

UNITED STATES MILITARY ACADEMY

WEST POINT · NEW YORK

ANNUAL REPORT

of the

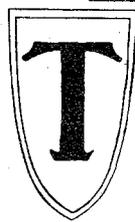
SUPERINTENDENT

1 July 1969 - 30 June 1970

DUTY · HONOR · COUNTRY

UNITED STATES MILITARY ACADEMY

MISSION



To instruct and train the
Corps of Cadets so that
each graduate will have
the qualities and attributes
essential to his progressive
and continued development
throughout a career as an
officer of the Regular Army



OFFICE OF THE SUPERINTENDENT
UNITED STATES MILITARY ACADEMY
WEST POINT, NEW YORK 10996

MASG

30 June 1970

SUBJECT: Annual Report, 1 July 1969 through 30 June 1970

Chief of Staff
Department of the Army
Washington, D. C. 20310

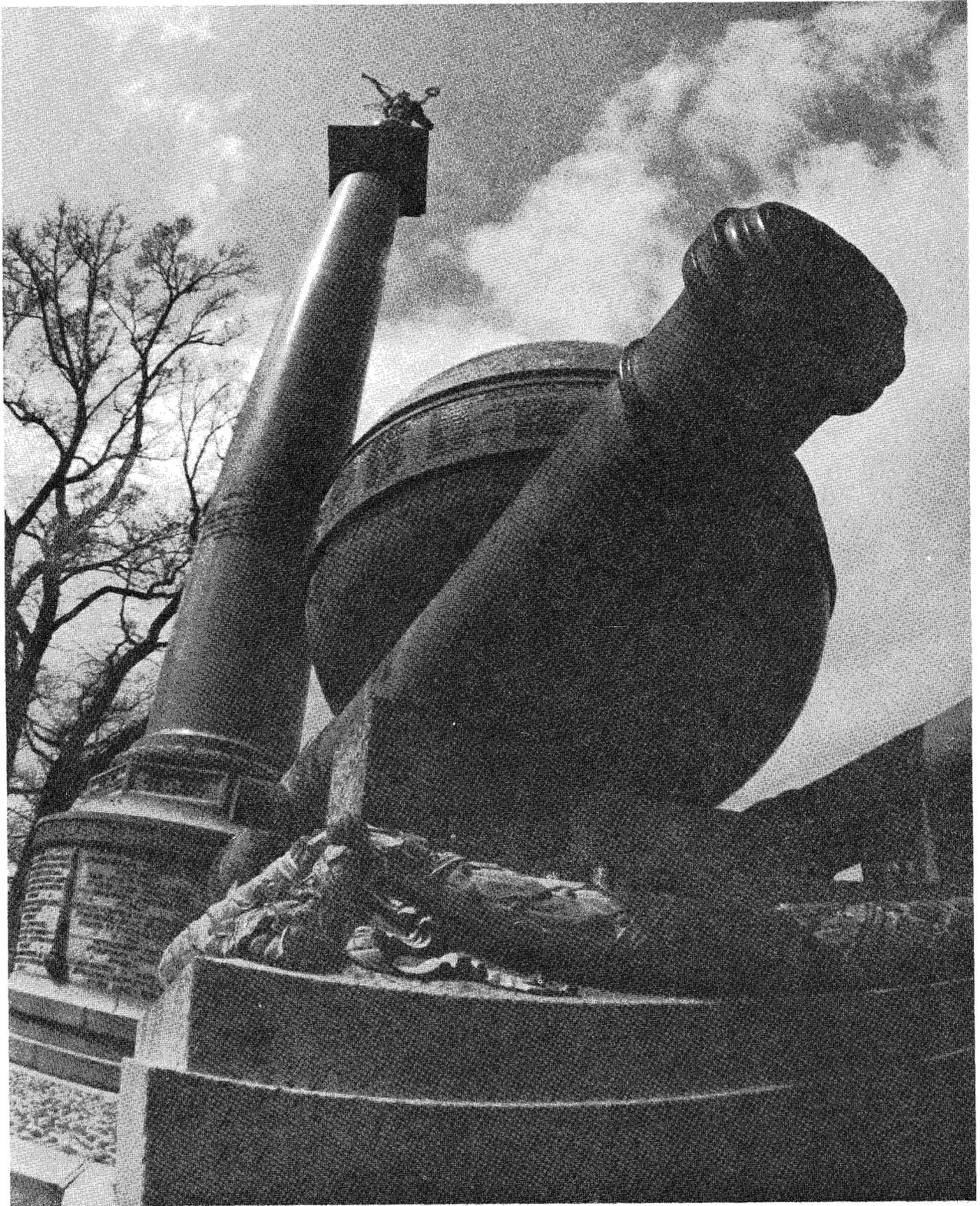
This report provides a record of the United States Military Academy for the period of 1 July 1969 through 30 June 1970. The report is complete in one volume this year as compared to the four volumes of the past few years.

A handwritten signature in black ink, reading "William A. Knowlton".

WILLIAM A. KNOWLTON
Major General, USA
Superintendent

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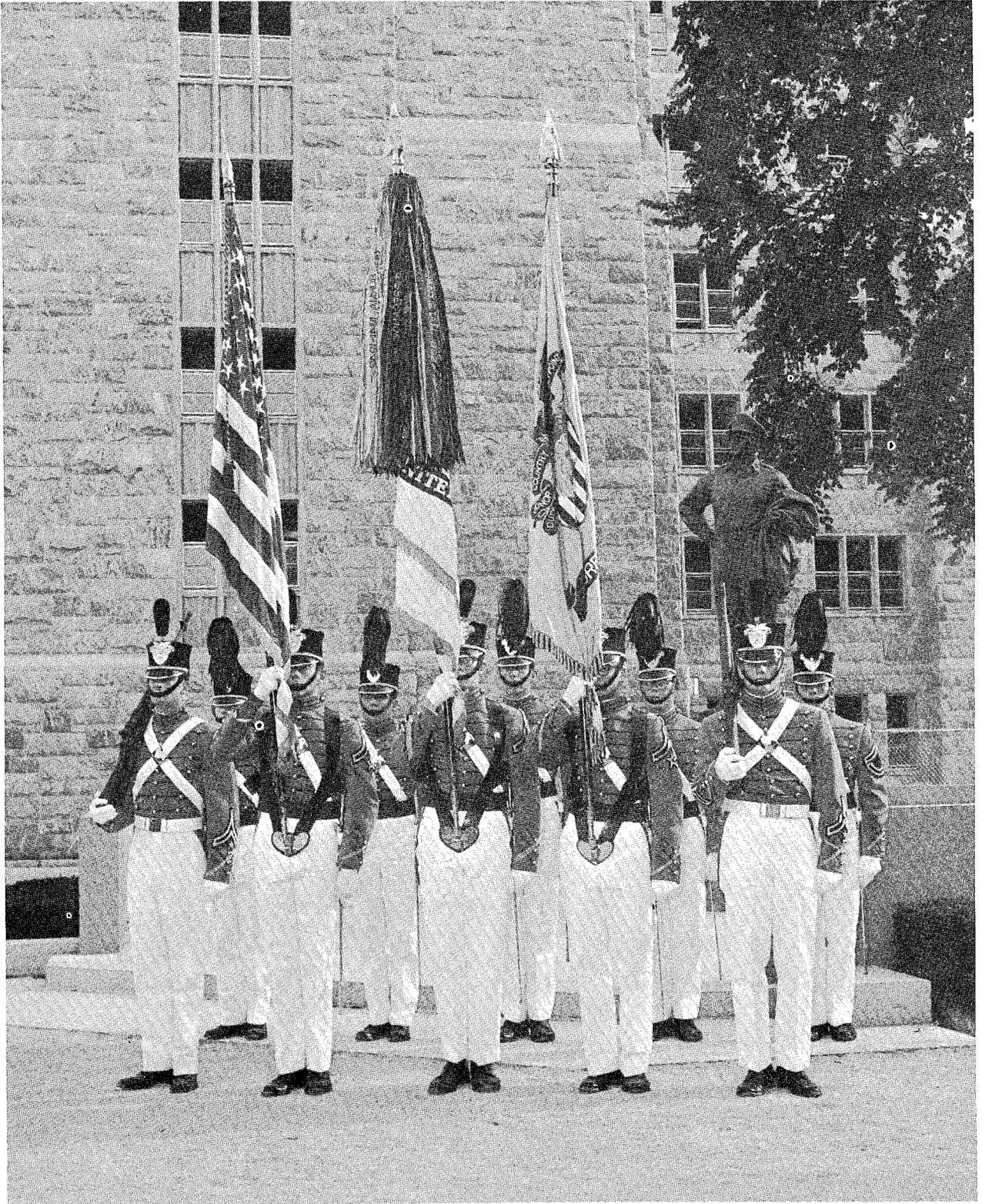
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INTRODUCTION

During Fiscal Year 1970, the United States Military Academy devoted itself to continuing its proud tradition of service to the nation. This past year's activities were in no way revolutionary, but continuous re-evaluation of all programs has resulted in carefully considered changes. The Expansion Program which encompasses not only the size of the Corps of Cadets but the scope of academics, the manning level of faculty and staff, and the attendant increase of post supporting facilities, has progressed appreciably. No program, however, surpasses in importance the primary goal of the Academy -- to train and educate cadets to become career Army officers. In attaining this goal, the basic and traditional tenets of USMA - DUTY, HONOR, COUNTRY - continue to be the paramount values with which each graduate embarks upon his future life.

Expanding the size of the Corps without sacrificing traditional standards of excellence has received considerable emphasis. Efforts are being directed toward identifying the best qualified of the nation's youth as early as possible and attracting that element to the Long Grey Line. To do this, the Office of Admissions has developed a comprehensive public information program to tell the Academy's story. Indications are that this effort is competitive with the sophisticated recruiting of the many colleges and universities throughout the nation. Begun in 1964, the Corps expansion program is scheduled to reach its goal of 4,417 cadets by July 1972, and there appears to be nothing to prevent attaining that goal.

Remarkable progress has been made in the evolution of the Academic Program. The area of elective concentration concept has proven quite effective and successful; this will be continued and expanded. This year the final step in the reorganization of academic departments, the transfer of the history component of the Department of Social Sciences to the Department of History, was accomplished. Committees of the Academic Board are continually engaged in curricular studies which serve to ensure that the best possible education is provided for each cadet.

The Military Training Program is closely related to and complements the cadet's academic development. Last year, the Department of Tactics developed and refined programs to enhance cadet motivation and to ensure application of positive leadership techniques. The Fourth Class System continued to be revised, and results thus far have been gratifying. A Yearling Sponsor Program has replaced the former "Plebe Pop" system in an attempt to acquaint the Third Classman with active Army life on an informal level at the most critical juncture of his college career when he must begin seriously considering his future. Yet another especially valuable program to improve military training was initiated this past year when Department of the Army approved a request for twelve future tactical officers to obtain post-graduate level degrees in personnel management.

Expansion of the Academy's physical plant has gained momentum, and problems reported previously have, to a considerable extent, been alleviated. Nevertheless, construction delays, combined with the rapidly increasing size of the

Corps, continue to cause overcrowding in living and recreational areas as well as in classroom and laboratory facilities. That the Corps will reach its authorized strength by July 1972 strongly legislates against further delays or financial cutbacks. This is true not only with regard to facilities used exclusively by cadets, but applies as well to buildings needed to accommodate the already large post population. Acquisition of post housing at Stewart Field has allowed some temporary flexibility in housing construction, but future disposition of that location is uncertain; therefore, completion of the housing construction program must move forward.

The recommendations of both the Board of Visitors and the Department of the Army General Staff Team emphasized timely completion of all phases of the expansion program to support the strength of the Corps effectively. Both groups also stressed continued implementation of the recommendations of the Faculty Review Board, particularly with regard to increasing the tenure faculty, the number of which has risen to twenty-five Associate Professors, and committees are meeting to select five more individuals to meet recognized requirements. The Board of Visitors made two other recommendations:

That Congress authorize and appropriate funds for construction of effective secondary sewage treatment facilities at West Point, currently part of the FY 71 MCA Program.

That Department of the Army draft and support legislation to amend the Armed Forces Pay Act of 1963 to provide Permanent Professors an additional \$250 per month upon completion of thirty-one years of service. The Academy strongly endorses both recommendations.

On 23 March 1970, Major General William A. Knowlton succeeded Major General Samuel W. Koster to become the 49th Superintendent of the United States Military Academy.

In June, the Academy graduated and commissioned 749 First Classmen. This event, at which Vice President Spiro T. Agnew was the honored guest, marked the culmination of another successful year at West Point.

ADMISSIONS PROGRAM

GENERAL

Competition among colleges for outstanding college aspirants continued to increase, and our efforts in the areas of public relations and assistance to the candidates were expanded to meet the challenge. As in previous years, the public relations themes were: increased and equal opportunity for admission, expanded facilities, and curriculum changes as the size of the Corps expanded towards the 4,400 cadet mark. Admissions programs remained at approximately the same level as last year; and their success was reflected in the largest class to enter the Academy in its history - 1,439 cadets on 1 July 1969.

The Congressional Briefing Program resulted in every Congressional office being visited by admissions personnel in both the fall of 1969 and in May and June of 1970. Continued emphasis on the District Representative Program, the Educator Visit Program, and the Cadet Public Relations Council Program combined to voice the story of West Point and to provide personal contact with various district representatives, educators, and prospective candidates.

ADMISSIONS OFFICE REORGANIZATION

By the summer of 1969 it was apparent that the anticipated 8,000 - 10,000 prospective candidates for the Class of 1974 would make it impossible for the Admissions Officers to complete administrative requirements and simultaneously accomplish the expanded admissions support programs. The expansion of the Corps, the increase in nominations to ten for each Congressional vacancy and the enlarged candidate pool required the Office of the Director of Admissions and Registrar to reorganize to insure efficient administration and continue personal response to needs of the candidates. Two directorates were formed. The Admissions Directorate, consisting of the Admissions Office and the Candidate Records Section, was established to allow the Admissions Officer to devote most of his efforts to recruiting and administrative servicing of candidates. The Candidate Advisory Services (CAS) Directorate assumed responsibility for administering attendant admissions programs. Significant factors which increased our ability to administer to more than 9,000 applicants more efficiently were the institution of a computer-monitored candidate records file system and the administration of the publications effort, candidate testing, and the Cadet Public Relations Council by the CAS Directorate. Each Admissions Officer was sent a weekly computer printout reflecting the current status of every candidate within his area of responsibility from which he could quickly determine who had completed the requirements for admission and who required additional, or more personal, assistance. However, a computer has not replaced the Admissions Officer, for a professional, subjective evaluation of the candidate's entire record remains the substance of the admissions process. By the end of the year, each of the seven Admissions Officers had managed an average of 1,100 applicants for the Class of 1974, and contributed to the Academy's largest qualified candidate pool, 2,203 young men.

ADMISSIONS SUPPORT PROGRAMS

An intensified Public Relations Program over the past two years is largely responsible for an increase from 1,800 to 2,200 in the qualified candidate pool. Basically, the aim of our public relations program has been to present an accurate picture of West Point to the serious college aspirant through a variety of sources: our own admissions personnel, District Representatives, USMA Liaison Officers, the Cadets themselves, and high school educators, combined with our publications and the news media.

We experienced a slightly higher level of participation in the closely allied District Representative and the Educator Visit Programs. Each educator visit included a variety of admissions participants. News media from the visiting area were also represented in each group and our Information Office provided film and newsworthy material. The combination of local news coverage, local educators in the high schools who have visited the Academy, together with local District Representatives and liaison officers to provide in-depth follow up in many areas, provides a varied, well-versed group to recruit and nurture the interest of the young men we must reach.

The varied array of publications we produce about Admissions Support Programs provides our representatives throughout the nation with relevant, immediate information. The Admissions Bulletin was inaugurated in the fall of 1969 to present succinct, detailed, complex admissions requirements in a form easily followed by both the candidate and the counselor. Similar assistance has been furnished to Congressional offices by the Congressional Guide for USMA Admissions, which provides both the Congressman and his administrative assistants with a ready reference to entrance requirements, suggested nomination screening techniques, and candidate processing procedures. Mailing of promotional literature to the National Merit Scholarship semi-finalist, the Boys State and Boys Nation delegates, and to the National Achievement Scholarship semi-finalists has also been successful in bringing West Point to the attention of college-bound students, many of whom had never before considered the Military Academy. While all of the aforementioned programs are effective in telling the West Point story to high school students, a cadet presentation remains most effective. Continued emphasis was placed on the Admissions-directed Cadet Public Relations Council Program of allowing cadet volunteers to visit high schools and civic groups in each Congressional district during Christmas, spring and summer leave periods. Cadet participation was maintained at virtually the same level as last year, with 765 cadets making 3,175 appearances in 391 Congressional districts, visiting 2,704 high schools, and appearing on 159 radio/television programs. Cadets also represented the Academy at most of the Boys State Conventions and at Boys Nation.

REFERRAL SYSTEM

To gain assistance in obtaining quality input last fall, we initiated a referral system through which Congressmen received lists of all known applicants from their respective districts for use in selecting nominees. District representatives also received the lists for their personal follow-up contacts of outstanding prospects. The response from both Congressmen and District Representatives was highly favorable.

EQUAL OPPORTUNITY

The Equal Admissions Opportunity Officer, a Negro officer on the Director of Admission's staff, continued to seek qualified candidates from minority ethnic groups. Sustaining the motivation of interested young men is a critical effort since all colleges and universities are intensifying their efforts to attract students from minority ethnic groups. The office realized greater assistance this year from our admissions participants, educators who have visited West Point, returns from mailing projects, and the cadets themselves. We expect the ethnic minority cadets to be of increasing assistance this coming year, since the largest group of these young men, in the Class of 1973, is now eligible to participate in public relations programs.

CLASS OF 1973

The quality of the young men matriculating at West Point continued to be high. Statistics compiled by the Office of Research, together with the American Council on Education's Annual Survey which includes the Class of 1973 and other college freshmen, reveal some interesting facts. The typical new cadet had a B+ average in high school, ranked in the top ten percent of his graduating class, was a member of a scholastic honor society, and won a varsity letter. The academic reputation of the Military Academy was a major factor in his decision to accept an appointment, a decision which was influenced by a parent or relative. His father is a business or professional person, has had some college education, and is in the middle income bracket. His mother is a high school graduate. The new cadet considers it important to develop a meaningful philosophy of life, to be knowledgeable of political affairs, and to obtain a master's degree. He is more conservative politically than the typical student at other colleges, and he is less prone to participate in overt protests.

In general, the cadets most resemble students at technical institutions. They differ in their greater interest in political affairs, community leadership, and administrative responsibility, and their desire for peer group recognition.

ACADEMIC PROGRAM

OVERVIEW

During Academic Year 1969-1970, a number of actions were taken in the academic area. These included implementing the Area of Elective Concentration concept, effecting certain changes in the organization of the academic departments, and completing two major curricular studies while initiating two others. In addition, the plan of implementing -- on a phased basis -- the approved recommendations of the Faculty Review Board continued.

FACULTY REVIEW BOARD

The general tone and thrust of the Faculty Review Board recommendations were that the Academy must constantly seek to adhere to the highest standards of the educational community, that some departures from normal personnel administrative procedures may be desirable to meet those standards, that the tenure component of the faculty should be increased, and that every effort should be made to assure that outstanding officers continue to be assigned to the staff. The Academy concurred fully in these general recommendations from the outset, and, as they were approved by the Department of the Army, began to implement specific details. For example, the number of appointed tenure associate professors has been raised to twenty-eight and committees have selected three more individuals to meet established requirements.

Permanent faculty members may now participate in a new Fellowship Program with the Army War College as well as in an expanded and improved Sabbatical Leave Program. In addition, the Academy embarked on a modest Faculty Research Program, one which now includes eight participants, each of whom is engaged in basic research on a full-time basis. For those who are engaged in the projects related to the sciences, the newly established USMA Science Research Laboratory is available. This facility has only limited capabilities now but it hopefully will be expanded in the future.

CURRICULAR STUDIES

The completed curricular studies previously referred to dealt with two questions: what is the place of Management Science/Operations Research/Systems Analysis in the Academy's curriculum, and, is it feasible and desirable to grant graduate level credit for some elective courses? The former study was completed in early December and acted upon by the Academic Board in January. The latter investigation was also finished before Christmas, but action on it was delayed until mid-February.

The Management Study was conducted by an ad hoc committee chaired by Colonel Jack M. Pollin, Deputy Head of the Department of Mathematics. This committee presented a number of recommendations, the majority of which were approved by the Academic Board and which will be implemented during the coming academic year. Their net effect will be development of a new elective field in the area of Management Science which will include elective courses encompassing both

engineering and socio-economic approaches to the study of this subject. This development will increase the number of courses in the Management Science field from six to eleven.

Colonel E. C. Cutler, Jr., Head of the Department of Electrical Engineering, acted as Chairman of the Ad Hoc Committee for the Study of Graduate Level Credit. Briefly, the committee's mission was to determine if any of the Academy's courses could qualify for graduate level credit, and if so, whether they could be used as a basis on which to build cooperative graduate programs with civilian universities.

The committee concluded that, at present, there are no courses at the full graduate level but that there are about twenty-five courses that could be defined as bi-level in scope and content. They also concluded that no attempt should be made to grant graduate credit to a cadet who completes one of these bi-level courses, but to leave that decision to the graduate school in which he may eventually be enrolled. Finally, the committee members felt that there was no clearly defined rationale for establishing cooperative degree programs and that no action be taken to do so at this time. However, they recommended that this proposal should be considered again if the Academy should adopt a program of majors, or if the Army should develop a need for more specialized undergraduate education, or if the policies governing the Army Civil Schooling Program should change significantly. The Academic Board approved these recommendations in mid-February.

By the end of the Academic Year, two other important curricular studies were well underway. A committee chaired by Colonel E. A. Saunders, Head of the Department of Physics, was investigating the desirability and feasibility of offering majors programs, while a second study group, directed by Colonel D. G. MacWilliams, Head of the Department of Chemistry, was analyzing the effect of the study of a foreign language on the overall educational experience afforded each cadet. These studies are certain to provide valuable information for the continuing effort of this institution to offer the cadets an optimum academic foundation.

AREAS OF ELECTIVE CONCENTRATION

This year completes the first academic session in which the cadet was given the opportunity to concentrate his electives in a given area. If certain course selections and grade requirements are met, the cadet earns transcript credit for his efforts. The results obtained thus far indicate that this program not only encouraged cadets to give more thought to their course selection but also increased their desire to excel academically. Members of the Classes of 1971 and 1972 chose their Areas of Elective Concentration as follows: Basic Sciences, twelve percent; Applied Sciences and Engineering, thirty-one percent; National Security and Public Affairs, thirty-four percent; Humanities, ten percent; no concentration, thirteen percent. The program was especially satisfying since each cadet was enrolled in the area of his choice.

ACADEMIC ORGANIZATION

We completed the initial phase of the organizational changes proposed last year and now have two new instructional agencies in our departmental structure -- the Department of History and the Department of Engineering. The final phase of the reorganization will be completed this summer when the history group of the Social Sciences faculty is integrated into the Department of History.

OFFICE OF THE DEAN

Operations Division

The curricular modifications of the past few years have brought with them an increased need for efficient counseling, scheduling, and academic record keeping. All of these functions are now performed by the Operations Division, with the assistance of the Academic Computer Center. Other responsibilities, alien to those mentioned above, have been transferred to the Executive Officer.

During the past twelve months, the Operations Division's capabilities in each of these areas have been expanded considerably. For example, all scheduling and most record keeping are now performed by the computer. In the area of counseling, each cadet is now required to present his proposed program of study to a Company Academic Counselor before submitting it to the Dean. Company Academic Counselors are faculty members who volunteer to assist cadets in making elective course selections. Academic records will be kept on an evaluation form which was adopted after analyzing those of about thirty other institutions. Members of the graduating class and cadets being discharged may now arrange for completion of these forms with up to three faculty members. Copies will then be filed with transcripts for future use in connection with transfers, admission to graduate schools, and employment.

Educational Research and Analysis Division

The activities of the Educational Research and Analysis Division continued to focus on preparing various curricular studies for use by the Academic Board. Studies conducted since last June include analyses of the graduate school performance of former cadets, comparisons of grades and grading systems, development of class schedules and academic calendars, and determination of faculty composition. Members of this division also were actively engaged in each of the major curricular studies mentioned earlier.

Instruction Support Division

During the last academic year, the Instruction Support Division made significant contributions to the Academic Program. These included supervision of the Cadet Reading Improvement Program and conduct of the Dean's Program in Special Skills for both the faculty and the cadets. In addition, the Division supported the SHARESIMCOM -- a consortium of the senior service colleges designed to assist students who are conducting research. The Division also conducted seminars and microteaching exercises to support the Instructor Training Program. Lastly, the Division introduced the faculty to the multi-screen (slide-film-tape) concept, and prepared several presentations which were shown

not only at West Point but also at a seminar sponsored by the Army Topographic Command at the annual convention of the National Education Association, and at Ohio State University.

With regard to instructional technology, the Division now has a third-generation GE-635 computer which permits simultaneous time-sharing through one hundred and twenty-one remote terminals and ten remote analog plotters. This equipment is being placed in the offices of each of the academic departments, in various laboratories, in the Library, and in certain areas of the cadet barracks. Selected items will also be placed in the new Computer Assisted Instruction Laboratories which are being developed in Thayer and Washington Halls.

Science Research Laboratory

Perhaps the most outstanding achievements of the Science Research Laboratory during its first year of existence were development of a new hypothesis concerning the deep atmosphere structures of Jupiter and Saturn and the subsequent derivation of a rather unique explanation for one of the oldest puzzles in planetary science -- Jupiter's Great Red Spot. Lieutenant Colonel W. B. Streett, Director of the laboratory, Major James L. E. Hill of the Department of Chemistry, and Cadet J. Lazzeri of the Class of 1970 obtained these results through a series of high pressure experiments, conducted during 1969 and 1970, on mixtures of light gases. Papers on this subject were read at two international conferences, and eight related scientific papers have been published or are now in preparation. Experimental and theoretical studies relating to Jupiter's Red Spot are continuing as a joint effort with Doctor George Veronis, Professor and Chairman of the Department of Geology and Geophysics at Yale University.

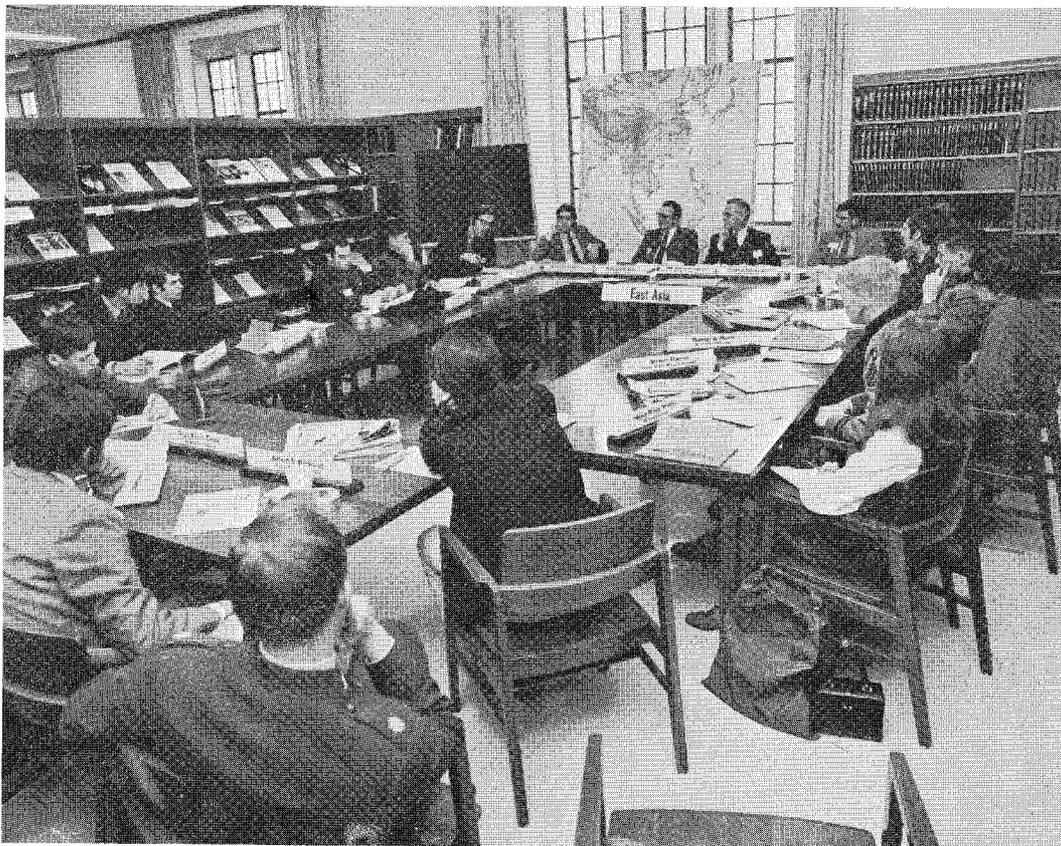
Significant progress has also been made in theoretical and experimental studies of pressure/volume/temperature behavior of simple molecular substances. Lieutenant Colonel Streett and Cadet R. Cousar, also of the Class of 1970, carried out experiments in this field. They include high speed computer calculations designed to predict the properties of fluids by simulating the behavior of an assembly of molecules. An outgrowth of this project is a cooperative effort with Doctors M. Klein and H. Hanley of the U. S. National Bureau of Standards, Washington, D. C., in which computer calculations carried out at USMA will be used to evaluate the effectiveness of intermolecular potential functions derived from other experimental and theoretical work at the Bureau. The results of these calculations will be incorporated into a larger study, now underway in Washington, on methods of correlating and predicting fluid properties. The results of this study should lead to important new insights into the structure and behavior of liquids at the molecular level.

The Library

The principal concern of the Library was the need to improve the quality of certain areas of its collection. With few exceptions, the overall collection -- now numbering over 300,000 volumes -- is strong enough to support the basic needs of the Academy. However, there are certain subject areas where

improvements can be made. To achieve these improvements, a new system has been established whereby each professional librarian develops a specific area through coordination with the faculty. At present, this system is responding well to the Academy's reference needs.

Since last summer a number of educational and cultural activities were held in the Library. Of particular note were two major art shows. The first included Naive American Paintings from the Garbisch Collection, and the second displayed original work by four generations of the Waugh family.



One of the roundtable discussions of the Student Conference on United States Affairs, XXI, in the USMA Library.

DEPARTMENTAL ACTIVITIES

Department of Chemistry

During Academic Year 1969-1970, all instructors emphasized the importance of the laboratory portion of their courses and increased the effectiveness of visual aids and classroom demonstrations. The Department introduced a new policy with laboratory experiments for Third Class chemistry courses which reduced emphasis on grades as a major element of the laboratory program. This approach permitted cadets to spend more time on aspects of experiments that

interested or troubled them. An increase from 2.5 to 4.0 credit hours for Physical Chemistry (CH 481-482) allowed an expanded laboratory program and broader course coverage. A new text adopted for this course places greater emphasis on modern physical chemistry, which is in accord with the present trend in other educational institutions.

Lieutenant Colonel George W. Chancellor was appointed Permanent Associate Professor of Chemistry, and Major James L. E. Hill was selected to occupy the research space assigned this department for Academic Year 1969-1970. Major Hill, in conjunction with Lieutenant Colonel William B. Streett, Director of the Science Research Laboratory, devoted full time to a research program which should result in the publication of several scientific papers. One of these papers was selected for presentation at the 1970 Army Science Conference. Major Hill and Lieutenant Colonel Streett had two cadets from the chemistry research elective working with them in this research program. In addition, three other officers, assisted by cadets from the research elective, have been involved in various laboratory research projects.

Department of Earth, Space, and Graphic Sciences

The principal activities of this department centered on implementing four new courses developed during Academic Year 1968-1969 to replace the two, two-semester continua in Engineering Fundamentals and Environment. The most significant change was in World Regional Geography. In this sequence, following fifteen lessons in Topical Geography, cadets chose one developed area of the world -- Anglo-America, Western Europe, or the Soviet Union -- and one undeveloped area -- Latin America, Africa, Southeast Asia, or China -- for concentration during the remainder of the term. This choice stimulated cadet interest, permitted more efficient use of faculty, and allowed more productive application of the geographic methodologies employed in regional analysis.

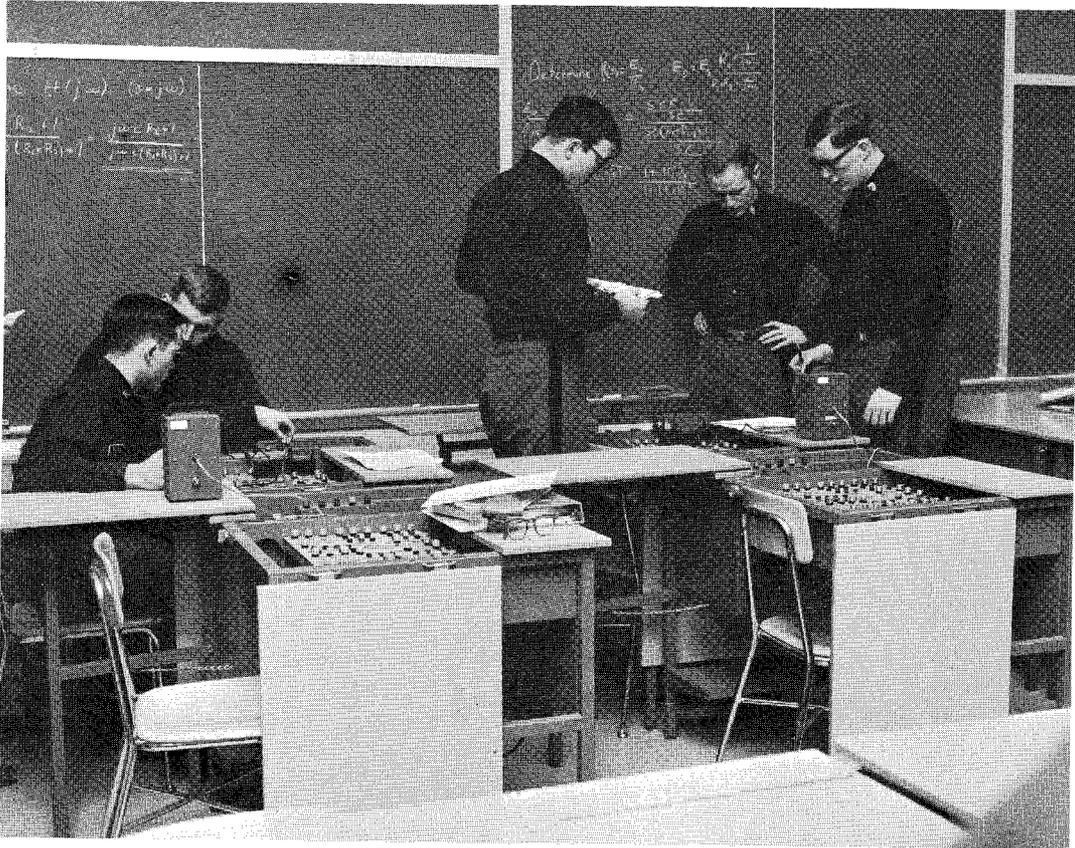
During Academic Year 1969-1970, the name of the Astronomy-Astronautics course was changed to Planetary Science which more accurately described the course. The Department added one new elective course, Physical Geology, which expands the materials discussed in World Regional Geography and Planetary Science.

To provide the expertise necessary to guide properly the expanded computer offerings in both standard and elective courses, Lieutenant Colonel Farrell G. Patrick, who earned his Ph.D. at American University, was appointed Permanent Associate Professor for Computer Science. He will attend the United States Army Command and General Staff College during Academic Year 1970-1971.

Department of Electrical Engineering

This department's course structure reflected the major changes in the USMA Engineering curriculum as well as the more formal status given to areas of concentration. A two-term electrical engineering sequence was offered to qualified first classmen as an option to fulfilling their First Class engineering requirement. These courses had previously been offered as 2.5-semester hour electives but were expanded to 4-semester hours each, largely through incorporation of additional laboratory and design work. One new elective, "Advanced Topics in Electrical Engineering," was introduced, and was selected by a small

number of cadets who wished to pursue individual laboratory projects or research subjects. In the standard courses, three new chapters in the Department Text on Circuits were presented on a trial basis to the first sections.



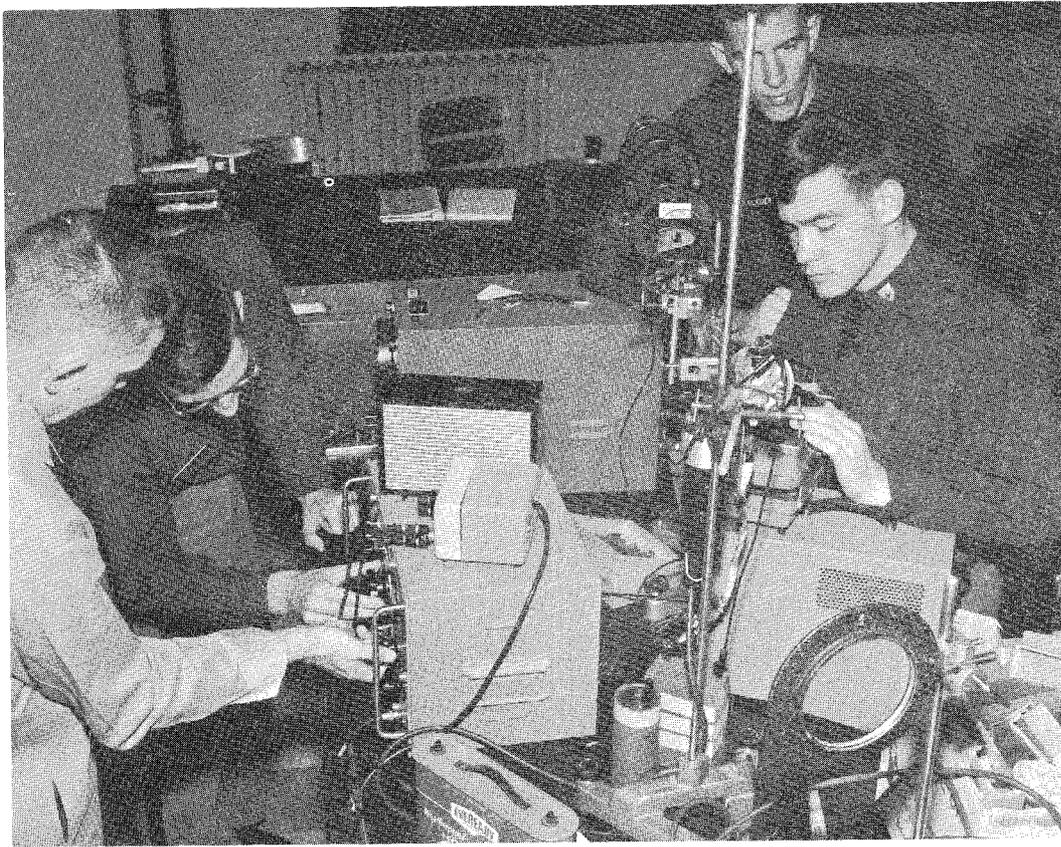
The Department of Electrical Engineering uses the dual purpose classroom/laboratory desk sets for cadet problems.

The permanent faculty was augmented by the return of Lieutenant Colonel Robert B. Andreen from Vietnam. He assumed his new duties as Permanent Associate Professor.

Department of Engineering

Activated on 15 June 1969 with Colonel Charles H. Schilling as Professor and Head of the Department, this new department was assigned the responsibility for courses formerly taught by the Department of Ordnance and the engineering portion of the Department of Military Art and Engineering, both deactivated on 14 June 1969. Personnel, equipment, and supplies came from the deactivated departments. Colonel Robert W. Samz, Acting Head of the Department of Ordnance, and Permanent Associate Professor, was assigned as Deputy Head of the Department.

Colonel Samz wrote a doctoral dissertation titled "Toward a Science of War Through Some Mathematical Concepts of Macrocombat," which he successfully defended before the faculty of Arizona State University in June.

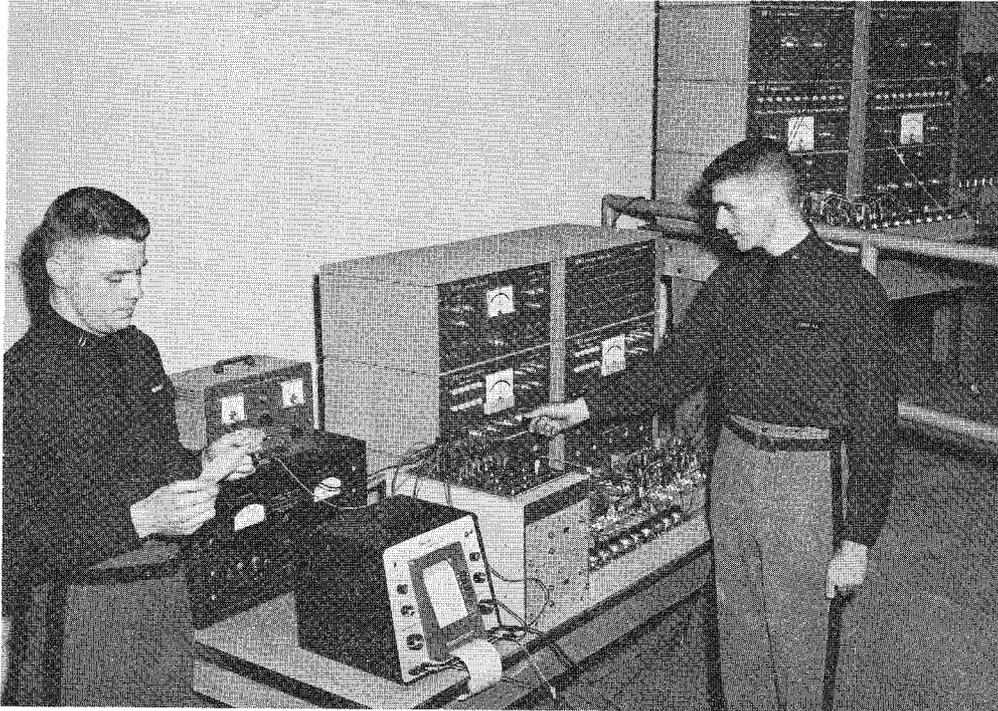


An electrical engineering laboratory session.

The new department offered three two-term standard courses, three two-term advanced courses, and nine single-term elective courses. All had been taught previously except General Engineering, a two-term standard course designed to provide a minimum engineering education for cadets who concentrate their studies in areas other than Basic Science or Applied Science and Engineering. It includes subcourses in Systems Engineering, Civil Engineering, Weapon Systems Engineering, and an integrated design problem.

Based upon the recommendations of the Committee for Review of Courses and Programs in Operations Research, Systems Analysis, and Management, two new electives will be offered in the First Term of next year: The first, Scientific Management, should provide the cadet with an interdisciplinary approach to the fundamental processes and issues of management, and should

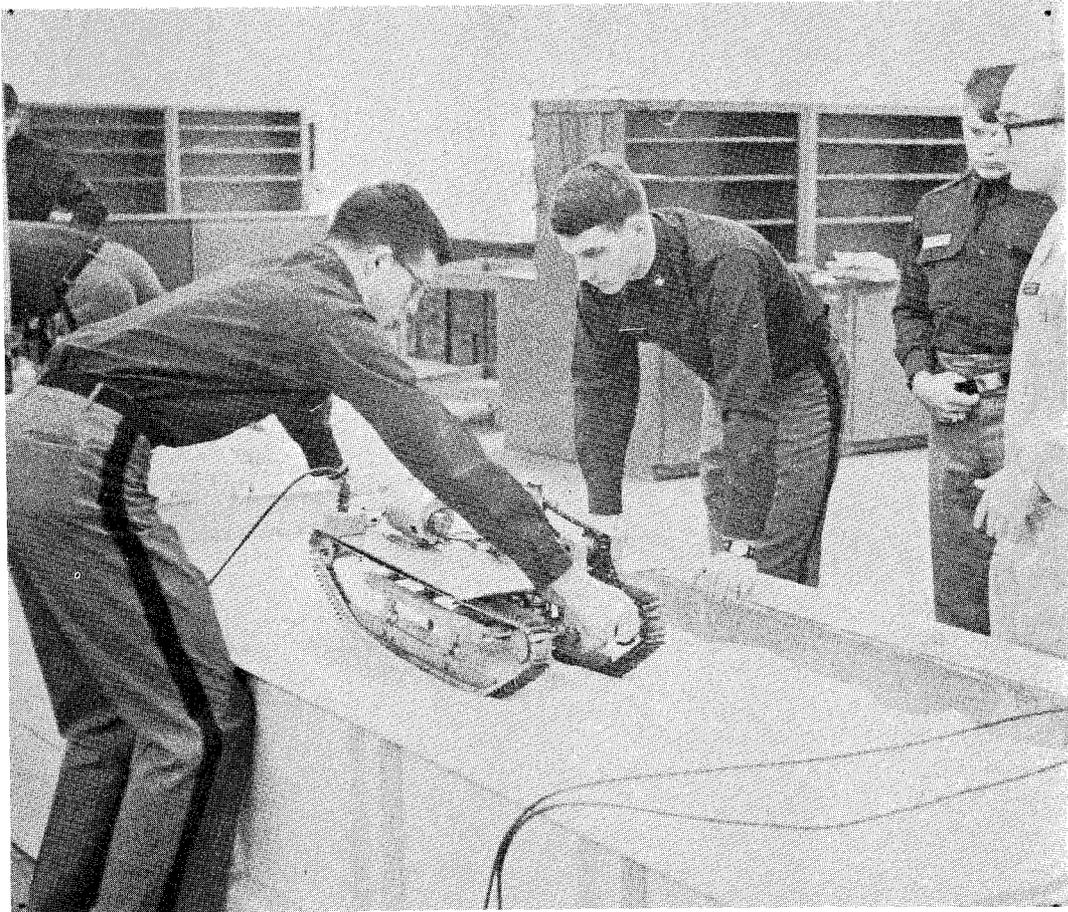
demonstrate the contributions and interactions of the various management disciplines. The second, Systems Engineering and Decision Making, should develop the ability to apply the systems attitude and approach in solving large and complex problems such as occur in military service.



Cadets working on analog computers in OE 401

Advanced Structural Analysis, Management Engineering, Engineering Materials, and Operations Research were each revised and their texts changed. In a continuing effort to update other courses, primary emphasis was placed on increased use of the computer in the classroom and on teaching the cadet to make decisions.

Nine cadets enrolled and undertook research projects in the Honors Course in Weapons Systems Engineering. Six reports will probably be published as a result of their work. Five cadets presented papers at the Eastern Colleges Science Conference held 16-18 April 1970 at Wilkes College, Wilkes-Barre, Pennsylvania.



Students in OE 402 performing a land locomotion experiment.

Lieutenant Colonel William K. Stockdale was nominated for the position of Permanent Associate Professor in the Department. Major Albert F. Dorris was awarded a National Science Foundation Fellowship to study "Probabilistic Approach to Analysis and Design" at the University of Illinois from 15 June thru 7 August 1970, and Major Geoffrey A. Fosbrook received a similar fellowship to study "Computer Matrix Methods in Structural Mechanics" at the University of Wisconsin from 17 August thru 4 September 1970.

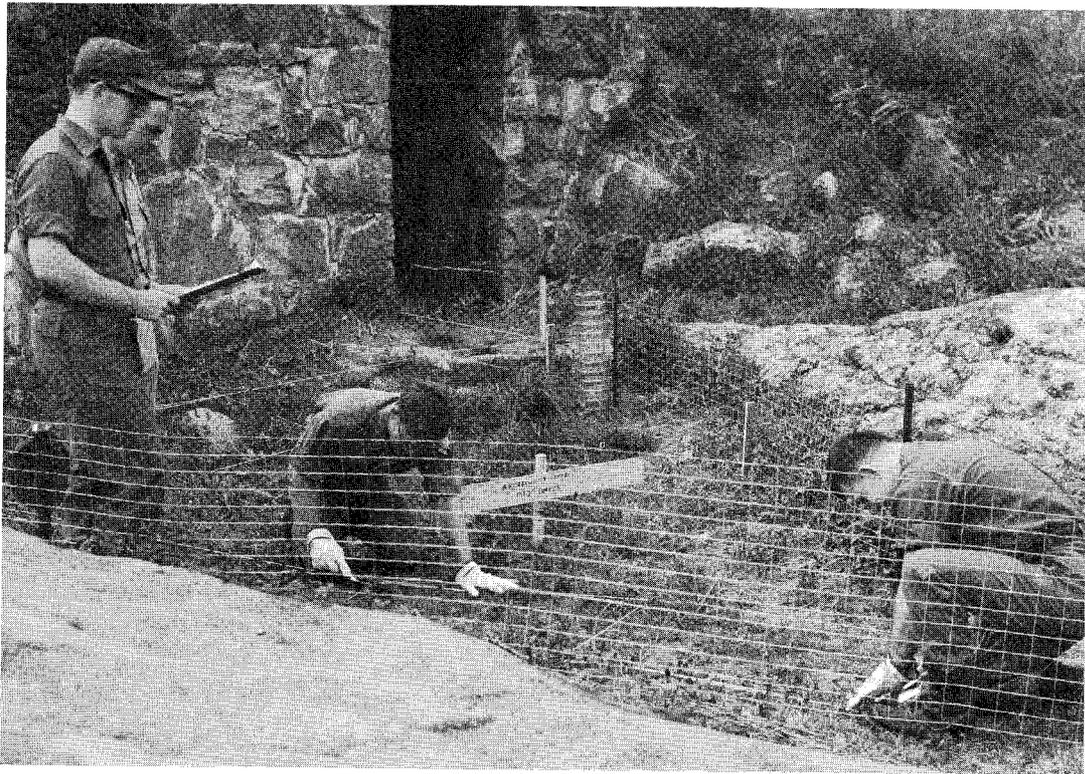
Department of English

During the past Academic Year, the English Department initiated a significant change in the scheduling of its First and Third Class courses. EN 201 and EN 402 will be taught each semester for one half of each class. Division of the instructor staff will allow instructors to improve their expertise by concentrating on one class and one course. Balancing instructor load requirements between semesters also allowed more flexibility in the assignment of instructors to elective courses.

Last year, EN 402 was reorganized into a study of philosophy, religion, and science from the points of view of methodology, metaphysics and morality. This course, slightly modified, will be offered again in 1970-1971.

The department planned twelve electives for next year. Students enrolled in Seminar in Major British Authors and Seminar in Major American Authors will again select, within a scope defined by the department, the specific authors and works to be considered in these courses. For the first time, several of the elective courses will be offered both semesters to accommodate more cadet schedules.

The Fine Arts Forum continued to increase its membership as well as to expand the number of activities which complement the Department's humanities instruction. The 668-member organization added seminars in Archeology and American Socio-cultural Developments. The latter group conducted an exchange discussion program with Manhattanville College; the Archeology seminar offered a series of lectures and training sessions prior to initiating the archeological "dig" now in progress at Fort Putnam. The Forum sponsored twenty-four trips to cultural events as part of its program to provide outlets for cadet interests in the areas of drama, music, art, poetry, sculpture, dance, cinema, photography, and architecture. As coordinating agency for the Dean's Affiliate Artist Program, the Fine Arts Forum also presented a series of concerts featuring the Academy's first affiliate artist, lyric soprano Joan Patenaude. In addition to her



Cadet archaeologists of the Fine Arts Forum Archaeology Seminar open the first official excavation at Fort Putnam.

participation in the Forum's Music Seminar and the department's Introduction to Music elective, Miss Patenaude contributed to discussion groups and musical programs in the community and at neighboring colleges.

The department's lecture series this year was particularly successful. Enthusiastic and productive classroom discussions followed the appearance of such lecturers as John Ciardi, Poetry Editor of The Saturday Review; Howard Mumford Jones, Harvard's eminent scholar and critic; Archbishop Fulton J. Sheen, and playwright Arthur Miller. Several departmental innovations led to a closer rapport between students and lecturers: informal discussions with selected cadets before the lecture assisted the speaker in tailoring his presentation to the interests and needs of his audience, and voluntary attendance at informal question periods following the lecture allowed genuinely interested cadets closer association with guest speakers.



Mr. Arthur Miller, eminent American playwright, meeting with cadets following his lecture to American Studies students.

Department of Foreign Languages

The Department of Foreign Languages added six new courses and completed significant revisions of texts and other courses during the past year.

Chinese Literature and Culture, a two-term course, was added and a Fourth Class Accelerated Course in Russian was developed for the coming year. The Department also planned three new electives, Soviet Russian Literature, Soviet Expository Writing, and Military and Scientific Readings in Spanish.

A new text, Military Readings in French, was published and adopted while the beginning text, French I, was completed with accompanying laboratory exercises and tapes. The Third Class Advanced German Course was revised to include a number of cadet-led discussions. Instruction in Spanish elective courses incorporated multi-media presentations, the first time that such have been used in the Department.

The cadet exchange programs with foreign military academies were expanded. Along with the annual German, Mexican and Latin American exchanges, a summer exchange visit with the Belgian Military Academy was arranged, and plans for resumption of the interrupted Austrian Exchange program were completed. A delegation of fourteen Brazilian cadets visited USMA during the spring term; marking the first time this group exceeded two cadets.

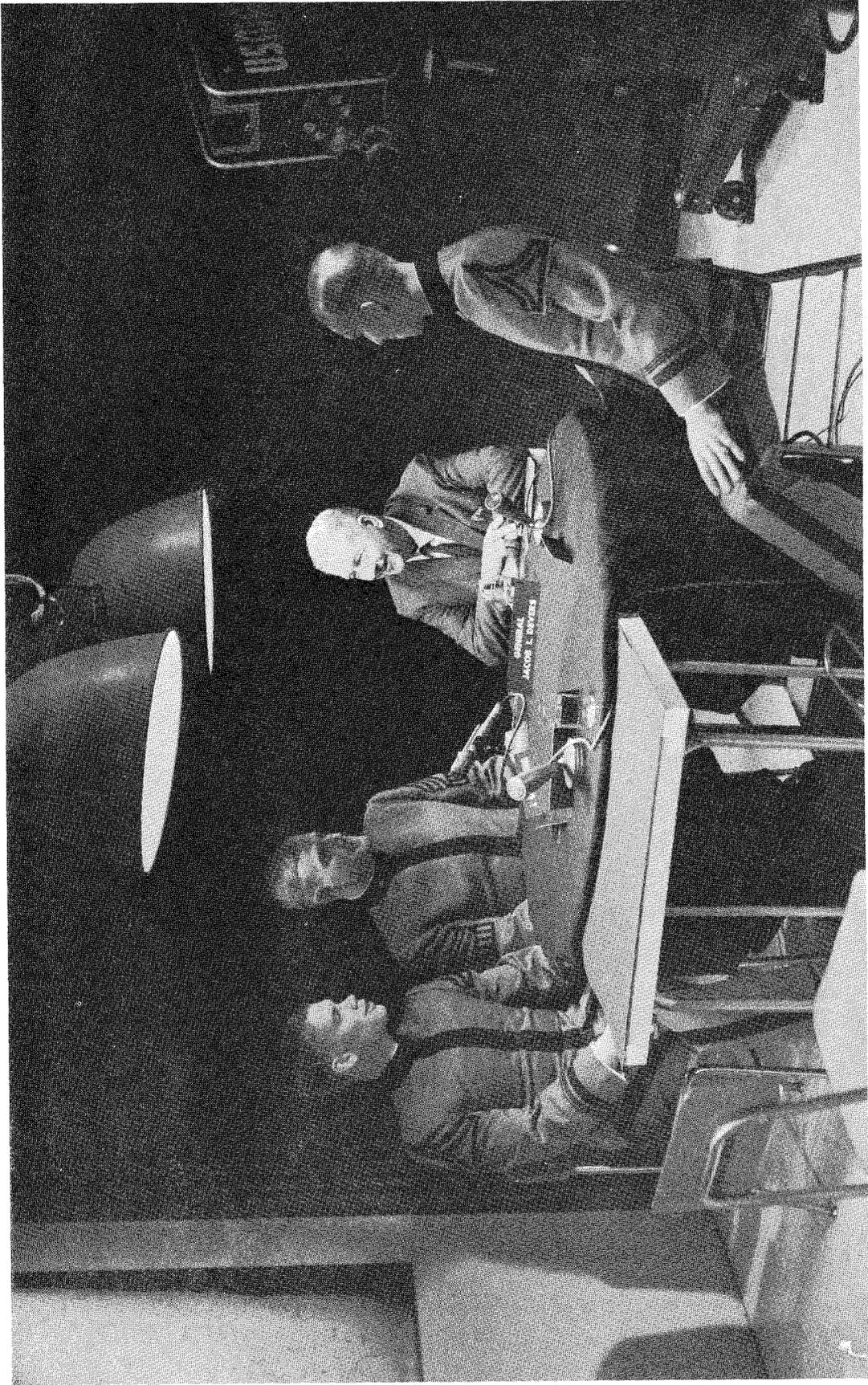
Several key appointments were confirmed. Lieutenant Colonel Harry E. Cartland, Permanent Associate Professor for German and French, will rejoin the Department in July 1970 after completing two years of full-time study as a doctoral candidate in German at Brown University. He will supervise German and French instruction. Lieutenant Colonel James R. Ross will be assigned as Associate Professor of Chinese and Russian, and Lieutenant Colonel John F. Hook will be Associate Professor of Portuguese and Spanish.

Department of History

The department devoted considerable effort this year to improving instructional material in all courses. Twelve new lessons were incorporated into the Military Art standard course, and thirteen lessons are programmed for next year as part of a long range program to provide more comprehensive and sequential treatment of the history of warfare. Success of the advanced section concept prompted plans for introducing two or three advanced sections next year to provide broader, more detailed course material for exceptionally talented cadets. Three departmental electives were carefully analyzed and revised. One revision included a field trip to the Stony Point Battlefield to complement and enhance classroom instruction. Instructional television continued to offer a valuable adjunct to classroom instructor. For example, locally produced television interviews by faculty and cadets with Generals Bruce C. Clarke and Jacob L. Devers were stimulating as well as informative.

The Department expended a major effort to absorb the Modern History courses from the Social Sciences Department on 1 July 1970. The Department prepared a complete plan for reorganization in preparation for this. Special attention was given to the transfer and future procurement of instructors and civilian personnel.

Several members of the department prepared significant research projects pertaining to course material. These projects involved expanding and revising current course material, and developing multi-media manuscripts. Written research as well as additional oral history projects were programmed for the



Cadets meet with General Jacob L. Devers in a televised panel discussion as part of the History of the Military Art course.

coming year in a continuing effort to produce new or revised instructional material.

During the summer, the department presented an intensive Military History Workshop of six weeks for thirty-eight ROTC instructors from schools across the nation. A similar course will be presented in 1970.

Colonel Thomas E. Griess was appointed Head of the Department while Lieutenant Colonel Roy K. Flint was appointed Permanent Associate Professor in Military History and will commence schooling in June 1970 to obtain his doctorate.

Department of Law

During the past academic year, the Department of Law prepared a new elective course, Military Aspects of International Law, to be taught next year. The entire Standard Law course was updated with special emphasis on the Constitutional Law sub-course which was expanded to include more material on the Laws of War.

Captains E. M. Overby III, R. T. Pope, and F. W. Joynt earned their LL.M. degrees from New York University Law School during this year. In addition, Captain Overby was invited to sit as a member of the American Society of International Law's Panel on Reprisals in International Law.

In August 1969, the Permanent Associate Professor of Law, Colonel Thomas C. Oldham, returned from Vietnam to assume his duties.

Department of Mathematics

The Department of Mathematics implemented a new course sequence for the Standard Program which provides the mathematics most beneficial for a cadet in light of his area of concentration. In the order of presentation, the new sequence consists of Analytic Geometry and Calculus during the Fourth Class year and Differential Equations, Probability and Statistics, and Linear Algebra and Linear Programming during the Third Class year.

This revised sequence establishes continuity of Calculus by presenting the entire course during Fourth Class year and permits cadets more time to consider their areas of concentration. At the same time, it ensures that they meet the prerequisites of standard courses in other departments.

In connection with the second aim, a new, abbreviated course in Differential Equations and Probability and Statistics was developed for Third Class cadets of the Standard, Advanced I, and Advanced II programs who concentrate their electives in Humanities or National Security and Public Affairs and do not take mathematics as one elective course during their Third Class year. This course will provide sufficient instruction in differential equations and probability and statistics to support standard courses in other departments.

A new text, Elementary Linear Algebra by Shields, has been adopted for use by the Third Class Standard Program during the coming academic year. This text is calculus-based and better reflects the experience of the cadets in the Standard

Program. In addition, a new calculus text, Modern Calculus with Analytic Geometry, by Goodman, will be used next year, on a trial basis, by a group of approximately two hundred cadets of the Fourth Class. This text incorporates some essentials of the vector calculus currently used in the standard physics and mechanics programs. Increased use of the computer to supplement classroom instruction in Probability and Statistics was initiated this year and has improved the computer application phase of mathematics instruction.

A voluntary program in remedial trigonometry was used for the first time during the Academic Year 1969-1970. Fifty Fourth Class cadets who scored lowest on a survey test were allowed to volunteer for this seven-week course which met once each week during the hour allotted for additional instruction. All fifty attended, and the majority showed marked improvement. In response to student requests, a second course was started and enrollment was again restricted to fifty. This program will be continued next year but will be reduced to five weeks.

Department of Mechanics

During the past academic year, two developments in the Department of Mechanics were decisive in maintaining the relevance and immediacy of the curriculum: the addition of electives in Aerospace Studies and the improvement of the departmental laboratory and classroom demonstration equipment. The department also obtained several items of significant value for teaching and research. These included a new J-85 turbojet engine which was donated to USMA, four new subsonic wind tunnels, eight new Go-Power engines, a Schlieren System, and ten portable air tables and air tracks.

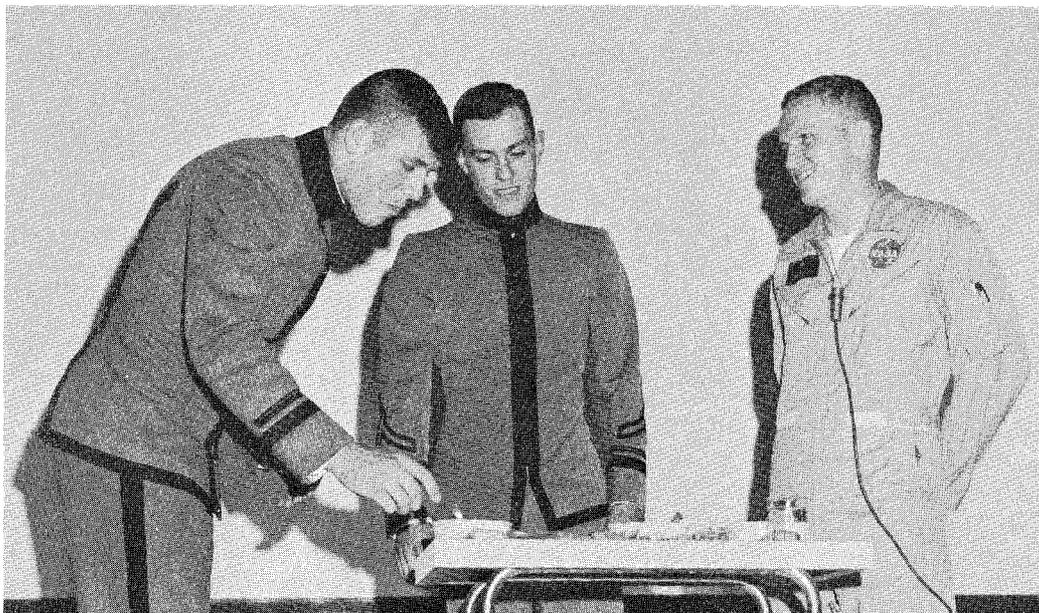
These improvements reflect only a portion of the Department's growth. Detailed instructor evaluation resulted in up-dating of all courses. Several new textbooks were adopted to offer cadets the best in the field. Some especially significant changes included reducing the size of cadet laboratory groups, recasting some of the laboratory exercises into realistic, role-playing situations and, laboratory modeling of selected real-life problems. To illustrate the last point, the Department is trying to focus on such fluid mechanics problems as pollution control to make its instruction increasingly relevant to the modern world.

During the academic year, a fundamental shift was made away from teaching Mechanics primarily to Second Class cadets. About three hundred Third Classmen who elected to concentrate their studies in National Security and Public Affairs or Humanities were permitted to enroll in Engineering Mechanics in the second semester. These Third Classmen, who had finished Physics 201 during the first semester, did as well or better than the Second Classmen studying with them. The Third Classmen profited by the uninterrupted continuation of their Mechanics study.

One officer research space was added by the Department during the year. The Army Research Office-Durham provided a \$5,420 grant which will initiate some interesting research in fluids.

One officer in the Department supervised a cadet individual project during the second semester. The project was aimed toward a study of the Effects of

Suction on Drag at Low Speeds for a Model of the Mohawk AO-1 BF Wing. Outside faculty involvements with cadets -- so important to the educational program -- were undertaken by members of the Department. These included new counseling programs, both within the Department and the area of cadet barracks. The Mechanics Department also added a new Open House during Plebe-Parent Weekend in addition to the traditional June Week Open House.



Cadets sample astronaut chow in an amusing moment of Colonel Borman's lecture in Mechanics.

One member of the faculty, Colonel F. A. Smith, Jr., received a National Science Foundation Summer Institute Grant. He will be at Virginia Polytechnic Institute this summer studying Recent Trends in Continuum Mechanics. Another member of the faculty, Lieutenant Colonel John D. Daigh, will spend a week in July 1970 at Massachusetts Institute of Technology studying Finite Element Methods in Solid and Continuum Mechanics.

Department of Physics

The Department of Physics adopted a new text, Fundamental University Physics, by Alonso and Finn, for use in the Advanced Physics Sequence. It will be used in combination with various supplementary materials prepared by the Department.

The Free Laboratory Program, in use for a number of years in the Advanced Physics course, was introduced into the Standard Physics course on a pilot basis during the first term and for all cadets in the second term. Results are still being evaluated, but the preliminary indicators are strongly favorable, and its use for all students probably will continue.

One new elective, Solid State Physics, was taught for the first time this year. The course was very well received, particularly since it provided not only coverage in a fundamental area of physics but also complemented a number of the engineering electives in electronics and science of materials.

Three officers and one cadet worked at the Army Electronics Command, Fort Monmouth, New Jersey, for the entire summer of 1969, primarily on gas lasers. Two of the officers will present their findings at the Army Science Conference in June 1970. This program of cooperative research with Army laboratories has proved highly beneficial to both USMA and the laboratories.

Research in the area of electron paramagnetic resonance continued throughout the past year with one officer being assigned full-time thereto. The research officer this year was Captain Preston Forbes working under the supervision of Colonel Loren E. Radford. A paper resulting from their work was published in the May 1970 issue of the American Journal of Physics.

Significant personnel actions during the year included the nomination of Lieutenant Colonel Wendell A. Childs to the position of Professor and Deputy Department Head and the nomination of Major James S. Willis to the position of Permanent Associate Professor of Physics. Lieutenant Colonel Childs is entering his second year of study toward his doctorate at the University of Virginia while Major Willis is expected to join the Department during the summer of 1970.

Department of Social Sciences

During Academic Year 1969-1970, the Department of Social Sciences taught six standard courses, six advanced versions of these courses, and thirteen electives. Cadets enrolled in these courses were addressed by thirty guest lecturers, including such notable visitors as Under Secretary of State U. Alexis Johnson, Assistant Secretary of Defense (Administration) Robert Froehlke, and the Special Military Assistant to the President of the United States, Brigadier General Alexander M. Haig.

One new elective in International Economics and Economic Development was introduced during the year. Three additional courses in Managerial Economics, Macro-economics: Theory and Policy, and Political and Cultural Anthropology were approved for the coming year.

The Twenty-first Annual Student Conference on United States Affairs was held during 3-6 December 1969, focusing on "Foreign Policy Problems for the Seventies." Two hundred conferees from seventy-eight colleges and universities participated in five round-table discussions and were addressed by senior officials of the government and the academic community.

The West Point Invitational Debate Tournament was conducted from 6-8 November 1969, with twenty-eight students from fourteen universities competing. Cadet debaters participated in a total of 297 debates against strong competition during the year with considerable success. Members of the Debate Council and Forum also attended eleven student conferences, including two Modern United Nations Assemblies; the activity sponsored visits to the United Nations, Radio Free Europe, and Washington, D. C. for its members.

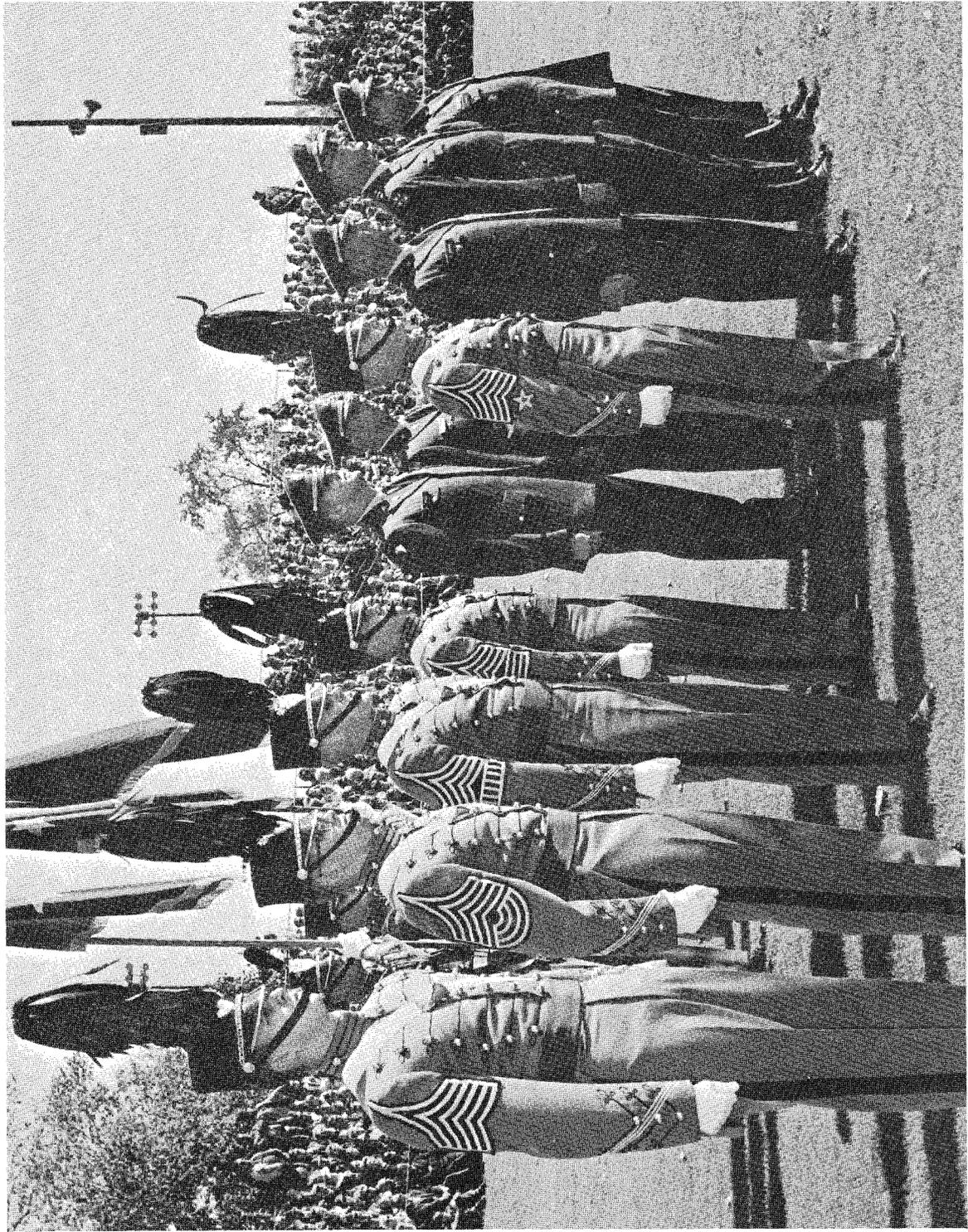
The USMA Senior Conference on "The Changing Role of the Military in American Life" was held from 11-13 June 1970. Forty distinguished guests from government, the academic community, and the press exchanged views on this important topic.

During the summer of 1969, fourteen officers from the Department assisted various government agencies in Washington, Vietnam, Europe, and New Jersey in the mutually beneficial task of enhancing their teaching expertise while contributing to the missions of the agencies concerned. Notable among the summer assignments were a three-man research project for the Advanced Research Projects Agency in Vietnam, a four-man assignment in the Office of the Assistant Secretary of Defense (International Security Affairs), two men in the Office of Emergency Preparedness, two working for the Urban Affairs Council in the White House, one for the President's Commission on Civil Disorders and the Prevention of Violence, and one with the New Jersey Department of Community Affairs.

Finally, the Department has been deeply involved in the transferring responsibility for instruction in Modern History to the Department of History. On 1 July 1970, a contingent of twenty instructors under the leadership of Colonel Roger H. Nye will make the transfer.

RESUME

Appendices A - P briefly highlight specific programs and statistics related to the Academic Program.



First Classmen lead the Corps by serving as officers and noncommissioned officers.

MILITARY TRAINING PROGRAM

The Commandant of Cadets is responsible for preparing each cadet for his military duties as a commissioned officer. The Commandant relies essentially on two organizations to assist him: the Corps of Cadets (Appendix Q) of which he is the commander and which last fall expanded to its final organization of four regiments, each having three battalions of three companies, or a total of thirty-six companies; and the Department of Tactics (Appendix R) of which he is the head.

In addition to providing administrative and logistical support for the Corps, and further defining the Commandant's mission, the Department of Tactics is responsible for:

Developing high qualities and attributes of leadership by emphasizing character as exemplified by integrity, morality, discipline, and a strong sense of duty and responsibility;

Providing a broad, basic military education;

Developing high standards of physical fitness;

Instilling motivation essential to the profession of arms, and

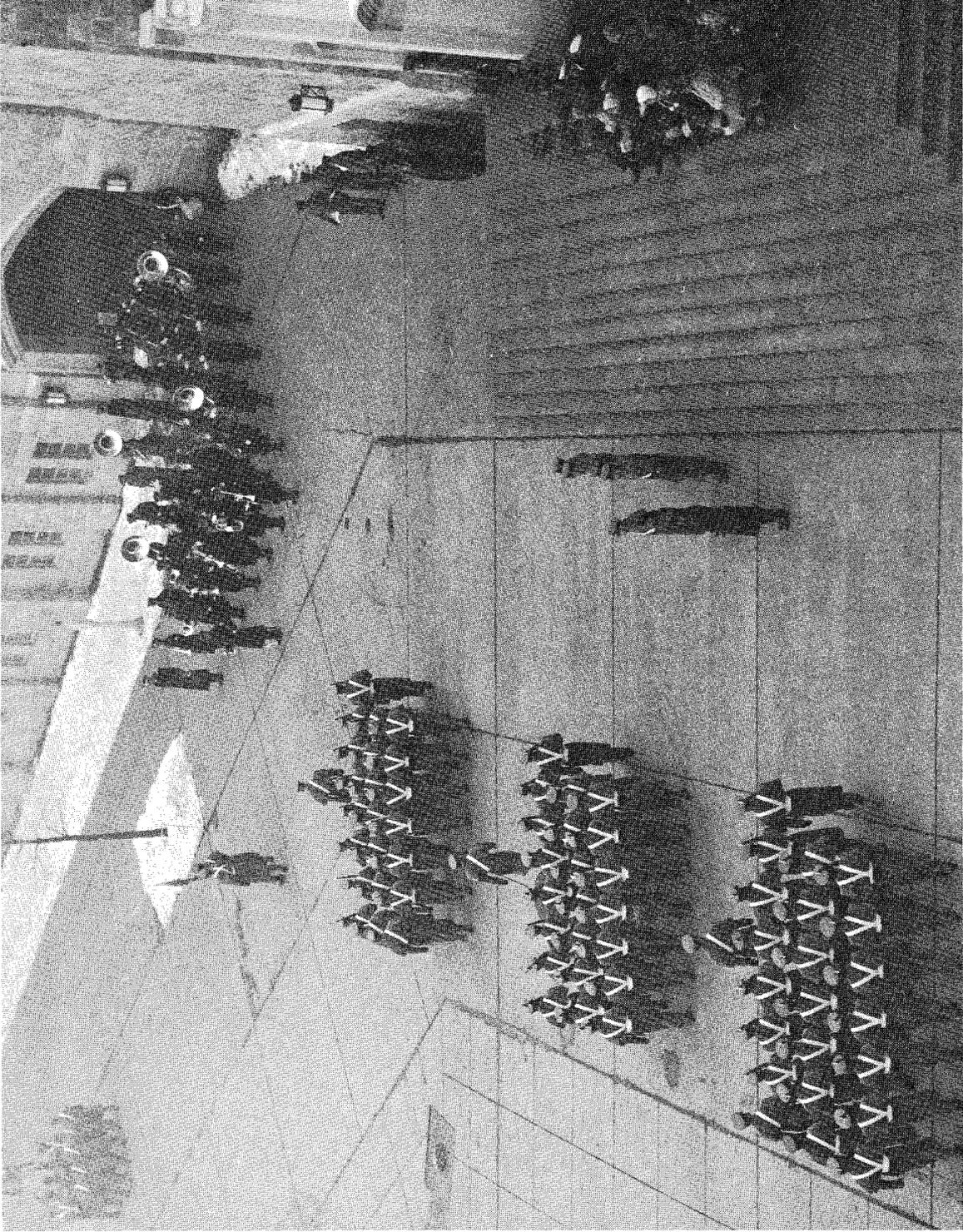
Providing orientation for a career in the United States Army.

LEADERSHIP DEVELOPMENT

Leadership Development continues to be a combination of both formal and informal programs designed to prepare cadets for the leadership challenges that they will face as commissioned officers.

INSTRUCTION

The Office of Military Psychology and Leadership (MP&L) contributed to cadet leadership development through a program of instruction in the behavioral sciences. The program included a one-semester course in General Psychology for Third Classmen, elective courses in Managerial Psychology, Sociology, Social Psychology, American Military Institutions and Manpower, and Behavioral Science Research, and a compulsory one-semester course, Military Leadership, for First Classmen. In addition, Military Instructor Education was presented to new Second Classmen during June 1970 as a joint project by the Offices of Physical Education and MP&L. These courses were highlighted by guest lecturers and seminar moderators from the academic, industrial, and military communities whose opinions stimulated and challenged cadet thought. The guest speakers who participated in this program are listed in Appendix S.



Cadets Pass in Review on a winter Saturday morning in front of Washington Hall.

ARMY ORIENTATION TRAINING

Members of the Classes of 1970 and 1971 participated in Army Orientation Training (AOT) during July and August. This 30-day exposure to the life of a junior officer continued as the primary, practical component of the cadet leadership development program. Almost 800 cadets served as junior leaders among Germany, Alaska, Hawaii, Panama, and nine installations within CONUS.

CADET EVALUATION

In a continuing effort to improve the methods of assessing a cadet's leadership qualities, the Leadership and Military Performance Grading System, instituted in Academic Year 1968-1969 for the First Class was adapted for use with the underclasses in Academic Year 1969-1970. The basis of this new system was the evaluation of each cadet's performance in specific duty positions within the cadet chain of command. The increased contribution of performance ratings to determining the General Order of Merit strengthened the role of the cadet chain of command and reinforced the cadet leader's obligation to observe, evaluate, and report the performance of his subordinates. The Aptitude for the Service System, based on peer nominations, continued to be the most reliable indicator of future leadership success as well as a very valuable tool for the identification and correction of individual weaknesses. The combination of performance ratings and peer nominations provided a balanced and effective system of leadership evaluation.

COUNSELING

Although Company Tactical Officers continued to be primarily responsible for counseling, they were assisted in this mission by the formal counseling service established in 1968 under the supervision of the Director of the Office of MP&L. This service continued to be a valuable adjunct to the Company Tactical Officer in assisting cadets who experienced adjustment difficulties and personal problems. A considerable effort was also devoted to those cadets considering resignation for motivational reasons. During this past year, 226 cadets received advice from the cadet counselor, a professional Army officer trained in psychology and counseling. Besides individual counseling sessions with cadets, the counseling service gave special classes for Company Tactical Officers to enhance their ability to give professional advice to the cadets in their respective companies. Class liaison was also maintained between the cadet counseling service and the Mental Hygiene Clinic at the United States Army Hospital at West Point. One of the primary functions of the counseling service continued to be identifying factors which contributed to resignations for motivational reasons. Information compiled reinforced previous indications that motivational losses were substantially a process of self-elimination by cadets who recognized their physical, emotional, or academic limitations and whose value as officers would, therefore, be questionable. The Department of Tactics' counseling services were closely allied with and complemented those furnished by the Office of the Dean of the Academic Board. Each company has assigned an Academic Instructor who works closely with the Company Tactical Officer in advising cadets on academic matters.

RESEARCH

Research efforts of the Office of MP&L continued to examine human systems which fall under the purview of the Commandant. Changes made in the Fourth Class System, including elimination of the exaggerated position of attention (bracing), codification of Fourth Class duties, and emphatic application of positive leadership methods, were evaluated and found satisfactory. A survey of upperclassmen taken just prior to June Week showed that most cadets felt that the changes improved the system. A study dealing with the early identification of poorly motivated cadets was initiated through the use of peer ratings and found to have considerable predictive value. In addition, the cadet disciplinary and privileges systems are being analyzed, and personality differences between cadet resignees and cadets who remain are being investigated.

CHARACTER DEVELOPMENT

Cadet Honor Code

The Cadet Honor Code and System continued to serve as a primary means of character development. Their original meaning, that a cadet does not lie, cheat, or steal has not changed. Although the honor system, which applies the code to cadet life, is subject to modification, no changes of major significance were made during the past year.

Religion

Attendance at chapel remains a part of a cadet's training in character development, and no cadet is exempt. Each cadet must attend either the Cadet Chapel, Catholic Chapel or Jewish Chapel service each Sunday according to announced schedules. He may also attend special denominational services in addition to his regular chapel service. There are many voluntary activities in which a cadet may participate, including morning worship service, evening religious discussion groups, chapel choirs, acolyte squads, weekend religious retreats, and the West Point Sunday School staff. All of these activities contribute significantly to the development of character in the Corps of Cadets.

Cadet Disciplinary System

The Disciplinary System at the United States Military Academy is correctional and educational rather than legalistic and punitive. This system has a significant impact on developing character and leadership. Underclassmen are required to adhere to rigid standards, and upperclassmen, in addition to this, play an important role in operating the system. Thus, the cadet progresses from follower to leader within the context of the Disciplinary System the same as the Cadet Chain of Command. By first learning to conduct himself in accordance with the prescribed standards, he is then effectively able to supervise the conduct of his subordinates.

During the past year, greater emphasis was given to cadet involvement in and support for the Disciplinary System. Beginning in December 1969, Cadet

Captain commanders were authorized to impose punishment on upperclassmen who failed to perform properly or who violated regulations. This authority supplemented the Disciplinary System and broadened the scope of the commander's authority to maintain discipline and control in his unit. Under this authority, Cadet Captain commanders were authorized to withhold class privileges for a specific number of days and/or to award consecutive periods of ordinary confinement. Cadets punished under this system were notified in writing of the punishment and were required to acknowledge. In addition, a permanent record of punishments awarded was maintained by all cadet commanders. This system has been successful during the past year.

TACTICS AND MILITARY SCIENCE

The Department of Tactics' four-year Military Training Program provided each cadet the broad base of military skills and knowledge which should enable him to begin his commissioned career with confidence and competence and should provide a basis upon which to continue his professional development. The major portion of this program was accomplished during intensive summer training for all four classes. The four-year program is shown in Appendix T.

SUMMER TRAINING

FOURTH CLASS SUMMER

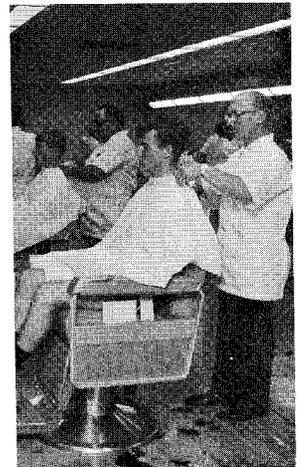
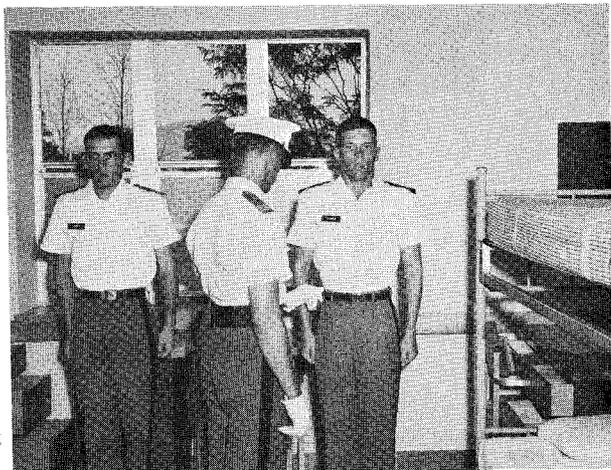
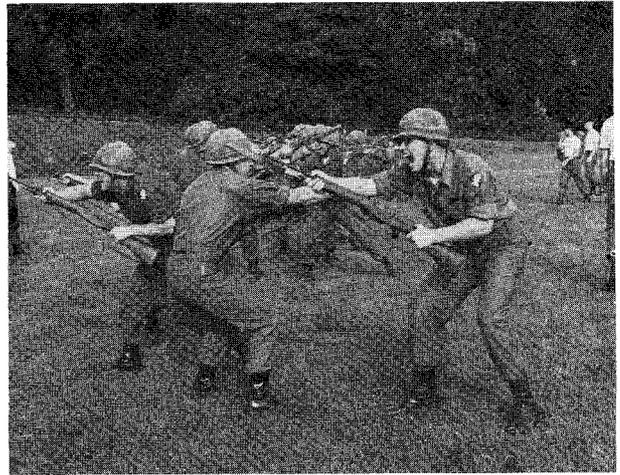
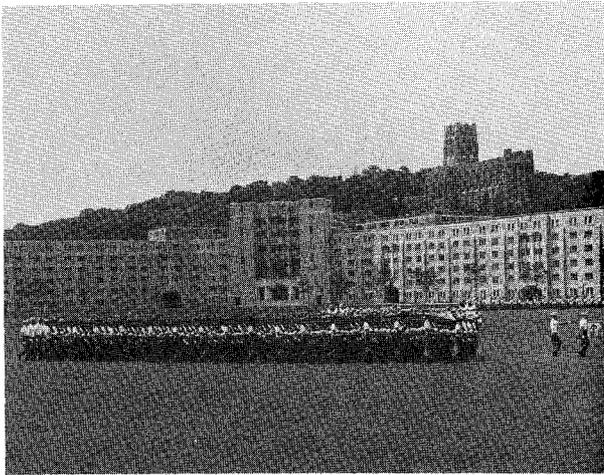
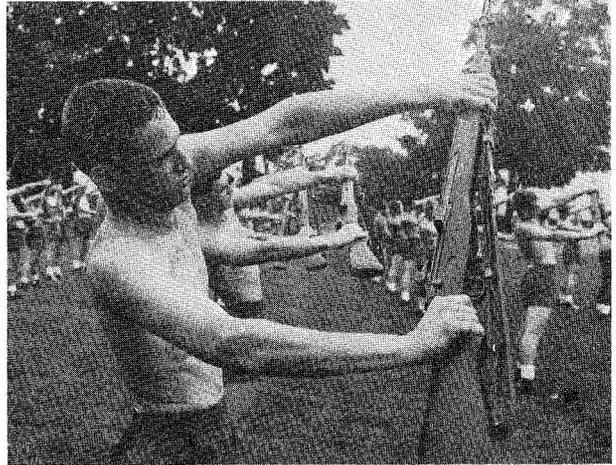
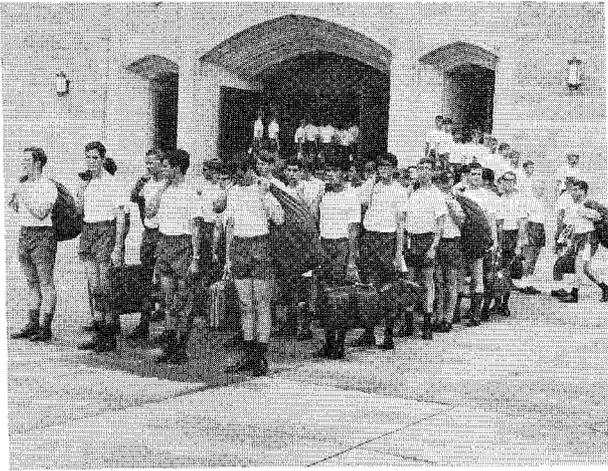
A Fourth Classman enters the United States Military Academy through New Cadet Barracks where the overall training objective is to indoctrinate, orient, train and equip members of the incoming class so that they are properly prepared to join the Corps at the beginning of the Academic year. An additional mission of significant importance is to further the leadership development of First and Second Classmen assigned to the New Cadet Detail.

The Class of 1973 entered on 1 July 1969 with a strength of 1439, the largest class ever to enter the Academy. Separations during New Cadet Barracks 1969 for all reasons amounted to 95 or 6.6% of the incoming class.

In New Cadet Barracks 1969, the Class of 1970 instituted changes in the Fourth Class System that substituted positive leadership techniques for less rewarding, obsolete practices and emphasized professionalism in all dealings with the New Cadets. This approach resulted in increased individual dignity, greater unit esprit, and better performance at training.

The tactical training program is essentially basic individual training. The New Cadet received training in battle drill, squad tactics, marches, and field craft as well as qualification with the M14 Rifle. Quick-Kill was introduced to build marksmanship confidence and will become a permanent part of the marksmanship program. In squad tactics, each New Cadet learned the teamwork required in a rifle squad and became exposed to leadership training by serving at least once as a fire team leader or squad leader.

By the end of the summer, the Class of 1973 selected as its class motto "Proud and Free - '73."



NEW CADETS

THIRD CLASS SUMMER

Following 25 days leave, Third Classmen began their eight weeks of training at Camp Buckner. They received advanced individual training, squad and platoon tactical training, fired selected individual and crew-served weapons, and received instruction and practical exercises in tactics and techniques of the combat and combat support arms. The training was presented principally by the senior branch instructors from the Office of Military Instruction who were assisted by officers from the academic departments and by troops drawn from Regular Army units throughout the United States. In 1969, 47 officers from the academic departments and over 1400 troops, primarily from the 82nd Airborne Division, assisted in Third Class Summer Training at Camp Buckner.

In addition, 46 lieutenants of the combat arms completed their service obligation by assisting in cadet training. This program was an unqualified success. These young officers, many of whom recently returned from Vietnam, provided the cadets with unique and valuable insight into the life and leadership challenges of the junior officer. It is also interesting to note that 15 of these 46 lieutenants elected while at West Point to remain in service beyond their two-year obligated tour.

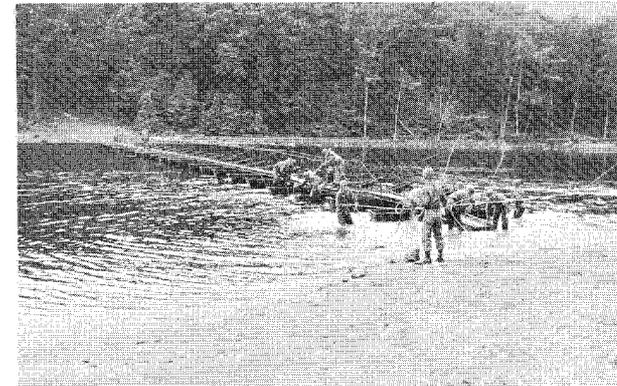
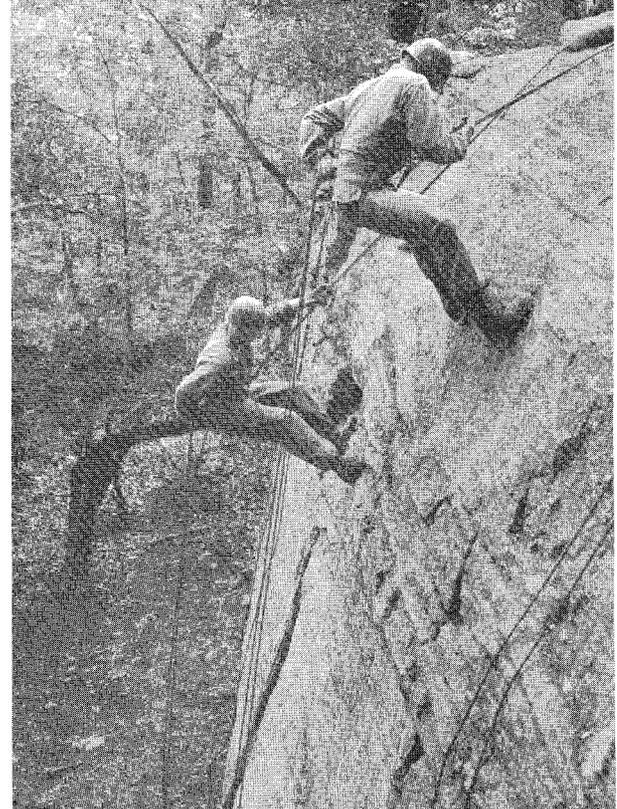
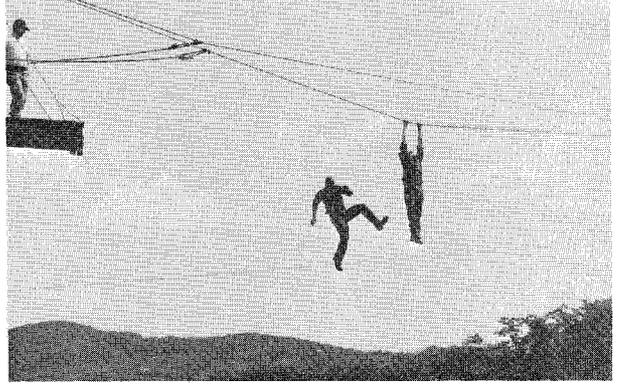
The integration of progressive military skills within blocks of instruction was continued. Third Classmen completed field exercises in artillery, engineer, and infantry training. Map reading, radio-telephone operation, tactical movement, and correct troop leading procedures were required and emphasized during all tactical training. Platoon tactics instruction included practical field exercises under simulated combat conditions in daylight and night attacks and during defense and airmobile problems. Night operations were given additional emphasis. At the Armor Center, Fort Knox, Kentucky, Third Classmen trained as members of mechanized rifle platoons and tank crews in tank-infantry team day and night attack exercises.

RECONDO training, a one-week course which resembled an abbreviated Ranger course, remained one of the high points of Third Class summer. RECONDO included combatives, mountaineering, survival, and long-range patrolling. In the patrolling phases, the cadets were required to use almost all skills and techniques of individual soldiering and small unit tactics, as well as to demonstrate leadership under extremely adverse physical, mental, and psychological conditions.

Throughout the summer, continued emphasis was placed on formal physical training to include reveille runs and calisthenics, obstacle and confidence courses, the Physical Combat Proficiency Test, and practical work in conducting PT.

SECOND CLASS JUNE TRAINING

Second Class June Training is designed primarily to prepare the cadet for his role and duties as a junior officer and for his more immediate responsibilities with an upper-class detail or with an Army Orientation Unit. The training continued to concentrate on developing practical leadership and instructor skills while concurrently introducing the cadet to roles of the other services in the overall defense team. In 1970, for the first time, the Second Classmen



CAMP BUCKNER

visited Forts Belvoir and Monmouth as a result of a modification of the First Class Trip. The trip was highly successful and acquainted the cadets with the roles, tactics, equipment, and new developments in the Engineer and Signal Corps. Cadets will continue to visit Fort Monmouth and Fort Belvoir during their Second Class summer and the four Combat Arms centers during their First Class summer. The new schedule will allow time for a more thorough orientation at each of the installations.

The Military Instructor Education Course, core of the Second Class June Encampment, was presented as a part of the summer training program for the last time this year. In the future, it will be integrated into the Third Class academic year and Camp Buckner training in order to allow time for Second Classmen to take the 3-week Airborne training program at Fort Benning, Georgia. The Airborne program has been adopted as a regular portion of the summer training program because, in addition to developing a military skill, it should be of great value from a motivational standpoint.

ARMY ORIENTATION TRAINING

In addition to providing a valuable adjunct to leadership development, Army Orientation Training (AOT) further extended the practical knowledge of participating cadets. Spaces in Germany were doubled for the past year while training center spaces were significantly reduced. AOT provided each cadet with an excellent opportunity to test the knowledge and theories that he was taught in the classroom. Performance reports indicate that while he did make mistakes, each cadet performed well.

It is planned that by the summer of 1972, all Second Classmen will participate in AOT, and First Classmen will perform leadership positions in New Cadet Barracks and Third Class summer training organizations. During the transition, two-thirds of the Class of 1972 will participate in AOT in the summer of 1970 while the Class of 1973 will do so during the summer of 1971 with the remaining one-third of the Class of 1972.

FIRST CLASS TRIP

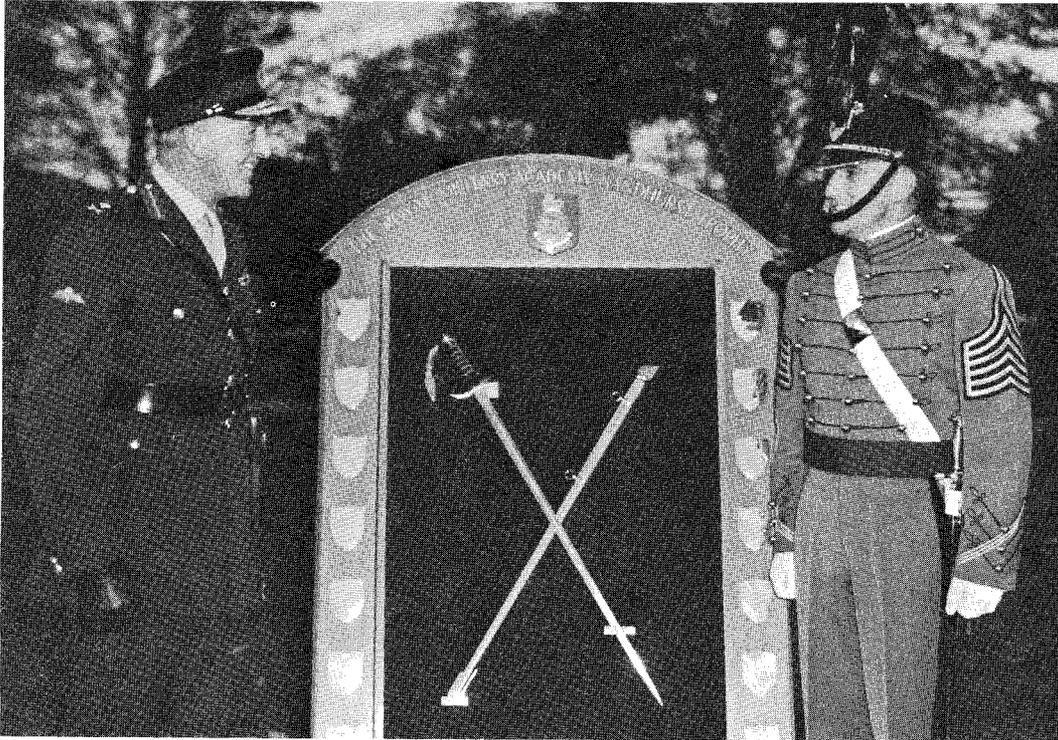
The First Class Trip left on graduation afternoon to visit Forts Benning, Knox, Bliss, Sill and Monmouth. The cadets were acquainted with the roles, tactics, techniques, current equipment, and new developments in the combat arms and were provided an overview of an officer's life at major U. S. Army installations.

SANDHURST TROPHY

The Sandhurst Trophy, an encased "Sword of Honor," is a replica of the sword presented at Sandhurst to the cadet adjudged by the Commandant to be the best in his class. Presented to the United States Military Academy in 1967, the trophy is awarded to the regiment which excels in summer training at both New Cadet Barracks and Camp Buckner. Beginning with Academic Year 1970-71, academic year military training will also be included as one of the criteria in determining the winner. In 1969, the trophy was presented to 2d Regiment, United States Corps of Cadets. A reciprocal award is presented by USMA to the best RMA college (nearest equivalent to our cadet regiments).



FIRST CLASS TRIP SUMMER SESSION



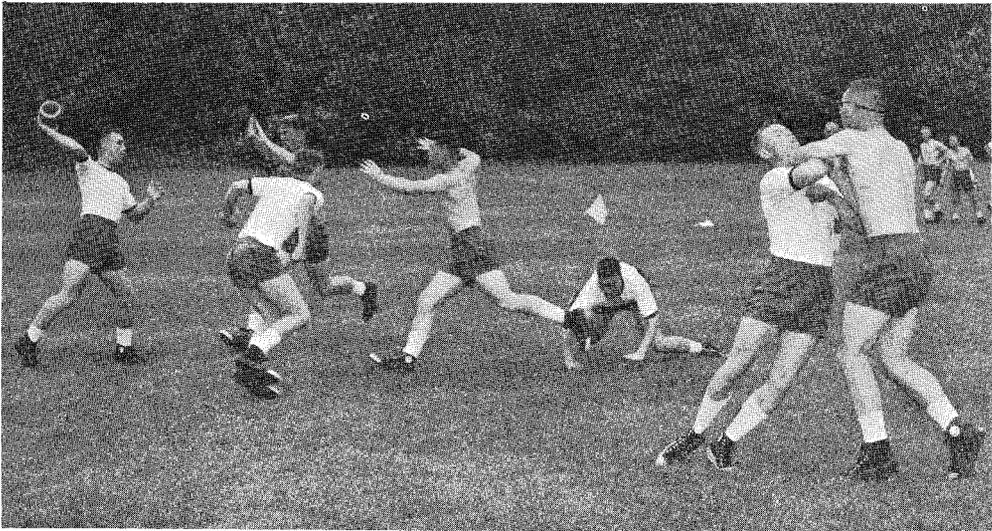
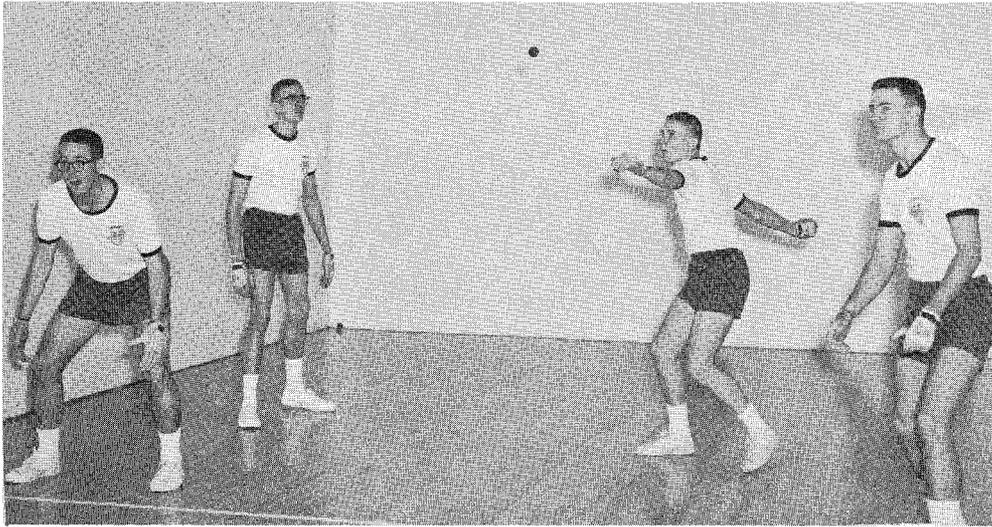
Cadet Captain and Regimental Commander Terry J. Young receives the Sandhurst Trophy on behalf of the Second Regiment, U.S. Corps of Cadets, from Major General P. T. Tower, Commandant, Royal Military Academy, Sandhurst, England.

ACADEMIC YEAR INSTRUCTION

The academic year military science curriculum for all four classes is designed to give the cadet a basic understanding of the fundamentals of military operations and to teach him fundamental basic skills in preparation for subsequent summer training. The curriculum for the graduating cadet is planned to prepare him for active duty.

FOURTH CLASS

In Academic Year 1969-70, Fourth Class military instruction began with a seventeen-hour subcourse in the military heritage and traditions of the United States Army. This was followed by two subcourses in basic and advanced map reading totalling twenty-four hours. Plebe year instruction culminated in a nineteen-hour subcourse covering the principles and procedures employed in military operations. Applications at the squad and platoon level provided a foundation for summer training.



PHYSICAL EDUCATION

THIRD CLASS

Military Science instruction for the Third Class, a new twenty-six hour course entitled "Command Functions," was designed to teach the cadet basic tactical considerations and resources available to the commander in the use of military power. The course delved into command and staff relationships and functional staff areas with an application phase on estimates of the situation and operations orders.

SECOND CLASS

Second Classmen received a 50-hour, two-semester course designed to familiarize them with the organization and basic combat principles employed by the combined arms at maneuver battalion level. The broad scope of this course included offensive and defensive operations, airborne and airmobile operations, river crossing operations, impact of nuclear weapons, command and staff procedures, and logistical support of a battalion combined arms task force. Since half of the Second Classmen attended Army Orientation Training the preceding summer, they contributed interesting and meaningful personal experiences to classroom discussions.

FIRST CLASS

The capstone of the four-year military science curriculum was a 24-hour course designed to provide First Classmen with a basic understanding of the operational and tactical environment of stability operations and operations of the combat arms in stability operations with emphasis on counter guerrilla tactics and techniques of an infantry company. All instructors for this course had recent combat experience in stability operations.

PHYSICAL EDUCATION

The Office of Physical Education (OPE) prepares each cadet to meet the physical performance challenges of a military career. The Physical Education curriculum consists of the instructional program, athletic participation, specialized instruction, and examinations.

The Director of Physical Education is responsible to the Commandant of Cadets for planning, organizing, and implementing the Physical Education Program. This program is primarily devoted to building basic physical ability, maintaining physical condition, teaching athletic skills, and developing leadership traits.

INSTRUCTIONAL PROGRAM

Preceded by participation in a variety of physical activities in New Cadet Barracks, the Standard Fourth Class physical education program continued emphasizing progressive development of physical ability. The standard courses, apparatus, boxing, swimming, and wrestling required three attendances weekly and were scheduled in blocks of twenty attendances each. Guided by results of the Diagnostic Profile Tests, non-swimmers and weak pull-up performers were not scheduled into the swimming or apparatus courses until second term.

Conversely, cadets who achieved a high performance skill level after twelve attendances in each of the standard courses validated the remaining instruction and were accelerated into handball, squash, or SCUBA for the remaining eight attendances.

In Academic Year 1969-1970, 481 Fourth Classmen validated one or more of the standard courses. Concurrently, OPE administered special and remedial programs in swimming, weight control, conditioning, reconditioning, and posture for all deficient cadets as well as for volunteers. All proficient cadets who completed the standard courses and required tests were scheduled for eleven attendances in either golf or tennis, both graded sports. Cadets failing to complete the standard course requirements were scheduled for make-up attendance.

Upperclass instruction comprised six instructional blocks of nine hours each which emphasized further development of recognized skills along with sports leadership. Third Class instruction especially stressed acquisition of basic skills in carryover sports. All Third Class cadets were required to attend and pass a course in Personal Conditioning (Basic Physiology and Physical Effects). First and Second Class instruction focused on advanced skills and maintenance of physical condition. Several new programs were successfully initiated. Third Classmen injured during Fourth Class year could receive any instruction they missed in swimming, boxing, and wrestling. Both Third Classmen and Second Classmen could learn Senior Life Saving if they had missed the opportunity as Fourth Classmen while First Classmen desiring a swimming instructor's rating were offered Water Safety instruction. Paddleball was also introduced to provide a transition from tennis skills to squash and handball skills.

A variety of tests were used to measure physical fitness and aptitude. Third Classmen took the mile run, obstacle course, Physical Aptitude Test, and Physical Combat Proficiency Test. Second Classmen took the mile run and Physical Fitness Test while the First Class received the Physical Combat Proficiency Test.

SPECIALIZED INSTRUCTION

The Special Instruction Program continued to provide individual instruction and assistance for cadets in posture, corrective and developmental exercise, physical reconditioning, weight control, and injury care and prevention. A total of 1688 cadets spent 6407 hours in physical reconditioning in lieu of regular attendance. The training room administered 4993 individual treatments - first aid, therapy, protective taping and wrapping, and 241 previously injured cadets were screened by the trainer prior to participation in athletics. Approximately 240 Fourth Classmen attended the posture clinic, 175 of whom were provided exercise programs designed either to arrest or correct postural abnormalities. Of all classes, 200 cadets participated in the development program. Voluntary conditioning in weight training had a daily attendance of over 100 cadets.

Twenty-eight new cadets with histories of severe pre-academy knee injuries and 13 new cadets with histories of pre-academy subluxation or dislocations of the shoulders participated in special strength development programs during New

Cadet Barracks with excellent results. There were no serious recurrences of injuries among these two groups during the fall athletic season.

Research efforts considered vital to the physical welfare of cadets were continued jointly by the Office of Physical Education and the Medical Research Project, USAH. Noteworthy among these efforts was the computerization of injury reports. Several studies concerning use of isokinetic exercise in the rehabilitation of knee injuries were also conducted, but additional data is being developed for comparison purposes.

INTRAMURAL ATHLETICS

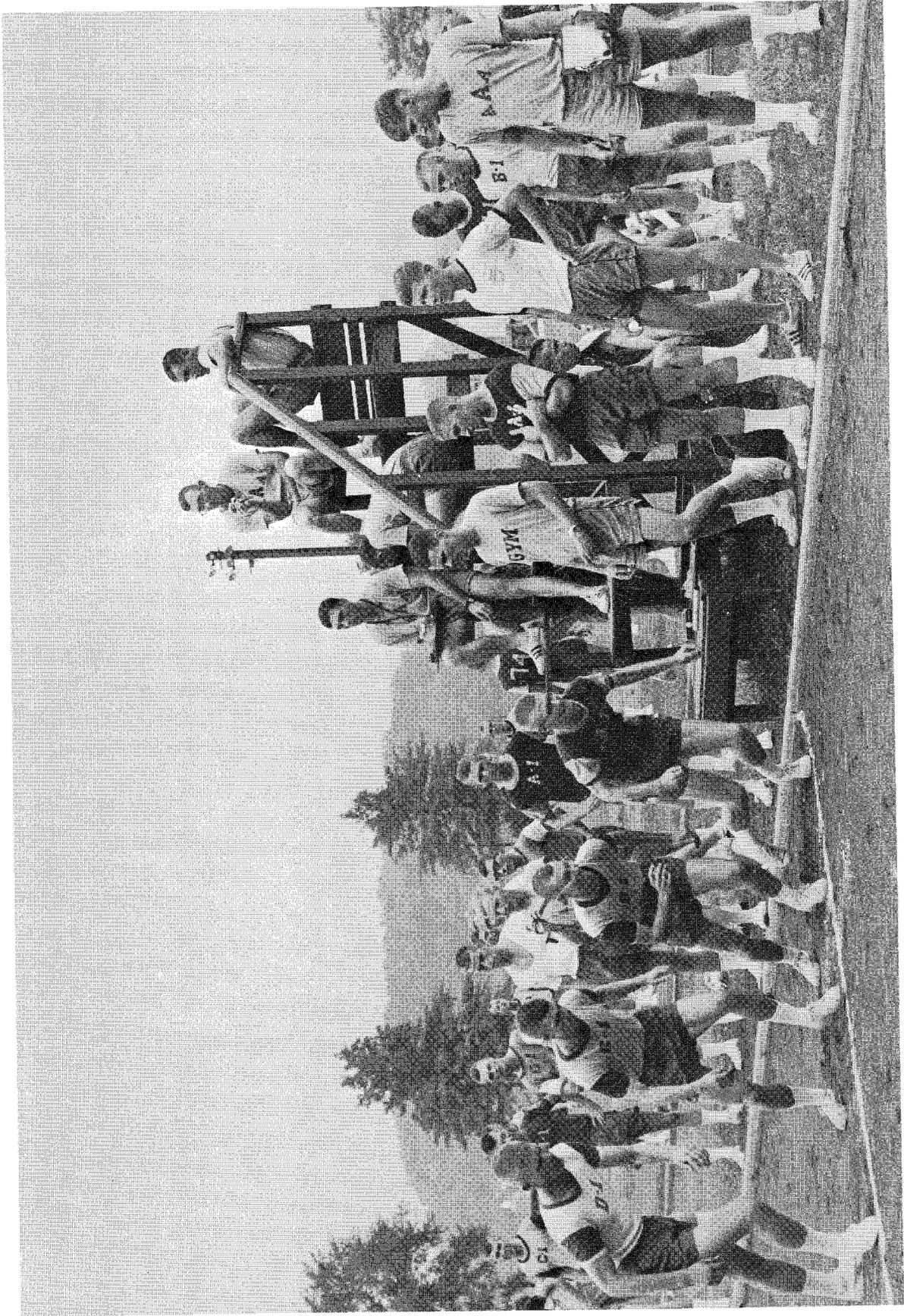
Each cadet who did not directly participate in one of the intercollegiate sports was required to engage in at least one intramural sport, of which there were eighteen. In addition to developing sports skills, the intramural program helps to nurture a sense of team play, to maintain a high level of physical fitness, to give cadets an opportunity to develop further their leadership potential by acting as coaches, officials, and cadets-in-charge of the various teams.

In an effort to increase cadet management and involvement with this program, the Academy has placed the responsibility for administering intramurals on the cadet chain of command. To complement this additional responsibility at company and battalion levels, cadet athletic sergeants have been appointed. Under this system, the program has functioned smoothly.

The 1969-1970 Program consisted of:

<u>Fall</u>	<u>Winter</u>	<u>Spring</u>
Football	Basketball	Boat Racing
Orienteering	Boxing	Cross Country
Soccer	Handball	Lacrosse
Tennis	Squash	Touch Football
Track	Volleyball	Water Polo
Triathlon	Swimming	
	Wrestling	

In the spring a new sport called Flicker Ball was tested on an experimental basis. Flicker Ball was well received by the cadets and will replace Triathlon in next year's fall season.



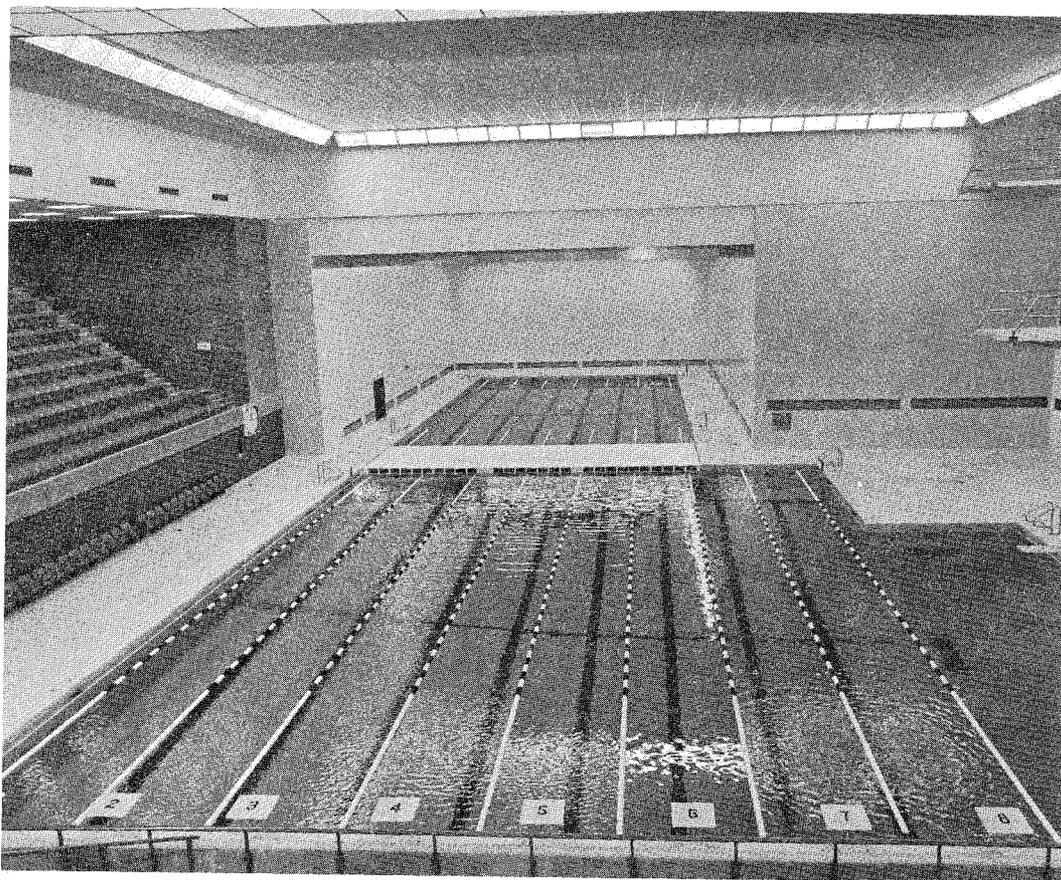
A vigorous intramural sports program insures that every Cadet is an active participant in competitive athletics.

STAFF DEVELOPMENT

Development of the physical education instructor staff increased the professional qualifications of instructors and enhanced the effectiveness of instruction. This program included the Personal Conditioning Course for all instructors, a cross-training course in new sports skills, and attendance at civilian institutions to complete advanced degree requirements.

PHYSICAL EDUCATION FACILITIES

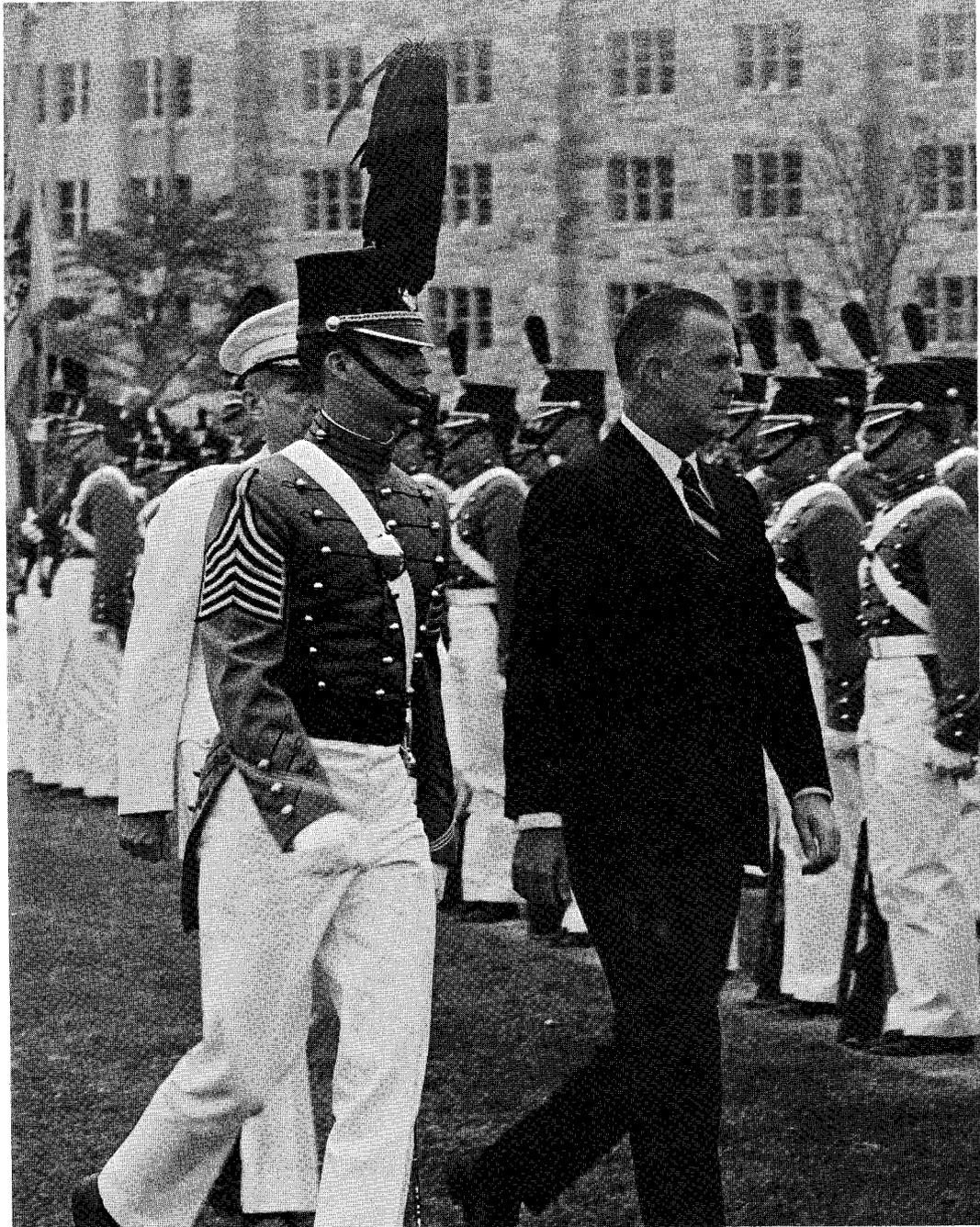
Continued development and improvement of Physical Education facilities was best exemplified by the February opening of the natatorium, which contains an olympic-size swimming pool and has a seating capacity of over 1200. At the same time, a physical education teaching station is replacing the old varsity pool and should be completed before the start of Academic Year 1970-1971. Nevertheless, modification and development of facilities for cadet use continued to be a critical matter. The physical education program will not achieve its full potential until the facilities-expansion plans are finished.



Completion of the Natatorium made an important contribution to the improvement of the physical education program.

CAREER MOTIVATION

The Department of Tactics combines a number of programs in order to motivate cadets for a career in the Army. The highlight of this year's career motivation effort was Vice President Agnew's graduation address.



Vice President Agnew inspects the Cadet Honor Guard prior to addressing the graduating class.



Jack Carl Zoeller (seated) first man in the Class of 1970, congratulates Paul McDowell (standing), anchor man for his Class, at graduation.

INFORMAL CONTACTS WITH CAREER OFFICERS

This past year we continued to encourage open discussion between cadets and officers assigned to West Point, most of whom have played an active role at all levels in the nation's recent military activities. These officers met with cadets daily on both a personal and professional basis. Through classroom discussions, informal counseling sessions, and social gatherings in officers' homes, cadets gained an understanding of Army life for career officers. Last year 650 cadets and 248 officers insured successful implementation of the Yearling Sponsor Program. The objectives of this new program were:

To provide a rewarding exchange of ideas between officers and cadets through informal social contacts;

To improve cadet motivation for an Army career by giving the "why" of West Point and the Army, giving direction to cadet life by making Yearling year more meaningful, and by stimulating thought about the Army and his place in it during that critical period when resignation is still a practical possibility for him;

To provide a training ground for social poise and etiquette in an atmosphere relatively free from pressure.

CAREER COUNSELING PROGRAM

Although the informal counseling approach is most effective, we do not rely on it completely. The Career Counseling Program conducted by the Office of Military Instruction provided cadets accurate information about all service branches. Career-oriented discussions were conducted for all four classes. During the First and Second Class branch training trips, cadets received orientations on Army life at the various branch centers. In December, the Director, Officer Personnel Directorate, Brigadier General George W. Putnam, Jr., addressed the First Class and discussed officer assignment policies and career patterns. Prior to branch drawings in February, the Office of Military Instruction conducted a branch orientation panel and additionally furnished each First Classman extensive information on all branches. Following the branch drawing, Senior Branch Instructors provided detailed information on which the First Classmen based the selection of initial duty assignments. The First Classmen also received informal orientations on Basic Officer, Airborne, and Ranger Courses by representatives of the branch service schools.

GRADUATE RETURNEE PROGRAM

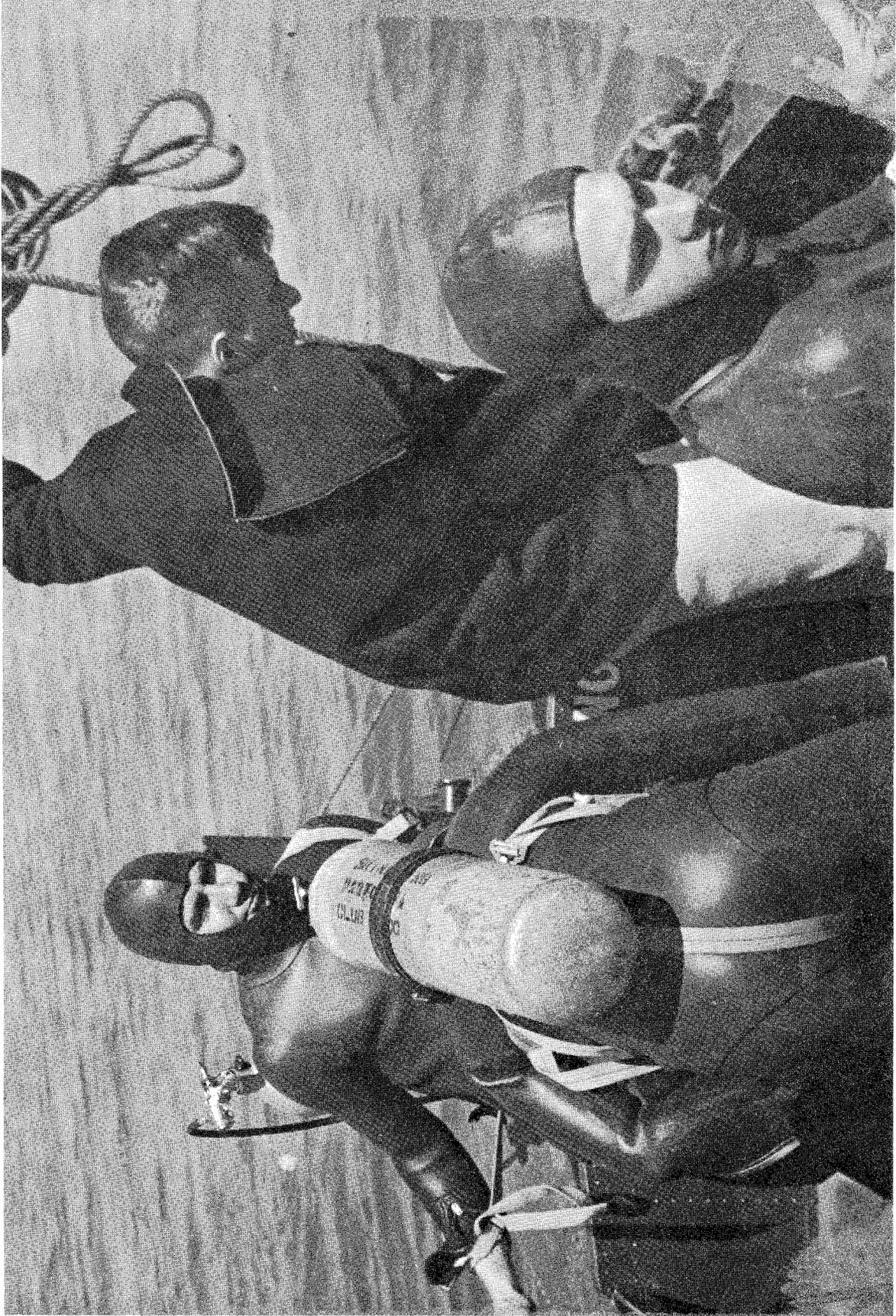
A cadet's understanding of his immediate duties as a junior officer was expanded by our Recent Graduate Returnee Program. Under this program, young officers of all combat branches who have graduated from the Military Academy within the last few years were invited to return to the Academy and conduct informal discussions with members of the First Class. During these discussions, they described the duties, responsibilities, and challenges that they faced on a daily basis as junior officers. Because of the enthusiasm and professionalism displayed by returnees, the program continued to be an unqualified success. At Appendix U is a list of guest lecturers who supported the career portion of the Military Instruction Program.

SENIOR OFFICER SEMINARS

The Senior Officer Seminar Program, managed by the Office of Military Psychology and Leadership, provides cadets with a picture of military activities at division level and higher. This year's program consisted of presentations by six guest speakers, Lieutenant General W. E. DePuy, Assistant Vice Chief of Staff; Major General G. E. Pickett, Assistant Chief of Staff for Communications-Electronics; Lieutenant General W. T. Kerwin, Jr., Deputy Chief of Staff for Personnel; Lieutenant General J. M. Heiser, Jr., Deputy Chief of Staff for Logistics; Lieutenant General R. G. Stilwell, Deputy Chief of Staff for Military Operations; and Lieutenant General W. R. Peers, Chief, Office of Reserve Components. The Army Chief of Staff, General Westmoreland, and General Haines, though not a part of the actual seminar program, also spoke to the cadets this past year.

CAREER IN THE CLASSROOM

Ten minutes of most Military Instruction classes during the academic year were set aside for discussion of career matters. Panel discussions were conducted for the Second Classmen by recent USMA graduates and senior branch instructors from the Office of Military Instruction. In addition, the Second Class received a lecture by the Superintendent about the challenge of a military profession. The Third Class received a nine-hour Service Orientation Course during the academic year in which a series of conferences, lectures, and seminars was used to discuss the junior officer's career progress and educational development prospects, his initial assignment, relationships with enlisted personnel, family life, and challenges of combat. The 17-hour course in the military heritage and traditions of the United States Army presented to the Fourth Class is designed to instill in each Plebe a feeling of pride in being a part of an organization with a proud past and a challenging future.



Scuba diving — There are 71 different extracurricular clubs and activities in which Cadets may participate.

EXTRACURRICULAR ACTIVITIES

INTERCOLLEGIATE ATHLETICS

PURPOSE

The Academy's Intercollegiate Athletic Program has two objectives: to produce teams which will represent the traditions of USMA and to provide a means of supporting the program. Through cadet participation both as players and spectators, the first objective contributes added benefits; it promotes the development of leadership, instills the will to win, develops esprit with the Corps, and enhances the reputation of the Academy.

PARTICIPATION

Nearly one-half of the Cadet Corps participated directly in the Intercollegiate Athletic Program consisting of twenty sports, fifty-two teams, and over five-hundred contests. While the effectiveness of any such program depends to a great extent on the quality of the coaching staff, it is the competing athlete - in this case, the cadet - who gives the program impetus. A great deal must be said for the cadet competitor who voluntarily sacrifices his time and energy to make the program a success. At West Point, as at the other service academies, the intercollegiate competitor gives unstintingly of himself without any hope of attaining the self-glory so frequently a part of being an athlete at other, non-military institutions. The cadet athlete, like all cadets, has little enough time which he may call his own, yet he willingly gives this time to ensure that when an Army team goes into competition, it will be the best team possible. He expects, and gets, no special consideration or compensation; his profit comes from his knowledge of having put forth his best.

THE STAFF

The Athletic Director, Colonel Gus Dielens, is in the enviable position of having an outstanding staff of coaches. As in past years, not only has the Academy's athletic record attested to the expertise of the various coaches, each dedicated to the Military Academy and its ideals, but so, too, have the honors which these men have received in recognition of their professionalism. Football coach Tom Cahill was head coach of the East team in the annual East-West Shrine game in San Francisco. Frank Wells (gymnastics), Jack Ryan (swimming), and LeRoy Alitz (wrestling) are members of the United States Olympic committees in their respective sports. In addition, Coach Ryan has been nominated as swimming coach for the United States in the 1971 Pan American games and the 1972 Men's Olympic team. Jack Riley is Chairman of the Hockey Committee for the World Student Games, and Carleton Crowell (track) is president of the Heptagonal Coaches Association and also vice president of the IC4A's Coaches Association. Al Pisano, in his first year as Lacrosse coach, distinguished himself as the coach of the North team in the annual North-South All-Star game in Lexington, Virginia. Two more coaches joined the staff this year: John Geraci in fencing and Howard Brosseau in skiing. Of special note are the coaching efforts of Bob Knight, which resulted in his

cagers compiling a 22 and 6 won-lost record, the best ever by an Army club. Through his superb ability the cadets were again the top defensive team in the country and were selected for participation in the National Invitational Basketball Tournament.

SPECTATOR PARTICIPATION

Army teams continued to attract large crowds throughout the year. Attendance at basketball and lacrosse games increased markedly while six home football games attracted a record attendance of 218,300 with four of the six listed as sellouts. Of the four road games, Notre Dame, Navy and Vanderbilt were all sellouts.

A RESUME

Only the decade changed during the 1969-1970 season as Army teams continued to win, and individuals as well as teams were honored. In the 1968-1969 season, Army teams participated in more contests and won more times than in any prior period in the history of intercollegiate sports at the Academy. This year's teams tried hard to match that record but settled for a composite winning percentage of .636 -- still a healthy record considering the uniformly top-flight competition Army teams engage in.

The indoor track team finished at the top with a fine 10-1 record, a winning percentage of .909. The riflemen followed with a 9-2 record; then came, in order, outdoor track, basketball and pistol to round out the selective top five.

Basketball, in particular, merits comment. The cagers, first in the nation defensively for the third consecutive year, received still another invitation to play in the National Invitation Tournament in New York's Madison Square Garden (Army teams have gone to the NIT six times in the last seven years). Once there, they battled their way to the semi-finals, eventually winning the third-place prize.

Unfortunately, there were some dark moments during the 1969-1970 intercollegiate season. Four squads failed to break the .500 mark, the most in several years. Football, swimming and gymnastics all came close to breaking even, missing by just a single game, but the baseball squad suffered, dropping fourteen of twenty-one contests.

The varsity sports record is shown on the opposite page.

ARMY VARSITY SPORTS SUMMARY

1969-70 Season

SPORT	CONTESTS	WON	LOST	TIED	PCT.	NAVY	1970-71 CAPTAIN
Track (Indoor)	11	10	1	0	.909	Won	Kevin James
Rifle	11	9	2	0	.818	Won	Charlie Morris
Track (Outdoor)	5	4	1	0	.800	Won	Bill Diehl
Basketball	28	22	6	0	.786	Won	Doug Clevenger
Pistol	12	9	3	0	.750	Lost	Paul Drake
Skiing	4	3	1	0	.750	----	Charles Ennis
Tennis	18	13	5	0	.722	Lost	Jack Stevenson
Squash	14	10	4	0	.714	Lost	Gerry Petersen
Golf	10	7	3	0	.700	Lost	Chuck Swannack
Lacrosse	10	7	3	0	.700	Lost	Steve Wood
Fencing	12	8	4	0	.667	Lost	Jerry Edelen
Soccer	12	7	3	2	.667	Tied	Dan Scioletti
150-Lb Football	6	4	2	0	.667	Lost	Ben George
Cross Country	9	5	4	0	.556	Lost	Jeff McNally
Hockey	24	13	11	0	.542	----	Dan Scioletti
Wrestling	15	8	7	0	.533	Lost	Bill James
Swimming	13	6	7	0	.462	Lost	Jack Frink
Football	10	4	5	1	.450	Won	Ken Wyrick
Gymnastics	9	4	5	0	.444	Lost	Bob Harvey
Baseball	<u>21</u>	<u>7</u>	<u>14</u>	<u>0</u>	<u>.333</u>	Lost	Tom Pyrz
TOTALS	254	160	91	3	.636	(5-12-1)	

NOTE: Skiing won the Division III Championship, placed sixth among the Division II ski teams, and won the Lemoyne-Syracuse Invitational and the Paul Smith's College Invitational.

CADET ACTIVITIES

SCOPE

Participation in the Cadet Extracurricular Activities Program again increased significantly during Academic Year 1969-1970. Seventy-one cadet activities, with a total of 8,225 active cadet memberships, functioned during the year. These activities with attendant participation are listed in Appendix V. New activities initiated this year were the Engineering Forum and the Fellowship of Christian Athletes. The activities program provided intellectual, physical, and moral improvement for the cadets and representation of the Corps and the United States Military Academy to the public.

FUNDS

In addition to grants from the West Point Fund, the financial support of the Cadet Extracurricular Activities Program depended upon the profits from the sale of used cadet clothing, the booklet "West Point - A Way of Life," Glee Club records, the annual Cadet Activity Fee assessed each cadet, and the United States Corps of Cadets Unit Fund. A selected group of First Classmen served as members of the Cadet Activities Trust Fund Council which made recommendations to the Commandant of Cadets for expenditure of welfare funds. Thus, the Corps of Cadets participated directly in the control of its own welfare funds.

FACILITIES

The lack of adequate facilities for cadet activities still remains a problem even though a new Fourth Class Games Room was opened and Constitution Island became available as a picnic area for use by cadets and their guests. A ferry boat (155-man capacity) is now available for river trips and transportation to Constitution Island. Funds have become available for the construction of the Cadet Activities Center and the project is now out for bids. The completion of this center will ease the space problem created by the increasing size of the Corps of Cadets.

EXPANSION CONSTRUCTION PROGRAM

OVERVIEW

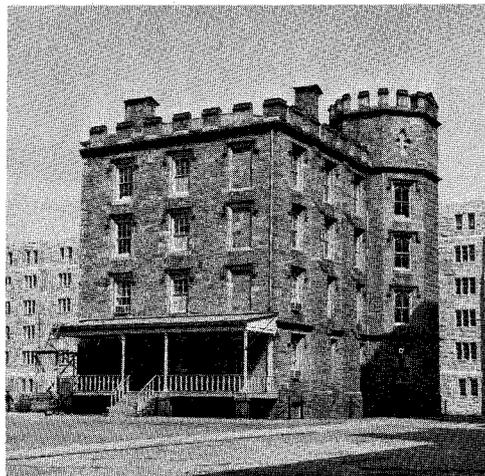
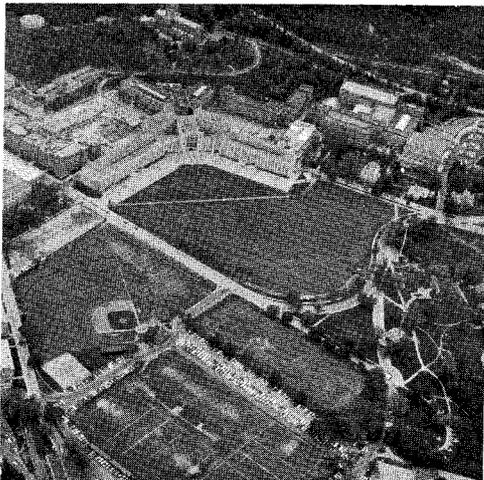
During the past year, construction of facilities to support the expanding Corps of Cadets and concomitant increase in staff and faculty created an unprecedented level of activity as construction of the new Academic Building continued along with replacement of barracks in both North and Central Areas. The Academy accepted temporary overcrowding in order to expedite rapid yet orderly expansion of the Corps of Cadets, and the availability of expanded facilities was phased to provide relief as space in vital areas became too confined. Severe overcrowding now exists in barracks and academic areas but will soon be alleviated by projects rapidly nearing completion. A serious shortage of athletic and social-recreational facilities will not be corrected as quickly, however.

WASHINGTON HALL COMPLEX

Remaining portions of the expanded and rehabilitated kitchen facilities in Washington Hall are nearing completion. This completes the Washington Hall/Barracks Complex, a keystone of the Expansion Plan to provide additional academic, administrative, dining, barracks, and cadet support facilities.

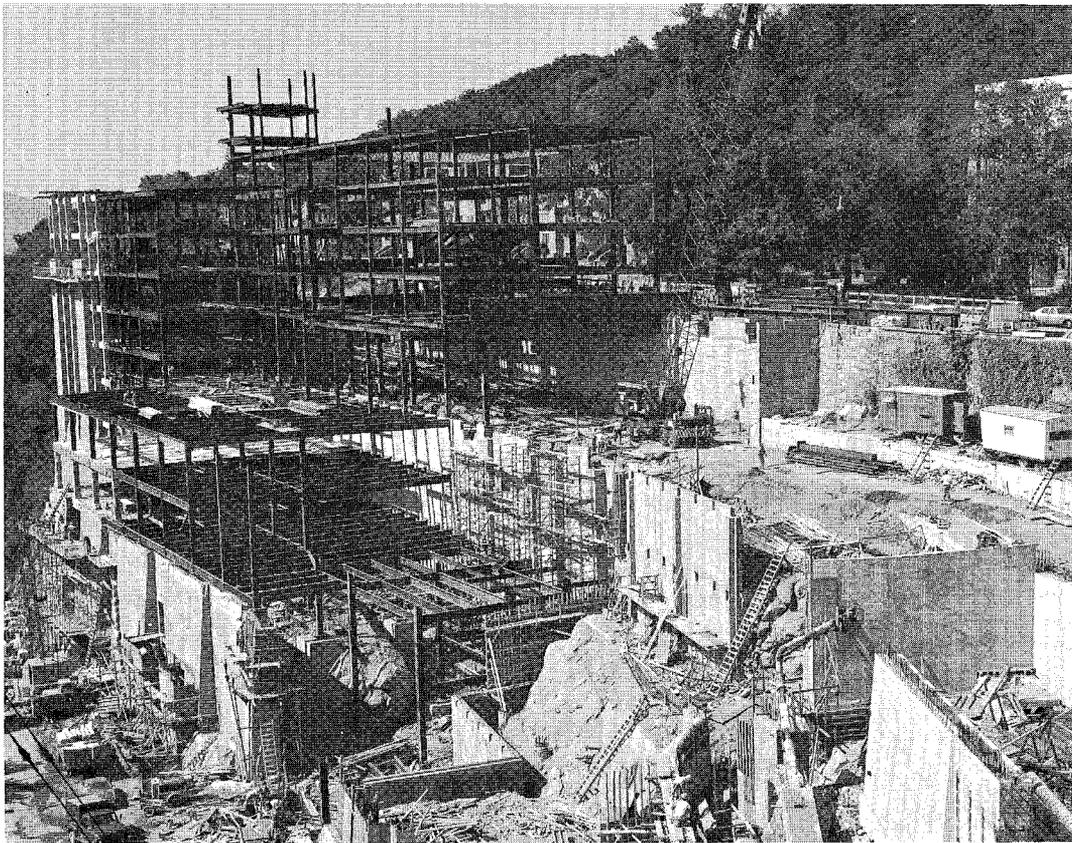
SECOND INCREMENT OF BARRACKS

Old Central Barracks and Old North Barracks were removed to make room for the final three new wings now under construction. The "First Division," oldest and most historic of all the barracks, was retained to preserve and advance the history and traditions of West Point. The new barracks will contain 670 cadet rooms and cost an estimated \$16.8 million. The construction contract was awarded on 13 August 1969 with completion scheduled in stages beginning in July 1971. The architectural style of the project is similar to the Washington Hall/Barracks Complex and will complement the "West Point Scene."



ACADEMIC BUILDING

Construction of the Academic Building approached the end of the second year. Progress has been hindered by foundation difficulties, postponing completion approximately one year and necessitating a \$2.58 million deficiency funding request as part of the 1971 MCA (Military Construction, Army) program. The foundation problems apparently have been overcome, and it appears that the deficiency funding request will be approved. The delay in completion has resulted in a difficult but not insurmountable problem of providing temporary classrooms. Most of the academic departments are affected and will be operating under less than desirable conditions until this facility is completed.



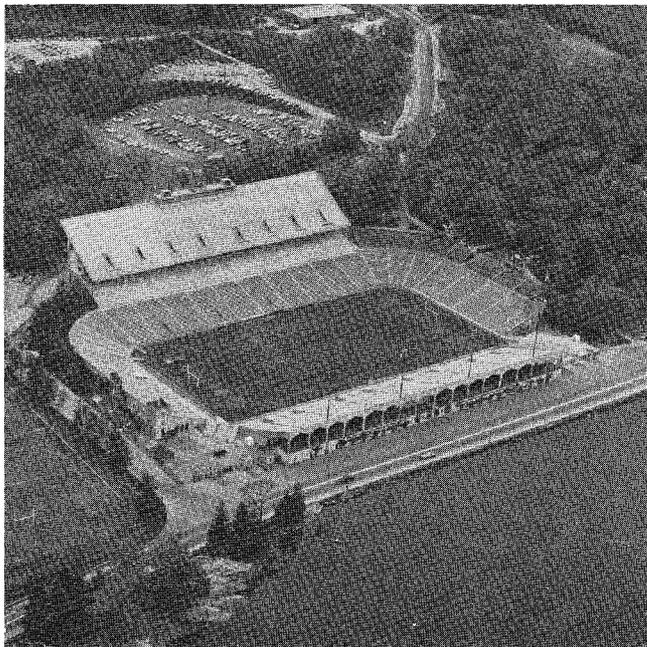
ATHLETIC FACILITIES

The north addition to the Cadet Gymnasium was completed in January 1970, placing in operation an olympic-size swimming pool with seating for twelve hundred spectators. Planning is now under way to convert and expand the old

varsity pool area to provide additional facilities required to support the physical education program.

Conversion of a roads and grounds garage to a modern indoor rifle and pistol range began in April and will be completed by early 1971. The old ranges will be removed to make way for the new Cadet Activities Center.

The expansion of Michie Stadium, funded by the Army Athletic Association, increased the seating capacity to 41,062. Although the project was not fully completed in time for the 1969 football season, the necessary additional seats were available and attendance far exceeded post records.

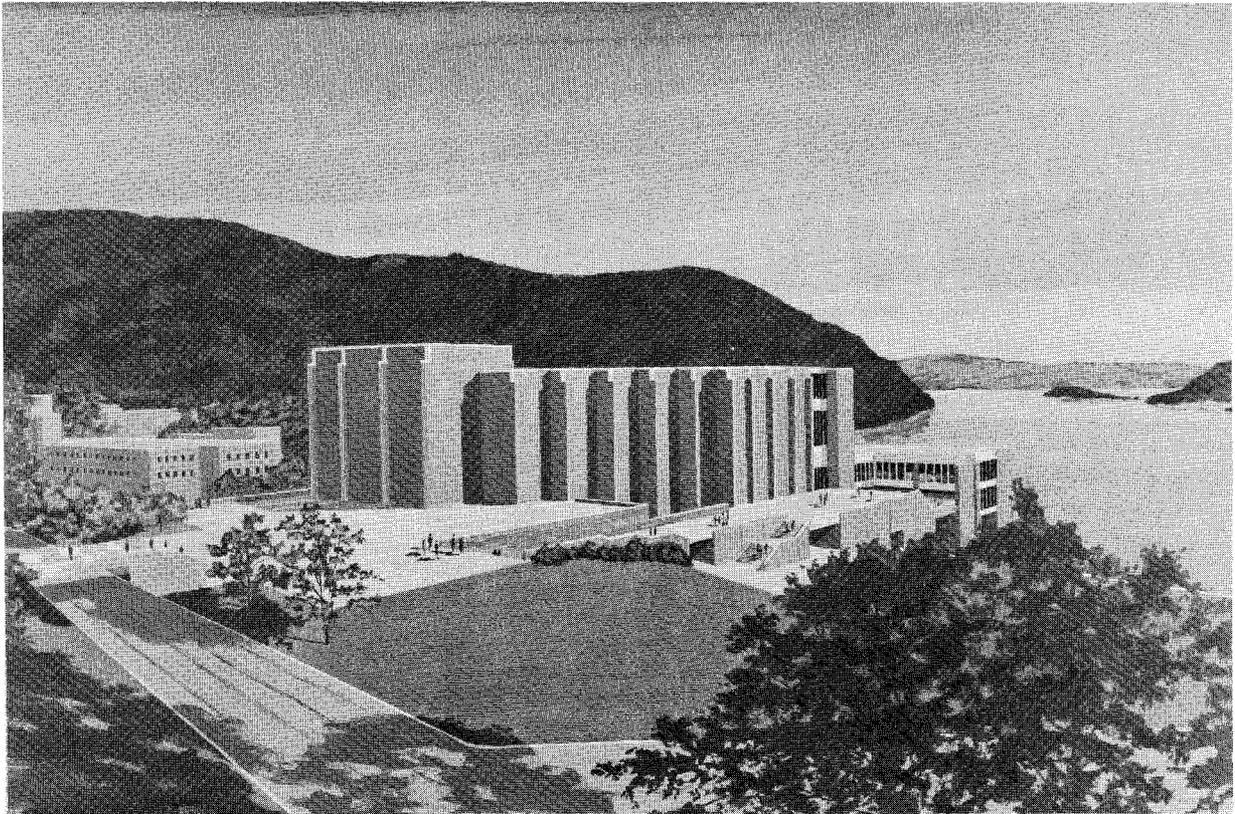


CADET ACTIVITIES CENTER

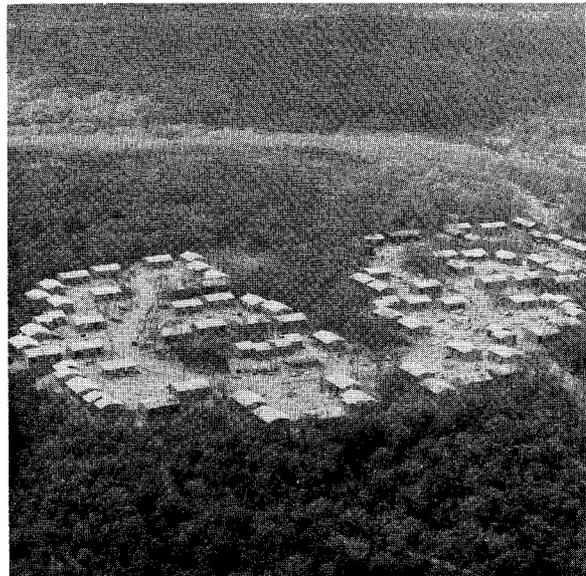
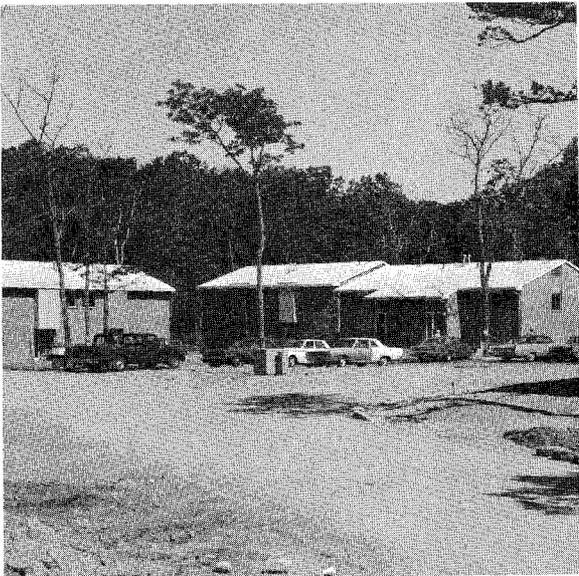
The Cadet Activities Center was approved as part of the FY 1970 MCA Budget, and culminated a thirty-year struggle to obtain funds for this vital facility. Proposals will be submitted on 1 July 1970 for a Fixed Price Incentive contract. This departure from the normal bidding procedure is an attempt to stimulate contractor interest and increase the competition of the bidding.

CAMP BUCKNER

At Camp Buckner, the capacity of the Mess Hall was doubled with additions to the kitchen and dining areas. Tents are being used temporarily in lieu of the planned final increment of thirteen prefabricated metal barracks.



Cadet Activities Center



Stony Lonesome Housing Area

POST FACILITIES

A majority of the utilities projects associated with the current Expansion Plan are complete and in use. Although not as glamorous as above-ground projects, these facilities constitute an indispensable part of the construction program and represent about ten percent of its total, estimated cost.

As anticipated in the 1968-69 Annual Report of the Superintendent, the proposed one-hundred bed hospital and thirty-six unit Bachelor Officer Quarters had to be reprogrammed because of the extremely high bids received. The hospital, now under redesign, has been reprogrammed for FY 1973, while the BOQ has not yet been reprogrammed for a specific fiscal year. Although the delay hindered orderly progression of the total expansion program, recent changes in hospital design criteria should provide a more complete and efficient facility.

Completion of two-hundred sets of family quarters was delayed several months. The first units are now becoming available, however, and all two-hundred units are scheduled for occupancy before the end of the year. Family quarters made available by the closing of Stewart Air Force Base relieved the critical housing situation at West Point. These quarters made completion of the 160-unit followup housing program less critical, and as a result, it was consequently deferred until the future of Stewart housing is determined.

CURRENT STATUS

Based on present estimated costs, the overall status of expanding facilities shows \$89.7 million in projects completed or under construction, \$17.6 million funded but not yet under contract, and \$41.8 million programmed for projects proposed in Fiscal Years 1971 through 1976. High bids arising from increased construction costs necessitated scheduling adjustments which seriously delayed such projects as the hospital and housing. Further delays will increase operating inefficiencies, could derogate from the Academy mission, and will undoubtedly result in even higher construction costs when the delayed projects are finally built. The specific status, including cost and critical dates of all expansion projects is detailed in Appendix W.

INSTITUTIONAL RESEARCH PROGRAM

While other USMA staff agencies (such as the Comptroller) are active in managerial types of institutional research found at other colleges, the Office of Research's primary interest continued to be a better understanding of USMA's candidates, cadets, and graduates.

Activities of the Office of Research attained an all-time high during FY 70 as can be gauged by the preparation and distribution of over forty reports (Appendix X), mainly in the areas of admissions, graduate performance (Product Appraisal), and the cadet environment. Cadet attitudes and opinions were sampled periodically so that the Academy's administration would not become "out of touch" with its student body as has occurred at so many other colleges and universities in the last few years. As a part of the Product Appraisal Project, the Office of Research surveyed over eleven-hundred graduates from the Classes of 1950 through 1962 in the summer of 1969. Major topics investigated related to the graduates' schooling and military or civilian career.

Along with other institutions of higher education, USMA has become increasingly concerned with minority group candidates and cadets. The relatively large number of Negro cadets who entered with the Class of 1973 provided for the first time a basis for productive research on minority group students. As a result, the Office of Research began a long-range project to study the characteristics of Negro candidates and cadets. The goal of this project is an increased knowledge and understanding of that minority group which will assist in recruiting, selecting, and retaining Negro candidates of high potential.

A Class Characteristics Inventory and other pertinent questionnaires are administered to each entering class to provide USMA with a profile of that class and to provide a source of data for other studies.

USMA continued its association with the American Council for Education in its annual survey of all entering freshmen. The Academy was among the original group of colleges and universities invited to participate in these surveys, which gather a variety of information about full-time freshmen students. As a result of these various surveys, USMA probably knows more about its student body than any other institution of higher education.

As still another example of the many areas being investigated, the Office of Research, in cooperation with the USMA Treasurer, conducted a study of the forced accrual of a portion of the cadet's pay to provide for expenses in connection with the purchase of officer uniforms and with the transition from cadet to officer status. This system has been in effect for many years, and the study showed that the vast majority of young graduates favor its retention without major modification.

In addition to its own studies, the Office of Research provided major professional and data support services to other institutional research agencies at West Point and elsewhere. To provide better support to installation research

activities, this office has begun redesigning its historical data base so that modern data processing and information retrieval methods can be more easily used. The design of an interim management information system compatible with currently available computer hardware was completed and the necessary programming for implementing it is well under way.

MANAGEMENT OF FACILITIES

COST REDUCTION PROGRAM

FY 1970 validated cost reduction savings reported by USMA activities totalled \$318,600. This amount represents an achievement of 112.7% of assigned Department of the Army/Headquarters First U. S. Army goals. The savings resulted from the validation of 65 activity management actions. Outstanding contributors to the program were activities of the Dean's area; Treasurer; Adjutant General Division; Supply & Services Division and Engineer Division. The most significant savings were realized through increased productivity of employees in installation support activities. The table on page 64 shows a detailed analysis of the programs.

FUNDING

Department of the Army provided \$26,885,200 in Direct Obligation Authority (Operations & Maintenance, Army: \$25,503,100; Family Housing: \$1,382,100) for the operation and maintenance of the United States Military Academy, support of family housing facilities, and USMA support of Headquarters, 1st Region, ARADCOM and other U. S. Army facilities at Stewart Field. This amount supported mission and expansion related requirements at minimum levels but was not sufficient to permit any reduction in the backlog of essential maintenance and repair projects. Of \$1.5 million allocated for USMA support of the Stewart Field operation for the period 1 January through 30 June 1970, \$787,000 was returned to Department of the Army. Details of the Military Construction Army funding are discussed in the Expansion Construction Program section of this report.

The chart on page 65 depicts income sources and distribution of funds at this installation.

INCENTIVE AWARDS PROGRAM

The Incentive Awards Program continues to be emphasized at USMA. In spite of this, however, the number of suggestions submitted during the past fiscal year were significantly below Department of the Army objectives. Significant program statistics are as follows:

	<u>FY 68</u>	<u>FY 69</u>	<u>FY 70</u>
Civilian Employee Suggestions	463	414	328
Military Personnel Suggestions	102	173	113
Adoption Rate	32.8%	31.3%	36.7%
First Year Savings	\$68,504	\$26,175	\$41,838
Cash Awards Paid	\$ 3,125	\$ 1,475	\$ 2,715

USMA COST REDUCTION PROGRAM
FY 1970

Cost Reduction Area	DA/First Army	FY 1970	FY 1970	FY 1970	DA/First Army	Estimated
	FY 1970	USMA Goals	Realized	Goals	FY 70-72	FY 70-72
	Goals		Savings		Goals	Savings
Real Property Maintenance & Operation Mgt	\$ 24,000	\$ 35,000	\$ 14,000	\$ 48,000	\$ 14,000	\$ 14,000
Schools & Other Educational Facilities	200,000	200,000	128,500	500,000	190,800	190,800
Operation, Mgt & Use of ADP Systems	1,000	2,000	2,600	3,000	13,000	13,000
Military Housing Mgt	5,000	5,000	2,600	10,000	2,600	2,600
Local Logistic Svcs	10,000	15,000	100,600	28,000	190,300	190,300
Hospitals & Clinics	8,000	8,000	300	27,000	300	300
Other Mgt Improvements	10,000	12,100	400	45,000	400	400
Telecommunications Mgt	0	3,000	0	0	0	0
Transportation & Traffic Mgt	0	6,000	0	0	0	0
Equipment Maintenance Mgt	0	2,500	0	0	0	0
Value Engineering	0	0	61,200	0	0	0
Major Items of Equipment	0	0	1,100	0	3,300	3,300
Secondary Items*	19,800	19,800	7,300	27,800	8,900	8,900
Use of Long Supply, Excess & Surplus Inventory*	5,000	5,000	0	7,000	0	0
TOTAL	\$ 282,800	\$ 313,400	\$ 318,600	\$ 695,800	\$ 423,600	\$ 423,600

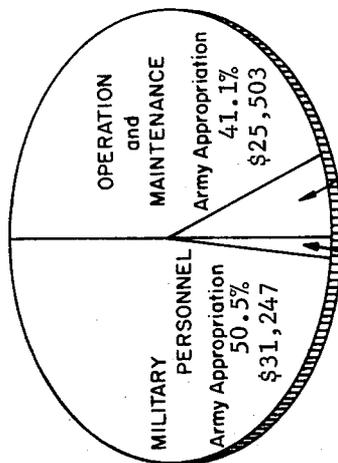
*Goals assigned by First Army

DISTRIBUTION OF USMA FY 1970 DOLLAR RESOURCES

(in thousands)

WHERE IT COMES FROM

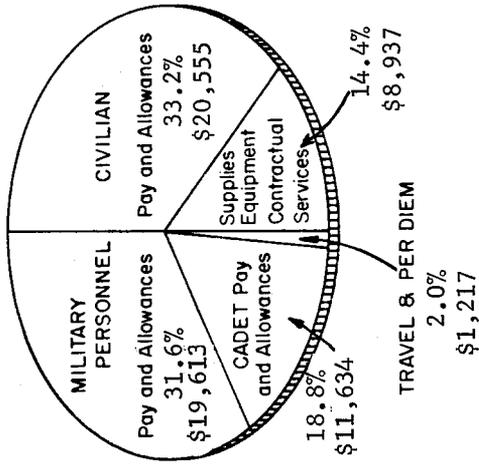
\$61, 985



WHERE IT GOES

(By Expense Category)

\$61, 956

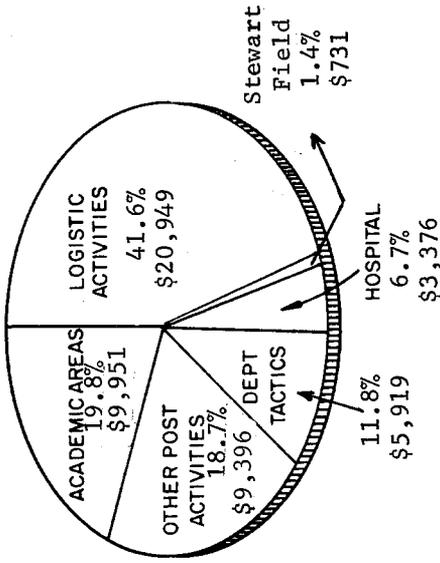


WHERE IT GOES

(By Functional Category)

\$50, 322

(EXCLUDES CADET PAY AND ALLOWANCES)



NOTE: AMOUNTS SHOWN ARE BASED ON THE OBLIGATIONS SYSTEM OF ACCOUNTING (i.e. excludes net change in undelivered orders & inventory)

LOGISTICS PERFORMANCE AND EVALUATION

ENGINEER DIVISION

Personnel from the Engineer Division and the 50th Engineer Construction Company continued to support the requirements generated by expansion. In addition, a major portion of the facilities at Stewart Field was designated as a USMA controlled area about mid-year.

Resources available for Facilities Engineering were inadequate to meet requirements for maintenance of new facilities and the continuing requirements for support and maintenance of existing facilities. Escalating costs for wages, materials and services continued to absorb the increased funding furnished. The total program, sufficient only for fixed costs, did not permit the reduction of the backlog nor the replacement of worn or obsolete equipment other than Procurement of Equipment and Missiles, Army (PEMA). Consequently, the Backlog of Essential Maintenance Repair (BEMAR) is approaching the \$4 million level, about eight times the level (\$500,000) prescribed by DA policy. Fifty items of obsolete R&U equipment valued at \$403,870 were replaced; forty-one overage items valued at \$408,166 of a total inventory of \$1,832,883 remain to be replaced.

MAINTENANCE DIVISION

During FY 1970 the Production Control and Administrative Services Branch reorganized into three separate branches for better efficiency and commodity control as follows: Production Control Branch, Administrative Services and Activity Supply Branch, and Supply and Storage Branch. Effective 6 June 1970, the responsibility for the Maintenance Supply Repair Parts Account and the personnel of the Supply and Storage Branch were transferred from this division to Supply and Services Division for further consolidation of supply activities. The responsibility for the equipment maintenance function at Stewart Field was assigned this division, and a branch consisting of a foreman and four mechanics was organized to handle the maintenance in a shop at Stewart Field.

SUPPLY & SERVICES DIVISION

Requirements for furniture and equipment to furnish the new academic building and new cadet barracks complex were developed by this division in coordination with the activities programmed to occupy each area. Necessary funds have been requested of Department of the Army.

The closing of the Stewart Air Force Base Commissary on 29 November 1969 resulted in a significant sales increase at the USMA Commissary. Sales quickly rose 62% above previously normal levels. Staffing increases were obtained and somewhat relieved congestion and stockage problems. Final resolution should come with the store expansion planned for 1971.

COMMUNICATIONS-ELECTRONICS DIVISION

This division effected a significant increase in electronic communications activities during the past fiscal year. In addition to assuming responsibility

for Stewart Field communications on 13 January 1970, the division installed and put into operation two hundred telephone sets in the Stony Lonesome housing area. An improved sound system was installed at Michie Stadium to support football games. Installation of the cable to furnish cable television reception to all quarters at the north end of post was completed on 16 January 1970, and the closed-circuit television system to support academics was expanded.

FAMILY HOUSING DIVISION

The housing inventory more than doubled with the addition of 591 units of family quarters and 183 transient quarters at Stewart Field and with the construction of two hundred new units of family housing at Stony Lonesome.

Two major rehabilitation projects were awarded in June 1970 - a project to increase the exterior electrical capacity to fifty-six units of family quarters (500 series) with total project cost of \$52,300 and a project to modernize forty units of family quarters with a total project cost of \$508,332.

TRANSPORTATION DIVISION

A 65-foot ferry boat was acquired to transport cadets and guests to and from Constitution Island increasing the area accessible for recreation for the Cadets. The division also established a motor pool at Stewart Field which proved to be more efficient than direct support from West Point.

TREASURER

Meals served in the Cadet Mess increased by 11% in FY 70. Part of the increase resulted from the fact that Saturday and Sunday brunch meals were added to the existing list of meals to which cadets can bring guests. Efficiency was maintained by reorganizing the Cadet Mess administrative staff and establishing an improved method for serving food and beverages.

Cadet food allowances were increased as follows:

\$1.44 from 1 July 1969 thru 30 November 1969
\$1.52 from 1 December 1969 thru 30 April 1970
\$1.60 beginning 1 May 1970.

Cadet Restaurant sales for the six activities totalled \$333,062, an increase of 14.5% over FY 1969. The first phase of renovation in Grant Hall Boodler and the Confectionary Boodlers was accomplished. This involved primarily the installation of new food preparation equipment.

The US Hotel Thayer was affected by recession and tight money during FY 1970. The occupancy rate was 62% as compared with 64% in 1969; however, gross revenue was \$1,678,000, an increase of \$55,000 over FY 69. An emergency lighting system was installed throughout the entire hotel and plans for expanding the recreational facilities are being developed. Color television sets were purchased to replace unrepairable black and white sets. This program will be continued until all of the existing black and white sets are replaced with color.

SURGEON DIVISION

The health of the Command was excellent during FY 70. A dispensary was opened at Stewart Field on 22 December 1969 as an extension of the medical operation at USMA. New Cadet Barracks (NCB) 1969 was medically the most successful and encouraging in the recent history of the Military Academy. A lowered incidence of sick call visits (down 15%), admissions to hospital (down 63%), and selected medical conditions, brace palsy, heat injury, hyperventilation and other emotional problems showed marked reductions in comparison with the experience of NCB 1968. Also, there were fewer foot problems (reduction of 54.8%), and during Fourth Class Bivouac the sick call rate for foot conditions was 2.9% as compared to 9.9% for NCB 1967 and 1968. Another favorable sign is that fewer cadets were seen because of neuropsychiatric conditions; there was a 68% reduction in new cadets hospitalized, and an increase of 96% in new cadets seen as outpatients. There was a 114% increase in the number of new cadets recommended for return to duty because of neuropsychiatric conditions, and a 47% decrease in the number recommended to resign.

The intensive care unit was relocated and combined with the surgical intensive care and recovery room to improve care of seriously ill patients.

Acquisition of new items of equipment also enhanced the care of very sick patients and improved the functioning of the coronary care unit.

The hospital is providing a residency training program for officers enrolled in the Health Care Administration Program. Each year upon completion of instruction at Fort Sam Houston, Texas, officers enrolled in this program are required to complete one year residency training before being granted a Master's Degree in Health Care Administration. The Executive Officer of the Hospital has been designated as Preceptor for residents in this program. In addition, the ongoing study of infectious mononucleosis in members of the Class of 1973 proceeded in collaboration with the Department of Preventive Medicine, Yale University School of Medicine.

There was a change in orientation of the Medical Research Project which became primarily concerned with a study of cadet injuries.

DENTAL DIVISION

Facilities were expanded to provide increased X-ray, laboratory and patient care areas. Major items of equipment were purchased to improve patient care and clinic operation. Fifty percent of the patients seen were from the Corps of Cadets, while 37% were active duty or retired personnel and 13% were dependents.

MANPOWER

GENERAL

The Academy has carefully avoided any premature build-up of staff personnel to ensure against an imbalance with instructional load or administrative and logistical support of the Corps as it grows through the Expansion Program.

As USMA approaches the end of its eight years of expanding facilities and Corps, staffing was below anticipated requirements, and staffing at full expansion is predicted to be less than forecast in the original Academy Expansion Plan.

West Point escaped recent manpower cuts, but staffing increases programmed for FY 1970 to keep pace with the expansion of the Corps and attendant facilities were reduced from 148 to fifteen civilians, from sixty-five to forty-six officers, and from fifty-eight to fourteen enlisted men. The impact of the reduced program for permanent civilian employees was lessened somewhat when Department of the Army authorized hiring temporary help during FY 1970. Every effort was made to ensure that operations directly related to cadet training and instruction were not impaired.

Below is shown the status of personnel as it existed at the close of the fiscal year:

DISTRIBUTION OF USMA MANPOWER
BY MAJOR ACTIVITY DIRECTOR
AS OF 30 JUNE 1970

	TOTAL		OFFICER		ENLISTED		FULL-TIME PERMANENT CIVILIAN	
	DA AUTH	ACT	DA AUTH	ACT	DA AUTH	ACT	DA AUTH	ACT
MAD								
TOTAL	4294	4538	794	865	1002	1190	2498	2483
<u>Mission</u>	1101	1132	608	642	106	110	387	380
COMMANDANT	396	455	133	185	60	66	203	204
DEAN	705	677	475	457	46	44	184	176
<u>Support</u>	3193	3406	186	223	896	1080	2111	2103
DCSLOG*	2305	2337	106	114	430	462	1769	1761
DCSP&A**	796	977	77	105	464	618	255	254
COMPROLLER	92	92	3	4	2	0	87	88

* Includes 50th Engr Co and Detachments 1-4 USAH.

**Includes USMA Band, 2nd Aviation Det, 57th MP Co, and Detachment 5, Stewart Field.

CIVILIAN PERSONNEL MANAGEMENT

Recruitment and Placement

The closing of nearby Stewart Air Force Base created a surplus of several hundred civilian employees, most of whom had job placement rights under the Department of Defense Priority Placement System. Approximately two hundred were absorbed by the Academy. As a result of the closing, USMA assumed servicing of civilian personnel at ARADCOM and STRATCOM at Stewart and established 149 positions to support Army interests there.

The ongoing need for waiters and mess attendants continued during this past year. Intensive recruiting within the immediate area and in New York City helped to meet this need.

Employee Training and Development

A strong training policy, previously endorsed by the Training and Development Committee, was issued, and immediately thereafter a substantial number of training coordinators were designated at divisional level. The coordinators have been aiding management to determine training needs and to report accomplishments. A summary of training results is shown below.

CIVILIAN PERSONNEL TRAINING SUMMARY

<u>TRAINING CATEGORY</u>	<u>NO. EMPLOYEES</u>	<u>MANHOURS</u>
Technical	253	4159
Executive	10	249
Middle Manager	16	444
Supervisor	445	2829
Familiarization*	284	532

*General, rather than job-related, e.g., Medical Self-Help

Thirty-six supervisors completed a course in basic supervision, and twenty, including eleven supervisors and managers, were given on-site training in Source Data Automation. In addition, sixty-six individuals whose duties require some knowledge of automatic data processing methods were given orientation training in this subject.

Employee Relations

In keeping with the Department of the Army policy of furnishing staff guidance and assistance directly to line officials in the development and administration of the civilian personnel program, more than 1200 visits were made with managers and supervisors. The Academy revised its Equal Opportunity Program to conform with changes in the Federal Program. Fourteen EEO counselors were appointed to handle employee complaints at the initial stage.

Union-Management Relations

Employees challenged the local Chapter of the American Federation of Government Employees for the right to be the exclusive representative of a

unit of Wage Board employees. Notwithstanding, final decision on the challenge has not been made; motions of AFGE to dismiss it have been denied by the Secretary of Labor for Labor-Management Relations.

POST ACTIVITIES

ADJUTANT GENERAL DIVISION

Automated Data Processing

In addition to providing normal installation support, the Adjutant General has emphasized improving the Division's capability to assist those activities directly involved with selecting, instructing, and training cadets. The Division redesigned the Director of Admission's cadet candidate processing system to establish a potential candidate evaluation process and to accommodate a candidate pool of over 8800, an increase of sixty-six percent over FY 1969.

In addition, two new automatic data processing systems were designed and implemented to support the Commandant's efforts. These were the New Cadet Barracks Peer Rating System and the Leadership and Military Performance Evaluation System for Second, Third, and Fourth Classmen.

Automated data processing applications in the areas of financial management and installation support were overhauled to integrate services to Stewart Field into the system. The expanded applications have reinforced previously established requirements to update and modernize equipment. The process for selecting third-generation data processing equipment, approved in FY 1969, was delayed, and final selection is not expected until early in FY 1971. Installation will probably occur during the last quarter of FY 1971.

Field Printing Activities

The Printing Branch achieved a record output during the past year. Because of the Academy Expansion Program, printing requests challenged plant capacity, but no plant expansion was possible in view of restrictions imposed by the Joint Committee on Printing.

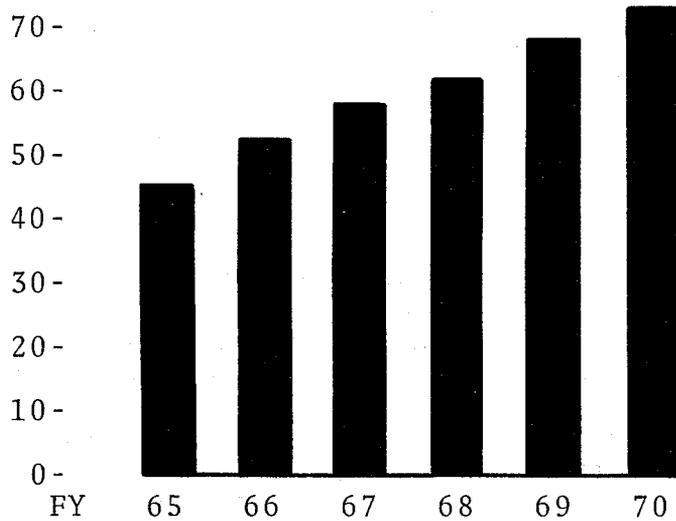
Plant operations and efficiency were improved with the acquisition of a new typing machine and a Vandercook Proof Press. Installation of a humidifier system in the plant helped to condition paper stock which decreased waste and improved operation of machines in the pressroom and bindery.

Comparative studies of Printing Plant productivity are shown below:

	<u>FY 1969</u>	<u>FY 1970</u>	<u>% of Increase</u>
Jobs Processed	4,515	*6,687	48.1%
Units Produced	59,716,747	65,343,721	9.4%
Operating Cost	\$311,049	\$346,466	11.4%

*Includes 400 jobs in process throughout plant on 30 June 1970.

MILLION



AG FIELD PRINTING PLANT UNITS PRODUCED

Army Community Services Program

The Army Community Services staff, with volunteer help from distaff members of the post, continued to assist approximately 450 unaccompanied service wives and widows who reside in the local area. The first Volunteer Orientation Training Program for Stewart Field was held in February and March 1970. Eighty-six waiting wives were residing at Stewart on 26 June 1970 and seventy more were anticipated in the near future. Assistance was given in sixty-seven cases under the Army Emergency Relief Program. Personal notification was made and assistance given in forty-eight Survivor Assistance cases.

ALUMNI ACTIVITIES

The Alumni Secretary continued to maintain historical records, now numbering approximately 29,500, concerning USMA graduates. Besides maintaining files on some 20,000 Association members, the Secretary keeps records current about non-member graduates and former cadets. Subscriptions to Assembly, the alumni magazine, and the Register of Graduates numbered over 14,700.

In addition to its administrative functions, the Association planned, implemented and supported a myriad of alumni functions. Foremost among these were the completion and dedication of the MacArthur Memorial, 1969 Homecoming activities, award of the 1970 Thayer Award, Founders Day for 1970, and reunions held during recent June Week activities.

BOOK DEPARTMENT

The USMA Bookstore increased sales and profits last year. Gross sales of over \$130,000 as compared to \$109,000 for FY 1969 netted over \$3,000. Total net profit for the Fiscal Year was \$7,676. Renovation was started to increase walk-in and browsing room, and plans were started for eventual expansion to keep pace with the increase in the Corps of Cadets. Liaison was established with the academic departments to improve the Bookstore's position as a useful complement to the academic curriculum.

DEPENDENT SCHOOLS

General

The past academic year began with an enrollment of 947 pupils. By the end of the year, 110 pupils had been transferred, and 117 new entrants recorded. Cumulative enrollment for the year amounted to 1,064 with the highest membership on any one day attaining 1,002. Seven exceptional children attended special schools. On 28 May, sixty eighth graders were graduated, and seventeen pupils in kindergarten through the eighth grade were retained in grade.

Staff Development

Fifty-four professional personnel, among whom were a full-time school psychologist and a nurse, serviced the school. Part-time participation of a trained speech correction teacher was of significant benefit, but the recognized need for both a reading specialist and a curriculum coordinator went unfulfilled.

Eight professional staff members continued their improvement programs by attending additional graduate study. Twenty-four members of the faculty and staff attended eighteen conferences in the areas of reading science, French, health, library, audio-visual methods, school construction and administration, industrial and fine arts, psychology, learning disabilities, and testing problems. To improve further the technical skills of the teachers, a new multi-media program was purchased for in-service training to begin during the coming academic year.

Diagnostic Testing

The Lorge Thorndike Test of Mental Ability was administered to 563 pupils in grades three through eight with the following results:

<u>Category</u>	<u>Range</u>	<u>% of Total Population</u>	<u>% of WPES Population</u>
Genius Level	140+	0.01	2.49
Very Superior	130-139	0.13	15.48
Superior	120-129	2.14	25.98
Bright Normal	110-119	13.59	27.76
Normal	90-109	68.26	25.27
Dull Normal	80-89	13.59	2.49
Borderline Defective	70-79	2.14	0.53
Defective	60-69	0.13	0.00
Very Defective	50-59	0.01	0.00

The Iowa Test of Basic Skills was administered to 562 pupils of grades three through eight in November 1969. The test includes skills testing in vocabulary, reading, language, work study, and arithmetic. West Point averages with percentile ranks were reported by the Iowa Machine Scoring Center as follows:

<u>Grade</u>	<u>Composite Grade Equivalent</u>	<u>Percentile</u>
Third	3.9	98
Fourth	5.0	97
Fifth	6.1	96
Sixth	7.3	98
Seventh	8.4	97
Eighth	9.8	99

The West Point Elementary School far exceeded the national averages when results were compared with those of pupils in 160 school systems from forty-six states.

The Metropolitan Readiness Test was administered to 153 kindergarten pupils in May 1970 with these results:

	<u>Number</u>	<u>Per Cent</u>
Superior	57	37
High Normal	53	35
Average	35	23
Low Normal	8	5

MUSEUM

The West Point Museum activities continued to expand, improve and diversify. The Museum continued its support of the Departments of History and Social Sciences by displaying a wide variety of artifacts highlighting the development of arms and tactics throughout history and the Museum staff again gave lecture series for ROTC students, Fourth Class cadets, and for elective courses.

The Museum recently acquired a number of fine 18th and 19th Century antiques to add to the "Thayer Office, Quarters 100" restoration. Other holdings, primarily weapons, prints and books were added to the Museum's collection, primarily to assist with cadet instruction.

In spite of considerable turmoil created by construction outside of the Museum and significant renovation within, visitor attendance continued at a high level. During the past year, a total of 323,255 people viewed the facilities holdings.

OFFICE OF INFORMATION

The Information Office retained a structure of four divisions: Community Relations (CRD), News Media (NMD), Special Projects (SPD) and Sports Information (SID). Highlights of activities reflecting the principal functions of each division are discussed below.

Community Relations Division

The Community Relations Division supervised and coordinated details relative to the Orientation Program for Parents of the Class of 1973 held on 1 July 1969 and made preliminary plans for a similar program for the parents of the Class of 1974 to be held on 1 July 1970. The division also supervised the overall USMA Community Relations Program including liaison with local area business and civic officials, operation of the USMA Speakers Bureau, and orientation visits to USMA and/or Camp Buckner by local area officials.

Details for unofficial visits as well were coordinated. The Division prepared itineraries, issued bus permits, and prepared and disseminated information packets for prospective visitors. The Visitors' Information Center was rehabilitated and subsequently operated from 15 April to 15 November in 1969 and had been in operation since 15 April 1970 at the end of this reporting period.

Below is a brief statistical summary of the Division's major activities:

Bus Permits Issued.....	2,627
Informational Packets Sent Out.....	5,160
Visitors' Queries Answered by Letters.....	66
Tours Coordinated (quasi-official visits/ceremonies).....	76
Speaking Engagements Coordinated.....	46
Visitors Served by Visitors' Information Center Personnel.... (15 Apr-15 Nov 69; 15 Apr-30 Jun 70)	176,021

News Media Division

In addition to preparing and publishing the Pointer View, the Post weekly newspaper, the News Media Division prepared and disseminated editorial and pictorial publicity about the USMA Expansion Program, material in support of the Academy Admissions Program, and a variety of releases, including captioned photos and magazine articles, concerning the history and mission of the Military Academy. News releases were distributed throughout the year on such activities as visits of educators, the appointment of USMA Congressional district representatives, Camp Buckner training, New Cadet Barracks, Founders Day, Plebe-Parent Weekend, the Thayer Award, and June Week activities including Vice President Agnew's commencement address.

Information about individual achievements of military personnel, including cadets, as well as those of civilians working at West Point was disseminated either directly from this office or through the Army Hometown News Center.

The Division's statistical summary depicts the scope and volume of its activities.

Major News Releases (nonsports).....	7,457
Media Serviced.....	6,487
Pictorial Releases.....	3,417
Hometown Releases from USMA IO.....	2,909
Hometown Releases (News) through USAHTNC.....	11,538
Hometown Releases (Pictorial) through USAHTNC.....	4,623
Replies to Press Queries.....	235
Press Representatives Assisted.....	101
POINTER VIEW (Post newspaper) published and distributed..... (41 editions 4 pages weekly))	4,000

Special Projects Division

The Special Projects Division supervised all coverage by representatives of local, regional, and national motion picture, radio, and television media and of general (nonsports) special events and activities concerning USMA and the Corps of Cadets. Arrangements were made with MARKAD International for the production of a Department of the Army approved motion picture about the Military Academy under the supervision of SPD personnel. Division personnel also assisted representatives of the Department of the Army "Big Picture" television series during the filming of USMA footage for inclusion in a forthcoming "Big Picture" production entitled YOUNG AMERICAN LEADERS.

SPD staff members produced several motion pictures including 4000 feet on the training at New Cadet Barracks and Camp Buckner, recorded a radio program titled "Christmas 1969 at USMA" for the Armed Forces Radio Service and coordinated the participation of Academy personnel in civic or patriotic events held in civilian communities.

Below is a statistical summary for the Division activities:

Radio/Television Projects Supervised.....	9
Motion Picture Projects Supervised.....	14
Educator Visits (radio taped interviews prepared).....	7
Educator Visits (assistance rendered TV media).....	9
USMA Band/Troop Appearances Coordinated.....	42
Speeches Composed for the USMA Superintendent.....	30
Holiday Messages Composed for the Superintendent.....	7

Sports Information Division

The Sports Information Director participated in all conferences dealing with coverage rights for Army varsity sports events at West Point and away. The Sports Information Division prepared material for the 1970 season football programs, produced promotional tapes (using remarks by the Athletic Director, Head Coach, and Team Captain), supervised production of the 1969 Army Football Highlights film, supervised preparation of the 1969 Army Football Parade booklet together with brochures on all Army sports, and published periodic issues of The Army Sportsletter.

The following is a tabular summary of the Division's principal activities:

Major News Releases (Sports).....	413
Media Services.....(aprx) (ea).....	360
Athletic Brochures Prepared.....	17
"Army Sportsletters" Prepared.....	13
Speaking Engagements or Public Appearances by SID and Asst SID's.	31
Sports Press Representatives Assisted.....	584
Individual Game Programs Prepared.....	244
Radio Tapes on Army Sports Events.....	36
Phoned News Stories on Army Sports Events.....	27

POST CHAPLAIN DIVISION

The Post Chaplain Division assumed the responsibility for providing religious activities for military personnel and their dependents at Stewart Field. One Protestant and one Catholic Chaplain, as well as two enlisted assistants, were assigned for this purpose.

The extent of the Division's program was reflected by an increased number of worship service opportunities classes. There was a twenty percent increase in worship service opportunities and a twenty-five percent increase in religious education classes offered at West Point including the additional services and programs at Stewart Field. This office produced a special program on problems of drug abuse which was presented by a team which works with addicts from Teen Challenge in New York City.

PROVOST MARSHAL DIVISION

The Provost Marshal lost the services of Rhode Island's 115th Military Police Company upon its release from Federal Service. While this loss was not serious, it did strain the resources of the Division, especially when the Academy assumed responsibilities for servicing Stewart Field. An additional

officer and thirty-four enlisted personnel were authorized for Stewart, but pending their arrival, the Academy detailed one officer and twenty-four enlisted men to that facility.

In addition to supporting a number of major events at West Point, including football games, the Military Police gave special attention to providing security for Vice President Agnew during his Graduation Day visit. In this regard, cooperation among Federal, state, local, and installation law enforcement agencies was excellent. This project, along with other June Week activities, was enhanced by augmentation from 519th Military Police Battalion stationed at Fort Meade, Maryland.

SPECIAL SERVICES DIVISION

Expanding and improving many Special Services activities stimulated increased participation in nearly every area of interest, both winter and summer. The Service Club hours of operation were increased from 2912 in FY 1969 to 4004 this fiscal period, and it was completely refurnished, to include installation of a stereo sound system. The Library expanded its holdings to include an extensive collection of reference materials about colleges and universities and about recreational facilities and points of interest nationwide.

Significant improvements were made to a number of outdoor recreation sites on the reservation. Major improvements were made at the Victor Constant Ski Slope to provide better, safer services to skiers. At the Round Pond Recreation Area, forty-nine additional picnic sites were constructed, and the Boy Scout camping area was enlarged to accommodate one-hundred scouts simultaneously.

In addition to the above, Special Services emphasized improving especially youth-oriented activities during the past year. The Teen-age Club was completely renovated to include installation of a modern snack bar, an inclosed patio, new game tables, carpeting, air conditioning, and construction of a new Youth Activities Office. As a result, Teen-age Club membership more than doubled during FY 1970. Youth Activities were expanded to include football, cageball, instructional swimming, cheerleader training, baseball training program for six and seven year olds, and a charm school for girls eleven years and older. Introduction of these programs resulted in an increase of youth participation of one-hundred percent over FY 1969.

Attendance at Special Services sponsored activities during FY 1970 amounted to 615,961 as compared to 586,795 in FY 1969, or an increase of 19.8 percent. Specific attendance figures are:

Sports	188,534
Theater	164,126
Youth	91,464
Service Club	72,763
Round Pond	37,816
Library	35,398
Stewart Field (as of 1 Jan 70)	13,249
Crafts Shop	12,611

TROOP SUPPORT

The 1st Battalion 1st Infantry is assigned to USMA and has the mission of serving as the command element for all enlisted personnel assigned or attached to USMA and supporting the Academy's operation, maintenance, and administration.

The Battalion experienced a seven percent increase in authorized manpower attributable to fifty-one spaces added to support operations at Stewart Field. Battalion strength increased from twenty-nine officers and 934 enlisted men to thirty-one officers and 999 enlisted men.

The 115th Military Police Company, a mobilized Army National Guard Unit from First Army, was attached to USMA and placed under the command of the 1st Battalion 1st Infantry. Mobilized 3 May 1968, this unit was demobilized on 12 December 1969. During the 1st Quarter FY 70, it was administered an Army Training Test by the Battalion.

In addition to providing military justice, administrative, and messing support to approximately 1500 personnel attached in support of the training of the United States Corps of Cadets, the Battalion also provided 7354 enlisted man days to requesting agencies, an increase of 523 over FY 1969. Approximately 3500 man hours of troop labor were expended for self-help projects during FY 1970. During the period December through March, the Battalion hosted four cadet candidate testing sessions and provided administrative, billeting, and messing facilities for 154 candidates.

Battalion enlisted personnel continued to take advantage of the several individual education programs available to them. Of the programs offered, 209 individuals participated in the Tuition Assistance Off-Duty Program, ninety enrolled in the High School and College General Education Development Program, and 114 registered with the Education Center for correspondence courses.

WEST POINT FUND

Formerly called the West Point Superintendent's Fund, the West Point Fund was established and recently reorganized to administer the gifts and memorials program at USMA. The Office of Assistant to the Superintendent now supervises the Fund, establishes its policies and the procedures governing its use, implements Fund programs, and completes projects financed by donations.

Basically directed toward West Point alumni, an intensive program of soliciting voluntary contributions was launched during the past year. Relying heavily on a well-planned and coordinated public relations effort and wide distribution of printed information, the Fund's promotional effort resulted in an increase in contributions this year of 369 percent over FY 1969. Plans have been prepared to establish a solid base of alumni support which will permit expanding solicitation efforts to a broader group of West Point supporters and ultimately for the first time, to corporations and philanthropic foundations.

The West Point Fund has contributed \$1.02 million to support various Academy projects since its organization in 1961. Twenty-one percent of this total was made during the past year, and emphasis was given to directly supporting cadet activities. During the past year total disbursements amounted to \$214,421.62 against an income of \$503,806.00. Annual operating expenses were \$34,815.04, and the cost of raising each dollar came to only 6.9 cents -- a noteworthy average in the fund raising field. This cost figure is predicted to be reduced even further in the coming year.

Previously established priorities which keep cadet activities preeminent among West Point Fund projects were reaffirmed during this past year, and plans are now under way to support the proposed five-year development program of Constitution Island at a cost of approximately \$1.6 million. An analysis of this year's disbursements is shown below.

WEST POINT FUND DISBURSEMENTS
FY 1970

	\$58,417.92
Cadet Academic Activities	
	\$59,588.00
Cadet Extracurricular Activities	
	\$59,184.80
Cadet Activities - Facilities	
	\$37,230.90
Other Projects	



CONCLUSION

On 6 June 1970, 749 of the nation's most qualified young leaders graduated from the United States Military Academy. By preparing these men to accept their roles of extraordinary responsibility, the Academy took justifiable pride in the part that it played of developing the potential of those who successfully completed the arduous, intensive training program demanded of a cadet at West Point.

With continued support from Department of the Army, USMA will rise to meet the nation's needs in the future as it has in the past. The Expansion Program, now nearing completion, ensures not only a quantitative, but also a qualitative, increase in Regular Army officers whose life's goal is the profession of arms. The increase in size of the physical plant was a considered result of far-reaching studies at the highest Army echelons, and both the academic and military training programs are constantly updated, expanded, and refined to complement the total capabilities of the Academy and the requirements of the Army.

Along with the rest of the military community, the Academy continues to be closely -- though not always carefully -- scrutinized by a variety of critical groups. West Point can satisfy the most discriminating critic who takes the trouble to evaluate without prejudice the cadet, the Academy's mission, and the final product - the graduate. Officers, both retired and active, have distinguished themselves throughout the history of the United States. This record is its own recommendation. In addition, the many distinguished visitors to the Academy (Appendix Y) have praised what they saw during their visits to West Point.

The foresight and imagination demonstrated by a progressive admissions program has insured that entering cadets are among the best students in the country. The academic and military training they then receive is designed and constantly re-evaluated to allow complete development of their potential. A wide variety of extra-curricular activities has offered cadets more frequent association with their contemporaries at other colleges, and one result has been that cadets are confident that the USMA curriculum has equipped them to respond in an informed and articulate manner.

Whatever the vicissitudes of the next few years, the staff and faculty of West Point will continue to develop skilled and dedicated graduates - officers who are able to refine and amplify those skills intelligently and who realize the need to commit themselves to an Army career. During the past year, the emphasis has continued to be placed on proven, traditionally viable values - DUTY, HONOR, COUNTRY.

ACADEMIC CALENDAR
(AY 1969 - 1970)

1969

1 July	Tuesday	New Fourth Class enters (Class of 1973)
4 July	Friday	Independence Day (Duties suspended)
24 August	Sunday	Beginning of Reorganization Week
30 August	Saturday	End of Reorganization Week
1 September	Monday	Labor Day (Duties suspended)
2 September	Tuesday	First Term begins
4 October - 6 October	Friday - Sunday	Homecoming Weekend
11 November	Tuesday	Veterans Day (Classes suspended)
27 November	Thursday	Thanksgiving Day (Classes suspended)
20 December	Saturday	Christmas leave begins at 1200 hours

1970

4 January	Sunday	Christmas leave ends at 1730 hours
17 January	Saturday	First Academic Term ends at 1150 hours
19 January	Monday	Second Academic Term begins
23 February	Monday	Washington's Birthday (Classes suspended)
19 March	Thursday	Spring leave for three upper classes begins at 1515 hours
23 March	Monday	Spring leave for upper classes ends at 1800 hours
23 May	Saturday	Second Academic Term ends for First Class at 1515 hours
28 May	Thursday	Second Academic Term ends for under classes at 1515 hours
30 May	Saturday	Memorial Day (Duties suspended)
31 May	Sunday	Baccalaureate Sunday
3 June	Wednesday	Graduation Day, Class of 1970
1 July	Wednesday	Class of 1974 enters

THE ACADEMIC PROGRAM
(AY 1969 - 1970)

4th Class (Freshman) Year	Credit Hours	2nd Class (Junior) Year	Credit Hours
Mathematics	15	Mechanics	8
Engineering Fundamentals	5	Electricity	8
Environment	5	Physics	4
English	5	Social Sciences	5
Foreign Language	<u>5</u>	Law	5
	35	Electives (3)	<u>7.5</u>
			37.5

3rd Class (Sophomore) Year	1st Class (Senior) Year
Mathematics	Engineering
Chemistry	History of the Military Art
Physics	Social Sciences
Foreign Language	Electives (4)
History, Europe and American	English
English	Leadership*
Psychology*	
Electives (1)	
4	8
8	8
8	8
8	10
5	2.5
2.5	<u>2.5</u>
2.5	39.0
<u>2.5</u>	
40.5	

*Conducted by the Office of Military Psychology and Leadership

PRESCRIBED COURSES IN THE ACADEMIC PROGRAM
(AY 1969 - 1970)

Standard Courses

Advanced/Accelerated Courses

4th Class (Freshman) Year

Engineering Fundamentals.....	Advanced Engineering Fundamentals
Communications Skills.....	American Thought and Literature
Foreign Language (Chinese,.....	Accelerated or Advanced French,
French, German, Spanish,	German, or Spanish; Advanced
Russian and Portuguese)	Russian
Environment.....	Advanced Environment
Calculus and Analysis;.....	Advanced Programs I, II, or III
Linear Algebra	

3rd Class (Sophomore) Year

General Chemistry.....	Advanced General Chemistry
Comparative Literature.....	None
Foreign Language.....	Accelerated or Advanced French,
(See above)	German, or Spanish; Advanced
	Russian
History of Europe and.....	None
America	
Calculus and Differential.....	Advanced Programs I, II, or III
Equations	
Physics I and II.....	Advanced Physics I and II
General Psychology.....	Advanced Psychology

PRESCRIBED COURSES IN THE ACADEMIC PROGRAM - Cont

Standard Courses

Advanced/Accelerated Courses

2nd Class (Junior) Year

Physics III.....	Advanced Physics III
United States Government.....	None
Economic Principles and.....	None
Problems	
Electric Circuits and.....	None
Electronics	
Legal Philosophy,.....	None
Constitutional Law,	
Military Law	
Engineering Mechanics.....	Advanced Engineering Mechanics
Thermodynamics.....	Advanced Thermodynamics

1st Class (Senior) Year

Engineering (Civil,.....	Honors Course (Civil, Weapons
Electrical, General,	Systems Engineering)
Nuclear, or Weapons	
Systems)	
Comparative Political.....	None
Systems	
International Relations.....	None
History of the Military.....	None
Art	
Literature and Advanced.....	None
Exposition	

ELECTIVE COURSES
(AY 1969 - 1970)

The Elective Program offers the cadet a number of courses in each of the four broad areas which have a substantial basis in the core curriculum. These are the Basic Sciences, the Applied Sciences and Engineering, the Humanities, and National Security and Public Affairs. Within each of these areas, the elective courses have been further categorized into associated fields. The cadet may choose his electives from the complete roster of elective courses, from the courses in an area, or from within a single field.

The areas and their associated fields are as follows:

Applied Sciences and Engineering

Civil Engineering
Electrical Engineering
Engineering Mechanics
Management Science
Nuclear Engineering
Weapon Systems Engineering

Humanities

American Studies
Literature
Chinese
French
German
Portuguese
Russian
Spanish

Basic Science

Chemistry
Mathematics
Physics

National Security and Public
Affairs

Economics
History
International Affairs
Military Studies
Political Science

ELECTIVE COURSES - Cont

BASIC SCIENCES

Organic Chemistry I
Organic Chemistry II
Physical Chemistry I
Physical Chemistry II
Human Biology I
Human Biology II
Chemistry Research Project
*Physical Geology
*Individual Research Project (Environment)
*Vector Calculus and Differential Equations
*Vector Calculus and Complex Analysis
*Complex Analysis and Differential Equations
Linear Programming
Abstract Algebra
Vector Calculus¹
Differential Equations (Intermediate)
Complex Analysis²
Numerical Analysis with Digital Computation
Real Variable Theory
Introduction to Theoretical Physics I
Introduction to Theoretical Physics II
*Solid State Physics
Quantum Mechanics
Experimental Physics
Nuclear Physics
Special Topics in Physics

*Added in Academic Year 1969-1970

1. Former title: Advanced Calculus I
2. Former title: Advanced Calculus II

ELECTIVE COURSES - Cont

APPLIED SCIENCE AND ENGINEERING¹

Soil Mechanics
Design of Concrete Structures
Advanced Structural Analysis
Individual Engineering Project
Computer Science Fundamentals
*Individual Computer Science Projects
Principles of Surveying
Space Sciences
Electromechanical Energy Conversion
Electromagnetic Fields
Digital Computers
Communication Systems²
Solid State Electronics
*Advanced Topics in Electrical Engineering
Mechanics of Materials
Gas Dynamics
Heat, Mass and Momentum Transfer
Space Mechanics
*Aerospace Structures
Continuum Mechanics
Mechanical Vibrations
*Introduction to Applied Aerodynamics
*Individual Mechanics Project
Management Engineering
Automotive Engineering
Individual Ordnance Project
Engineering Materials
Operations Research
Nuclear Reactor Theory

*Added in Academic Year 1969-1970

1. Electronic Circuits and Automatic Control Systems redesignated as standard courses in AY 1969-1970.
2. Former title: Information Transmission

ELECTIVE COURSES - Cont

HUMANITIES

Introduction to Music
Introduction to Fine Arts
The Novel
Shakespeare
Contemporary Literature
American Literature of the 19th Century
*Seminar in Major British Authors
*Seminar in Major American Authors
English Literature from the Beginning to 1660
English Literature from 1660 to the Present
Expositors of 18th and 19th Century American Thought
Social Criticism in 20th Century American Prose
Chinese Language through Readings in History
and Civilization
Military Readings in Chinese
*Contemporary Chinese Writings
*Readings on Chinese Culture
French Language through Literature
Military and Scientific Readings in French
Civilization and Literature of France
Contemporary France
Survey of French Literature
Modern French Literature
Directed Studies in French I
Directed Studies in French II
German Language through Literature
Military and Scientific Readings in German
History of German Civilization
Contemporary Germany
Survey of German Literature
Modern German Literature
*Directed Studies in German I
*Directed Studies in German II
Portuguese Language through Literature
Survey of Brazilian Literature
Directed Studies in Portuguese I
Directed Studies in Portuguese II

ELECTIVE COURSES - Cont

HUMANITIES - Cont

Russian Language through Literature I
Russian Language through Literature II
Military and Scientific Readings in Russian
Russian Civilization
*Soviet Russian Literature
*Soviet Expository Writings
Spanish Language through Literature²
*Military Readings in Spanish
Survey of Spanish-American Literature
Modern Spanish-American Literature
Survey of Spanish Literature
Modern Spanish Literature

*Added in Academic Year 1969-1970

1. Former Title: Modern American Criticism,
20th Century Attitudes reflected
in American Prose.
2. Spanish Language through Literature I and II,
combined into one course.

ELECTIVE COURSES - Cont

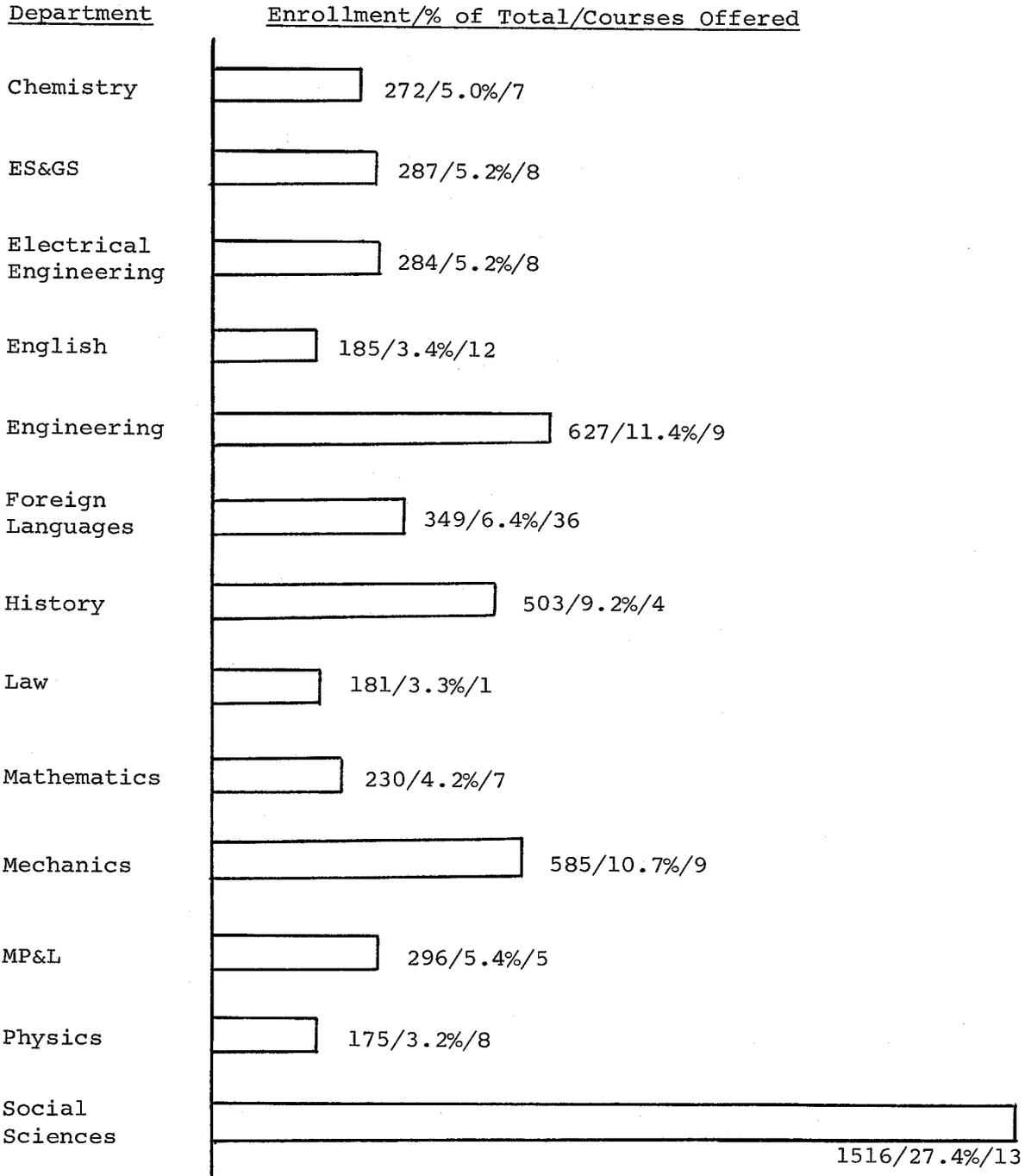
NATIONAL SECURITY & PUBLIC AFFAIRS

Geography of the USSR
Regional Geography of the U. S.
International Law
Revolutionary Warfare
Evolution of Modern Warfare
Twentieth Century Warfare
History of Russia
History of U.S. Foreign Relations
*Individual Military History Project
Middle Eastern Studies
Latin American Studies
Comparative Economic Systems
Political Philosophy
Seminar in Public Policy
Seminar in History
Economic Analysis: Theory and Defense
Application
National Security Seminar
*International Economics and Economic
Development
Problems of the Developing Nations
Seminar in Public Policy (Honors - Research)
Managerial Psychology
Sociology: Society and Culture
*Social Psychology
Military Institutions of the U.S.
Independent Behavioral Science Research

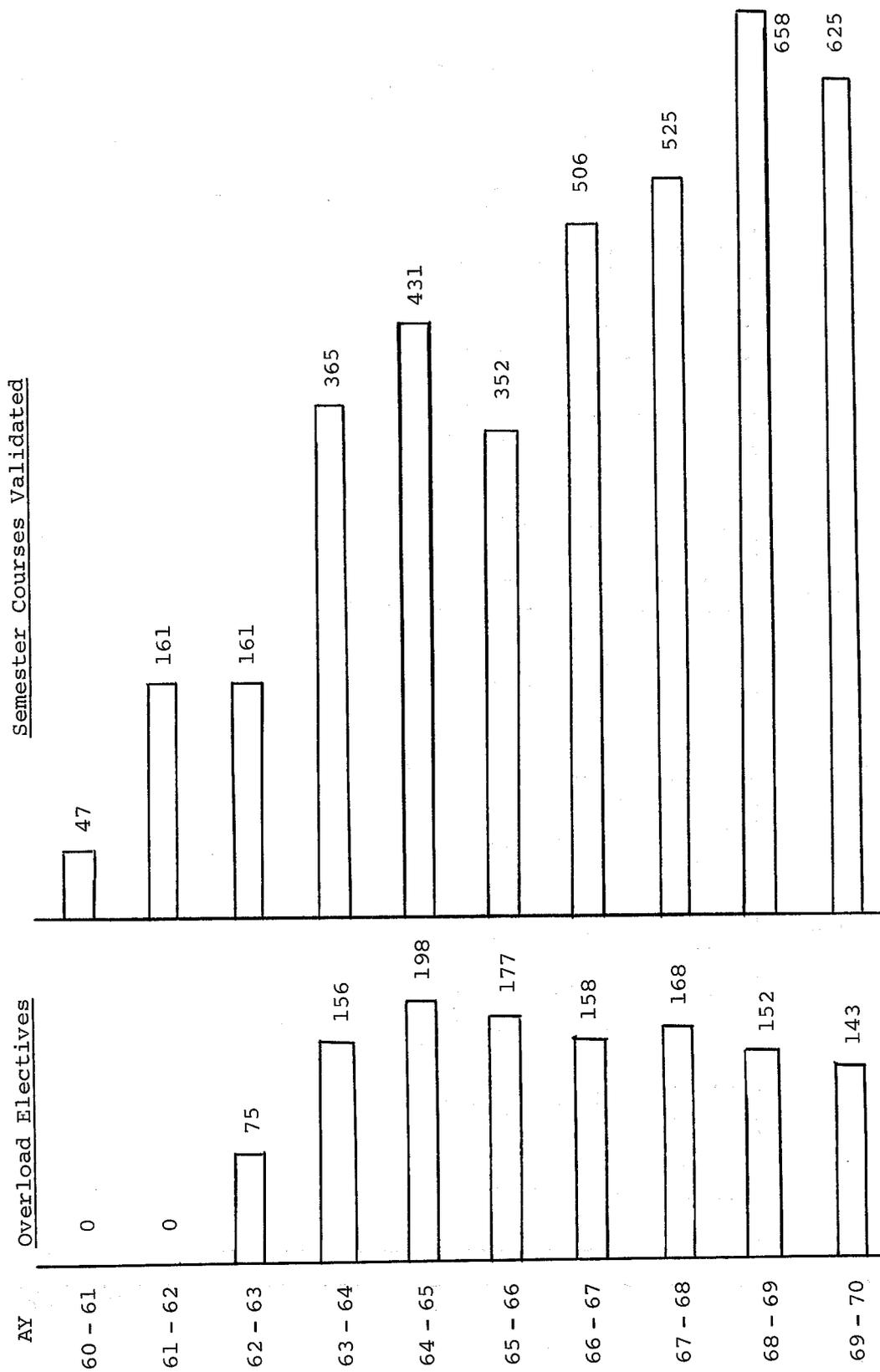
*Added in Academic Year 1969-1970

1. Former title: Economics of Defense
Management
2. Former title: American Military
Institutions and Manpower

ELECTIVE ENROLLMENTS
(AY 1969 - 1970)



OVERLOAD AND VALIDATION STATISTICS
 (AY 1960 - 1961 through AY 1969 - 1970)



TENURE FACULTY APPOINTMENTS
(AY 1969 - 1970)

Colonel Charles H. Schilling, Ph.D.
as Head of the Department of Engineering, in June 1969.

Colonel Robert W. Samz, Ph.D.
as Associate Professor of Engineering, in June 1969.

Colonel Thomas E. Griess, Ph.D.
as Head of the Department of History, in June 1969.

Lieutenant Colonel George W. Chancellor, M.S.
as Associate Professor of Chemistry, in April 1970.

Lieutenant Colonel Farrell G. Patrick, Ph.D.
as Associate Professor of Earth, Space & Graphic Sciences,
in April 1970.

Lieutenant Colonel Roy K. Flint, M.A.
as Associate Professor of History, in April 1970.

Major James S. Willis, Ph.D.
as Associate Professor of Physics, in June 1970.

Lieutenant Colonel William K. Stockdale, Ph.D.
as Associate Professor of Engineering, in June 1970.

Lieutenant Colonel George K. Osborn, Ph.D.
as Associate Professor of Social Sciences, in June 1970.

Lieutenant Colonel Lee D. Olvey, Ph.D.
as Professor of Social Sciences, in June 1970.

Lieutenant Colonel Wendell A. Childs, M.S.
as Professor of Physics, in June 1970.

GRADUATE SCHOOLS ATTENDED BY
FACULTY MEMBERS

Texas Agricultural & Mechanical
University
Alliance Française
Air Force Institute of Technology
American University
American University of Beirut
American University of England
Arizona State University
Brooklyn Law School
Brown University
Bonn University
Boston College
California Institute of Technology
Catholic University
College of William and Mary
Colorado State University
Columbia Teachers College
Columbia University
Cornell University
Dartmouth College
Davidson College
DePaul University
Drake University
Drexel Institute of Technology
Duke University
Duquesne University
Emory University
Fletcher School of Law and
Diplomacy
Florida State University
Fordham University
Free University of Berlin
Friedrich Wilhelm University
Georgetown University
George Washington University
Georgia Institute of Technology
Harvard University
Hofstra University
Imperial College, London
Indiana University
Iowa State University
John Carroll University

John Hopkins University
LaSalle College
Mainz University
Massachusetts Institute of
Technology
Michigan State University
Middlebury College
Missouri School of Mines and
Metallurgy
New Mexico State University
New York University
North Carolina State University
Northeastern University
Northwestern University
Ohio State University
Oxford University
Pennsylvania State University
Pontificia Universilade Catolica
Princeton University
Purdue University
Rensselaer Polytechnic Institute
Rice University
Rutgers University
San Francisco State University
Seton Hall University
South Dakota State University
St. John's University
Stanford University
State University of New York,
Buffalo
Stetson University
Stevens Institute of Technology
Syracuse University
Texas Western University
Tulane University
U.S. Naval Postgraduate School
Universidad de los Andes
Universität Köln
University of Alabama
University of Arizona
University of Brazil
University of Brussels

GRADUATE SCHOOLS - Cont

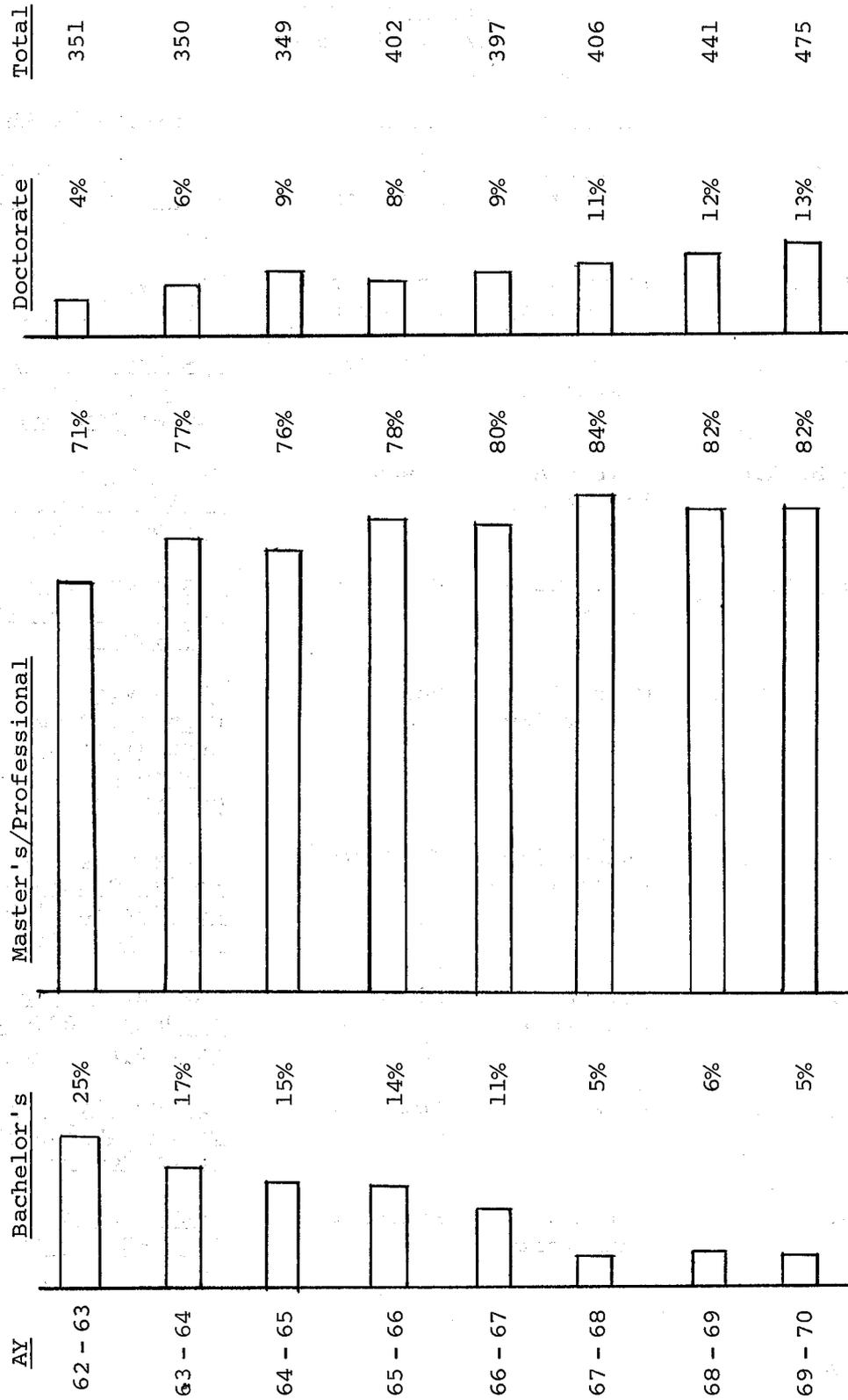
University of California, Berkeley	University of Missouri
University of California, Davis	University of Nebraska
University of California, Los Angeles	University of North Carolina
University of Ceará	University of Oregon
University of Chicago	University of Omaha
University of Coimbra, Portugal	University of Paris
University of Colorado	University of Pennsylvania
University of Connecticut	University of Pittsburgh
University of Denver	University of Scranton
University of Erlangen	University of Southern California
University of Florida	University of Tennessee
University of Freiburg	University of Texas
University of Hawaii	University of Toledo
University of Illinois	University of Virginia
University of Kansas	University of Washington
University of Kentucky	University of Wisconsin
University of Maryland	University of Wyoming
University of Massachusetts	Utah State University
University of Miami	Vanderbilt University
University of Michigan	Virginia Polytechnical Institute
University of Minnesota	Wake Forest University
	Washington State University
	Yale University

HIGHEST DEGREES EARNED
(AY 1969 - 1970)

Department	Bachelors				Masters				Doctorate				Total							
	P	AS	AT	T	P	AS	AT	T	P	AS	AT	T	P	AS	AT	T				
	Office of the Dean	0	0	0	1	1	2	8	7	18	0	2	1	0	3	1	4	22	8	9
Chemistry	0	0	0	0	0	1	9	10	20	1	1	1	1	4	2	10	24	11	11	24
ES&GS	0	0	0	0	2	5	19	27	53	0	1	2	0	3	2	6	21	27	56	56
Elec Engrg	0	0	0	0	0	1	6	8	15	1	2	0	0	3	1	3	6	8	18	18
Engineering	0	0	0	0	0	2	12	12	26	1	1	2	0	4	1	3	14	12	30	30
English	0	0	0	2	0	3	8	29	40	2	2	0	2	6	2	5	8	33	48	48
Foreign Languages	0	0	7	8	15	0	3	22	16	2	0	1	0	3	2	3	30	24	59	59
History	0	0	3	1	4	0	2	6	7	1	0	0	0	1	1	2	9	8	20	20
Law	0	0	0	0	0	0	4	4	8	1	1	4	3	9	1	8	7	17	17	17
Mathematics	0	0	2	0	2	1	3	16	47	1	1	0	0	2	2	4	18	47	71	71
Mechanics	0	0	0	0	0	1	15	10	26	1	2	1	2	6	1	3	16	12	32	32
Physics	0	0	0	0	0	2	11	17	30	1	1	1	0	3	1	3	12	17	33	33
Social Sciences	0	0	0	0	0	1	23	25	49	1	3	8	6	18	1	4	31	31	67	67
Total	0	0	12	12	24	4	26	159	219	13	17	21	14	65	17	43	192	245	497	497

P: Professor
AS: Associate Professor
AT: Assistant Professor
IN: Instructor
T: Total

HIGHEST DEGREES EARNED*
 (AY 1962 - 1963 through AY 1969 - 1970)



*Academic Departments Only

DOCTORATES EARNED BY
FACULTY MEMBERS
(AY 1969 - 1970)

<u>Name</u>	<u>Institution</u>	<u>Field</u>	<u>Dissertation</u>
Cameron, D.A.	Princeton University	Civil Engineering	<u>Approximate Solutions to the Nonproportionally Damped Timoshenko Beam.</u>
Deagle, E.	Harvard University	Polit Econ and Govt	<u>The Agony of Restraint: Korea 1951 - 1953.</u>
Ellis, J.J.	Yale University	History	<u>The Puritan Mind in Transition: The American Samuel Johnson.</u>
Enharth, R.L.	Columbia University	History	<u>The Tragic Alliance: Austro-German Military Co-operation 1871-1918.</u>
Farmer, B.M.	N.C. State University	Economics	<u>Man-Hour Productivity and Future Agricultural Adjustment.</u>
Freedman, R.O.	Columbia University	Polit Sci	<u>The Soviet Union's Use of Economic Pressure as an Instrument of Pressure Toward Other Communist Countries.</u>
Heimdahl, P.D.	University of Illinois	Mechanics	<u>Behavior of Eccentrically Loaded Concrete Columns Reinforced with Linearly Reinforced Steels.</u>
Morrison, J.L.	Columbia University	History	<u>The United States Military Academy, 1833-1866, Years of Progress and Turmoil.</u>
Myers, D.J.	UCLA	Polit Sci	<u>The Political Process of Urban Development - Caracas Under Accion Democratica.</u>
Olvey, L.D.	Harvard University	Economics	<u>Metropolitan Growth and Inter-Regional Migration.</u>

DOCTORATES EARNED - Cont

<u>Name</u>	<u>Institution</u>	<u>Field</u>	<u>Dissertation</u>
Seidl, J.M.	Harvard University	Polit Econ	<u>Upon the Hip--A Study of the Criminal Loan-Shark Industry.</u>
Vardamis, A.A.	Columbia University	English	<u>The Critical Reputation of Robinson Jeffers.</u>
Villa, B.	Harvard University	History	<u>A Case Study in Imperialism Tunisia 1881.</u>
Wilson, J.W.	Cornell University	Economics	<u>Residential and Industrial Demand for Electricity: An Empirical Analysis.</u>

FACULTY PUBLICATIONS
(AY 1969 - 1970)

<u>Author</u>	<u>Title</u>	<u>Publisher</u>
Bell, R. E. Jr.	The Changing Structure of the Division	<u>Veterans of Foreign Wars</u> , Feb 70
Bratz, G. T.	Review of Joseph R. Washington's <u>Black and White Power Subreption</u>	<u>American Quarterly</u> , Summer 1970
Cluxton, D. E.	Military Strategy & Tactics	<u>American People's Encyclopedia</u>
Collier, M. with Prof A.A. Said	Revolutionism	Boston, Allyn and Bacon, 1970
Collier, T. R.	Infantry	<u>American People's Encyclopedia</u>
Curran, H. A.	Subsurface Cretaceous Stratigraphy of the North Carolina Coastal Plain	<u>Programs and Abstracts</u> 1970, Geological Society of America
Curran, H. A.	Subsurface Cretaceous Stratigraphy of the South-eastern North Carolina Coastal Plain	<u>Programs and Abstracts</u> , 1970, Geological Society of America
Hanne, W. G.	Landscape Atlas of the USSR	<u>Proceedings</u> , 1969, Association of American Geographers, N.Y. - N.J. Section
Hansell, C. R. (co-author)	The Expansion of the Negro Ghetto in Milwaukee: A Description and Simulation Model	<u>Tijdschrift voor Economische en Sociale Geografie</u> (Dutch pub)
Haponski, W. C.	Golden Blades	<u>Skating</u> (June 1970)
Haponski, W. C.	Reply to a Vietnam Veteran	<u>Saturday Review</u> (25 Oct 1969)

FACULTY PUBLICATIONS - Cont

<u>Author</u>	<u>Title</u>	<u>Publisher</u>
Justus, P. S.	Paleographic Aspects of Continental Drift	<u>Proceedings</u> , 1969 Association of American Geographers, N.Y. - N.J. Section
Justus, P. S. (co-author)	Comparative Geochemistry and Petrology of Diabase Dikes in the North Carolina Triassic Basins	<u>Programs and Abstracts</u> , 1970, Geological Society of America
Kouns, D. L.	Combat Engineers in Operation DUTCHESS	<u>The Military Engineer</u>
Lawson, B. R.	No Significant Difference	<u>Educational Television</u> , Jan 1970 and <u>ERM</u> Magazine, Mar 1970
McCormick, J. R.	History of Foreign Language Teaching at the United States Military Academy	<u>The Modern Language Journal</u>
Miller, J. R. C.	Nuclear Reactor Experi- ment by CAI (Computer Aid Instruction)	<u>ERM</u> , Educational Research and Methods Division of ASEE
Radford, L. E. Willis, J.S. and Forbes, P. W.	Teaching Perturbation Theory Through Spin Systems	<u>American Journal of Physics</u> , May 1970
Rousmaniere, J. P.	Cultural Hybrid in the Slums: The College Woman and the Settlement House, 1889-1894	<u>American Quarterly</u> , Spring 1970
Smith, F. A. with others	Torsion Analysis of Heavy Box Beams in Structures	<u>Journal of the Structural Division</u> , Proceedings of the American Society of Civil Engineers, Mar 1970
Streett, W.B. and Staveley, L.A.K.	Experimental Study of the Equation of State of Liquid Argon	<u>Journal of Chemical Physics</u> , <u>50</u> . 2302 (1969)

FACULTY PUBLICATIONS - Cont

<u>Author</u>	<u>Title</u>	<u>Publisher</u>
Streett, W.B. and Hill, J.L.E.	Phase Equilibria in Fluid Mixtures at High Pressures; The Helium-Nitrogen System	<u>Journal of Chemical Physics</u> , <u>52</u> , 1402 (1970)
Streett, W. B.	Phase Equilibria in Planetary Atmospheres	<u>Journal of the Atmospheric Sciences</u> , <u>26</u> , 924 (1969)
Streett, W. B.	Phase Behavior of Light Gas Mixtures at High Pressures	<u>Transactions of the International Astronomical Union</u> (in press)
Street, W. B. and Hill, J.L.E.	Phase Equilibria in Fluid Mixtures at High Pressures: The Helium-Argon System	<u>Transactions of the Faraday Society</u> (in press)
Streett, W. B.	An Experimental Study of the Equation of State of Neon at Temperatures from 80° to 130° K, and Pressures to 2000 Atmospheres	<u>Journal of Chemical and Engineering Data</u> (in press)
Szarmach, P. E.	Caesarius of Arles and the Vercelli Homilies	<u>Traditio</u> , 1970
Torrence, J. E.	Infantry	<u>Collier's Encyclopedia</u>
Weekley, R. M.	Pantagonian Journey	<u>Americas Magazine</u> , Pan American Union, Washington, D.C., Mar 1970. Published in English, Spanish and Portuguese
Wilson, J. W.	Residential Demand for Electricity	<u>Proceedings of the Conference of Public Utility Valuation and the Rate Making Process</u> , Iowa State University, 1970

FACULTY PUBLICATIONS - Cont

<u>Author</u>	<u>Title</u>	<u>Publisher</u>
Wilson, J. W.	Statement of Utility Consumers Counsel Act of 1969	Hearings Before the Subcommittee on Inter-governmental Relations of the Committee on Government Operations United States Senate (Volume 5), 1969
Wilson, J. W.	Management Efficiency and Interutility Cost Variations in the Electric Utility Industry: A Critique of the Iulo Thesis	Proceedings of the Conference of Public Utility Valuation and the Rate Making Process, Iowa State University, 1969

PROFESSIONAL/EDUCATIONAL SOCIETIES IN WHICH
FACULTY MEMBERS ARE ACTIVE

African Studies Association	American Institute of Aeronautics & Astronautics
Air Force Association	American Institute of Chemists
Alpha Chi Sigma	American Institute of Industrial Engineers
Aircraft Owners & Pilots Association	American Institute of Mining Engineers
Alpha Pi Mu	American Institute of Physics
Alpha Pi Omega	American Judicative Society
American Arts and Sciences Association	American Marketing Association
American Association for Advancement of Science	American Mathematical Society
American Association of Collegiate Registrars & Admissions Officers	American Military Institute
American Association of Physics Teachers	American Nuclear Society
American Association of Teachers of French	American Numismatic Association
American Association of Teachers of German	American Ordnance Association
American Association of Teachers of Slavic & East European Languages	American Personnel and Guidance Association
American Association of Teachers of Spanish and Portuguese	American Physical Society
American Association of University Professors	American Political Science Association
American Astronomical Society	American Society for Engineering Education
American Bar Association	American Society for Testing of Materials
American Chemical Society	American Society of Civil Engineers
American Council for Geographic Education	American Society of International Law
American Concrete Institute	American Society of Mechanical Engineers
American Crystallographic Society	American Society of Registered Professional Engineers
American Economic Association	American Studies Association
American Folklore Society	American Water Resources Association
American Foreign Service Association	Archaeological Institute of America
American Geographical Society	Army Aviation Association of America
American Geographical Union	Army Finance Association
American Geological Society	Armed Forces Communications & Electronics Association
American Historical Association	

PROFESSIONAL/EDUCATIONAL SOCIETIES - Cont

Asia Society
Association for Asian Studies
Association for Computing Machinery
Association of American Geographers
Association of American Rhodes
Scholars
Association of Departments of
English
Association of French Veteran
Liaison Officers & Military
Interpreters in the U.S.
Association of U.S. Armor
Association of the U.S. Army
Chi Epsilon
Company of Military Historians
Conference on College Composition
and Communications
Council for Basic Education
Council on Foreign Relations
Court of Military Appeals
Defense Supply Association
Delta Epsilon Sigma
Eta Kappa Nu
Faraday Society
Federal Bar Association
Florida State Bar Association
Illinois Society of Professional
Engineers
Industrial Engineering Society
Institute for International Studies
Institute of Electrical &
Electronics Engineers
Institute of Management Sciences
Institute of Strategic Studies
International Institute
Kappa Delta Rho
Latin American History Association
Latin American Studies Association
Mathematical Association of America
Medieval Academy of America
Melville Society
Middle East Institute
Mid-Hudson Physics Teachers
Association
Military Operations Research
Society
Minnesota State Bar Association
Mississippi State Bar Association
Modern Language Association of
America
National Association of Educational
Broadcasters
National Council of Teachers
of English
National Council of Teachers
of Mathematics
National Education Association
National Geographic Society
National Geologic Society
National Rifle Association
National Society for Professional
Engineers
National Speleological Society
National Wildlife Association
New Hampshire Bar Association
New York Academy of Sciences
New York Bar Association
New York State English Council
New York State Trial Lawyers
Association
Operations Research Society of
America
Orange County Bar Association
Organization of American
Historians
Pennsylvania Society of Pro-
fessional Engineers
Phi Alpha Delta
Phi Beta Kappa
Phi Delta Kappa
Phi Delta Phi
Phi Eta Sigma
Phi Kappa Phi
Phi Lambda Upsilon
Phi Sigma Alpha
Phi Mu Epsilon
Practicing Law Institute
Renaissance Society of America
Sigma Pi Sigma
Sigma Tau
Sigma Xi
Société des Professeurs Française
en Amérique
Society for History of Geographical
Discoveries
Society of American Military
Engineers

PROFESSIONAL/EDUCATIONAL SOCIETIES - Cont

Society of Industrial and Applied
Mathematics
Societi International Arthurienne
South Dakota Bar Association
South Dakota Supreme Court
Supreme Court of Georgia
Supreme Court of the United States
Systems Science and Cybernetics
Association
Tau Beta Pi

Texas Society of Professional
Engineers
United States Naval Institute
United States Parachute
Association
Virginia Bar Association
Virginia Supreme Court of Appeals
Volunteers for International
Technical Assistance
Woodrow Wilson Association

EDUCATIONAL TRIPS
(AY 1969 - 1970)

<u>Department</u>	<u>Date</u>	<u>Cadets</u>	<u>Destination</u>
ES&GS	13 October	20	Astronomical Observatory Palisades, N.Y.
	15 April	19	Aerial observation of New York
	2-3 May	37	World Trade Center, New York City
	6 May	50	Joint Computer Conference Atlantic City, N.J.
Electrical Engineering ¹	5-6 December	32	Fort Monmouth, N.J.
	25 April) 2 May)	34	Power Plant, Stony Point, N.Y.
	8 May	28	IBM Seminar, West Point, N.Y.
Engineering ²	20, 21, 22, 23 October	120	IBM Plant, East Fishkill, N.Y.
	22 October	12	Watervliet Arsenal, N.Y.
	3, 4 November	104	Texaco Research Laboratory Beacon, N.Y.
	18 November	12	Research Laboratory Suffern, N.Y.
	19 November	10	Picatinny Arsenal, N.J.
	24, 25, 26 March	88	IBM Plant, East Fishkill, N.Y.
	14, 15 April	65	Texaco Research Laboratory Beacon, N.Y.
	16-19 April	40	Armed Forces Radiobiological Research Institute, Bethesda, Md.

EDUCATIONAL TRIPS - Cont

<u>Department</u>	<u>Date</u>	<u>Cadets</u>	<u>Destination</u>
Engineering ² (Cont)	21 April	40	Bethlehem Steel Corporation Bethlehem, Penna.
	27, 28 April	115	World Trade Center, New York City
	29, 30 April	42	Nuclear Power Plant, Indian Point, N.Y.
English ³	27, 28 September	100	46th Street Theatre New York City
	9, 10 October	30	Anta Theatre New York City
	23 October	16	Art Museum, New Paltz, N.Y.
	8 November	16	Art Museums, New York City
	16 November	28	Roundabout Theatre, New York City
	13, 14 December	88	Brooks Atkinson Theatre New York City
	22 February	104	Museum of the City of New York
	13 April	11	Carnegie Hall, New York City
	18, 19 April	18	Cultural Center, Newburgh, N.Y.
	25-26 April	102	Lincoln Center, New York City
Foreign Languages	16 December	30	Metropolitan Museum of Art New York City
	10 March	59	T.S. BREMEN, Pier 92, New York City
History	22, 23 October	36	Stony Point Battlefield, N.Y.
	11, 12 March	50	Stony Point Battlefield, N.Y.

EDUCATIONAL TRIPS - Cont

<u>Department</u>	<u>Date</u>	<u>Cadets</u>	<u>Destination</u>
Law	22 April	112	United States Mission, United Nations
Mechanics ⁴	26 November	60	Texaco Research Laboratory, Beacon, N.Y.
	26 November	36	Grumman Aircraft, Bethpage, N.Y.
	1 December	25	United Aircraft Labs., East Hartford, Conn.
	24 March	54	Grumman Aircraft, Bethpage, N.Y.
	21 April	22	United Aircraft Labs., East Hartford, Conn.
	28, 29 April	86	Stewart Airport, N.Y.
	30 April 1 May	110	Texaco Research Laboratory Beacon, N.Y.
Physics	8 December	42	Brookhaven National Labs., Brookhaven, N.Y.
	1 May	41	Brookhaven National Labs., Brookhaven, N.Y.
MP&L	28, 29 October	58	Fisher Body Division Tarrytown, N.Y.
	25, 26 March	64	Fisher Body Division Tarrytown, N.Y.
	23 April	34	Warwick State Training School, Warwick, N.Y.
	4, 5 May	64	Letchworth Village, N.Y.
Social Sciences ⁵	17 March	92	Hyde Park, N.Y.
	14 April	61	Albany, N.Y.

EDUCATIONAL TRIPS - Cont

Additional trips sponsored for groups of less than ten cadets:

1. The Department of Electrical Engineering: One trip for a cadet engaged in research.
2. The Department of Engineering: Seven trips for cadets engaged in individual projects or research.
3. The Department of English: One trip to New York City to observe the production of a play.
4. The Department of Mechanics: One trip of seven cadets to Picatinny Arsenal, Dover, N.J.
5. The Department of Social Sciences: Sixty-three cadets participated in an International Simulation Exercise conducted at West Point on 1, 2 April.

LECTURE PROGRAM
(AY 1969 - 1970)

DEPARTMENT OF EARTH, SPACE, AND GRAPHIC SCIENCES

Waldo E. Smith, Executive Director, American Geophysical Union, "The Importance of the Geophysical Sciences to the Military"

Theodore Shabad, Soviet Correspondent, New York Times, "Mineral, Fuel, and Power Resources Distribution in USSR"

LTC R. H. Hammond (RET), School of Engineering, North Carolina State, "Graphical Calculations: Functional Scales"

James Endler, Vice-President, Tishman Realty & Construction Company, "Civil Construction"

BG Padufaly, Commanding Officer, U.S. Topographic Command, "Mapping"

D. D. McCracken, McCracken & Associates, Inc., "How to Change a Computer from Slave to Master Without Really Trying"

Dr. James W. Head, Lunar Exploration Dept, Bellcomm, Inc. "Lunar Geology & the Exploration of the Moon"

DEPARTMENT OF ELECTRICAL ENGINEERING

BG Richard C. Horne III, Comm Signal School, "Electronics"

DEPARTMENT OF ENGINEERING

LTC George James, U.S. Army Small Arms Agency, Aberdeen Proving Grounds, Maryland and Richard Maguire, U.S. Army Weapons Command, Rock Island, Illinois, "The Army Small Arms Program"

LECTURE PROGRAM - Cont

Dr. I. R. Ehrlich, Davidson Laboratory, Stevens Institute of Technology, "Off-Road Mobility"

Dr. Edward Teller, Lawrence Radiation Laboratory, University of California, "Technology and Defense"

LTC Vandenberg, Director, Corps of Engineers, Nuclear Cratering Group, Livermore, California, "Nuclear Cratering"

John Meyer, Structural Architect, Sverdrup & Parcel, Inc. "Cadet Athletic Center--Structural Concepts"

DEPARTMENT OF ENGLISH

Professor John Unterecker, author and educator, "The Birth of a Poem"

Professor Loren Baritz, Professor of History, New York State University, Albany, "American Thought and Literature"

Professor Roland M. Frye, University of Pennsylvania, "Paradise Lost and the Visual Arts"

Professor Howard M. Jones, Harvard University, "Ralph Waldo Emerson"

Professor Richard Hartzell, State University of New York, "Techniques of Film Making"

John A. Ciardi, Poetry Editor, Saturday Review of Literature, "Poetry, Its Form & Function"

Lewis Gifford, Kim & Gifford Productions, New York, "TV as Art Form"

Dr. Charles H. Monson, Associate Vice-President, University of Utah, "Making Philosophy Practical"

Dr. Robert Walker, George Washington University, "Literature and Social Action in America, 1865-1914"

LECTURE PROGRAM - Cont

- Arthur Miller, Playwright, "The American Clock," readings from a new play.
- Archbishop Fulton J. Sheen, Titular Archbishop of Newport, "Philosophical Aspects of Religion"
- Professor Kazin, State University of New York at Stony Brook, "American Literature"
- Professor Nagel, Columbia University, "American Literature"
- Professor Bruce Aune, Professor of Philosophy, University of Massachusetts, "American Thought & Literature"
- Dr. William T. H. Jackson, Professor of Germanic Languages, Columbia University, "Chaucer as a Man for Our Times"
- Professor James M. McCrimmon, Author & Educator, "Problems that Face Student Writers"
- Professor Louise M. Rosenblatt, New York University School of Education, "Literary Experience in Modern World"

DEPARTMENT OF FOREIGN LANGUAGES

- LTG Salido, Military Attache of Mexican Army & Air Force of Republic of Mexico, "The Mexican Army"
- COL Gustav von Detten, German Army Attache, Washington, D. C., "Federal Defense Ministry As a Part of NATO"
- Mr. Nicholas Maltzoff, Vassar College, "Russian Geography"
- M. Camille Bauer, Professor of French, Brown University, "French Educational System"
- Dr. Francis Millet Rogers, Professor of Romance Languages, Harvard University, "Aspects of Portuguese Navigation and Exploration"
- Dr. Nicholas Fersen, Professor of Russian, Williams College, "Vlasov"

LECTURE PROGRAM - Cont

LT COMDR Bertrand S. D'Espinay Saint Luc, French Naval Officer, MMF Saclant Naval Base, "The French Role in the American Revolution"

DEPARTMENT OF HISTORY

Dr. Donald Gillin, Professor of History, Vassar College, "Revolutionary Warfare in China 1927-1945"

General Bruce C. Clarke, USA (RET), "Generalship"

Honorable Douglas Henderson, Department of State, Washington, D.C., "Revolution in Bolivia"

MG William A. Knowlton, SGS Office, C/S DA, Washington, D. C., "Pacification in Vietnam"

General Jacob L. Devers, USA, (RET), "6th Army Gp in Southern France"

Professor Frank Kierman, Princeton University, "The Civil War in China"

Professor David Chandler, Lecturer, RMA Sandhurst, "Guerrilla Warfare in Malaya"

Dr. Von Luttichau, Historian, "World War II in Russia"

Dr. Russell Weigley, Professor of History, Temple University, "Professionalism in the U. S. Army, 1870-1900"

Professor J. C. Hurewitz, Columbia University, "The Arab Commando Movement"

DEPARTMENT OF LAW

Professor Oliver J. Lissitzyn, Scholar in Residence for International Law at Naval War College, "International Law"

BG Parker, Assistant JAG for Military Law, "Military Justice"

LECTURE PROGRAM - Cont

Mr. Albert J. Gaynor, Executive Assistant to U.S. Attorney, Southern District of New York, "The Role of the U. S. Attorney's Office in the Federal Judicial System"

DEPARTMENT OF MATHEMATICS

Dr. Richard Di Prima, Professor of Mathematics, RPI, "Differential Equations"

Dr. J. M. Harper, Manager, Industrial Venture Team, General Mills, Inc., "Monte Carlo Simulation to Optimize Plant Configuration"

DEPARTMENT OF MECHANICS

Mr. Ingraham & Ralph Papirno, U.S. Army Materials & Mechanics Research Center, Watertown, Massachusetts, "Modern Applications of Strength of Materials"

Mr. M. Kornitzki, U.S. Army Material and Mechanics Research Center, "Modern Materials"

Professor A. E. Bergles, Georgia Institute of Technology, "Boiling Heat Transfer"

COL Frank Borman, Field Director, Space Station Testing Group, "Apollo Program"

Professor J. P. DenHartog, Professor Emeritus of Mechanical Engineering, MIT, "Mechanical Vibrations"

DEPARTMENT OF SOCIAL SCIENCES

Isaac C. Hunt, Staff Member, Rand Institute, "Race and the U. S. Economy"

COL Robert Gard, Office of Assistant Chief of Staff for Force Development, DA; and LTC Zeb Bradford, Office of Assistant Vice Chief of Staff, DA, "Military Professionalism Panel"

LECTURE PROGRAM - Cont

Honorable Allard K. Lowenstein, U.S. Congressman, Nassau Country, New York, "The Urban Crisis and the Political Process"

Dr. John N. Plank, Brookings Institute, "U.S. Policy in Latin America"

Honorable R. B. Froehlke, Assistant Secretary of Defense for Administration, "Defense Management in the Nixon Administration"

Edward M. Fleming, HF, Du Pont Winterthur Museum, "Images of America 1607-1860"

Dr. C. Wagley, Columbia University, "Social Obstacles to Progress in Latin America"

Professor S. Adler, New York University, "Isolationism of 1930's Revisited"

Dr. Abdul Said, American University, "North Africa Today"

Dr. J. Jose, American University, "International Organization and National Security"

Dr. W. Franklin, Department of State, "Coalition Diplomacy in World War II"

Dr. H. Schwartz, New York State University System, "Problems of the Soviet Economy"

Professor L. Morton, Dartmouth College, "The Decision to Drop the Atomic Bomb, New Perspectives"

LTC J. Seigle, DA, Office C/S and MAJ Peter Dawkins, Princeton University, "Military Professionalism Panel"

Professor Warren Hassler, Jr., Pennsylvania State University, "American Civil War"

Mr. Bruce K. McClury, Deputy Undersecretary for Monetary Affairs, "U. S. Trade & Financial Policy"

LECTURE PROGRAM - Cont

BG Alexander Haig, Military Assistant, NSC, "National Security Decision-Making in the Nixon Administration"

Honorable D. Pryor, U. S. Congress, "Role of the Congressman"

Professor A. Link, Princeton University, "W. Wilson, the Diplomat"

Mr. W. Sullivan, Assistant Director, FBI, "Selected Dimensions of American Social Crisis"

Dr. J. C. Hurewitz, Columbia University, "Impact on Fedayeen on Middle East Politics"

Honorable P. Ylvisaker, Former Director of Com Affairs, State of New Jersey, "Urban Crisis"

Dr. William Franklin, Director, Historical Office, Department of State, "Wartime Diplomacy"

Professor Hans Schmitt, New York University, "Inter-War Diplomacy"

Professor L. J. Oliva, New York University, "Nazi-Soviet Pact"

Professor Harry Schwartz, New York University, "Soviet Economy"

Dr. Plank, Brookings Institute, "Current Development in U. S. Policy Toward Latin America"

COL William W. Whitson, Staff, ISA, "Contemporary Trends in the People's Republic of China"

Honorable Bruce K. MacLaurey, Deputy Undersecretary for Monetary Affairs, Office of Secretary of Treasury, "International Monetary Affairs"

Frank Armbruster, Hudson Institute, "Misunderstood American Issues"

EDUCATIONAL CONVOCATIONS
HELD AT USMA
(AY 1969 - 1970)

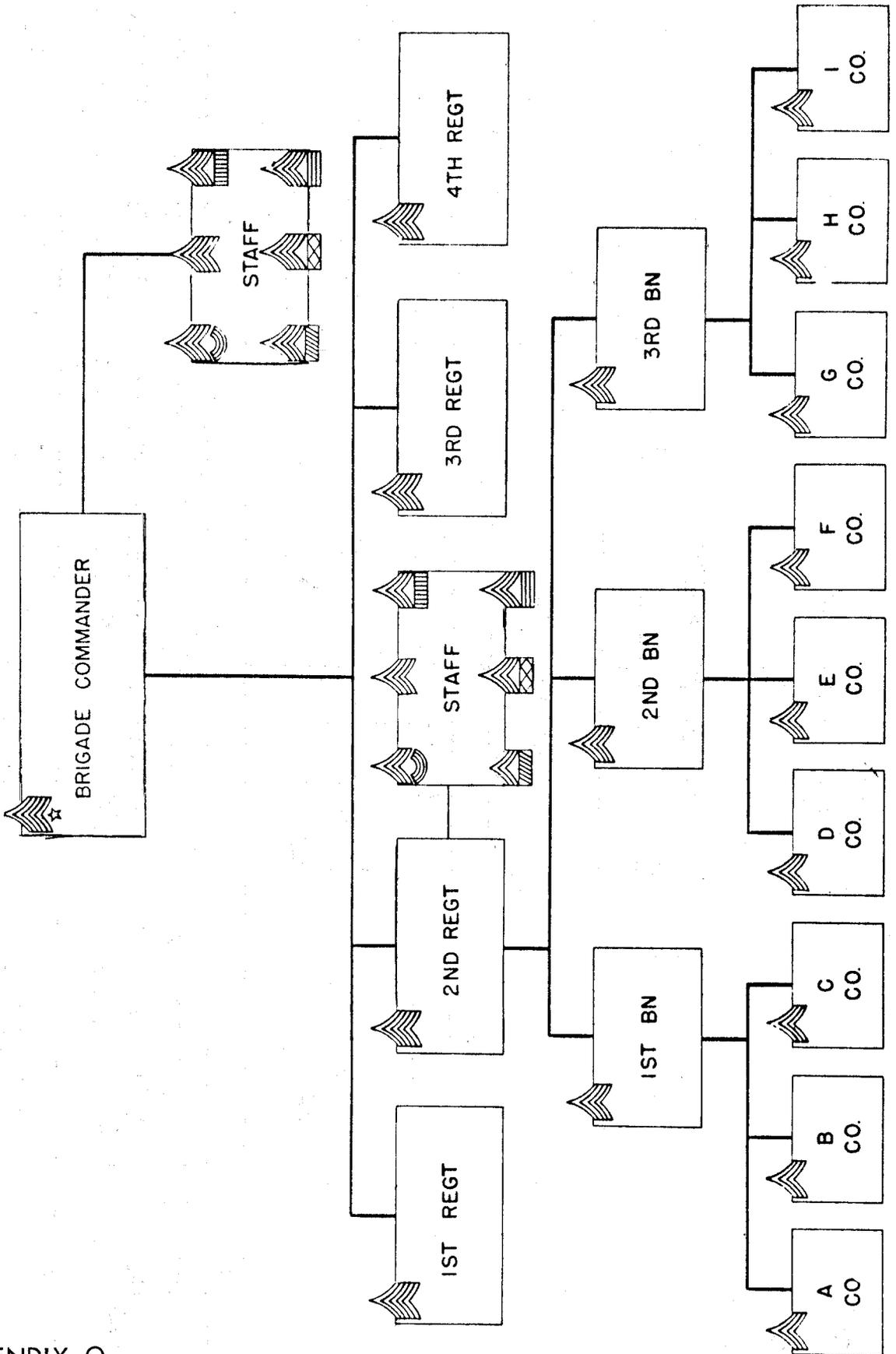
"West Point Invitational Debate Tournament," 6-8 November 1969. Attended by student representatives from fourteen colleges and universities.

"Student Conference on United States Affairs, XXI," 3-6 December 1970. Attended by two hundred conferees representing 78 colleges and universities. SCUSA XXI delegates participated in five round table discussions and were addressed by senior officials of the government and academic community.

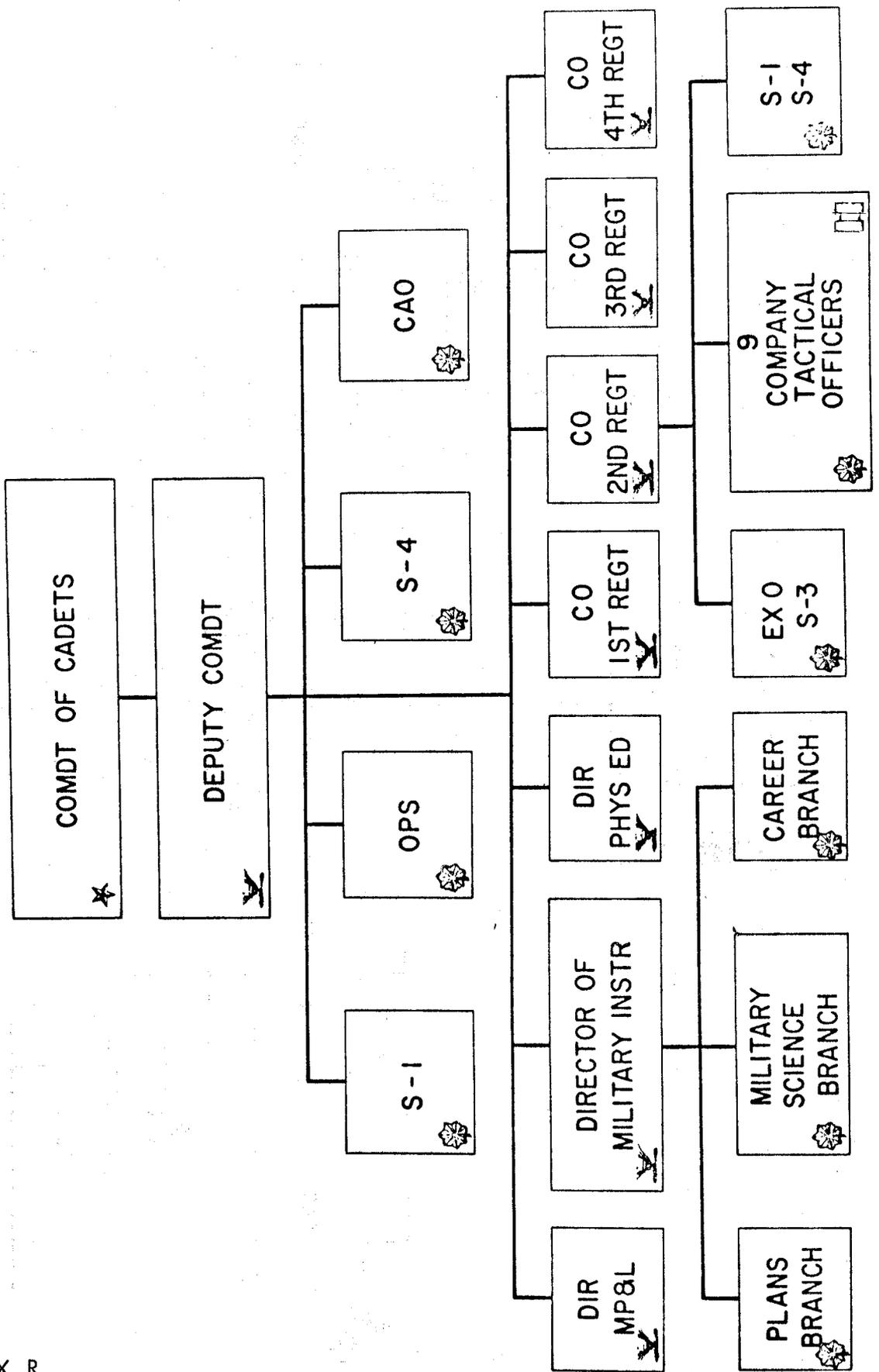
"USMA Senior Conference," 11-13 June 1970. Forty distinguished guests from government, the academic community, and the press exchanged views on "The Changing Role of the Military in American Life."

"Army Science Conference," 16-19 June 1970. Attended by approximately 500 Army civilian and military scientists and managers, the conference provided a forum for the presentation of various research papers.

UNITED STATES CORPS OF CADETS



DEPARTMENT OF TACTICS



MILITARY PSYCHOLOGY AND LEADERSHIP GUEST LECTURERS

Dr. Lawrence D. Brennan, Professor of Business Communication, New York University, "General Communication Theory"

Mr. John J. McCarthy, Business Consultant, "Military Leadership"

Mr. Tom Leo, Manager, General Motors, Tarrytown, New York, "Training in GMC"

LTG Richard G. Stilwell, Deputy C/S for Military Operations, "The Leadership Challenge"

Dr. Baradey, University of Hawaii, "Social Stratification"

Dr. John D. Weisz, Director Human Engineer Labs, "Military Application of Psychology"

LTC Charles Thomas, Psychology Consultant to Surgeon General, "Mental Health of the American Soldier"

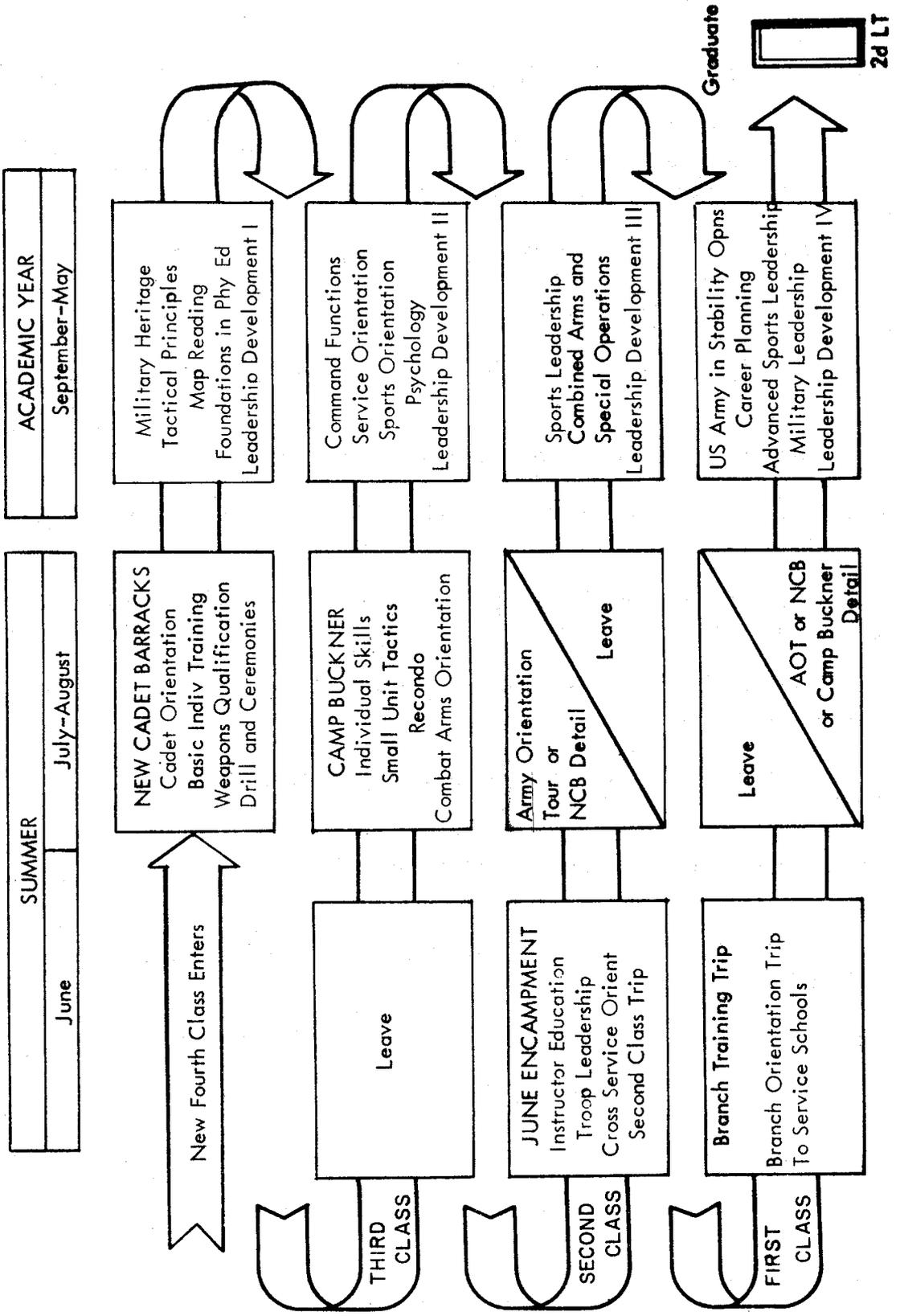
Dr. R. Nathan, Institute for Political Psychology and International Psychology, "Psychological Warfare"

Dr. Morris Janowitz, Professor of Sociology, University of Chicago, "The American Soldier"

Mr. Joseph Littlejohn, Housing Officer, NAACP, "Social Responsibility of Management"

CW3 William J. Scheve, Jr., Military Police Corps, Fort Gordon, Georgia, "Drug Orientation"

MILITARY TRAINING PROGRAM - 4 YEARS



MILITARY INSTRUCTION GUEST LECTURERS

Brigadier General John H. Cushman, Commanding Officer, Fort Devens, Massachusetts, "Career Challenges," 12 November 1969.

Brigadier General George W. Putnam, Officer Personnel Directorate, Department of the Army, "Officer Assignment Policies and Career Patterns," 2 December 1969.

Colonel Samuel V. Wilson, Assistant Commandant, U.S. Army Institute for Military Assistance, Fort Bragg, North Carolina, "U.S. Army in Stability Operations - Worldwide," 7 January 1970.

Major James A. Gibbs, U.S. Army Field Artillery School, "Impact of Nuclear Weapons," 3 and 4 March 1970.

Major Paul C. Hutton, III, Department of English, USMA, West Point, New York, "Special Forces in Vietnam," 5 and 6 January 1970.

Captain Nahas and Captain Burkett, U.S. Army Infantry School, "Ranger and Airborne Orientation," 13 to 15 April 1970.

Colonel William E. Holmes, Major Thomas J. LeCleur, Major Albert L. Bagnaschi, Jr., Fort Bliss, Texas, ADA Briefing Team, Reorganization Week 1969.

The following officers presented an orientation on the "Basic Officer's Course" for their respective branches on 16 and 17 April 1970:

First Lieutenant Charles Sachsenmaier III	Engineer School
Captain Charles L. Schmidt	Armor School
Captain James Loftus	Field Artillery School
Captain William J. Ervin III Captain Robert Landry	Infantry School
Captain Gerald R. Sullivan	Air Defense School
Captain Milford B. Hutchinson	Signal School

The following officers presented Cross-Service Orientation to the Second Classmen during June Encampment 1970:

Lieutenant Colonel R. J. Spence, USAF
Air Force Orientation

Chief, USAF Presentation
Branch, Operations Division
Dept of the Air Force
Washington, D.C.

Lieutenant John Collins, USN
Navy Orientation

Office of the Chief of Naval
Operations
Dept of the Navy
Washington, D.C.

Colonel J. M. Van Meter, USMC
Marine Corps Orientation

Chief, Amphibious Warfare
Presentation Team
Marine Corps School
Quantico, Virginia

The following officers participated in the Recent Graduate Returnee Program, 19 through 25 April 1970:

Captain Thomas E. White
Armor

Trp F, 2d Sqdn, 6th ACR
Fort Meade, Maryland

First Lieutenant Joseph Creeden
Armor

First Lieutenant Keith F. Merritt
Field Artillery

Svc Btry, 2d Bn, 18th Arty
Fort Lewis, Washington

First Lieutenant Robert B. Uhler
Field Artillery

1st Bn (Abn), 320th Arty
82d Airborne Division
Fort Bragg, North Carolina

Second Lieutenant John A. Lucas
Infantry

Co A, 1st Bn (Mech), 10th Inf
5th Infantry Division (Mech)
Fort Carson, Colorado

Second Lieutenant John W. May, Jr.
Infantry

HHC, 3d Bn (Abn), 325th Inf
82d Airborne Division
Fort Bragg, North Carolina

Captain Larry R. Donnithorne
Engineer

First Lieutenant Mark A. Edelman
Engineer

Captain Mark A. Scureman
Signal Corps

Captain Karl D. Sakas
Signal Corps

Captain Douglas A. Sims
ADA

First Lieutenant Robert M. Baker

Captain Mark R. Walsh
MI

Captain William L. Wilby
MI

Officer Personnel Directorate
Washington, D.C.

Assistant S3
18th Engineer Battalion (Combat)
Fort Devens, Massachusetts

School Brigade
U.S. Army Signal Center and
School
Fort Monmouth, New Jersey

Department of Command Communi-
cations
U.S. Army Signal Center and
School
Fort Monmouth, New Jersey

Btry C, 4th Bn (HERC), 4th Arty
49th Artillery Group (AD)
Fort Lawton, Washington

Junior Aide-de-Camp to
Commandant
U.S. Army War College
Carlisle Barracks, Pennsylvania

HQ, U.S. Army Security Agency
ATTN: DCSFOR
Arlington Hall, Virginia

CADET ACTIVITIES

Academic Group

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
Amateur Radio Club	18	0	1	Visited headquarters of the American Radio Relay League.
Astronomy Club	100	0	3	Solar eclipse viewed and photographed.
Audio Club	76	0	2	Visited Columbia Broadcasting Studio & RCA Recording Studio.
Behavioral Science	199	1	1	Participated in a psychodrama at Moreno Institute.
Chinese Language Club	51	2	3	Visited United Nations, Chinese Public School, Lutheran Church and Metropolitan Museum of Art.
Computer Forum	139	3	1	Sponsored three guest lecturers and visited the largest commercial time-sharing center in the U. S. at Teaneck, N.J.
Debate Council & Forum				
Debate Council	53	2	35	Sponsored Extemporaneous Speaking Contest and West Point Invitational Debate Tournament. 45.7% Win Ratio.
Student Conference, United States Affairs	81	1	0	Attended by 198 students representing 78 colleges and universities, including 48 cadet participants.

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
West Point Forum	266	0	14	Participated in 11 student conferences.
Engineering Forum	97	N/A	0	Initiated as a new activity.
Fine Arts Forum	687	9	23	Sponsored the play "No Exit," the opera "Barber of Seville," concert by Peter Nero; co-sponsored (w/WP Museum) Garbisch Collection Art Show, (w/USMA Band) Band of America Music Concert.
French Language Club	225	0	2	Visited French Consulate in NYC and the French Embassy in Washington, D.C.
Geology Club	150	0	7	Visited granite & marble quarries, Mammoth Cave National Park; toured South Mall Project and Lamont-Doherty Geological Observatory; explored Onsequethaw and Knox Caves.
German Language Club	111	5	3	Sponsored lectures by COL Erny, Swiss Defense Attache; Dr. Schmidt-Schlegel, Consul General of the Federal Republic of Germany; COL Von Detton, German Military Attache.
Mathematics Forum	142	5	3	Visited T. J. Watson Research Center of IBM and Fort Monmouth. Attended two mathematical lectures at Vassar and Ladycliff.

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
Military Affairs	250	5	4	Traveled to Gettysburgh, Pa., Battlefield; Aberdeen, Md., Proving Ground; St. John's University, NY, and attended the Annual Meeting of the Company of Military Historians at Fort Monroe, Va.
Portuguese Language Club	97	0	2	Visited the United Nations and the Inter-American Defense Institute, Brazilian Embassy.
Rocket Society	94	0	1	Visited Cape Kennedy, Florida.
Russian Language Club	134	2	3	Visited State Department, Voice of America and the CIA at Washington, D.C.
Spanish Language Club	150	0	3	Visited Inter-American Defense College in Washington, D.C.
Academy Support Group				
Cadet Chapel Sunday School Teachers	186	0	1	
Cadet Glee Club	150	6	12	Traveled 16,000 miles this year to appear on four network television shows and sang in concerts in the following states: Maine, Massachusetts, Connecticut, New York, Pennsylvania, Georgia, Arkansas, Missouri, Illinois, and California. Audiences totaled 100 million.
Catholic Chapel Sunday School Teachers	32	0	0	

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
Fourth Class Glee Club	78	4	4	
Information Detail	23	N/A	N/A	
Public Relations Council	583*	N/A	N/A	*Reflects average number of cadets. Cadets in some cases appeared in two or more programs. 715 presentations were made in the Christmas, Spring, Summer and Special CPRC Programs.
Scoutmasters' Council	181	1	1	Hosted over 3000 scouters from the Northeastern States at the Annual West Point Invitational Camporee.

Competitive Athletic Group

Bowling Club and Team	51	18	16	Placed 1st against 17 teams in Association of College Unions Region II Tournament.
Handball Club	30	11	4	Placed 4th out of 22 schools entered in National Intercollegiate Tournament.
Judo Club	40	2	1	
Karate Club	40	4	3	Received two trophies: one for winning the season's Dual Meet Championship and one for winning the West Point Collegiate Tournament. Team remains undefeated.

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
Rugby Football Club	75	6	4	For the first time, the Army Rugby Team defeated a British Rugby Club--Roundhay RFC. Also defeated Air Force Academy.
Sailing Club	46	7	6	The Engineer's Regatta was the first major race to be held at West Point with the Cadet Sailing Club placing first.
SCUBA Diving	200	0	4	An advanced diver's program was conducted in preparation for the intensive training planned for the group's search and recovery unit. 125 individuals qualified as YMCA certified basic SCUBA divers, 6 received their leader-examiner qualifications, 1 was given an instructor rating.
Volleyball Club	24	2	2	Finished second out of sixteen YMCA teams at the Westchester Open Tournament.
Water Polo Club	46	3	3	Second place finish in West Point Tournament.
Corps Support Group				
<u>Bugle Notes</u>	17	0	4	
Cadet Band	115	28	12	
Cadet Chapel Choir, Acolytes & Chimers	250	0	3	Sang at the 200th Anniversary Service at St. George's Church in Philadelphia, Pa.

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
Catholic Chapel Choir and Acolytes	93	1	5	Participated in the Veteran's Day Commemorative Service for Peace at the National Shrine in Washington and participated in ceremonies honoring 5000 New York City policemen.
Class Committees (4)	144	N/A	N/A	
Dialectic Society	115	7	2	Sponsored six special programs: "Oliver," "Cowsills," "Brooklyn Bridge & Magnificent Men," "Vogues," "Grassroots," and "Second City & Impressions." Total attendance of these six programs exceeded 14,000 cadets and guests. Sponsored the annual 100th Night Show.
Hop Committees (4) and Hop Bands	175	N/A	N/A	Approximately 100 Hops were scheduled during the year, with more than 130,000 cadets and guests participating. Bands played in Philadelphia, Pa., for the Army/Navy Football Weekend festivities, New York City for the Army/Notre Dame Football Game festivities and supported home functions such as rallies and official class events.
<u>Howitzer</u>	78	0	24	
Jewish Chapel Choir and Sunday School Teachers	45	0	4	
"Pointer"	116	N/A	5	Five cadets participated in the OCINFO trip to the Pentagon and Arlington National Cemetery.

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
Rabble Rousers	35	11	12	Planned and conducted rallies, team send-offs, and cheerleading for athletic contests.
Ring & Crest Committees (4)	144	N/A	N/A	Administered Class Crest and Class Ring selection. Arranged for special Class Banquets during the year.
"Slum & Gravy"	68	N/A	57	In addition to sports coverage of Corps Squad activities, several competitive extracurricular club events were covered.
WKDT Radio Staff	59	*	33	A grant from the West Point Fund made it possible to rehabilitate the station. Provided exclusive coverage of the Army-Oregon Game. First time a college radio station broadcast live from coast to coast. *Furnished live coverage of all major home Army sports; i.e., football, basketball, hockey, lacrosse and baseball.

Military Skills Group

Mountaineering Club	61	N/A	3	Emphasis was placed on developing leaders' skills and raising the standard of the club members in climbing.
Pistol Club	25	0	3	Placed first in Merck, Sharpe, & Dhome competition at West Point, Pa.

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
Riding Club/Team	137	4	3	The Cadet Riding Team represented USMA in intercollegiate equestrian competition. Conducted exhibitions in support of Armed Forces Day and June Week.
Rifle Club	25	1	1	Took 2d Place in the 1st U. S. Army Rifle Match.
Skeet & Trap	70	5	5	Won first place in the National Intercollegiate Skeet Competition.
Sport Parachute Club/Team	72	6	6	First Place-School at the Eastern Collegiate Parachuting Championships. Jumpmaster certification awarded six cadets.
Triathlon Club	30	2	2	
Recreational Group				
Chess Club	115	7	8	Cadet Mike McCabe won first place in unrated class at Continental Intercollegiate Championship.
Outdoor Sportsmen's Club	225	0	8	
Ski Club	360	N/A	9	Two cadets were qualified by the National Ski Patrol System as local patrolmen. Nine cadet members of the Instructor Group were qualified by U. S. Eastern Amateur Ski Association. Sponsored a 16-hour American Red Cross Advanced First Aid Course plus a 12-hour refresher course.

<u>Activity</u>	<u>Cadets</u>	<u>Nr Major Home Events</u>	<u>Nr Trips</u>	<u>Remarks</u>
Cardinal Newman Forum	118	N/A	3	
Protestant Discussion Group	135	N/A	2	
Fellowship of Christian Athletes	178	N/A	1	Initiated as new activity AY 69- 70.
Other Protestant Religious Groups	315	N/A	6	

EXPANSION PROGRAM PROJECT SUMMARY

Completed

<u>PROJECT</u>	<u>DATE</u>	<u>COST</u>
<u>ACADEMIC COMPUTER CENTER</u> Modification to Rooms 142 and 144 in Thayer Hall.	November 1965	\$ 132,000
<u>USMA HEADQUARTERS</u> Modernize utilities in Building 600.	November 1966	278,000
<u>USMA BAND FACILITY</u> Modify Building 685 to provide individual, group, and full band practice areas; rehearsal and recording facilities; and living accommodations.	December 1966	452,000
<u>RENOVATION OF BARTLETT HALL</u> Modernize facilities for academic use.	January 1967	2,044,000
<u>PHYSICAL EDUCATION FIELDS</u> Construction of 8 athletic fields; lighting for tennis courts, South Field area, and access ramp.	January 1967	358,000
<u>REHABILITATION OF BOILER PLANT</u>	December 1967	350,000
<u>MODERNIZE CAMP BUCKNER</u> Replace eleven wooden barracks with aluminum buildings; replace the Headquarters building with a masonry structure; improve the dining hall, assembly hall, and guest house.	July 1967	610,000
<u>REHABILITATE FAMILY HOUSING</u>	March 1968	1,641,000
<u>ALTERATION TO CADET GYMNASIUM</u> Remove balconies from old North Gym (Army Theater) and convert to gymnasium use.	May 1968	336,000
<u>RESTORE NORTH SHORE</u> Realignment and satabilization of 1650 linear feet of shoreline.	June 1968	420,000
<u>EXPAND CAMP BUCKNER</u> Kitchen and dining hall expansion.	January 1970	395,000

APPENDIX W

Completed (continued)

<u>PROJECT</u>	<u>DATE</u>	<u>COST</u>
<u>UTILITIES</u>	January 1970	\$ 3,053,000
Package No. 1: Replaced two 120,000 pounds per hour boilers in the steam plant with modern 220,000 pounds per hour boilers; enlarged steam distribution lines from power plant to Central Area and from North Area to the gymnasium.		
Package No. 3: Authority rescinded.		
Package No. 6: Electrical substations "C" and "D" servicing area of Post Chapel and Cadet Gymnasium.		
Provide a gas line to Stony Lonesome housing area.		
	TOTAL	<u>\$10,069,000</u>

Essentially Completed

<u>PROJECT</u>	<u>CURRENT ESTIMATE</u>
<u>WASHINGTON HALL - CADET BARRACKS COMPLEX</u> Partial demolition of Central and North Barracks and relocation of utilities completed November 1965. New construction commenced November 1965 to provide: Billets for 1255 cadets; expanded kitchen and dining hall facilities to accommodate 4500; complete academic and administrative facilities for the Departments of ES&GS and Foreign Languages, and elements of the Department of Tactics. All major areas of this project are essentially complete and in use; remaining work includes installation of several minor pieces of equipment in the bakery, and site cleanup.	\$25,800,000
<u>UTILITIES</u> Package No. 2: Utilities associated with Cadet Gymnasium Addition. Package No. 4: Stony Lonesome Access Road and utilities associated with new Family Housing to include a sewer line and a water pumping station. Package No. 5: New 20" water supply main from Lake Stilwell to New Stony Lonesome Housing area, new filtration plant to north Post, and improved fourth level water system. New main power substation, new sub-stations, distribution mains and feeders sufficient for new projects now under way. Telephone support facilities for new projects. Claims and other deficiencies on all utilities packages.	6,148,000
<u>ADDITION TO CADET GYMNASIUM</u> Add 57,900 square feet, housing Olympic-size pool, 1,200 seating, lockers and support facilities.	3,332,000
<u>REFRIGERATED STORAGE</u>	251,000
TOTAL	<u>\$35,531,000</u>

Under Construction

<u>PROJECT</u>	<u>ANTICIPATED COMPLETION</u>	<u>CURRENT ESTIMATE</u>
<u>FAMILY HOUSING</u> 200 Units in Stony Lonesome area.	December 1970	\$ 7,200,000
<u>INDOOR RIFLE PISTOL RANGE</u>	February 1971	592,000
<u>SECOND INCREMENT OF CADET BARRACKS</u> Final three wings of barracks containing 670 cadet rooms.	Summer 1971	16,800,000
<u>ACADEMIC BUILDING/THAYER ROAD RELOCATION</u> Will house Departments of Engineering Mechanics and English. Portions scheduled for occupancy prior to Academic Year 1971-72.	1972	19,487,000
	TOTAL	<u>\$44,079,000</u>

PROJECTS FUNDED BUT NOT AWARDED
AS OF 1 JULY 1970

<u>PROJECT</u>	<u>AUTHORIZED</u>
<u>EXPAND CAMP BUCKNER</u> Thirteen new prefabricated metal barracks.	\$ 739,000
<u>CADET ACTIVITIES CENTER</u> Components include a 4500-seat auditorium, a 1000-seat snack bar, a 1000 person ballroom, guest reception areas, and limited game areas.	16,814,000
	TOTAL <u>\$17,553,000</u>

PROPOSED EXPANSION PROJECTS*

<u>PROJECT</u>	<u>PROGRAM</u>	<u>CURRENT ESTIMATE</u>
Rearrange Academic Facilities	FY 1971	\$ 1,040,000
Outdoor Ranges	FY 1971	472,000
Road Interchange	FY 1971	3,708,000
S.W. Gym Addition	FY 1972	6,615,000
Consolidated Services Facility	FY 1972	3,520,000
Post Chapel Addition	FY 1972	854,000
Bachelor Officers Quarters	FY 1972	800,000
Family Housing 160 Units	FY 1972	6,720,000
Hospital	FY 1973	13,000,000
Signal Facilities	FY 1973	269,000
Outdoor Athletic Facilities	FY 1974	90,000
Consolidated Administrative Facility	FY 1974	635,000
Ammunition Storage Area	FY 1974	1,000,000
Old Hospital Conversion	FY 1975	3,000,000
Cadet Club Rooms	FY 1976	100,000
	TOTAL	<u>\$41,823,000</u>

* A Secondary Sewage Treatment Plant has been approved by Department of the Army as part of the Academy's FY 1971 construction program. This project is not considered part of the Expansion Plan; consequently, its estimated cost of 3.299 million dollars is not included in this summary.

S U M M A R Y

PROJECTS

COMPLETED	\$ 10,069,000
ESSENTIALLY COMPLETED	35,531,000
UNDER CONSTRUCTION	44,079,000
FUNDED NOT AWARDED	17,553,000
PROPOSED	41,823,000
TOTAL	<u>\$149,055,000</u>

USMA INSTITUTIONAL RESEARCH REPORTS, FY 1970

Office of Research

1. Summary of Faculty and Staff Research for Fiscal Year 1969.
2. Candidates Who Declined Appointment to USMA Class of 1972.
3. Characteristics of the Class of 1973.
4. Research Study on Military Career Commitment.
5. The Characteristics of Compensating Evidence for Applicants with a CEER Score in the Grey Zone.
6. Prediction of Size of Class by Source of Appointment for the Class of 1974.
7. Report on the USMA - Stewart Air Force Base Education Surveys.
8. Selected Characteristics of Cadets Admitted to the Class of 1973 by State of Birth with Comparison to All Cadets in the Class of 1973.
9. Characteristics of USMA Preparatory School Graduates in the U.S. Military Academy Class of 1973.
10. Time and Distance Considerations in Going to Test Sites for Members of the Class of 1973.
11. Changes in Commitment of USMA Cadets to a Military Career.
12. An Overview of the Success of Negro Cadets at West Point: Cadet Rank, Activities, and Present Rank.
13. The 1969 USMA Preparatory School Visitation to the United States Military Academy.
14. Summary Report of Admission Scores of the Candidates and Cadets of the USMA Class of 1973.
15. Ability and Performance by Academic Area of Concentration: Class of 1971 Fourth Class Year.
16. Study of the Impact of the Five Year Service Obligation on USMA Cadets.
17. A Social-Psychological Profile of the Class of 1973.
18. A Study of Two USCC Classes: the Congruence of Cadets' Psychological Needs with the Environmental Stimuli at USMA.
19. Educational Aspirations and Academic Environment of the Graduating Class of 1969.
20. Ability and Performance by Academic Area of Elective Concentration: Class of 1972 Fourth Class Year.
21. Survey of Graduates of the United States Military Academy, Classes of 1950 to 1962, Background, Schooling and Careers.

22. Guidelines to Individual Research by USMA Staff and Faculty Members.
23. A Comparative Examination of Negro and Non-Negro Cadets in the Class of 1973.
24. Quality of Services to Cadets.
25. A Comparison of New Cadets at USMA with Entering Freshmen at Other Colleges Class of 1973.
26. Success of Cadets in Class of 1973 as a Function of Selection by the Academic Board vs Non-Selection.
27. Summary of Institutional Research at the U.S. Military Academy 1 July 1969 to 31 December 1969.
28. A Descriptive Analysis of the Negro Cadets in the United States Military Academy Class of 1973.
29. Weighting of Items for Discrimination of Stayers vs Leavers on the Self-Description Inventory and the Study of Values.
30. Report of Financial Questionnaire of the Graduating Class of 1969.
31. A Comparative Study of Early Resignations from USMA for the Class of 1973.
32. Costing Cadet Education at USMA.
33. Background and Predicted Success of Cadets in the Class of 1973.
34. An Appraisal of the Use of CEER for Negro Cadets.
35. The Performance of USMA Graduates in the Classes of 1967, 1968, and 1969 on the Defense Officer Record Examination.
36. A Multidimensional Analysis of Non-Varsity Sports.
37. A Multidimensional View of Cadets Decision to Seek a USMA Nomination.
38. Military Academy Graduates as Civilians.
39. A Preliminary Study of the Validity of ACT Data for Predicting the Fourth Class Academic Average.
40. Sources of Influence to Seek a Nomination to USMA for Cadets in the Class of 1973.

Office of MP&L

1. ASR as a Predictor of Success in the Army. (69-c)
2. Relationship Between Aptitude Standing + AOT Performance. (69-d)
3. Interviews with Recent USMA Graduates Serving in South Vietnam. (69-f)
4. Opinions of New Cadet Barracks from Cadet Squad Leaders. (69-g)

Medical Research Unit

1. Evaluation of Individual Differences in Physical and Mental Fatigue in USMA Fourth Classmen.
2. The Relationship of Leadership Style to Task Structure, Position, Power and Leader-Member Relations.
3. The Development and Change of Problem-Solving Strategies and Leadership Styles in U.S. Military Academy Cadets.
4. Peripheral Neuropathy Technical Report.

Office of Physical Education

1. A Determination of the Reliability of the Motor Performance Test Under Field Conditions.
2. A Physical Aptitude Comparison of Foreign Cadets in the Class of 1973 with Their Classmates.
3. A Study of the Effects of a Program of Reconditioning of the Rate and Severity of Recurrent Shoulder Injuries.
4. Predicting Athletic Success at the United States Military Academy.
5. The Physical Performance of West Point Generals as Cadets.
6. The Relationship of Secondary School Athletic Participation to Success at the United States Military Academy.
7. A Study to Compare the Strength of the Quadriceps with Distance Jumped in a Standing Broad Jump.

Office of the Dean

Academic Order of Merit Within Academic Area of Concentration.

OFFICIAL VISITORS TO USMA

The following groups and individuals were official visitors to the Military Academy during the reporting year. This list does not include visitors who were sponsored by the Academic Departments or the Department of Tactics.

1969
July

70 Brazilian Officers (Senior Member - Major General Idalio Sardenberg)

8 Canadian Officers

Major General Chang Woo Lee, Korean Army
Major General Byung Hyung Lee, Korean Army

August

Colonel Kemal Ozsoy, Turkish Army

Lieutenant Yuan-Shi Peng, Chinese Air Academy

Governor Mobolaji Johnson and Commissioner Babatunde Williams, Nigeria

80 Brazilian Officers (Senior Member - General Augusto Fragoso)

September

Major General Ngo Dzu, Deputy Chief of Staff for Operations, Vietnamese Army

42 Latin American Cadets, Representing the U. S. Army School of the Americas

Brigadier General Melvin A. Goers, Director ROTC, USCONARC

October

Honorable William K. Brehm, Assistant Secretary of the Army

General Alejandro Lanusse, Commander-in-Chief, Argentine Army

30 Paraguayan Officers (Senior Member - Major General Hipolito Viveros)

Honorable Yoshimitsu Fujita, Member of the Japanese Diet

Major General P. T. Tower, Commandant, Royal Military Academy Sandhurst

November

42 Argentinean Officers (Senior Member - Brigadier General Horacio Siburú)

General Mun Hyong Tae, Chairman, Joint Chiefs of Staff, Korean Army

APPENDIX Y

December Brigadier D. J. St. M. Tabor, United Kingdom
Commander Khuong Huu Ba, Vietnam

1970
January Major General John E. P. Groven, Chief of Staff,
Belgian Army

February Honorable Stanley R. Resor
Honorable William K. Brehm

March General Suh Jyong Chul, Chief of Staff, Republic of
Korea Army
General Lyman L. Lemnitzer, Founders Day Speaker
26 USAIS Foreign Officer Students (Colonel Aroon
Chabchamsri, Thailand, Class Leader)

April Department of the Army Staff Team (Senior Member -
Major General W. E. Brinker)
General Sam Manekshaw, Chief of the Army Staff, Indian
Army

May Board of Visitors:
Honorable Ernest F. Hollings, South Carolina
Honorable Glenn R. Davis, Wisconsin
Honorable William Nichols, Alabama
Honorable William H. Natcher, Kentucky
Major General Leif J. Sverdrup, Chairman of the Board,
Sverdrup & Parcel & Associates, Inc., St. Louis,
Missouri
Dr. Edwin D. Etherington, President, Wesleyan University,
Middletown, Connecticut
Mr. Louis R. Vincenti, President, Wesco Financial
Corporation, Pasadena, California

96 Command and General Staff College Foreign Students

Kermit Roosevelt Lecture: General Sir Michael Carver,
KCB, CBE, DSO, MC, General Officer Commanding-in-Chief,
Southern Command

Foreign Military Attaches Tour (Senior Member - Major
General Arne Gunner Lund, Dean of the Corps of Military
Attaches)

Thayer Award: Honorable Ellsworth Bunker, U. S.
Ambassador to the Republic of South Vietnam

Lieutenant General Sir Thomas J. Daly, Chief of the
General Staff, Australian Army

May

Alumni Review:
General of the Army Omar N. Bradley
General Clyde D. Eddleman

June

Graduation Exercises:
Vice President Spiro T. Agnew

General Juergen Bennecke, Commander-in-Chief, Allied
Forces Central Europe, NATO

General Tanom Putmonanda, Deputy Chief of Staff, Supreme
Command Headquarters, Thailand

Lieutenant General Harald Løken, Commander-in-Chief,
Norwegian Army