378	93	130	1206	6388	118
1961	970	461	113	88	1632	6749	120
1962	266	182	102	96	646	6465	64
1963	195	107	67	95	464	7340	80
1964	93	75	60	61	289	7900	67
1965	80	38	47	53	213	8544	52
1966	142	58	64	47	311	9112	43
1967	109	65	52	63	289	9943	48
1968	96	61	72	51	280	10290	37
1969	68	27	68	61	225	10885	53
1970	42	19	37	66	164	10911	63

¹Iowa State University, Army ROTC Report of Enrollment, 1942-70. There was no sophomore, junior or senior class from 1943 through 1945 and no sophomore or senior class in 1946.

APPENDIX K: NROTC 1949-50 COURSE DESCRIPTION¹Description of Courses

- 111, 112, 113. Naval Orientation.
111. History, traditions, and accomplishments of the Navy.
112. Organization, functions, and characteristics of the Navy and its components, Naval justice and elements of leadership.
113. Duties and responsibilities of a deck officer, seamanship; communications.
- 211, 212, 213. Naval Weapons.
211. Capabilities and limitations of all types of modern naval weapons.
212. Basic principles of the employment and control of naval surface and anti-aircraft weapons.
213. Fire control, fundamentals of operation and employment of radar and sonar; guided missiles.
- 311, 312, 313. Naval Science.
311. Navigation instruments and equipment, piloting, elements of navigation, relative movement, radar, loran.
312. Nautical rules of the road, basic aerology, celestial navigation, and nautical astronomy.
313. Nautical astronomy, celestial navigation.
- 313M. Concepts of Military Policy, Power and Principles (for Marine Corps students in lieu of 313).
Origin, development, and role of U.S. Military Forces, significance of military power, classic principles of war.
- 411, 412, 413. Naval Science.
411. Naval Machinery. Theory and construction of typical modern naval engineering installations, properties of steam, internal combustion engines.
412. Diesel Engines and Ship Stability. Theory, construction, and operation of the diesel engine, principles of ship stability and buoyancy, damage control.
413. Naval Administration and Leadership. Naval law, administration, psychology and technique of leadership, duties and responsibilities of officers.

¹Iowa State College Catalog, 1949-50, pp. 270-71. All Naval Science courses required three hours of lecture and two hours of drill per week for three hours credit per quarter.

411E. Naval Application of Thermodynamics and Power Generation.
For students with credit or classification in M.E. 344
or equivalent.

411M, 412M, 413M.

Prerequisite: Enrollment as a Marine Corps student.

- 411M. Analysis of American Battles. Analysis of
selected battles, principles of war, type
operations, development of tactics and techniques.
- 412M. American Battles and Amphibious Operations.
Specialized amphibious warfare, battle planning.
- 413M. Amphibious Operations. Advanced study in the
specialized field of amphibious warfare.

APPENDIX L: NROTC ENROLLMENT AND COMMISSIONING

DATA 1946-1970¹

<u>Year</u>	<u>Regular midshipmen</u>	<u>Contract midshipmen</u>	<u>Total enrollment</u>	<u>Number commissioned</u>
1946			148	
1947				
1948		77		
1949			208	
1950	135	88	223	25
1951			271	42
1952			269	48
1953			272	26
1954				30
1955			291	51
1956				46
1957	121	125	246	37
1958	108	109	217	41
1959	110	95	205	34
1960	109	90	199	36
1961	103	114	217	27
1962	120	108	228	26
1963	113	80	193	28
1964	114	65	179	29
1965	104	61	165	29
1966	106	60	166	21
1967	102	79	181	27
1968	101	81	182	31
1969	89	77	166	37
1970	108	63	171	33

¹There was little enrollment data available for the first eleven years of NROTC at Iowa State. The information presented from 1946 through 1956 was obtained from the following sources: The Daily, August 28, 1946, p. 1, September 25, 1948, p. 6, October 7, 1950, p. 1; undated history in the NROTC Command History File (probably 1949); Letter from E. T. Seaward, PNS, Iowa State College, dated December 23, 1952 in the NROTC Command History File. The early commissioning data was extracted from several sources in the NROTC Command History File and compared with the list of NROTC graduates in the Iowa State commencement programs.

It is interesting to note that the numbers commissioned for each year from 1950 through 1959 did not match exactly. However the total number commissioned from 1950 to 1959 showed 380 using one source and 381 using another source. Since 1957 the NROTC academic secretary has maintained an annual listing of the number of regular, contract, total enrollment, and number commissioned and is the document that supplied the 1957 to 1970 information.

APPENDIX M: AFROTC 1952-53 COURSE DESCRIPTION¹Courses Primarily for Undergraduate Students

- 141, 142, 143. Air Science I.
Leadership, drill and exercise of command; military organization; military policy of the United States; evolution of warfare; maps and aerial photographs; military psychology; first aid and hygiene; geographical foundation of nation power; military problems; military mobilization and demobilization.
- 241, 242, 243. Air Science II.
Prerequisite: 143, or service in the armed forces or three years' service in a federally recognized Junior ROTC. Leadership, drill and exercise of command; aerodynamics and aircraft propulsion; navigation; meteorology; applied air power.
- 341, 342, 343. Air Science III. Administration.
Prerequisite: 243, or extended service in the armed forces. Leadership, drill and exercise of command; logistics; air operations; air force administration.
- 344, 345, 346. Air Science III. Communications.
Prerequisite: 243, or extended service in the armed forces. Leadership, drill and exercise of command; logistics; air operations; air force communications.
- 347, 348, 349. Air Science III. Armament.
Prerequisite: 243, or one year's service in the armed forces; major in engineering or scientific field. Air operations; elementary air force supply procedures; military publications; specialized training in armament.
- 351, 352, 353. Air Science III. Flight Operations.
Prerequisite: 243, or one year's service in the armed forces. Air operations; leadership, drill and exercise of command; elementary air force supply procedures; military publications; specialized training in flight operations.

¹Iowa State College Catalog, 1952-53, pp. 280-281. All Air Science I and II courses required one hour of lecture and two hours of drill. Air Science III and IV had three hours of lecture and two hours of drill.

441, 442, 443. Air Science IV. Administration.

Prerequisite. 343.

Leadership, drill and exercise of command; military administration; Inspector General; military teaching methods; military law and boards; air force management; career development; air force administration.

444, 445, 446. Air Science IV. Communications.

Prerequisite. 346.

Leadership, drill and exercise of command; military teaching methods; Inspector General; military law and boards; air force management; career development; air force communications.

447, 448, 449. Air Science IV. Armament.

Prerequisite. 349

Leadership, drill and exercise of command; air force inspection systems; military teaching methods; military law and boards; military management; career development; specialized training in armament.

451, 452, 453. Air Science IV. Flight Operations.

Prerequisite. 353.

Leadership, drill and exercise of command; air force inspection systems; military teaching methods; military law and boards; military management; career development; specialized training in flight operations. Graduates of this course will be required to continue their training, as an officer, at an air force flying training school.

APPENDIX N: AFROTC 1953 GENERALIZED CURRICULUM¹Description of Courses

Courses Primarily for Undergraduate Students

- 141, 142, 143. Air Science I.
Introduction to A.F.R.O.T.C. and aviation. Fundamentals of global geography; international tensions and security structures; instruments of national military security; drill--basic military training.
- 241, 242, 243. Air Science II.
Prerequisite. 143, or over six months' service in the armed forces, or three years' service in a federally recognized Junior R.O.T.C.
Introduction; elements of aerial warfare; careers in the U.S.A.F.: leadership laboratory--cadet non-commissioned; officer training.
- 341, 342, 343. Air Science III.
Prerequisite. 243, or one year's service in the armed forces.
Introduction to advanced A.F.R.O.T.C.; the air force commander and his staff; problem-solving techniques; the communications process and air force correspondence; military law, courts and boards; applied air science; air force base functions; leadership laboratory.
- 441, 442, 443. Air Science IV.
Prerequisite. 343.
Critique of summer camp and introduction to Air Science IV; leadership seminar; career guidance; military aspects of world political geography; military aviation and the art of war; briefing for commissioned service; leadership laboratory--cadet wing officer training.

¹Iowa State College Catalog, 1954-55, p. 305. Air Science I and II received one hour of lecture and two hours of drill for one credit. Air Science III and IV involved three hours of lecture and two hours of drill for three hours credit.

APPENDIX O: AFROTC ENROLLMENT AND
COMMISSIONING DATA 1946-1970¹

Year	Freshman	Sophomore	Junior	Senior	Total	Number commissioned
1946	81	7	28		116	
1947	340	119	44	22	525	
1948	404	193			623	17
1949	427	247	58	55	787	25
1950					684	52
1951	730	338	176	96	1340	41
1952					1600	90
1953					1952	118
1954					1953	109
1955					1375	149
1956					1351	123
1957					1477	49
1958					1465	38
1959	914	472	34	33	1450	32
1960	1017	489	24	31	1561	25
1961	818	575	24	26	1443	23
1962	351	75	41	25	492	19
1963	178	95	22	38	333	19
1964	149	76	31	42	298	23
1965	100	83	45	49	277	20
1966	160	63	41	57	321	25
1967	111	84	31	56	282	28
1968	112	54	30	43	239	36
1969	48	39	31	39	157	35
1970	63	22	39	38	162	33

¹Little information was available on the AFROTC enrollment in the 1950's. The AFROTC enrollment and commissioning data is based on the following sources: The Daily, September 30, 1948, p. 1, October 11, 1950, p. 1, September 30, 1952, p. 3, May 16, 1953, p. 1; Iowa State University Army ROTC Report of Enrollment, 1946-48; AFROTC Detachment 250 Statistical Data Notebook, 1958-70; Robert C. Hall, "History of Detachment Eleven," July 1, 1951--March 31, 1952; Iowa State University, Commencement Programs, 1947-70; AFROTC Historical Statistical Reference Book, No. 17, AFROTC Detachment 250, (Montgomery, Alabama, Headquarters AFROTC, 1955-70) pp. 1-2. AFROTC Detachment 250 Briefing Folder, 1972, pp. 1-5.

It is interesting to note that there is conflicting information in most of the available sources on AFROTC enrollment and commissioning. The information on enrollment maintained in the AFROTC Detachment 250 shows a larger enrollment than the AFROTC Headquarters information. Detachment 250 records are based on the actual number of AFROTC students that attended class the first week. Whereas the AFROTC Headquarters information is based on an October 31st cut off for the number enrolled. Therefore the AFROTC Headquarters information is less since several students had dropped AFROTC by October 31st of each year. Where the information is available the AFROTC Headquarters data was used.

There is also a difference in the number of officers that were commissioned in the Air Force from Iowa State. The only source of Air Force officers graduating from Iowa State from 1948 to 1954 was the Iowa State commencement programs which list the military graduate by name. The commencement program does not take into consideration the cadets that are commissioned at summer camp, and this number probably varies from two or three to as high as five per year. However since no other information is available for the 1948-54 time period the commencement program information is given in this appendix. From 1955 to 1970 the number of Air Force Officers commissioned from Iowa State is taken from the AFROTC Headquarters information. It is interesting to note that the number of Air Force

officers listed as being commissioned in the Iowa State commencement program was fifty nine less (in 1955 through 1959) than the AFROTC information. This writer knows from first hand experience that the 1955 to 1956 years were the biggest years for commissioning of AFROTC cadets at summer camp. Further, that the 1955 and 1956 years were years the Air Force had a continuing over production of officers and many cadets who had completed AFROTC but not college were told they would not be commissioned, however, after graduation they were finally commissioned. The late commissionees would not appear in the commencement program. After the 1960 time period the information in the University commencement program, AFROTC Headquarters commissioning numbers and the local AFROTC Detachment 250 number of commissioned are more compatible. For the purpose of this dissertation the AFROTC Headquarters commission and enrollment information is used from 1955-70.

APPENDIX P: ARMY ROTC GENERAL MILITARY

SCIENCE CURRICULUM 1964-70¹

Basic Course, Senior Division ROTC

111, 112, 113. Military Science I.

(1-1) Cr. 1 each.

Leadership; individual weapons and marksmanship; organization of the Army and ROTC; United States Army and national security.

211, 212, 213. Military Science II.

(1-2) Cr. 1 each.

Prerequisite. Military Science I or approval of professor of Military Science.

Leadership; map and aerial photographic reading; introduction to basic tactics, American military history and counter-insurgency operations.

Advance Course, Senior Division ROTC

301, 302, 303. Military Science III.

(3-1) Cr. 3 each.

Prerequisite. Military Science I and II or completion of six weeks' basic training summer camp, approval of Professor of Military Science.

Leadership; military teaching principles; small unit tactics and communications; branches of the Army; and counter-insurgency operations.

401, 402, 403. Military Science IV.

(3-1) Cr. 3 each.

Prerequisite. Military Science III.

Leadership; logistics; military administration; military law; United States and world affairs; services orientation; map reading.

¹Iowa State University General Catalog, 1965-67, pp. 354-55.

APPENDIX Q: AFROTC COURSE DESCRIPTION 1964-70¹

- 141, 142, 143. World Military Systems
(1-1) Cr. 1 each. Yr.
Causes of present world conflict, the role and relationship of military power to that conflict and the responsibility of an Air Force officer. Factors from which differing political philosophies have evolved. Analysis of the three prime political philosophies which have guided segments of society in the twentieth century. Means that nations develop to pursue their objectives and how they confront each other in the use of these means. Individual military systems with emphasis upon the U.S. Department of Defense and the U.S. Air Force.
- 241, 242, 243. Military Systems.
(1-1) Cr. 1 each. Yr.
Prerequisite. 143.
World military forces and the political-military issues surrounding the existence of these forces, including the United States Army and the United States Navy, their doctrines, missions and employment concepts; military forces of NATO, CENTO, SEATO, and their role in free world security; and military forces of the USSR Soviet Satellite Armies, and the Chinese Communist Army. Analysis of the trends and implications of world military power.
- 341, 342, 343. Growth and Development of Aerospace Power.
(3-1) Cr. 3 each. Yr.
Prerequisite. 243.
The nature of war; development of air power in the U.S.; mission and organization of the Defense Department; Air Force concepts, doctrine and employment; astronautics and space operations; and future development of aerospace power.
- 441, 442, 443. The Professional Officer.
(3-1) Cr. 3 each. Yr.
Prerequisite. 343.
Professionalism, leadership, and management, including the meaning of professionalism, professional responsibilities, the military justice system, leadership theory, functions, and practices, management principles, and functions, problem solving, and management tools, practices and controls.

¹Iowa State University General Catalog, 1965-67, p. 353. These courses were introduced in 1964 and have remained basically the same throughout the remainder of the 1960's.