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George F. Palmer

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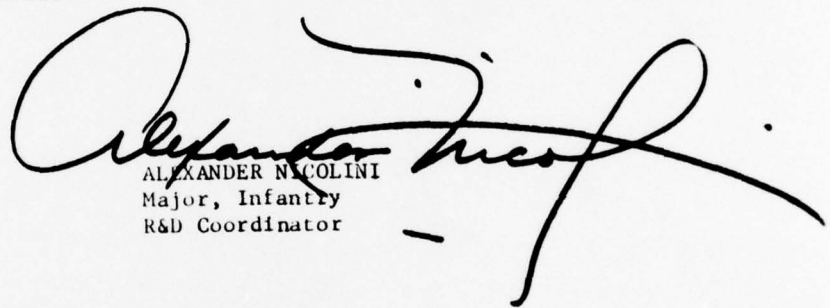
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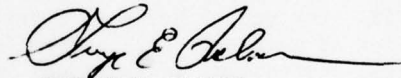
ALEXANDER NICOLINI
Major, Infantry
R&D Coordinator

P R E F A C E

This study was undertaken as part of a continuing effort to explore all possible methods of improving the US Army Physical Fitness Program. The diversification of duty assignments in today's modern Army has created many physical fitness problems and opportunities for enhancing the physical fitness of the American soldier. Increased mobility and the concomitant accelerated pace of land warfare and underscore the demands on the physical fitness of all Army personnel. The foot soldier must be prepared to meet the physical requirements of the new battlefield and the peacetime training grounds. The staff officer and administrative support personnel must be physically capable of handling the tremendous planning and logistical, and administrative support system.

The following study investigates the feasibility of improving the Army Physical Readiness Training Program by establishing and operating an Institute of Physical Fitness. This facility would train physical training instructors for both supervisory and instructional duties at the unit level, perform research, and develop improved physical training techniques.

To analyze the problem, a selective study was conducted of the Army's previous attempts to improve physical readiness training. The physical training academies of foreign nations and the US Marine Corps were also studied, and a survey was made of the proponent Army agencies concerned with the physical health and condition of the American soldier. The need for improved training, availability and training of instructor personnel, current problems in physical training, and the availability of facilities for the proposed institute are also considered in this study.



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S U M M A R Y

Subsequent to 1956, the US Army attempted several methods to improve the physical condition and physical readiness training of the American soldier. Multi-level physical training conferences, civilian-military seminars, physical training managerial classes in branch service schools, and the development of a detailed field manual have not eliminated the major problem areas.

Physical training personnel at unit level are not presently trained sufficiently to provide a highly motivated, efficient, and effective program of physical development and maintenance. Physical injuries have resulted from the improper administration of physical training programs with subsequent hospitalization, wasted manhours, and the development of poor attitudes toward physical training. The current Army Athletic and Recreation Program (A&R) is not being implemented by small units at its optimum level due to a lack of qualified, knowledgeable personnel in the field.

Several foreign nations have long considered a physical training academy or school to be the most effective means of maintaining physical readiness in their armed forces. These academies emphasize sports, which are considered an integral part of psychological warfare to these nations, a defeat in the Olympics is a defeat in the "cold war." Also by research they maintain the capability of evaluating and improving their methods on a continuing basis to take advantage of new world-wide developments.

The US Marine Corps is also operating a physical training academy at the present time.

A successful physical training school was operated by the US Army from 1946 to 1953. The school produced physical training instructors and supervisors, a few of whom are still active in the Army and working in the fields of athletics, recreation, and physical training. The school was disbanded when the armed forces experienced a budget curtailment.

To maintain a modern and relevant physical training program, a need exists to provide a centralized research facility. This facility should have the capability to perform the following: conduct basic kinesiological research; maintain a complete physical fitness library, coordinated with civilian authorities; provide a statistical analysis of the effectiveness of program changes and relevance of training to need; and evaluate and develop new and improved physical fitness training methods.

This report proposes the creation of a United States Army Institute of Physical Fitness. The institute would be composed of an Academic Department and a Research and Development Department.

a. Academic Department. A student-faculty ratio of approximately 5:1 would exist in the Academic Department where physical training instructors would be trained in the proper, most effective, and modern methods of organizing and implementing Army physical training programs. The physical training instructors' course would be 7 weeks in duration. Six cycles of this course would be conducted the first year, with 50 students per cycle. As the program is perfected, additional classes would be scheduled to meet the needs of the service. Graduates would be used at division through battalion level in TO&E units and at company level in Army Training Centers. After graduation of three physical training instructor classes, an additional

supervisors' course would be developed. Selected officers and enlisted men would be further trained in planning, organization, and supervision of procedures to enhance the implementation of Army physical training programs and techniques as developed by the US Army Institute of Physical Fitness.

b. Research and Development Department: The research and development department would be staffed by specialists essential for an aggressive and valid research program. This department would function as a collection point and repository for physical fitness information, respond to inquiries from the field, provide a continuous means of evaluating Army physical readiness training, and develop and evaluate new methods of physical training and testing.

To support the establishment of a US Army Institute of Physical Fitness at Fort Benning, Georgia, research of selected topic areas is contained in the attached study. The areas discussed are as follows:

- a. The History of Army Physical Fitness.
- b. Physical Conditioning as a Part of Unit Training.
- c. Developmental Research.
- d. Unit Athletic and Recreation Programs.
- e. Causes and Affects of Personnel Injuries.
- f. Individual and Unit Motivation.
- g. Training Facilities Required for Proposed Institute.
- h. Proposed Institute Staff and Faculty.
- i. Program of Instruction.
- j. Student Personnel and Support.
- k. Estimated Cost Implications.

It is envisioned that initially the US Army Institute of Physical Fitness will support the Womens' Army Corps and could eventually become an all-service institute..

The last quarter of FY 72 is currently proposed as the time period in which the proposed Institute of Physical Fitness could be activated.

A single Army-wide Institute of Physical Fitness will provide the economy, practicality, uniformity and information assimilation, evaluation, and dissemination necessary to promulgate a progressive Army physical training program.

The conclusions of this study are -

- a. There is a need to improve the technical subject knowledge of the Army physical training instructors and supervisors.
- b. The most economical and practical method of providing physical training personnel for the field is through a centralized training institute.

c. Development and research facilities should be centralized to improve development of the Army's physical readiness program.

d. Many of the injuries sustained during physical training because of improper exercise are avoidable and could be prevented by qualified, school trained physical training instructors in the field.

e. Current unit A&R programs do not fulfill their potentiality in small units due to a lack of properly trained instructor/supervisory personnel in the field.

f. Many physical training personnel in the field are not prepared to assume responsibility for planning, supervising, and leading physical training activities.

g. An Institute of Physical Fitness can feasibly be established without delay at Fort Benning under the operational control of the Leadership Department, United States Army Infantry School.

The recommendations of this study are -

a. That the concept outlined in this report be approved for the establishment of an Institute of Physical Fitness at the United States Army Infantry School.

b. That an MOS be awarded graduates of the proposed institute, or

(1) That a prefix be awarded to an officer MOS upon completion of the course, and

(2) That a Special Qualification Identifier (SQI) and/or an Additional Skill Identifier (ASI) to the MOS of enlisted personnel be awarded upon completion of the course.

c. That an Institute of Physical Fitness be established without delay at Fort Benning under the operational control of the Leadership Department, United States Army Infantry School.

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I. INTRODUCTION

Problem:

To determine the feasibility of establishing an Institute of Physical Fitness at the United States Army Infantry School, Fort Benning, Georgia.

Facts Bearing on the Problem:

The need for physically combat-ready soldiers will continue indefinitely. There will also be a continued emphasis on physical conditioning activities and the athletic and recreation (A&R) programs throughout the Army as the various commands increase unit training.

The Army education system included a successful Physical Training School from 1946 to 1953 (Annex C).

The United States Army Infantry School has the responsibility for developing physical training doctrine throughout the Army (26,27). (Appendix I and II of Annex F)

Several foreign nations have had physical training academies in operation for many years (Annex D).

The US Marine Corps has operated a physical training academy since 1967 (Annex E) (26).

Army Regulation 705-5, dated April 1968, designates the Army Surgeon General the sole responsibility for research and development in physiology, studies of the neurophysiological aspects of motor coordination, and therapeutics. Laboratory facilities do exist for the investigation of the medical aspects of physical conditioning (Annex G).

The Army needs a more active physical fitness research and development unit and better qualified physical training instructors and supervisors in the field to assist commanders (Annex F).

There is a lack of personnel in the field qualified to implement the Army A&R programs (Appendix IV of Annex F).

Physical injuries have resulted from the improper administration of physical conditioning activities (Appendix V of Annex F).

II. H I S T O R Y

The American soldier has almost invariably been physically unprepared for the rigors of combat. Complaints have been made concerning the state of physical fitness of the US Army since 1826 (23).

The two major conflicts of the twentieth century, World Wars I and II, found the Army seeking civilian assistance to properly prepare the new recruits for the physical demands of war. The Young Men's Christian Association and the Knights of Columbus were among those assisting in this training (25). The YMCA had provided 541 physical fitness directors by 1918 (23). During World War II, the Army once again relied on civilian teachers and coaches to provide physical training in the Army (30).

Immediately following World War II, the trend in the Army was to upgrade the physical fitness programs within the various commands as training schedules became peacetime oriented. Recommendations approved by Department of the Army in 1944 included a plan for increasing participation in athletic activities and a proposal that experienced, well-trained physical training supervisors be assigned to permanent duty positions from theater level down through regimental level (Appendix I of Annex B).

The goals established by the program planners in 1944 were realized in September 1946, when the Army organized a successful Physical Training School at Fort Bragg, North Carolina (Annex E). This school was closed in 1953 as an economy measure (during President Eisenhower's first term in office) when other small, independent service schools were either disbanded or consolidated.

The responsibility for physical training doctrine was transferred at the closing of the Physical Training School to the Army General Staff School at Fort Riley, Kansas, and later to the United States Army Infantry School by direction of General Order 20, Department of the Army, dated 11 March 1955, amended by General Order 36, dated 6 June 1955.

Prior to the Korean Conflict, and subsequent to transfer of physical readiness training responsibility to USAIS, several significant conferences were held and studies conducted which recommended that the training of leaders responsible for conducting and supervising physical training be improved and that a more balanced program be developed. Action taken on the recommendations, in some instances, was not sufficient to alleviate all problems relating to the need for trained physical training personnel in the field (Appendix II-IV, Annex B).

III. ESTABLISHMENT OF PHYSICAL FITNESS ACADEMIES

Foreign:

Several foreign nations have long considered an academy as the most effective means of maintaining physical readiness in their Armed Forces. Sports events are considered to be of primary importance in their physical training programs because these events not only condition an individual, but build unit morale and esprit de corps. To the European, sports events are an integral part of psychological warfare, i.e., a loss in the Olympics is a defeat in the cold war. Emphasis in research at the foreign academies is in evaluating and developing methods of improving human performance. Graduates of these academies are used at the lowest unit level as physical training instructors and athletic supervisors (Annex D).

US Marine Corps:

For the purpose of research and development, the United States Navy and Air Force have several facilities staffed by well-trained personnel, but no physical training schools. The US Marine Corps has a physical training academy but lacks research facilities. The Marine Corps Physical Training Academy graduates are awarded an MOS and are used as instructors at unit level (Annex E).

IV. NEED FOR AN INSTITUTE OF PHYSICAL FITNESS

Unit Training:

In the near future, there will be an increase in unit training activities. More time will be available at the company level for physical training and athletics. Personnel knowledgeable in the leadership techniques of physical training and in organizing and officiating athletic activities will be needed for the successful accomplishment of such a program. These individuals could effectively implement the physical training program and effect changes as circumstances necessitate.

Developmental Research:

Presently, there is no centralized facility for the research and development of Army physical training doctrine. Facilities in existence are not sufficient to allow a continual statistical analysis of physical training. The establishment of a physical fitness institute would permit a continuous evaluation and comparison for the development of improved programs.

The vast majority of physical conditioning research in the United States is accomplished by universities and civilian athletic organizations. Their results are usually available through easily obtainable periodicals and books. The requirements of the Army physical training program do, however, differ sufficiently from civilian programs to necessitate certain modifications and adaptations.

The Army Surgeon General has the responsibility for developments in the fields of physiology, neurophysiological aspects of motor coordination, and therapeutics. Problems which arise in these areas could be directed, by the centralized facility mentioned in the paragraph above, with the assistance of the Office of the Staff Surgeon, USAIS, to the appropriate medical facility.

This centralized location would provide a properly staffed and equipped facility for aggressive research and progressive development of a better training and testing program and the evaluation of new training methods.

Instructor Training:

Headquarters, CONARC, recognized the importance of trained physical training instructors in Basic Combat Training (BCT), in Advanced Individual Training (AIT), and in unit training. A recommendation made in a 1965 survey was approved, in part, in an attempt to solve the problem of insufficiently trained physical training personnel. It was believed, at that time, that the problem would be remedied by the Drill Sergeant Schools, physical training management classes at branch service schools, and by holding a series of conferences for key staff officers (physical training action officers) from USCONUS level down through major unit/installation level (Appendix IV to Annex A; Appendix VI to Annex F).

All efforts attempted have failed to adequately satisfy the need for trained personnel. The pertinent technical subjects are not being taught at the Drill Instructor Schools or service schools. Most physical training time at these schools is devoted to individual conditioning. A minimal amount of time is spent in leadback instructional periods (Appendix VII of Annex F).

A 3-day CONUS level conference held at USAIS in 1965 was not followed up with conferences at the lower levels as outlined in the multi-stage plan developed at Headquarters, CONARC.

Specialized Schooling:

An extensive survey of officers and units throughout the Army revealed that 97 percent of the officers replying believed that physical training instructors should receive specialized training due to the technical nature of their duties. The officers also indicated that this schooling should take place at division and post-level schools (65:4).

While it might be convenient for the units to send personnel to post schools, the cost of equipment and facilities and the availability of staff personnel capable of teaching the technical subjects would be prohibitive at these levels. A single Army-wide school would provide the economy, uniformity, and information assimilation, evaluation, and dissemination necessary to promulgate a progressive physical training program.

Injuries:

Injuries have resulted from the improper administration of physical training programs. Improper exercise design and improper administration of training have caused physical damage, hospitalization, wasted manhours, and poor attitudes toward physical training. Because of the present techniques of treating stress fractures, a common problem in training centers, knowledgeable people are needed at the unit level to prevent complications, greater loss of manpower, and increased medical expenditures (Appendix V of Annex F).

Athletic and Recreation Program:

The Army Athletic and Recreation (A&R) program in small units in the field is not presently being used at its optimum level. One of the problems is a lack of knowledgeable personnel to implement existing programs and to motivate troops to use existing facilities. The unit A&R program can increase and maintain a high state of troop morale only if properly used. Personnel knowledgeable in A&R could create a friendly competitive atmosphere between units and thereby increase esprit de corps (Appendix IV of Annex F).

Motivation:

Motivation is an important part of a properly conducted and meaningful physical training and sports program. Such a program needs to be implemented by individuals who can provide a variety of interesting activities and communicate a personal enthusiasm for physical activity. The effectiveness of most physical fitness programs can be nullified by a lack of motivation and subsequent improper execution of the activities (Appendix III of Annex F).

V. FEASIBILITY OF FOUNDING AN INSTITUTE OF
PHYSICAL FITNESS AT FORT BENNING, GEORGIA

Athletic Facilities:

A sufficient number and variety of outdoor athletic facilities exist at Fort Benning, Georgia, to support the proposed institute (Annex A). Although some of these facilities are presently being used by other USAIS resident classes, the facilities would be adequate if properly scheduled (Appendix III of Annex A).

Classroom Facilities:

At the time of this report, Mr. Dehan, Department of Operations, USAIS, stated that 95 percent of the classrooms in Infantry Hall are being scheduled daily. By March 1970, the United States Army Training Center will be deactivated, vacating the buildings presently used for classroom instruction and billeting. Some of these buildings could be made available to support the proposed institute.

Cost:

The cost of operating the proposed institute is minimal. It consists primarily of the civilian research and development specialist's salary, annual library maintenance, and expendable office supplies. The cost of equipping the proposed institute would be less, and the same equipment would have multiple uses for training, research, and teaching aids. This required equipment has a relatively long life expectancy. Replacement costs of athletic equipment would be minimal (Appendix IV of Annex A).

Personnel:

Within the Army there appears to be an adequate source of qualified personnel with the appropriate backgrounds to satisfy the proposed institute's staff requirements. These individuals should possess college degrees in physical education, kinesiology, or physiology. Some graduates from the Army's former Physical Training School are still in the service.

VI. C O N C L U S I O N S

↘ There is a need to improve the technical subject knowledge of the Army physical training instructors and supervisors.

The most economical and practical method of providing physical training personnel for the field is through a centralized training institute.

Development and research facilities should be centralized to improve development of the Army's physical readiness program.

Many of the injuries sustained during physical training because of improper exercise are avoidable and could be prevented by qualified school-trained physical training instructors in the field.

Current unit A&R programs do not fulfill their potentiality in small units due to a lack of properly trained instructor/supervisory personnel in the field.

Many physical training personnel in the field are not adequately prepared to assume responsibility for planning, supervising and leading physical training activities. ↙

It is feasible to establish without delay an Institute of Physical Fitness at Fort Benning under the operational control of the Leadership Department, USAIS.

VII. R E C O M M E N D A T I O N S

That the concept outlined in this study be approved for the establishment of an Institute of Physical Fitness at the United States Army Infantry School.

That an MOS be awarded graduates of the proposed institute, or

a. That a prefix be awarded to an officer MOS, and

b. That a Special Qualification Identifier (SQI) and/or an Additional Skill Identifier (ASI) to the MOS of enlisted personnel be awarded upon completion of the course.

That an Institute of Physical Fitness be established without delay at Fort Benning under the operational control of the Leadership Department, United States Army Infantry School.

ANNEX A - Description of Proposed Physical Fitness Institute

ANNEX A -- Description of Proposed Physical Fitness Institute

- APPENDICES:
- I - Concept of the Academic Department
 - II - Concept of the Research and Development Department
 - III - List of Facilities
 - IV - Cost Analysis
 - V - Proposed Program of Instruction

Appendix 1 to Annex A - Concept of the Academic Department

1. Course: Physical Fitness Instructor/Supervisor Course (Specialist or functional course)
2. Purpose: To prepare officers and noncommissioned officers to instruct and supervise physical training activities at division and lower levels of command.
3. Prerequisites: Twelve months or more service remaining after completion of the course. Grade O-1 to O-3; E-5 to E-7. Age 19 to 30. High school graduate or equivalent certificate. GT of 90 or higher. Qualified swimmer. Ability to meet minimum combat ready standards of the Physical Combat Proficiency Test (successfully pass WAC test for WAC personnel). No service obligations for active Army commissioned officers. Confidential security clearance required.
4. Length of Course: Seven weeks.
5. Class Size: 50
6. Cycles per Year: Six (to be increased to meet needs after the program is developed and the usefulness of the graduates determined)
7. Training Locations: United States Army Infantry School, Fort Benning, Georgia.
8. Uniform: Normal duty uniform as locally prescribed. Students must furnish their own gym shoes and swimming suits.
9. Source of Students: Students will be recruited from the following sources:
 - a. Drill Sergeants, preferably recent graduates of the Drill Instructors School.
 - b. Special Service personnel.
 - c. Noncommissioned officers, preferably recent graduates of the Non-commissioned Officers Course.
 - d. Junior officers, preferably while stationed at USAIS for the Infantry Officer Basic Course and recent Officer Candidate School graduates.
 - e. Volunteers meeting the prerequisites from TOE and TD units, especially those filling positions such as assistant S-3 training officer, training NCO, A&R officer, and A&R NCO.
10. Graduates to be awarded a physical training MOS or prefix/suffix.
11. Knowledge Level: Qualified.
12. Staff and Faculty: 11 officers, 12 enlisted men, and one civilian listed below by title and job description.
 - a. Director (LTC) Infantry, MOS not specified: Responsible for the administration, instruction, and research and development activities of the Institute. Supervise 10 officers, 12 enlisted men and one civilian in the

Appendix 1 to Annex A (continued)

performance of their duties to insure the highest professional instructional standards are maintained; and supervise and advise Director of Research and Development Department to insure relevant and pertinent research is performed, and monitor all activities performed by Research and Development Department. Coordinate the institute activities to support the requirements of the service. Act as primary coordinator between Institute and military and civilian agencies on physical fitness. Responsible for compilation, maintenance, analysis, interpretation, and dissemination of physical fitness information. Prepare answers to inquiries from the field and report concerning physical training and testing. Prepare training manuals and other documents as directed by the Commandant, USAIS. Responsible for research, coordination, and supervision of special projects and studies assigned by the Commandant, USAIS, within the scope of the institute.

b. Deputy Director (MAJ), Infantry, MOS not specified: Responsible for acting on all matters in the absence of the Director. Administer and supervise the budget and fiscal matters. Responsible for historical and promotional projects relevant to the mission of the Institute. Coordinate with USAIS for the procurement and assignment of qualified personnel for instructional and research duties within the Institute. Monitor field implementation of Army physical training and graduates of the Physical Fitness Instructors/Supervisors Course. Responsible for preparing materials for briefings and orientations to be presented to visiting officials, dignitaries, and interested persons. Insure the preparation and maintenance of necessary instructional material and training records and files. Monitor and coordinate with other agencies, civilian and military, to insure implementation of the most modern and efficient methods and techniques. Inspect training to insure proper fulfillment of the program of instruction. Supervise the processing of all types of relief actions, resignations, and formulate procedures for these actions. Identify graduates for possible retention on the staff of the Institute. Direct the activities of the Academic Department.

c. Operations Officer (CPT): Advise the Director and provide staff supervision on administrative matters of operations and management. Develop and publish policies and procedures for the operation of the entire Institute in coordination with the Research and Development Department and the Academic Department. Maintain all records, correspondence, and the research library. Prepare or procure training aids and insure availability and operating condition of all facilities required for operation. Requisition, issue, and maintain all supplies and equipment for the Institute.

d. Director of Research and Development (Civilian, GS-13): (Special Qualification: Kinesiologist) Responsible for initiating and performing research relevant to the Army's physical fitness program. Supervise the preparation, maintenance, and continuance of a research library. Monitor civilian and foreign developments in areas of physical fitness relevant to Army needs. Responsible for preparing necessary records and reports pertaining to Research and Development Department activities. Attend seminars, symposiums, and meetings and visit other institutions involved in physical fitness research and development. Prepare and present instruction to classes in the Academic Department concerned with the technical aspects of anatomy, physiology, and related subjects. Analyze and interpret statistical data gathered and provide relevant results to interested agencies. Formulate standard operating procedures for the conduct of research and development within the Department. Supervise 11 officers and 12 enlisted men in the performance of their duties within the Research and Development Department.

Appendix 1 to Annex A (continued)

e. Statistician (1LT), MOS 6400: Conduct special research studies, prepare statistical data in tabular form, and report findings with recommendations. Evaluate trends and correlations to determine cause and effect relationships. Perform statistical and complex mathematical functions in connection with research and development projects. Direct publication of statistical tables and texts. Develop and coordinate basic measurement standards necessary in development and improvement of review and analysis methods and techniques. Evaluate present and proposed programs in terms of lead times, trends, availability of necessary resources, and consistency with established programs. Measure progress, and evaluate effectiveness of operations against established objectives and previously developed standards. Conduct continuing analysis to assure that significant facts are brought to the attention of responsible personnel.

f. Senior Staff Physiologist/Instructor (MAJ): (Special Qualification: Master of Science Degree in Physiology) Assist the Director of Research and Development in performing research on physical fitness and assume his responsibilities when the Director of Research and Development is absent. Monitor developments in the field of physical fitness and study the possible adaptation of these developments for Army use. Instruct in the technical subject areas and provide a local expertise in physiology. Supervise the implementation of curriculum and insure high quality professional instruction. Disseminate information of new and pertinent developments to members of the institute as well as interested agencies of USAIS and other concerned agencies.

g. Instructors (two CPTs, two LTs, and two WAC LTs): (Special Qualifications: Background in Physical Education or Physiology) Prepare and present instruction in the field of physical training to students enrolled in the Physical Training Instructors/Supervisors Course, according to the program of instruction. Prepare lesson plans, teaching materials, vault files, and training aids on subjects within the scope of the institute. Monitor classes taught by other instructors to insure uniformity of instruction. Assist the Research and Development Department Director in the improvement of the Army physical fitness program by issuing quarterly reports to that Department delineating observed problem areas, suggested research areas, possible solutions to existing problems, or any other information considered interesting. Supervise assistant instructors assigned to their class.

h. Senior Enlisted Assistant Instructor (E-8): Assist the instructors in the supervision of the assistant instructors. Maintain working files of instructional materials for class utilization. Assist the operations officer in the administration and logistical support of the institute.

i. Assistant Instructors (ten E-6s or E-7s): Assist the instructors as required with the presentation of instruction. Demonstrate as required and provide assistance on an individual basis to students. Officiate in the team athletic classes except where student officiating is part of the curriculum. Assist in the preparation of study material. Perform other duties assigned within the Academic or Research and Development Departments.

j. Clerk-Typist (E-4), MOS 71H: Perform typing and related duties. Organize and type correspondence, recurring and special reports, and similar material based on written notes or verbal instructions. Post and file regulations, correspondence, and similar materials. Distribute incoming communications. Proofread typewritten material against source material. Operates office machines such as mimeograph and adding machines. Assist in operation of library services by performing such duties as circulation, desk routines, stack and records maintenance, typing, and filing.

Appendix 1 to Annex A (continued)

13. Organization: The Institute will be under the operational control of the Leadership Department, USAIS.

14. Institute Support:

a. Male: Students of the proposed institute could be billeted and messed by The School Brigade, USAIS. With a class of 50 students operating one class at a time, the students could be billeted and messed in an existing company of the 1st Battalion, The School Brigade. As cycles begin to overlap to a sufficient degree, a separate company could be provided by the 1st Battalion, The School Brigade, for the institute's support. A class of 50 students would require the addition of one or two clerks for The School Brigade to process the increased number of files. The Casual Section of Headquarters Company, The Candidate Brigade, could provide billets and mess for students arriving prior to their class date and awaiting orders after graduation.

b. Female: Female students of the proposed institute could be billeted and messed by the WAC Company of the USAIC Troop Command. Early arrivals and students awaiting orders after graduation would also be billeted and messed by the WAC Company.

15. Graduation Utilization: The ultimate goal is to have an officer and NCO graduate of the institute assigned to each division, brigade, and battalion headquarters and a minimum of one NCO per Army Training Center Company.

Appendix II of Annex A - Concept of the Research and Development Department

1. Purpose: To provide a centralized facility for the statistical analysis of physical readiness and other research and developments; to provide a centralized facility for the evaluation and development of improved physical training and testing methods; to refer problems of an essentially physiological and/or the neurophysiological aspects of perception and motor coordination nature to Medical Service facilities for investigation; maintain a technical reference library; and update Army training literature concerning physical readiness.
2. Staff: The Deputy Director's primary duty is the assimilation of data, statistical analysis, and program research and development. Other staff members help the Deputy Director as needed.
3. Equipment: No special scientific equipment is necessary for the type of research that the institute is initially expected to perform. See Appendix IV of this annex for a listing of equipment which is to be used for instruction and for research and development.

Appendix III of Annex A

The following list of sports facilities are presently available at Fort Benning. These can easily be made available for USAIS classes by routine coordination with the USAIC Special Services Office.

<u>FACILITY</u>	<u>NO. LOCATIONS</u>	<u>REMARKS</u>
Bowling Alley	3	42 lanes total
Gynasiums	5	Uses: handball, badminton, wrestling, weightlifting, volleyball, boxing, table tennis, basketball.
Swimming Pools	6	1 indoor pool
Tennis Courts	2	6 courts
Golf Course	1	9 holes, 1 driving range
Baseball Field	7	
Softball Field	19	
Volleyball Court	39	
Basketball Courts	6	Outdoor courts
Speedball	6*	
Flickerball	8*	

*Some overlapping of these facilities.

Appendix IV of Annex A - Cost Analysis

1. Initial Cost:

a. Athletic Equipment	\$1,500.00
b. Teaching/research aids	2,000.00
c. Mimeograph machine	567.00
d. Adding machine	<u>150.00</u>
	\$4,217.00

2. Annual Cost:

a. Salary GS-13, Deputy Director	\$15,812.00
b. Library	200.00
c. Miscellaneous office supplies	<u>2,000.00</u>
	\$17,332.00

3. Itemized listing of costs for athletic equipment and teaching/research equipment:

a. Teaching/research equipment:

(1) Articulated skeletons	\$500.00
(2) Transparencies, prepared	40.00
(3) Anatomical plaques	10.50
(4) Charts, anatomical and physiological	60.00
(5) Overhead projector	175.00
(6) See-thru chart	160.00
(7) Motion picture film (X-ray of movement)	11.00
(8) Sphygmomanometers	150.00
(9) Stethoscopes	25.00
(10) Spirometers	60.00
(11) Long skinfold calipers	140.00
(12) Pedometers	20.00
(13) Coniometers	20.00
(14) Flexiometer	150.00
(15) Tension gauges	25.00

Appendix IV of Annex A (continued)

* (16) Scales (wt. & ht.)	70.00
(17) Arm, hand scapula, and clavicle skeleton	35.00
(18) Plastic splints	30.00
(19) Portable vital capacity	65.00
(20) Rats, large, injected	50.00
* (21) Resuscitation dummy	197.00
b. Athletic Equipment	
(1) Softballs	30.00
(2) Ball gloves	400.00
(3) Catcher's mask	40.00
(4) Chest protectors	50.00
(5) Leg guards	88.00
(6) Bats	120.00
(7) Bags	30.00
(8) Tennis rackets	100.00
(9) Tennis balls	20.00
(10) Badminton set	25.00
(11) Basketball sets	75.00
(12) Volleyball sets	75.00
(13) Soccer balls	40.00
(14) Footballs	40.00
* (15) Tumbling mats	150.00
* (16) Speedball sets	110.00
(17) Miscellaneous	107.00

*4. All previous cost is based on local retail prices except those noted by an asterisk. These items are based on Army supply catalogue prices.

Appendix V of Annex A - Proposed Program of Instruction

PROGRAM OF INSTRUCTION
PHYSICAL TRAINING INSTRUCTOR/SUPERVISOR COURSE
7 Weeks; 296 Hours

Introduction	1	Welcome address. Mission of academy and course outline.
History	2	History of physical fitness. Orientation on foreign academics and the history of selected athletic events.
Current Problems	1	Problems presently concerning military and civilian conditioning, fitness, and testing.
Anatomy and Physiology	20	Study in detail the anatomy of skeleton, musculature, and circulo-respiratory system. Study in less detail the nervous, digestive, endocrine and excretory system. Study in detail muscle, neuromuscular, and circulorespiratory physiology.
Athletic Injuries	13	Prevention and emergency treatment of injuries common to athletics. Army profile system - its meaning and importance.
Mechanics of Movement	6	Study the proper methods of performing selected movements (lifting, squatting, pushing, walking, etc.) and the principles involved in movement and impetus. Posture.
Hygiene	2	General physical hygiene procedures and concepts. Emphasis on special problems created by athletic activity.
Nutrition and Obesity	4	Nutritional requirements of active bodies and symptoms and problems resulting from poor nutrition. Problems of obesity, relevance to physical fitness, prevalence and measurement and proper weight control.
Environment	2	The effects of temperature, humidity, and altitude on physical conditioning and activities. Effects on sleep and nutrition.
Effects of Exercise	4	The effect exercise has on the body and mind and changes which result from exercise - valuable and detrimental.
Factors of Conditioning	3	Factors which hasten and retard physical development and fitness. (sleep, nutrition, attitude, repetitions, overload, drugs, etc.)

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Appendix V of Annex A (continued)

Remedial Exercise Concept and Methods	5	Concept of progression and overload. List of common weaknesses and possible specific remedial exercises and activities. Practical exercise for students. Discussion.
PCPT	2	Two tests for measurement of student development and familiarization with proper test administration.
Sex Related Topics	3	Problems and factors of physical fitness and conditioning which varies between men and women. Hormonal correlations.
Exercises and Athletics (For Male Personnel Only)	150	
Analysis of the Army Program	(25)	Analysis of each exercise and training activity in the Army physical fitness program. (Conditioning drills, grass drills, rifle drill, obstacle and confidence course, weight training, isometrics, etc.)
Exercises	(20)	To provide physical conditioning for the student in the first four weeks of the course and provide some student teaching opportunity. One 15 minute period per student.
Design and Run Conditioning Confidence Course	(5)	Run obstacle course for conditioning, confidence, and familiarization. Design on paper, courses which should reflect the students understanding of testing and conditioning concepts.
Organized Athletics	(100)	Organization, officiating, supervision, and skills involved in playing selected sports. (swimming, softball, flickerball, volleyball, basketball, soccer, badminton, tennis, golf, speedball, etc.) The basic team sports would be taught to all students. The others would be offered as electives with a certain number of electives required for graduation.
Methods of Instruction	54	
Techniques	(10)	Concepts and principles of learning and teaching. Use of demonstrations, graphic aids, and other teaching techniques. (Voice control, motivation, etc.) Discussion.
Practice Teaching	(44)	Each student will teach one half-hour period and one hour period of instruction.
Testing Methods	3	PCPT administration and records. Problems of validity and accuracy in testing physical fitness. Students design possible test events. Discussion.

Appendix V of Annex A (continued)

Exercise and Athletics (For WAC Personnel)	150	
Analysis of Army Womens' Program	(10)	Analysis of each exercise and training activity in the WAC program.
Exercises	(20)	To provide physical conditioning for the student in the first four weeks of the course and provide some student teaching.
Personel Development	(5)	To learn and practice posture. Special problem of female athletic hygiene. Feminity in athletics.
Organized Athletics	(115)	Same as, but separate from, organized athletics for men. Swimming will be coed. Some sports will be deleted or added to fit the need of women.
Nonacademic Subjects	24	
Inprocessing	8	
Outprocessing	8	
Graduation	1	
Commandant's time	2	
Open Time	5	

ANNEX B - Background

ANNEX B - Background

The need for qualified physical training instructors and supervisors has been recognized for many years. Various approaches to the problem of training leaders to properly conduct, supervise, and plan physical training have been attempted. Contained in this Annex are extracts from significant staff studies and seminars which contain discussions on the problems that have arisen within the field of physical readiness due to a lack of qualified physical training leaders. Several valid recommendations quoted have, to date, not been acted on effectively, even though some action was taken. The discussion on the need for an Institute of Physical Fitness will address these continuing problems.

- APPENDICES:
- I - 1944 Conference on Physical Training
 - II - Report by American Association for Health, Physical Education and Recreation (1951)
 - III - Physical Fitness Survey (1958)
 - IV - Program Evaluation by USAIS (1965)

Appendix I to Annex B - 1944 Conference on Physical Training

1. The Athletic Branch of the Special Services Division met with several leading civilian sports authorities from 14 to 19 August 1944, to develop plans for an Army athletic program for the demobilization period following World War II.

2. At the conclusion of the conference the following comments were included in the conference report, which could be appropriate again as our military commitment in the Republic of Vietnam lessens:

a. "Following the defeat of Germany and during the subsequent period of readjustment and demobilization it is proposed that certain programs be put into effect to assist commanders in maintaining a high state of morale and physical fitness in units and individuals." (13:2)

b. "At such times as the military situation in an overseas command permits, purely military instruction will be reduced to that necessary for the execution of the mission and the maintenance of discipline, orientation, and health. The remainder of the training day will be devoted to comprehensive educational, athletic and recreational programs." (13:2)

c. "The successful organization and conduct of the athletic program is dependent upon the quality of the personnel selected to administer and work in the program. Under the conditions of occupation and demobilization, during which the athletic program will be inaugurated, it is of paramount importance that the personnel chosen be especially well qualified to carry on the required duties and responsibilities. Among these qualifications, emphasis must be given not only to the man's technical training, but to his ability to lead and to inspire others." (13:4)

3. The conference recommended that "each regiment, or equivalent unit (2,000) should have one athletic officer on a full-time basis."

Appendix II to Annex B - Report by American Association for Health,
Physical Education and Recreation

1. In October 1951, the Liaison Committee of the Armed Services and American Association for Health, Physical Education and Recreation, completed a 2 year project which involved an "evaluation of physical training, athletic and recreation and physical reconditioning programs as they were operated in the Army, Navy, and Air Force during World War II." (13:1)
2. "The evaluation was undertaken in order that the lessons of World War II in regard to these programs would not be forgotten." The evaluation was accomplished by members of the Association who had served in important positions of leadership in the Armed Forces from 1941 to 1945. (13:1)
3. The following problems were among those reported by the Association:
 - a. "Lack of properly trained leadership. Few officers and noncommissioned officers were adequately prepared to assume their responsibilities for physical training. Nowhere in their preparation was sufficient time and attention devoted to this subject. The quality of the leadership given to this program was much inferior to that provided for other training activities." (13:2)
 - b. "Lack of supervision from higher headquarters. There was practically no supervision of physical training from higher headquarters. Whereas progress in other aspects of training was frequently inspected, no attention was given to determine whether troops were adequately conditioned. This led naturally to neglect of this phase of training." (13:3)
4. Among the recommendations contained in the report were the following:
 - a. "That present tables of organization be expanded to include the addition to all G-3 and S-3 sections...one officer whose primary duty is to plan, administer and supervise all physical training and athletic programs under the authority of his commanding officer." (13:4)
 - b. "That physical training personnel be trained for their responsibilities at an appropriate school; such a school should be adequately staffed and provide all the latest and best information relating to physical training and athletics." (13:4)
 - c. "That all future officers be properly trained for their responsibilities in regard to physical training and athletics. This is particularly important in Officer Candidate and Reserve Officer Training Course programs." (13:4)
 - d. "That considerable emphasis be placed on a program of athletic participation for all troops." (13:3)
 - e. "That some centralization for the selection, training, assignment, and re-assignment of properly qualified athletic leadership personnel be effected by the Department of the Army." (13:4)
5. Subsequent to the 1944 conference and prior to the AAHPER evaluation, the Army took steps to alleviate a few of the problems, perhaps anticipating the recommendations of the Association's report and other similar reports. The Army founded a school, initially at Washington and Lee University, for the purpose of training physical training specialists. This school was later divided; the special service-oriented portion of the school moved to Fort Lee, Virginia, while the physical fitness portion was re-established at Fort Bragg, North Carolina. Additional information on the school at Fort Bragg is contained in Annex B.

Appendix III to Annex B - 1958 Physical Fitness Survey

1. In conjunction with the Physical Fitness Seminar held from 21-24 April 1958, at Fort Benning, Georgia, an opinion survey was conducted by the United States Army Infantry School. All divisions and each Army Headquarters received distribution of the questionnaires to distribute to subordinate units including combat units, support units, training centers, and service schools. Portions of the survey dealt with program supervision and leadership training. The analysis of these portions have been extracted and are as follows:

a. "The majority of the officers questioned believed the main purpose of the physical training program to be the preparation of personnel for combat. They also believe there are other reasons for the program. Although not specifically enumerated in the questionnaire, many other desirable traits are developed such as confidence, aggressive spirit, will to win, and esprit de corps." (64:2)

b. "Concerning the amount of interest and knowledge officers have about the physical training program, slightly more than half indicated a high interest. Slightly less than half indicated they were quite familiar with the program. This area appears to reveal a weakness as well as a problem. A weakness in that more officers should have a higher interest and better knowledge, and a problem as to methods to improve interest and knowledge." (64:2)

c. "Units by vast majority (97%) feel physical fitness leaders should be trained. It is the opinion of units that instructors who are to conduct the program should be trained through a course of instruction at major unit level. They believed officer supervisors should be trained for the planning and supervision of the program at the branch service school level. Units favor participation by officers in the physical training of the unit." (64:3)

d. "The allotment of time for organized physical training is unsatisfactory in the opinion of the majority of officers. They are dissatisfied with time allotment for enlisted personnel, for officer personnel and for students at service schools they have attended. Fifty percent of the units surveyed fail to schedule the minimum required hours to develop and maintain physical fitness." (64:4)

e. "Both officers and units agree to the value of athletics for use in the physical conditioning of troops. Yet only a small percentage (10%) is devoted to the conduct of such activity. There is some evidence that units take the path of least resistance in the use of activities as those activities featuring ease of control and simplicity are utilized at the expense of other desirable types of exercise." (64:4)

2. The survey concluded, among other things, that "leaders for both instruction and supervision of physical training should receive school instruction as their duties are technical enough to warrant such training. Preparation of physical training instructors should be at division or post level schools." (64:5)

Appendix IV to Annex B - Program Evaluation by USAIS (1965)

1. On 9 August 1962, Headquarters, USCONARC, held a physical fitness conference at Fort Monroe, Virginia. While leadership training was discussed at the conference, no further action was taken until the USAIS completed a program evaluation on 15 March 1965. This report reiterated the need for training personnel to properly conduct and supervise physical training activities. Among the conclusions were the following:

a. "Physical fitness programs, as implemented in the field, are not always effective and in such cases are generally not executed as prescribed by appropriate literature." (24:8)

b. "The absence of facilities will always be a limiting factor in the development of proper physical fitness programs in the field; however, improved planning would assist in overcoming this deficiency within current resources." (24:9)

c. "There is a need for improvement of company level physical training leadership." (24:9)

d. "It is not practical for the Army to again attempt centralized and highly specialized training of physical fitness leaders for company size units due to funding and other problems. It is practical to train limited numbers of higher unit commanders and key staff personnel." (24:9)

2. Based on these conclusions, the USAIS conference recommended the following:

a. A letter be dispatched to the Commandant of each branch service school. "This action will indicate the command interest at HQ, USCONARC, toward assuring leadership course students at branch service schools are prepared upon graduation to improve physical fitness programs within their assigned units." (24:10)

b. A letter be sent to each "CONUS Army commander and each Active Army Division Commander directing the attendance of the assistant G-3 staff officer who acts on physical fitness matters, at an orientation conference to be conducted at Fort Benning, Georgia, by the USAIS." (24:11)

c. "The United States Army Infantry School be authorized to establish a one-time conference envisioned as a three level program to ensure complete coverage. The first conference would be at USCONUS level. The second conference would be held at Army headquarters and attended by major units and installations. The third conference would be held at major unit/installation level attended by subordinate units." (24:11)

3. This plan proved to be unsuccessful, and only the first conference was held. The problems, therefore, still exist. While it was formerly considered impractical to have a centralized school, this would appear to be the only remaining alternative if the Army physical readiness program is to be improved.

TABS:

A. Outline of USCONUS Level Conference at USAIS

THREE-DAY ORIENTATION CONFERENCE FOR PHYSICAL
FITNESS ACTION OFFICERS FROM MAJOR HEADQUARTERS

1. Purpose: To orient and instruct the key staff officer personnel from major headquarters in the requirements of and appreciation for the Army Physical Fitness Program that these key personnel can carry out their assignment in an improved manner.
2. Duration of Conference: Three days.
3. Location of Conference: The USAIS, Fort Benning, Georgia.
4. Prerequisite: Assignment to a staff position related to physical fitness in a major headquarters in G-3 training, special services, or office of the surgeon.
5. Mandatory Attendance: The physical fitness action officers from Headquarters DA, USCONARC, the CONUS Armies, and the Active Army Divisions will be required to attend the conference as follows:
 - a. For the Initial Conference - All personnel serving in the mandatory attendance categories.
 - b. For Subsequent Conferences - Attendance at the next scheduled conference after assignment to a position requiring mandatory attendance.
6. Method of Instruction: Lecture, conference, demonstration will be used in the conference. No requirement will exist for physical participation in exercise during the instruction.
7. Schedule of Conferences: Two conferences per year if required, one in each half of the fiscal year. Dates of conferences to be announced.
8. Conference Program: An outline agenda is attached. When approved, a more detailed program will be developed and submitted for approval.

OUTLINE PROGRAM OF INSTRUCTION FOR THREE-DAY
ORIENTATION COURSE OF INSTRUCTION IN PHYSICAL FITNESS

<u>1st Day</u>	<u>Time</u>
1. Welcome and Course Instruction	1/2 hr
2. The Army Physical Fitness Program	1 hr
3. Physical Fitness Regulations and Publications	1 hr
4. The Body and the Effects of Exercise	2 hrs
5. Introduction to Physical Fitness	1 hr
6. Seminar Period	2 hrs
7. Summary	<u>1/2 hr</u>
TOTAL	8 hrs

<u>2nd Day</u>	<u>Time</u>
1. Physical Fitness Testing	2 hrs
2. Physical Training Programs	2 hrs
a. BCT	
b. AIT	
c. Unit Training	
3. Preparation of Physical Training Leaders	1 hr
4. Seminar Period	2 hrs
5. Summary	<u>1/2 hr</u>
TOTAL	7 1/2 hrs

<u>3rd Day</u>	<u>Time</u>
1. Physical Conditioning of Staff and Specialist Personnel	1 hr
2. Weight Control Program	1 hr
3. Special Service Sports and the Army Sports Program	1 hr
4. Physical Fitness Leadership and Supervision	2 hrs
5. Seminar Period	2 hrs
6. Course Summary	<u>1 hr</u>
TOTAL	8 hrs

TAB A to APPENDIX IV to ANNEX B (continued)

ANNEX C - Physical Fitness Academy at Fort Bragg,
North Carolina (Guide to Staff and Faculty) 1952

CHAPTER I

The Mission of the Physical Training School

1. Mission.

a. To train company grade officers and company, battery, and troop non-commissioned officers to assist unit commanders in the conduct of the Physical Training Program. MOS for which trained: None.

b. To serve as an agency of the Chief of Army Field Forces, in the development and perfection of physical training techniques; to maintain a system for the collection, evaluation, classification and preservation of data concerning specialized physical training for mountain, arctic, and desert combat.

CHAPTER II

Organization and Functions of the Physical Training School

2. Organization. Under the direction of the Commandant, the Physical Training School is organized as follows:

a. Headquarters, Physical Training School, includes the Staff and Headquarters Detachment.

(1) The Staff is composed of the Commandant, Assistant Commandant, and the Headquarters Detachment Commander (See Figure 1).

(2) The Academic Staff is composed of the Commandant, Assistant Commandant, Director of Instruction, Operations Officer, the School Secretary who is also the Adjutant, and the Chiefs of each of the Academic Departments (See Figure 2).

(3) The School Detachment Commander administers all personnel permanently assigned to Headquarters Physical Training School. He is responsible for the billeting and administration of all students attending the Physical Training School (See Figure 3).

CHAPTER III

Organization of the Academic Department

3. Assistant Commandant.

Under the direction of the Commandant, the Assistant Commandant is charged with direct supervision over all instruction, administration of instruction and instructional personnel. He will exercise close supervision over the school curriculum and make recommendations as to changes to the Commandant. He will coordinate the inspection of instruction through the Director of Instruction and the various department chiefs of the Academic Department. In addition, he will supervise the Headquarters School Detachment in its administration of the school cadre and the student companies. He will be historical officer and responsible for promotional projects and statistics.

4. The Academic Department Staff.

a. The School Secretary-Adjutant is the administrative assistant to the Commandant and conducts the details of the administration of the school, except those pertaining to instruction, and will be custodian of all school records. He will be responsible for the student evaluation program in connection with the course of instruction and in charge of the administration of the grading

ANNEX C - (continued)

system, scoring and tabulating the individual students' proportional weight scores based on current school grading system. He will conduct examinations, critiques and advises conferences when scheduled and act as the school's publicity officer. He will also act on all school budget and fiscal matters.

b. Director of Instruction - Acting for the Commandant, the Director of Instruction supervises the training program of the Academic Department, reviews each subject hour of instruction, prepares plans and policies for approval and establishes training standards by maintaining a system of inspections of each department's program of instruction. Acting for the Commandant, he coordinates the five departments of instruction, prepares instructional material and compiles the comprehensive examinations. He is directly responsible for the school's vault files on current lesson plans and instructors' manuscripts. In addition, the Director of Instruction is responsible for the efficient integration of newly assigned instructors into the faculty.

c. Operations Officer - The Operations Officer is charged with the preparation of the master schedule board for each class at the Physical Training School and publishing of the weekly schedule. Acting with the Director of Instruction and the Department Chiefs, he makes the weekly assignment of instruction. He assigns instructional areas, classrooms, arranges for the necessary athletic equipment, materials, training aids, sound amplifying equipment and temporary bleachers for instructional purposes. He represents the Physical Training School in all matters pertaining to the use of facilities outside the school compound necessary to efficient operations. The Operations Officer has direct control over the ground crew in the preparation of all instructional areas, the Training Aids and Reproduction Shop, and the Film Library. He is responsible for the proper maintenance of all facilities for instruction within the school compound. He is also the Library Officer.

5. Academic Department - The Academic Department is organized into five separate departments under supervision of department chiefs who are directly responsible to the Director of Instruction for the preparation, presentation and all administrative details in connection with all instruction in their respective departments. Titles and responsibilities of these five departments are as follows:

a. Methods Department - charged with the preparation, presentation and administration of all subject matter pertinent to Methods of Instruction, including the Leadership Training and the Practice Teaching phases of the course of instruction. The Methods Department is responsible for forty-two hours of instruction in the following course subjects:

Methods of Instruction & Principles of Leadership-----	32 Hours
Command Voice -----	3 Hours
Command Conference (TIP) -----	7 Hours

b. Program Planning Department - charged with the preparation, presentation and administration of all subject matter pertinent to the instruction in Program Planning with particular emphasis on the on-duty Physical Training Program at company level. The Program Planning Department is responsible for thirty hours of instruction in the following course subjects:

Program Planning -----	11 Hours
Tournaments -----	9 Hours
Field Meets -----	4 Hours
Procurement, Care & Maintenance of Athletic Equipment -----	4 Hours
Field Trips -----	2 Hours

ANNEX C - (continued)

c. Basic Conditioning Department - charged with the preparation, presentation and administration of all subject matter pertinent to the instruction in the conditioning phase of the Physical Training Program. Particular attention will be given to the development of instructional procedures, instructor techniques and perfection in performance in addition to the actual conditioning of the student. The practice teaching phase will be closely coordinated with the Methods Department. The Basic Conditioning Department is responsible for fifty-three hours of instruction in the following course subjects:

Basic Conditioning -----	27 Hours
Administration of Physical Fitness Testing -----	4 Hours
Administration of Basic Physical Achievement Test -----	3 Hours
Cross Country -----	2 Hours
Combatives (Hand to Hand Combat) -----	6 Hours
Mass Games and Relays -----	7 Hours
Obstacle Course -----	3 Hours
Confidence Course Orientation -----	1 Hour

d. Theory-Technical Department - charged with the preparation, presentation and administration of all instruction designed to provide the student with the professional background and basic principles in the theory and practice of Physical Education. The Theory and Technical Department is responsible for twenty-nine hours of instruction in the following course subjects:

Nature of Physical Fitness -----	1 Hour
Physiology of Exercise -----	6 Hours
Anatomy and Kinesiology -----	8 Hours
Body Mechanics and Posture -----	5 Hours
Principles of Physical Fitness Testing -----	3 Hours
Prevention of Athletic Injuries -----	6 Hours

e. Sports Skills Department - charged with the preparation, presentation and administration of all instruction in the development of sports skills, teaching and coaching techniques and their application to the operation of sports programs at the company level. The Sports Skills Department is further subdivided into a major and minor sports committee under committee chiefs and are responsible for one hundred and forty hours of instruction in the following course subjects:

<u>Major Sports Committee</u>		<u>Minor Sports Committee</u>	
Football -----	20 Hours	Volleyball -----	11 Hours
Basketball -----	17 Hours	Soccer -----	10 Hours
Baseball & Softball -----	20 Hours	Speedball -----	5 Hours
*Swimming -----	22 Hours		
Track & Field -----	18 Hours		
Boxing & Bag & Rope -----	16 Hours		
Officiating -----	1 Hour		

* Principles of this program include administration of a swimming test followed by 8 hours of instruction for beginners in Swimming, and concurrently, 8 hours of individual gymnastics for qualified swimmers.

6 Doctrine Research and Analysis Department - The Doctrine Research and Analysis Department is composed of the Assistant Commandant and the Chiefs of each Academic Department. They will conduct research and prepare analytical studies of subjects or projects assigned by the Commandant. They will constantly review current

ANNEX C - (continued)

trends and new developments in the professional field of Physical Education with regard to their adaptability to the Army's Physical Training Program. They are responsible for study and research of the existing tests and measurements standards in the Army as to their accuracy, validity, objectives and scope. They are also responsible for examination of existing Army Physical Training Manuals and Publications to determine their adequacy and utility. They are further responsible to the Commandant for the direction of the Physical Training School special mission of continued research and development of adequate physical conditioning of troops for desert, mountain and arctic duty.

7. Librarian - The Librarian is in charge of the School Library. He is immediately responsible for the efficiency of its administration and responsible for the books and other property therein. He is responsible for the procurement, cataloguing and classifying of the books comprising the Library. The Library is maintained for the use of students, cadre, staff and faculty of the Physical Training School. The Librarian will be assisted in the administration of the School Library by a Library Committee, which is charged with the general supervision of the Library and its affairs. It is responsible for the preparation of regulations for the administration and interior economy of the Library; and with the selection of books, periodicals, and other publications and supplies to be obtained therefor.

a. Loss of, or damage to, books - In case of loss of or damage to any book, periodical or other property belonging to the Physical Training School, through neglect, the person responsible for such loss or damage will replace the article, or pay the cost of the article, or the cost of repairs.

b. Accountability - The Librarian will account to the Commandant semi-annually for the books and other property in the Library.

ANNEX D - Foreign Physical Training Academies

ANNEX D - Foreign Physical Training Academies

1. In August 1967, the Chief of Physiological Division, Naval Medical Field Research Laboratory and the Director of the US Marine Corps Physical Fitness Academy visited several military physical fitness academies in Europe. The following information is, for the most part, extracted from their report of that trip.

a. British Army School of Physical Training, Aldershot, England: The educational philosophy stresses the importance of calisthenics and sports activities to condition the soldier for combat. Games are essential for morale and esprit de corps. Graduates are qualified to instruct and supervise physical training programs. The goal is to have at least one graduate in every company. (63:2)

b. Royal Air Force School of Physical Training, St. Athens, Wales, established 1918: The educational philosophy stresses leadership and the necessity for extensive recreational facilities for leisure time activities since the Royal Air Force (RAF) requires no specific training time for conducting activities. There is a special course for women. Officer students are recruited from civilian physical education colleges. In 1967, plans were being made for beginning research similar to that conducted by the US Air Force laboratories. (63:10)

c. Bataillon De Joinville, Fountainebleau, France, founded in 1857: The academy was at one time only a training center for French athletes. The Army and Navy had separate schools for physical training. In 1967, these smaller service schools were to be incorporated into the Bataillon De Joinville. At the time of the visit it was suspected that some changes would be made as the Army philosophy leaned toward military physical conditioning activities. The nation's sportsmen and military teams, which compete internationally, train at the academy, and the academy trains physical training instructors and sports supervisors. The school is staffed with medical personnel who carry on research and coordinate with various civilian organizations interested in physiology. (63:15)

d. Der Sportschule Der Deutscher Bundeswehr, Southofen, Germany: The educational philosophy stresses sports training as the best means of conditioning soldiers for military duty. The graduates are prepared for instructor and supervisor duties. There is a 2-week orientation for medical officers specializing in sports medicine. The school is open to Navy and Air Force personnel as well as the Army. Sports training is oriented toward Olympic preparation. (63:22)

e. Norges Idrettschogskole, Oslo, Norway: The educational philosophy stresses physical activity and athletics. The school is under the joint control of the Minister of Defense and Minister of Education. It is attended by military and civilian personnel alike. Military graduates assume battalion level supervisory roles. The course consists of instruction on medical subjects, teacher training, athletics, and the military skills and conditioning exercises. The school is the center of activity for Olympic training. (63:29)

2. In 1965, Mr. William G. McNamara, who now occupies the position of Secretary, Interservice Sports Council, Officer of the Adjutant General, Washington, D.C., reported on foreign academies and the physical training programs in the previously mentioned nations and a few others which warrant mentioning here. The following information is extracted, for the most part, from his report.

a. Italy: The Italian Armed Forces have very extensive physical readiness programs, each suited to skills required for the mission of the respective branches. The Army Physical Education School at Orviete, Italy, prepares instructors and coaches specialized in military skills such as hand-to-hand combat, boxing, judo,

ANNEX D - (Continued)

and fencing. The Air Force program is closely related to that of the RAF in Great Britain. The Vigna della Valle Sports Center coordinates the training program and prepares instructors. The Naval physical training program stresses calisthenics and nautical sports such as rowing, swimming, etc. (35:4)

b. Finland: The Finnish Army physical readiness program stresses cross-country marching, swimming, and skiing. There is an NCO physical training specialist in each battalion to supervise physical training activities (35:5)

c. Soviet Union: At the disposal of the Soviet Armed Forces are three scientific research institutes which conduct physiological research. They are located in Moscow, Leningrad, and Tibilisi. The Soviet Army has vigorous, comprehensive physical fitness program which is an extension of the physical readiness program imposed on all citizens from the age of about 14. (35:7)

3. The conclusions drawn from the visits to foreign academies include the following:

a. Due to a national interest in physical activities, the Armed Forces of the countries visited had ample funds, extensive modern facilities, and an impressive amount of prestige.

b. European Armed Forces employ sports to a larger extent in physical conditioning programs than any of the US Armed Forces.

c. Where research programs did not exist, the academies were at least considering plans for such programs. The emphasis of research programs is on evaluating and developing methods of improving human physical performance. The study of the stress undergone by the athlete in training is recognized in these academies as having valuable application to combat preparedness. Work with rehabilitation cases and the aged is also being conducted.

TAB:

A - Courses Offered at European Academies

COURSES OFFERED AT EUROPEAN SCHOOLS

British Army School of Physical Training Aldershot, England	Students	Length	RAF School of Physical Training St. Athans, Wales	Students	Length	Bataillon de Joinville Fontainebleau, France	Students	Length	German Army Sports School Sonthofen, Germany	Students	Length	College of Physical Education and Sport Oslo, Norway	Students	Length
Asst. Instructor (Corporal)	120	13 wk	Basic (men)		23 wk	Recruit Training		4 mo	Asst. Instructor (Reisgenführer)		3 wk	First Year (Officers only)	31	1 yr
Advanced	20	13 wk	Basic (women)		13 wk	NCO School		6 mo	Advanced (Sportsfelder)	250	4 wk	Advanced Courses (Officers only)		1 yr
Probationers	10	13 wk	Officers		4 wk	1st Degree Monitor		3 mo	Sports Courses (Advanced)		3 wk			
Officers	25	4 wk	Flight Commanders		3 wk	Middle Level Monitor		5 mo	Officer					
Senior Officers	150	1 da				Chief Monitor		1 yr	Major-Colonel	25	2 wk			
Refresher	15	2 wk				Regimental Commanders		2 wk	Lt.-Colonel	20	2 wk			
Women	-	13 wk							Medical Officers	25	2 wk			
Cadet (boys)	-													
Special														
a. Coaching		Varies												
b. Anatomy and physiology		from 1 wk to 3 mo												
c. Sports medicine														
d. Others as required														
Total Student Capacity	200		Total Student Capacity	90		Total Student Capacity	800		Total Student Capacity	600				

ANNEX E - Trip Report to U.S. Marine Corps Physical Training Academy
(1969)

ANNEX E - Trip Report to U.S. Marine Corps Physical Training Academy (1969)

SUBJECT: Trip Report

TO: Dir, Leadership Dept FROM: Chairman, CCDC DATE: 26 Nov 69 CMT 1
MAJ May/11c/545-5733

1. The following personnel from Conditioning, Combatives and Drill Committee, Leadership Department, USAIS, conducted a liaison visit to Quantico, Virginia, and Washington, D. C., during the period 18-20 November 1969:

- a. LTC George E. Palmer, 267-32-2016
- b. MAJ Billy W. May, 439-48-7044

2. Purpose: To visit and maintain liaison with the Marine Corps Physical Fitness Academy and exchange information concerning the latest techniques and doctrine of bayonet fighting and physical fitness.

3. Period and Place:

- a. 18 November 1969: Marine Corps Physical Fitness Academy, Quantico, VA
- b. 19 November 1969: President's Council on Physical Fitness and Sports
- c. 19 November 1969: NASA Stress Lab, Washington, DC

4. Synopsis of Observation:

- a. Marine Corps Physical Fitness Academy: TAB A
- b. President's Council on Physical Fitness and Sports: TAB B
- c. NASA Stress Lab, NASA Building: TAB C

5. Conclusions:

a. Liaison visit was productive and afforded an excellent opportunity to become informed on the latest doctrine and philosophy of the Marine Corps' approach to physical fitness.

b. The Marine Corps is making excellent progress in teaching and preparing personnel for assignment as physical training instructors. In addition, extensive command emphasis is being placed on this program by the Commandant of the Marine Corps.

c. The Marine Corps is currently planning an expansion of its present Physical Fitness Academy. Planning includes an elaborate multi-million dollar training facility to accommodate all requirements for an Armed Forces Physical Training and Research Academy which would become the military focal point for the dissemination of information relating to physical fitness.

d. Mr. Jack Wilbern of the President's Council on Physical Fitness and Sports expressed tremendous interest in the Army's physical fitness program. He stated that the Council would provide expertise to the Army upon request in establishing physical fitness facilities and in preparation of Programs of Instruction for physical fitness.

e. The Marine Corps method of teaching the bayonet is patterned after Dr. Sidler's method, with modifications. The Marines, however, expressed considerable interest in the Army's new approach to rifle and bayonet fighting techniques.

ANNEX E - (continued)

6. Recommendations:

a. That CCDC continue to conduct liaison visits with the Marine Corps and other services to exchange ideas and information in areas of mutual interest.

b. That Mr. McNeely, or his personal representative on the President's Council on Physical Fitness and Sports, be invited to visit Fort Benning to:

(1) Address Advanced Course classes on the purpose, mission, functions and contributions of the Council to physical readiness training.

(2) Tour physical training facilities and observe training in the Leadership Department's physical conditioning classes.

(3) Correlate the direction and goals of the Army physical training program with civilian physical education and athletics.

GEORGE E. PALMER
LTC, Infantry
Chairman, CCDC

SYNOPSIS OF VISIT

Marine Corps Physical Fitness Academy, Quantico, Virginia

1. The following contacts were made at the Physical Fitness Academy:

LTC R. H. Thompson - Director
MAJ R. D. Shoptaw - Assistant Director
CPT N. L. Tomlinson - OIC (Woman Marine instruction)
Gunnery Sgt (E-7) Jackson - NCOIC
Gunnery Sgt (E-7) Crater - Chief Instructor (water survival techniques)
SSG Hockaday - Instructor (close combat section)
Miss M. A. Newcomb - Assistant Instructor (Woman Marine)

2. The visit was initiated by an entrance interview with Major Robert Shoptaw, Assistant Director. He discussed the background, missions, function and organization of the Academy and then arranged for a tour of Academy facilities and inspection/tour of several classes being taught. Those classes visited were:

- a. Water Survival Techniques (Drownproofing)
- b. Bayonet Training
- c. Student presentations

3. An interview with the Director of the Academy was concerned with the expansion plans for the Academy. Following are notes covering various aspects of the Academy.

a. General. The course of training for physical fitness instructors is based on comprehensive classroom instruction in Anatomy, Physiology, Kinesiology and principles of physical training to provide a working knowledge of the human body and how it performs. Emphasis is placed on instruction on all systems, the methods and techniques of physical conditioning, coupled with the use of related apparatus and equipment. The course includes a very demanding progressive conditioning program aimed at increasing the strength and endurance and developing agility and coordination. It is designed to improve performance under stress. The course includes instruction in organized athletics such as rugby, soccer, basketball and football. Additionally, boxing is now part of the POI. These sport skills are taught in the context of a physical conditioning medium for improving physical fitness through vigorous, aggressive team competition. Instructor training is also included in the course to help give the students confidence in themselves to speak articulately and intelligently.

b. Training Philosophy: A basic working knowledge of the human body is taught at the beginning of the course. This provides the basis for the instruction in physical training, close combat and water survival, which is carried on throughout the course. As previously mentioned, students must undergo a continuous and progressively more vigorous individual conditioning program. They actively engage in all methods of training which they will subsequently teach, and are repeatedly compelled to perform at maximum stress levels consistent with their level of training. This training reflects the concept that the physical training instructor must not only be knowledgeable and have the ability to communicate this knowledge, but also must teach by providing leadership in these activities through personal example and by adhering to the principles of his teaching.

c. Mission: To improve combat readiness and the general physical fitness of all Marines by developing and promulgating the most effective physical training and combat survival techniques.

ANNEX E - (continued)

d. Functions:

- (1) To train instructors and specialists in close combat and physical training for all Marine Corps units.
- (2) To collect, classify and evaluate all available research data relating to physical fitness and combat survival for assessing its application to military training and combat.
- (3) To conduct and coordinate research functions and to evaluate and develop programs in physical fitness.
- (4) To prepare information and instructional literature on physical fitness and related programs for dissemination to field commands.
- (5) To maintain liaison with other agencies and authorities in the field of physical fitness.
- (6) To provide professional assistance to other services and civilian agencies as directed by the Commandant, USMC.

e. Organization: The Academy is composed of three branches, to include a Documentation and Classification Branch, Instructional Branch, and Methods Program Research and Evaluation Branch. The Instruction Branch is divided into four sections, including Physical Training, Close Combat, Water Survival, and Administrative Sections. An advisory council composed of experts frequently advises on the professional development of the Academy and the subject matter included in the various courses of training.

f. Staff: The staff is composed of the Director, Deputy Director, a woman Marine (captain) instructor, an assistant woman Marine instructor (civilian), a civilian physiologist who is a visiting instructor from the Naval Research Laboratory, and ten enlisted instructors, plus guest instructors.

g. Courses of Instruction: The Academy conducts four separate courses of instruction for officer and enlisted students. These four courses are:

- (1) Physical Training Instructor Course (Male) - 12 weeks
- (2) Physical Training Instructor Course (Woman Marine) - 12 weeks
- (3) Water Survival Instructor Course - 1 week
- (4) Close Combat Instructor Course - 3 weeks

All courses are scheduled during a common three-month training cycle with a one-month break between cycles when no formal classes are conducted. The primary course is the Physical Training Instructor Course, which incorporates the other courses of instruction. The main difference between the male and Woman Marine Instructor Course is that the Woman Marine does not participate in close combat classes and instead substitutes classes on personal development. Normal quotas for all courses of instruction are 30 men and 10 women (total 40) per class.

h. Prerequisites:

- (1) Physical Training Instructor (Male)
 - (a) Sergeant or above.
 - (b) High School graduate or GED equivalent.

ANNEX E - (continued)

- (c) GCT 100 or higher.
 - (d) Volunteer.
 - (e) Qualified swimmer.
 - (f) Must successfully complete all nine events in the Marine Corps Physical Fitness test for Marines in the 17-25 age group.
 - (g) Minimum of one year remaining on station upon completion of course.
- (2) Physical Training Instructor (Woman Marine)
- (a) Corporal or above.
 - (b) High School graduate or possess GED equivalent.
 - (c) GCT 100 or higher.
 - (d) Qualified swimmer.
 - (e) Volunteer.
 - (f) Must successfully pass all events of the Woman Marine Physical Fitness Test for the appropriate age group.
 - (g) Minimum of one year on station upon completion of the course.
- (3) Close Combat Instructor.
- (a) Successfully pass the Marine Corps Physical Fitness Test.
 - (b) Corporal or above.
 - (c) Volunteer.
- (4) Water Survival Instructor: Must be currently qualified as Senior Red Cross Life Saver.

ANNEX F - The Need for a Physical Fitness Institute

ANNEX F - The Need for a Physical Fitness Institute

- Appendices:
- I - Research Responsibilities of the USAIS
 - II - Evaluation of Army Physical Fitness Program (1965)
 - III - Motivation
 - IV - Unit A&R Programs
 - V - Injuries
 - Tab a. Concurrence from Dr. Shaver, MAH
 - Tab b. Concurrence and Prevention of Injury from LTC Eason, MAH
 - VI - Report to HQ, USCONARC (1965)
 - VII - Service School Programs

Appendix I to Annex F - Research Responsibilities of the USAIS

The following is an extract of p. 6-8 of the USAIS SOP, Fort Benning, Georgia (15 December 1969)

E-X-T-R-A-C-T

"6.12. Physical Training

a. General. The Commanding General, USCONARC, has charged the Commandant, USAIS, with the development, evaluation and continued revision of the Army Physical Fitness Program. To meet this responsibility the USAIS: (1) serves as the proponent of Army physical fitness, and develops and maintains a program of physical fitness for all components (Active and Reserve) of the United States Army; (2) provides personnel and support required for review, evaluation, development and test of various aspects of the Army physical fitness program; and (3) recommends changes and new developments to USCONARC and DA, as appropriate.

b. ODDLP. The Training and Liaison Branch of the Training Division, ODDLP, is responsible for evaluating and coordinating the development and revision of the Army Physical Fitness Program for which USAIS is responsible. ODDLP will also serve as a consultant to the Assistant Commandant concerning physical conditioning and training.

c. Leadership Department. The Leadership Department is responsible to support revision or change to the physical fitness program. This responsibility includes development of new or revised techniques; testing as required to confirm the merit of new or revised methods or techniques; and preparation and submission of recommendations, reports and draft of changes/revision to training literature and visual aids."

Appendix II of Annex F - 1965 Evaluation of Army Physical Fitness Program

1. "Evaluation of the Army Physical Fitness Program Report to USCONARC" 15 March 1965, Director, Ranger Department, Colonel I. A. Edwards.

"c. Problems Investigated. Each of the following areas were analyzed to determine the most pressing needs. Areas were identified from which specific and practical remedial actions could be recommended. Discussion of each are as follows:"

(1) through (3) omitted herein.

"(4) Coordination of the Physical Fitness Program. The Army Physical Fitness program is coordinated at Department of Army. HQ, USCONARC, is responsible for development of physical fitness programs and for the development of personnel. There is no central agency within USCONARC to coordinate these functions. USAIS believes the planning and development of the total program should remain progressive and up to date. The current organization at USCONARC with minor change can accomplish this objective. There appears to be no justification for transferring the monitorship for Army-wide physical fitness programs to the Military Academy as suggested by General Corley. The United States Military Academy is not in a position to effectively assume the monitorship, and the USMA is not under USCONARC control."

2. Memorandum for: Chief of Army Field Forces, From: LTC E.C.D. Scherrer, GS, Schools Division, G-3, 21 May 1953, Subject: Report of Annual Inspection of the Physical Training School, Fort Bragg, North Carolina, 12-13 May 1953."

E-X-T-R-A-C-T

"2. Administration-Organization.

b. The Physical Training School was not fully cognizant of their mission, insofar as the school's responsibility for doctrine, research and analysis, and revision of publications in the physical training field. The school has a research and analysis organization composed of an officer from headquarters and the directors of instructional departments. This group meets whenever necessary to act on projects or conduct research. More efficient operation would probably result if a Research and Analysis Department were established with one of its members to be permanent and without other duties.

7. Corrective Action.

b. Initiated but not completed:

(1) By the Physical Training School:

(a) Upon determination of desirability, initiate action to establish a Research and Analysis Department with one member who is permanent and without other duties."

The before-mentioned determination was made, and in a letter dated 21 July 1953, Captain Harold S. Travzel, Adjutant, Physical Training School, Fort Bragg, North Carolina, requested the needed equipment and authorization. The Department was established and functioning when the Physical Training School was disbanded on 1 January 1954.

Appendix III of Annex F - Motivation

1. The need for a well-motivated physical training leader, motivated men, and a properly planned program is expressed in FM 21-20, Physical Readiness Training.

a. "A desire to be physically ready should be created in all personnel. Motivation is increased and men take greater interest in physical fitness if they understand the value and benefits of vigorous exercise."

b. "Favorable reaction is enhanced by proper planning and organization, reasonable yet not easy requirements, use of competition and application of a progressive program resulting in physical fitness. With the development of physical fitness there is an equal development of morale." (30:15)

2. The leader of physical training activities must be able to convey his personal enthusiasm for athletics and physical fitness to his students. Only through his leadership and contagious enthusiasm will the student be motivated to actively and aggressively engage in a fitness program. Conversely, if the leader approaches physical training as drudgery, so will his students.



DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY INFANTRY CENTER
FORT BENNING, GEORGIA 31905

SPECIAL SERVICES OFFICE

AJISS

13 November 1969

SUBJECT: Proposed Physical Training Course

To Whom It May Concern

1. Reference proposed Physical Training Academy to be conducted by the Infantry School.

2. I am convinced that if reference course were offered it would in addition to training personnel in proper physical education techniques, be a valuable asset to unit level A&R programs. It has been my experience that unit A&R programs are often weak or nonexistent primarily because of a lack of qualified A&R personnel with proper motivation. This course would provide commanders with an excellent source of trained and motivated personnel to conduct an effective physical fitness and unit level sports program.

A handwritten signature in cursive script, appearing to read "R. A. Sebenoler", is positioned above the typed name.

R. A. SEBENOLER
LTC, AGC
Special Services Officer

SPECIAL SERVICES, USAIC
SPORTS BRANCH
Fort Benning, Georgia 31905

AJISS

17 November 69

SUBJECT: Comments Concerning Establishment of a Physical
Training Academy at US Army Infantry School

During the late 40's and early 50's the Army established and conducted a Physical training School at Fort Lee, Virginia which was later moved to Fort Bragg, North Carolina. The purpose of this school was to train military personnel in the methods and procedures for conducting physical training and the organization of unit intramural sports programs.

A recognized requirement existed in the Army during this period for trained personnel in this field.

The mustering-out phase of World War II saw a great majority of the trained personnel in this field lost to the Army.

Attendance at the P. T. School was based on quotas from installations or Army areas. The length of the course and material presented at the school is not presently available to the undersigned, however, this can be obtained from the Army files.

Upon completion of the school, personnel were assigned, in most cases to organizations as Sports Officers, Unit Athletic and Recreation Officers. The utilization of these trained personnel depended upon the commanders interest in organization and conduct of a physical training and intramural sports program.

The overall mission of the Army today has not materially changed from that of the World War II phase. Training of the individual soldier for combat duty is of primary importance, especially the modern day Infantry Soldier.

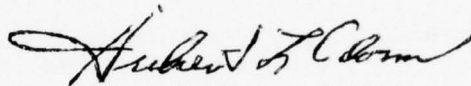
Past experience has shown that a program of rigorous physical fitness training alone is not sufficient to motivate the individual to maintain this condition. Competition in intramural sports on a seasonal basis has long been a supplement for physical training as well as a morale factor within organizations.

A program of physical training or athletics in a unit does not just happen. Organization and motivation of groups and individuals is a necessity for these as well as other programs within the military establishment. To accomplish this important phase of a program, leadership and qualification of the instructor or commander is considered a primary prerequisite.

Upon completion of training and qualification, assignment and utilization of physical training personnel is very important to the individual and the program.

Today one of the weaknesses in the Army Sports Program (AR 28-52) is the lack of qualified personnel at the major unit and lower echelon level to organize and implement the program. Another appears to be the lack of command interest especially at brigade and higher level.

The organization and establishment of a school or course to train personnel as physical training specialist as physical training specialist is highly recommended. However, prior to this, provisions should be made to authorize the MOS and positions within the TD and TO&E military organizations.



MR. HUBERT L. ODOM
Sports Director
Special Services, USAIC

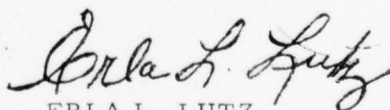
DEPARTMENT OF THE ARMY
WAC COMPANY
UNITED STATES ARMY INFANTRY CENTER TROOP COMMAND
Fort Benning, Georgia 31905

13 November 1969

SUBJECT: Qualifying PT Instructors

TO: Chairman of the CC & D
Leadership Department
United States Army Infantry School
Fort Benning, Georgia 31905

1. At the present time, it is the duty of the WAC Company Commander to schedule Physical Fitness Training weekly for one hour. However, the Army does not provide qualified Physical Fitness Training instructors, with the exception of the one or two trained personnel at the Women's Army Corp Training Center at Fort McClellan, Alabama.
2. To keep up the morale of the Company, Commanders are encouraged to furnish teams to participate in various sports within the Army area. We are handicapped greatly due to the lack of qualified coaches or even a general familiarity with Women's rules.
3. Physical Fitness instructors would be utilized by all WAC Company Commanders as Athletic and Recreation NCO's and to instruct the WAC Fitness Program. In addition, they will be able to give extra classes and more personalized attention to those Enlisted Women who are overweight or otherwise Physically unfit.
4. Having a trained instructor, would motivate those Enlisted Women who otherwise would be discouraged to participate due to their lack of knowledge or ability. The instructor could take this group of Women and teach them the sport they would like to learn without the handicap of being watched by a amateur/professional player.



ERLA L. LUTZ
CPT, WAC
Commanding

Appendix V of Annex F - Injuries

Injuries can and have resulted from the improper design and administration of physical training.

a. Design: The improper design of some exercises such as full deep knee bends, duck waddling, and sit-ups with legs extended have resulted in torn ligaments, stress fractures, cartilage destruction, and strained muscles. In some instances, such as sit-ups, modifications can be made, flexing the knees, which will eliminate the unwanted action, contraction of the iliopsoas, and retain the desired action, contraction of the rectus abdominis. However, in some instances, it is more efficient and safer to substitute other exercises designed to affect the target muscles (Annex E, Appendix V, Tabs A and B).

b. Administration:

(1) A survey of 586 officer candidates in 1967 at Fort Benning, Georgia, revealed 23 cases of proven exertional rhabdomyolysis with myoglobinuria (muscle membrane dissolution caused by excessive physical exertion with the resultant presence of the muscle respiratory pigment, myoglobin, in the urine) associated with physical exercise. The symptoms include a decrease in exercise tolerance greater than 50 percent, brown urine, muscle weakness, and swelling. A group of 175 candidates who underwent a graduated physical training program revealed no cases of myoglobinuria (28:22)

(2) In 1969, 13 cases evidencing muscle destruction were admitted to Martin Army Hospital as a result of a basic training company administering an exercise not prescribed by FM 21-20. The exercise called "Monkey Jump" also resulted in two of the before-mentioned cases being complicated with kidney damage. (15)

Tabs: A - Letter, Dr. Shaver
B - Letter, LTC Eason

TAB a of ANNEX F

The following letter from Major Glyndon B. Shaver, Jr refers to the recommendations made by this study, Annex G of this paper, and Tab b of Annex E of this paper.

AJIMA-H-K (10 Dec 69) 1st Ind
SUBJECT: Proposed Physical Training Institute

ORTHOPEDIC SERVICE, MARTIN ARMY HOSPITAL, Fort Benning, Ga.
31905 10 December 1969

THRU: Chief Professional Services, Martin Army Hospital, Fort
Benning, Georgia 31905

TO: Chief, Physical Training Subcommittee, CCDC (Leadership
Department), United States Army Infantry School, Fort
Benning, Georgia, 31905

1. Concur with recommendations and changes as stated in basic communication.
2. Highly recommend that this program be adopted.

GLYNDON B. SHAVER, JR.
MAJOR, MC
CHIEF ORTHOPEDIC SERVICE

10 December 1969

SUBJECT: Proposed Physical Training Institute

THRU: Chief, Orthopedic Service
Martin Army Hospital
Fort Benning, Georgia 31905

Chief, Professional Services
Martin Army Hospital
Fort Benning, Georgia 31905

TO: Chief, Physical Training Subcommittee
CCDC (Leadership Department)
United States Army Infantry School
Fort Benning, Georgia 31905

1. Through Lieutenant Latman we were made aware of a study on the feasibility of establishing an academy for training those individuals responsible for giving physical training in the Army.
2. We in Physical Therapy would like to add strong support for the acceptance of this idea and make recommendations for changes in the manner in which certain exercises are taught, as well as to recommend additional exercises.
3. The reason for these recommendations is not only for proper strengthening of these men and women but also, hopefully, as a preventive measure.
4. One of the most common problems in our society today is low back pain. Contributing factors of this common malady are inadequate muscle strength, poor posture, and incorrect use of the body, particularly when lifting.
5. Low back pain is also probably the most common problem for those new to the Army. In some instances the exercises given as part of the general conditioning program for these men and women, in fact, contribute further to the problem. In our opinion, if isotonic abdominal exercises are given, correct posture and body mechanics are taught and stressed at this phase of training; it is feasible that thousands of man hours would be saved, not to mention the prevention of unnecessary pain. Hopefully the majority of trainees would establish and continue good posture and body mechanics throughout their lives.

SUBJECT: Proposed Physical Training Institute

6. In a cursory survey of FM 21-20 dated January 1969 it is noted that there are no exercises which assure isotonic strengthening of the rectus abdominus and the obliques. In general, these muscles run from the ribs to the pelvis and are responsible for flexing the trunk and titling the pelvis upward in front as stated on pages 266-67. In other words, their action is to shorten the distance between the ribs and pelvis as they contract, either when raising the trunk or by tilting the pelvis.

7. When doing situps with the knees straight, as well as leg lifts in the supine position, there is a strong probability that there will be increased lumbar curve due to the strong pull of the Psoas Major muscle on the anterior bodies of the lumbar vertebrae (a reverse action in situps). Increasing the lumbar curve is one of the major contributors to low back pain.

8. Modification of the test exercise on pages 256-257 with implementation as a basic exercise would fulfill the specific recommendations of abdominal strengthening.

9. The modifications recommended are:

- a. Change the exercise from situps to partial situps and add the word partial before situps throughout the wording of the exercise procedure.
- b. Continue the same wording for starting position except replace "He interlaces his fingers and places them behind his head in contact with the ground, " to "He extends his arms through his legs").
- c. Under Movement delete "bend forward at the waist and raise the upper body until the head is directly over the knees, " and "elbows remain in the same plane to the head and body throughout the event. " Replace with "raise head and shoulders and come to partial sitting position. "
- d. Under movement add - "lift the head and raise the shoulders, coming to a partial situp. "
- e. Under instructions add as the second sentence - "The purpose of the exercise is to shorten the distance between the ribs and the pelvis, causing the abdominals to work maximially. "
- f. Under Administration delete the phrase "No situp is credited if the hands are unclasped from behind the head. "

AJIMA-H-K
SUBJECT: Proposed Physical Training Institute

10 December 1969

10. The progression of difficulty in performing the partial situp is (1) with the arms extended through the legs, (2) with the arms folded on the chest, and the most difficult is (3) with the hands behind the head and elbows held in the same plane as head and body. For attaining the desired result and avoiding confusion it is recommended the arms extended through the knees be used and progression of difficulty be attained by increasing the repetitions.

11. Maintaining good posture is already stressed in Chapter 31. This should continue to be stressed. Having an awareness of the importance of the abdominals and actually having strong abdominal muscles assists the motivated individual in attaining good posture.

12. Correct lifting is pictorially implied in FM 21-20 in the log lift and bar bell lifting, however, a cursory review of the manual did not reveal an explanation of the correct way. Squatting, holding the object as close to the body as possible, keeping the back slightly flexed, and lifting with the leg muscles is the correct way. This manner of lifting prevents undue stress being put on the lumbar area, which helps prevent low back pain. Getting in the habit of lifting in this manner regardless of the amount of weight to be lifted assures that the correct way will be used when lifting heavy objects. These exercises and correct posture and lifting procedures should be initiated at the reception station or as early as possible in basic training.

13. We strongly recommend positive consideration be given establishment of a Physical Training Academy or Institute. We strongly recommend revision of situp exercises as outlined above to assure correct isotonic strengthening of abdominal muscles. In addition to the change in the abdominal strengthening exercises we recommend teaching and stressing correct lifting and continuing to teach and stress correct posture. We further recommend that the revision and implementation of the abdominal exercises, correct lifting and posture correction be initiated whether or not the Physical Training Institute is implemented.

MARTHA J. EASON
LTC AMSC
CHIEF, PHYSICAL THERAPY CLINIC

Tab b to Appendix V of Annex F (continued)

Appendix VI of Annex F - 1965 Report to HQ USCONARC

On 15 March 1965, a report written by COL I. A. Edwards was submitted through channels to HQ USCONARC entitled "Evaluation of the Army Physical Fitness Program - USAIS Report to CONUS." Its stated problem was "evaluate the Army Physical Fitness Program to determine if the program is adequate to meet Army Requirements." The following is extracted from this report.

E-X-T-R-A-C-T

(2) Conduct of Physical Training and Physical Fitness Development in the Field. The Army Physical Fitness Program is separated into component parts. For this evaluation, five evaluation factors were applied to each part to determine effectiveness. These factors included command support, supervision and leadership, allotted time, facilities and program content. Application of these factors produced the following results:

(a) Basic Combat Training. The physical fitness program in BCT is generally effective. Command support, supervision, allotted time, and program content is adequate. The establishment of schools for Drill Instructors and for officers, coupled with other actions from the Ailes Report, should result in improved physical training leadership at the company level. Programs at times are limited due to inadequate facilities;

(b) Advanced Individual Training. The Physical Fitness Program is also generally effective in AIT. The supervision and program content are adequate. Command support is directed more at MOS qualification and less emphasis is placed on physical development. Several factors could be improved in AIT. Physical training instruction could be more competent; the time allotted which averages two hours per week is an hour less than adequate, and facilities could be standardized to a greater degree.

(c) Unit Training. The physical fitness development is less centralized in TOE and TD units than in individual training. The quality of program is directly affected by the vigor required to accomplish the unit mission and preoccupation in developing technical and material readiness. Program execution ranges from superior to poor. Factors which cause poor programs are: failing to place adequate emphasis on physical training at company/battery troop level to assure proper instruction and conduct of the activities; insufficient time allotment; poor facilities; and program content which forces staff officer and company commanders to plan programs for which they do not have the time or knowledge to successfully accomplish. Time allotted for the physical training is inadequate

(d) Special Services Programs. The organized Army Sports Program and the recreational sports program are primarily applicable to personnel of troop and TD type units. Although participation assists in developing and maintaining physical fitness, only limited numbers of personnel participate to the extent that no other program is necessary.

Appendix VII to Annex F - Service School Programs

1. The below listed schools incorporate the indicated amount of physical conditioning instruction in the school Program of Instruction.

2. The time devoted to administration of the PCPT ranges from 4 to 9 hours, depending on the POI. Little or no time is devoted to instruction of leadback techniques or remedial physical training, environmental factors, etc.

<u>SCHOOL</u>	<u>COURSE TITLE</u>	<u>WEEKS</u>	<u>HRS PT</u>
Infantry	Infantry OCS	23	22
	Officer Basic Course	9	13
	Officer Advanced Course	34	90
	NCO Course	12	22
Armor	Officer Basic Course	9	14
	Officer Career Course	36	147
Field Artillery	Artillery OCS	23	9
	Officer Basic Course	9	0
	Officer Advanced Course	39	0
Air Def. Arty	Officer Basic Course	9	9
	Officer Advanced Course	34	136
Engineer	Officer Basic Course	9	4*
	Officer Advanced Course	32	54
	Engineer OCS	23	8
Signal	Officer Basic Course	9	21
	Officer Career Course	10	6
Quartermaster	Officer Basic Course	9	20
	Officer Advanced Course	31	75
Military Police	Officer Basic Course	9	35
	Officer Advanced Course	33	99
Drill Instructor	Drill Instructors' Course	6	22

* Under revision - 18 additional hours will be added.

ANNEX C - Medical Research Responsibilities

ANNEX G--Medical Research Responsibilities.

E-X-T-R-A-C-T

9 April 1968

AR 705-5

APPENDIX A
RESPONSIBILITIES FOR CONDUCTING RESEARCH
AND DEVELOPMENT

A-1. Responsibilities for conducting research and development are as follows:

b. The Surgeon General.

(1.) Sole responsibility for:

(j.) Medical and allied sciences to include:

1. Adjustment and rehabilitation methods, including physical medicine.
2. Environmental medicine.
3. Internal medicine, including infectious diseases, metabolism, and dermatology.
4. Neuropsychiatric and psycho-physiological studies of prevention, diagnosis, and therapy of psychopathology.
5. Physical and medical standards for military service.
6. Physiology.
7. Preventive medicine, epidemiology, immunology, occupational health and environmental health hazards, including the study of insects and rodents as disease vectors and methods for their control.
8. Studies on neurophysiological aspects of sensation, preception, and motor coordination.
9. Medical aspects of ionizing and other types of radiation.
10. Surgery.
11. Therapeutics.

ANNEX H - Bibliography

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1. American Association of Health, Physical Education, and Recreation, Evaluation Report on Army Physical Fitness Program in World War II, Oct. 12, 1951.
2. AR 28-1, Special Services, (Washington, D. C.: Dept of Army, Sept 1964).
3. AR 28-52, Army Sports Program, (Washington, D. C.: Dept of Army, Dec. 1960)
4. AR 40-501, Standards of Medical Fitness, (Washington, D. C.: Dept of Army, Jan 1965.)
5. AR 600-1, Army Physical Fitness Program, (Washington, D. C.: Dept of Army, June 1965).
6. AR 600-7, Weight Control, (Washington, D. C.: Dept of Army, June 1965).
7. AR 705-5, Army Research and Development, (Washington, D. C.: Dept of Army, April 1968).
8. Arsen, C and C, Gillet, Psoas Muscles and Lumbar Curvature. (Abstracted in Excerpts Medica, See XIX, Rehabilitation and Physical Medicine, :425 (1970) Aug 1965).
9. ASS 21-37, Physical Training, (Washington, D. C.: Dept of Army, June 1964)
10. ATP 21-111, Modified Basic Training Program for Conscientious Objectors Without Prior Service, (Washington, D. C.: Dept of Army, July 1964).
11. ATP 21-114, Male Military Personnel Without Prior Service, (Washington, D.C.: Dept of the Army, July 1966).
12. ATP 21-121, Basic Training Program for Female Women Without Prior Service, (Washington, D. C.: Dept of Army, Jan 1966).
13. Bank, Col. Theodore P. "Evaluation of WWII Physical Training Program", (Washington, D. C.: Dept of Army, Oct 1951).
14. Badger, Phillip O., "Suggested Athletic Program for Demobilization Period", (A report to Special Services Division, War Department, 19 Aug 1944).
15. Breza, MAJ. Dept of Medicine, MAH, Conversation
16. Clarke, H. Harrison, Muscular Strength and Endurance in Man, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1966).
17. Cooper, Maj Kenneth N., Aerobics, M. Evans and Co., Inc, New York, 1968
18. "Controversial Calisthenics," in Tips on Athletic Training IV, Chicago, American Medical Association, 1962
19. DA Pam 21-2, Physical Fitness for Women in the Army (Washington, D.C.: Dept of the Army, February 1965)
20. Dawson, James, Physical Fitness Advisor, USAIS, Office of Doctrine, Development, Literature and Plans, conversations
21. Dawson, James, "Evaluation of the Army Physical Fitness Program," (USAIS Staff Study)

ANNEX H - (continued)

22. Dehan, Jacob W., Department of Operations, USAIS, conversations.
23. Drew, A. G., "A Historical Study of the Concern of the Federal Government for the Physical Fitness of Non-Age Youth with Reference to the Schools, 1770-1941," Research Quarterly 16:198, October 1945 (cited in 30)
24. Eason, LTC, Physical Therapy Clinic, Martin Army Hospital, letter
25. Editorial Board, Service with Fighting Men (New York: Association Press, 1922) p. 317 (cited in 30)
26. Edwards, I. A., Colonel, "Physical Fitness Study" (USAIS Staff Study)
27. Flint, M. M., "Selecting Exercise," Journal of the American Association for Health, Physical Education and Recreation, 35:19, February 1964
28. General Order Number 20, (Washington, D. C.: Dept of Army, 11 March 1955)
29. General Order Number 36, (Washington, D. C.: Dept of Army, 6 June 1955)
30. Greene, F. M. "The Development of Physical Training in the United States Army", Director, Physical Education, USMA, 1949-52.
31. Greenburg, J. and L. Anderson, "Exertional Phabdomyolysis with Myoglobinuria in a Large Group of Military Trainees," Neurology, Vol. 17, March 1967
32. Guide for Staff and Faculty, (Physical Training School, Fort Bragg, North Carolina, December 1952)
33. FM 21-20, Physical Readiness Training (Washington, D. C.: Dept of Army, January 1969)
34. Kendall, F. P., "A Criticism of Current Tests and Exercises for Physical Fitness," Journal of Physical Therapy Association, 45:187-197, March 1965
35. Klein, Karl K., The Knee: Growth, Development and Activity Influence, Greley, All American Publications, 1967
36. Lutz, CPT Erla L., Letter, Subject: Qualifying PT Instructors, 13 November 1969.
37. McDonald, Richard G. "Early Diagnosis and Treatment of Stress Fractures of the Galeaneus," Journal of the American Peditary Association, Vol. 56, December 1966
38. McNamara, William G., "Current Status of Physical Fitness in our Armed Forces and a Plan for the Future" (Staff Study, 1965)
39. Nelson, D. O., "Focus on Two Fitness Exercises," Journal of the American Association of Health, Physical Education and Recreation, 35:22-23, May 1964
40. Odom, Robert L., letter, Subject: Comments Concerning Establishment of a Physical Training Academy at USAIS, 17 November 1969
41. Osgard, Colonel James L., Physical Fitness Seminar Report, Fort Benning, Georgia, USAIS, April 1958
42. Palmer, LTC George E., Trip Report (Fort Benning, Georgia, USAIS, November 1969)
43. Program of Instruction for Physical Training Instructors Course (Marine Corps Development and Education Command, Quantico, Va.)
44. Program of Instruction for Marine Corps Women Physical Training Instructor Course, (Marine Corps Development and Education Command, Quantico, Va.)

ANNEX H - (continued)

45. Program of Instruction for Physical Training Supervisor Course, (Physical Training School, Fort Bragg, NC, 1951)
46. Program of Instruction for 2-6-C20, Field Artillery Officer Basic Course, (Fort Sill, Okla, USAFAS)
47. Program of Instruction for 2-6-C22, Field Artillery Officer Advanced Course (Fort Sill, Okla, USAFAS)
48. Program of Instruction for Field Artillery Officer Candidate Course, (Fort Sill, Okla, USAFAS)
49. Program of Instruction for 2-7-C20, Infantry Officer Basic Course, (Fort Benning, Georgia, USAIS)
50. Program of Instruction for 2-7-C22, Infantry Officer Advanced Course, (Fort Benning, Georgia, USAIS)
51. Program of Instruction for 2-7-F1, Infantry Officer Candidate Course (Fort Benning, Georgia, USAIS)
52. Program of Instruction for 2-7-010, Infantry Noncommissioned Officer Course (Fort Benning, Georgia, USAIS)
53. Program of Instruction for 4-5-C20, Engineer Officer Basic Course, (Fort Belvoir, Va, USAES)
54. Program of Instruction for 4-5-C22, Engineer Officer Advanced Course, (Fort Belvoir, Va., USAES)
55. Program of Instruction for 4-5-F1, Engineer Officer Candidate Course, (Fort Belvoir, Va., USAES)
56. Program of Instruction for 4-11-C20, Signal Officer Basic Course, (Fort Gordon, Georgia, USAESS)
57. Program of Instruction for 7-19-C20, Military Police Basic Course, (Fort Gordon, Georgia, USAMPS)
58. Program of Instruction for 7-19-C22, Military Police Officer Advanced Course, (Fort Gordon, Georgia, USAMPS)
59. Program of Instruction for 8-10-C20, Quartermaster Officer Basic Course (Fort Lee, Va., USAQS)
60. Program of Instruction for 8-10-C22, Quartermaster Officer Advanced Course (Fort Lee, Va., USAQS)
61. Program of Instruction for 17-A-C20, Armor Officer Basic Course, (Fort Knox, Kentucky, USAAS)
62. Program of Instruction for 17-A-C22, Armor Officer Advanced Course, (Fort Knox, Kentucky, USAAS)
63. Program of Instruction for 11-A-C24, Signal Officer Career Course, (Fort Monmouth, N.J., USASS)
64. Program of Instruction for 44-A-C20, Air Defense Artillery Officer Basic Course (Fort Bliss, Texas, USAADS)

ANNEX H - (continued)

65. Program of Instruction for 44-A-C22, Air Defense Artillery Officer Course (Fort Bliss, Texas, USAADS)
66. Rasch, Phillip J. and Ottott, Maj, George E., "Report on a Visit to Selected European Military Physical Fitness Academies," (Obtained from Marine Corps Physical Fitness Academy, Quantico, Va.)
67. Report, "Physical Fitness and Conditioning Survey (Fort Benning, Georgia, USAIS, April 1958)
68. Rose, LTC Gerald S., Staff Surgeon, USAIS, conversations.
69. Sherrer, LTC E. C. D., letter, Subject: Establishment of Research and Analysis Department, Physical Training School, 21 July 1953.
70. Sebenoler, LTC R. A., letter, Subject: Proposed Physical Training Course, 13 November 1969
71. Shaver, Maj, Orthopedics Department, Martin Army Hospital, letter
72. Smith, Colonel T. J., letter, Subject: Activation of Physical Training Department at the Army Generals School, Office of the Chief of Army Field Forces, Fort Monroe, Va., 26 January 1954
73. Standard Operating Procedure, USAIS, Fort Benning, Georgia, 1969
74. Training Directive 350-1, Annex Q (Ft. Monroe, Va., HQ CONARC, Jul 67)
75. Turner, CPT, Edward H., Management and Budget Office, USAIS, conversation
76. Wittenberg, Henry, Isometrics, Award Books, New York, 1968