

that overall troop strength will decrease even more by the end of fiscal year 1978, and the investigative staff is of the opinion that the transient population will decrease proportionately.

In addressing the specific categories in the above table, the investigative staff notes that two categories, personnel confinement facility and medical holding company transients, by their very nature, generally require housing for a short period of time separate and apart from permanent party personnel. As to the remaining categories, it is questionable whether, in justifying a new complex, personnel with such short-term housing requirements should be included in the permanent housing programing deficit.

4. Observations of Investigative Staff

In considering an enlisted men's barracks complex at Fort Leonard Wood of the size and cost proposed for fiscal year 1974, it appears to the investigative staff that there are points which should be considered before deciding whether or not to construct this facility. The investigative staff views these points as follows:

(1) Although the existing barracks complex at Fort Leonard Wood is of World War II vintage and therefore classified as substandard, the barracks in this complex have undergone extensive modernization and improvement and, in fact, are being fully utilized at present to house permanent party bachelor enlisted men and women. These barracks are scheduled to be demolished to make room for the proposed barracks complex.

(2) There are several intangible factors outside the control of the Army which limit the Army's ability to adequately forecast housing requirements for a period much beyond 1 year. These factors include a projected troop strength reduction, reduced participation in Southeast Asia, and reorganization of the Army training format, all of which were previously discussed in this report.

(3) The Army has no prior construction experience with the new design concept proposed for the Fort Leonard Wood complex other than that which will be derived from construction now underway at Fort Carson. Sufficient leadtime should be allowed between the current construction effort at Fort Carson and the proposed construction effort at Fort Leonard Wood so that the latter can benefit from the former's experience.

(4) The major mission of Fort Leonard Wood is training. Historical and projected information furnished by Army officials disclosed that the actual training level has been and will be substantially below the program level, yet the proposed permanent complex is justified utilizing program level figures. Furthermore, the use of transients in calculating permanent party housing deficits seems to be inconsistent and inflationary with respect to portraying the true permanent party housing deficit picture.

If this complex is approved for fiscal year 1974 MCA funding, there is a question as to whether construction of a complex of the size proposed for Fort Leonard Wood is warranted. The investigative staff questions whether, in programing this complex for fiscal year 1974, the Army based its justification on a demonstrated need or as part of its overall plan to remove all World War II temporary barracks as rapidly as possible.

B. CONFINEMENT FACILITY—250 MEN

To provide adequate facilities for the custody, control, and treatment of military prisoners, the Army has proposed the construction of a new confinement facility at Fort Leonard Wood for fiscal year 1974. The total project cost is estimated at \$6,287,000. As support for the proposed facility, the DD Form 1391 indicated that the project is a part of the continuing improvement of the Army's confinement and correctional program which is designed to effect maximum use of modern stockades and more meaningful confinee productivity in the attached vocational buildings. The new facility is intended to serve prisoners originating from Fort Leonard Wood and other adjacent defense installations, as well as other absentees, on a geographical area basis. The geographical area for the Fort Leonard Wood facility is comprised of the States of Missouri, Minnesota, Wisconsin, Michigan, and parts of Illinois and Indiana. The facility was first proposed for fiscal year 1973 as a 400-man facility, but the project was deferred by OSD and resubmitted for fiscal year 1974 as a 250-man facility.

According to the original justification prepared by the facility engineering section at Fort Leonard Wood, the facility is to have a peacetime capacity of 250 prisoners at 72 square feet per man and is capable of being expanded to accommo-

date 325 prisoners at 55 square feet per man. (In an emergency, additional prisoners can be accommodated at 44 square feet per man.)

1. Present Facility

The buildings currently in use for the confinement facility consist of World War II temporary mobilization-type structures constructed in 1941 which as modified, are used to provide control, supervision, and segregation of prisoners. Twenty-one temporary buildings totaling 58,301 square feet are planned to be demolished upon completion of the proposed project.

A breakdown of the average monthly prisoner strengths at Fort Leonard Wood for calendar years 1971 and 1972 is shown below:

AVERAGE PRISONER STRENGTH

Month	Calendar year 1971			Calendar year 1972		
	Pretrial	Posttrial	Total	Pretrial	Posttrial	Total
January.....	45	45	90	161	17	178
February.....	59	46	110	193	22	215
March.....	86	51	137	226	14	240
April.....	146	65	211	142	41	183
May.....	151	78	219	163	37	193(200)
June.....	191	61	252	156	26	189(182)
July.....	200	60	260	162	18	180
August.....	208	42	250	199	10	209
September.....	223	32	255	159	19	178
October.....	208	26	234	145	13	158
November.....	226	22	248	139	15	154
December.....	225	17	242	128	3	131

The annual average of prisoner strengths by pretrial and posttrial category follows:

	Pretrial	Posttrial	Total
Calendar year:			
1971.....	164	45	209
1972.....	164	20	184

Information furnished to the investigative staff and interviews with Army officials disclosed that a substantial number of military offenders, about 80 to 90 percent, were charged with or convicted of Absence Without Leave (AWOL) or desertion. A recent study by the Office of the Army Provost Marshal General showed that a majority of the prisoner population was in pretrial confinement. The study showed, for example, that during fiscal year 1972, the CONUS stockade pretrial population ranged from a low of 70 percent to a high of 81.7 percent. Moreover, a study entitled the "Report of the Special Civilian Committee for the Study of the U.S. Army Confinement System," dated May 15, 1970, concluded that as an estimate, not more than 5 to 8 percent of the military offenders are confined for civilian-type offenses such as the use, sale, or possession of drugs, robbery, assault of a superior officer or civilian on post, forgery or fraud.

Army officials advised that, based on statistics compiled between January 1967 and January 1972, average prisoner strength had been six troops per thousand, and confinee spaces in the proposed complexes have been programed based on these statistics and other data. In order to obtain historical data as to average prisoner strengths during peacetime periods, the investigative staff requested the Army to furnish statistics to reflect average prisoner strength back to the year 1952. These figures indicated that average prisoner strength dropped from a high of 12.8 prisoners per thousand following the Korean conflict in 1952 to less than 5 prisoners per thousand during the years prior to January 1967, with a low of 3.8 per thousand in December 1965. Army officials also advised that, in line with overall troop strength reductions in the Army, the total prisoner population has shown a commensurate decline.

2. Modification of the Army Correctional System

The CONARC plan for modification of the Army correctional system was approved by the Department of the Army on October 2, 1972. As directed by CONARC on February 23, 1973, the implementation date of the initial phase of

the plan was March 1, 1973, and complete implementation of the whole plan was to be achieved, in phases, by the end of calendar year 1973. The implementation plan was developed in coordination with the plan for scheduled Army reorganization in CONUS.

The objectives of the new Army correctional system are:

(1) Greater support to commanders by making maximum use of available confinement facility capacities and by relieving commanders of responsibility for highly specialized correctional treatment missions;

(2) Timely transfer of military prisoners to correctional facilities having treatment programs designed to return the maximum number of prisoners to productive duty with improved military skills and attitudes or to promptly identify and administratively discharge those individuals who will not or cannot meet Army standards;

(3) Maximum utilization of highly skilled correctional and professional services personnel;

(4) Optimum use of the larger, more modern confinement facilities; and

(5) Significant reductions in manpower requirements and future confinement facility construction costs.

The investigative staff was advised that, in the development of the new Army correctional system, extensive use was made of the study conducted by the Special Civilian Committee and a recent internal study made by the Office of the Provost Marshal General.

As modified, the Army correctional system will do away with large stockades at some installations, eliminate the correctional treatment mission at installation stockades, accelerate the movement of post trial prisoners to correctional treatment facilities, and provide confinement services on an area basis at other facilities.

The new system will consist of the following facilities:

(1) Transient installation confinement facilities having fluctuating prisoner population and part-time cadre staffs to provide for short-term confinement of installation and casual prisoners;

(2) Installation confinement facilities, normally not exceeding a capacity of 50 prisoners, which will provide support for those installations on which they are situated. Utilization of installation confinement facilities will provide pretrial confinement services at most Army installations.

(3) Area confinement facilities to be established at selected installations to provide for pretrial confinement services on an area basis for individuals transferred from other installation confinement facilities, for those individuals returned to military control (AWOL's), and to service the installation on which they are situated; and

(4) The U.S. Army retraining brigade at Fort Riley, Kans., and the U.S. disciplinary barracks at Fort Leavenworth, Kans., are designated to receive post-trial prisoners with 30 days or more remaining on their sentences.

3. Proposed Facility

The proposed area confinement facility at Fort Leonard Wood is designed for a capacity for 250 men. The facility as planned will use the modern design concept known as the "telephone pole plan." Its characteristic feature is a central corridor from which wings for housing and other facilities extend like the arms of a telephone pole. In commenting on the prison design, the special civilian committee in its study noted that over the past 35 years the trend of civilian medium and minimum security correctional institutions has been to use this type design. The Army, using the "telephone pole plan," has approved four basic designs: 50-, 150-, 250-, and 400-man facilities.

This new design for Fort Leonard Wood calls for 72 square feet net sleeping area for each prisoner and a gross area of 330 square feet per prisoner for the confinement facility—exclusive of mechanical space—including a gross area of 75 square feet per prisoner for vocational facilities. It is intended that the vocational facilities will be located in an attached building, thereby precluding the necessity for perimeter fencing. Fencing will be required for the exercise yards on the basis of 8 square yards per prisoner.

The confinement facility will have a mess and kitchen area, heating plant, processing and administrative offices, dispensary, visitor rooms, social worker and consultation rooms, administration and disciplinary cells, and dormitory wings for 250 prisoners. The facility is designed to be totally integrated and self-sustaining.

Under the new Army correctional concept, there are currently in existence or under construction three permanent area confinement facilities and one large installation confinement facility. These facilities are located at Fort Knox and Fort Campbell, Ky.; Fort Sill, Okla.; and Fort Riley, Kans., respectively, all of which are in geographic proximity to Fort Leonard Wood.

4. Observations of the Investigative Staff

One of the main features of the new Army correctional concept is to allow the Army to afford more attention to counseling and rehabilitation with the hope of salvaging personnel who, for one or a number of reasons, have deviated from prescribed Army behavior.

In reviewing the confinement facility proposed for Fort Leonard Wood, the investigative staff feels that this facility, as proposed, is inconsistent in several respects with the correctional concept advanced by the Army.

(1) As previously noted by the investigative staff, it is felt that if the Army is successful in implementing its correctional concept, the size of the Fort Leonard Wood facility is overprogramed.

(2) In considering that 80 to 90 percent of Army confinees have been placed in a confinement facility for a period of less than 30 days for non-criminal-type of offenses, principally AWOL, there is some question as to whether a facility of this sophistication is compatible with the Army's correctional concept. While it is recognized that some provisions must be made for criminal type offenders, it is noted that this type offender constitutes 10 percent or less of the confinee complement.

(3) Under the modern volunteer Army concept, Army officials advised that the Army hopes to recruit a different caliber soldier and retain only those who display an interest in the career aspects of the Army. The investigative staff feels that if the Army is successful in attracting and retaining this type soldier, he would be less inclined to jeopardize his career by engaging in activities which would subject him to confinement.

(4) While a physical inspection by the investigative staff of the existing Fort Leonard Wood facility revealed that this installation is in need of a new confinement facility, it was also noted that the Army already has in existence or under construction three permanent area confinement facilities and one large installation confinement facility within the immediate geographical area of Fort Leonard Wood. In light of the conclusions set forth above, it would appear that these four facilities could be utilized to accommodate the confinees to be housed at the proposed Fort Leonard Wood area confinement facility.

During the review of the proposed confinement facility, it was noted that since 1970, the Army had constructed four permanent-type confinement facilities with the use of Army contingency funds. Since the use of Army contingency funds to construct these facilities may be of immediate interest to the committee, more detailed information concerning construction of these facilities was furnished in a separate memorandum to the committee.

C. MILITARY POLICE BARRACKS AND SUPPORTING FACILITIES

The fiscal year 1974 military construction program at Fort Leonard Wood includes \$1.831 million for a proposed new military police barracks and supporting facilities. The existing barracks and facilities are World War II temporary mobilization-type buildings that include a mess hall, orderly room, and supply and arms room.

The proposed project is required to provide housing and related facilities for the military police company, in support of the proposed new confinement facility. Except for heating, which will be provided from the heating plant to be included in the confinement facility, utilities are programed as part of this proposed project.

The investigative staff's review of the DD form 1391, approved previously by the Army, OSD and OMB disclosed that based on current DOD construction criteria the allowance for mechanical space was overstated by 2,720 square feet. Although Fort Leonard Wood engineer officials and Omaha district CE representatives were unable to satisfactorily explain the discrepancy, OCE officials in Washington, when confronted with the discrepancy, readily acknowledged that the DD form 1391 was in error. These OCE officials advised the investigative staff that the original DD form 1391 submitted for the fiscal year 1974 military construction program budget would be revised to reflect the corrected figures. Subsequently, before completion of the study, the investigative staff received

copies of the corrected DD form 1391 which showed that the total project cost was reduced by \$93,000.

The investigative staff noted that this project was justified using :

(1) Living space of 165 square feet per man, as permitted by OSD waiver, even though this is a small barracks facility.

(2) Occupation of the facility under maximum utilization conditions would be 148 men, which is based on occupancy by only E2-E4 personnel. However, project justification on the face of the DD form 1391 reflected that, under a grade mix condition, 135 personnel will occupy this facility.

(3) Unit cost per square foot of \$28.50 adjusted by the area construction cost index, or \$34.20.

The Department of the Army justified the 165 square feet based on the stated advantages of the new large barracks designs to meet the requirements of the modern Volunteer Army, such as flexibility and livability. In the military police barracks project at Fort Leonard Wood, the extra 10 square feet per man—for 148 men at \$34.20 per square foot—results in about \$50,600 more than is allowed by current Department of Defense construction criteria for a similar type facility for the other military services.

Rather than question the advisability as to whether the extra 10 square feet per man should be allowed in the construction of this proposed facility, the investigative staff feels that OSD and each of the military services should address the broader questions of whether existing criteria for square footage allowances for enlisted personnel barracks construction is reasonable in line with the modern volunteer Army concept. If not, adjustments should be made in the criteria so as to insure consistency and comparability in the design and planning of new barracks construction. This, of course, would preclude the need for periodic waivers utilizing justifications based on hypothetical conditions such as may possibly have been used in connection with the proposed facility.

The need for the military police barracks facility is directly related to the proposed confinement facility, as discussed previously in this report, and any decision as to the approval or disapproval of funding of either facility should be made only with full consideration given this relationship.

D. ENLISTED WOMEN'S BARRACKS ADDITION

A line item in the amount of \$1,136,000 was proposed by the Army for an enlisted women's barracks addition at Fort Leonard Wood. The project consists of adding 122 housing spaces onto existing Building 312, which currently is programed to accommodate 103 enlisted women. Building 312 was originally constructed as a permanent facility in 1965, and military construction program funds in the amount of \$338,000 were appropriated in fiscal year 1972 to modernize this building by providing air-conditioning and some minor partition rearrangement within the building. The fiscal year 1972 work is now under construction.

The enlisted women's barracks addition programed for fiscal year 1974 is listed on the DD form 1391 as having a design capacity of 122 personnel, based on a grade mix as follows :

Grade:	Number of personnel
E2-E4 -----	87
E5-E6 -----	32
E7-E9 -----	3
Total -----	122

The investigative staff noted that, in reality, the complex is justified utilizing the criteria of 144 personnel. Fort Leonard Wood and OCE officials explained that under "maximum utilization" conditions, this complex can house 144 E2-E4 personnel, and that all square footage for this complex, though programed on a grade mix, is computed on maximum utilization.

A Fort Leonard Wood official advised the investigative staff that when he prepared the original DD form 1391 for the enlisted women's barracks addition for fiscal year 1974, he based his square footage total on maximum utilization, 144 personnel at 140 square feet per person. He stated that he submitted the original DD form 1391 reflecting 20,130 square feet to the Omaha district CE. Subsequently, however, the Omaha district CE returned to him a revised DD form 1391 which showed 24,480 square feet, which was based on the maximum utilization figure of 144 personnel but which used 165 square feet per person. Army

officials advised the investigative staff that the authority to use the increased square footage was granted to the Army by OSD under its waiver authority.

According to the existing Army guidance criteria, the gross square footage per man allowances are exclusive of mechanical space. However, an official in the Office of the Deputy Assistant Secretary of Defense (installations and housing) advised the investigative staff that it is an "unwritten rule" that his office will usually allow 2 to 3 square feet per man for mechanical space for facilities with an existing central plant, and 5 square feet per man where there is no existing central plant.

Subsequently, another OCE official advised that 5 square feet per person for mechanical space, rather than 2 square feet per person, would have to be used in construction of the enlisted women's barracks addition. He stated that 5 square feet had been included in the 24,480 square feet for this complex to allow for all contingencies. This official further stated that the prevailing view was that the existing heating/air-conditioning complex could be expanded to accommodate the new addition and that 2 square feet per man for mechanical space would be adequate. It has since been determined by the Army, however, that expansion of this existing heating/air-conditioning complex is not economically feasible because (1) it is located two-thirds into the existing building, (2) the heating is oil fed, and (3) it does not have the expansion capacity to handle 144 additional people. In reviewing the 24,480 square feet figure as submitted for 144 personnel, the Investigative Staff determined that a 5-square-foot-per-man factor had been included in this figure.

An OCE official also advised the investigative staff that there is now some question as to whether the existing enlisted women's barracks will be expanded or whether a new facility will be built. He stated that if a new facility is decided upon it will be built within the same cost figures as set forth in the DD Form 1391 for the barracks addition. He advised that the Omaha District CE is conducting a feasibility study as to whether the current facilities should be expanded or a new building should be constructed. He stated that if a new building is decided upon, it will be of the "center corridor" concept, as the users want this type of building in order to obtain better control over personnel. He advised that this is contrary to the enlisted men's concept of having more privacy.

Although it is claimed that the cost of a new barracks would be the same as an addition to existing barracks, the investigative staff feels that, before any approval of funds, a choice should be made and more definitive cost estimates developed, if necessary, so that a proper evaluation can be given to the need and the reasonableness of cost of the proposed facility.

If the extra 10 square feet per person is also permitted for the enlisted women's barracks addition, or for a separate building, this would result in about \$49,200 more than is allowed by current Department of Defense construction criteria for a similar type facility for the other military services.

E. BARRACKS MODERNIZATION

The fiscal year 1974 military construction program at Fort Leonard Wood includes \$2,981,000 to air-condition 10 permanent open bay trainee barracks. These barracks, completed prior to 1968, were not air-conditioned at the time of construction as have similar barracks completed since 1968. Current plans for these barracks are for continued occupancy by BCT's.

An official at Fort Leonard Wood advised that in May 1972, a cost proposal was submitted, with Omaha District, CE approval, to the Department of the Army estimating the cost of air-conditioning at \$5.7 million. In June 1972, an independent architectural and engineering contractor lowered this cost estimate from \$5.7 million to \$4.2 million. Subsequently, in July 1972, officials at the 5th Army level questioned the high cost of this project. As a result, the Omaha District, CE and Fort Leonard Wood facilities engineers performed a physical survey of the barracks and determined that the entire project could be completed for \$2,981,000. Fort Leonard Wood officials stated that this lower cost was arrived at when it was determined by physical survey that not as much electrical work would have to be performed as originally estimated.

Fort Leonard Wood officials advised the investigative staff that these 10 barracks are part of a group of 30 barracks, constructed prior to 1968, in which air-conditioning is the only modification required to upgrade these facilities to meet current construction criteria. In addition to the 10 barracks proposed for air-conditioning modification under the fiscal year 1974 military construction program, the remaining 20 barracks are programmed for future fiscal year modernization.

BARRACKS

Mr. PATTEN. Is the requirement for enlisted men's barracks at Fort Leonard Wood based upon a proven or existing requirement, or is it based on your projected base loading?

General COOPER. It is really based on both, sir. It is based on the existing requirements. We need these barracks.

Mr. PATTEN. Is there a chance that these barracks will not be required if Army training workloads fail to materialize?

General COOPER. The training load would have to go down drastically before we wouldn't require these barracks. The direct answer to your question is no. We will utilize these now. If you talk about a 300,000-man army, that is something else again, but based on our projected requirement we will use these.

Mr. PATTEN. To what extent is the requirement for the enlisted men's barracks based on the transient population?

General COOPER. We estimated the total average transient load at Fort Leonard Wood at about 1,792 people. That is included in the long-range total requirement of 22,675 barracks spaces. But with the barracks that we have now plus those requested in fiscal year 1974, we will get up to only 59 percent of the installation's required barracks spaces. We do, in the long range, plan for the transients but we are quite a long way away from directly taking care of the transients.

Mr. PATTEN. Is it good policy to program for transients?

General COOPER. Yes, sir.

Mr. PATTEN. Why?

General COOPER. Because these people have to have a place to sleep.

UTILIZATION OF TRAINING INSTALLATIONS

Mr. PATTEN. The Army has historically underutilized its training installations. What plans have been developed to achieve better use of the large barracks facilities proposed for fiscal year 1974 at the training installations at Fort Leonard Wood, Fort Polk, and Fort Ord?

General KJELLSTROM. Before responding to that specific question, Mr. Chairman, I would like to suggest that historically the Army has not intentionally underutilized its training installations. Over a period of years, the strength of the Army has gone up and down in accordance with the requirements of national policy and strategy. The manpower of the Army has gone, for example, from 554,000 in fiscal year 1948 to 1.6 million in fiscal year 1952. This was for the Korean emergency. The regular component of the 1.6 million was about 1.3 million. We went down in 1961 to 859,000; back up in 1962, because of the Berlin situation, to 1,066,000, and back down in 1965, the low point before the Vietnam conflict, to 969,000, then up to 1.6 million. Our training requirements must be flexible.

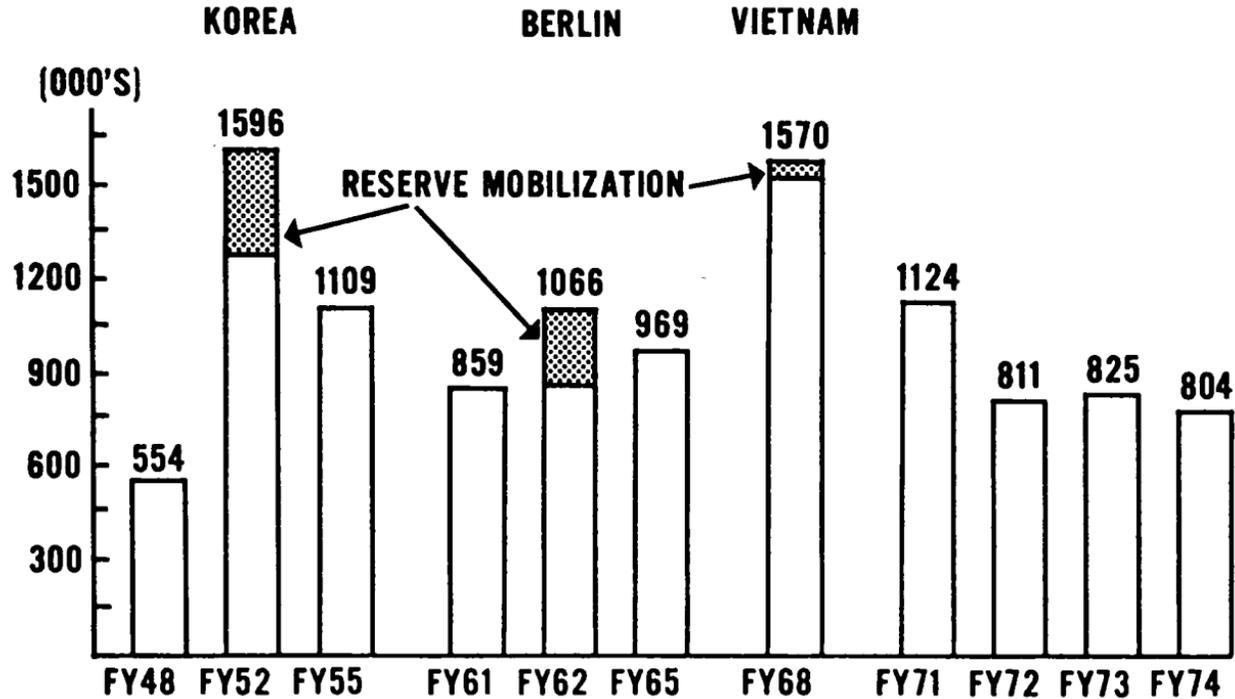
At a point in time I would agree that we have underutilized capacity in the training facilities. At other points in time we have been forced into a three-shift basis. During the height of the buildup for Vietnam in 1968 and 1969, many of our installations were on a 24-hour-a-day basis. Not necessarily for night training, Mr. Chairman, but because the classroom facilities weren't adequate during the nor-

mal 8- to 10-hour training day. I think it important for the record to recognize this significant fluctuation in the strength of the Army. If I may, I would like to add a chart which I have, which graphically illustrates the pluses and minuses in the size of the Army.

Mr. PATTEN. Without objection, I would like to have the chart in the record at this point.

[The information follows:]

CHART 8. THE ARMY'S CHANGING SIZE



Mr. McKAY. In line with your figures, do we have sufficient training facilities to train our people, if we should—I pray not—be forced to total mobilization?

General KJELLSTROM. If by total mobilization you mean a 3 million man Army, the answer is probably not.

Mr. PATTEN. How about 12 million like we had in World War II?

General KJELLSTROM. The answer is "Definitely not," sir. If we are going to an Army strength of 1.6 million, the size of the Vietnam buildup, the answer is probably "Yes," notwithstanding the adjustments in our bases that we have made recently.

General COOPER. If we are going back up to 1.6 million, the answer is "Yes," but a lot of the facilities will be temporary. We are trying to get into a position where the vast majority of our facilities are permanent and we can get rid of these World War II temporary structures. Later on when we discuss Fort Ord, we'll see that the permanent barracks facilities there constitute only about two-thirds of the requirement. At Fort Leonard Wood the figure is slightly less than 60 percent, so we are a long way from having sufficient permanent facilities. We do have a lot of World War II temporaries.

Mr. McKAY. Do you have any figures as to what level, 1.5 million, 3 million, or whatever, you could accommodate with the facilities you now have?

General COOPER. We would have to provide that for the record along with assumptions on the callup of Reserves and National Guard. If we did what we did in Vietnam, that is, try to train them all from scratch, it would be entirely different.

Mr. McKAY. I have no further questions.

Mr. PATTEN. Any questions on my left?

Mr. DAVIS. The matter was brought up, General, about underutilizing training facilities. The staff report, which has been referred to here, indicates that the estimates of your program levels at a number of your installations have been a great deal higher than what have actually materialized. Is this a general situation?

General KJELLSTROM. I would suggest that in a period of phasedown from the Vietnam war shortfalls will occur. Assumptions and decisions made on a piecemeal basis. For example, we did not know at the time of the budget presentation for fiscal year 1970 that a decision was to be made on a significant withdrawal in the forces in Vietnam. At the end of fiscal year 1968, we were a 1.6 million man Army, and in fiscal year 1971—I don't have the 1970 figures in front of me—we were down to 1.1 million, and at the end of fiscal year 1972 we were down to 811,000.

Furthermore, we did not recognize on a timely basis the impact of the reduction of 50,000 man-years that was necessary in fiscal year 1972. There are many extenuating factors which bear on an individual installation's workload and the workload of the training base. I do not quarrel with the statement that individual installations and possibly the training base has been underutilized at times, but at other times it has been overutilized. It is a very fluid situation.

Right now, we are in the process of further phasing down the training base, phasing out companies and reducing workload.

If I may, Mr. Chairman, we have not seen the S. & I. report that has been introduced in the record. We would be very pleased to receive a copy and comment on the recommendations made.

Mr. TALCOTT. What is the S. & I. report?

General COOPER. Surveys and Investigation.

Mr. PATTEN. It is so ordered.

Mr. TALCOTT. Ordinarily I think it has been the custom of our committee to provide agencies with copies of these reports if we are going to refer to them, and include them in the record. I just think it is not fair to refer to it without giving the agency an opportunity to read it and to respond. I would like you to have an opportunity to respond. This is a public hearing, and immediately the media is permitted to take this report and utilize it for whatever they want without the perspective and balance of the agency response.

General COOPER. Let me add, apropos of the present utilization of the training facilities, they are being underutilized right now because the numbers that we are recruiting are less than we programmed. If you go out to any training installation right now, you will see it is underutilized.

Mr. PATTEN. General, don't press the point. Anyone knows the Army, by its very nature, is a standby reserve operation for the minute you need it. We may have 800 Capitol Police around here. It may be at this particular hour we don't need six. We have them for an emergency, but day after day we don't need all the police we have around this building. As far as your justifying reserve facilities, the very nature of your work makes it impossible to run the Army like we run our house, having adequate bedrooms for a fixed number of people, a number we know is permanent and isn't going to change—not at my age.

CONFINEMENT FACILITY

In view of the fact that there are four sizable confinement facilities in the immediate geographical area of Fort Leonard Wood, is it necessary, under the new Army correctional system, that Fort Leonard Wood be designated as a location for an area confinement facility?

General COOPER. The Fort Leonard Wood area of responsibility encompasses the States of Missouri, Illinois, Indiana, Michigan, Wisconsin, and Minnesota. This area has approximately 29,900 enlisted men and a large population of AWOL/deserter personnel. The proposed capacity of the Fort Leonard Wood facility is required to manage the projected prisoner population. Of the four confinement facilities in the geographical area of Fort Leonard Wood, two—Fort Knox and Fort Campbell—have been operating above the recommended medical standard of 72 square feet per prisoner. The Fort Knox facility has operated at its full reduced capacity—55 square feet per prisoner. The third facility indicated, Fort Riley, is an old, antiquated facility programed for considerable reduction in its scope of operation. The fourth facility, Fort Sill, will soon be replaced by a new confinement facility with confinement responsibility for the entire State of Oklahoma, part of Arkansas and part of Texas. Together with the Fort Leonard Wood facility, the 5th Army Commander will be able to more equitably distribute the prisoners within his area of responsibility, thereby, reducing the potential for disturbances or other adverse incidents.

Mr. PATTEN. The investigative staff report indicates that you may be overbuilding your confinement facilities, that they are of the type

designed to hold criminals, whereas much of your population is AWOL or other pretrial personnel. Is this correct?

General COOPER. The standard design of new confinement facilities incorporates features to manage any type of offender regardless of his charge, that is, AWOL, manslaughter, or murder. There is no way to predict which facility will receive which type offender. Although much of the prisoner population is charged with AWOL, previous experience dictates these personnel can cause a riot or disturbance as quickly, if not quicker, than the more hardened criminal. Riots in Army confinement facilities during 1968, 1969, and 1970 clearly documented what could occur within inadequate facilities. The standard design was developed by a special civilian committee that studied the Army confinement system in conjunction with Army penology experts. In contrast to other penal designs, our new facilities incorporate the maximum flexibility possible in custody, control, and correctional treatment of prisoners.

Mr. PATTEN. In view of (a) troop strength reduction, (b) implementation of the new Army correctional system, and (c) the adoption of the Modern Volunteer Army concept, is the new area confinement facility proposed for Fort Leonard Wood overprogrammed at 250 men?

General COOPER. While there has been a sharp drawdown in Southeast Asia and a reduction of forces, there has not been a concomitant reduction in prisoner strength. Although the overall prisoner population decreased to 4,219 at the end of December 1972, it rose to 5,356 at the end of 3d quarter, fiscal year 1973. As indicated in earlier testimony, the Fort Leonard Wood area of responsibility consists of high density population areas which serve as a place of refuge for a large number of AWOL/deserters. The AWOL/deserter apprehensions for the Fort Leonard Wood area of responsibility for the last 5 quarters is as follows:

3d quarter fiscal year 1972.....	2, 441
4th quarter fiscal year 1972.....	1, 737
1st quarter fiscal year 1973.....	1, 613
2d quarter fiscal year 1973.....	1, 228
3d quarter fiscal year 1973.....	1, 630

Based on projected prisoner population, which takes into consideration future Army strengths, there is no statistical data at this time to support a facility of any lesser size or design.

ENLISTED WOMEN'S BARRACKS

Mr. PATTEN. Will the proposed \$1,136,000 enlisted women's barracks project proposed for Fort Leonard Wood be constructed as an addition to existing facilities or as a separate facility?

General COOPER. Presently the architect engineer firm is evaluating both solutions, the addition and separate structures. When the evaluation is complete, we propose to take the most economical and logical solution.

Mr. PATTEN. Why does the Army feel it is appropriate to use 165 square feet per person as its criterion in constructing smaller barracks facilities?

General COOPER. The net space allotted per person is the same regardless of the size of the barracks project. However, in order to provide the common support areas for a barracks, such as laundry, con-

trol desk, dayroom, lounge, personal storage, and circulation, it requires 75 square feet per person. It usually takes approximately 163 men to produce enough gross area to provide these common support areas. Therefore, in barracks projects of less than 163 men the support areas, such as dayroom, laundry and storage are minimal even with 165 square feet per man.

BARRACKS MODERNIZATION

Mr. PATTEN. Why hasn't the Army given higher priority to upgrading all 30 of the existing permanent barracks in 1 fiscal year at Fort Leonard Wood?

General COOPER. Fort Leonard Wood is one of our leading training centers and enjoys a high priority within our construction programs. This is reflected in the relatively large program we are requesting in fiscal year 1974. Upon completion of the proposed fiscal year 1974 barracks projects, Fort Leonard Wood will have only 59 percent of their required permanent barracks spaces and will continue to receive strong consideration. However, many other installations have sizable bachelor housing deficits which we must also consider. It would be a substantial project to modernize all of the 30 existing permanent barracks at Fort Leonard Wood in one program year. Before doing that we would balance Fort Leonard Wood's needs against other installations vying for the resources available, consider what other projects the field commanders feel are also priority needs at Fort Leonard Wood, and check what is the practical limit to the size of program that the construction industry in the area could absorb without unduly impacting construction costs.

BRIEFING ON ARMY'S BARRACKS DESIGN

Mr. PATTEN. Let us turn to your briefing on the Army's new barracks.

General COOPER. Mr. Allred will give the briefing, sir.

Mr. ALLRED. Mr. Chairman, members of the committee, I am James Allred, Chief, Architectural Section, Office Chief of Engineers. Today, we will present to you the Army's new designs for bachelor enlisted troop housing. Before doing this, I believe it will be helpful to place these designs in context.

During the fiscal year period fiscal year 1952 through fiscal year 1968, several series of barracks designs were prepared and issued to Engineer Field Offices for repetitive use in CONUS.

This is a schematic plan of the 225-man, one-company, barracks used in the fiscal year 1952-54 programs. It is a 3-story, masonry building. The lower enlisted grades were housed in large squad rooms (shown in orange), 35 per room. NCO's had separate 2-man bedrooms (shown in blue). It also contained mess facilities (shown in brown). This is one of the types of barracks we are now modernizing.

In 1954, a two-company barracks housing 326 men was developed. It offered essentially the same features as the previous one-company design. The lower grades were housed in 32-man squad rooms (shown in orange). It had central latrines (shown in red) and an attached mess hall (shown in brown). This design was used during the fiscal year 1955 through 1958 programs.

In 1955 and 1956, the Army became more concerned with the austere housing provided for bachelor EM under the then current price ceilings. Surveys were conducted throughout Army commands, with the result that the majority of Army commanders agreed to eliminate company integrity in order to obtain additional features considered essential to morale. During this period, troop housing was designed so that it was physically separated from messing, administration, supply and other non-housing elements. In 1957, a new design was developed in response to these changed criteria. It housed two companies. It is not an unattractive building, compared to those barracks which were erected during the austere '50s. It has brick facing, canopies over the windows, and a minimum of mechanical hardware of the roof. We build hundreds of these during the years 1959 through 1968.

This is the schematic floor plan. It has a nominal capacity of two companies, or 326 men, with the lower grades housed in 8-man squad rooms, each man with a net sleeping area (including wardrobe) of 65 square feet. These first three designs are the ones we are now modernizing.

We had been working toward bringing our Army housing up to adequate, modern standards, and when the President decreed the all-volunteer Army, this improved environment for the enlisted man took on an even more significant priority. In 1971, by direction of the Chief of Staff of the Army, the Army Housing Committee was formed. On this committee were representatives of all the major Army staff elements. In order to obtain the best possible designs, our office determined to hold an architectural design competition. Four of our design districts retained noted architects with proven expertise in the field of domiciliary design to prepare proposals. The basic ground rules and design requirements were these:

Develop a new, attractive living environment for the enlisted man tailored to Army needs.

Keep costs within the proposed authorization limits with cost estimates to be computed as of a bid opening date of January 1973.

Provide a three-man room containing 270 square feet of net area with an attached three-fixture bathroom, suitable for down-loading to accommodate NCO's; and with a 4-foot wardrobe for each man.

Provide for maximum privacy.

To maintain unit integrity, as required by the Army Housing Committee, provide a room cluster consisting of a small lounge serving no less than four nor more than eight 3-man rooms.

Provide other spaces as required, such as storage, a control office or desk, a lobby, space for vending machines, individual mailboxes for each soldier, company dayrooms, mechanical space, circulation, and so forth.

Finally, the architects were directed to design buildings not exceeding three stories in height because of the excessive costs involved in going higher.

These are the basic space criteria used for the designs.

To achieve the maximum flexibility in assignment of rooms, the Army has designed one basic room which will permit assignment of one, two, or three men to a room, as circumstances require.

Mr. TALCOTT. Is this the same for women also?

Mr. ALLRED. Yes, sir.

The four selected architects came to OCE on March 6 and 7, 1972, and made formal presentation of their design efforts. Of the four presentations reviewed, one was adjudged to be outstanding, one was good but required some changes in building layout, and two were considered either nonresponsive or lacking in merit. The evaluation panel consisting of professionals from the Government, civilian industry, and the military was most impressed with the amount of homework and research done by the two top design firms. They went to the installations, saw what was going on, asked questions, and became as familiar as possible with the needs and desires of the client, namely, the enlisted man.

This shows the first of the two designs which were approved and developed in the fiscal year 1973 MCA program. It was prepared by the architect-engineer firm of Benham, Blair & Affiliates for the Missouri River division. The room contains 270 square feet, not including the bathroom. This is a top view of the model showing half of a typical floor. Privacy is provided by arrangement of wardrobes to form cubicles. Each man has his own window, desk with chair, bed, and wardrobe.

The orange as shown here are beds. Each man has a bed, a desk, and a wardrobe. Privacy is provided by dividing up the sleeping space with the wardrobes; again a wardrobe, desk, and a bed. Each man has his own window, and each bedroom has an adjoining three-fixture bathroom.

This shows how it could be used for a senior enlisted man, one man in the room, and a small private living room space here.

This illustrates two people per room with a small living room space.

This is an artist's sketch showing the three-man room. The architect has developed a complete furniture and furnishing schedule along with his design. Some of the color palettes are over here on display. We are working with GSA to see that completely coordinated furniture and furnishings will be provided in the new barracks.

The building consists of eight three-man bedrooms which cluster about a common lounge; shown here are two eight-room clusters side by side. The general circulation is by an interior corridor with entrance by exterior stairwells at either ends of the building.

This is a sketch of the common lounge. The lounge is provided for passive activities—reading, writing, TV, cards, and so forth.

This is an early site plan showing a two-company cluster. The most significant departure here is the separation of the dayroom from the housing. The noisy activities which conflict with the private living areas have been isolated.

The dayroom sits out here. Here on the right, a 3-man room around that private lounge. There, a quadrangle of buildings put together to form a complex.

Mr. PATTEN. Have you got one of those finished?

Mr. ALLRED. No, sir. We have Fort Carson under construction using this design. Here is the architect's rendering of the barracks. Again here are the bedroom areas. You can see that lounge and the separate dayroom. This is the Fort Carson project.

General COOPER. We do have a full-scale model of the other design that is down at Columbia, S.C.

Mr. ALLRED. This is a perspective of the housing cluster with the living quarters in the background and the separate dayroom to the

right. This is the winning barracks module developed by the South Carolina architect, Lyles, Bissett, Carlisle, and Wolff, for the South Atlantic division area. Basically, the scheme consists of four 3-man rooms grouped around a small, central lounge. Access to each cluster is by stair. A central court provides light and air between pairs of clusters. Each room has a bath and a "mini-lounge," or common use space. Each man has a separate cubicle containing a window, a desk and chair, a wardrobe, and a bed. Cubicles can be closed off by an accordian partition.

Here is a bedroom. This is not a very good slide. Each man has his own cubicle, bed, desk; there is a window here and a wardrobe, repeated here and here. This shows a little card table. This is the three-fixture bath, which each bedroom has adjoining. This is the small lounge area in this particular design, and this is the stairway coming up to it. Again the lounge is used for passive activities. We have that model on display. Here is a small court to give light and air to the various bedrooms.

Mr. MCKAY. Which one have you adopted?

Mr. ALLRED. We have adopted both of these. You have seen our two designs that we are building in fiscal year 1973 and propose to build in fiscal year 1974 for major complexes.

WOMEN'S BARRACKS

Mr. LONG. You say similar quarters are being prepared for women.

Mr. TALCOTT. The facilities are separate for men and women, are they not? For one instance, you provide showers for men and a bathtub for women so that makes it a different type of facility.

Mr. LONG. Are they in the same or a different complex?

General COOPER. In the same complex. We have some places where the women's barracks will be right next door.

Mr. LONG. Are there separate buildings?

General COOPER. Separate buildings.

General KJELLSTROM. In our BOQ's we have male and female officers in the same building, just like college dormitories.

General COOPER. Looking to the future when the WAC Corps may expand we are considering putting some combination bath and shower so if we get more WACS we don't have to go through a more costly process of renovation.

Mr. ALLRED. The criteria are the same for both men and women, although where we know women are going to be housed we initially give them a bathtub with a shower.

Mr. LONG. But you are looking into the future as far as the women are concerned, so you won't have to spend extra money if the picture changes so far as women's quarters are concerned.

Mr. ALLRED. That is right. It would require minimal changes to convert.

General COOPER. We are looking to put even more in than we could now justify on the basis of the present projected authorized strength of women.

Mr. ALLRED. This shows units grouped to house one battalion, or 818 men. Five service modules per battalion are provided. Basically

it is a dayroom and support facilities. Here are the housing elements, the first floor is set up on stilts and the dayrooms, our service modules face directly off the sallyports.

SALLYPORTS

Each two modules open off of a covered "sallyport," which serves as a gathering place, small formations, and meetings. There is a good architectural relationship of small spaces leading from one to another and to the large open areas, which should provide an excellent environment.

Mr. TALCOTT. Is the sallyport a glorified open air lobby?

Mr. ALLRED. No, sir. It is just where we set one floor up on stilts so that there can be passage from one side of the building to the other. Basically when we have long rows of these modules we have to penetrate and get some circulation around.

Mr. PATTEN. Like the Forrestal Building.

Mr. ALLRED. Well, not quite so opulent. It is for circulation purposes and we get a secondary benefit of being able to have a covered training area for men.

General COOPER. It is like a tunnel through the barracks.

Mr. ALLRED. The regular barracks takes place in this very long line and we have lifted one up here on stilts and only built a second and third floor.

Mr. PATTEN. That is like construction in new apartment buildings, isn't it?

Mr. ALLRED. Yes, sir.

This shows a typical service module for 163 men. The covered sallyport is at the top of the plan. Each service module contains a large dayroom, lobby, mailboxes, control desk, public toilets, space for vending machines, laundry and drycleaning, trash rooms, and mechanical space.

Behind the masonry walls you see some bedrooms that would continue on to form another complex.

Mr. PATTEN. You mean you have individual mail delivery in the Army today?

Mr. ALLRED. They have individual mail that come down from battalion and each man will have his own mailbox.

The service modules are designed to serve a given number of men—163 maximum—rather than units. Common use space allocated to each man—based on three-man occupancy of rooms—total 37 square feet, including his share of the cluster lounge, the service module and the sallyport.

These architectural renderings show the general appearance of the building and a view of the sallyport. Good human scale is maintained throughout. The big institutional or "anthill" aspect is gone.

It is more of an apartment or townhouse complex atmosphere, a little more soft in terms of scale and responsive to let's say human environment. You can see one of these sallyports.

BIDS

Mr. TALCOTT. How did the bids come in?

Mr. ALLRED. We have awarded five of the six contracts on the 1973 programs. The sixth one came in high. We revised designs and we are going out for another bid now.

Mr. TALCOTT. Which was the high one?

Mr. ALLRED. Fort Belvoir here in Washington. This is another architectural rendering of that particular sallyport.

BRIGADE COMPLEX

This shows a typical 3,300-man group or brigade layout. Support facilities—mess halls, headquarters, branch exchange, chapel, dispensary—are centrally located. The gymnasium is at top center near playing fields. Company administrative and storage buildings are at the corners, convenient to the barracks and parking. The relationship of intimate spaces and large, open green areas is considered excellent. Parking is at the ends of the complex on this scheme.

Mr. TALCOTT. Is it possible to play football or soccer on those three baseball fields?

Mr. ALLRED. I would think so, yes. It is possible to play here too. This is the mess hall in this particular one, battalion headquarters buildings, PX, branch exchange, chapel, regimental headquarters.

MOCK-UP

To better visualize the design and to assist in the final design effort, the Corps directed the architect to construct a full-size "mockup" of a living module consisting of a lounge and four three-man bedrooms. The surface treatment shown here is one recommended and approved for the Fort Belvoir project. It is the split-faced, striated masonry unit. Each floor is delineated with a concrete band.

We are not building any one-story barracks. This is just the one-story mockup, two other floors would be added on here. There is a small area here called a cockpit that provides a seat and a gathering place for the men, and you go down into there and enter into the building. This is very visible on this particular model over here.

FURNITURE

This is a view of the living room with the main entrance to the right. Shown here, as well, is the type of furniture necessary to provide a pleasing and coordinated facility.

We have made some changes and this is not the exact furniture, but it is representative of the type. In the background you see two bedroom doors that are open.

This is a typical soldier's living area. Each with its own bed, desk and chair, wardrobe, and window. To the right is the room's private bathroom.

To show how this scheme can be applied to a real project, here is the design for the 540-man medical detachment barracks complex at Fort Gordon.

The barracks concept is here. It has the administrative area here and in the background is the new Eisenhower General Hospital now under construction.

CONTRACT AWARDS

Gentlemen, this completes our presentation on the new housing for the modern volunteer Army. Pursuant to approval by the Congress we have completed design on six projects totaling 10,581 spaces at an estimated 5-foot line cost of \$47.7 million. We currently have five projects awarded. They are:

	<i>Men</i>
Fort Gordon, Ga.....	540
Fort Hood, Tex.....	3, 288
Fort Polk, La.....	744
Fort Sill, Okla.....	1, 632
Fort Carson, Colo.....	3, 165
Total	9, 369

For the remaining project, Fort Belvoir, 1,212 spaces, we will be reopening bids shortly and anticipate award.

Gentlemen, have you any questions?

Mr. PATTEN. My uncle, Bill Crow, went to Fort Dix in 1917 and lived in a tent. I went down there as a kid and I never saw so much mud in my life. There were no embellishments, so for some of you who have worked on these projects, this is a far cry from the way we set up our men in World War I in tents. Apparently you are enthused about this, I take it.

Mr. ALLRED. Yes, sir.

MAINTENANCE COSTS

Mr. TALCOTT. May I ask what consideration you have given, or what estimates you have calculated, concerning the maintenance of these buildings. They appear far superior to anything we have had before, but it looks to me that the maintenance is going to be more difficult and more costly.

Mr. ALLRED. We took quite a few looks at the designs as they were worked up, constantly considering maintenance. As you can see, this is concrete block treated in an attractive way. On the renderings, the interior walls are concrete block but treated with some care. There is a little different decorative pattern provided. The ceilings are concrete. We anticipate very low maintenance.

Mr. TALCOTT. How about housekeeping as distinguished from maintenance?

General COOPER. The experience that the Air Force has had with corresponding designs is that if you give the men nice facilities, they will keep them up. The maintenance costs will be more in these, since we include the utility costs as part of our total maintenance which will go up because we are providing more square feet. We are providing air conditioning and things like that. In terms of the maintenance of the outside, the walls and so forth, it will be less. In terms of the overall operations and maintenance costs, we expect it will be greater per man because we are giving them a much, much nicer place to live.

Mr. TALCOTT. The old time barracks were made so they could be easily cleaned and kept up. That was an advantage, but in some ways probably a disadvantage.

General COOPER. It was an advantage. Some of the sergeant majors now say they much prefer the open bays because they can keep their eyes on all of the troops.

CARPETING

Some of the people complain about putting rugs in the barracks. We have rugs in all of these places.

Mr. TALCOTT. Carpets are probably less expensive to install and maintain than hard wood floors.

General COOPER. Definitely, but the alternative considered was vinyl tile. Believe me, when you see one which has carpeting and one which has vinyl tile, it makes all the difference in the world in my opinion to have the carpeting. They do have sturdier carpeting. They have little kits where if somebody burns it you can cut a part out and replace it.

Mr. TALCOTT. Hospitals, schools, and business offices have demonstrated and proved beyond a doubt that carpeting is superior for many reasons. The kind of furniture, the weight of the furniture and whether it can be moved around, where the television set is located, whether it is on a wall or in a cabinet or on a stool, could make a considerable difference in keeping the place maintained up to good housekeeping standards, which is very important to personnel in the service.

General COOPER. That is right.

Mr. TALCOTT. This may be where many men learn housekeeping and maintenance of their homes.

General COOPER. GSA has done a very fine job for us in designing the furniture which will be sturdy and suitable for young, vigorous men and women.

Mr. ALLRED. To answer your question, we took as large a look as we could at everything.

General COOPER. We even looked at the furniture, for example, which is designed for three-man room, for what happens if 5 or 10 years from now if we have an emergency and we want to double up the space. We designed the beds, or GSA has designed the beds for us, so we could double bunk them if we had to.

Mr. TALCOTT. Thank you.

HOUSEKEEPING

Mr. MCKAY. In light of the fact that you are pushing to get the military out of KP, is the next step to get them out of housekeeping, too?

General COOPER. No, sir. the men will have to take care of these places where they live themselves.

Mr. MCKAY. There is no thought about moving in that direction?

General KJELLSTROM. Sir, we got the message from the Congress last year in the House Appropriations Committee action on our appropriations bill. We had a sizable amount in the Army request for relief of EM from detail, and included in this was maintenance of barracks

common space area. We are not planning going in and performing barracks housekeeping for the enlisted men.

Mr. PATTEN. More interesting was the dialog on the floor of the House.

Mr. TALCOTT. The Congress is still ambivalent on this subject.

Mr. McKAY. I think as Mr. Talcott said, the Congress is very ambivalent on it. If the movement goes to contracting, saving the military man's time for training "rather than household duty," then you are going to have greater pressures, if you can call it efficiency, and I am not sure it is. I am not sure we are through with this yet.

General KJELLSTROM. I don't see a move afoot within the Army to perform the normal custodial support for the barracks.

Mr. McKAY. You didn't used to have it for KP either. Now you have come up with surveys that this is one thing that the military man hates the worst. Well, when you relieve him of that the next thing he is going to do is find something else to hate.

General KJELLSTROM. I agree.

Mr. McKAY. Making his own bed or something else. It is just the nature of man that that is what is going to happen.

Mr. TALCOTT. In every profession, as we know, they all make their own beds, but they don't all provide KP. We may provide KP services for our employees around the Capitol; but we certainly don't provide the bedmaking facilities. I hope the services don't go that far.

Mr. McKAY. We will wait and see.

Mr. ALLRED. Gentlemen, I invite you to look at all the renderings and models over there whenever you have time.

Mr. TALCOTT. Where was this model in place?

Mr. ALLRED. Columbia, S.C.

Mr. PATTEN. Mr. DAVIS.

USE OF TWO BARRACKS DESIGNS

Mr. DAVIS. Was the concept when you started out that you would use two different types of barracks?

Mr. ALLRED. No, sir. The concept was to get the best designs possible, get the best thinking of private industry focused on the problem. We weren't sure if we were going to get one, two, three or four. As it turned out we got two, and each of them have good features, so we saw no reason to go with one.

Mr. DAVIS. Are these designed for different geographic areas, different weather, or are they interchangeable?

Mr. ALLRED. They are somewhat interchangeable, although the plan we are building at Fort Carson that you see right here has an interior corridor circulation which we think would be better in cold climates, where as the second design has an exterior stair circulation system, better in the South, but we have not used climate as the only selection parameter.

Mr. DAVIS. Once you decide that one of these types is going to be used on a particular base, is it the concept that all of them built on this particular installation will be of that uniform type?

Mr. ALLRED. No, sir.

Mr. DAVIS. You may have some of each on the same installation?

Mr. ALLRED. That is correct. They may not be adjacent to each other. For instance, we seem to do a little better with that design you see in front of you for WAC's. There is one large lounge for 24 people in that design instead of the two small lounges in the other plan. Therefore, we prefer this plan for use by WAC's, because we provide kitchen facilities in each lounge. So in 1974 there are some cases where that design is used in a southern climate, even though it has interior corridors. Separate dayrooms also work very well for WAC's.

Mr. DAVIS. How do they compare in costs per square foot?

Mr. ALLRED. Right now, we are proposing to build both designs at the same installation, to get an exact comparison. We think now that both designs are equal.

Mr. DAVIS. What is your idea with respect to air-conditioning, for instance?

Mr. ALLRED. They are completely air-conditioned.

General COOPER. They are air-conditioned in areas that call for air-conditioning.

Mr. PATTEN. You wouldn't have that out at Salt Lake City though, where it never gets above 60°.

Mr. DAVIS. They are both adaptable for air-conditioning.

Mr. ALLRED. That is the point I was trying to make.

COST PER SQUARE FOOT

Mr. DAVIS. What is the cost per square foot?

General COOPER. The average cost we design to is about \$28.50 for fiscal year 1974.

Mr. ALLRED. It was set at \$27 for 1973.

Mr. LONG. Per square foot?

General COOPER. Yes. That is the target we aimed at. Each varies a little bit.

Mr. MCKAY. That is very good.

General COOPER. We did have the construction bidders go down to Columbia, S.C., to see that model, before they bid on it, so they would have an idea what it looked like.

ADDITIONAL BENEFITS OF NEW DESIGNS

Mr. PATTEN. You didn't mention the other benefits of construction, fire protection, the use of utilities, the benefit of light, air, and some of the other factors. You haven't even touched on this. I suppose we would need 5 hours if we went into all of it, but there are many benefits other than the cost factor here, is that right?

Mr. ALLRED. Absolutely, sir.

Mr. PATTEN. I think in your briefing it would probably help the record if you gave some of those pluses for the record. I think members might be interested. I know you must have a lot of this information.

[The information follows:]

These new designs for bachelor enlisted housing do offer many additional benefits or features. They incorporate fire resistive construction, the latest readily adaptable construction techniques and materials that will insure a long and durable life. These items in consonance with the designs features described in the briefing will provide a safe and improved living environment for our soldiers. For the sake of brevity, we will address here only the Lyles, Bissett, Carlisle and Wolff (L,B,C&W) design. The Benham, Blair and Affiliates Design; however, while not duplicating the exact features, has employed the same construction approach to offer similar innovations.

The L,B,C&W design cannot be truly classified as a systems building; however, the building cluster employs many of the advantages commonly associated w/systems construction, for example repetition of identical component parts which offers the builder a systems construction technique. Architectural plans and sections have been dimensioned so that the unit may be built modularly in both the horizontal and vertical directions.

The building cluster has only three door sizes, each hung in a metal door buck. Each bedroom has three windows of the same size. Each bedroom is identical in layout and design. These bedrooms repeat from room to room to form a module of 12 men. Three of these are stacked vertically to form a 36-man module. Two of these are placed back together with an enclosed interior court to provide a 72-man building cluster. With this constant repetition of elements, the builder may more efficiently move his workers from unit to unit performing the same function as the job progresses.

The design eliminates all horizontal utility runs in the building proper. The main utility runs are vertically stacked into four mechanical chases which directly connect to the bathrooms and individual room mechanical air-handling units. The piping and duct work may be prefabricated in sections and placed prior to laying the block walls. This directly reduces the time required for construction and takes advantage of mass production of similar high cost elements.

The design reduces the number of trades required. The interior of the building is virtually complete after the masons have left. Concrete masonry block walls are painted. The structural slab is the ceiling and need only to be painted and the top of the slab forms the floor which is finished with carpeting. In the bathroom, liquid glaze tile is sprayed on the three walls, the underside of the slab ceiling and in the precast concrete shower receptacle. Ceramic tile will be used on the rear wall of the shower.

Our experience shows these structural materials to be highly durable and to require only minimal maintenance. We are using metal and solid core doors to insure long life.

The construction can be tailored to local practices and material availability through the use of contractor options.

Examples of the floor options are as follows:

1. Precast 2" forms with shear transfer trusses to receive a 6" cast-in-place slab.
2. Cast-in-place 8" concrete slab.
3. Precast 6" cored slab with 2" concrete topping.
4. Post-tensioned cast-in-place concrete slab.
5. Bar joists with metal forms and concrete tapping on first floor only.

These options also increase subcontractor competition and result in reduced construction costs. The exterior walls may be brick or fluted concrete masonry block to match existing, adjacent architectural motifs. This will permit readily available materials to be used.

6TH ARMY

Mr. LONG. Insert in the record page 129.
[The page follows:]

[In thousands of dollars]

Sixth Army	Prior authorization	Proposed authorization	Proposed funding
Fort Carson, Colo.....		5,651	5,651
Hunter-Liggett Military Reservation, Calif.....		7,776	7,776
Fort Lewis, Wash.....		8,327	8,327
Fort MacArthur, Calif.....		428	428
Fort Ord, Calif.....		9,812	9,812
Presidio of San Francisco, Calif.....		5,751	5,751
Total.....	0	37,745	37,745

Mr. LONG. Can you tell us briefly the major impacts of the Army reorganization and base realignment announcements on these Sixth Army installations?

General COOPER. For the installations we are considering today, Fort Carson, Hunter-Liggett, Fort Lewis, Fort MacArthur, Fort Ord, and the Presidio of San Francisco, there are no major changes. There is one change in the Presidio of Monterey where we are taking the System Development Agency of the Defense Language Institute out, and moving that to Fort Monmouth.

DEFENSE LANGUAGE INSTITUTE HEADQUARTERS

Mr. TALCOTT. May I ask the reason? There was an announcement by the director of DLT, Washington, and by the Army that the headquarters for the Defense Language Institute was going to be moved from Washington to Monterey. Some people actually moved and then suddenly something was changed without giving any reason. Could you tell us the basis for these changes? Is it just that the Army is mixed up concerning their management, administration, or base utilization, or did you find something that was superior that convinced you to make the change?

General COOPER. We decided to locate the Systems Development Agency with the headquarters, and if we had stuck to the basic design of moving the headquarters to Monterey, we would not have moved the Systems Development Agency out.

Going beyond September—when the announcement was made which you referred to that the headquarters would move to Monterey—in

looking at the facilities at Fort Monmouth that were going to be vacated by consolidating the Signal School, at Fort Gordon, there were facilities available at Fort Monmouth. We did want to move the Defense Language Institute, Eastern Branch, out of the Washington area to reduce the total number of activities in the Washington area. We moved that to Fort Monmouth, including the headquarters.

Mr. TALCOTT. What did you find at Fort Monmouth, an empty barracks or an empty hangar or something like that?

General COOPER. There were empty barracks at Fort Monmouth that were available to be modified into classrooms, and also to provide living space for the students.

Mr. TALCOTT. So the basis was finding an empty barracks rather than what is good for the Defense Language Institute?

General COOPER. No, sir. We also considered that Fort Monmouth, being close to New York City, and having several universities close to Fort Monmouth, was an acceptable place in terms of a location for a Defense Language Institute.

UNIVERSITY PARTICIPATION WITH DEFENSE LANGUAGE INSTITUTE

Mr. TALCOTT. Do the universities ever participate with DLI? Did a university ever participate with DLI in Washington?

General COOPER. I don't know the answer to that question specifically.

Mr. TALCOTT. That sounds good, but did it ever happen? I personally think it never happened. You don't call on universities to come around to consult with a language institute that I know of.

General COOPER. I think it is desirable to have universities which do have language departments to consult with them. I don't personally have the specific details.

Mr. TALCOTT. Would you ask somebody who knows something about language to confirm that, because I just don't think that is true.

General COOPER. We will have the colonel who is in charge of the Defense Language Institute come visit you, which I think he already has.

Mr. TALCOTT. He certainly didn't tell me anything like that. I would like to have some record of the past 6 to 10 years, or whatever you want, of how many times the Defense Language Institute ever consulted with a nearby college or ever had anybody from a nearby college consult with anybody in the Defense Language Institute.

General COOPER. We will provide that for the record.

[The information follows:]

The Defense Language Institute's (DLI) relationships with colleges and universities during the last decade have been numerous, productive, and of broad scope. These relationships can be divided into two categories, direct and indirect. The first category to be discussed is that of direct relationships.

Direct relationships between DLI and academic institutions have taken several forms. First, there have been a number of direct contractual relationships wherein DLI has had course materials developed by a university. Georgetown University and the University of Hawaii, for example, have developed course materials in Chinese and Laotian, respectively. In addition to this type of service, several universities have, in the past, provided direct instruction to DLI students under contract. Syracuse University, for instance, did this until 1971. Yale and Indiana provided this service also.

The West Coast Branch of DLI has an on-going agreement with the University of California and San Jose State College to provide evaluations of DLI developed materials and general consulting services concerning language learning. DLI, in return for these services, provides language instruction for a limited number of students from those schools on a space-available basis. This relationship, maintained at no cost to the government, has been mutually advantageous.

DLI has called upon academic institutions to provide consultants to evaluate and provide advice on specific problems. A current example of this concerns the development of course materials in Arabic. The services of representatives from the University of Utah, the University of Texas, and Harvard University are being used in this project. Another example is the use of Georgetown University personnel to assist DLI in evaluating the language proficiency of personnel manning the Washington Moscow hot-line. There are numerous other instances where the professional expertise available at various colleges and universities has been utilized by DLI. These include not only consultant services, but training lectures and courses for DLI instructors. Further, DLI personnel attend schools such as Georgetown University, George Washington University and American University on a tuition assistance basis for professional development. The Defense Language Institute has also recruited personnel for specialized positions through universities.

Finally, through association with such professional organizations as the Modern Language Association, the Linguistic Society of America, the Teachers of English to Speakers of Other Languages, and the American Council of Learned Societies, DLI personnel keep in constant contact with other professionals in the field of linguistics, psychology and education in order to keep abreast of the latest techniques in language instruction.

Indirect relationships between DLI and the academic community also exist. Organizations such as Educational Testing Service (ETS) of Princeton, New Jersey and the Center for Applied Linguistics (CAL) in Washington, D. C. make extensive use of the academic community in fulfilling contractual arrangements with DLI. ETS has used various university instructors to develop test items for Defense Language Proficiency Tests, under contract to DLI, in over twenty foreign languages. CAL has provided consultants to advise DLI in such areas as Portuguese and Arabic training, the teaching of English as a foreign language to foreign military personnel, and in evaluating various course materials used at the DLI Branches.

The number of direct and indirect contacts between DLI and the academic community is far too large to itemize but the specific examples noted above show the nature of these contacts. A listing of the academic institutions contacted by DLI during the past several years follows:

Georgetown University	University of California	University of North Carolina
American University	San Jose State College	University of Texas
Catholic University	University of Utah	Syracuse University
Harvard University	Brigham Young University	Tulane University
Cornell University	University of Illinois	George Washington University

Mr. TALCOTT. In spite of that I see no reason why proximity to New York colleges is relative or significant. Were there any other reasons?

General COOPER. As in most of these decisions there are several considerations. One of the considerations was the fact that there was space at Fort Monmouth as a result of the Signal Corps School moving to Fort Gordon.

Mr. LONG. Could we defer the questions on Fort Monmouth until later when we come to that? There is quite a bit of territory to cover. We have quite a few questions on Fort Monmouth.

Mr. TALCOTT. Perhaps it would be more orderly to take it up later.

Mr. LONG. It will be taken up.

STATUS OF PRIOR YEAR PROGRAMS

What is the status of prior-year construction programs for the 6th Army?

General COOPER. Mr. Carton can give it to you now.

Mr. CARTON. The 1972 program is virtually complete. The 1972 program is under construction with the last project, the enlisted men's barracks recently started. The 1973 program is awarded with the exception of the barracks modernization project which we expect to award in September. At Fort Lewis, Wash., sir—

General KJELLSTROM. Would you like these inserted for the record? It is quite a detailed list.

Mr. LONG. Yes, please. We are going to be asking questions on each one of these.

[The information follows:]

All prior year construction projects at Sixth U. S. Army Installations are complete except as follows:

<u>FY</u>	<u>Project</u>	<u>Programed Amount</u>	<u>Status</u>
<u>Fort Carson, Colorado</u>			
72	EM Barracks Complex	\$21,043,000	1% Complete
72	Commissary	2,129,000	48% Complete
73	Moving Target Simulator Bldg	224,000	12% Complete
73	EM Barracks Complex	12,920,000	1% Complete
73	Community Center	2,954,000	1% Complete
73	Barracks Mod	6,570,000	NOTE 1
<u>Fort Lewis, Washington</u>			
71	Sewage Trt Fac Impr	3,757,000	NOTE 2
72	Laundry	2,109,000	67% Complete
72	Confinement Facility	1,822,000	Award scheduled in Sep 73
72	Barracks Improvement	2,009,000	69% Complete
73	Barracks Mod	9,039,000	9% Complete
<u>Fort Ord, California</u>			
71	Commissary Sales Store	1,855,000	86% Complete
71	Sew Outfall & Plant Mod	1,642,000	NOTE 3
72	2 EM Barracks	2,174,000	Awarded 18 April
73	EM Barracks	7,996,000	Award scheduled for June 73
73	Electric Dist Sys Impr	455,000	3% Complete
73	Barracks Mod	1,713,000	10% Complete
<u>Presidio of Monterey, California</u> (See Note 4)			
73	Academic Facility	4,118,000	Award scheduled in June 73
<u>Presidio of San Francisco, California</u>			
71	WMIR - PH I	7,004,000	83% Complete
72	WMIR - PH II	10,498,000	39% Complete
73	WMIR - PH III	11,695,000	Award scheduled for Jun 73
73	Electric Dist Sys Impr	672,000	Awarded 24 Apr 73

- NOTES
1. Heating/air conditioning plant awarded 3 April 1973. Remaining work to be awarded in September 1973.
 2. Portion of work has been completed with remainder scheduled for award in June 1973.
 3. Work in the sewage treatment plant is complete. Outfall line work deferred pending decision on location or alternate procedure.
 4. BOQ authorized and funded in FY 71 Program no longer required. Funds reprogramed for other uses.

Mr. LONG. When do you expect to award the prior-year projects at the Presidio of Monterey?

Mr. CARTON. Sir, there is only one prior-year project that I recall at the Presidio of Monterey. I believe that one is ready for award. I am sorry, I will have to provide the exact status for the record.

[The information follows:]

A fiscal year 1973 project for construction of an academic facility at the Presidio of Monterey at a program amount of \$4,118,000 is being advertised for bids. Contract award is scheduled for June 1973.

[Editor's Note: Contract award was further delayed.]

FORT CARSON, COLO.

Mr. LONG. Fort Carson, Colo. Insert page 130 in the record. No questions.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Fort Carson								
4. COMMAND OR MANAGEMENT BUREAU Sixth United States Army		5. INSTALLATION CONTROL NUMBER Colorado 5		6. STATE/COUNTRY Colorado								
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1942		9. COUNTY (U.S.) El Paso								
				10. NEAREST CITY Colorado Springs, 7 miles North								
11. MISSION OR MAJOR FUNCTIONS Training and provide logistical support of the Fourth Infantry Division (Mechanized) and STRAC status and other non-divisional support units assigned to Fort Carson.			12. PERSONNEL STRENGTH									
			PERMANENT		STUDENTS	SUPPORTED	TOTAL					
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)	
			a. AS OF <u>31 Dec 72</u>	1,718	22,944	2,089	0	4	30	48	200	27,033
			b. PLANNED (End FY 78)	1,866	19,104	2,351	0	0	17	44	0	23,382
			13. INVENTORY									
			LAND	ACRES (1)	LAND COST (\$000) (2)	IMPROVEMENT (\$000) (3)	TOTAL (\$000) (4)					
			a. OWNED	137,766	4,113	120,703	124,816					
			b. LEASES AND EASEMENTS	0	0	0	0					
			c. INVENTORY TOTAL (Except land runs) AS OF 30 JUNE 19 <u>72</u>									
			d. AUTHORIZATION NOT YET IN INVENTORY (Exclusive of family housing - \$17,645)									
			e. AUTHORIZATION REQUESTED IN THIS PROGRAM (Exclusive of family housing - \$19,660)									
			f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$47,100)									
			g. GRAND TOTAL (c + d + e + f)									
			262,402									
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION												
CATEGORY CODE NO. a	PROJECT TITLE b	Page No c	TENANT COMMAND c	UNIT OF MEASURE d	AUTHORIZATION PROGRAM			FUNDING PROGRAM				
					SCOPE e	ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h				
540	94 - Dental Clinic - 28 Chair	131					1,036		1,036			
721	276 - Barracks Modernization	132		MN	2,152	4,615		2,152	4,615			
	Totals					5,651			5,651			

628

FORT CARSON, COLO.—\$5,651,000

Fort Carson is located 7 miles south of Colorado Springs, Colo. The mission of this installation is to provide facilities and support for the Fourth Infantry Division (Mechanized) and nondivisional support units. The program includes a dental clinic and barracks modernization.

Status of funds

Funded program not in inventory.....	\$54,961,000
Unobligated projects, Mar. 31, 1973 (actual).....	9,545,000
Unobligated projects, June 30, 1973 (estimated).....	21,000

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
Dental clinic.....	30	0
Barracks modernization.....	200	20

Enlisted barracks summary, Fort Carson, Colo.

	Men ¹
Total requirement.....	11,516
Existing substandard.....	² 7,717
Existing adequate.....	0
Funded, not in inventory.....	5,292
Adequate assets.....	5,292
Deficiency.....	6,224
Fiscal year 1974 program.....	2,152
Barracks spaces occupied, Mar. 15, 1973.....	11,357

¹ 90 square feet per man—permanent party personnel; 72 square feet per man—trainees.

² Includes 2,920 spaces that can be made adequate.

HUNTER-LIGGETT MILITARY RESERVATION, CALIF.

Mr. LONG. Turn to Hunter-Liggett Military Reservation, Calif.
Insert page 134 in the record.

[The page follows:]

1. DATE 9 July 1973	2. DEPARTMENT ARMY		3. INSTALLATION Hunter Liggett Military Reservation												
4. COMMAND OR MANAGEMENT BUREAU Sixth United States Army		5. INSTALLATION CONTROL NUMBER California 205		6. STATE/COUNTRY California											
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1940		9. COUNTY (U.S.) Monterey	10. NEAREST CITY King City										
11. MISSION OR MAJOR FUNCTIONS Provide the logistical, and as required, administrative support for training as conducted by the USATC, Fort Ord, California. Requirement to furnish training areas and provide such other support as directed for the Combat Development Command Experimentation Command, Reserve, and National Guard Units during unit field training. The above includes the construction and maintenance of ranges and other training facilities as required. Insure police of the reservation and adequate precautionary measures against the outbreak of forest fires and control thereof.				12. PERSONNEL STRENGTH		PERMANENT		STUDENTS		SUPPORTED		TOTAL			
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)			
				a. AS OF 31 Dec 72			Included with Fort Ord								
				b. PLANNED (End FY 75)			356	2,571	129			2	13		3,071
				13. INVENTORY											
				LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
				a. OWNED		166,372		1,570		6,623		8,193			
				b. LEASES AND EASEMENTS		163		0		0		0			
				c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								8,193			
				d. AUTHORIZATION NOT YET IN INVENTORY								1,691			
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								7,776							
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$43,632)								1,119							
g. GRAND TOTAL (c + d + e + f)								18,779							
SUMMARY OF INSTALLATION PROJECTS															
PROJECT DESIGNATION															
CATEGORY CODE NO.	PROJECT TITLE			Page No	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM						
a	b			c	d	e	f	g	h						
	PRIORITY														
721	20 - EM Barracks Complex			1	135	MN	1,304	7,776	1,304	7,776					

630

HUNTER-LIGGETT MILITARY RESERVATION, CALIF.—\$7,776,000

Hunter-Liggett is a subinstallation of Fort Ord and is located at Jolon, Calif. The mission of this installation is to provide the logistical, and as required, administrative support for training as conducted by the U.S. Army Training Center, Fort Ord, Calif. An additional mission is to furnish training areas and provide such other support as directed for the Combat Developments Experimentation Command and Reserve and National Guard units during unit field training. The above includes the construction and maintenance of ranges and other training facilities as required. The program provides a barracks complex.

Status of funds

Funded program not in inventory	\$1,691,000
Unobligated projects, Mar. 31, 1973 (actual)	0
Unobligated projects, June 30, 1973 (estimated)	0

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
EM barracks complex	390	25

Enlisted barracks summary, Hunter-Liggett Military Reservation, Calif.

	<i>Men</i> ¹
Total requirement	1,650
Existing substandard	105
Existing adequate	260
Funded, not in inventory	0
Adequate assets	260
Deficiency	1,390
Fiscal year 1974 program	1,304
Barracks spaces occupied, Mar. 15, 1973	324

¹90 square feet per man—permanent party personnel; 72 square feet per man—trainees.

Mr. LONG. Can you provide the operating costs and real property costs for Hunter-Liggett?

General COOPER. Yes, sir.

[The information follows:]

Real property, personnel, and other operating costs—Hunter-Liggett Military Reservation

Activity :	Cost
Backlog of essential maintenance and repairs.....	\$289, 500
Initial cost of improvements.....	6, 323, 800
Replacement cost (excluding land).....	24, 030, 440

[In thousands of dollars]

	Fiscal year—		
	1972	1973	1974
Real property maintenance.....	\$733	\$760	\$653
Other operating costs.....	542	1, 022	750
Personnel:			
Military expense.....	612	692	665
Civilian cost.....	599	618	660

Mr. LONG. Is this installation an integral part of the operation of Fort Ord?

General COOPER. Yes, sir.

Mr. LONG. Or is it one of the smaller installations?

General COOPER. No, it is an integral part of Fort Ord.

It is a place where the Combat Development Command runs numerous tests. It is also used as a Reserve and National Guard training site. There is a small party permanently stationed at Hunter-Liggett and others on temporary duty from Fort Ord.

Mr. LONG. Provide details on the number of personnel utilizing Hunter-Liggett for the record.

[The information follows:]

Personnel utilizing Hunter-Liggett Military Reservation (HLMR) on a permanent basis total 64 military and 146 civilians. Personnel utilizing HLMR on a TDY basis (from Fort Ord) average from 1,300 to 2,200. In addition, an average of 4,300 Reserve personnel train here during the summer months.

Mr. TALCOTT. This happens to be in my district. May I state I think it is well to reiterate that these troop facilities have been described as the poorest living conditions provided for troops any place in the world exclusive of combat. This is really true. I appreciate the Army saying it. I didn't have to say it first, but I think it is a regrettable situation. They are simply bivouac structures.

FORT LEWIS, WASH.

Mr. LONG. Fort Lewis, Wash. Insert page 136 in the record.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Fort Lewis								
4. COMMAND OR MANAGEMENT BUREAU Sixth United States Army		5. INSTALLATION CONTROL NUMBER Washington 465		6. STATE/COUNTRY Washington								
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1917		9. COUNTY (U.S.) Pierce and Thurston								
				10. NEAREST CITY Olympia - 15 miles West								
11. MISSION OR MAJOR FUNCTIONS Station or a permanent Infantry Division Command, training and logistical support for non-Divisional units. Supports National Guard and Army Reserve component summer training. *Includes Madigan General Hospital. ** Includes \$7,400 one-time cost for easement.				12. PERSONNEL STRENGTH *								
				PERMANENT		STUDENTS		SUPPORTED		TOTAL		
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)
a. AS OF 31 Dec 1972				2,331	11,579	1,301	46	115	8	61		15,441
b. PLANNED (End FY 75)				2,134	20,021	3,250	0	85	9	24	0	25,523
13. INVENTORY												
LAND			ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
a. OWNED			84,258		836		181,412		182,248			
b. LEASES AND EASEMENTS			2,500		7**		0		7			
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19			72						182,255			
d. AUTHORIZATION NOT YET IN INVENTORY									18,880			
e. AUTHORIZATION REQUESTED IN THIS PROGRAM									8,327			
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS									34,785			
g. GRAND TOTAL (c + d + e + f)									244,247			
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION												
CATEGORY CODE NO.	PROJECT TITLE	Page No	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM			FUNDING PROGRAM				
					SCOPE	ESTIMATED COST (\$000)	SCOPE	ESTIMATED COST (\$000)				
a	b	c	d	e	f	g	h					
540	329 - Dental Clinic - 28 Chair	21 137				1200		1200				
721	333 - Barrack Modernization	1 138		MN	3,014	7127	3014	7127				
	Total					8,327		8,327				

FORT LEWIS, WASH.—\$8,327,000

Fort Lewis is located 15 miles east of Olympia, Wash. The mission of this installation is to serve as the station for an infantry division, to provide training and logistical support for nondivisional units and to support National Guard and Army Reserve component summer training. The program provides a dental clinic and barracks modernization.

Status of funds

Funded program not in inventory	-----	\$18,880,000
Unobligated projects, Mar. 31, 1973 (actual)	-----	12,418,000
Unobligated projects, June 30, 1973 (estimated)	-----	8,720,000

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
Dental clinic	166	20
Barracks modernization	308	20

Enlisted barracks summary, Fort Lewis, Wash.

	Men ¹
Total requirement	12,537
Existing substandard	² 21,116
Existing adequate	0
Funded, not in inventory	4,102
Adequate assets	4,102
Deficiency	8,435
Fiscal year 1974 program	3,014
Barracks spaces occupied, Mar. 15, 1973	7,204

¹ 90 square feet per man—permanent party personnel; 72 square feet per man—trainees.

² Includes 5,336 spaces that can be made adequate.

Mr. LONG. What is the relative priority of these two projects at Fort Lewis to others in the Army's fiscal year 1974 program.

General COOPER. The dental project is priority No. 21 and the barracks modernization is priority 1.

Mr. LONG. Is the 9th Division stationed here, and is it all full strength? If not, when will it be at full strength?

General COOPER. Yes, the 9th Infantry Division is stationed at Fort Lewis. The division is presently authorized to be a level 2, which is 90 percent of full T.O.E. personnel and equipment. In fiscal year 1974 the division will go to level 1, or 100 percent strength with all equipment.

Mr. LONG. We will adjourn until tomorrow morning at 10 o'clock.

TUESDAY, MAY 22, 1973.

Mr. PATTEN. The committee will come to order.

FORT MACARTHUR, CALIF.

Mr. PATTEN. Insert page 138A in the record.
[The information follows:]

9 July 1973	ARMY	FY 19 74 MILITARY CONSTRUCTION PROGRAM			Fort MacArthur						
4. COMMAND OR MANAGEMENT BUREAU		5. INSTALLATION CONTROL NUMBER			6. STATE/COUNTRY						
Sixth United States Army		California			California						
7. STATUS		8. YEAR OF INITIAL OCCUPANCY			9. COUNTY (U.S.)		10. NEAREST CITY				
Active		1888			Los Angeles		Los Angeles				
11. MISSION OR MAJOR FUNCTIONS Provide operational and administrative control, logistical supply and maintenance support, training, discipline and facilities for all assigned and attached activities. Provide supply and maintenance support to 19th Acty Gp, (ARADCOM). Furnish administrative support and training for USAR and Army NG Units. Provide housing, facilities, construction and maintenance for On-Post and Off-Post tenants and/or activities.											
12. PERSONNEL STRENGTH											
			PERMANENT		STUDENTS		SUPPORTED		TOTAL		
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)
a. AS OF 28 Feb 1973			152	818	817						1,787
b. PLANNED (End FY)			143	527	885	0	0	5	78	2	1,640
13. INVENTORY											
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
a. OWNED		495		810		17,011		17,821			
b. LEASES AND EASEMENTS									0		
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72									17,821		
d. AUTHORIZATION NOT YET IN INVENTORY									0		
e. AUTHORIZATION REQUESTED IN THIS PROGRAM									428		
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS									15,308		
g. GRAND TOTAL (c + d + e + f)									33,557		
SUMMARY OF INSTALLATION PROJECTS											
PROJECT DESIGNATION											
CATEGORY CODE NO.	PROJECT TITLE	Page No	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM				
					SCOPE	ESTIMATED COST (\$000)	SCOPE	ESTIMATED COST (\$000)			
a	b	c	d	e	f	g	h				
724	37 - Barracks Modernization (EW)	1 138B		EW	90	428	90	428			

FORT MACARTHUR, CALIF.—\$428,000

Fort MacArthur is located near San Pedro, Calif. The mission of this installation is to provide administrative and logistical support to the U.S. Army Hospital, Army Air Defense Command, U.S. Army Reserve, Reserve Officers' Training Corps, and active Army activities in southern California, portions of Arizona, and southern Nevada. The program provides enlisted women barracks modernization.

Status of funds

	<i>Thousands</i>
Funded program not in inventory-----	0
Unobligated projects (actual)-----	0
Unobligated projects, June 30, 1973 (estimated)-----	0

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
EW barracks modernization-----	20	0

Enlisted barracks summary, Fort MacArthur, Calif.

	<i>Men/women</i> ¹
Total requirement-----	833
Existing substandard-----	² 1,088
Existing adequate-----	³ 60
Funded, not in inventory-----	0
Adequate assets-----	60
Deficiency-----	773
Fiscal year 1974 program-----	90
Barracks spaces occupied, Mar. 15, 1973-----	842

¹ 90 square feet per man—permanent party personnel; 72 square feet per man—trainees.

² Includes 90 spaces that can be made adequate.

³ Private housing.

Mr. PATTEN. What surveys have you done of Navy facilities which will be excessed in the Long Beach area, including family housing, to determine if enlisted women can be billeted in these facilities without incurring additional construction or operating costs?

General COOPER. We have not done any specific surveys since that announcement was made on April 17. We are asking for some information in that regard, although I think in accordance with our basic policy we would prefer the enlisted men and women be billeted on the base.

Mr. PATTEN. Is Fort MacArthur one of the facilities you are restudying?

General COOPER. Yes, sir. We are restudying all the facilities and particularly the ones that are relatively small, such as Fort MacArthur.

Mr. PATTEN. Provide for the record the operating, real property, and replacement costs.

[The information follows:]

Real property, personnel, and other operating costs—Fort MacArthur, Calif.

<i>Activity</i>	<i>Cost</i>
Backlog of essential maintenance and repair-----	\$492,000
Initial cost of improvements-----	17,011,000
Replacement cost (excluding land)-----	65,672,000

	Fiscal year—		
	1972	1973	1974 ¹
Real property maintenance	3,532	4,056	3,134
Other operating costs	2,525	2,874	2,353
Personnel:			
Military expense.....	4,007	4,000	4,000
Civilian cost	6,757	7,778	7,888

¹ Estimated.

FORT ORD, CALIF.

Mr. PATTEN. Turn to Fort Ord, Calif.

Insert in the record page 139.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Fort Ord		4. COMMAND OR MANAGEMENT BUREAU Sixth United States Army		5. INSTALLATION CONTROL NUMBER California 625		6. STATE/COUNTRY California			
7. STATUS Active				8. YEAR OF INITIAL OCCUPANCY 1940		9. COUNTY (U.S.) Monterey		10. NEAREST CITY Seaside, 4 miles South					
11. MISSION OR MAJOR FUNCTIONS Provide administrative and logistical support for US Army Training Center (Infantry), Reception Station, US Army Hospital and divisional and non-divisional type units. Provide support to CDCEC, Headquarters, a tenant activity at Fort Ord.				12. PERSONNEL STRENGTH		PERMANENT			STUDENTS			TOTAL	
						OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)		ENLISTED (7)
				a. AS OF <u>31 Dec 72</u>	1,481	21,917	2,514						25,912
				b. PLANNED (End FY 78)	1,023	6,154	2,784	0	15,615	2	13	0	25,591
				13. INVENTORY		LAND		ACRES (1)	LAND COST (\$000) (2)	IMPROVEMENT (\$000) (3)	TOTAL (\$000) (4)		
a. OWNED				28,619	864	145,553	146,417						
b. LEASES AND EASEMENTS				1	2*	0	2						
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>							146,419						
d. AUTHORIZATION NOT YET IN INVENTORY							15,835						
e. AUTHORIZATION REQUESTED IN THIS PROGRAM							9,812						
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS							65,641						
g. GRAND TOTAL (c + d + e + f)							237,707						
SUMMARY OF INSTALLATION PROJECTS													
PROJECT DESIGNATION					AUTHORIZATION PROGRAM		FUNDING PROGRAM						
CATEGORY CODE NO.	PROJECT TITLE	PRIORITY	Page No	TENANT COMMAND	UNIT OF MEASURE	SCOPE	ESTIMATED COST (\$000)	SCOPE	ESTIMATED COST (\$000)				
a	b	c	d	e	f	g	h	i	j				
721	226 - EM Barracks Complex	1	140		MN	1,170	8,622	1,170	8,622				
721	227 - Barracks Modernization (EW)	1	142		EW	504	<u>1,190</u>	504	<u>1,190</u>				
	Total						9,812		9,812				

038

FORT ORD, CALIF.—\$9,812,000

Fort Ord is located 4 miles north of Seaside, Calif. The mission of this installation is to command, train and support an Army training center and non-divisional units and to support the Combat Developments Experimentation Command at Hunter-Liggett Military Reservation, a common specialist school, a reception center and reserve components summer training. The program consists of a barracks complex and barracks modernization for enlisted women.

Status of funds

Funded program not in inventory-----	\$15, 835, 000
Unobligated projects, Mar. 31, 1973 (actual)-----	11, 098, 000
Unobligated projects, June 30, 1973 (estimated)-----	829, 000

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
EM barracks complex-----	161	25
Barracks modernization EW-----	47	20

Enlisted barracks summary, Fort Ord, Calif.

	Men/women ¹
Total requirement-----	19, 802
Existing substandard-----	² 21, 273
Existing adequate-----	² 3, 203
Funded, not in inventory-----	2, 550
Adequate assets-----	5, 753
Deficiency-----	14, 049
Fiscal year 1974 program-----	1, 674
Barracks spaces occupied, Mar. 15, 1973-----	14, 477

¹ 90 square feet per man—permanent party personnel; 72 square feet per man—trainees.

² Includes 5,909 spaces that can be made adequate.

³ Includes 75 in private housing.

WATER POLLUTION ABATEMENT

Mr. PATTEN. What is the status of water pollution abatement programs here?

General COOPER. At Fort Ord we had a particular project where we were going to work with the local people to avoid discharging the treated effluent into the Monterey Peninsula. Since then the original agreement has been changed. At the present time we are trying to work out a solution with the local people as how best to take care of not only the community problem of tertiary treatment of sewage but also that of Ford Ord.

Normally, when we can in any of these pollution sewage treatment problems, we do try to work with the local community so that as standards change we have one plant to change or build, as opposed to our building something just for the Army installation.

Mr. PATTEN. When would you expect these problems to be resolved?

General COOPER. It is difficult to say because you have to work with the three different communities. Mr. Carton may have something more.

Mr. CARTON. In the current situation, sir, the communities have just restarted working on a plan. It now appears that it will be some time before the local communities are able to develop a regional

system and the funding therefor. We are also looking into the possibility of effluent disposal on land at Fort Ord itself in the event the communities are not able to come forward with their plans in a reasonable amount of time.

BARRACKS

Mr. PATTEN. What is the status of the prior year barracks at Fort Ord? When do you expect to award a contract?

Mr. CARTON. Sir, the barracks project for the trainees, which was in the fiscal year 1973 program, was advertised and the bids which were received were too high. It has been readvertised and we anticipate that bids will be opened on the 5th of June.

Mr. PATTEN. Will it be a satisfactory facility?

Mr. CARTON. We expect so, sir.

Mr. PATTEN. Will these barracks be for trainees or for permanent party personnel?

General COOPER. These barracks are primarily for trainees.

Mr. PATTEN. At the reduced training workload anticipated if Fort Dix remains as a training base, will these barracks still be required?

General COOPER. Yes, sir. These barracks will provide 64 percent or roughly two-thirds of the installations required permanent barracks spaces.

FORT ORD AS TRAINING INSTALLATION

Mr. PATTEN. How do you rate Fort Ord according to your criteria for basic training installations?

General COOPER. We rate Fort Ord quite high. From a mission-requirement aspect Fort Ord is excellent. From an environmental point of view, it is good, not excellent. If mobilization continues as a requirement it is good, not excellent, because it is somewhat limited in terms of total area. Encroachment is the only really adverse aspect of Fort Ord of the criteria for basic training installations and that is because it is in a very delightful section of the country. There are some pressures which we have been able to resist with the help of people like Mr. Talcott.

Mr. LONG. To do what?

General COOPER. In California, where the environmental ethic is longstanding and has reached its zenith, there are pressures, for example, not to permit using some firing ranges. When we use some of these ranges we close down part of the beaches adjacent to Fort Ord for safety purposes. The people would prefer we not do that. That is an example.

Mr. LONG. We are having the same problem in Aberdeen, where there is a protest about firing outside of the Aberdeen area. We will talk about it a little later.

General COOPER. In that case is it primarily noise?

Mr. LONG. There are other worries about the danger from these things dropping in the water and dropping outside the area uncontrolled. Do you have that same worry at Fort Ord?

General COOPER. No, sir. At Fort Ord with the basic trainees it is primarily, almost entirely, small arms, rifles, rifle grenades, and things like that. No great danger unless somebody is trying to get shot.

Mr. LONG. This raises some very fundamental questions that you have to face now before we put a lot more money into these areas; that is, as the areas get more and more built up, are you going to reach a point, sooner or later, where the community pressures become irresistible, and you have to move out and leave stranded a tremendous amount of construction that we are being asked to vote on here?

General COOPER. In evaluating our total training base that is one of the difficulties. I think it is outweighed by the fact that it is the only training base that we have on the west coast, and in the interest of providing some geographical dispersion it makes sense to keep it.

We cannot guarantee that we will always be able to overcome the encroachment problem but we think that we can. We definitely think that we can. It is one of the minuses in terms of Fort Ord as a training base. We think the overall value of having one on the west coast, the only one except Fort Leonard Wood west of the Mississippi, is well worth it. We prefer to train people in the same section of the country they come from.

MOVE TO FORT HUACHUCA

Mr. LONG. Fort Holabird is closing down, or is closed down—I am finding out what it is—but you kept putting new money into that place for years, and all of a sudden we are told that the encroachment problems were such that you could not get full use of it, so you had to move the Intelligence School out to Arizona. That was because of the audio interference and the fact the airfields were not big enough—two or three reasons were given—and at that time you came in and were snowed by the weight of evidence that you presented against any further use of the area. So you moved something and left behind millions of dollars worth of real estate, much of it in pretty good condition. We are going to be asked to build millions of dollars of construction at Huachuca eventually, to accommodate what you have moved out there. I think that you have got to face this. Whatever you say now is going to be held against you in future years, especially if I am still around.

General COOPER. It should be held against us, regardless of who is around. We do take that into great consideration because we, as much as you, don't want to waste the military construction dollars that we have. We recognize within our own constraints that we are limited and we cannot do all the things that we want to.

We are restricted up the line. It is in our best interests not to waste the money. It is in the best interests of maintaining credibility with the Congress.

Mr. LONG. I know that is the theory, but in practice it does not work out that way.

General COOPER. In practice, some things change beyond one's control.

Mr. LONG. In some cases these are political things beyond your control. I am not blaming you people for what the politicians do, except that I do resent your coming in here with stories that are all set up to justify a political decision. As this was the case at Huachuca, and a certain gentleman present came in here and looked at us with wide-eyed innocence and told us all the Army reasons for justifying the move out to Huachuca—plenty of housing and water and everything.

It all turned out to be absolutely untrue by your own admission. That is what distresses me.

I think the move to Huachuca was political, and I don't blame you for that, but I do blame you for all falling in line and giving a bunch of statistics all set up to make a political decision look like a real decision in the national interest.

General COOPER. Without digressing from Fort Ord, there are political decisions. I personally don't believe Holabird was a political decision. In looking at Holabird since I have been in this particular job, I think Holabird is a small, relatively costly installation of the type that we are looking to close. I think——

Mr. LONG. Whether Fort Holabird should have been shut down is one question. Whether the intelligence school should have gone to Huachuca is another question. That was a very dubious decision in view of the water problem and housing problem.

General COOPER. The housing problem has ameliorated quite a bit at Fort Huachuca in the last year. I think I would agree with you that at the time the decision was made there were some unfortunate, but honest mistakes. One might call them stupid, but the decision to move was not based on a political rationale. People like Mr. Lockwood and General Yates and others didn't try to misrepresent the case.

Mr. LONG. Have you seen reports on "money down a dry hole"?

General COOPER. Yes, sir; and I also read in detail the special hearing in which you were involved.

Mr. LONG. Do you remember the little part where I was calling the colonel out there and asking him what the housing situation was? He said, "Fine, no problem." I questioned him further and he said, "I cannot answer any more questions, Congressman." He hung up. He was telling me there was plenty of housing out there when I knew there was not.

We were getting reports from angry people driving up and down the streets that there were no houses. Right at that moment that colonel was telling me something that was not true.

We began to call the real estate agents out there long distance, and we found what people were telling us was absolutely true; there was no housing. That is wrong—when you people are telling us something that at that moment is totally untrue.

General COOPER. Absolutely wrong, and I will offer no excuse for anybody.

Mr. LONG. Has that colonel ever been disciplined for handing us that story?

General COOPER. I don't know.

Mr. LONG. Those names are available.

General COOPER. I wouldn't know. If he cannot say anything because of basic—

Mr. LONG. That fellow was caught in a bind, I know.

General COOPER. There is no excuse for lying to anybody. He can say nothing if he is not sure.

Mr. LONG. The old saying is, an ambassador is an honest man sent abroad to lie for his country. That should not be true for a military man.

General COOPER. I agree with you, sir. It should not be true for a Government civil servant.

Mr. LONG. Or anybody. Even a Congressman.

All this is, I think, somewhat pertinent to the Ord situation because I wonder whether you are going to face the same sort of situation sooner or later in these very congested areas—all of a sudden you are going to have hundreds of millions or scores of millions of dollars of construction stranded.

General COOPER. Our present evaluation is no, we would expect to keep Fort Ord. If somebody cuts the size of the Army in half, then that would be a major change from our projection of an 800,000-man Army.

We think Fort Ord is definitely a hard core training base. Anytime you go to an isolated area like Fort Polk, that is great in terms of encroachment, but does not have permanent facilities.

Mr. LONG. Thank you.

PRESIDIO OF SAN FRANCISCO, CALIF.

Mr. PATTEN. Let us turn to the Presidio, San Francisco, Calif.

Put in page 143 in the record.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION FY 1974 MILITARY CONSTRUCTION PROGRAM Presidio of San Francisco							
4. COMMAND OR MANAGEMENT BUREAU Sixth United States Army			5. INSTALLATION CONTROL NUMBER California 781		6. STATE/COUNTRY California						
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1850		9. COUNTY (U.S.) San Francisco		10. NEAREST CITY San Francisco					
11. MISSION OR MAJOR FUNCTIONS Sixth Army Headquarters: To provide housing, work facilities and administrative and logistical support, as required, to active force and reserve component units, activities and installations of the Sixth United States Army, Letterman General Hospital, Western Medical Institute of Research, Sixth Region US Army Air Defense Command, other Army and Government agencies on and off-post in the Sixth US Army Area. *Includes Letterman Army Hospital.				12. PERSONNEL STRENGTH*			TOTAL				
				PERMANENT			STUDENTS		SUPPORTED	TOTAL	
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (5)	ENLISTED (6)	OFFICER (7)	CIVILIAN (8)	(9)
				a. AS OF 31 Dec 72	1,172	3,426	3,354	85	307		
b. PLANNED (End FY 78)	870	2,199	2,835	76	214	2	45	3	6,244		
13. INVENTORY											
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)	TOTAL (\$000) (4)				
a. OWNED		1,779		99		71,296	71,395				
b. LEASES AND EASEMENTS		2		0		0	0				
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72							71,395				
d. AUTHORIZATION NOT YET IN INVENTORY							29,869				
e. AUTHORIZATION REQUESTED IN THIS PROGRAM							5,751				
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS							9,512				
g. GRAND TOTAL (c + d + e + f)							116,527				
SUMMARY OF INSTALLATION PROJECTS											
PROJECT DESIGNATION											
CATEGORY CODE NO.	PROJECT TITLE			TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM			
a	b	PRIORITY	Page No	c	d	SCOPE	ESTIMATED COST (\$000) (f)	SCOPE	ESTIMATED COST (\$000) (h)		
721	75 - EW Barracks w/o Mess	1	144		EW	320	3,074	320	3,074		
721	96 - Barracks Modernization	9	145		MN	969	2,677	969	2,677		
	Total						5,751		5,751		

PRESIDIO OF SAN FRANCISCO, CALIFORNIA

\$5,751,000

The Presidio of San Francisco is located at San Francisco, California. The mission of this installation is to support Headquarters, Sixth U.S. Army, Letterman General Hospital, Western Medical Institute of Research and the Sixth Region U.S. Army Defense Command. The program provides barracks without dining facilities for enlisted women and barracks modernization.

Status of Funds

(\$000)

Funded Program Not in Inventory	29,869
Unobligated Projects, 31 March 1973 (actual)	12,367
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
75	EW Barracks w/o Mess	Being designed by State of California	
96	Barracks Modernization	112	20

ENLISTED BARRACKS SUMMARY, PRESIDIO OF SAN FRANCISCO, CALIF.

MEN/WOMEN*

Total Requirement	2,118
Existing Substandard	1,464**
Existing Adequate	0
Funded, Not in Inventory	0
Adequate Assets	0
Deficiency	2,118
FY 1974 Program	1,289
Barracks spaces occupied, 15 Mar 73	1,203

* 90 square feet per man permanent party personnel;
72 square feet per man trainees.

** Includes 969 spaces that can be made adequate

REALINEMENT OF MISSIONS

Mr. PATTEN. With the realinement of misisons at the Presidio, will the permanent facilities here be fully utilized? What about the housing?

General COOPER. With regard to the barracks as opposed to family housing, the barracks will be 60 percent of the installation's requirements for fully adequate barracks spaces.

Mr. PATTEN. Embellish on that for the record.

General COOPER. Yes, sir.

[The information follows:]

The existing facilities at the Presidio of San Francisco will be fully utilized. The family housing assets, plus the off post community support, are considered adequate. No family housing construction is now planned for the fiscal years 1975-78 time frame. On post bachelor housing will be at 60 percent of the known requirement upon completion of the barracks projects proposed in the fiscal year 1974 program. Other types of facilities are generally adequate. The Presidio of San Francisco has a modest (\$9,512,000) long range program.

Mr. COVEY. Family housing is adequate and we don't propose any new housing.

REAL PROPERTY AND OPERATING COSTS

Mr. PATTEN. Can you provide for the record the cost to operate this installation, the real property maintenance cost and replacement value?

General COOPER. Yes, sir.

[The information follows:]

Real Property, Personnel, and Other Operating Costs, Presidio of San Francisco, Calif.

Activity:	Cost in thousands		
	1972	1973	1974 ¹
Backlog of essential maintenance and repair.....			696
Initial cost of improvements.....			71, 296
Replacement cost (excluding land).....			185, 712
<hr/>			
	Fiscal year—		
	1972	1973	1974 ¹
Real property maintenance.....	8, 124	7, 045	8, 570
Other operating costs.....	4, 857	6, 098	5, 150
Personnel:			
Military expense.....	4, 241	4, 086	3, 849
Civilian cost.....	12, 889	15, 668	15, 883

¹ Estimated.

Mr. PATTEN. You have downloaded the Presidio as a result of the Army reorganization plan. Do you plan to keep this installation?

General COOPER. It is one we are examining or reexamining as part of the total review. We presently plan to keep it. We are restudying it now and it does have a large hospital in addition to the purposes of the 6th Army.

WESTERN MEDICAL INSTITUTE OF RESEARCH

It also has the Western Medical Institute of Research, which we clearly plan to keep.

Mr. PATTEN. That covers exotic diseases in tropical areas?

General COOPER. We can discuss the facility later on.

Mr. PATTEN. Are they making any impact on the study of exotic tropical diseases? That was one of the justifications when we gave them the extra \$50 million or \$60 million 3 or 4 years ago for a new facility out there.

General PIXLEY. I could provide information for the record. I do know the greatest progress they have made is with reference to skin diseases of the tropics and many of the preventive measures, creams, developed there were used in Southeast Asia.

[The information follows:]

The Western Medical Institute of Research (WMIR) is a three-phase project. The Institute, when completed will consolidate the research activities presently being conducted at the U.S. Army Medical Research and Nutrition Laboratory, Denver, Colo.; the Letterman Army Institute of Research (LAIR), San Francisco, Calif.; and elements of the U.S. Army Medical Research Laboratory, Fort Knox, Ky. The total project is expected to be completed in March 1975. Since the first phase of WMIR is not yet complete, no research is presently being conducted at the new institute.

The research presently being conducted at the Presidio of San Francisco is being done by LAIR, one of the three laboratories that will be consolidated in the new institute upon its completion. One of the missions of LAIR is the research program in dermatology which is concerned with effects on man's skin of water immersion, friction, heat and humidity, fungal and bacterial infections, and insect repellants. These effects are studied both singularly and in combination. Progress has been made in these areas. Accomplishments include: identifying soldiers who would be susceptible to epidemic skin fungal infections like "athlete's foot" or who would be prone to chronic infections; minimizing superficial fungal infection in a tropical combat zone by reducing infection rates from 38 percent to less than 5 percent and man-days lost from 9 days to less than 1 day; treatment of raw friction blisters with an easily applied liquid plastic dressing which reduces pain and infection; and control of immersion foot in a tropical combat zone. The information obtained during these investigations is being disseminated through scientific publications, manuals, and displays at scientific and medical meetings.

ARMY MATERIEL COMMAND

Mr. PATTEN. Turn to the Army Materiel Command and insert page 146 in the record.

[The information follows:]

INSTALLATION SUMMARY

ARMY MATERIEL COMMAND

[In thousands]

	Prior authorization	Proposed authorization	Proposed funding
Aberdeen Proving Ground, Md.....		11, 934	11, 934
Aeronautical Maintenance Center, Tex.....		6, 284	6, 284
Annisston Army Depot, Ala.....		3, 745	3, 745
Army Materials and Mechanics Research Center, Mass.....		325	325
Atlanta Army Depot, Ga.....		119	119
Frankford Arsenal, Pa.....		73	73
Memphis Defense Depot, Tenn.....		456	456
Fort Monmouth, N.J.....		12, 286	12, 286
Natick Laboratories, Mass.....		466	466
Picatunny Arsenal, N.J.....		2, 915	2, 915
Pine Bluff Arsenal, Ark.....		294	294
Redstone Arsenal, Ala.....		4, 971	4, 971
Sacramento Army Depot, Calif.....		412	412
Savanna Army Depot, Ill.....		2, 746	2, 746
Sierra Army Depot, Calif.....		380	380
White Sands Missile Range, N. Mex.....		4, 771	4, 771
Yuma Proving Ground, Ariz.....		6, 472	6, 472
Totals.....	0	58, 649	58, 649

REORGANIZATION AND REALINELEMENT OF MATERIEL COMMAND

Mr. PATTEN. Can you tell us how the Army reorganization and the base realignment package have affected the Materiel Command?

General COOPER. I can provide the details for the record.

[The information follows:]

Actions within this overall reorganization include the consolidation of the Munitions Command and the Weapons Command into a single command, the Armaments Command at Rock Island, Ill. This action will effectively merge the currently splintered "guns and bullets" responsibilities within AMC and increase the use of available resources.

Another project within the overall AMC reorganization is the consolidation of elements of the Electronics Command headquarters located in Philadelphia, Pa., with the bulk of the headquarters located at Fort Monmouth, N.J. This consolidation will eliminate the present geographical dispersion of major Electronics Command organizations, improving necessary day-to-day coordination and management efficiency, and providing substantial manpower savings.

The Mobility Equipment Command in St. Louis, Mo., will be converted into the Troop Support Command and dedicated primarily to improving the personal equipment and environment of the individual soldier. Initially, Natick Laboratories and other personnel equipment related activities will be assigned to this command. Later, responsibilities for materiel handling equipment, construction equipment, and industrial engineering will be transferred to the Tank/Automotive Command in Detroit, Mich.

A realignment of the Army depot system, reflecting managerial improvements and reduction in workload will be accomplished. These actions will result in a change in mission and partial force reduction of the Atlanta Army Depot, Atlanta, Ga., a reduction in the level of activity at Umatilla Army Depot, Hermiston, Oreg., and reduction of Charleston Army Depot, Charleston, S.C., to inactive status.

General COOPER. One of the major changes was to close down the ammunition procurement and supply agency at Joliet, and we consolidated the Munitions Command and Weapons Command into the Armaments Command at Rock Island.

I think that was the major change in terms of—

SAVINGS AND PERSONNEL REDUCTIONS

Mr. PATTEN. Provide summary data on personnel reductions, savings, and costs avoided for the record.

General COOPER. Yes, sir.

[The information follows:]

MAJOR ELEMENTS OF TOAMAC PHASE I

<u>Type of Action</u>	<u>Scheduled Completion</u>	<u>Pers Reduction</u>		<u>One-Time Cost (\$ mil)</u>	<u>Annual Savings (\$ mil)</u>
		<u>MTL</u>	<u>CIV</u>		
<u>ECOM</u>					
Consolidation of ECOM Phila with ECOM Ft. Monmouth at Ft. Monmouth	4th Qtr FY 74	0	493	10.436	9.432
Includes Reduction-in-force based on Manpower Survey which reduces impact of TOAMAC by 234 civ spaces	15 Apr 73				
<u>ARMCOM</u>					
Merger of MUCOM HQ, including AFSA, with WECOM HQ at Rock Island, IL. Absorb Small Arms Systems Agency and OR Group	1st Qtr FY 74	0	1403	16.200	25.900
<u>TROSCOM</u>					
Phase I - MECOM redesignated as TROSCOM. Assume command of Natick Labs and ACMA's. Realign RDE functions and transfer of items to other MSCs.	2nd Qtr FY 74	0	35		
Phase II - Transfer of responsibility for materials handling equipment, construction and related equipment and industrial engines related to these categories. (To be done in 2 parts).	4th Qtr FY 75	0	600	4.000	7.300
<u>RICHMOND SUPPORT CENTER</u>					
Disestablishment. Transfer of commissary to CONARC. Transfer of AVSCOM mission and support personnel to NCAD.	3 Feb 73 4th Qtr FY 73		225	.620	2.400

<u>Type of Action</u>	<u>Scheduled Completion</u>	<u>Pers Reduction</u>		<u>One-Time Cost (\$ mil)</u>	<u>Annual Savings (\$ mil)</u>
		<u>MIL</u>	<u>CIV</u>		
<u>MAINTENANCE SPT AGCY</u> Establishment of agency at Lexington by integrating Army Maint Bd; AMC Maint Spt Ctr; AMC Logistic Data Center; AMC Test, Measurement and Diagnostic Equip Tech Coordinating Office and Tools & Maint Equip Committee	4th Qtr FY 73	0	36	1.157	.500
<u>JEFFERSON PROVING GROUND</u> Transfer of Ammo Acceptance Testing from Aberdeen Proving Ground	4th Qtr FY 74	0	69	.692	.794
<u>DESERET TEST CENTER</u> Consolidate staff and operating elements of DTC at Ft. Douglas with DTC at Dugway Proving Ground	4th Qtr FY 73				
Reduction-in-force	30 Mar 73	132	175	.645	2.600
<u>ATLANTA ARMY DEPOT</u> Discontinue Depot Operations	4th Qtr FY 74	0	910*	24.300	16.900
<u>PUEBLO ARMY DEPOT</u> Reduction-in-force	4th Qtr FY 74	0	335	2.184	3.683
<u>SENECA ARMY DEPOT</u> Reduction-in-force	4th Qtr FY 74	0	172	1.242	2.270
<u>SIERRA ARMY DEPOT</u> Reduction-in-force	4th Qtr FY 74	0	431	.951	3.426
<u>SAVANNA ARMY DEPOT</u> Reduction-in-force	4th Qtr FY 74	0	205	.545	1.975

*854 spaces transferred to DSA.

<u>Type of Action</u>	<u>Scheduled Completion</u>	<u>Pers Reduction</u>		<u>One-Time Cost (\$ mil)</u>	<u>Annual Savings (\$ mil)</u>
		<u>MIL</u>	<u>CIV</u>		
<u>UMATILLA ARMY DEPOT</u> Redesignate from depot to depot activity under Tooele Army Depot	4th Qtr FY 74	0	335	1,352	4.0
<u>CHARLESTON ARMY DEPOT</u> Inactivation	1st Qtr FY 75	0	148	2,428	1.800

Summary data for the fourteen actions are as follows:

Personnel reduction - Military 132 (The Military to be reduced are JCS Personnel - Civilians 5572)

One-Time Costs are \$66.752 million.

Total Annual Savings are \$83.037 million.

General COOPER. We did close the Atlanta Army Depot, or most of it, and we are also closing the Charleston Depot in South Carolina. We also substantially reduced the level of activity at Umatilla Army Depot, Hermiston, Oreg.

Mr. PATTEN. How were these selected?

General COOPER. There was a study by the Army Materiel Command (AMC) which had the acronym of TOAMAC, the Optimum Army Material Command. AMC went through a detailed study of what the total requirements were and what facilities they had to meet these requirements and then decided on the phasing down or phasing out of some of them.

WORKLOADS

Mr. PATTEN. To what extent have workloads at your depots been reduced since the peak demands of the war in Southeast Asia occurred?

General COOPER. Considerably. For example, at Sunny Point Ammunition Terminal, during the peak loads of the war we probably shipped out 10 times as much as we will during peacetime. The worldwide depot receiving and shipping workload tonnage dropped from its peak of 8,773,000 short tons in 1969 to 5,607,000 short tons in 1972.

Mr. PATTEN. Has your workload bottomed out or do you expect further reductions?

FURTHER REDUCTIONS

General COOPER. I think we expect further reductions. We still are shipping out, for example, ammunition to Southeast Asia. We expect to slow down further and we are restudying, in what we call TOAMAC II, what additional depots and installations might be necessary to phase out consistent both with our wartime contingency mission as well as our steady-state mission in peacetime.

Mr. PATTEN. Do you expect further consolidation of activities?

General COOPER. Yes, sir.

DEPOT MAINTENANCE PROJECTIONS

Mr. PATTEN. Provide for the record the depot maintenance workload by categories of equipment for fiscal years 1970 through 1973, and that projected for fiscal year 1974 and 4 succeeding fiscal years.

[The information follows:]

fiscal years:

The following table reflects the FY 70-78 depot maintenance workload data by categories of equipment by

	(\$000)								
	<u>FY 70</u>	<u>FY 71</u>	<u>FY 72</u>	<u>FY 73</u>	<u>FY 74</u>	<u>FY 75</u>	<u>FY 76</u>	<u>FY 77</u>	<u>FY 78</u>
PE732207	(583,104)	(515,777)	(559,038)	(562,278)	(486,184)	(478,911)	(495,809)	(484,096)	(484,368)
Aircraft	285,044	262,400	239,642	231,589	174,555	178,467	180,213	175,226	175,952
Automotive	42,708	44,454	72,686	75,157	51,103	49,729	50,504	50,861	50,861
Combat Vehicles	90,798	80,345	95,948	107,426	103,293	106,449	108,237	101,950	101,950
Construction	13,150	11,460	17,478	12,546	19,967	17,806	16,917	15,235	15,235
Elec/Comm Equip	36,270	31,123	38,551	34,025	34,830	33,410	34,179	36,290	36,290
Missiles	43,408	33,145	35,894	33,166	34,300	32,537	33,023	36,866	36,866
Ships	11,841	6,837	6,782	6,966	5,293	2,447	2,399	2,320	2,320
Munitions Armament	7,402	5,182	6,693	9,123	9,201	8,915	8,756	8,121	8,121
Weapons Armament	12,863	7,599	10,794	14,334	10,100	7,084	7,687	6,161	6,161
Rail	1,517	1,448	1,292	1,084	2,066	1,782	1,844	1,409	1,409
General Equipment	22,654	14,311	18,750	21,648	25,378	25,566	35,266	34,303	33,849
Commodity Group	15,449	17,473	14,528	15,214	16,098	14,719	16,784	15,354	15,354

Mr. PATTEN. Are the reductions and consolidations you announced so far based on your projected fiscal year 1974 workload?

General COOPER. Yes, sir.

Mr. PATTEN. I note there are expected to be significant reductions in your aircraft and electronics/communications workloads from fiscal year 1974 to the out years. Is that correct? What effect will that have on your depot structure at these areas?

General COOPER. We have the detailed forecast on the expected workloads. For example, in aircraft it is projected at \$156 million for fiscal year 1974. We project for 1975 through 1978 a load slightly less than \$140 million. The total workload is not down in a major way. For the aircraft beyond fiscal year 1974 we may have to consider reductions. We don't expect to reduce anything at Corpus Christi. If the workload decreases we will decrease the load or eliminate it in some of the other places where they are presently handling aircraft.

Mr. PATTEN. Does the Army have a depot modernization plan?

General COOPER. I know we have one for some of the specific depots such as Anniston Army Depot. We have one for the ARADMAC. I would like to provide for the record the long-range depot modernization plan for the entire complex.

[The information follows:]

Each Army depot has a master plan which is used as a basis for facility planning and development, however there is no single document identified as a depot modernization plan. Depot modernization has been applied to the individual aspects or functions of each installation's master plan.

STATUS OF MUNITIONS PLANTS

Mr. PATTEN. What is the situation with regard to munitions production capacity and requirements? Can you provide for the record a listing of your government-owned, contractor-operated, plants, showing which have greater or lesser priority, which are inactive, and which you are considering for inactivation, and which you plan to excess?

General COOPER. We will be happy to provide that.
[The information follows:]

There are 25 Army ammunition plants currently in the Army's production base to meet mobilization production requirements, with 18 of these in an active status. A recent review of the need to retain these plants to meet updated mobilization requirements has been conducted and resulted in a proposal to excess the Alabama Army Ammunition Plant. This proposal is under consideration and review at the DA staff level.

Additionally, a workload study is conducted each year to determine which of these plants in the mobilization base are required to remain active to support the anticipated production requirements associated with the current fiscal year President's budget. When the procurement plan for the current fiscal year is developed and approved, a determination is made as to which GOCO plants in consonance with procurements from private industry will be needed to support these requirements. The final determination is made based on economics and the recognition of the need to sustain production facilities in the GOCO munitions base active to support the warm base concept of keeping a hotline for each item of munitions. This concept enables the Army to respond more rapidly to emergency requirements and reduces the investment cost in ammunition inventories which would otherwise be required to meet mobilization requirements.

A listing of the inactive plants follows: Alabama Army Ammunition Plant; Burlington Army Ammunition Plant; Gateway Army Ammunition Plant; Hays Army Ammunition Plant; Ravenna Army Ammunition Plant; St. Louis Army Ammunition Plant; and Sunflower Army Ammunition Plant.

General COOPER. There is, I am sure you know, in munitions production, a long-range program to upgrade all of our munitions facilities. I assume that is different from the question you asked about the depots.

Mr. PATTEN. Are there any questions?

Mr. DAVIS. No question.

Mr. TALCOTT. No questions.

AERONAUTICAL DEPOT MAINTENANCE CENTER, TEXAS

Mr. PATTEN. Aeronautical Depot Maintenance Center, Texas. Insert page 152 in the record.

[The information follows:]

1 DATE 1 Feb 73	2 DEPARTMENT ARMY		3 INSTALLATION FY 1974 MILITARY CONSTRUCTION PROGRAM Aeronautical Depot Maintenance Center										
4 COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command		5 INSTALLATION CONTROL NUMBER Texas		6 STATE/COUNTRY Texas									
7 STATUS Active		8 YEAR OF INITIAL OCCUPANCY 1941 (Navy) 1961 (Army)		9 COUNTY (U.S.) Nueces									
		10 NEAREST CITY Corpus Christi - 10 miles North											
11. MISSION OR MAJOR FUNCTIONS Perform (Depot) maintenance of mission-essential aeronautical equipment to meet the operational requirements of Department of the Army by performing aircraft depot maintenance and support functions such as overhaul, repairs, modifications, retrofit, modernization, fabrication, avionics and special projects, providing aeronautical depot on-the-job training (military), maintaining mobilization readiness, maintaining prepositioned depot stocks, providing engineering services for AVSCOM, and supporting US Army Materiel Gp No. 1.				12. PERSONNEL STRENGTH									
				PERMANENT		STUDENTS		SUPPORTED		TOTAL			
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)	
				* AS OF 31 Dec 72		64	384	6,171					4,619
				* PLANNED (End FY)									
13. INVENTORY													
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)					
* OWNED								*					
* LEASES AND EASEMENTS								*					
* INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19													
* AUTHORIZATION NOT YET IN INVENTORY								9,343					
* AUTHORIZATION REQUESTED IN THIS PROGRAM								6,284					
* ESTIMATED AUTHORIZATION - NEXT 4 YEARS								5,330					
*Included in Navy Inventory													
SUMMARY OF INSTALLATION PROJECTS													
PROJECT DESIGNATION													
CATEGORY CODE NO	PROJECT TITLE		TENANT COMMAND		AUTHORIZATION PROGRAM		FUNDING PROGRAM						
a	b		c		SCOPE		ESTIMATED COST (\$000)						
	Priority No		d		e		f						
					g		h						
211	45 - Upgrade Turbine Engine Test Cells and Computer Ctr		153		SF		15,000						
442	44 - Supply Operations and Storage Building		29 154		SF		160,000						
	Total						6,284						

AERONAUTICAL MAINTENANCE CENTER, TEXAS, \$6,284,000

The Aeronautical Maintenance Center is located 10 miles south of Corpus Christi, Tex. The mission of this installation is to provide depot maintenance overhaul and rebuild facilities for mission essential aeronautical equipment and to maintain prepositioned depot stocks. The program consists of upgrading turbine engine test cells and a supply operation and storage building.

Status of Funds

	<i>Thousands</i>
Funded program not in inventory.....	9,343
Unobligated projects, Mar. 31, 1973 (actual).....	4,000
Unobligated projects, June 30, 1973 (estimated).....	4,000

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete, Apr. 30, 1973
Upgrade tur eng test cells.....	\$115	30
Supply operations and storage building.....	250	30

HELICOPTER REPAIR

Mr. PATTEN. In previous years you have requested new engine test cells at this location. Has the test cell workload declined? Has it stabilized?

General COOPER. It has stabilized, sir.

Mr. PATTEN. Where else is this type of engine repair on Army helicopters performed?

General COOPER. With regard to the Navy, we do some repair of helicopters at Pensacola. The number is about 200. We plan 245 Hueys in 1974 and 200 in 1975. The Navy considers 200 an economic minimum workload. We also do some helicopter maintenance by commercial firms. I don't know the specific locations. We have Colonel Oram here.

Colonel ORAM. We have depot maintenance performed in-house at ARADMAC and New Cumberland. We have a depot maintenance out-of-house contract right now on UH-1 type aircraft with Bell. That contract is about to expire.

We also have a contract for CH-47 Chinooks with Boeing Vertol. This is ongoing and we don't anticipate any reduction in that contract in the near future.

As far as the engines are concerned, we can provide the maintenance for that type engine at ARADMAC. We also have out-of-house contract with Lycoming which is about complete. Another one with Geary Aircraft Industries in Texas, for a small number of engines.

Mr. PATTEN. That would leave the impression that more of the workload will be in-house as these contracts expire with Bell and others? In the future will more of the workload be in-house?

Colonel ORAM. Yes, sir. I would anticipate as requirements decrease that we would maintain and utilize capacity in-house.

General COOPER. I have some specific figures with regard to fiscal years 1973 and 1974. The trend will go down in 1975.

Mr. PATTEN. Put that in the record.

[The information follows:]

The following data shows the relationship of in-house (Army/Other Service) to contract depot maintenance.

Fiscal year	In-house	Contract	Interservice	Total
Depot maintenance airframe program:				
1973.....	1,021	155	240	1,416
1974.....	736	84	245	1,065
1975.....	873	200	200	1,273
Depot maintenance engine program:				
1973.....	3,718	1,344	66	5,128
1974.....	3,046	663	81	3,790
1975.....	2,668	698	70	3,436

¹ Included within the fiscal year 1975 airframe program are 2 conversion programs. These programs will accomplish conversion of ——— OV-1C to D configuration and ——— AH-1G to a Q, or Tow missile configuration.

TEST CELLS

Mr. PATTEN. What will be the scheme for upgrading the test cells at ARADMAC—one or two cells at a time, all at once? How does the expected workload influence the approach used?

General Cooper. We will do two cells at a time. The first two cells will be test cells Nos. 11 and 12.

Mr. PATTEN. How does the expected workload influence the approach used?

General COOPER. We expect to be able to keep eight test cells operating at one time to handle the workload, which is about 3,800 engines per year.

Mr. PATTEN. Has the computer application at ARADMAC been fully checked out, or is this a new approach which may have a deleterious effect on testing and maintenance production?

General COOPER. The computer application proposed is a proven design. Test cells at Kelly Air Force Base and United Airlines overhaul facility in San Francisco have operational computers with equivalent application and as an integral part of the test cell facility. We are convinced it is a standard application, not something new.

Mr. PATTEN. What is the leadtime on the computer scheduled for the ARADMAC turbine engine test cell project?

General COOPER. The proposed computer is going to be leased and there would not be much leadtime beyond the contract negotiating time which is expected to be about 90 days.

Mr. PATTEN. Will the availability schedule mesh with the construction BOD?

General COOPER. Yes, sir.

SUPPLY OPERATIONS AND STORAGE BUILDING ECONOMIC ANALYSIS

Mr. PATTEN. What is the present value of future benefits anticipated from the supply operations and storage buildings?

General COOPER. From the supply operations, we estimate savings of \$850,000 per year.

Mr. PATTEN. Provide the summary of the analysis (format A-1) and pertinent supporting material for the record.

General COOPER. Yes, sir.

[The economic analysis follows:]

ECONOMIC ANALYSIS—DOD INVESTMENTS

SUMMARY OF PROJECT COSTS, FORMAT A-1, PART I—GENERAL INFORMATION

1. Submitting DOD component : Department of the Army.
2. Date of submission : May 8, 1972.
3. Project title : Supply operations and storage building.
4. Description of project objective : A supply operations and storage building to house shipping, receiving, packaging, and crating; and environmentally controlled storage for select depot and national inventory control point (NICP) property. Proposed new facility would consolidate the above activities in one building to accomplish the depot modernization program.
5. Alternatives.

(a) Alternative 1: Alternative 1 (status quo) would be to maintain supply functions, that is, shipping, receiving, packaging, and preservation in existing facilities with a capital equipment investment to mechanize certain supply operations and provide storage retrieval aids for maximum utilization of existing buildings.

(b) Alternative 2: Alternative 2 would be to upgrade (new permanent walls, dock height floors, loading and unloading ramps, environmental control, and material handling and storage retrieval systems) the existing structures, consolidating packaging, and preservation operations in certain existing buildings—otherwise, maintaining existing structures for storage.

(c) Alternative 3: Alternative 3 would be to construct a new supply operations and storage facility, consolidate supply operations within the new building, install automated material handling and storage retrieval aids, and provide environmental control for depot and NICP property.

6. Recommended alternative: Alternative 3 is recommended as the most economical alternative and the most feasible solution to achieve the depot modernization/mechanization concepts consistent with consolidation of supply operations, efficiency, and economy. With the acquisition of this facility, supply operations and critical items' storage can be consolidated in one building with satellite facilities (buildings) utilized for storage of "other class" items.

PART II.—COMPARISON OF RECURRING COSTS—ALTERNATE 1 VERSUS ALTERNATE 2

(7) Project year	(8) Recurring (operations) costs—		(9) Differential cost	(10) Discount factor	(11) Discounted differential cost
	(a)	(b)			
	Alternative 1	Alternative 2			
1 through 24.....					
25.....	\$1,729,835	\$1,298,089	\$431,746	9.524	\$4,111,948
12. Total.....					4,111,948

PART II.—COMPARISON OF RECURRING COSTS—ALTERNATE 1 VERSUS ALTERNATE 3

(7) Project year	(8) Recurring (operations) costs—		(9) Differential cost	(10) Discount factor	(11) Discounted differential cost
	(a)	(b)			
	Alternative 1	Alternative 3			
1 through 24.....					
25.....	\$1,729,835	\$881,778	\$848,057	9.524	\$8,076,895
12. Total.....					8,076,895

PART III.—INVESTMENT COSTS AND BENEFITS—ALTERNATE 1 VERSUS ALTERNATE 2

Program cost (funding requirement)	Present value		
	Program cost	Terminal value	Investment costs
13. Present value (P.V.) of new investments:			
a. Land and buildings:			
\$1,288,152 × .954	\$1,228,897		\$1,228,897
b. Equipment:			
\$900,000 × .954	858,600 × .097	\$83,284	775,316
c. Other (support facility):			
\$716,753 × .954	683,782		683,782
14. Total present value new investments			\$2,687,995
15. Plus present value of existing assets to be employed			0
16. Net Defense Investment (Line 14 plus Line 15)			2,687,995
17. Present value of cost savings from operations (column 11)			4,111,948
18. Plus present value of cost of refurbishment or modifications eliminated			487,254
19. Total present value of cost savings			4,599,202
20. Plus present value of existing assets replaced			0
21. Present value of benefits (line 19 plus line 20)			4,599,202
22. Benefits/investment ratio (line 19 divide (line 16 minus line 20))			1.71

PART III—INVESTMENT COSTS AND BENEFITS—ALTERNATE 1 VERSUS ALTERNATE 3

Program cost (funding requirement)	Present value		
	Program cost	Terminal value	Investment costs
13. Present value (P.V.) of new investments:			
a. Land and buildings:			
\$3,645,000 × .954	\$3,477,330		\$3,477,330
b. Equipment:			
\$787,000 × .954	750,798 × .097	\$72,827	677,971
c. Other (support facilities):			
\$338,000 × .954	322,482		322,482
d. Working capital:			
Not applicable			
14. Total present value new investments			\$4,477,783
15. Plus present value of existing assets to be employed			0
16. New defense investment (line 14 plus line 15)			4,477,783
17. Present value of cost savings from operations (column 11)			8,076,895
18. Plus present value of cost of refurbishment or modification eliminated			487,254
19. Total present value of cost savings (line 17 plus line 18)			8,564,149
20. Plus present value of existing assets replaced			0
21. Present value of benefits (line 19 plus line 20)			8,564,149
22. Benefits/investment ratio (line 19 divide (line 16 minus line 20))			1.91

PART IV—SOURCE/DERIVATION OF COST ESTIMATES

1. *Alternate 1 (status quo)*

The following base costs would be incurred under this alternate and all costs relative to alternates 2 and 3 will be measured against these base costs:

(a) Investment costs (itemized project costs).

(1) Material handling and storage retrieval equipment.

Automated floor-mounted conveyor system for packaging and preservation. Overhead powered and free conveyor system, storage bins (loose issue and pallet type) for storage. Depressed truck docks for shipping and receiving.

	Amount
Lump sum	\$562,000
Discounted 2d year, \$562,000 × .867	487,254

(b) Recurring costs (operations).

(1) Overhead and maintenance at Cabaniss Field, Building 7 and Building 25 not directly related to the supply operations: \$18,207/year²

Subtotal (1)----- \$18, 207

(2) Overhead and maintenance directly related to Cabaniss Field supply operation:

(a) Lease costs, \$46,704/year³----- \$46, 704

(b) Labor⁴:

Number of men, grade, and yearly salary:

2, W-6-----	14, 860
1, W-4-----	6, 614
1, S-6-----	10, 150
3 security guards-----	34, 115

Subtotal (1) ----- 65, 739

Plus 25 percent overtime----- 16, 435

Total ----- 82, 174

(c) Transportation:

1 truck----- 22, 670

1 W-8----- 8, 250

Maintenance and forklift operations----- 18, 225

Subtotal (2)----- 49, 145

Grand total----- 178, 023

(3) Cost of yearly cyclic inspection and represervation of highly machined aircraft parts (critical items with machined surfaces) which should be stored in environmentally controlled atmosphere, but, due to the absence of this space at ARADMAC, are stored in covered (for the most part) ambient atmosphere aircraft hangars. These items include helicopter and turbine engine parts such as engine compressors, rotor gear boxes, fuel controls, avionics and electronics equipment, etc., associated with aeronautical maintenance. These items are in both the national inventory control point (NICEP) and depot property accounts. These costs were developed from an analysis of the four functional areas under account 721111.00000 "Supply Depot Operations" and, more specifically, within subaccount of 721111.10000 "Storage and Warehousing":⁵

NOTE.—Reference Change 13 TM 743-200-1 dated 3 March 1970.

Labor:*Man-hours⁵*

Packing for storage 721111.12120----- 25, 590

Care of material in storage 721111.13100----- 18, 248

Preservation-packaging for storage 721111.13320----- 23, 657

Cyclic inspection 721111.14320----- 13, 525

Total manhours----- 81, 020

Cost per manhour----- \$5. 24

Total ----- \$424, 549

Materials⁶:

Packing for storage 721111.12120----- \$2, 251

Preservation-packaging for storage 721111.13300----- \$20, 576

Total ----- 22, 827

Subtotal (3)----- \$447, 376

(4) The following analysis represents a combined supply/management engineering analysis of the supply operations cost associated with the receiving shipping, packaging and preservation operations as they exist presently. This

breakdown represents a consolidation of major operations involved in the receipt, packaging, distribution, and shipping of this center's aeronautical material (both NIPC and installation property). It should be noted that these operations are composed of several smaller operations grouped to form the work units shown. Of course, as modernization is effected, the costs are reduced under each alternate:

Operation ⁷	Work unit	Total production	Man-hours per unit production	Total man-hours	Man-hours ⁸ cost	Total cost
Unload truck	Freight bill	8,659	.600	5,195.4	5.24	\$27,223
In-check line item	Line item	182,481	.292	53,284.4	5.24	279,210
Binning	do.	125,354	.150	13,803.1	5.24	93,528
Stock list change	do.	160,438	.135	21,659.1	5.24	113,493
Rewarehouse	do.	43,741	.238	10,410.4	5.24	54,550
Transport shipment	do.	40,369	.118	4,763.5	5.24	24,900
Pack parcel post	do.	94,755	.106	10,044.0	5.24	52,630
Prepare freight carton	do.	16,734	.143	2,393.0	5.24	12,539
Prepare triwall ship	do.	7,158	.219	1,567.6	5.24	8,214
Crates single item	do.	5,067	.383	1,940.7	5.24	10,169
Crate consol container	do.	18,433	.092	1,695.8	5.24	8,885
Prepare ship as receive	Container	30,364	.191	5,799.5	5.24	30,389
Load truck	Government bill of lading	7,600	.588	4,468.8	5.24	23,416
Deliver parcel post	Trip	282	.961	271.0	5.24	1,420
Pack very large container	Container	10,796	1.393	15,038.8	5.24	78,803
Pack large container	do.	14,664	.650	9,531.6	5.24	49,945
Pack medium container	do.	18,462	.400	7,384.8	5.24	38,696
Pack small container	do.	25,043	.230	5,759.9	5.24	30,181
Subtotal (4)						943,259

⁸ This rate includes 29 percent added for fringe benefits.

(5) Equipment ⁹:

(a) Forklifts (Army owned):

Depreciated purchase cost (per hr)	-----	¹⁰ \$1.02
Maintenance cost (per hr)	-----	.02
Operations cost (per hr)	-----	.17
Subtotal (per hr per forklift)	-----	1.21
52 forklifts × \$1.21 per hr per forklift × 2,080 hrs per year	-----	130,864

(b) Tractors (Army owned):

Depreciated costs (per hr)	-----	¹¹ \$.38
Maintenance costs (per hr)	-----	.01
Operations costs (per hr)	-----	.15
Subtotal (per hr per tractor)	-----	.54
8 tractors × \$0.54 per hr per tractor × 2,080 hr per year	-----	8,986

(c) Scooters (Army owned):

Depreciated costs (per hr)	-----	¹² \$.09
Maintenance costs (per hr)	-----	.01
Operations costs (per hr)	-----	.05
Subtotal (per hr per scooter)	-----	.15
10 scooters × \$0.15 per hr per scooter × 2,080 hr per year	-----	3,120
Subtotal (5) (per year)	-----	142,970

Alternate 1: Grand total recurring costs (operations) ----- 1,729,835

2. Alternate 2

a. Investment costs (Itemized project costs):

(1) Upgrade Buildings 7 and 25 (107,346 square feet) to provide the means for maximum utilization of existing facilities through modernization/mechanization of primary depot supply functions; that is, shipping, receiving, preservation, packaging, et cetera. These costs would include new permanent walls, additional doors to accommodate acquisition/distribution, substructural modifications

(dock-height loading/unloading), installation of necessary material handling and storage equipment, lighting in conformance to DOD 4270.1M, and controlled temperature and humidity in conformance to TM 38-230-1 and SB 740-1.

(a) Structural/architectural¹², 107,346 square feet times \$12 per square foot equals \$1,288,152.

(b) Additional power for material handling equipment, mechanical system (air and heating), fire alarm, et cetera¹³ (support facility), 1,500 kilovoltampere times \$30 kilovoltampere equals \$45,000.

(c) Install air conditioning and heating for relative humidity and temperature control for storage¹³ (support facility), 107,346 square feet times .00465 tons per square foot equals 500 tons; 500 tons times \$1,000 per ton equals \$500,000.

(d) Lighting in conformance to DOD 4270.1M criteria (support facility), 107,346 square feet times \$1.60 per square foot equals \$171,753.

(e) Material handling equipment¹, (1) automated floor-mounted conveyor system, control consoles, carrier dispatch controls, mechanized extendable conveyors for receiving and shipping, lump sum, \$400,000.

(2) Overhead-powered and free conveyor system, storage bins (loose issue and pallet type), control consoles, and materials accumulation system, lump sum, \$500,000.

b. Recurring costs (operations):

(1) Overhead and maintenance at Cabaniss Field, Buildings 7 and 25 not directly related to supply operation:

Year ²	\$18, 207
Subtotal (1)	18, 207

(2) Overhead and maintenance directly related to Cabaniss Field supply operation:

(a) Lease costs per year ³	\$46, 704
---	-----------

(b) Labor:⁴

Number of men, grade, and yearly salary:

2, (W-6)	\$14, 860
1, (W-4)	6, 614
1, (S-6)	10, 150
3, security guards	34, 115

Subtotal	65, 739
----------------	---------

+ 25 percent overtime	16, 435
-----------------------------	---------

Total	82, 174
-------------	---------

(c) Transportation:

1 truck	\$22, 670
---------------	-----------

1 W-8 (per year)	8, 250
------------------------	--------

Maintenance and operation (per year)	18, 225
--	---------

Total (per year)	49, 145
------------------------	---------

Subtotal (2)	178, 023
--------------------	----------

(3) Cost of yearly cyclic inspection and represervation of highly machined aircraft parts (critical items with machined surfaces) which are received and stored within the new facility. These items include helicopter and turbine engine parts such as engine compressors, rotor gear boxes, fuel controls, avionics and electronics equipment, etc. which represent 17,600 line items of the 53,000 line items in both the National inventory control point and depot accounts. These costs were developed by the ARADMAC storage modernization committee by assumption (and evaluation) that the 17,600 line items above (33 percent) could all be stored in the new facility. An analysis of the four functional areas under account 721111.00000 "Supply Depot Operations," and more specifically within subaccount 721111.10000 "Storage and Warehousing . . ." shows as follows:

NOTE: Ref C-13 to

TM 743-200-1 dtd 3 Mar 70

Labor⁴ and (manhours):⁵

	Cost
Packing for storage 721111.12120	(25, 590)
Care of Material in Stg 721111.13100	(18, 248)
Preservation—Pkg'g for Stg 721111.13320	(23, 657)
Cyclic Inspection 721111.14320	(13, 525)

Subtotal	(81, 020)
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Total (81,020) × \$5.24/manhour	424, 549
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Materials: °

Packing for storage 721111.12120-----	2, 251
Preservation-Packing for storage 721111.13320-----	20, 516
Total cost of materials-----	22, 827
Subtotal-----	447, 376

Subtotal (3) Reduction of 33 percent or .33 would give
 $.66 \times \$447,376$ ----- 295, 268

(4) The following analysis represents a combined supply/management engineering analysis of the supply operations cost associated with the receiving, shipping, packaging and preservation operations as they exist presently. This breakdown represents a consolidation of major operations involved in the receipt, packaging, distribution and shipping of this Center's aeronautical materiel (both NICP and depot property). It should be noted that these operations are composed of several smaller operations grouped to form the work units shown. Of course, as modernization is effected, the costs are reduced under each alternate:

Operation ?	Work unit	Total production	Man- hours per unit pro- duction	Total man-hours	Man- hours # cost	Total cost
Unload truck-----	Freight bill-----	8, 659	.600	5, 195	5. 24	\$27, 224
In-check line item-----	Line item-----	182, 481	.220	40, 146	5. 24	210, 385
Binning-----	do-----	125, 354	.150	13, 803	5. 24	93, 528
Stock list change-----	do-----	40, 109	.077	3, 088	5. 24	16, 183
Rewarehouse-----	do-----	43, 741	.215	9, 403	5. 24	49, 271
Transport shipment-----	do-----	40, 369	.118	4, 763	5. 24	24, 960
Pack parcel post-----	do-----	94, 755	.076	7, 201	5. 24	37, 735
Prepare freight carton-----	do-----	16, 734	.118	1, 974	5. 24	10, 346
Prepare triwall ship-----	do-----	7, 158	.160	1, 145	5. 24	6, 001
Crate single item-----	do-----	5, 067	.379	1, 920	5. 24	10, 062
Crate consol container-----	do-----	18, 433	.073	1, 345	5. 24	7, 050
Prepare ship as receive-----	Container-----	30, 364	.134	5, 537	5. 24	29, 275
Load truck-----	Government bill of lading-----	7, 600	.588	4, 468	5. 24	23, 417
Deliver parcel post-----	Trip-----	282	.623	175	5. 24	920
Pack very large container-----	Container-----	10, 796	.838	9, 047	5. 24	47, 406
Pack large container-----	do-----	14, 664	.408	5, 982	5. 24	31, 350
Pack medium container-----	do-----	18, 462	.226	4, 172	5. 24	21, 863
Pack small container-----	do-----	25, 043	.127	3, 180	5. 24	16, 665
Subtotal (4)-----						663, 621

(5) Equipment °:

(a) Forklifts (Army owned):

Depreciated purchase cost (per hr)-----	¹⁰ \$1. 02
Maintenance cost (per hr)-----	. 02
Operational cost (per hr)-----	. 17

Total----- 1. 21
 52 forklifts \times \$1.21 per hr per forklift \times 2,080 hr per year----- 130, 864

(b) Tractors (Army owned):

Depreciated costs (per hr)-----	¹¹ . 38
Maintenance costs (per hr)-----	. 01
Operations costs (per hr)-----	. 15

8 tractors \times \$.54 per tractor \times 2,080 hr per yr----- 8, 986

(c) Scooters (Army owned):

Depreciated costs (per hr)-----	¹² . 09
Maintenance cost (per hr)-----	. 01
Operations costs (per hr)-----	. 05

10 scooters \times \$.15 per hr per scooter \times 2, 080 hr per yr----- 3, 120

Subtotal (5) yr----- 142, 970

Alternate 2: Grand total recurring costs (operations)----- 1, 298, 089

3. Alternate 3

a. Investment costs (itemized project costs (DD Form 1391 dated Apr. 24, 1972) :

(1) Land and building-----	\$3, 645, 000
(2) Equipment -----	\$787, 000
(3) Supporting facilities -----	\$338, 000
(4) Working capital -----	N/A

b. Recurring costs (operations).¹ The following analysis represents a combined supply/management engineering analysis of the supply operation cost associated with the receiving, shipping, packaging, and preservation operations as they exist presently. This breakdown represents a consolidation of major operations involved in the receipt, packaging, distribution, and shipping of this Center's aeronautical material (both NICP and installation property). It should be noted that these operations are composed of several smaller operations grouped to form the work units shown. Of course, as modernization is affected, the costs are reduced under each alternate :

Operation ⁷	Work unit	Total production	Man-hours per unit production	Total man-hours	Man-hours ⁸ cost	Total cost
Unload truck-----	Freight bill-----	8, 659	. 183	1, 584	5. 24	\$8, 3 03
In-check line item-----	Line item-----	182, 481	. 174	31, 751	5. 24	166, 373
Binning-----	do-----	125, 354	. 071	8, 900	5. 24	46, 636
Stock list change-----	do-----	40, 109	. 077	3, 088	5. 24	16, 183
Rewarehouse-----	do-----	43, 741	. 209	9, 141	5. 24	47, 963
Transport shipment-----	do-----	40, 369	. 010	403	5. 24	2, 115
Pack parcel post-----	do-----	94, 755	. 076	7, 201	5. 24	37, 735
Prepare freight carton-----	do-----	16, 734	. 118	1, 974	5. 24	10, 346
Prepare triwall ship-----	do-----	7, 158	. 160	1, 145	5. 24	6, 001
Crate single item-----	do-----	5, 067	. 374	1, 920	5. 24	10, 062
Crate consol container-----	do-----	18, 433	. 073	1, 345	5. 24	7, 050
Prepare ship as receive-----	Container-----	30, 364	. 134	5, 537	5. 24	29, 275
Load truck-----	Government bill lading-----	7, 600	. 339	2, 576	5. 24	13, 500
Deliver parcel post-----	Trip-----	282	. 623	175	5. 24	920
Pack very large container-----	Container-----	10, 796	. 838	9, 047	5. 24	47, 406
Pack large container-----	do-----	14, 664	. 408	5, 982	5. 24	31, 350
Pack medium container-----	do-----	13, 462	. 226	4, 172	5. 24	21, 863
Pack small container-----	do-----	25, 043	. 127	3, 180	5. 24	16, 665
Subtotal (1)-----						519, 701

(2) Equipment :

(a) Forklifts (Army owned) :

Depreciated purchase cost (per hr) ¹⁰ -----	\$1. 02
Maintenance costs (per hr)-----	. 02
Operations costs (per hr)-----	. 17
Total-----	1. 21

23 forklifts × \$1.21 per hr per forklift × 2,080 hr per year----- 57, 886

(b) Tractors (Army owned) :

Depreciated purchase cost (per hr) ¹⁴ -----	. 38
Maintenance costs (per hr)-----	. 01
Operations costs (per hr)-----	. 15
Total-----	. 54

6 tractors × \$.54 per hr per tractor × 2,080 hr per year----- 6, 739

(c) Scooters (Army owned) :

Depreciated costs (per hr) ¹⁵ -----	. 09
Maintenance costs (per hr)-----	. 01
Operation costs (per hr)-----	. 05
Total-----	. 15

7 scooters × \$.15 per hr per scooter × 2,080 hr per year----- 2, 184

Total equipment costs (2) (per yr)----- 66, 809

(3) Cost of yearly cyclic inspection and reprereservation of highly machined act parts (critical items with machined surfaces) which are received and stored within the new facility. These items include helicopter and turbine engine parts such as engine compressors, rotor gear boxes, fuel controls, avionics and electronic equipment, etc., which represent 17,600 line items of the 53,000 line items in both the NICP and depot accounts. These costs were developed by the ARADMAC Stg Modernization Committee by assumption (and evaluation) that the 17,600 line items above (33 percent) could all be stored in the new fac. An analysis of the four functional areas under account 721111.00000 "Supply Depot Operations," and more specifically within subaccount of 721111.10000 "Storage and Warehousing . . ." shows as follows:

Labor *	<i>Man-hours</i> °
Packing for storage—721111.12120-----	25, 590
Care of material in storage—721111.13100-----	18, 248
Preservation—packaging for storage—721111.13320-----	23, 657
Cyclic inspection—721111.14320-----	13, 525
Total -----	81, 020
81,020 × \$5.24 per man-hour-----	\$424, 549

Materials °	<i>Cost</i>
Packing for storage—721111.12120-----	\$2, 251
Preservation—packaging—721111.13320-----	20, 516
Total -----	22, 827
Subtotal -----	447, 376
Reduction of 33 percent or .33 would give: .66 × \$447,376=	
subtotal (3)-----	295, 268

NOTE: Further cost savings, although not claimed, could be realized by implementation of the COSIS¹⁶ program in that inspection and reprereservation time cycle between inspections is increased from 18 months to 60 months in a C-T/H environment.

Grand total (alternate 3)----- \$881, 778

Prepared by:

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Principal action officer:

F. B. PARISH, LTC, CmlC,
 Director for Services.

APPENDIX A—SOURCE OF COST DATA

¹ ARADMAC Director for Supply "Storage Modernization Planning Committee" S.O. No. 32 dated Apr. 12, 1971, estimate for material handling equipment, storage aids and loading dock facilities.

² DA Form 2701, Work Order Request, Facilities Maintenance Engineering Branch fiscal years 1963-70 average per year.

³ U.S. Government lease for real property, SF-2 dated June 7, 1967, leases Nos. DAC-63-5-67-394 and DAC 63-5-67-395 (currently under renegotiation).

⁴ DOD Directive 5120.39 dated June 5, 1968, "Coordinated Wage System Regular Wage Rate (Schedule for Corpus Christi Area)" and "Federal Pay Comparability Act of 1970."

⁵ RCS CSGLD-1198(R1) (1535), 3d quarter fiscal year 1972 (actual) and 4th quarter (projected) man-hours expended for activities in functional account 2220, Supply Depot Operations.

⁶ DA Form 2765-1 "Request for Issue or Turn In" monthly average for 3d quarter fiscal year 1971.

⁷ See Item 1.

⁸ This rate includes 29 percent added for fringe benefits.

⁹ ARADMAC Directorate for Supply "Storage Modernization Planning Committee S.O. No. 32" dated April 12, 1971—estimate for material handling equipment necessary to expedite and transport depot and NICP materiel.

¹⁰ Average forklift (4,000 lb. class) costing \$12,000 new and depreciated 20 percent per year for 5 years, converted to cost per available hour.

¹¹ Average tractor (2,000 lb. class) costing \$4,000 new and depreciated 20 percent per year for 5 years.

¹² Average scooter cost \$1,300 new depreciated 20 percent per year for 5 years.

¹³ Southern Division, Naval Facilities Engineering Command current cost reference Means Cost Data book. 1972.

¹⁴ Average tractor (2,000 lb. class) costing \$4,000 new depreciated 20 percent per year for 5 years, converted to cost per available hour.

¹⁵ Average scooter cost \$1,300 per year depreciated 20 percent per year for 5 years, converted to cost per available hour.

¹⁶ COSIS—Care of supplies in storage.

Mr. PATTEN. You have it rated as a fairly low priority project and yet it seems to have, according to the economic analysis, a fairly good ratio of 2.017 of future savings to present costs. Is there any particular reason for giving it a low priority other than that there are higher priority projects in the program?

General COOPER. None whatsoever. I have visited ARADMAC and discussed it at great length with Mr. Joe Cribbens, who earlier briefed Mr. Sikes. It is an extremely worthwhile project. They are now separated in quite a few buildings and they handle large numbers of line items.

LOCATION OF EXISTING STORAGE FACILITIES

Mr. PATTEN. Can you show us on the map where the buildings are located and indicate what type of construction they are?

Colonel ORAM. I have a small-scale map that I can show you the location of the two facilities in which we now have our supply operation. This is the ARADMAC unit one, and here is 12 miles, as the crow flies, or 14 miles driving, a field which used to be an old World War II training facility. There are two hangars there which have received very little maintenance over the years but they do offer some cover over the stocks that we keep there.

General COOPER. There are many more than two buildings operated there now. We have a list of all of these buildings, a total of about seven different buildings.

Colonel ORAM. There are seven buildings, two of which are at Cabaniss Field that I can show you. Others are located here. To orient you, this is north and the bay comes around this way. These are all hangars, and the runway. Cabaniss Field would be over here—12 miles. These two facilities are actually aircraft hangers and we do keep supplies in this one and in half of this one (indicating).

The facilities down here, these structures here remind me a lot of a shed that you see in stockyards. The only difference is that they do have a side on these. They are totally inadequate for any type of supplies because they have posts throughout and it is difficult to operate forklifts and that sort of thing.

What this program does is destroy these two buildings, raze these two, and replace them by a facility which has about 50,000 more square feet of storage than these two that are being razed. However, in conjunction with that, after completion of the project, the lease for facilities at Cabaniss Field will be terminated.

Mr. PATTEN. Are there any questions?

Mr. DAVIS. I suppose that an argument can be made for the dispersal of these storage facilities for ready accessibility?

General COOPER. No, sir. By centralizing the facility you not only reduce costs but also make it easier to handle parts. The proposed facility is very close to the maintenance facility itself, where they are going to use these parts or ship them out. Dispersal in this case is a negative factor. The only reason you might talk about dispersal is to reduce vulnerability to bombing. But we have not considered that. Dispersal is inefficient and if an enemy is going to knock something out, they would prefer to knock out the test cells or the building where we do the maintenance and overhaul of the engines and aircraft.

Mr. DAVIS. Would only a small part of these supplies actually be used at Corpus Christi?

General COOPER. No, most of these are parts and supplies to be used right at the maintenance facility. This is not what we call a national inventory control point. It is not really a depot in the normal sense of the word that we ship parts out to all helicopter units for the organizational maintenance. Primarily these parts are used right at the facility at Corpus Christi.

Mr. DAVIS. Over at the Cabaniss Field you have some buildings which you are using. That is just because you had a building there; you are not using any substantial amount of those supplies in the immediate vicinity?

General COOPER. We do have, that is right. We use them because we have it at that location. Some of those supplies are shipped from there to the Corpus Christi station to be used.

Colonel ORAM. Those are the supplies at Corpus Christi. There are many components overhauled in addition to the aircraft itself. Most of those are the reparable components. Those that need to be overhauled as they come in, they are stored there and put in the production line.

Mr. PATTEN. Do you still spend an hour maintaining a helicopter for every hour in the air? Someone said this a couple of years ago.

Colonel ORAM. It depends on the helicopter. Some of them we spend more time than that.

General COOPER. We tend to spend more time than that.

ANNISTON ARMY DEPOT, ALA.

Mr. PATTEN. Turn to Anniston Army Depot, Ala.

Insert page 155 in the record.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Anniston Army Depot							
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER Alabama 012		6. STATE/COUNTRY Alabama						
7. STATUS Active			8. YEAR OF INITIAL OCCUPANCY 1942		9. COUNTY (U.S.) Calhoun						
11. MISSION OR MAJOR FUNCTIONS Receive, store, perform care and preservation and ship general supplies and ammunition. Receive, store and ship strategic and critical materials. Receive, store and ship Civil Defense Shelter supplies. Perform depot maintenance of general supplies, ammunition and assigned missile systems. Operate area support Secondary Reference Calibration Facility (except Nucleonics) and provide area support Secondary Reference Transfer Calibration Teams for six Southeastern states. Perform production fueling of Lance Missile.			12. PERSONNEL STRENGTH		10. NEAREST CITY Anniston, Alabama - 10 miles East						
			PERMANENT			STUDENTS		SUPPORTED			TOTAL
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)
			AS OF 31 Dec 72	28	20	4,101					
			PLANNED (End FY 78)	31	19	4,131	0	0	0	0	4,181
13. INVENTORY											
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
a. OWNED		15,214		245		70,554		70,799			
b. LEASES AND EASEMENTS		32		7*		0		7			
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								70,806			
d. AUTHORIZATION NOT YET IN INVENTORY								3,266			
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								3,745			
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS								6,015			
g. GRAND TOTAL (c + d + e + f)								83,832			
SUMMARY OF INSTALLATION PROJECTS											
PROJECT DESIGNATION											
CATEGORY CODE NO.	PROJECT TITLE			Page No	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM		
a	b			c	d	e	ESTIMATED COST (\$000) (1)	SCOPE (2)	ESTIMATED COST (\$000) (3)	SCOPE (4)	h
	PRIORITY										
214	70 - Repair and Processing Vehicle Facility			41	156	SF	96,400	3,745	96,400	3,745	

ANNISTON ARMY DEPOT, ALABAMA, \$3,745,000

Anniston Army Depot is located 10 miles west of Anniston, Ala. The mission of this installation is to receive, store, and issue general supplies and ammunition. The installation also performs depot maintenance of general supplies, ammunition, and assigned missile systems. The program provides a vehicle repair and processing facility.

Status of funds

Funded program not in inventory-----	3, 266, 000
Unobligated projects, Mar. 31, 1973 (actual)-----	2, 210, 000
Unobligated projects, June 30, 1973 (estimated)-----	750, 000

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
Repair and processing vehicle facility-----	\$130	0

REPAIR AND PROCESSING VEHICLE FACILITY

Mr. PATTEN. Discuss the processes to be carried out in the repair and processing vehicle facility.

General COOPER. Basically what we do is to rebuild combat vehicles and artillery. The work in the repair and processing of vehicles is now being done in overcrowded, scattered, substandard facilities that don't allow or permit efficient shop flow or optimum utilization of personnel or equipment.

Anniston is our major depot overhaul facility for these combat vehicles, such as armored personnel carriers, and also for the artillery. I can provide some more details on the specific items. Anniston, according to General Abrams, runs one of the best operations that he has seen in the Army. They are hampered in doing an even better job by the lack of these particular facilities.

Mr. PATTEN. What type of vehicles did you say you process here?

General COOPER. Primarily combat vehicles, tracked vehicles, and artillery.

Mr. PATTEN. Will this workload be affected by your WHEELS program?

General COOPER. Primarily the 25 percent reduction was in wheeled vehicles and not in tracked vehicles. There has been a time in the past where Anniston did retrofit some wheeled vehicles but its primary mission is not in that area.

Mr. PATTEN. Where else do you do this type of repair?

General COOPER. We have done some at Letterkenny and Red River. We also did a fair amount in Japan and I believe we do some of it in Taiwan. In the case of Japan and Taiwan when we shipped back and forth from Vietnam we had a much lower cost in terms of shipping. In the United States we are better off using Anniston.

ECONOMIC ANALYSIS

Mr. PATTEN. Supply for the record the economic analysis for this project.

General COOPER. Yes, sir.

[The information follows:]

The economic analysis of the repair and processing vehicle facility, Anniston Army Depot follows.

PREFACE

1. This economic analysis is presented to reflect costs and benefits of alternative means of accomplishing the stated objectives. The purpose of this analysis is to provide the decisionmaker with the maximum economic visibility regarding the allocation of resources.

2. The primary objectives of this project are to provide modern mechanized facilities for full workload accomplishment of the depot mission for receipt, repair, process, and shipment of combat vehicles, transport vehicles, and artillery.

3. The secondary objectives of this project are as follows:

a. To achieve more economical productivity by maximum utilization of modern materials movement equipment and engineered shop flow.

b. To relieve the extreme congestion experienced in the present operational area.

c. To provide a consolidated processing facility that will maximize efficiency and increase the responsive capability through proper design and location.

4. Several alternatives were thoroughly analyzed considering the benefits to be derived with respect to the desired objectives. Three alternatives are being treated in this analysis as follows:

a. Alternative 1 is the status quo. This alternative consists of existing fragmented substandard facilities that do not permit full workload accomplishment. This alternative is being treated in this analysis for comparative purposes only, and should not be considered as a viable alternative since it meets none of the above stated objectives.

b. Alternative 2 is the recommended alternative. This proposal, consisting of new construction, meets all of the established objectives and affords the maximum benefits to this depot and to the U.S. Government as shown in this economic analysis.

c. Alternative 3 is the modified status quo. This alternative consists of major refurbishment, modification, and conversion of existing facilities in order to meet the primary objective of full workload accomplishment. This alternative will not meet the secondary objectives demanding consolidation of fragmented facilities, increased operating efficiency, and achievement of cost savings through a reduction in personnel. This alternative will cause a disruption of operations during refurbishment, and will require conversion of 30,000 square feet of storage space valued at \$345,000 (based on empirical cost estimates, table 2, AR 415-17).

5. Consideration was given to accomplishment of this mission by commercial contract. This approach is not considered feasible because of the following reasons:

a. There are no commercial contractors in the Anniston geographic area with the capabilities for accomplishing this type of work.

b. Because of the storage facilities required for vehicles, the transportation cost involved between storage and rebuild, the scheduling of vehicles into the maintenance shops for overhaul, and the response time often demanded on emergency shipments, it is imperative that this activity be located on the depot.

c. The utilization of a partial or total contract operation on the depot would still require a major investment outlay in order to afford adequate receiving, processing, and shipping facilities. This capital outlay would be the same as that shown under alternative 2.

6. The following assumptions have been made and will be considered throughout the preparation of this economic analysis:

a. It is assumed that this facility will be started and completed during the first year of the project.

b. The annual workload projected through the economic life of this facility is based on the average annual workload experienced during the past 4 years (See appendix).

c. It is assumed that no refurbishment will be required for the proposed facility during its 25-year economic life. This assumption is based on the fact that improved materials and modern design will be incorporated in construction of this facility thereby prolonging its physical life beyond that of projects in previous years.

d. There is no salvage value considered for the structures to be demolished. The salvage value derived from the demolition of building 142 is estimated to be offset by the cost of demolition and is therefore not included. Additional demolition costs are treated separately in this analysis.

ECONOMIC ANALYSIS - DOD INVESTMENTS
SUMMARY OF PROJECT COSTS
 FORMAT A-1

1. Submitting DoD Component: Department of the Army
2. Date of Submission: 7 Apr 1972
3. Project Title: Repair and Processing Vehicle Facility
4. Description of Project Objective: To provide adequate vehicle repair and processing facilities and achieve cost savings.
5. Alternatives:
- a. Alternative 1: (Status Quo/Present Alternative) Economic Life 25 years
- b. Alternative 2: New Facilities Economic Life 25 years
- c. Alternative 3: Economic Life
6. Recommended Alternative: Alternative 2

PART II - Comparison of Recurring Costs--Alternative 1 vs Alternative 2

7. Project Year	8. Recurring (Operations) Costs a. Alternative 1	b. Alternative	9. Differential Cost	10. Discount Factor	11. Discounted Differential Cost
1	2,088,642	2,018,711	69,931	.954	66,714
2	2,018,711	2,024,345	-5,634	.867	-4,885
3	"	1,408,948	609,763	.788	480,493
4	"	"	"	.717	437,200
5	"	"	"	.652	397,565
6	"	"	"	.592	360,980
7	"	"	"	.538	328,052
8	"	"	"	.489	298,174
9	"	"	"	.445	271,345
10	"	"	"	.405	246,954
11	2,088,642	"	679,694	.368	250,127
12	2,018,711	"	609,763	.334	203,661
13	"	"	"	.304	185,368
14	"	"	"	.276	168,295
15	"	"	"	.251	153,051
16	"	"	"	.228	139,026
17	"	"	"	.208	126,831
18	"	"	"	.189	115,245
19	"	"	"	.172	104,879
20	"	"	"	.156	95,123
21	2,088,642	"	679,694	.142	96,517
22	2,018,711	"	609,763	.129	78,659
23	"	"	"	.117	71,342
24	"	"	"	.107	65,245
25	"	"	"	.097	59,147
26	"	"	"	.088	53,659
12. Total					4,848,767

PART III - Investment Costs and Benefits

13. PROJECT VALUE (P.V.) OF NEW INVESTMENT	Program Cost (Funding Req't)	P.V. Program Cost	P.V. Terminal Value	P.V. Invest Cost
a. Land and Buildings	3,077,000	2,935,458	90,347	2,845,111
b. Equipment	252,250	240,647		240,647
c. Other (Identifiy nature)				
d. Working Capital				
14. Total P.V. New Investments				3,085,758
15. Plus: P.V. of Existing Assets to be Employed				N/A
16. Net Debase Investment (Line 14 plus Line 15)				3,085,758
17. P.V. of Cost Savings from Operations (Column 11)			4,848,767	
17a. P.V. of Benefits from Format B				
18. Plus P.V. of Cost of Rehabilitation or Maintenance (Identify)			283,897	
19. Total P.V. of Cost Savings and Benefits				5,132,664
20. Plus: P.V. of Existing Assets Replaced				541,090
21. P.V. of Benefits (Line 18 + Line 20)				5,673,754
22. Benefit/Investment Ratio (Line 21 ÷ Line 16)		2.017		

ECONOMIC ANALYSIS - DOD INVESTMENTS
SUMMARY OF PROJECT COSTS
 FORMAT A-1

1. Submitting DoD Component: Department of the Army
2. Date of Submission: 7 April 1972
3. Project Title: Repair and Processing Vehicle Facility
4. Description of Project Objective: To provide adequate vehicle repair and processing facilities and achieve cost savings.
5. Alternatives:
- a. Alternative 1: (Status Quo/Present Alternative) Economic Life 25 years
- b. Alternative 2: Economic Life
- c. Alternative 3: Modified Status Quo Economic Life 25 years
6. Recommended Alternative: Alternative 2

PART II - Comparison of Recurring Costs--Alternative 1 v/m Alternative 3

7. Project Year	8. Recurring (Operations) Costs		9. Differential Cost	10. Discount Factor	11. Discounted Differential Cost
	a. Alternative 1	b. Alternative			
1	2,088,642	2,088,642	0	.954	0
2	2,018,711	2,470,543	-451,832	.867	-391,738
3	"	2,098,964	-80,253	.788	-63,239
4	"	1,695,006	323,705	.717	232,096
5	"	"	"	.652	211,056
6	"	"	"	.592	191,633
7	"	"	"	.538	174,153
8	"	"	"	.489	158,292
9	"	"	"	.445	144,049
10	"	"	"	.405	131,101
11	2,088,642	1,764,937	"	.368	119,123
12	2,018,711	1,695,006	"	.334	108,117
13	"	"	"	.304	98,406
14	"	"	"	.276	89,343
15	"	"	"	.251	81,250
16	"	"	"	.228	73,805
17	"	"	"	.208	67,331
18	"	"	"	.189	61,180
19	"	"	"	.172	55,677
20	"	"	"	.156	50,498
21	2,088,642	1,764,937	"	.142	45,966
22	2,018,711	1,695,006	"	.129	41,758
23	"	"	"	.117	37,873
24	"	"	"	.107	34,636
25	"	"	"	.097	31,909
26	"	"	"	.088	28,486
12. Total			"		1,812,251

PART III - Investment Costs and Benefits

13. PRESENT VALUE (P.V.) OF NEW INVESTMENT	Program Cost (Funding Req't)	P.V. Program Cost	P.V. Terminal Value	P.V. Invest Cost
a. Land and Buildings	904,062	862,475		862,475
b. Equipment	252,250	240,647		240,647
c. Other (Miscellaneous)				
d. Working Capital				
14. Total P.V. New Investments				1,103,122
15. Plus: P.V. of Existing Assets to be Employed				345,000
16. Net Defense Investment (Line 14 plus Line 15)				1,448,122
17. P.V. of Cost Savings from Operations (Column 11)			1,812,251	
18. P.V. of Benefits from Format B				
19. Plus P.V. of Cost of Establishment or Maintenance (if any)			N/A	
20. Total P.V. of Cost Savings and Benefits				1,812,251
21. Plus P.V. of Existing Assets Employed				N/A
22. P.V. of Benefits (Line 19 + Line 20)				1,812,251
23. Benefit/Investment Ratio (Line 22 ÷ Line 16)			1.251	

SOURCE/DERIVATION OF COST ESTIMATES, ALTERNATIVE 1—STATUS QUO
(PRESENT FACILITIES)

A. INVESTMENT COSTS

There are no investment costs to be incurred for this alternative. Refurbishment costs shown in the appendix, pages 27 and 33 are only those costs realistically estimated as necessary to sustain present operating capability over the project period. It is recognized that this alternative does not meet the project objectives as stated in the preface, but is used as a base for comparison between two proposed alternatives.

B. RECURRING COSTS (OPERATIONS)

1. *Personnel*

Total personnel to be considered under this alternative is the 142 people currently assigned to the Vehicle and Artillery Branch. The total annual cost attributed to these personnel amounts to \$1,331,245 as detailed in the appendix, page 24.

These personnel costs are based on the assumption that the workload will be of the magnitude presently being experienced. As stated in the preface, this workload estimate is based on a statistical analysis of the workload during the past 4 years. An analysis of the present shipping workload (as of June 28, 1972) reveals that approximately 97 per cent of the vehicles on shipping preparation orders are for requirements other than Vietnam. This fact indicates that our workload is not likely to be substantially affected (downward) by a cessation of the Vietnam conflict. In fact, the possibility of a substantial increase over and above the estimated workload could result from large scale returns of vehicles from Vietnam for rebuild and/or storage. This possibility reinforces the need for improvement of this depot's responsive capability.

Types of vehicles involved in the projected workload include the M113 personnel carriers and related vehicles, M-48 series combat vehicles, M-60 series combat vehicles, M-551 combat vehicles and a variety of supportive-type trailers and trucks. Vehicles presently in the system which are type classified A are likely to remain in this category for many years since no replacement vehicles are known to be in the production stage of the life cycle, particularly in view of the delay and/or termination of the MBT 70 program.

2. *Maintenance and repair*

Current depot records are not maintained in sufficient detail to permit isolation of maintenance and repair cost for each building. Based on the technical data reports available and the expertise of depot facilities engineers, an annual maintenance cost of \$0.462 per square foot was derived.

Square foot floor space (alternative 1)-----	62, 181
Annual cost per square foot-----	×\$. 462
<hr/>	
Total annual maintenance cost-----	28, 728

3. *Utilities*

Based on the technical data reports available and the expertise of depot facilities engineers, the annual utilities cost for this alternative is as follows:

a. *Heating:*

Square foot floor space-----	62, 181
Annual heating cost per square foot-----	×\$. 537
<hr/>	
Total annual heating cost-----	33, 391

b. *Lighting:*

Square foot floor space-----	62, 181
Annual lighting cost per square foot-----	×\$. 033
<hr/>	
Total annual lighting cost-----	2, 052

4. Overhead costs

Other costs such as that for custodial services and other overhead costs not treated in preceding paragraphs are considered to be approximately the same for each alternative, and are therefore excluded from this analysis.

C. OTHER CONSIDERATIONS

1. The vehicle processing capability of the present facilities is not adequate to meet the demands of the present or future workload. At the present time, there is a backlog of 4,526 vehicles that will require 90,631 man-hours to process. This processing time includes additional man-hours for dual handling of vehicles due to not being able to process them upon receipt. (See appendix, page 22 for backlog data.) Under this alternative, gasoline drainage and steam cleaning operations are performed in outside areas which limit their effectiveness during inclement weather. Expansion of other processing operations would also require that much of the work be performed outside. It would not be possible to increase the processing capability of the status quo without the addition of some investment for increased facilities. Although the expansion and addition to the present facilities would permit full workload accomplishment, it would remain very inefficient because of the antiquated and fragmented facilities.

2. Approximately 2,000 of the above mentioned unprocessed vehicles are code F vehicles awaiting rebuild. Without prompt and adequate processing, these vehicles continue to deteriorate while in storage. This added deterioration results in a higher rebuild cost due to additional parts cost. The average annual parts cost for rebuild of combat vehicles is \$12,065,909 (see appendix, page 26). Based on a survey of the additional deterioration of code F vehicles due to lack of processing, it was concluded that prompt processing would reduce the parts requirements by approximately 5 per cent. The additional annual rebuild parts cost under this alternative is estimated to be $\$12,065,909 \times 0.05 = \$603,295$.

Processing of code F vehicles is essential for the purpose of preventing further deterioration of the vehicles while in storage. Code F vehicles are stored in outside storage areas because of the necessity for utilizing protective storage for serviceable assets. Code F vehicles are rebuilt as armywide requirements demand. There are numerous components and parts of a vehicle which have critical surfaces. These surfaces must be processed if deterioration is to be held to a level which would allow reclamation of the component or part.

If these vehicles are not afforded protective processing at the time of receipt, the effect of deterioration is immediate. The extent of deterioration is a function of the time of exposure to the elements up to a point. Once the point is reached where parts or components are not reclaimable then the rebuilt cost for that vehicle is substantially increased. There is no doubt that lack of processing is the prime reason for deterioration of vehicle component parts. It is also true that no amount of processing halts deterioration 100 percent.

Estimates of increased parts cost have been arrived at by those individuals who are most knowledgeable in the processing, maintenance, and rebuild of combat vehicles. Estimates are used because no records exist which would pinpoint those costs which are specifically and exclusively a result of deterioration due to lack of processing. Many parts are reclaimed at time of rebuild. Those parts which cannot be reclaimed are parts where rust pits and corrosion have progressed beyond the point where surfaces can be reclaimed by machining or other reclamation processes. The processing is necessary for all types of vehicles and parts cost will increase for all types where processing is not afforded.

Examples of code F vehicles referred to are:

- M113 personnel carriers.
- M551 armed recon/airborne assault vehicles.
- M48 series combat vehicles.
- M60 series combat vehicles.
- M42 series self-propelled guns.
- M44 howitzers.
- M17 and M20 trainers.
- M548 cargo carriers.
- M106A1 and M125 mortars carriers.

M132A1 flame thrower carriers.

M577A1 command post carriers.

Examples of the types of parts which deteriorate to the point that they cannot be reclaimed are :

Gear cases and gears.

Transmission parts.

Battery boxes.

Radiators.

Exhaust systems.

Air compressors (installed in vehicles).

Engine parts—cylinders, oil pans, crankshafts, rods, valves, pistons, and camshafts.

Fire control instruments.

The parts listed are reclaimable if corrosion or rust has not progressed to the point that they cannot be machined within tolerances or otherwise repaired. When this occurs they must be replaced with new parts. Proper processing of these vehicles would reduce the extent of deterioration and consequently result in a larger percentage of the parts being reclaimable.

It is an established fact that corrosion and rust takes place in vehicle components. Present requirements for protective processing for shipment and storage of new vehicles bear this fact out. Extensive processing is absolutely imperative if serviceability of these vehicles is to be maintained. It is well known that with the exception of battle-damaged vehicles, rebuild of assets is necessary due primarily to corrosion and rust deterioration.

3. A total of 12 units of towing equipment is required to support the vehicle and artillery processing operations under this alternative (see appendix, page 25). Since only three of these units are considered to vary between the addressed alternatives, their costs are computed as follows :

(a) Annual operating cost :

1 each high speed tractor.....	\$5, 200
1 each tournadozer.....	5, 200
1 each caterpillar DW-20.....	2, 600
Total operating cost.....	13, 000

(b) Annual maintenance cost :

1 each high speed tractor.....	\$3, 500
1 each tournadozer.....	2, 500
1 each caterpillar DW-20.....	1, 000
Total maintenance cost.....	7, 000

(c) The above equipment will require replacement on a 10-year cycle. It is assumed that replacement of this equipment will be made during the 1st, 11th, and 21st years. The acquisition cost is as follows :

1 each high speed tractor.....	\$22, 286
1 each tournadozer.....	21, 217
1 each caterpillar DW-20.....	26, 428
Total replacement cost.....	69, 931

4. Costs for refurbishment of present facilities are expected to be significant cost factors if they are continued in use for the 25-year period being considered. Estimated costs for refurbishment discounted over the economic life of the project will be \$283,897 (see appendix, page 27 and 33). It is not intended that this estimated refurbishment cost should provide a substitute for the recommended alternative but rather a reflection of expected cost for maintaining the status quo.

SOURCE/DERIVATION OF COST ESTIMATES ALTERNATIVE 2—NEW CONSTRUCTION

A. INVESTMENT COSTS

Land and buildings—DD 1391, Military construction line item data No. 070000, dated Sept. 13, 1971, shows an estimated cost of \$3,077,000. The estimate for this project was verified by Mobile District—Corps of Engineers in October 1970. Capital equipment cost is estimated to be \$252,250.

B. RECURRING COSTS

1. Personnel:

a. The total personnel required under this alternative in order to afford full workload accomplishment within the vehicle and artillery branch is 144 people. The total annual personnel cost under this proposal will amount to 144 people \times \$3,621 annual salary plus 8.75 percent government contribution or \$1,350,005. This cost is based on the required personnel cost shown under alternative 3 for full workload accomplishment less the following personnel savings:

(1) Care and preservation (track and wheel vehicle processing): Due to lack of processing facilities under the status quo, approximately 40 percent of the necessary processing is performed in the open. Costs for processing vehicles under these circumstances and with excessive backlogs as presently being experienced are increased by approximately 50 percent. This is due primarily to additional work required to correct deficiencies caused by deterioration resulting from delays in processing and the inefficiency of work in outside areas. Dual handling of these assets is necessary because the facilities for processing vehicles promptly upon receipt are not available. The savings generated through this alternative by alleviating the above deficiencies will result in a reduction of processing time by 2.08 man-hours per vehicle.

Vehicles processed annually.....	12, 280
Man-hour savings per vehicle.....	\times \$2. 08
Man-hour savings per year.....	25, 542
Average hourly wage.....	\times \$4. 14
Total direct labor savings.....	\$105, 744
Percent Government contribution plus leave (AR 37-13).....	\times 1. 29
Total annual savings.....	\$136, 410

(2) Provision of this alternative will include modern mechanized towing equipment through each processing line. This improvement will result in a reduction of two spaces in the material movement activity. The savings generated by this improvement is as follows:

Average annual salary.....	\$8, 621
People.....	2
Total annual salary.....	\$17. 242
Percent Government contribution (AR 37-13).....	\$1. 0875
Total annual savings.....	\$18, 751

(3) Due to the consolidation of operations and the operational efficiencies designed into this alternative, the elimination of lost time is apparent. By the utilization of mechanical towing devices through the processing lines, an estimated 2,600 man-hours of unproductive time per year will be eliminated. This delay time is necessary under the status quo to allow spotting of vehicles by tow equipment along the processing line. Other unavoidable delay time is presently incurred on the docks. The present docks are above ground level and are not long enough to permit full utilization of outloading crews. A survey shows that 15 man-hours of delay time are incurred each time it is necessary to spot additional cars for outloading. This delay time will be eliminated by alternative 2 through the use of long modern ground-level docks and a more efficient layout. This provision will result in an annual savings of 3,900 man-hours.

Man-hours delay time eliminated.....	2, 600
Man-hours delay time eliminated.....	3, 900
Total man-hours delay time eliminated.....	6, 500
Average hourly wage.....	\times \$4. 14
Total direct labor savings.....	\$26, 910
Percent Government contribution plus leave (AR 37-13).....	\times 1. 29
Total annual savings.....	\$34, 714

(4) Based on the consolidation of activities and the central location of this alternative, considerable savings will be realized by reduction of distances involved in vehicle movement incidental to storage, receiving, and shipment of artillery, transport, and combat vehicles. This savings will be reflected in a reduction of standard man-hours as follows:

(a) Engineered standards presently allow 2,540 man-hours per vehicle for receipt of tracked vehicles and movement from receiving docks to a holding area. This figure can be reduced to 1,540 man-hours under alternative 2 due to the centralized location, consolidated facilities and efficient operations. Based on past history and current workload trends, the average annual receipts are estimated at 3,161 vehicles (see appendix, p. 25).

Track vehicles received.....	3,161
Man-hours per vehicle savings.....	X 1
Man-hours savings per year.....	3,161
Average hourly wage.....	X \$4.14
Total direct labor savings.....	\$13,086
Percent Government contribution plus leave (AR 37-13).....	X 1.29
Total annual savings.....	\$16,881

(b) Engineered standards presently allow 2,540 man-hours per vehicle for movement of vehicles from present processing area to warehouse storage after rebuild or processing. Under alternative 2, the estimated man-hour allowance for this operation will be 2,040. This man-hour reduction will result in the following savings:

Average units moved.....	1,691
Man-hours per vehicle savings.....	X 5
Man-hour savings per year.....	846
Average hourly wage.....	\$4.14
Total direct labor savings.....	\$3,502
Percent Government contribution plus leave (AR 37-13).....	X 1.29
Total annual savings.....	\$4,518

(c) Engineered standards presently allow 0.796 man-hours per wheeled vehicle for movement of vehicles from the warehouse area to the processing facility. Due to alternative 2 being located adjacent to the storage facilities, the projected man-hour standard for this operation will be reduced to 0.667. This man-hour reduction will result in the following savings:

Wheeled vehicles processed per year (see appendix p. 21).....	6,409
Man-hour reduction per vehicle.....	.129
Man-hour savings per year.....	827
Average hourly wage.....	\$4.14
Total direct labor savings.....	\$3,424
Percent Government contribution plus leave (AR 37-13).....	1.29
Total annual savings.....	\$4,417

(d) Additional personnel will be required for an interim period of 1 year in order to work out the excessive backlog of vehicles that currently exists. The current backlog of 4,526 vehicles requiring 90,631 man-hours for processing as shown in the appendix, page 22, will be greatly reduced by the accomplishment of this alternative. Considering the consolidation and modernization of mechanized processing facilities to be afforded by this alternative, the following reduction in processing time will be realized:

(1) Paragraph 1a above indicates a total reduction of man-hour expenditures for vehicle processing of 3.71 man-hours per vehicle. The total man-hour savings based on these figures is 4,526 vehicles X 3.71 man-hours per vehicle = 16,791 man-hours.

(2) Computation of man-hours required to work out the excess backlog is as follows:

Man-hours (alt. 3) see appendix, page 22.....	56, 287
Reduction in standard man-hours.....	-16, 791
Reduction in delay time.....	-2, 600

Total man-hours for processing vehicles promptly upon receipt.....	36, 896
35 percent increase due to deterioration caused by delay in processing.....	+12, 914
Man-hours required for material handling.....	+4, 650

Total man-hours required..... 54, 460

(54,460 man-hours) ÷ (1,708 man-hours/person) = 31.9 or 32 people.

The annual cost to be incurred for 1 year by the addition of these 32 people is as follows:

Average annual salary.....	\$8, 621
People.....	× 32

Total direct labor cost.....	\$275, 872
Percent Government contribution (AR 37-13).....	× 1. 0875

Total cost..... \$300, 011

2. Maintenance and repair

Cost estimates for maintenance and repair of the new facility are expected to be significantly less than for the present facilities. This is due to technological advances in the construction materials available. These materials have longer life-spans with minimum maintenance cost. For this reason, no refurbishment costs are shown for this alternative during the 25-year economic life of the facility. Normal maintenance costs are estimated as follows:

Square foot space (alt. 2).....	97, 300
Annual cost per square foot.....	× . 232

Total annual maintenance cost..... \$22, 550

3. Utilities

The utilities cost for this alternative is expected to be significantly less than the present area due to better insulated buildings and the use of more efficient systems. The expected utilities costs are as follows:

(a) Heating:

Square foot floor space.....	77, 200
Annual heating cost per square foot.....	× . 429

Total annual heating cost..... \$33, 119

(b) Lighting:

Square foot floor area.....	99, 200
Annual lighting cost per square foot.....	× . 033

Total annual lighting cost..... \$3, 274

4. Overhead costs

Other costs such as that for custodial services and other overhead costs not treated in preceding paragraphs are considered to be approximately the same for each alternative, and are therefore excluded from this analysis.

C. OTHER CONSIDERATION

1. A total of nine units of towing equipment is required to support the vehicle and artillery processing operations under this alternative. This is a reduction of three units from alternatives 1 and 3 and results in a savings as follows:

Annual operating cost.....	\$13, 000
Annual maintenance cost.....	7, 000
Replacement cost (10-year cycle).....	69, 931

Details of this cost are included in the source/derivation of cost estimates for alternatives 1 and 3 and is considered as zero for this alternative.

2. Under this alternative, it is expected that the excessive backlog will be eliminated after 1 year. After this time, it is expected that the additional rebuilt parts cost of \$603,295 presently being incurred by the maintenance directorate due to deterioration caused by unprocessed vehicles will be eliminated.

3. *Present value of assets replaced.*—Building 146 occupies 26,660 square feet and is presently used as an interim processing building. This building will be converted to a combat vehicle rebuild support facility and quality verification building. 16,605 square feet of Building 143 and 4,000 square feet of Building 147 will revert to the directorate for maintenance for use in support of rebuild operations of combat vehicles and related items. Computations are based on an estimated \$12 per square feet as follows:

Square ft. reverted to other use.....	47,265
Estimated value per sq. ft.....	× \$12
Total value of assets replaces.....	567,180
Discount factor.....	× .954
Present value of assets replaced.....	541,090

4. *Terminal value.*—It is estimated that the proposed facility will have a physical life of 45 years without a major refurbishment. This assumption is based on the fact that the proposed facility will be of modern design built with materials which are capable of longer life spans than those used in years past. This assumption applies only to the primary facility which has an estimated cost of \$2,310,000. For computational purposes, a straight line method of depreciation is used as follows:

$$\$2,310,000 \div 45 \text{ yrs.} = \$51,333 \text{ depreciation per year}$$

Depreciation per year.....	\$51,333
25 years (economic life).....	× 25
Total depreciation during economic life.....	1,283,325
Total value of primary facility.....	2,310,000
Depreciation used during economic life.....	—1,283,325
Terminal value.....	1,026,675
26th year discount factor.....	.088
Present value of terminal value.....	90,347

5. *Demolition of present facilities.*—Upon completion of this alternative, Building 142 and docks 123 and 124 will be demolished. The estimated cost of demolition is \$14,400 as detailed in the appendix, page 46.

Total demolition cost.....	\$14,400
Discount factor.....	.954
Discounted demolition cost.....	13,738

SOURCE/DERIVATION OF COST ESTIMATES ALTERNATIVE 3—MODIFIED STATUS QUO

A. INVESTMENT COSTS

1. Total investment cost for this alternative amounts to \$904,062. These estimates include the construction of a steam-cleaning facility, gasoline drainage facility, the conversion of 30,000 square feet of warehouse space into operating space and initial refurbishment of existing facilities.

(a) This alternative requires the conversion of 30,000 square feet of warehouse space into shop space for processing of vehicles. The total cost of this conversion is estimated to be \$477,000. (See appendix, page 44 for detail estimate).

(b) Construction of a new steam cleaning facility consisting of 6,000 square feet of space is required at an estimated cost of \$13.20 per square foot (based on empirical cost data). This facility is estimated to cost \$79,200.

(c) Construction of a gasoline drainage facility consisting of 4,800 square feet of space is required at an estimated cost of \$20.90 per square foot (based on empirical cost data). The total cost of this facility is estimated at \$100,320.

(d) The initial refurbishment of existing facilities is also included in the investment cost. This refurbishment amounts to \$247,542 (see appendix, page 31).

2. This alternative will require the conversion of 30,000 square feet of valuable storage space. This space is valued at \$11.50 per square foot or \$345,000 total (based on empirical cost estimates, table 2, AR 415-17).

B. RECURRING COSTS (OPERATIONS)

1. Personnel

(a) Total personnel costs to be incurred under this alternative are based on present personnel strength plus additional personnel necessary to afford full workload accomplishment as follows:

(1) The present personnel strength of the vehicle and artillery branch is 142 people resulting in a total annual cost of \$1,331,245 as detailed in appendix, page 28. It should be pointed out that this figure does not reflect manpower for full workload accomplishment. This fact is evidenced by the accumulation of a 4,526 vehicle processing backlog at the present time. Reduction of this backlog would require an estimated expenditure of 90,631 man-hours (see appendix, p. 26). This backlog has been established and is continuing to exist based on our current workload, personnel and processing facilities. The processing of code F vehicles (vehicles awaiting rebuild) is necessary in order to prevent deterioration of components beyond a point of economic repairability. The impact of this backlog has resulted in an increased parts cost for rebuild of unprocessed vehicles amounting to \$603,295 per year as shown in the source/derivation of cost estimates for alternative 1.

(2) Reduction of the current backlog under this alternative will require additional personnel. In order to process the backlog of 4,526 vehicles (90,631 man-hours) within a 2-year period, the following additional personnel will be required: 1,708 productive man-hours/employee/year times 2 years (projected time frame for reducing backlog) for a total of 3,416 productive man-hours (2-year period); (90,631 m/hrs. backlog) divided by (3,416 m/hrs.) equals 26.5 or 27 people.

The above calculations show that an additional 27 people will be required for 2 years in order to reduce the current backlog. The annual cost of these additional people will be as follows:

Average annual salary	\$8, 621
Total annual salary (27 people)	\$232, 767
Government contribution (AR 37-13) (percent)	1. 0875
Total annual cost	\$234, 854

(3) Considering the current excessive backlog separately as shown in paragraph 2 above, additional people will be required to permit full workload accomplishment. A new gasoline drainage building and steam-cleaning facility as well as 30,000 square feet of additional operating space will be afforded under this alternative. The following additional personnel requirements will exist:

(a) Two work crews of 10 people each will be required to support the processing lines necessary to accomplish full workload based on current workload projection. The annual cost of these people will be:

Average annual salary	\$8, 621
Total annual salary (20 people)	\$172, 420
Government contribution (AR 37-13) (percent)	1. 0875
Total annual cost	\$174, 507

(b) Six additional support people will be required to provide towing services and other support to the vehicle processing activity. This support will result in an annual personnel cost as follows:

Average annual salary	\$8, 621
Total annual salary (6 people)	\$51, 726
Government contribution (AR 37-13) (percent)	1. 0875
Total annual cost	\$53, 813

2. Maintenance and repair

Current depot records are not maintained in sufficient detail to permit isolation of maintenance and repair cost for each building. Based on the technical data reports available and the expertise of depot facilities engineers, an annual maintenance cost of \$0.462 per square foot was derived:

Floor space (alternative 3) (ft. ²)-----	102,521
Annual cost per ft. ² -----	\$0.462
Total annual maintenance cost-----	\$47,365

3. Utilities

Based on the technical data reports available and the expertise of depot facilities engineers, the annual utilities cost for this alternative is as follows:

(a) Heating:

Floor space (ft. ²)-----	91,721
Annual heating cost per sq. ft.-----	\$0.537
Total annual heating cost-----	\$49,254

(b) Lighting:

Floor space (ft. ²)-----	102,521
Annual lighting cost per ft. ² -----	\$0.033
Total annual lighting cost-----	\$3,383

4. Overhead costs

Other costs such as that for custodial services and other overhead costs not treated in preceding paragraphs are considered to be approximately the same for each alternative, and are therefore excluded from this analysis.

C. OTHER CONSIDERATIONS

1. A total of 12 units of towing equipment is required to support the vehicle and artillery processing operations under this alternative. This quantity is the same as required by alternative 1. Since only three of these units are considered to vary between the addressed alternatives, their costs are computed as follows:

(a) Annual operating cost:

1 ea High Speed Tractor-----	\$5,200
1 ea Tournadozer-----	5,200
1 ea Caterpillar DW-20-----	2,600
Total operating cost-----	13,000

(b) Annual maintenance cost:

1 ea High Speed Tractor-----	\$3,500
1 ea Tournadozer-----	2,500
1 ea Caterpillar DW-20-----	1,000
Total maintenance cost-----	7,000

(c) The above equipment will require replacement on a 10-year cycle. It is assumed that replacement of this equipment will be made during the 1st, 11th and 21st years. The acquisition cost is as follows:

1 ea High Speed Tractor-----	\$22,286
1 ea Tournadozer-----	21,217
1 ea Caterpillar DW-20-----	26,428
Total replacement cost-----	69,931

2. Initial refurbishment costs have been included in part A as investment costs. Other recurring refurbishment costs will amount to a total 25-year discounted cost of \$47,273. This cost is shown in the appendix, page 37 (refurbishment of office trailer excluded). It is assumed that the new construction and major modification included under this alternative are considered to have a physical life equal to its economic life, and therefore will not require additional refurbishment.

3. The additional parts cost of \$603,295 per year caused by deterioration due to unprocessed vehicles as detailed in the source/derivation of cost estimates

for alternative 1 will continue to exist for the period that the excessive backlog exists. For computational purposes, it is assumed that the backlog under this alternative will be reduced by 50 percent after the second project year and completely eliminated after the third year.

4. All existing assets are being utilized under this alternative. It is assumed that the economic life and physical life of alternative 3 will be approximately equal, therefore a terminal value is not considered.

ECONOMIC ANALYSIS—DOD INVESTMENTS SUMMARY OF PROJECT BENEFITS FORMAT B

1. *Submitting DOD component.*—Department of the Army.

2. *Date of submission.*—Apr. 7, 1972.

3. *Project title.*—Repair and processing vehicle facility.

4. *Description of project objectives.*—To provide adequate vehicle repair and processing facilities necessary for the accomplishment of the depot's mission of receipt, repair, processing, and shipment of end items and achieve cost savings.

5. *Alternative.*—New facilities. This proposal, consisting of new construction, meets all of the established objectives and affords the maximum benefits to this depot and to the U.S. Government as shown in this economic analysis.

6. *Economic life.*—25 years.

7. *Benefits.*—In addition to the economic benefits which will accrue from provision of this facility, substantial nonquantifiable benefits will be realized as follows:

(a) This project will provide modern mechanized facilities for full workload accomplishment of the depot's mission for receipt, repair, processing, and shipment of combat vehicles, transport vehicles, artillery, and other end items. This project will incorporate modern design and construction combined with engineered workflow and mechanized material handling and processing facilities. These factors, coupled with the consolidation of activities adjacent to the vehicle storage area, will result in increased operating efficiency, expanded workload capability, and improved working conditions.

(b) *Elimination of congestion.*—The area in which the present loading docks and substandard processing facilities are located is extremely congested due to lack of temporary holding area and vehicle movement area. The maintenance vehicles (in process of overhaul) are operated in the same general area as receiving and shipping vehicles. This results in a safety hazard and also impedes movement of vehicles. Considerable lost time is experienced by both directorates due to the congestion and lack of operating and holding area. The accomplishment of this project will generate 180,000 square feet of open storage space to be utilized by the Maintenance Directorate for in-process storage and holding area for vehicles awaiting rebuild. Maintenance operations are currently bordered on two sides by a large drainage canal and depot boundary and by general supply storage activities on the remaining two sides. This restricts expansion activities which are urgently needed within the maintenance area. This depot has an MCA project in the fiscal year 1976 program to construct a depot maintenance support facility, line item T223000, which will further reduce outside holding by approximately 124,800 square feet.

(c) *Increased responsive capability.*—Present facilities are not sufficient to afford responsiveness to increased demands for receiving and shipping. When demand is at present levels much of the processing must be accomplished with overtime due to facilities saturation. Quality of work is affected due to necessity for processing outside. Records show that more than 3,500 vehicles were processed outside during the past 3 years.

(d) *Alternative use of existing facilities.*—Building 146 (Interim processing facility) will provide required inspection and mechanical area for quality assurance quality verification activities and will obviate the need for an MCA project to provide these facilities. At the present time this directorate does not have an area with lifting facilities to perform this function. The remainder of this building (North half) will be used by Maintenance Directorate for mechanical work, spot painting, and stenciling of vehicles.

(e) *Expansion capability.*—This project will provide expansion capability for both the maintenance activity and supply activity. At present there exists no possibility for expansion of holding area or shop space. This lack of space seriously limits modernization possibilities for both directorates. The proposed project will eliminate this problem completely with respect to supply activities and will do much to alleviate the problem in maintenance activities.

(f) *Improved working conditions.*—This project will provide vastly improved working conditions for approximately 150 employees. It will also eliminate outside mechanical work and processing and will reduce the adverse impact of inclement weather on receiving and shipping operations.

SENSITIVITY ANALYSIS

In order to evaluate the sensitivity of this project's economic worth as related to the major assumptions, the following evaluation is made as to economic impact:

If the parts cost reduction is in fact less than 5 percent, then the differential costs between alternative 1 and alternative 2 are decreased. Conversely, if the parts cost reduction is greater than 5 percent (a possibility which is as likely as the possibility that it will be less) then the economic worth of the proposed alternative is enhanced.

Effects of comparing alternative 1 versus alternative 2 if the parts cost reduction is increased from 5 percent to 7 percent. This would add \$241,318 per year to alternative 1.

Year	Alternative 1	Alternative 2	Difference	Discount factor	Discounted difference cost
1.....	2,088,642	2,018,711	69,931	0.954	\$66,714
2.....	2,260,029	2,024,345	235,684	.867	204,338
3 to 10.....	2,260,029	1,408,948	851,081	4.626	3,937,101
11.....	2,329,960	1,408,948	921,012	.368	338,932
12 to 20.....	2,260,029	1,408,948	851,081	2.118	1,802,590
21.....	2,329,960	1,408,948	921,012	.142	130,784
22 to 26.....	2,260,029	1,408,948	851,081	.538	457,882
Total.....					6,938,341
Total PV new investment.....					\$3,085,758
PV cost savings.....					6,938,341
PV cost of refurbishment eliminated.....					283,897
Total cost savings from operations.....					7,222,238
PV of existing assets replaced.....					541,090

Note: Benefit investment ratio $(3,085,758 - 541,090 = \$2,544,668)$ $(7,222,238 \div 2,544,668) = 2.84$.

Effects of comparing alternative 1 versus alternative 2 if the parts cost reduction is decreased from 5 percent to 3 percent. This would add \$241,318 per year to alternative 2.

Year	Alternate 1	Alternate 2	Difference	Discount factor	Discounted difference cost
1.....	2,088,642	2,018,711	69,931	0.954	\$66,714
2.....	2,018,711	2,265,663	(-246,952)	.867	(-214,107)
3 to 10.....	2,018,711	1,650,266	368,445	4.626	1,704,427
11.....	2,088,642	1,650,266	438,376	.368	161,322
12 to 20.....	2,018,711	1,650,266	368,445	2.118	780,366
21.....	2,088,642	1,650,266	438,376	.142	62,249
22 to 26.....	2,018,711	1,650,266	368,445	.538	198,223
Total.....					2,759,194
Total PV new investment.....					\$3,085,758
PV cost savings from operations.....					2,759,194
PV of refurbishment eliminated.....					283,897
PV of existing assets replaced.....					541,090
Total cost savings and benefits.....					3,043,091

Note: Benefit/investment ratio $(3,085,758 \text{ minus } 541,090 \text{ equals } \$2,544,668)$ $(3,043,091 \text{ divided by } 2,544,668) \text{ equals } 1.196$.

APPENDIX

FISCAL YEAR 1967-71—RECEIVING, SHIPPING, AND MAINTENANCE IN STORAGE

	Receiving		Shipping		Maintenance in storage	
	Tons	Units	Tons	Units	Tons	Units
Combat vehicles:						
Fiscal year:						
1967.....	43,052	1,903	38,212	1,603	57,912	2,425
1968.....	84,307	3,759	105,562	3,998	67,126	2,160
1969.....	75,783	2,328	82,404	4,651	36,870	1,565
1970.....	70,661	3,533	65,938	3,109	21,607	921
1971.....	64,394	3,023	53,800	2,076	37,063	1,422
1968 to 1971 (total).....	295,145	12,643	307,704	13,834	162,666	6,068
Average.....	73,786	3,161	76,926	3,459	40,667	1,517
Average increase over 1967 (percent).....	(71)	(66)	(101)	(116)	(-30)	(-37)
Wheeled vehicles:						
Fiscal year:						
1967.....	12,478	3,604	11,516	3,234	17,371	5,020
1968.....	18,544	5,805	8,942	4,662	44,622	9,648
1969.....	15,244	4,649	18,442	5,140	25,587	6,550
1970.....	16,045	4,332	17,749	4,756	31,460	5,908
1971.....	19,764	5,969	13,773	5,287	13,472	3,529
1968 to 1971 (total).....	69,597	20,755	58,906	19,845	115,141	25,635
Average.....	17,399	5,189	14,727	4,961	28,785	6,409
Average increase over 1967 (percent).....	(39)	(44)	(28)	(53)	(66)	(28)

END ITEM BACKLOG, AS OF AUG. 30, 1971

	Units	Tons	Man-hours
Combat vehicles.....	2,101	26,065	23,62
Wheeled vehicles.....	2,092	13,909	30,48
Artillery.....	333	1,948	2,17
Total.....	4,526	41,922	56,287

NOTES

1. Man-hours for backlog do not include additional man-hours for materials movement equal to approximately 6,200 man-hours.

2. The man-hours listed above are based on processing of vehicles at time of receipt and do not reflect the additional man-hours required to correct deterioration from storage of nonprocessed vehicles. It is estimated that an increased processing time of 50 percent will be incurred in processing the present backlog due to the state of deterioration of these vehicles.

3. The total processing time required to work out the present backlog is as follows:

Standard processing man-hours.....	56,287
Additional processing man-hours due to deterioration.....	28,144
Man-hours required for material handling.....	6,200

Total man-hours required..... 90,631

4. The above backlog data was derived from D.D. & T. planning and scheduling ledgers.

END ITEMS, MANHOURS EXPENDED

Fiscal year	Receiving		Shipping		Maintenance in storage	
	Regular time	Overtime	Regular time	Overtime	Regular time	Overtime
1967.....	13,289	(90)	30,520	(3,559)	232,745	(40,983)
1968.....	8,657	(117)	25,569	(4,391)	141,874	(23,418)
1969.....	7,425	(121)	29,686	(5,502)	283,323	(20,727)
1970.....	7,673	(60)	21,060	(878)	92,765	(509)
1971.....	8,870	(0)	14,632	(8)	78,370	(192)

V. & A. BRANCH, PRESENT PERSONNEL STRENGTH

Grade	Number of employees	Hours per year	Hourly pay	Annual wage
WS-14	1	2,080	\$7.54	\$15,683.20
WS-12	1	2,080	6.67	13,873.60
WS-10	1	2,080	6.11	12,708.80
WS-9	6	12,480	5.90	73,632.00
WS-8	3	6,240	5.64	35,193.60
WS-5	1	2,080	4.86	10,108.80
WS-7	1	2,080	5.38	11,190.40
WL-10	4	8,320	4.89	40,684.80
WL-9	1	2,080	4.67	9,713.60
WL-8	1	2,080	4.41	9,172.80
WL-7	1	2,080	4.13	8,590.40
WL-5	1	2,080	3.59	7,467.20
GS-4	1	2,080	3.46	7,196.80
GS-3	4	8,320	3.08	25,625.60
WG-11	5	10,400	4.62	48,048.00
WG-10	19	39,520	4.44	175,468.80
WG-9	23	47,840	4.24	202,841.60
WG-8	19	39,520	4.00	158,080.00
WG-7	10	20,800	3.75	78,000.00
WG-6	30	62,400	3.52	219,648.00
WG-5	9	18,720	3.27	61,205.40
Total	142	295,360		1,224,133.40

Note: Average hourly wage \$4.14; total annual cost, \$1,331,245.

Vehicle and artillery branch towing equipment

Type equipment:	Quantity
Tractor, highspeed M5	1
Tractor, highspeed M5A4	6
Tournadozer	4
Caterpillar DW-20	1
Total	12

Total directorate for maintenance, parts expenditure

Fiscal year	Cost
1968	\$11,721,789.00
1969	13,415,490.00
1970	12,343,664.00
1971	10,782,694.00
Total	48,263,637.00
Annual average	12,065,909.25

INITIAL REFURNISHMENT ESTIMATE

Building No.	Square feet	Estimated cost (square feet)	Total cost	Discount factor (year 1)	Discounted cost
S-142	14,496	\$3.00	\$43,488	0.954	\$41,488
S-146	26,620	3.50	93,170	.954	88,884
S-143	16,605	1.25	20,756	.954	19,801
S-147	4,000	2.00	8,000	.954	7,632
Dock 123	13,688	3.00	41,064	.954	39,175
Dock 124	13,688	3.00	41,064	.954	39,175
Office trailer	460	0	0	0	0
Total	89,557		247,542		236,155

ARMY MATERIALS AND MECHANICS RESEARCH CENTER, MASS.

Mr. PATTEN. Turn to Army Materials and Mechanics Research Center, Mass.

Insert page 158 in the record.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Army Materials and Mechanics Research Center									
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER Massachusetts 965		6. STATE/COUNTRY Massachusetts								
7. STATUS Active			8. YEAR OF INITIAL OCCUPANCY 1816		9. COUNTY (U.S.) Middlesex								
					10. NEAREST CITY Watertown								
11. MISSION OR MAJOR FUNCTIONS Execute the AMC research and exploratory development program in structural materials and mechanics and conduct technological programs in structural materials and in mechanics as used in Army materiel. Provide advice and assistance on materials and mechanics to all elements of AMC. Coordinate the AMC armor materials program; manage testing technology portion of AMC Quality Assurance program; manage assigned portions of the DOD Standardization Program, manage a program of materials technology as part of AMC PEMA program; provide technical surveillance over AMC testing training program; monitor electronic materials program.			12. PERSONNEL STRENGTH		PERMANENT		STUDENTS		SUPPORTED		TOTAL		
			OFFICER (1)		ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)	
			a. AS OF 31 Dec 72		11	0	590						601
			b. PLANNED (End FY 75)		9	0	595	0	0	0	0	0	604
			13. INVENTORY										
			LAND		ACRES (1)	LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
			a. OWNED		48	120		14,166		14,286			
			b. LEASES AND EASEMENTS						0				
			c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72						14,286				
			d. AUTHORIZATION NOT YET IN INVENTORY						332				
			e. AUTHORIZATION REQUESTED IN THIS PROGRAM						325				
			f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS						2,850				
			g. GRAND TOTAL (c + d + e + f)						17,793				
SUMMARY OF INSTALLATION PROJECTS													
PROJECT DESIGNATION					TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM				
CATEGORY CODE NO.	PROJECT TITLE				Page No		SCOPE	ESTIMATED COST (\$000) (1)	SCOPE (2)	ESTIMATED COST (\$000) (3)			
a	b				c	d	e	f	g	h			
310	35 - Dynamic Deformation of Materials Laboratory				31	159	SF	4,000	325	4,000	325		

ARMY MATERIALS AND MECHANICS RESEARCH CENTER, MASS.—\$325,000

The Army Materials and Mechanics Research Center is located at Watertown, Mass. The installation conducts research and exploratory development programs in structural materials and mechanics, manages the testing technology portion of the quality assurance program, and manages assigned portions of the defense standardization program. The program consists of a dynamic deformation materials laboratory.

Status of funds

Funded program not in inventory.....	\$332,000
Unobligated projects, Mar. 31, 1973 (actual).....	0
Unobligated projects, June 30, 1973 (estimated).....	0

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
Dynamic deform mat lab.....	\$21	20

Mr. PATTEN. Is this installation the only one with the same or similar mission?

General COOPER. Yes, sir.

Mr. PATTEN. Could this work be done at the Air Force's New Materials Laboratory?

General COOPER. This is the only one with this particular mission and it is the lead laboratory for materials technology peculiar to the Armed Forces, such as armor. One obviously could set this laboratory up someplace else. But we believe that we have a good facility there now and with a small amount of increase in funding, in this particular case \$325,000, we can carry out the mission better. Looking to the future at Watertown, there are some other facilities in our plan that have not yet been programed.

Mr. PATTEN. Supply for the record the cost of military personnel and operation and maintenance support to run this base. Also the real property maintenance and operations and its replacement value.

General COOPER. Yes, sir.

[The information follows:]

Real property, personnel and other operating costs, Army Materials and Mechanics Research Center, Massachusetts

	Cost
Backlog of essential maintenance and repair.....	\$108,000
Initial cost of improvements.....	14,166,000
Replacement cost (excluding land).....	53,831,000

	Fiscal year—		
	1972	1973	1974
Real property maintenance.....	(385)	(525)	(427)
Other operating cost.....	1,499	1,683	1,834
Personnel:			
Military expense.....			
Civilian cost.....	4,485	4,557	4,636

General COOPER. You understand this is primarily civilian-operated and there are almost no enlisted men. There are none except perhaps on temporary duty from time to time.

Mr. PATTEN. What programs does your research here support?

General COOPER. It is in direct support of antiballistic missile hardening, in support of the development and improvement of materials for the main battle tank and the development of armor piercing and discarding Sabot projectiles.

Mr. PATTEN. Are there any questions?

Dr. DAVIS. What did we have in addition to this particular facility up there? How much of an installation do we have there?

General COOPER. It has other things. It has a nuclear reactor, a materials testing reactor, where they can irradiate materials and see what happens to them. It has several other laboratories that do the AMC research in all structural materials and mechanics, primarily in armor. The laboratory also manages portions of the DOD standardization program. It has X-ray facilities. I think those are the major things plus the labs.

Mr. DAVIS. Did you say that this is largely civilian or by contract?

General COOPER. They are Government employees. Many of them have been with us for a long time and have developed a particular expertise which we want to retain and it would be difficult to duplicate elsewhere. It does not have the large overhead as some other bases where we do have a large or even small number of enlisted men.

Mr. DAVIS. The entire site up there is 48 acres, or are we just talking about this particular facility?

General COOPER. The entire site is 48 acres. It is, in essence, in the downtown area in Watertown, Mass., and it is surrounded by industry there. There are maybe a few houses or maybe none at all. There might be a few apartments.

Mr. PATTEN. Watertown is not built up like Boston; it does not have the population?

General COOPER. No, but in this particular area it is industrialized.

Mr. PATTEN. It is not like the District of Columbia or a city like that? Smaller? The whole area is much smaller, right?

General COOPER. It is small, that is correct. There are parts of Watertown fairly well built up. This lab is in one of those. It is not like downtown Boston or Cambridge.

Mr. DAVIS. Is Watertown in the Boston suburban area?

General COOPER. Yes, sir. It is not too far away.

Mr. PATTEN. It is a good distance. We don't consider it part of metropolitan Boston, do we?

General COOPER. No, sir, but it is inside Route 128. If you were going to Watertown, you would fly to Boston and then drive to Watertown.

Mr. PATTEN. This is fascinating work and what you are doing here is unique. I know a fellow who has a lot of equipment and works for the gas lines across the country. Their work is fascinating and they test these materials. This group in Watertown is trying to relate to nuclear and outer space and other type work.

If there is nothing further—

ATLANTA ARMY DEPOT, GA.

Mr. PATTEN. Turn to Atlanta Army Depot, Ga.

Insert in the record page 159A.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Atlanta Army Depot								
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER Georgia 015		6. STATE/COUNTRY Georgia							
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1942		9. COUNTY (U.S.) Clayton	10. NEAREST CITY Forest Park							
11. MISSION OR MAJOR FUNCTIONS Upon elimination of depot operations, part of the real property comprising Atlanta Army Depot will be retained as a sub-installation of Fort McPherson. The mission of this sub-installation will be to furnish administrative, logistics and facilities support to staff elements and units of Headquarters Forces Command; to other Army, DOD and Agency for International Development tenants; to the Reserve Components; and to Army and Air Force Exchange Service and other activities.				12. PERSONNEL STRENGTH			STUDENTS			TOTAL		
				PERMANENT			SUPPORTED					
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)
				a. AS OF 28 Feb 73	2	172	2,540					2,714
				b. PLANNED (End FY)	106	245	353					704
				13. INVENTORY								
LAND		ACRES (1)	LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)					
a. OWNED		1,475	174		33,404		33,578					
b. LEASES AND EASEMENTS		57	52*		0		52					
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19								33,630				
d. AUTHORIZATION NOT YET IN INVENTORY								117				
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								119				
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS								1,024				
g. GRAND TOTAL (c + d + e + f)								34,890				
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION				TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM				
CATEGORY CODE NO. a	PROJECT TITLE b			Page No c	d	SCOPE e	ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h			
872	52 - Security Fencing			1 159B			119		119			

690

ATLANTA ARMY DEPOT, GA.—\$119,000

Atlanta Army Depot is located in Atlanta, Ga. The mission of this installation is to provide depot storage and maintenance of general supplies, field maintenance of aircraft and depot maintenance of engineer and medical equipment, also provides support to Defense Supply Agency. The program provides security fencing.

STATUS OF FUNDS

	<i>Thousands</i>
Funded program not in inventory.....	\$117
Unobligated projects, Mar. 31, 1973 (actual).....	0
Unobligated projects, June 30, 1973 (estimated).....	0

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 19730
Security fencing.....	3	

Mr. PATTEN. What are your plans with respect to future land and facility use at this depot?

General COOPER. Basically we plan to retain a small part of it to support the Forces Command being established there. The rest of it we are turning over to the Defense Supply Agency. A good part of the depot has had supplies handled by DSA to begin with. We will retain a small portion of it and the rest of it we will turn over to DSA or GSA for disposal.

Mr. PATTEN. How did Atlanta rank as a depot according to your criteria?

General COOPER. As a depot itself, it ranks very low. That is the reason we are disposing of it as an Army depot.

FRANKFORD ARSENAL, PA.

Mr. PATTEN. Turn to Frankford Arsenal and please insert page 160 in the record.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Frankford Arsenal								
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER Pennsylvania 245		6. STATE/COUNTRY Pennsylvania							
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1815		9. COUNTY (U.S.) Philadelphia	10. NEAREST CITY Philadelphia							
11. MISSION OR MAJOR FUNCTIONS Development, Procurement, Production and Supply, Fire Control Systems, Small Arms Ammunitions, Cartridge Activated & Propellant Actuated Devices. Research with respect to Optical Material, Metallurgy of Non-ferrous and Reactive Metals, Material Degradation, Corrosion, Mycological, Synthetic Lubrication and Small Army Propellants, Laser Counter-measure.				12. PERSONNEL STRENGTH								
				PERMANENT			STUDENTS		SUPPORTED		TOTAL	
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)
				a. AS OF <u>31 Dec 72</u>	18	34	3,998					
b. PLANNED (End FY 78)				14	27	4,022	0	0	0	0	0	4,063
13. INVENTORY												
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)				
a. OWNED		110		434		52,076		52,510				
b. LEASES AND EASEMENTS								0				
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>									52,510			
d. AUTHORIZATION NOT YET IN INVENTORY									0			
e. AUTHORIZATION REQUESTED IN THIS PROGRAM									73			
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS									2,366			
g. GRAND TOTAL (c + d + e + f)									54,949			
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION					AUTHORIZATION PROGRAM		FUNDING PROGRAM					
CATEGORY CODE NO. a	PROJECT TITLE b	PRIORITY	Page No c	TENANT COMMAND d	UNIT OF MEASURE e	SCOPE f	ESTIMATED COST (\$000) g	SCOPE h	ESTIMATED COST (\$000) i			
721	58 - Barracks Modernization	55	161		MN	15	73	15	73			

FRANKFORD ARSENAL, PENNSYLVANIA

\$73,000

Frankford Arsenal is located at Philadelphia, Pennsylvania. The mission of this installation is to provide logistics support for fire control and other minor systems, and to conduct certain research operations. The program provides barracks modernization.

Status of Funds

	(\$000)
Funded Program Not in Inventory	0
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
58	Barracks Modernization	5	10

ENLISTED BARRACKS SUMMARY, FRANKFORD ARSENAL, PA.

	<u>MEN*</u>
Total Requirement	15
Existing Substandard	74**
Existing Adequate	0
Funded, Not in Inventory	0
Adequate Assets	0
Deficiency	15
FY 1974 Program	15
Barracks spaces occupied, 15 Mar 73	18

* 90 square feet per man - permanent party personnel;
72 square feet per man - trainees.

** Includes 22 spaces that can be made adequate.

Mr. PATTEN. I have no questions.
If there are no other questions——

MEMPHIS DEFENSE DEPOT, TENN.

Mr. PATTEN. Turn to Memphis Defense Depot, Tenn.
Insert in the record page 161A.
[The information follows:]

1. DATE 2 Apr 1973		2. DEPARTMENT ARMY		3. INSTALLATION Memphis Defense Depot										
4. COMMAND OR MANAGEMENT BUREAU Defense Supply Agency			5. INSTALLATION CONTROL NUMBER Tennessee 425		6. STATE/COUNTRY Tennessee									
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1942		9. COUNTY (U.S.) Shelby		10. NEAREST CITY Memphis								
11. MISSION OR MAJOR FUNCTIONS Defense Depot Memphis is one of seven principal distribution depots in the Defense Supply Agency integrated wholesale distribution system. Its mission is the receipt, storage, maintenance, inventory and issue of clothing textiles, fuel, general supplies, construction supplies, industrial supplies, subsistence and medical commodities. Its major function is the distribution of these commodities to all military activities in the south central region, composed of States of Texas, Oklahoma, Arkansas, Louisiana, and Tennessee, plus the overseas support for all military activities in the Caribbean area including South America as well as Southeast Asia.				12. PERSONNEL STRENGTH		PERMANENT		STUDENTS		SUPPORTED		TOTAL		
				a. AS OF 31 Dec 1972		OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)
				b. PLANNED (End FY 75)		17	10	2,116			5	11	526	2,685
						16	10	2,095			5	10	500	2,636
13. INVENTORY														
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)						
a. OWNED		642		225		30,240		30,465						
b. LEASES AND EASEMENTS								0						
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								30,465						
d. AUTHORIZATION NOT YET IN INVENTORY														
e. AUTHORIZATION REQUESTED IN THIS PROGRAM										456				
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS														
g. GRAND TOTAL (c + d + e + f)														
SUMMARY OF INSTALLATION PROJECTS														
PROJECT DESIGNATION														
CATEGORY CODE NO.	PROJECT TITLE			Page No	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM					
a	b			c	d	e	ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h					
218	24 - Medical Equipment Maintenance Facility			1	161B		456		456					

MEMPHIS DEFENSE DEPOT, TENN. \$456,000

Memphis Defense Depot is located near Memphis, Tenn.

STATUS OF FUNDS

	<i>Thousands</i>
Funded program not in inventory.....	\$0
Unobligated projects, March 31 1973 (actual).....	0
Unobligated projects, June 30, 1973 (estimated).....	0

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
Medical equipment maintenance facility.....	25	0

TRANSFER OF MEDICAL EQUIPMENT MAINTENANCE FROM ATLANTA

Mr. PATTEN. What brought about the requirement for this facility?

General COOPER. This depot has been at Memphis but the function has been performed at the Atlanta Depot. This requirement for \$456,000 is part of our reorganization and realignment plan regarding the Atlanta Depot to provide some new facilities for the medical equipment maintenance at the Memphis Depot.

Mr. PATTEN. Are there any questions?

DEFENSE SUPPLY DEPOTS

Mr. DAVIS. What do we have there at Memphis?

General COOPER. Memphis is one of the seven principal distribution depots in the Defense Supply Agency. It does the usual things a depot does of storing and issuing supplies. Its major function is the distribution of commodities to all military activities in the south central region.

Mr. DAVIS. Do we have something similar to this elsewhere in other parts of the country?

General COOPER. Yes, sir. We can provide for the record all of those others, if you like.

[The information follows:]

DEFENSE SUPPLY DEPOTS

Defense Depot, Mechanicsburg, Pa.
 Defense Depot, Memphis, Tenn.
 Defense Depot, Ogden, Utah.
 Defense Depot, Tracy, Calif.
 Defense Construction Supply Center, Columbus, Ohio.
 Defense General Supply Center, Richmond, Va.
 Defense Electronics Supply Center, Dayton, Ohio.

General COOPER. I don't know where all the others are.

Memphis takes care of the States of Texas, Oklahoma, Arkansas, Louisiana, and Tennessee.

Mr. DAVIS. Are we upgrading this one to compare with others, or is this the first of a series that we will be looking at?

General COOPER. In this particular case we are taking a facility that was at the Army Atlanta Depot which we are closing down because we couldn't justify keeping that depot operating, and we are putting this medical equipment maintenance facility at Memphis, which is already a large ongoing depot. It is a consolidation in that regard. It does require this almost half-million dollars to fix up or convert a warehouse.

DISPOSITION OF ATLANTA DEPOT

Mr. DAVIS. Is Atlanta being completely closed?

General COOPER. We are retaining a small portion of it, not in connection with the depot activities but in connection with the Forces Command at Fort McPherson, which is 10 or 15 miles away. DSA is taking over the depot. We are not sure what the ultimate disposition will be.

Mr. DAVIS. Disposition?

General COOPER. If DSA wants to continue to operate part of it. That is up to them.

Mr. PATTEN. Primarily GSA is our real estate dealer and it is turned over to them as surplus to the Army?

General COOPER. GSA also manages certain supplies itself in the same way the Defense Supply Agency does. For the whole Federal Government, not just the military.

Mr. DAVIS. What kind of shape is this depot in, this maintenance facility in Atlanta; is this good business to vacate a facility which might be adequate and then build, for all practical purposes, a new one at Memphis?

General COOPER. The one at Atlanta is not in very good shape and we estimate if we build the new facility at Atlanta to take care of this function it would cost \$1.3 million.

Mr. DAVIS. Thank you.

FORT MONMOUTH, N.J.

Mr. PATTEN. Turn to New Jersey, Fort Monmouth.

Insert page 162 in the record.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Fort Monmouth											
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER New Jersey 555		6. STATE/COUNTRY New Jersey										
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1917		9. COUNTY (U.S.) Monmouth	10. NEAREST CITY Red Bank										
11. MISSION OR MAJOR FUNCTIONS Headquarters, US Army Electronics Command. Provides administrative and logistical support for US Army Communications Systems Agency, USA Satellite Communications Agency, Defense Language Institute, USA Patterson Army Hospital and Defense Communications Agency and other activities. Performs research, development evaluation and testing of communications and meteorological equipment and facilities and related ground and air signaling equipment.				12. PERSONNEL STRENGTH		PERMANENT		STUDENTS		SUPPORTED		TOTAL			
				a. AS OF 31 Dec 72	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
				b. PLANNED (End FY 78)	545	952	8,593	600	600					11,290	
				13. INVENTORY											
				LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
				a. OWNED		1,419		519		83,114		83,633			
				b. LEASES AND EASEMENTS		435		0		0		0			
				c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								83,633			
				d. AUTHORIZATION NOT YET IN INVENTORY										(Exclusive of family housing - \$2,650) 5,109	
				e. AUTHORIZATION REQUESTED IN THIS PROGRAM										(Exclusive of family housing - \$ 180) 12,286	
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS										(Exclusive of family housing - \$6,600) 36,589					
g. GRAND TOTAL (c + d + e + f)										137,617					
SUMMARY OF INSTALLATION PROJECTS															
PROJECT DESIGNATION															
CATEGORY CODE NO.	PROJECT TITLE			Page No.	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM						
a	b			c	d	e	f	g	h						
				PRIORITY											
171	123 - Alter Classrooms for Language Labs			1	163		2,097				2,097				
310	29 - R&D Electronic Installations Facility			50	164	SF	8,460	590	8,460		590				
540	45 - Dental Clinic - 32 Chair			23	165			1,198			1,198				
610	121 - Convert Barracks to Admin			1	166			653			653				
610	122 - Convert Classroom Bldg to Admin			1	167			552			552				
721	116 - Barracks Modernization			1	168	MN	1,889	7,196	1,889		7,196				
	Totals							12,286			12,286				

FORT MONMOUTH, NEW JERSEY

\$12,286,000

Fort Monmouth is located at Red Bank, New Jersey. The mission of this installation is to command and support the U.S. Army Electronics Command which performs research, development, procurement and production of electronics materiel. The installation also supports the U.S. Army Signal Center and School, U.S. Army Satellite Communications Agency, U.S. Army Combat Developments Command Communications and Electronics Agency, Tri-Service Tactical Communications Agency, and the U.S. Army Communications System Agency. The program consists of a research and development electronic installations facility, a dental clinic, barracks modernization, conversion of barracks to administrative facility, conversion of classroom building to administrative facility and alterations to classrooms for language laboratory.

Status of Funds

(\$000)

Funded Program Not in Inventory	5,109
Unobligated Projects, 31 March 1973 (actual)	1,700
Unobligated Projects, 30 June 1973 (estimated)	1,700

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
29	R&D Electronic Instl Fac	35	20
45	Dental Clinic	67	10
116	Barracks Modernization	357	25
121	Convert Barracks to Admin Facility	42	20
122	Convert Classroom Building to Administrative Facility	31	15
123	Alter Classrooms for Language Lab	117	15

ENLISTED BARRACKS SUMMARY, FORT MONMOUTH, N.J.

MEN*

Total Requirement	1,640**
Existing Substandard	4,352***
Existing Adequate	47****
Funded, Not in Inventory	0
Adequate Assets	47
Deficiency	1,593
FY 1974 Program	1,889*****
Barracks spaces occupied, 15 Mar 73	2,859

* 90 square feet per man - permanent party personnel;
72 square feet per man - trainees.

** Includes 500 Non-US Officer students

*** Includes 1,569 spaces that can be made adequate

**** Private housing

***** When occupied by DLI students at two to a room, capacity is 1569

CONSOLIDATION OF LANGUAGE TRAINING

Mr. PATTEN. Would you discuss your reasons for concentrating language training at Fort Monmouth.

General COOPER. We also have Colonel Koenig here, who is the director of the Defense Language Institute. I think it might be better if you heard directly from him since he has the primary responsibility.

Colonel KOENIG. The announced objective is to provide for more efficient and economical management of the defense language program. This will transfer these functions from temporary facilities at three widely scattered locations to permanent academic facilities at Fort Monmouth. Specifically, in the Washington, D.C., area, the east coast school is in temporary substandard facilities and there is a lack of housing for enlisted men. The move to Fort Monmouth will provide housing for all of our enlisted students, provide housing for our permanent party on the military installation, and it will also provide for a consolidation of the English language training and the foreign language training in one area. This will facilitate the work of our development agency since we will have a test bed in English and foreign languages all under one roof. This will permit the clearing of the Anacostia area. Of course, it will permit the move out of the National Capital region and it will provide for greater control of all of our enlisted men.

We will move into an area where the defense language program can adequately be supported by the local area. It will also provide for academic support of the defense language program.

Those are the basic reasons for the move of the Defense Language Institute facilities to Fort Monmouth, N.J.

Mr. PATTEN. Mr. Talcott.

PROPER EMPHASIS ON LANGUAGE TRAINING

Mr. TALCOTT. I would like to ask a couple of questions.

I am more concerned about the language teaching in the defense forces. I just happen to think that language teaching and understanding of language and communication with other people is a very important tool, or very important weapon in peacekeeping. There are several attitudes in the military today, old World War II cannoners who couldn't give a hoot what is on the other end of a cannon and whether they can speak to them or not. Just so long as they raise the white flag, that is all right with them.

There is another mentality in the service today, the missilemen who can care less who is on the other end of the missile, so long as they don't bother anybody.

I contend that language teaching, language understanding, communications, understanding the people with whom we are dealing, enemy and allies, is going to be very important, particularly in the wars that we may be likely to fight in the next few decades.

We ought to be giving a lot more attention to language and communication and understanding of other people than we are today. If that is not relevant I have no other questions. If it is, I have a couple of questions. My contention is that language teaching is very important, and it is entitled to some special consideration.

It is not like pilot, or infantry, training, or communications systems training. The location ought to be on the basis of what is best for language teaching, and not where you have an empty hangar.

Proof of this is not very hard to find. Some years ago when we were trying to build up the Vietnamese language program, we had an empty hangar in El Paso, so we moved our language teaching to El Paso simply because we had an empty hangar, and tried to convert it to a language teaching facility, and it was not done very well. Some time ago it was decided they would move the Defense Language Institute to Monterey. Somebody in the Defense Department decided to do it, made the announcement, and transferred some people there.

I thought that was on the basis of trying to provide a good environment for teaching languages.

Then, suddenly they have an empty barracks at Monmouth, and decide that would be a better location. If that is a good reason for doing it, that is perfectly all right with me.

Colonel Koenig just said they moved from temporary facilities in Washington. For how long has the Defense Language Institute been in Washington?

Colonel KOENIG. July 1, 1963, was the formation. For a long time the Defense Language Institute had been looking for permanent facilities, and also we wanted to collocate and consolidate our activities. We have both the English language training function and the foreign language function. We needed a facility on the east coast. So, we had been searching for a place to collocate our activities.

Most of our activities are in temporary facilities. Moving the Signal School from Fort Monmouth gave us the opportunity not to move into barracks but to move into administrative facilities and classrooms that could be modified for what we considered to be fine classrooms.

Mr. TALCOTT. You are doing \$2 million worth of rehabilitation, and you consider them to be fine facilities?

Colonel KOENIG. Yes, sir. They need to be soundproofed and air-conditioned.

Mr. TALCOTT. As a matter of fact, they need to be adapted to language teaching, and there is no other type of classroom that you can use. The classroom for teaching pilots or infantry people or anything else in the service is not really suitable for teaching languages, is it?

General COOPER. That is the reason we are modifying the buildings. We have the basic structure. We do save the cost of the basic structure, which is considerable.

Mr. TALCOTT. I am not going to argue with this because it does take on the attitude of provinciality. If you want to move the whole thing and if you think the people in language teaching, the people in communications, the people in trying to understand other people want to move any part of the Defense Language Institute from Monterey to any place else, that is perfectly all right with me, and I think you ought to do it, but I think your reasons ought to be more valid than those you have presented.

One of them, you said, was that you needed more control over the enlisted men. I think every enlisted man assigned to the Defense Language Institute will resent that from the bottom of his heart. These people are not just recruits whom you are trying to keep control of as you do in basic training. These are experienced people,

people whom you are going to trust to go out and communicate with other people, not only our friends but our allies. If you think you need to control them, I think you are going to have a lot of trouble teaching them language.

Colonel KOENIG. May I answer the point. In the Washington area, we have many low-grade enlisted men.

Mr. TALCOTT. High-grade enlisted men.

General COOPER. They are all high-grade in terms of quality, but he means lower in rank.

Colonel KOENIG. Right. We do not have housing on military facilities for these men.

Mr. TALCOTT. Is that essential, really?

Colonel KOENIG. Yes, sir. It is an important factor. It is a hardship on the enlisted men when they report to the Washington area and there are no quarters.

General COOPER. "Essential" is an overstatement, because we obviously have been operating for several years without this. We think it very desirable.

Mr. Talcott, it is certainly the policy of the Secretary of Defense and the Secretary of the Army and the Chief of Staff of the Army as the executive agent, that language training is important.

That does not mean there are not individuals and attitudes such as these to which you have referred, but we do consider language training important.

One of the reasons DLI was assigned to the Army is that we are on the ground, dealing directly with people for the most part.

Mr. TALCOTT. I think the Army ought to pay a lot more attention to this. Perhaps this is not the right committee of the Congress to be suggesting it. When I see you are spending \$2 million for rehabilitating some barracks, this looks to me like an extravagant expenditure of funds, with spending ceilings, and doing all these kinds of things, trying to convert other kinds of classrooms to this particular kind. I think we may be spending our money unwisely.

All I am going to suggest here, in just a couple of minutes, is that I, for one, with some knowledge of the Defense teaching and the Defense instruction and the Defense organization and administration in the Army, consider language training to be demeaned and degraded and far below what we ought to be doing for our services.

It could be very important, but if we continuously shift them from one place to another just because we have empty barracks and hangars, this is an example of the degradation of language teaching in our services, and it will hurt us in the future, in my judgment.

That is all I have to say.

ADEQUACY OF LOCATION FOR LANGUAGE TRAINING

General COOPER. May I comment?

The availability of facilities was a consideration. If we had available facilities, we would then have to be careful in evaluating what area of the country these facilities are in. We would not locate far away from any university or far away from any large number of people who speak foreign tongues. We would not consider such a location for a permanent home for language training.

We consider Fort Monmouth is located close to many colleges. It is close to New York City. It is a suitable location.

In addition to the suitable location we consider the availability of facilities, which we are modifying at a unit cost of slightly less than \$10 a square foot as opposed to providing them at probably \$30 a square foot. We think we will end up with a good facility for teaching languages.

I recognize you disagree with that. I did want to make the point that we are doing it, not just because we have the barracks, but also because we think that section of New Jersey is conducive—

Mr. TALCOTT. You promised to tell me how many associations you have with colleges. You say you are locating it near colleges. My contention is that there is really very little relationship with colleges. That is not what you do. You have a different kind of system.

If you are going to send a kid to college, you would send a kid to college, as you do.

I can tell you that 10 years ago or 6 years ago, the reputation of the language teaching in the services was outstanding. It was recognized by all the universities as being outstanding.

It no longer is. I regret this. One of the reasons is that this kind of thing is happening.

LOCATION OF HEADQUARTERS

Six months ago, for some reason, probably not a good enough reason, you suggested that the headquarters be located in Monterey. I think the headquarters could be located at a different place than Monterey, but the reasons for that ought to be good ones, better than what you are giving.

General COOPER. Let me separate the two things. The DLI headquarters and the Systems Development Agency are a small part of this total move. The move to Fort Monmouth is mostly the move of students from Anacostia to Monmouth. Whether the headquarters, which has maybe 65 or 70 people in it with a corresponding number in the Systems Development Agency, should be at Monterey or at Monmouth is separate. I think a good argument could and was made for the move of the headquarters to Fort Monmouth.

If you ask my personal opinion, I think it was a mistake to change the decision of the location of the headquarters. I do not think it was a mistake to move the basic facility, the East Coast facility, from Anacostia to Fort Monmouth. I think the headquarters and the Systems Development Agency can function quite well at Fort Monmouth. We do lose credibility by telling you and telling the Members of Congress—

Mr. TALCOTT. You are not telling Members of Congress. You told your staff, really.

General COOPER. We put out a notice to Congressmen saying we were going to move the headquarters from Anacostia to Monterey. I think, frankly, it does not make that much difference. I do think it was wrong to vacillate in this particular case. I think the headquarters as such can function quite well at Fort Monmouth. I think Fort Monmouth is a good place for the eastern branch of the language institute.

Mr. TALCOTT. I think this is what will happen to language teaching as long as the Army has it. It will vacillate. It will be moved from one place to another, whether it is El Paso or Anacostia or Monmouth or Monterey or anyplace else where you find a cheap place to locate it, where you can control your enlisted men, where you can find a unit cost of a dollar or two less. Language teaching be damned.

USE OF LANGUAGE SKILLS

Mr. LONG. I agree very much with what Mr. Talcott says. Some of my remarks will not be particularly relevant to your construction responsibility, and in some ways they are.

I have heard reports—I do not know how true they are—that languages are not taught to people long enough so that they can really make effective use of them. I had 5 years of German, can repeat a few lines from Goethe, and that's about it. If language is not practiced, language training can be very much a waste of time.

Also, there is the question whether you are training people who are going to stay in long enough to use the language. If they get out, then you have wasted your instruction. Then, of course, there is the question of assignment to posts where the language will be relevant. There have been many criticisms of the services that they give a fellow a lot of training in one language and then put him in a country which speaks another.

Of course, this is true of the armed services. You have always had these criticisms. Not just in languages.

I think they concern us. Why should we put a lot of money into buildings if we are coming up with a language program which is superficial or unrealistic or excessively expensive?

Could you comment on that?

General COOPER. I can comment briefly based on my personal experience, but fundamentally the people to whom you should address

that question are the personnel people, the Deputy Chief of Staff for Personnel, because I am not directly responsible for that training.

In cases like Vietnam, you end up training a lot of people in Vietnamese, and it is going to be lost.

The effort in the foreign area specialist training, in which my younger brother was involved, was to train people very thoroughly in the language. It took a year at Monterey where they studied just the language, a year at Columbia where they studied further. Then they went for 2 more years to Oberammergau, where all their instructors taught them in Russian all about the history of Russia, the military aspects of Russia, and for their summer training they went off to places like Turkey—

Mr. LONG. I have no doubt those things occur. I wonder if you could give us some information for the record.

General COOPER. Yes, sir.

Mr. LONG. What statistics do you have that show that people who have been given language training stay in the service and use it? In other words, what is your turnover among people being taught language? How many of them get out? Give us some data which throws light on that.

Second, what are the assignments? Can you give us data on the assignments of these people? After their language training, where were they assigned, and how many of them made adequate use of it?

Can you do that for us?

General COOPER. Yes, sir.

Mr. LONG. That would help in deciding whether these buildings are just being built for nothing or whether they are being built to serve a useful purpose.

[The information follows:]

Officer Personnel:

During the period FY 1970 - 1972, 1,054 Army officers were trained in foreign languages other than Vietnamese. During this same period 2,193 officers received Vietnamese language training with virtually 100% being utilized in an assignment in Vietnam which required training in the Vietnamese language. A recent sampling of the 1,054 officers trained in other foreign languages revealed the following utilization information:

-Utilization (Percent of officers assigned to units authorized linguist positions)	90%
-Not Utilized (Officers not assigned to a linguist position immediately after training)	3%
-Unknown (Utilization data not available since officers are no longer on active duty)	7%

The majority of Army officers are utilized in assignments in the areas of Intelligence assignments, Foreign Area Specialist Programs and Defense Attache assignments.

It is Army policy that officers will be programed into language training only to satisfy specific Army requirements, therefore, a high percent of utilization assignments is experienced. In those few instances where language trained officers are not utilized, it is normally because the requirement was deleted or changed after the training commenced. Retention of language trained career officers is high and repetitive utilization in career areas is prevalent.

Enlisted Personnel:

During the period FY 1970 - 1972, 8,971 Army enlisted personnel were trained in a foreign language by the Defense Language Institute (DLI). Included in this number were 4,740 enlisted personnel trained in the Vietnamese language. Ninety percent of all graduates were assigned to units that were authorized linguist positions. The types of assignments for enlisted linguists are:

<u>Percentage</u>	<u>Assignment</u>
40	U.S. Army Security Agency Duties
20	Intelligence Field Duties
10	Special Forces Units
30	Logistics, advisor, administrative assignments

In order to meet enlisted language training requirements, by grade and position, large numbers of personnel must be trained each year. Reutilization of language trained enlisted personnel is modest -- approximately 20 percent. Reasons for this include promotion out of grade and/or Military Occupational Specialty (MOS) requiring language ability, higher priority non-linguist assignments and equitable overseas assignment procedures. However, the principal factor bearing on this problem is that many enlisted linguists are first term enlistees and do not reenlist.

FACILITIES AT FORT MONMOUTH

Mr. PATTEN. Let's not charge all of this to the language school. For many years we have been after the Military to update these facilities, which are among the best you have in your whole organization.

As far as updating them, whether you use them for the Signal School or place the Language Institute there, with 1,500 students, or whatever you are going to do, it has been in order for at least 5 years to fix up these buildings. So, do not charge it to your bringing in the language school. We might just as well have the Signal Corps back. If the Signal Corps stayed there, you still would have to spend this money.

General COOPER. That is correct, sir.

Mr. PATTEN. You are not spending the money because you are bringing in—

Mr. TALCOTT. That is exactly my point.

Mr. PATTEN. These buildings are the best. The whole setup at Monmouth is one of the best. Monmouth is not Camp Kilmer. These facilities shortly would be used by the Army, whether for the language school or for any other purpose, and no matter what you used them for, it has been in the program for many years to fix them up and update them and air-condition them and do everything else.

The leaders down there have contacted us for many years to give them a little hand with these particular buildings that you are going to use for the language school.

Mr. TALCOTT. This is exactly the point I have been making. You will update them just as for any other facility. They couldn't care less whether they are going to use them for language or anything else. Language requires different things. The laboratories are different. The \$2 million item is to convert the existing classrooms which they could use for other classes, into language training labs which are different. They have to be different. Language is entirely different from pilot training.

This is what a lot of people do not understand about language teaching.

General COOPER. I do not understand you or you do not understand me, Mr. Talcott, because we are converting these facilities to be good language teaching facilities. What Mr. Patten was referring to was the fact that some of the barracks do need to be air-conditioned and modernized as barracks. The fact that they are basically such good facilities, is the reason it will cost us only about \$10 a square foot to upgrade them.

These modifications for DLI are well designed by people who are interested in teaching languages. This is a \$2 million project. It is not throwing up partitions.

Mr. TALCOTT. It is a good facility, but it takes \$2 million to convert it to a language laboratory?

General COOPER. Yes, sir, and it might take as much as \$5 million if you started from scratch.

R. & D. ELECTRONICS INSTALLATIONS FACILITY

Mr. PATTEN. How is the type of work which you perform in the R. & D. electronic installations facility similar or different from that performed in the hangar provided for the night vision laboratory at Fort Belvoir?

General COOPER. It is completely different. The night vision laboratory is involved in devices like the snooperscope, the sniperscope, and the starlight scope, where you use infrared techniques and low light level TV; whereas at Fort Monmouth we are primarily involved with communications and electronics, such as radar. These are dissimilar. Both labs use electronics and batteries, but for different purposes.

PROJECTS RELATED TO RELOCATIONS

Mr. PATTEN. Which of the projects here are directly related to the new mission which will be moved into Fort Monmouth?

General COOPER. You mean with the ECOM moving from Philadelphia?

Mr. PATTEN. Including that, yes.

Provide that information for the record for all the missions which are relocating here.

[The information follows:]

ARMY REALIGNMENT RELATED PROJECTS, FORT MONMOUTH, N.J.

Action.—Relocate Defense Language Institute Headquarters and East Coast Branch to Fort Monmouth.

Related Projects.—Alter classrooms for language labs—\$2,097,000.

Action.—Relocate the Electronics Command (ECOM) Headquarters to Fort Monmouth and consolidate activities.

Related Projects.—Convert barracks to administrative facilities—\$653,000.

Convert classroom building to administrative facilities—\$552,000.

All other projects proposed for Fort Monmouth in fiscal year 1974 are not directly related to Army realignment actions.

General COOPER. The language labs are certainly a new mission. The R. & D. electronics installations facility is affected by the ECOM move. The dental clinic was not related to that change of mission. As a matter of fact, because of the change in mission, we are reducing the scope of the dental clinic from what is in the form 1391 you have here, 32 chairs, to probably 18 chairs.

The conversion of barracks to administrative space and classroom to administrative space are related to DLI. The barracks modernization would have occurred without the change in mission.

In summary, the dental clinic and the barracks modernization are not directly related to the change in mission.

Mr. PATTEN. You are saying you have adjusted the scope of all these projects to reflect the new missions?

General COOPER. Except for the dental clinic. That 32-chair capacity was based on the military strength prior to moving the Signal School out. The clinic would be reduced in scope. The rest of the projects all reflect the new missions.

Mr. PATTEN. Maybe, for the record, you could provide details of the old and the new requirements, and show how you adjusted the scope of these facilities to reflect these changes.

General COOPER. Yes, sir.

Mr. PATTEN. We would like to show a saving.

[The information follows:]

PROGRAM CHANGES DUE TO ARMY REALINEMENT, FORT MONMOUTH, N.J.

	Amount
Previously planned program:	
Enlisted women's barracks.....	278 EW..... \$2,399,000
Enlisted men's barracks (medical det).....	120 MN..... 1,538,000
Consolidated dining facility.....	35,700 SF..... 2,404,000
Barracks modernization.....	2167 MN..... 8,186,000
Dental clinic.....	32 chairs..... 1,198,000
R. & D. electronic installations facility.....	8,460 SF..... 590,000
Total.....	16,315,000
Postrealignment program:	
Barracks modernization.....	1,889 MN..... 7,196,000
Dental clinic.....	18 chairs..... 1,003,000
R. & D. electronic installations facility.....	8,460 SF..... 590,000
Alter classrooms for language labs.....	220,560 SF..... 2,097,000
Convert barracks to administration facilities.....	81,998 SF..... 653,000
Convert classrooms building to administration facilities.....	92,496 SF..... 552,000
Total.....	12,091,000

¹ Shown in program for 32 chairs at \$1,198,000. New reduced scope was determined after program was submitted to Congress.

ABERDEEN PROVING GROUND, MARYLAND

Mr. PATTEN. Let us turn to Aberdeen.

Insert page 147 in the record.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Aberdeen Proving Ground											
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER Maryland 015		6. STATE/COUNTRY Maryland										
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1918		9. COUNTY (U.S.) Harford		10. NEAREST CITY Baltimore									
11. MISSION OR MAJOR FUNCTIONS Headquarters, US Army Test and Evaluation Command. Performs research on propellants and propulsive force systems; terminal effects of warheads; vulnerability of weapons to blast fragments and radiation; human factors engineering, dynamic and environmental testing of vehicles and ordnance equipment. The US Army Ordnance School; Land Warfare Laboratory, Research and Development Center and Joint Military Packaging Training Center are located here. The Environmental Hygiene Agency is located at the Edgewood Arsenal area of Aberdeen Proving Ground. *19,800 one-time cost for easement.				12. PERSONNEL STRENGTH			13. INVENTORY								
							PERMANENT		STUDENTS		SUPPORTED		TOTAL		
							OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)
				a. AS OF <u>31 Dec 72</u>			1,005	3,219	8,708	404	2,918				16,254
				b. PLANNED (End FY 75)			917	3,116	8,133	410	2,068	0	0	0	14,644
				LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
				a. OWNED		71,205		4,401		134,356		138,757			
				b. LEASES AND EASEMENTS		88		20*		0		20			
				c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>								138,777			
				d. AUTHORIZATION NOT YET IN INVENTORY								4,901			
				e. AUTHORIZATION REQUESTED IN THIS PROGRAM (Exclusive of family housing - \$4,927)								11,934			
				f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$2,910)								36,425			
				g. GRAND TOTAL (c + d + e + f)								192,037			
SUMMARY OF INSTALLATION PROJECTS															
PROJECT DESIGNATION															
CATEGORY CODE NO.		PROJECT TITLE			Page No	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM					
a		b			c	d	SCOPE	ESTIMATED COST (\$000) (e)	SCOPE	ESTIMATED COST (\$000) (h)					
		PRIORITY													
310	179	- Human Factors Engineering Research Laboratory		17	148		SF	64,838	2,962	64,838	2,962				
721	198	- EM Barracks		1	149		MN	432	2,965	432	2,965				
721	243	- Barracks Modernization		1	150		MN	1,940	4,507	1,940	4,507				
740	118	- Chapel Center		33	151		SF	27,255	1,500	27,255	1,500				
		Total							11,934		11,934				

ABERDEEN PROVING GROUND, MARYLAND

\$11,934,000

Aberdeen Proving Ground is located at Aberdeen, Maryland. The mission of this installation is to provide facilities and support for the Headquarters U.S. Army Test and Evaluation Command, the U.S. Army Ordnance School, Land Warfare Laboratory, Research and Development Center and Joint Military Packaging Training Center. The Environmental Hygiene Agency is located at Edgewood Arsenal, a nearby sub-installation. The program provides for a human factors engineering laboratory, barracks, barracks modernization and a chapel center.

Status of Funds

(\$000)

Funded Program Not in Inventory	4,901
Unobligated Projects, 31 March 1973 (actual)	478
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
179	Human Factors Engr Lab	157	25
198	EM Barracks	160	25
243	Barracks Modernization	127	10
118	Chapel Center	50	5

ENLISTED BARRACKS SUMMARY, ABERDEEN P.G., MARYLAND

MEN*

Total Requirement	4,009
Existing Substandard	8,775**
Existing Adequate	18***
Funded, Not in Inventory	0
Adequate Assets	18
Deficiency	3,991
EY 1974 Program	2,372
Barracks spaces occupied, 15 Mar 73	4,369

* 90 square feet per man - permanent party personnel;
72 square feet per man trainees.

** Includes 1,940 spaces that can be made adequate

*** Private housing

HUMAN FACTORS ENGINEERING LABORATORIES

Mr. PATTEN. Is Aberdeen the best location for the Human Factors Engineering Research Laboratory?

General COOPER. We think it is, sir. That is where the function has been handled prior to this time. It has been there since about 1951. It is also located close to laboratories where they can experiment with small arms and vehicles and combat vehicles. It is in close proximity to the test courses and firing ranges of the Aberdeen Proving Ground.

Mr. PATTEN. Can you provide for the record data on the proposed makeup of this laboratory?

Can you show how much administrative space, laboratory space, and so forth, are being planned?

[The information follows:]

We plan 29,032 square feet of administrative space and 35,806 square feet of laboratory space in the new building, for a total of 64,838 gross area.

Mr. PATTEN. What is the nature of the laboratory space?

General COOPER. The laboratory space will house experimental simulators and mock-ups for materiel prototype development, data reduction facilities, and the complex electronic instrumentation.

Mr. PATTEN. What are you using at the present time?

General COOPER. At the present time, we are using primarily World War II structures, an old firehouse, a repair shop and a warehouse.

Mr. PATTEN. Provide for the record data on the workload of this laboratory for the past 5 years, and as projected long-range.

[The information follows:]

The workload for the Human Engineering Laboratories expressed in dollars was:

Fiscal year 1969.....	\$3, 376, 105
Fiscal year 1970.....	3, 385, 499
Fiscal year 1971.....	3, 814, 000
Fiscal year 1972.....	4, 256, 000
Fiscal year 1973.....	6, 255, 000

The workload will probably continue at that level of effort for the next 5 years.

Mr. LONG. Why are current facilities not adequate?

Colonel SELL. Currently used laboratory facilities are insufficient in size. The Human Factors Engineering Research Laboratory requires over 100,000 square feet of space but has less than 60,000 square feet.

Mr. LONG. Do current facilities impair the quality of research? If so, how?

Colonel SELL. Current facilities will not permit installation of experimental test equipment such as an eye movement measuring device, which will require approximately 1,600 square feet of specific laboratory space having temperature and humidity and lighting control. Current facilities will not permit installation of electroencephalogram equipment for central nervous system research. Here the requirement exists for electrical shielding inclosures, soundproofing, humidity, and temperature control. Aviation simulators cannot be used to study helicopter control and instrumentation design. Again, temperature, lighting, and humidity control are essential. No research of this type is possible now because present facilities will not permit the laboratory space and environmental controls necessary.

Mr. LONG. Describe in some detail some of the simulated stress conditions.

Colonel SELL. We need to simulate helicopter flight under low light levels, wherein we can also overload the pilot and crew members, as it happens in combat, in order to determine proper cockpit and control design of future helicopters. Here we would measure crew performance in a special laboratory set up where we would need to control lighting, temperature, humidity, noise and vibration.

In another part of the lab we need to simulate combat stress situations where we can carefully control and monitor body heat load, sweating, heart rate, pulse rate, electrocardiogram, and electroencephalogram. Only under very controlled laboratory conditions, can we expose human experimental subjects to psychological stress such as fear and measure their response both physiologically and psychologically. Blood and urine samples will also be taken before, during, and after experimental sessions to determine short range and long range effects of stress via the endocrine system. Thus, here we need a lab set up to create the experimental stress and take psychological and physiological measurements all at the same time.

Mr. LONG. Why is an oil-fired heating system desired?

Colonel SELL. Oil heat is not specified. The design agency should select the optimum heating system.

Mr. LONG. How many jobs would be created?

Colonel SELL. No jobs will be created because of the construction itself. The present lab strength is approximately 130 military and civilian. About 20 additional professional personnel will be added to the staff in the next 18 months.

Mr. LONG. What will you need for the next fiscal year?

Colonel SELL. There are no identified future year facility requirements beyond this fiscal year 1974 project.

UTILIZATION OF RELIGIOUS EDUCATION FACILITIES

Mr. PATTEN. What is the Army's Policy on the utilization of religious education facilities for other types of educational programs?

General COOPER. To the extent it does not interfere with the religious educational facilities, we do permit the use for other purposes. Most of the activities are related. We have Bible classes, Protestant church meetings, some youth activities.

We also orient new wives.

The primary use is still related to religion.

Mr. NICHOLAS. If it is not being used at a particular hour, if there is no scheduled use, would you bring in other training activities? Is there no prohibition against that or does it have to be related to religious activities in some way, however tenuous?

Mr. PATTEN. Like a bingo game.

General COOPER. They run bingo games in churches all the time.

Mr. PATTEN. That is related. I forgot.

General COOPER. I do not know that we ever ran one in an Army chapel.

The answer to your question is, There is no prohibition. The chaplain monitors this. If he thinks the use is not consistent with the general

purpose, he might ask the installation commander not to permit it. There is no prohibition.

Mr. PATTEN. Are there any questions?

Mr. LONG. Yes, I have some questions.

BARRACKS

Mr. LONG. I am concerned about the barracks and barracks modernization money. I want to reiterate the question I raised the other day.

What has been done to make sure this cannot be reduced or eliminated altogether by making use of the housing which will be freed as a result of the Bainbridge Naval Station closing?

General COOPER. With regard to family housing? Or are you also referring to barracks housing?

Mr. LONG. I suppose you have to have barracks right on the premises. Is that your argument?

General COOPER. Yes, sir. The family housing figures I have—

Mr. LONG. This would not be relevant to anything at Bainbridge?

General COOPER. Bainbridge is a little too far away for that.

Mr. LONG. Bainbridge is only 6 or 7 miles away.

FIRING ACTIVITY AT ABERDEEN

I want to raise the question of the firing up there. There has been a good deal of complaint about a proposal of the Army to begin some firing. I believe it has been suspended 30 days, perhaps as a result of the questions I asked.

The community in Baltimore County, which is quite a distance from Aberdeen, was quite startled to learn recently of proposals of firing outside of the Proving Ground into the waters off Hart and Miller Islands. Of course, there is a tremendous small boat population there. People were alarmed.

I was not informed, as the Congressman from the area into which you were proposing to unload a lot of bombs or shells. So, when the papers called me up, I was in the position of not knowing anything about it.

Whoever is running that show up there is lacking a certain amount of sensitivity. I do not want to harass the Army. I do not want to make it overly difficult for them to carry out their job of testing weapons.

At the same time, when you are doing something like this, I think it would be very wise to inform the people who have to stand on the firing line.

General COOPER. We should inform not only you ahead of time, we should also inform the local public and explain.

Mr. LONG. You always have your ways of covering. A little routine circular was handed out which naturally nobody saw until somebody picked it up somewhere and waved it around. It was not available to me, but they said there had been some circulars put out; mimeographed, very dull looking, not calculated to excite interest.

General COOPER. That should not be the method. The intention was to inform.

You are right. In many cases—

Mr. LONG. This does raise the question of encroachment. I would hope that we could find out whether this is a new departure. They say this is the same type of test firing they have done before. I would like to know if that is in fact true. To the public, this is a brand new thing. They have never heard of it.

If the Army has been test firing like this before, then the people around there never knew about it.

I do not think you should do these things with the idea that the public will not notice it and so it is all right.

General COOPER. I agree, sir. Has somebody been in touch with you about the operational aspect?

Mr. LONG. I got in touch with them. I had my whole district office full of newspaper people suddenly one day.

[Off the record.]

Mr. LONG. Do I get my point over?

General COOPER. Yes, sir. Your point is very clear.

I am not personally familiar with the detailed operations, but we certainly can provide you information.

Mr. LONG. I want to find out for sure whether this is something new and whether it is, in fact, as totally innocuous as they claim, and also make sure that in the future I am consulted about all these things.

General COOPER. Even separate from the record, we can have somebody come and visit you in your office, if you desire.

Mr. LONG. Talk to one of my staff. So long as my office is informed, we are all right. I am not looking for any more business personally than I have.

[The information follows:]

For the past 30 years Aberdeen Proving Ground has annually conducted a small amount of testing in the waters of Chesapeake Bay for test firings beyond the reservation area. For the last 7 years the duration of this testing has never exceeded 7 days in any 1 year. All firings involved use nonexplosive 155mm rocket assisted projectiles and are directed in the authorized restricted airspace as set forth in volume 28, part 19 of the Federal Register.

During the firings into this area extensive safety measures are exercised. Stringent control is maintained by posting four Aberdeen Proving Ground patrol boats at strategic points around the impact area to assure the safe passage of boat traffic. In addition, four observers are located in observation towers along the Eastern Shore and Gunpowder Neck to visually observe the area for boat traffic. No firings are performed until the area is completely free of traffic and no attempt is made to force the traffic from the area. In the past these test firings have not imposed any interference or restrictions on any of the boating activities in that area.

Prior to testing in this area Aberdeen Proving Ground requests authorization to conduct their firings into navigable waters from the Baltimore District, Corps of Engineers, Department of the Army, as required by regulations in title 33, United States Code, section 3. The Corps of Engineers puts out notices of this scheduled usage to the county commissioners. Members of Congress, the Environmental Protection Agency, Department of Natural Resources, and the State of Maryland. The Aberdeen Proving Ground public information office places articles in the local newspaper. Every effort is made to inform and educate those concerned with the scheduled testing.

Due to delays in the program, testing originally scheduled earlier this year has been postponed until June, at which time notification will be extensively and clearly made.

General COOPER. I must say we spend a lot of time and effort, particularly in the Corps of Engineers, in trying to be sure that the word does in fact get out to the public; that we do not just put a little notice

in the back of the classified ads of the newspapers and expect the point to get across.

Mr. LONG. Before you put the notice out to the public, for heaven's sakes get some guidance from the political people. Learn a lesson from Watergate. There is a function to be performed by political people who have their finger on the public pulse, and know how the public reacts. It is an art which is not without its usefulness.

[Discussion off the record.]

Mr. MCKAY. I do not know whether you have a chaplain here or not. Have you?

General COOPER. No, sir. We tried to hold down on the number of backup witnesses.

Mr. MCKAY. The question was raised earlier about the joint use of religious facilities. I concur, to some extent at least, that some facilities such as classrooms, Sunday school rooms, and some of those things, ought to have as much use as possible. But there really ought to be some areas which have an air of sanctity to them, and that should be preserved.

RELIGIOUS ACTIVITIES

My question relates to what kind of program do we have for the religious needs of the men in the Army? We see you are requesting some buildings. You could provide this for the record.

General COOPER. I can comment in two ways.

Mr. MCKAY. I think there is a real need for strengthening families. The church is the basis by which that can come. I do not think you can legislate it. I do not think you can order it. I think it has to come through a basic religious or family association and a general projection of our culture.

General COOPER. I do not profess to be a chaplain, but I have had experience with chaplains throughout my life in the military.

The religious program is not compulsory, as the Department of Defense found out when it tried to make cadets and midshipmen go to chapel.

I do not think chapel hurts anybody. I agree with you, it should not be compulsory. To try to enhance just what you are talking about, we have taken action. At Fort Carson, for example, they had a diversity of chaplains, and they also have a diversity of people among Protestants and even among Catholics. The Southern Baptists would set up one of the chapels at Fort Carson for primarily the Southern Baptists, where in some cases the blacks preferred to go because that is what church was like at home.

By thinking about it in those terms and trying to accommodate to the needs of the troops without forcing them to go, the chaplains provided a church atmosphere that the troops knew before they came in the Army, and chapel attendance went up significantly.

I can provide additional information for the record.

[The information follows:]

The Army provides a comprehensive program of religious activities for active duty, reserve, and national guard personnel, their families, and authorized civilians. These activities are organized within three general categories: Religious services, religious education, and pastoral care and counseling.

Religious services are regularly conducted by chaplains who represent the major demoninations and faith groups in the United States. When chaplains are not available, civilian clergy are employed to insure that every authorized

person may voluntarily practice, within the Army, those religious rites which are common to the civilian community. Traditional and innovative forms of worship are designed to meet the diverse spiritual needs within a rapidly changing society. Special emphasis is placed on services and activities which will attract young soldiers, and involve them in a process which emphasizes moral responsibility, human relationships, personal integrity, brotherhood, and responsibility to God. Marriage, baptism, and funeral services are conducted as requested and as appropriate. In overseas areas, religious retreats enable persons to step aside from their normal duties for a short time of intensive spiritual examination and personal evaluation.

Religious education in the Army serves the needs of all age groups. It includes group instruction in Sunday/Sabbath schools, individual instruction in matters of faith and practice, studies in marriage and family life, religious and cultural interest groups, choir and choral groups, personal growth and spiritual leadership development programs, religious drama, and religious films. These programs are supervised by qualified chaplains and civilian directors of religious education. However, their success is due to a vast group of volunteer workers who give their time and talents to better establish a learning, growing, maturing community.

Pastoral care is an extension of the preaching/teaching ministry to person-to-person level of human interaction. Chaplains are available for counseling 24 hours a day. They extend the influence of the church beyond the chapel by their presence with troops in combat, in training areas, in offices, in homes and barracks, in service clubs, and in other places where persons live, work, and play. Using their professional counseling skills, chaplains have been able to bring an important dimension to the drug/alcohol education and rehabilitation process, for they have demonstrated that problems of abuse are basically spiritual problems, and redemption from that abuse is a spiritual process. Chaplain counselors are recognized members of the healing team, with the doctor, psychiatrist, social worker and others. The chaplain ministers to persons who are hospitalized, who are confined for disciplinary reasons, who are facing serious emotional adjustments, who are having family problems, and who are seeking guidance for their lives. The chaplain provides spiritual support which often turns out to be the key to personal stability and physical recovery.

Pastoral care by chaplains goes beyond crisis intervention to a concern for preventive programs which will create an environment in which healthy relationships can better exist. Family life centers have been developed at several installations which are designed to strengthen family ties and thereby strengthen the community. Organization development programs are assisting chapel groups to realistically assess needs and design programs to meet those needs.

In short, the chaplains represent the presence of the church in the military community and attempt to insure that the wholesome objectives of religion are realized by those who seek them in military life.

Mr. McKAY. So there is a program to accommodate the needs of the people who are subjected to the changes which military life requires?

General COOPER. There is a program, but it is not compulsory.

Mr. McKAY. I am not suggesting that it should be compulsory.

At the military academy, I am not so sure that one course and some religious exposure might not help. That would be all right as a requirement. As a continual force and push, no. But it would not hurt to have some exposure to religious life, so they might understand better the men they supervise later.

The reason I mention this, General, is that I talked to a naval doctor who spent 2 or 3 years in Vietnam. You always hear the charge that the reason we had to get out of this war is that "all our guys were going on pot," and it was all because of the war. He is now administrator of the veterans' hospital in my State. He declared that he could prove that 99 percent of all the kids, at least in the Navy that he had any jurisdiction over, would have been on drugs any place in this country.

I asked him why. His answer was, it relates back to the family; that there was such a disruptive, broken up condition in the family that these kids were disoriented and were looking for some place of security, for understanding, for something.

He says, "I can pull that out of the medical records and show it to you."

As I said before, you cannot order it, you cannot legislate it. It has to come through our institutions, of which religion is a very important one.

Mr. LONG. I agree entirely with you. I have had a lot of exposure and contact with people who have drug problems with their children, and in every case the family is in a very disorganized condition. In fact, you wonder how the kids have done as well as they have.

Mr. MCKAY. I personally see religion as a major source for helping solve the problem.

General COOPER. I spent a lot of my time, as brigade commander of some 10,000 troops, worrying about drugs. I would agree with the 99 percent in terms of the hard core users, but there are a lot of troops who used it just because it was readily available. The ones who got in such trouble that they ended up in the neuropsychiatric wards, almost without exception started on drugs long before they got in the Army.

[Off the record.]

NATICK LABORATORIES, MASS.

Mr. PATTEN. Let us turn to Natick Laboratories, Mass.

Please insert page 169 in the record.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Natick Laboratories								
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER Massachusetts 690		6. STATE/COUNTRY Massachusetts							
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1953		9. COUNTY (U.S.) Middlesex	10. NEAREST CITY Natick							
11. MISSION OR MAJOR FUNCTIONS Through research and development to create prototypes for the Army and Department of Defense in the commodity areas of textiles, clothing, footwear, organic materials, subsistence, containers, food service equipment, field support equipment, tentage and equipage and air delivery equipment. Provide technical support to elements of the Department of the Army and the Department of Defense in the commodity areas above, and accomplish the standardization program in order that procurements of the new items may be accomplished expeditiously and economically.			12. PERSONNEL STRENGTH		13. INVENTORY							
			PERMANENT		STUDENTS		SUPPORTED			TOTAL		
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)	
			a. AS OF <u>31 Dec 72</u>	77	161	1,355						1,593
			b. PLANNED (End FY 78)	70	140	1,285	0	0	0	0	0	1,495
			LAND		ACRES (1)	LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)		
			a. OWNED		100	105		22,787		22,892		
b. LEASES AND EASEMENTS				1		0		0				
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>								22,892				
d. AUTHORIZATION NOT YET IN INVENTORY (Exclusive of family housing -- \$840)								0				
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								466				
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$ 72)								778				
g. GRAND TOTAL (c + d + e + f)								24,136				
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION					AUTHORIZATION PROGRAM					FUNDING PROGRAM		
CATEGORY CODE NO. a	PROJECT TITLE b			Page No c	TENANT COMMAND c	UNIT OF MEASURE d	SCOPE e	ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h		
	PRIORITY											
721	31 - EM Barracks w/Mess Addition			1 170		MN	38	466	38	466		

NATICK LABORATORIES, MASSACHUSETTS

\$466,000

The Natick Laboratories are located at Natick, Massachusetts. The mission of this installation is to create prototypes through research and development and to provide technical support in troop support, field support and air delivery equipment and to accomplish the standardization program. The program provides an addition to barracks with dining facilities for enlisted men.

Status of Funds

	(\$000)
Funded Program Not in Inventory	0
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
31	EM Barracks w/Mess Add	19	15

ENLISTED BARRACKS SUMMARY, NATICK LABORATORIES, MASS.

	<u>MEN*</u>
Total Requirement	102
Existing Substandard	50**
Existing Adequate	2***
Funded, Not in Inventory	0
Adequate Assets	2
Deficiency	100
FY 1974 Program	38
Barracks spaces occupied, 15 Mar 73	45

* 90 square feet per man - permanent party personnel;
72 square feet per man - trainees.

** Includes 50 spaces that can be made adequate

*** Private housing

Mr. PATTEN. What is the mission of this laboratory?

General COOPER. The mission of this laboratory is to create research and development prototypes for the Army and Defense Department in the commodity areas of textiles, clothing, footwear, organic materials, subsistence, and containers. It is that part of the quartermaster R&D function relating to the individual soldier.

Mr. PATTEN. Have you looked to see if it could be consolidated at another location?

General COOPER. I am sure it was examined as a part of TOMAC but I do not know what other areas were considered. We have a large number of highly skilled civilians there. As such, unless there were some driving force like very high operating costs, we would be inclined to keep it there.

Mr. PATTEN. Would you provide for the record data on the workload here for the past 5 years, and the projected workload?

General COOPER. Yes, sir.

[The information follows:]

The workload at Natick Laboratories in the past was :

Fiscal year :	Thousands
1969 -----	\$27, 937
1970 -----	23, 860
1971 -----	25, 677
1972 -----	37, 242
1973 -----	33, 770

The workload will probably continue at that level for the next 5 years.

Mr. PATTEN. Provide for the record the operating costs of running this facility, and the real property maintenance and operation costs. Also show the replacement value of the facilities here.

[The information follows:]

Real property, personnel and other operating costs Natick Laboratories, Mass.

Activity :	Cost in thousands
Backlog of essential maintenance and repair -----	\$60
Initial cost of improvements -----	22, 787
Replacement cost (excluding land) -----	86, 587

	Fiscal year—		
	1972	1973	1974
Real property maintenance -----	(535)	(516)	(559)
Other operation cost -----	1, 663	1, 609	1, 499
Personnel:			
Military expense -----	435	497	566
Civilian cost -----	3, 682	4, 106	3, 830

PICATINNY ARSENAL, N.J.

Mr. PATTEN. We turn to Picatinny Arsenal, N.J.

Insert page 171 in the record.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Picatinny Arsenal							
4. COMMAND OR MANAGEMENT BUREAU US Army Materiel Command			5. INSTALLATION CONTROL NUMBER New Jersey 855		6. STATE/COUNTRY New Jersey						
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1879		9. COUNTY (U.S.) Morris	10. NEAREST CITY Dover - 4 miles Southwest						
11. MISSION OR MAJOR FUNCTIONS A field installation of the US Army Munitions Command with national mission responsibilities including national development and national industrial engineering and support mission responsibilities, including development industrial engineering, preproduction and maintenance engineering with respect to ammunition, pyrotechnics and nuclear artillery and munitions including demolition types. *\$101,700 one-time cost for easement.			12. PERSONNEL STRENGTH		13. INVENTORY						
			PERMANENT			STUDENTS		SUPPORTED		TOTAL	
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)
			a. AS OF 31 Dec 72	95	73	6,855					7,023
			b. PLANNED (End FY 75)	52	80	6,478					6,610
			LAND		ACRES (1)	LAND COST (\$000) (2)	IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)		
			a. OWNED	5,848	905	71,560	72,465		72,465		
b. LEASES AND EASEMENTS	643	102*	0	102		102					
c. INVENTORY TOTAL (Except Land rent) AS OF 30 JUNE 19 72				72,567		72,567					
d. AUTHORIZATION NOT YET IN INVENTORY				1,931		1,931					
e. AUTHORIZATION REQUESTED IN THIS PROGRAM				2,915		2,915					
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$720)				3,073		3,073					
g. GRAND TOTAL (c + d + e + f)				80,386		80,386					
SUMMARY OF INSTALLATION PROJECTS											
PROJECT DESIGNATION											
CATEGORY CODE NO. a	PROJECT TITLE b	Page No c	TENANT COMMAND e	UNIT OF MEASURE d	AUTHORIZATION PROGRAM			FUNDING PROGRAM			
					SCOPE f	ESTIMATED COST (\$000) g	SCOPE h	ESTIMATED COST (\$000) i			
310	86 - Explosive Laboratory Addition	32 172		SF	40,530	2,660	40,530	2,660			
721	88 - Barracks Modernization	1 173		MN	50	255	50	255			
	Total					2,915		2,915			

722

PICATINNY ARSENAL, NEW JERSEY

\$2,915,000

The Picatinny Arsenal is located 4 miles northeast of Dover, New Jersey. The mission of this facility is to serve as a field installation of the U. S. Army Munitions Command with national mission responsibilities including development and industrial engineering and support mission responsibilities for pre-production and maintenance engineering with respect to ammunition, pyrotechnics and nuclear artillery and munitions including demolition types. The program provides for an addition to the explosives laboratory and barracks modernization.

Status of Funds

	(\$000)
Funded Program Not in Inventory	1,931
Unobligated Projects, 31 March 1973 (actual)	190
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
86	Addn Explosives Laboratory	74	35
88	Barracks Modernization	16	15

ENLISTED BARRACKS SUMMARY, PICATINNY ARSENAL, N.J.

	<u>MEN*</u>
Total Requirement	50
Existing Substandard	66**
Existing Adequate	0
Funded, Not in Inventory	0
Adequate Assets	0
Deficiency	50
FY 1974 Program	50
Barracks spaces occupied, 15 Mar 73	62

* 90 square feet per man permanent party personnel;
72 square feet per man - trainees.

** Includes 66 spaces than can be made adequate

Mr. PATTEN. Is this a hardcore post?

General COOPER. Yes, sir.

Mr. PATTEN. Why?

General COOPER. Primarily because it is the only place that we do the R. & D. for military explosives. You are well aware of the fact that commercially, people are not interested in developing military explosives for fear of the taint that Du Pont got as a result of World War I.

That is also the major production facility in terms of prototypes, in terms of trying out new techniques.

Mr. PATTEN. Would you rate the explosives laboratory addition as a high priority project?

General COOPER. We gave it a priority of 32, but, again, we used up almost all the priority 1's in terms of barracks. We consider it a very worthwhile project.

Mr. PATTEN. What are the alternatives to providing this project?

General COOPER. In lieu of doing this, we would continue to use the existing facilities, which are very much overcrowded. We also would not be able to do some of the research work in sensitive primary explosives, like lead azide.

Mr. DAVIS. You refer to the consolidation of your facilities at Picatinny. Consolidation of what from where?

General COOPER. You mean in my comments just now?

Mr. DAVIS. In the justifications.

General COOPER. I will have to provide that for the record. I am not quite sure what that refers to. I think it is within Picatinny itself. I do not think we have consolidated any other facilities from outside.

Mr. DAVIS. I refer to page 172, which says: "Consolidation of the Army explosives program at Picatinny Arsenal has resulted in dangerous overcrowding in present inadequate facilities."

I assume that means something has been brought in here that was not there before.

General COOPER. I should have understood your question earlier. I thought you were referring to something in the recent realignment and reorganization.

In 1968, we had a merger of the basic research laboratory, materials engineering, research and development, and the explosives laboratory. Those were all consolidated.

Colonel Sell may be able to add something.

Colonel SELL. Since the 1968 consolidation, all the work is done on Picatinny Arsenal itself. But we have overcrowded existing facilities, which need to be modified to provide physics research, primarily. Our physics and chemistry research are on top of one another. They need to be spread out a little more to give them a better chance to operate.

PINE BLUFF ARSENAL, ARK.

Mr. PATTEN. Let us turn to Pine Bluff Arsenal, Ark.

Mr. Reporter, please put page 174 in the record.

(The page follows:)

1. DATE 9 July 1973	2. DEPARTMENT ARMY	3. INSTALLATION Pine Bluff Arsenal										
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command		5. INSTALLATION CONTROL NUMBER Arkansas 087	6. STATE/COUNTRY Arkansas									
7. STATUS Active	8. YEAR OF INITIAL OCCUPANCY 1942	9. COUNTY (U.S.) Jefferson	10. NEAREST CITY Pine Bluff									
11. MISSION OR MAJOR FUNCTIONS Directorate of Chemical Operations; Directorate of Biological Operations*(Demil); Directorate of Depot Operations; Directorate of Engineering and Technology. *\$17,700 one-time cost for easement		12. PERSONNEL STRENGTH	PERMANENT		STUDENTS		SUPPORTED			TOTAL		
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)	
		a. AS OF <u>31 Dec 72</u>	24	73	1,233						1,330	
		b. PLANNED (End FY 78)	16	46	1,078	0	0	0	0	0	1,140	
		13. INVENTORY										
		LAND	ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
		a. OWNED	14,884		223		127,070		127,293			
b. LEASES AND EASEMENTS	67		18*		0		18					
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>							127,311					
d. AUTHORIZATION NOT YET IN INVENTORY							3,278					
e. AUTHORIZATION REQUESTED IN THIS PROGRAM							294					
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS							765					
g. GRAND TOTAL (c + d + e + f)							131,648					
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION												
CATEGORY CODE NO.	PROJECT TITLE			TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM				
	Page No					SCOPE	ESTIMATED COST (\$000)	SCOPE	ESTIMATED COST (\$000)			
721	33 - EM Barracks w/o Mess	1	175	MN	36	294	36	294				
	Priority											

PINE BLUFF ARSENAL, ARKANSAS

\$294,000

The Pine Bluff Arsenal is located at Pine Bluff, Arkansas. The mission of this installation is to provide facility space for the Directorate of Chemical Operations, Directorate of Biological Operations, and the Directorate of Engineering and Technology. The program provides barracks without dining facilities.

Status of Funds

	(\$000)
Funded Program Not in Inventory	3,278
Unobligated Projects, 31 March 1973 (actual)	3,099
Unobligated Projects, 30 June 1973 (estimated)	3,099

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
33	EM Barracks w/o Mess	17	25

ENLISTED BARRACKS SUMMARY, PINE BLUFF, ARSENAL, ARKANSAS

	<u>MEN*</u>
Total Requirement	39
Existing Substandard	258
Existing Adequate	0
Funded, Not in Inventory	0
Adequate Assets	0
Deficiency	39
FY 1974 Program	36
Barracks spaces occupied, 15 Mar 73	17

* 90 square feet per man - permanent party personnel;
72 square feet per man trainees.

Mr. PATTEN. Where else do you perform the activities carried on at Pine Bluff?

General COOPER. Nowhere, sir.

Mr. PATTEN. What would it cost to move the special missions elsewhere?

General COOPER. We have not really computed the costs. One could make some estimate. It would be on the basis of what the replacement cost is, which is close to half a billion dollars.

One of the reasons we have not is that any time you move a chemical warfare facility or move the individual chemical munitions it gets to be a tremendous public relations problem.

REDSTONE ARSENAL, ALA.

Mr. PATTEN. Let us turn to Redstone Arsenal, Ala.

Insert page 176 in the record.

[The page follows:]

1. DATE 9 July 1973	2. DEPARTMENT ARMY	3. INSTALLATION Redstone Arsenal									
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command		5. INSTALLATION CONTROL NUMBER Alabama 202	6. STATE/COUNTRY Alabama								
7. STATUS Active	8. YEAR OF INITIAL OCCUPANCY 1942	9. COUNTY (U.S.) Madison	10. NEAREST CITY Huntsville, Alabama								
11. MISSION OR MAJOR FUNCTIONS Headquarters of the US Army Missile Command, the Army's principal commodity center for rockets, guided missiles and related systems and equipment. The Army's principal Munitions and Missile Training Center and school is located at Redstone Arsenal.		12. PERSONNEL STRENGTH									
		PERMANENT		STUDENTS	SUPPORTED	TOTAL (9)					
		OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)		ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	
		a. AS OF <u>31 Dec 1972</u>	600	1,676	8,962	65	1,456	200	27	212	13,198
		b. PLANNED (End FY 75)	577	1,561	7,252	158	1,253	0	0	0	10,801
13. INVENTORY											
LAND		ACRES (1)	LAND COST (\$000) (2)	IMPROVEMENT (\$000) (3)	TOTAL (\$000) (4)						
a. OWNED		36,817	1,941	177,497	179,438						
b. LEASES AND EASEMENTS		3	0	0	0						
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>					179,438						
d. AUTHORIZATION NOT YET IN INVENTORY (Exclusive of family housing - \$3,900)					4,008						
e. AUTHORIZATION REQUESTED IN THIS PROGRAM					4,971						
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS					20,590						
g. GRAND TOTAL (c + d + e + f)					209,007						

SUMMARY OF INSTALLATION PROJECTS

CATEGORY CODE NO. a	PROJECT DESIGNATION b	PROJECT TITLE	Page No c	TENANT COMMAND d	UNIT OF MEASURE e	AUTHORIZATION PROGRAM		FUNDING PROGRAM	
						SCOPE f	ESTIMATED COST (\$000) g	SCOPE h	ESTIMATED COST (\$000) i
721	234 - Barracks Modernization		177	MN	990	3,852	990	3,852	
740	109 - Chapel Center		178	SF	24,735	1,119	24,735	1,119	
		Total				4,971		4,971	

REDSTONE ARSENAL, ALABAMA

\$4,971,000

Redstone Arsenal is located at Huntsville, Alabama. This installation is the headquarters of the Army Missile Command and the Missile Training Center and School. This program provides barracks modernization and a chapel center.

Status of Funds

	(\$000)
Funded Program Not in Inventory	2,582
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
234	Barracks Modernization	95	25
109	Chapel Center	60	25

ENLISTED BARRACKS SUMMARY, REDSTONE ARSENAL, ALABAMA

	<u>MEN*</u>
Total Requirement	1,543
Existing Substandard	2,566**
Existing Adequate	0
Funded, Not in Inventory	0
Adequate Assets	0
Deficiency	1,543
FY 1974 Program	990
Barracks spaces occupied, 15 Mar 73	1,703

* 90 square feet per man - permanent party personnel;
72 square feet per man - trainees.

** Includes 1,143 spaces that can be made adequate

MISSION CHANGES AT REDSTONE ARSENAL

Mr. PATTEN. You have already discussed generally the changes in mission at Redstone Arsenal, but could you provide specific details for the record at this point?

[The information follows:]

INSERT FOR THE RECORD
HAC
22 May 1973
Page 1472, following line 3

Reorganization of the SAFEGUARD System Command to include the merger of SAFEGUARD Logistics Command into the reorganized SAFSCOM. Because of the limits contained in the ABM Treaty and Defense Procurement Authorization Action of FY 73 a reduction-in-force is necessary to realign personnel with the change in mission and logistics support concept while maintaining a viable research, development, engineering, and advanced technology capability. The reorganization and personnel phasedown will be accomplished during the 3 year period of FY 73-75 and will result in a decrease of 758 civilian and 117 military jobs.

Realignment and reduction of the U.S. Army Engineer Division Huntsville. The reduction in personnel strength of the Division is caused by the signing of the ABM Treaty which reduces the scope of the SAFEGUARD BMD program by terminating construction activities at Malmstrom, Montana; delay in initiation of construction of the NCA site and the completion of major construction at Grand Forks, North Dakota, in early 1973. This action will result in a reduction at Huntsville of 5 military and 223 civilian jobs by end FY 75.

Establishment of certain U.S. Army Chemical Warfare Center Courses at Redstone Arsenal. The Chemical Warfare Center, Ft. McClellan, Alabama, is being disestablished and certain courses involving instruction in Explosive Ordnance Disposal, technical escort and Senior Chemical-Biological Accident/Incident Control Officers will be transferred to Redstone Arsenal by end FY 73 because of their commonality with existing courses already being taught at the U.S. Army Missile Munitions Center. This action will result in an increase of 41 military and 1 civilian job.

Establishment of Army Readiness Regions As a part of the reorganization of the Army in the Continental United States in 1973, the Army is realigning its Reserve Component management system. With the disestablishment of Continental Army Command in the Army reorganization, Forces Command (FORSCOM) will assume the responsibility for command of the Army Reserve and supervision of the Army National Guard through its realigned Continental Armies. Nine Army Readiness Regions (ARR) will be established to assist Reserve Component commanders in accomplishing effective training. Readiness Groups (RG), subordinate to ARR's, and composed of representatives of the combat, combat support and combat service support branches, will be tailored to the Reserve Component structure of their respective regions. RG personnel will serve as evaluators and instructors of Army Reserve and National Guard units. The establishment of a Readiness Group at Redstone Arsenal will increase the work force by 110 military and 27 civilian jobs.

Relocate an element of the Combat Developments Command Maintenance Agency from Redstone to Fort Lee, Virginia. As part of the CONUS reorganization, the formation of a strong, centralized Logistics Center at Ft Lee envisioned the eventual consolidation of all logistics development activities under one roof for maximum efficiency in addressing Army logistics requirements. Transfer of the Maintenance Agency, which is located principally at Aberdeen Proving Ground, Maryland but which has an element at Redstone Arsenal, to Fort Lee is an integral part of this concept as a follow-on action to establishing the Logistics Center nucleus. A determination of how best, and when, to integrate the Maintenance Agency into the Logistics Center is still under consideration. The relocation of jobs in the Missile and Munitions Division of the Maintenance Agency at Redstone Arsenal to Fort Lee will take place at the time the consolidation of the Maintenance Agency at Ft Lee is accomplished.

Mr. PATTEN. Is the \$299,000 for minor construction in fiscal year 1973 the only construction which will be required as a result of the realignment of missions?

General COOPER. That should satisfy it. We moved the Chemical School out of McClellan. We abolished the Chemical Corps. That is to take care of the remaining functions.

The answer to your question is, "Yes."

LONG RANGE PROGRAM

Mr. PATTEN. Provide for the record details of the \$20,590,000 to be requested in the out years at Redstone Arsenal.

[The information follows:]

Redstone Arsenal out year program fiscal years 1975-78

	<i>Dollars in thousands</i>
Radar operations facility-----	\$419
Environmental test facility improvement-----	970
Missile flight test facility addition-----	133
Force and flow addition metrology center-----	270
U.S. Army Hospital-----	8,000
Enlisted men's barracks and mess addition-----	1,237
Component test laboratory-----	1,045
Main post office-----	245
Rocket motor static test stand test area No. 5-----	1,016
Main post exchange addition-----	1,726
Youth activities center-----	364
Enlisted service club addition-----	277
Unit training shop No. 1-----	1,593
Dental clinic-----	900
Personnel processing—security building-----	2,057
NCO swimming pool-----	338
Total -----	20,590

SACRAMENTO ARMY DEPOT, CALIF.

Mr. PATTEN. Let us turn to Sacramento Army Depot, Calif.

Insert page 179 in the record.

(The page follows:)

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Sacramento Army Depot									
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER California 765		6. STATE/COUNTRY California								
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1945		9. COUNTY (U.S.) Sacramento		10. NEAREST CITY Sacramento							
11. MISSION OR MAJOR FUNCTIONS Receive, store, preserve, assemble and ship military hardware such as: electronic, wheeled and track-type vehicles, photographic, meteorological, radiological and weapons. Perform repair, overhaul, fabrication and modification of the military hardware listed above. Provide primary standards comparison and certification service similar to the National Bureau of Standards functions for nuclear and radio chemical detection equipment. Provide calibration services for Army electromechanical equipment. Provide film badge services to determine radiation exposure count for US Government personnel who work with nuclear radiation or X-ray equipment. Operate an Army Field Printing Plant.				12. PERSONNEL STRENGTH		13. INVENTORY							
				PERMANENT		STUDENTS		SUPPORTED		TOTAL			
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)	
				a. AS OF 31 Dec 1972		48	201	2,667					2,916
				b. PLANNED (End FY 75)		43	247	2,793	0	0	0	0	3,083
				LAND OWNED		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)	
						485		101		21,122		21,223	
b. LEASES AND EASEMENTS								0					
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 1972								21,223					
d. AUTHORIZATION NOT YET IN INVENTORY								0					
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								412					
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$936)								3,345					
g. GRAND TOTAL (c + d + e + f)								24,980					
SUMMARY OF INSTALLATION PROJECTS													
PROJECT DESIGNATION													
CATEGORY CODE NO.	PROJECT TITLE			Page No	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM				
a	b			c	d	e	ESTIMATED COST (\$000) f	g	ESTIMATED COST (\$000) h				
	PRIORITY												
721	45 - Barracks Modernization			1	180	MN	111	412	111	412			

SACRAMENTO ARMY DEPOT, CALIFORNIA

\$412,000

Sacramento Army Depot is located at Sacramento, California. The mission of this installation is to store, repair and overhaul military hardware. The program provides barracks modernization.

Status of Funds

	(\$000)
Funded Program Not in Inventory	0
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
45	Barracks Modernization	20	20

ENLISTED BARRACKS SUMMARY, SACRAMENTO ARMY DEPOT, CA.

	<u>MEN*</u>
Total Requirement	111
Existing Substandard	162**
Existing Adequate	0
Funded, Not in Inventory	0
Adequate Assets	0
Deficiency	111
FY 1974 Program	111
Barracks spaces occupied, 15 Dec 72	106

* 90 square feet per man - permanent party personnel;
72 square feet per man - trainees.

** Includes 162 spaces that can be made adequate

Mr. PATTEN. Where else do you do electronics maintenance?

General COOPER. We do it at Lexington Blue Grass and at Tobyhanna.

Mr. PATTEN. Is there a particular reason to have an electronics maintenance depot on the west coast?

General COOPER. One of the reasons would be, as far as dealing with the Far East and Hawaii and Korea, it saves shipping time. Sacramento is also a very nice area. I think the main reason is shipping time.

SAVANNA ARMY DEPOT, ILL.

Mr. PATTEN. Let us turn to Savanna Army Depot in Illinois.

Insert page 181 in the record.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Savanna Army Depot												
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER Illinois 795		6. STATE/COUNTRY Illinois											
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1918		9. COUNTY (U.S.) Carroll - Jo Daviess	10. NEAREST CITY Clinton, Iowa											
11. MISSION OR MAJOR FUNCTIONS Receipt, storage, renovation, and demilitarization of conventional ammunition and guided missile ammunition components and special weapons materiel. Training in ammunition surveillance and maintenance.				12. PERSONNEL STRENGTH			PERMANENT			STUDENTS			SUPPORTED			TOTAL
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)					
a. AS OF <u>31 Dec 72</u>				14	142	869	6	12								1,043
b. PLANNED (End FY 75)				18	163	697	224	0								1,102
13. INVENTORY																
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)								
a. OWNED		13,102		883		31,991		32,874								
b. LEASES AND EASEMENTS		2		0		0		0								
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>								32,874								
d. AUTHORIZATION NOT YET IN INVENTORY								354								
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								2,746								
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS								9,644								
g. GRAND TOTAL (c + d + e + f)								45,618								
SUMMARY OF INSTALLATION PROJECTS																
PROJECT DESIGNATION																
CATEGORY CODE NO. a	PROJECT TITLE b			Page No c	TENANT COMMAND d	UNIT OF MEASURE e	AUTHORIZATION PROGRAM f		FUNDING PROGRAM g							
				PRIORITY			SCOPE h		ESTIMATED COST (\$000) i		SCOPE j		ESTIMATED COST (\$000) k			
721	67 - EM Barracks w/Mess			57	182	MN	74		859		74		859			
724	49 - Bachelor Officer Quarters			56	183	MN	100		1,774		100		1,774			
812	66 - Security Lighting			27	184				113				113			
	Total								2,746				2,746			

736

SAVANNA ARMY DEPOT, ILL., \$2,746,000

Savanna Army Depot is located near Clinton, Iowa. The mission of this installation is the receipt, storage, renovation, and demilitarization of conventional ammunition and guided missile ammunition components and special weapons materiel and to train personnel in ammunition surveillance and maintenance. The program provides barracks with dining facilities, bachelor officer quarters, and security lighting.

Status of funds

	<i>Thousands</i>
Funded program not in inventory.....	\$354
Unobligated projects, Mar. 31, 1973 (actual).....	0
Unobligated projects, June 30, 1973 (estimated).....	0

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
EM barracks w/mess.....	\$50	3
Bachelor officer quarters.....	60	3
Security lighting.....	6	0

Enlisted barracks summary, Savanna Army Depot, Ill.

	¹ Men
Total requirement.....	83
Existing substandard.....	296
Existing adequate.....	0
Funded, not in inventory.....	0
Adequate assets.....	0
Deficiency.....	83
Fiscal year 1974 program.....	74
Barracks spaces occupied, May 8, 1973.....	125

¹ 90 square feet per man—permanent party personnel; 72 square feet per man—trainees.

Bachelor officer quarters summary, Savanna Army Depot, Ill.

	Men
Total requirement.....	229
Existing substandard.....	96
Existing adequate.....	0
Funded, not in inventory.....	0
Adequate assets.....	0
Deficiency.....	229
Fiscal year 1974 program.....	100
Occupying BOQ's, May 8, 1973.....	90

Mr. PATTEN. What are your long-term plans for utilization of Savanna?

General COOPER. Long term, we are reexamining the Savanna Army Depot as part of what I referred to earlier as TOAMAC II. Savanna Army Depot is in the lower priority of our bases to be retained.

Mr. NICHOLAS. Is this why you rated the barracks and bachelor officers project priorities 57 and 56?

General COOPER. That is correct.

Mr. PATTEN. Will you have 1,289 personnel here at the end of fiscal year 1975, do you think?

General COOPER. We may well have that number at the end of fiscal year 1975, but we won't know until the completion of TOAMAC II.

Mr. PATTEN. What is the function of the military personnel stationed here for whom you are requesting barracks and officers quarters?

General COOPER. These people, for example, include the MP's that guard the depot. The ammunition school is also located at Savanna. The barracks are primarily for the MPs and the BOQ's for both civilians and military people whom we send to the ammunition school.

SIERRA ARMY DEPOT, CALIFORNIA

Mr. PATTEN. Let us turn to Sierra Army Depot, California.

Insert page 185 in the record.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		FY 1974 MILITARY CONSTRUCTION PROGRAM		3. INSTALLATION Sierra Army Depot								
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER California 815			6. STATE/COUNTRY California								
7. STATUS Active			8. YEAR OF INITIAL OCCUPANCY 1942			9. COUNTY (U.S.) Lassen		10. NEAREST CITY Reno, Nevada - 60 miles South						
11. MISSION OR MAJOR FUNCTIONS The primary mission of the Depot is receipt, storage, maintenance, renovating and distribution of ammunition and components, and general supplies. Receipts, storage and maintenance in special weapons material. Restoration of conventional, guided missile and special weapons ammunition to a serviceable condition. Surveillance includes the observations, test, study, grading and classification of ammunition and special weapons. Material and guided missiles in movement, storage and use with respect to serviceability hazard and rate of deterioration.				12. PERSONNEL STRENGTH		PERMANENT			STUDENTS		SUPPORTED		TOTAL (9)	
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)			
				a. AS OF 31 Dec 72		23	178	1,022						1,223
				b. PLANNED (End FY 75)		33	184	869						1,086
				13. INVENTORY										
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)						
a. OWNED		81,287		56		38,722		38,778						
b. LEASES AND EASEMENTS		16,284		0		32,204		32,204						
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								70,982						
d. AUTHORIZATION NOT YET IN INVENTORY (Exclusive of family housing - \$2,120)								2,889						
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								380						
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS								6,092						
g. GRAND TOTAL (c + d + e + f)								80,343						
SUMMARY OF INSTALLATION PROJECTS														
PROJECT DESIGNATION														
CATEGORY CODE NO.	PROJECT TITLE	Page No	TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM			FUNDING PROGRAM						
					SCOPE	ESTIMATED COST (\$000)	SCOPE	ESTIMATED COST (\$000)						
a	b	c	d	e	f	g	h							
812	47 - Security Lighting	26 186		LF		380		380						

SIERRA ARMY DEPOT, CALIF., \$380,000

Sierra Army Depot is located 36 miles southeast of Susanville, Calif., and 60 miles north of Reno, Nev. The mission of this installation is to receive, store, maintain, renovate, and distribute ammunition and components and general supplies; receive, store, and maintain special weapons material; and restoration of conventional guided missile and special weapons ammunition. The program provides security lighting.

Status of funds

	<i>Thousands</i>
Funded program not in inventory-----	\$2, 889
Unobligated projects, Mar. 31, 1973 (actual)-----	2, 889
Unobligated projects, June 30, 1973 (estimated)-----	0

DESIGN INFORMATION

Project	Design cost (thousands)	Percent complete Apr. 30, 1973
Security lighting-----	\$19	25

Mr. PATTEN. I have no questions.

WHITE SANDS MISSILE RANGE, NEV.

Mr. PATTEN. Let us turn to White Sands Missile Range, Nev.
Insert page 187 in the record.
[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION White Sands Missile Range							
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER New Mexico 955		6. STATE/COUNTRY New Mexico						
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1945		9. COUNTY (U.S.) Otero, Sierra, Lincoln & Socorro	10. NEAREST CITY Las Cruces - 28 miles Southwest						
11. MISSION OR MAJOR FUNCTIONS A national Range performing test and evaluation of missile and rocket systems and related material. Provides specialized technical support of all range users, including Army, Navy, Air Force and Systems contractors.		12. PERSONNEL STRENGTH				TOTAL (9)					
		PERMANENT		STUDENTS		SUPPORTED					
		OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)		
		a. AS OF 31 Dec 72	304	1,492	4,391	0	6	34	138	375	6,740
		b. PLANNED (End FY 75)	299	1,643	4,332	0	0	0	0	0	6,274
		13. INVENTORY									
		LAND	ACRES (1)	LAND COST (\$000) (2)	IMPROVEMENT (\$000) (3)	TOTAL (\$000) (4)					
a. OWNED	1,340,508	95	165,897	165,992							
b. LEASES AND EASEMENTS	419,921	1*	0	1							
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72					165,993						
d. AUTHORIZATION NOT YET IN INVENTORY					3,642						
e. AUTHORIZATION REQUESTED IN THIS PROGRAM					4,771						
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS					9,833						
g. GRAND TOTAL (c + d + e + f)					184,239						
SUMMARY OF INSTALLATION PROJECTS											
PROJECT DESIGNATION											
CATEGORY CODE NO. a	PROJECT TITLE b	Page No c	TENANT COMMAND d	UNIT OF MEASURE e	AUTHORIZATION PROGRAM		FUNDING PROGRAM				
					SCOPE f	ESTIMATED COST (\$000) g	SCOPE h	ESTIMATED COST (\$000) i			
390	230 - Multiple Target Launch Complex	42 188				467		467			
390	252 - SAM-D Remote Area Test Facilities	43 189				116		116			
721	256 - Barracks Modernization	1 190		MN	486	670	486	670			
740	248 - Post Library	25 191		SF	8,000	339	8,000	339			
740	251 - Addition to Bell Gymnasium	39 192		SF	3,473	157	3,473	157			
841	255 - Water Wells	45 193				316		316			
911	217 - Land Acquisition - Phase I	11 194		AC	71,159	2,706	71,159	2,706			
	Total					4,771		4,771			

WHITE SANDS MISSILE RANGE, NEW MEXICO

\$4,771,000

White Sands Missile Range is located 28 miles northeast of Las Cruces, New Mexico. This installation is a national range with a mission to test and evaluate missile and rocket systems and related material. It supports all range users including Army, Navy, Air Force and systems contractors. The program consists of a multiple target launch complex, a Sam D remote testing facility, barracks modernization, a post library, an addition to the gymnasium, water wells and land acquisition.

Status of Funds

(\$000)

Funded Program Not in Inventory	3,642
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
230	Multi Target Launch Complex	40	30
252	Sam D Remote Test Facs	9	25
256	Barracks Modernization	46	20
248	Post Library	23	30
251	Gymnasium Add	20	5
255	Water Wells	29	30
217	Land Acquisition Phase I	N/A	5

ENLISTED BARRACKS SUMMARY, WHITE SANDS, NEW MEXICO

MEN*

Total Requirement	1,191
Existing Substandard	726**
Existing Adequate	213***
Funded, Not in Inventory	0
Adequate Assets	213
Deficiency	978
FY 1974 Program	486
Barracks spaces occupied, 15 Mar 73	680

* 90 square feet per man permanent party personnel;
72 square feet per man trainees.

** Includes 486 spaces that can be made adequate

*** Includes 5 in private housing

LAND ACQUISITION PHASE I

Mr. PATTEN. You are requesting phase I of a land acquisition program here. This phase involves the acquisition of privately owned lands and mining claims at this range, is that correct?

General COOPER. That is correct, sir.

Mr. PATTEN. What would phase II involve?

General COOPER. Phase II involves getting lands from the State. The initial stage is to acquire title to the privately owned lands. Within the total complex, we have both State-owned lands and privately owned lands.

Mr. PATTEN. You have had, since fiscal year 1971, authorization to acquire title to this land by exchange. Can anyone tell us what progress has been made?

General COOPER. We have Mr. Lockwood here, who has looked into this in great detail. I would like to refer that question to him.

Mr. LOCKWOOD. Sir, since that authorization in 1970, the Army has acquired about 1,900 acres of State-owned land by exchange.

Mr. PATTEN. No private land?

Mr. LOCKWOOD. No, sir.

Mr. TALCOTT. How many more acres will you acquire besides the 71,000 that you are acquiring by purchase?

Mr. LOCKWOOD. There is a total of 341,900 acres of State-owned land. Our best estimate right now is that about 198,000 acres of that we will have to pay for, and the balance we will be able to acquire by exchange. This is subject to change in negotiations.

Mr. TALCOTT. Is that the same quality of land as the privately owned land?

Mr. LOCKWOOD. The privately owned land in this year's program is 71,159 acres.

Mr. TALCOTT. About \$300 an acre?

Mr. LOCKWOOD. I believe it works out to about \$33 an acre as the unit cost.

Mr. TALCOTT. The Government land would cost that much or more?

Mr. LOCKWOOD. It is roughly comparable land, yes, sir. The range land varies in value from \$10 to \$40 an acre. About 2,000 acres of land would go up to an appraised value of \$150 an acre.

Mr. TALCOTT. Do we deed this land back to private owners for grazing?

Mr. LOCKWOOD. No, sir. We do not propose to do that.

Mr. TALCOTT. Will the State-owned lands be used for anything? Will we lease it back to the State for recreational use?

Mr. LOCKWOOD. No, sir. There would be exclusive military use and control.

Mr. TALCOTT. While we are closing bases all over the world, we are acquiring more acreage here.

Mr. LOCKWOOD. Sir, the land we are talking about, both privately owned and State owned, is under our control now, and has been for about 30 years. We have been leasing it all that time, both the State-owned lands and the privately owned lands.

Mr. TALCOTT. After 30 years, it suddenly becomes important to buy it?

Mr. LOCKWOOD. Sir, from my research of the record, for at least 15 years, at various levels within the Army and the Department of Defense, there have been proposals to acquire the fee and extinguish the mining claims on this land. Quite honestly, there has been difficulty in competing with the other projects in the military construction program each year.

Mr. TALCOTT. What is the priority this year?

General COOPER. The priority is No. 11, sir.

Mr. TALCOTT. Then it came up a little bit this year. Before, it was about 32.

Mr. LOCKWOOD. It is a long dormant area that we should straighten out at the Federal level. There is checkerboard ownership—Federal Government, State, and privately owned.

Mr. TALCOTT. How often is it used?

Mr. LOCKWOOD. Constantly. There is an estimated \$60 million worth of instrumentation and improvements on the general lands in question; and specifically on the lands we are talking about, there is an estimated \$10 million worth of improvements.

Mr. TALCOTT. By "constant use," you mean daily?

Mr. LOCKWOOD. Daily, yes, sir.

GREEN RIVER PERSHING LAUNCHES

Mr. MCKAY. Does this change in priority relate somewhat to the recent problem you had with impaction of the firing at Black Mesa and Green River and overflights into White Sands?

Mr. LOCKWOOD. Our operational activities have been unimpeded. We have good use rights now based on the leases we have. Of course, most of the range is public domain. I would say no.

Mr. MCKAY. Have you any information as to what has happened?

General COOPER. No, sir.

Mr. MCKAY. You recently have had some fallout from the missiles on their way over?

General COOPER. I do not believe so. I think the legal actions that have been taken in connection with the land at White Sands are now reaching the point that we should clean up the ownership. We have had full use of these lands for a long time.

Part of the fundamental Department of Defense policy is to acquire nonfederally owned lands which are part of a permanent Federal installation.

Mr. MCKAY. I suppose you are aware of the incident that happened.

General COOPER. Yes, sir.

Mr. MCKAY. Will you give me a report on the status and the result of that incident, and whether you are continuing with that program of firing?

General COOPER. I cannot give you an answer now. We can provide an answer later, unless Colonel Sell happens to know.

Colonel SELL. I know of one incident I was told about a year ago. It impacted in Mexico, as I understand. I do not know the details of it.

Mr. MCKAY. Apparently they had one firing out of Green River which went awry, or part of it did, and a cow or something got hit.

I do not remember all the details. There was some threat to shut down the whole operation out of Green River and Black Mesa.

Colonel SELL. That was a year ago. We have been testing some since then.

Mr. MCKAY. It depends on what you call "some," I guess. I would be interested to know the status of that, and what the findings were, and if it had any relationship to your priorities for acquiring lands that fall in that line of operation.

[The information follows:]

The Pershing missile operation, test and evaluation, and annual service practice firings have been conducted at White Sands Missile Range, N. Mex., since August 20, 1963. One hundred ninety-two missiles have been launched to date. The firings are conducted from three launch areas. They are: Fort Bliss, Tex., Blanding, Utah, and Green River, Utah. The launch area is selected to provide the capability to demonstrate the missile performance at various target distances.

During the firings on September 18, 1972, from Gyser site near Green River, Utah, a small piece (32 pounds, 30 by 18 by 12 inches) was recovered in the vicinity of Socorro, N. Mex. This piece was identified as a part of the second stage motor case which was detached at the time of thrust reversal and "case vent." "Case vent" is a rupturing of the second stage motor case by explosive charges to rapidly reduce motor chamber pressure. This action is taken to increase accuracies of payload and is a normal operation of a tactical weapon system. The piece from the firing on September 18, 1972, was the first indication that Pershing debris was falling outside of the preestablished safety area.

The Pershing firing on October 11, 1972, included an adjustment in the programmed flight path to preclude the debris from impacting near Socorro, N. Mex. A piece (15 pounds) was recovered on this firing also but was farther from the small community of Socorro. This piece was identified as part of the second stage motor case.

The firing series was concluded with the last two missiles being fired with "case vent" disabled.

An analysis of the causes of the incident and size of the safety area required is being conducted. From an analysis of available data the debris can be contained within the co-use safety areas with adjustments in missile flight path and the launch site at Green River, Utah. The fall series of Pershing launchings are now planned from Green River, Utah, launch site. However, if it is determined from further analysis that the safety area needs to be enlarged, then negotiations will be initiated for lease of additional co-use safety area. This incident is not related to the priority of the fiscal year 1974 private land acquisition project.

Mr. PATTEN. How much is the entire program expected to cost?

Mr. LOCKWOOD. It will gross about \$8 million. That will include the administrative costs and contingencies. The administrative costs will come from operation and maintenance money. That overall figure will be subject to some deviation based on how much land we can exchange with the State and how much we must buy.

Mr. PATTEN. Can you justify this acquisition based on the present benefits and future savings?

Mr. LOCKWOOD. No, sir, not primarily based on the economics.

Mr. PATTEN. Why do you need to acquire this land rather than continuing to lease it?

Mr. LOCKWOOD. General Cooper just outlined several policies. Generally it is our policy to have fee or permanent easement on any lands on which we put permanent improvements. It is also our policy to acquire lands in fee that we have an indefinite long-range requirement for.

Mr. PATTEN. If it is agreeable, we will adjourn until 2 p.m.

AFTERNOON SESSION

LAND ACQUISITION—WHITE SANDS

Mr. SIKES. The committee will come to order.

We were discussing the White Sands Missile Range. Had you completed the discussion of the land acquisition?

Bring me up to date on the land acquisition. How much land are you preparing to acquire? What are the reasons you need it?

General COOPER. Mr. Lockwood has addressed that in some detail.

Mr. SIKES. Briefly tell me what the situation is.

Mr. LOCKWOOD. Mr. Chairman, of the acreage included in the White Sands Missile Range, 71,159 acres are privately-owned. A recommended project this year is to acquire fee interests in that land and to extinguish all mining claims on the White Sands Missile Range.

Mr. SIKES. Will you get title to the land?

Mr. LOCKWOOD. Yes, sir. Fee title.

Mr. SIKES. Of 71,000 acres?

Mr. LOCKWOOD. Yes, sir.

Mr. SIKES. At what cost?

Mr. LOCKWOOD. The estimated total cost for the entire project is \$2,706,000.

Mr. SIKES. How much is that per acre?

Mr. LOCKWOOD. It would average about \$33 per acre.

Mr. SIKES. Why is it necessary to buy it? Why is it necessary to acquire title rather than to continue to lease it?

Mr. LOCKWOOD. We have an indefinite long term requirement for this acreage and we have placed \$10 million worth of permanent improvements on these lands and have plans to place additional permanent improvements on this land. Our policy is that land of that type we generally acquire in fee or perpetual easement.

General COOPER. Phase 2 of this program presumably would come the following year to obtain the State lands.

Mr. SIKES. Would that be acquired by purchase or exchange?

General COOPER. Both, sir.

Mr. SIKES. How many acres involved in that?

General COOPER. 344,000 acres.

Mr. SIKES. Show me on the map what you are talking about.

Mr. LOCKWOOD. This is the White Sand Missile Range. Checkboarded throughout this range are the State and privately owned lands. We have separate maps which show in color what the privately-owned lands and the State-owned lands look like. This gives you a better visualization of that. We put these together. The private lands are in green and the State-owned lands are hatched in red. The balance of the land is public domain, U.S. Government-owned.

Mr. SIKES. Do the private owners have access to their property now?

Mr. LOCKWOOD. No, sir, they do not.

Mr. SIKES. Are they compensated by a lease arrangement?

Mr. LOCKWOOD. Yes, sir, they are.

Mr. SIKES. How much are the leases per acre?

Mr. LOCKWOOD. If I may first give the total, on the private-owned lands it runs about \$80,000 a year. That would be a little over a \$1 per year per acre.

Mr. SIKES. How is the State compensated for the use of State lands?

Mr. LOCKWOOD. We also pay them, sir. The annual rental on that land runs about \$237,000 per year. Most of these leases——

Mr. SIKES. How much is that per acre?

General COOPER. A little less than a \$1 an acre.

Mr. SIKES. What is the status of the leases?

Mr. LOCKWOOD. Most of these are now the subject of condemnation cases and it may be settled for a little more or considerably higher.

Mr. SIKES. If the condemnation results in an unusually high figure, do you propose to continue with the acquisition or will you continue your lease basis?

Mr. LOCKWOOD. Because of the checkerboard fashion here and the administrative problems related to the privately owned and State-owned lands, we would like to clear this up, once and for all. We would like to acquire all the land in fee and extinguish all mineral rights.

Mr. SIKES. What are the overall distances reflected there north and south and east and west in the White Sands missile range?

Colonel SELL. One hundred miles from north to south; 40 miles east and west.

Mr. SIKES. Have the present owners been compensated for not being allowed to continue grazing on their lands?

Mr. LOCKWOOD. We have a legal opinion by the Judge Advocate General of the Army indicating that the compensation paid through June 30, 1970, adequately compensated them for losses incurred as a result of their no longer having the grazing rights. These grazing permits were issued under the Taylor Grazing Act.

Mr. SIKES. A lot of this land does not have any grazing on it, does it?

Mr. LOCKWOOD. It is low-grade grazing land. It carries on the average of 15 head per section, per 640 acres. It is not very lush.

General COOPER. As I understand it, the problem is in deciding what the true value of the private property is. The people that own the land want to consider the fact that they did have these grazing rights. They consider them part of the value of their land, whereas the grazing rights really belonged to, or were accorded by, the Government. It is an adjudication of this difference——

Mr. SIKES. How many of them would run cattle on it if you gave them an opportunity?

General COOPER. Not very many.

Mr. SIKES. That is right. I have seen a lot of that land.

SAM-D SUPPORT FACILITIES

You are requesting facilities in support of SAM-D. Can you not use existing facilities?

Colonel SELL. We have no facilities now in what you might consider the impact area. Fifty, 70, and 90-mile impact area. That is where we want to place the SAM-D equipment and have our target missiles come in. We do not now have the appropriate facilities in those places.

Mr. SIKES. Are there any obstacles? Is there any development anywhere within the perimeter of the White Sands range that would prevent full utilization of it as a testing area for long-range weapons?

Colonel SELL. No, sir.

Mr. SIKES. Are all of the projects here except the barracks modernization of lower priority than the land acquisition?

General COOPER. They are all listed as lower priority; yes, sir.

Mr. SIKES. Give us briefly the reason for a project this year and provide for the record fiscal year 1970 testimony and comment on your need for the record.

General COOPER. Yes, sir.

[The justification follows:]

FUTURE CONSTRUCTION REQUIREMENTS

(Extract of fiscal year 1970 hearings, page 388)

Mr. CEDERBERG. What are we looking for down the road as far as additional expenditures of this type for construction of SAM-D?

Colonel TOBEY. You will have additional facilities to handle the tactical units as they emerge.

Mr. CEDERBERG. In other words, as far as the testing is concerned, this is about it?

Colonel TOBEY. No, sir. This is the testing of the first prototype.

Mr. CEDERBERG. So you will have more construction funds just for testing?

Colonel TOBEY. Yes, sir, to provide facilities for testing.

Mr. CEDERBERG. Can you give us an estimate of how much that might be?

Colonel TOBEY. That is the \$1.3 million that we have.

Mr. CEDERBERG. Is that over and above the request that you have in fiscal 1970?

Colonel TOBEY. No; that is the fiscal 1970 request.

Mr. CEDERBERG. What about beyond fiscal 1970?

Colonel TOBEY. We see nothing more than that.

Mr. CEDERBERG. You see nothing more for testing?

Colonel TOBEY. No, sir.

Mr. CEDERBERG. Then you anticipate you will be ready for whatever is necessary in the way of actual deployment with the troops?

Colonel TOBEY. Yes, sir.

Mr. CEDERBERG. That is all I have.

Mr. SIKES. Further questions?

Mr. JONAS. Yes, Mr. Chairman.

Page 391:

FISCAL YEAR 1970 REQUEST FOR SAM-D FACILITIES

Mr. CEDERBERG. The adjusted request for SAM-D facilities was reduced to \$1.281 million?

General DALRYMPLE. Yes, sir, from \$2.054 million.

Mr. CEDERBERG. Will the facilities you are requesting here complete the development of the test facility for the SAM-D program at White Sands?

General DALRYMPLE. So far as MCA is concerned; yes, sir.

Mr. CEDERBERG. From your end it will be finished?

General DALRYMPLE. That is correct, sir.

Mr. CEDERBERG. Has there been any slippage in the SAM-D program since it was discussed in May? Everything is on schedule?

Colonel CASTRO. Yes, sir.

(End of fiscal year 1970 hearings extract)

The facilities requested for the fiscal year 1970 MC program were for the advanced development phase of SAM-D. This is the period during which system and program definition are refined and validated. Our current process defines this period as contract definition. During validation, the emphasis is upon hardware demonstration and testing. Component prototyping and system and subsystem are highlighted. The statements by Colonel Tobey and General Dalrymple, above, refer to this period in the SAM-D program which was initiated in May 1967 and lasted through February 1972. At the time of these statements it was envisioned that the \$1.3 million would be the total remaining requirement for the test facility construction.

The last year of the advanced development phase (1971) was devoted to a detailed engineering development or full-scale development definition phase which impacted not only the design of prototype engineering development fire sections, but also the test program and facilities required. Engineering development or full-scale development is defined as that phase during which the system is fabricated and tested. Detailed information on the total system is completed. Advanced production engineering is conducted. As the system progresses toward the next phase, the transition to full production is planned. In making the final transition to full production the importance of progressive testing up to this point cannot be overemphasized. These tests simply determine the go or no-go status of the system.

Approval to enter the 5-year engineering development program for SAM-D was granted the Army by the Secretary of Defense in February 1972. A 5-year incrementally funded contract was signed and the engineering development phase began in March 1972. The program has successfully completed its first year of engineering development within programed costs and schedules. The funds for the multiple target launch complex are needed now so that test firings can continue as planned without engineering development schedule slippage and cost growths.

Mr. SIKES. Why do you want it now?

General COOPER. We feel the SAM-D is sufficiently far along in development that this project is needed to continue the program. We have about \$194 million programed for R.D.T. & E. in fiscal year 1974.

Mr. SIKES. Will this project complete the requirement for SAM-D?

General COOPER. As far as facilities are concerned?

Mr. SIKES. Yes.

General COOPER. Yes, sir, it will complete the requirements as far as any remote area test facilities are concerned.

Mr. SIKES. Will it complete all the requirements for SAM-D facilities?

General COOPER. At White Sands or everywhere?

Mr. SIKES. At White Sands.

General COOPER. As far as I know.

Colonel SELL. Yes, sir. I believe you may have referred to the facilities in fiscal year 1970, where we had to have a facility on the launch line. This is now testing that equipment out with the target missiles overflying.

MULTIPLE TARGET LAUNCH COMPLEX

Mr. SIKES. On the multiple target launch complex, why are such launches necessary? Why can't you accomplish the required tests with the present facilities?

Colonel SELL. Sir, we cannot launch more than one target missile at a time with the existing facilities at White Sands. The SAM-D requires that we have at least four targets flying over simultaneously and this requires that we provide this capability. We do not now have it at White Sands.

Mr. SIKES. Show us on the map the present and proposed facilities for the launch complex.

Colonel SELL. The present launch facility is approximately here [indicating]. That is one at a time. It launches and goes to the east, swings around the launch line and goes out to the range. What we want to do is locate this capability of firing four target missiles simultaneously approximately here [indicating]. This will enable us to fire uprange with no safety problems.

Mr. SIKES. What specific programs will use the multitarget launch complex?

Colonel SELL. SAM-D, sir, and the variable speed training target.

Mr. SIKES. Where are you testing these or similar missiles at this time?

Colonel SELL. SAM-D has been tested at White Sands. We are not now testing the variable speed training target.

Mr. SIKES. What is the urgency of the project?

Colonel SELL. Time is involved in the testing. Overall SAM-D testing requires that we have this construction in the fiscal year 1974 program, both the multitarget launch facility and the SAM-D remote area test facility.

Mr. SIKES. For what systems will it be required initially, and when is the testing schedule to begin?

General COOPER. The testing schedule begins in fiscal year 1976 and 1977.

Mr. SIKES. What is the construction period on the project?

General COOPER. I don't know specifically. Probably about a year.

Mr. SIKES. Do you feel that you are asking for it before you actually require it?

General COOPER. No, sir. We will be well into fiscal year 1974 before we even get the program approved. We want the facilities in fiscal year 1976 and 1977. We need time in the design, plus the time from design to award of contract as well as actual construction time. I think our request is consistent with the need. If you delay it another year, the schedule might be much too tight.

Mr. SIKES. Do you want to add to that?

Colonel SELL. Only to say the same thing. We have historically taken about a year or a year and a half for facilities there at White Sands.

WATER WELLS

Mr. SIKES. You are asking for new water wells. How long will they meet your requirements?

Mr. CARTON. We expect that the wells will meet the requirement for about 5 years.

Mr. SIKES. Is there apprehension about your ability to bring in new wells as they are needed?

Mr. CARTON. No, sir. We feel that we will be able to obtain new wells at White Sands.

Mr. SIKES. At what depth are you getting water?

General COOPER. Something like 800 feet.

Mr. POULSON. 800 to 1,000 feet will be the depth of well required.

CONSTRUCTION PHASING

Mr. SIKES. Could you provide for the record an expansion on your previous answer with regard to the phasing of the construction and the initiation of the R. & D. testing?

General COOPER. Yes, sir.

[The information follows:]

A construction completion date of December 1974 is required for the multiple target launch complex in order to provide the time necessary for system check-out, trial runs, and tracking missions which must be completed prior to the first simultaneous engagement test firing in May 1975. The down-range facilities have been requested for the same time period. Actual use of down-range facilities (first firings) are scheduled to begin in mid-1976 (July).

System development milestones are as follows:

(a) September 1973

Completion of modifications to the SAM-D Advanced Development Fire Control Group. The fire control group will then be shipped to WSMR to be reassembled as the Demonstration Model Fire Control Group.

(b) February 1974

Completion of three shortburn SAM-D missile firings consisting of the flyout of the missile cannister and initial trajectory measurements.

(c) May 1974

Completion of checkout of Demonstration Model Fire Control Group at WSMR.

(d) May 1974

Initiate a firing program of 16 engineering development model SAM-D missiles.

(e) May 1975

Completion of the 16 missile firing program with a flight against formation targets. This requires use of the multiple target launch complex.

YUMA PROVING GROUND, ARIZ.

Mr. SIKES. Gentlemen, I think we can take up the Yuma Proving Ground, Ariz.

Please insert in the record page 195.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Yuma Proving Ground									
4. COMMAND OR MANAGEMENT BUREAU United States Army Materiel Command			5. INSTALLATION CONTROL NUMBER Arizona 985		6. STATE/COUNTRY Arizona								
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1943		9. COUNTY (U.S.) Yuma	10. NEAREST CITY Yuma - 32 miles Southwest								
11. MISSION OR MAJOR FUNCTIONS Provides administrative and logistical support for US Army Electronics Command Activity, Lockheed Plant Activity, Medical Detachment Activity and Army Materiel Command Liaison Offices. The installation activities plan, conduct, record and report test results on material and equipment; perform desert environmental testing and support other research and development activities as directed.				12. PERSONNEL STRENGTH									
				PERMANENT			STUDENTS		SUPPORTED		TOTAL (9)		
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)		CIVILIAN (8)	
				a. AS OF <u>31 Dec 72</u>	82	498	842						1,422
				b. PLANNED (End FY 75)	84	609	760	0	0	0	0	0	1,453
				13. INVENTORY									
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)					
a. OWNED		1,034,947		0		31,573		31,573					
b. LEASES AND EASEMENTS		8,516						0					
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>									31,573				
d. AUTHORIZATION NOT YET IN INVENTORY									4,816				
e. AUTHORIZATION REQUESTED IN THIS PROGRAM (Exclusive of family housing - \$36)									6,472				
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS									8,208				
g. GRAND TOTAL (c + d + e + f)									51,069				
SUMMARY OF INSTALLATION PROJECTS													
PROJECT DESIGNATION					TENANT COMMAND		AUTHORIZATION PROGRAM		FUNDING PROGRAM				
CATEGORY CODE NO. a	PROJECT TITLE b	Page Priority No.			UNIT OF MEASURE d	SCOPE e	ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h				
390	105 - KOFA Range Improvements - Phase I	12	196				2,686		2,686				
721	85 - EM Barrack Addition	1	197		MN	238	1,526	238	1,526				
740	48 - NCO Open Mess	24	198		SF	6,500	483	6,500	483				
812	104 - Expansion of Electrical Distribution System	44	199		LF	333,300	1,777	333,300	1,777				
	Total						6,472		6,472				

752

YUMA PROVING GROUND, ARIZONA

\$6,472,000

Yuma Proving Ground is located 32 miles northeast of Yuma, Arizona. The mission of this installation is to perform engineering and service tests of research and development projects; to conduct surveillance and acceptance tests on production material; and to support other research and development activities. The program provides the first phase of improvement to the KOFA range, addition to barracks, an NCO open mess and expansion to the electrical distribution system.

Status of Funds

(\$000)

Funded Program Not in Inventory	4,816
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
105	KOFA Range Impr Ph I	120	0
85	EM Barracks Addition	82	25
48	NCO Open Mess	34	25
104	Electrical Dist Sys Exp	96	0

ENLISTED BARRACKS SUMMARY, YUMA PROVING GROUNDS, ARIZONA

MEN*

Total Requirement	449
Existing Substandard	596**
Existing Adequate	53***
Funded, Not in Inventory	0
Adequate Assets	53
Deficiency	396
FY 1974 Program	238
Barracks spaces occupied, 15 Mar 73	315

* 90 square feet per man - permanent party personnel;
72 square feet per man trainees.

** Includes 120 spaces that can be made adequate

*** Includes one in private housing

Mr. SIKES. The request is for \$6,472,000 for range improvements, enlisted men's barracks additions, an NCO mess, and expansion of the electrical distribution system.

Are any of the projects requested here to support the relocation of any activities from Edgewood Arsenal or Aberdeen Proving Ground?

General COOPER. Not that I know of, sir. No, sir.

Mr. SIKES. Would you check that for the record?

General COOPER. Yes, sir.

[The information follows:]

The requested projects are not to support the relocation of any activities from Edgewood Arsenal or Aberdeen Proving Ground.

Mr. SIKES. Are any of the facilities provided in the fiscal year 1973 program being utilized for functions which previously have been transferred from Aberdeen?

Colonel SELL. Perhaps you could say the igloos indirectly support the aircraft test firing that we have done there. The basic reason is in our long-range artillery testing where we need space for artillery rounds.

KOFA RANGE IMPROVEMENTS

Mr. SIKES. What is the total program for improvements for KOFA Range?

General COOPER. In addition to what we have this year, we have a phase 2 program of \$3,800,000, primarily for range roads.

Mr. SIKES. Show us on the map what you propose in phase 1.

Colonel SELL. This stretchout chart shows the east-west firing range with the firing line being here [indicating]. There are several improvements, including a reorientation of the firing line bombproof observation shelters for people to be protected and observe the impact.

Mr. SIKES. What type of firing is this?

Colonel SELL. Artillery firing. There are some powerline improvements here, and there is a soft-impact area approximately here—plowed ground area—where we can recover the impacted artillery shells to see what happened to them.

Mr. SIKES. Explain the remainder of the map. What is the horse-shoe-shaped sketch?

Colonel SELL. This horseshoe shape outlines the entire Yuma Proving Ground. The portion I pointed out to you stretches from here to approximately there. This is our KOFA Artillery Test Firing Range. This is the Cibola Aircraft Firing Range. There are some other drop ranges parachute testing.

Mr. SIKES. Tell us about the urgency of the project. The priority is 12, in the bottom 20 percent of the request. What is the urgency?

Colonel SELL. We cannot use this portion of the firing range at the present time because it is close to some buildings here. We have to fire from other locations farther north along this firing front, which is inefficient. Whenever we change direction of the gun tube, we have to realine our coils in front of the tubes, etc. It takes time and it is inefficient in operation. Our workload is high and we feel this justifies the urgency or realining this range now so that they can operate more effectively.

Mr. SIKES. That will be a permanent operation? You anticipate there will be no changes required in the foreseeable future insofar as its usefulness is concerned?

Colonel SELL. Once these improvements are made it will be very useful to us; that is correct.

Mr. SIKES. This will be adequate for the purpose? It will complete the requirements?

Colonel SELL. No, sir. There is a second phase which principally consists of road improvements. These roads now are dusty roads and not paved; not graveled. These are ineffective to us at the present time.

U.S. ARMY SECURITY AGENCY, ZONE OF INTERIOR

Mr. SIKES. Let us take up the U.S. Army Security Agency and place page 200 in the record.

[The information follows:]

U.S. Army Security Agency, Zone of Interior, Vint Hill Farms Station, Va.

Prior authorization.....	
Proposed authorization.....	\$287, 000
Proposed funding.....	287, 000

VINT HILL FARMS STATION, VA.

Mr. SIKES. Turn to Vint Hill Farms. Place page 210 in the record.
[The information follows:]

1. DATE 1 Feb 73		2. DEPARTMENT ARMY		3. INSTALLATION Vint Hill Farms Station								
4. COMMAND OR MANAGEMENT BUREAU U. S. Army Security Agency			5. INSTALLATION CONTROL NUMBER Virginia 855		6. STATE/COUNTRY Virginia							
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1942		9. COUNTY (U.S.) Faquier	10. NEAREST CITY Warrenton - 10 miles West							
11. MISSION OR MAJOR FUNCTIONS This is a U.S. Army Security Agency installation engaged in Communications Intelligence Activities.			12. PERSONNEL STRENGTH									
			PERMANENT			STUDENTS		SUPPORTED		TOTAL		
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)	
			a. AS OF 31 Dec 72	127	1,237	612						1,976
			b. PLANNED (End FY 75)	129	2,231	419						2,779
13. INVENTORY												
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)				
a. OWNED		721		128		15,241		15,369				
b. LEASES AND EASEMENTS								0				
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								15,369				
d. AUTHORIZATION NOT YET IN INVENTORY								2,084				
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								287				
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$23,112)								16,709				
g. GRAND TOTAL (c + d + e + f)								34,449				
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION					TENANT COMMAND		AUTHORIZATION PROGRAM		FUNDING PROGRAM			
CATEGORY CODE NO. a	PROJECT TITLE b			Page No. c	UNIT OF MEASURE d	SCOPE e	ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h			
871	66 - Storm Drainage			PRIORITY 53	202		287		287			

VINT HILL FARMS STATION, VA., \$287,000

Vint Hill Farms Station is located 11 miles east of Warrenton, Va. The mission of this installation is to support the Army Security Agency in its communications and intelligence activities. The program provides for storm drainage.

Status of funds

Funded program not in inventory	-----	\$2,084,000
Unobligated projects, Mar. 31, 1973 (actual)	-----	1,582,000
Unobligated projects, June 30, 1973 (estimated)	-----	0

Design information, project No. 66, storm drainage

Design cost	-----	\$49,000
Percent complete, Apr. 30, 1973	-----	25

Mr. SIKES. The request is for \$287,000. Does this complete the requirement?

General COOPER. Yes, sir.

FORT HUACHUCA, ARIZ.

Mr. SIKES. Take up Fort Huachuca. Place in the record page 204.
[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Fort Huachuca								
4. COMMAND OR MANAGEMENT BUREAU U. S. Army Strategic Communications Command			5. INSTALLATION CONTROL NUMBER Arizona 005		6. STATE/COUNTRY Arizona							
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1951		9. COUNTY (U.S.) Cochise								
				10. NEAREST CITY Sierra Vista								
11. MISSION OR MAJOR FUNCTIONS Provide logistic and administrative support to tenant organizations, including Army Major Field Command (US Army Strategic Communications Command), Army Materiel Command Class II Activity (Army Electronic Proving Ground) and the Army Intelligence School and resources and assistance to Area Army Commanders in support of Army Emergency Plans. Provide training support to active Army and Reserve Component Units.			12. PERSONNEL STRENGTH									
			PERMANENT			STUDENTS		SUPPORTED		TOTAL		
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)	
			a. AS OF <u>31 Dec 72</u>	1,080	5,194	3,297	395	898				10,864
			b. PLANNED (End FY75)	875	4,422	3,244	430	842				9,813
13. INVENTORY												
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)				
a. OWNED		71,841		0		100,287		100,287				
b. LEASES AND EASEMENTS		1,755						0				
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>								100,287				
d. AUTHORIZATION NOT YET IN INVENTORY (Exclusive of family housing - \$2,600)								14,242				
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								6,832				
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$13,428)								44,430				
g. GRAND TOTAL (c + d + e + f)								165,791				
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION					TENANT COMMAND		AUTHORIZATION PROGRAM		FUNDING PROGRAM			
CATEGORY CODE NO. a	PROJECT TITLE b	Page Priority No. c	205	UNIT OF MEASURE d	SCOPE e	ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h				
113	107 - Libby Army Airfield Improvements	15	205	SY	52,485	490	52,485	490				
310	120 - Electronic Test Equipment Facility	47	206	ASA	6,500	293	6,500	293				
721	3 - EW & EM Barracks w/o Mess (Medical)	1	207	MN	160	1,347	160	1,347				
721	136 - Barracks Modernization	1	208	MN	1,208	4,702	1,208	4,702				
	Total					6,832		6,832				

FORT HUACHUCA, ARIZONA

\$6,832,000

Fort Huachuca is located 41 miles east of Bisbie, Arizona and is the Headquarters for the U.S. Army Strategic Communications Command (USASTRATCOM). This command is the principal manager for the Army's portion of the Defense Communications System (DCS), including extensions, restoration, engineering, leasing, installation, and operation of the DCS (Army). This command also provides engineering, installation, and technical support services, as required, for non-DCS communications and operation of the non-DCS communications system as assigned. It provides logistics and administrative support to the Intelligence School. The program includes improvements for Libby Army Airfield, an electronic testing equipment facility, barracks for medical personnel and barracks modernization.

Status of Funds

(\$000)

Funded Program Not in Inventory	14,242
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
107	Libby AAF Improvement	21	10
120	Electronic Test Equip Fac	15	10
3	EM Barracks w/o Mess Med	68	25
136	Barracks Modernization	190	20

ENLISTED BARRACKS SUMMARY, FORT HUACHUCA, ARIZONA

MEN/WOMEN*

Total Requirement	4,412
Existing Substandard	4,592**
Existing Adequate	0
Funded, Not in Inventory	1,166
Adequate Assets	1,166
Deficiency	3,246
FY 1974 Program	1,368
Barracks spaces occupied, 15 Mar 73	3,544

* 90 square feet per man permanent party personnel;
72 square feet per man trainees.

** Includes 1440 spaces that can be made adequate

Mr. SIKES. The request is for \$6,832,000. It includes barracks modernization, an electronics test facility, and Libby Army Airfield improvements.

PROJECTED STRENGTH REDUCED

The long-range projected strength of Fort Huachuca has been reduced considerably as shown in the justifications. Why is this? What is the significance of this?

General COOPER. We believe that the figures are in error. We rechecked the number of civilians as of December 31, 1972 and instead of the 3,799 figure shown on page 204, we believe it is 3,297, about 500 less, which means that the total projected strength as of December 31 is slightly less than the plan for 1975.

[Editor's Note. Page 204 has been amended to show correct figure.]

Mr. SIKES. The hearings last year showed a projected long-range strength of 12,346 total personnel as opposed to 10,954, which you project now. How do you explain that difference?

General COOPER. I cannot do it now. I would have to provide an explanation for the record.

[The information follows:]

The long-range strength of 12,346 shown last year was based on an 840,000-man Army and included TOE units which we planned to station there. As we adjusted to the 804,000 force, units were dropped from the force structure and, as with many installations, we adjusted our stationing plan for Fort Huachuca. Units no longer planned for Fort Huachuca are a military intelligence battalion, a separate military intelligence company, and an engineer battalion.

WATER SUPPLY

Mr. SIKES. Tell us about the water supply; is it adequate?

General COOPER. The water supply as of the moment is adequate. The water supply is one of the reasons for being sure we don't exceed the total population—

Mr. SIKES. Will it continue to support the projected population?

General COOPER. Yes, sir.

Mr. CARTON. At the present time we feel that the water supply is adequate to support this base population. We are continuing our investigation of the water supply. We hope to have a complete report on this by April 1974. We have had a preliminary report which is optimistic about the ability of the water supply to continue.

Mr. SIKES. You are waiting for a permanent report?

Mr. CARTON. A final report on this investigation.

Mr. SIKES. When will that be available?

Mr. CARTON. We expect it in April 1974.

Mr. SIKES. The committee would like to be advised as soon as you have this information.

Mr. CARTON. Yes, we will do so, sir.

LIBBY ARMY AIRFIELD IMPROVEMENTS

Mr. SIKES. Indicate on the map the location of the improvements proposed for the airfield. In the meantime, tell us why they are required.

Colonel COATS. Improvements are to the west end of the main taxiway which serves this runway, which generally runs through the north-

east and southwest, and the other primary runway, which generally runs northwest and southeast. Additionally lighting is required on the taxiway running west from the hangars and also on the taxiway that runs north and south to the security area. The main taxiway was built about 1952 and it was not built to withstand the wheel loads of the aircraft that utilize it now. It is badly deteriorated and needs to be upgraded. The other portion of the project is to provide a permanent parking area to meet the criterion which allows space for 75 percent of the assigned aircraft. Currently there are parking spaces for only 17 aircraft.

Mr. SIKES. Will this complete the requirement?

Colonel COATS. Yes, sir.

Mr. SIKES. I would like to have for the record data on the utilization of the airfield and the accident record.

[The information follows:]

There are 32 fixed wing and 12 rotary wing aircraft assigned at Libby Army Airfield. During an average month, approximately 5,000 day and 1,000 night operations are conducted in support of the post and tenant units at Fort Huachuca, which include STRATCOM, Safeguard communications, the U.S. Army Electronic Proving Ground Aviation Support Division, the Combat Surveillance and Electronic Warfare School, and the U.S. Army Security Agency Test and Evaluation Command.

The following aircraft are assigned:

Fixed wing:		
OV-1	-----	23
U-1A	-----	1
U-6	-----	1
U-8	-----	3
C-47	-----	2
T-41	-----	1
U-21A	-----	1
Total	-----	32
Rotary wing:		
UH-1	-----	7
OH-58	-----	5
Total	-----	12

The number of takeoffs and landings at Libby Army Airfield for the last 3 years is summarized below:

	Calendar year—		
	1970	1971	1972
Fixed wing.....	72,898	62,883	81,769
Rotary wing.....	9,213	6,606	14,950
Total.....	82,111	69,489	96,719

Note: These figures include itinerant military and civilian aircraft.

During fiscal year 1973, Libby Army Airfield has experienced five precautionary landings, two force landings, five incidents, and no accidents.

Mr. SIKES. Does this project have a higher project priority than the one at Fort Belvoir?

General COOPER. I am quite sure it does.

Mr. SIKES. Provide it for the record.

[The information follows:]

The Fort Belvoir, Va. (Davison Army Airfield) helicopter landing facilities project is priority No. 40. Improvements to Libby Army Airfield at Fort Huachuca, Ariz., are priority No. 15.

Mr. SIKES. You have air-conditioning in the barracks. This committee recognizes the importance of air-conditioning where it is needed, but here you have a 5,000-foot altitude and cool nights. How much of the year would you require air-conditioning?

General COOPER. Under the basic DOD criteria for construction, Fort Huachuca qualifies because of the dry bulb as opposed to the wet bulb temperature. The dry bulb measures how hot it is and the wet bulb how hot and muggy it is. The area experiences 1,280 hours of 80 degrees Fahrenheit or higher temperature, dry bulb, and the new criterion for air—

Mr. SIKES. How many months a year would you have the air-conditioning turned off?

General COOPER. I don't have the figures in months. I would gather it—

Mr. SIKES. Provide it for the record by months.

[The information follows:]

Air-conditioning would be turned off approximately 8 months of the year. The air-conditioning season at Fort Huachuca ranges from May 15 to September 15 (approximately 4 months). During that period the system would operate approximately 50 percent of the time.

ELECTRONIC TEST EQUIPMENT FACILITY

Mr. SIKES. You are using leased facilities to meet a part of the requirement for the electronic test equipment facility. Are they unsatisfactory?

Colonel SELL. These are trailers and they are unsatisfactory. That is what we would like to eliminate by adding to the existing building.

FAMILY HOUSING SITUATION

Mr. SIKES. Could you provide for the record the family housing situation at Fort Huachuca?

General COOPER. Yes, sir. Briefly, our 1973 survey indicates that, because of the installation stability there, the community buildup has significantly reduced the backlog of requirements for military construction of family housing.

Mr. SIKES. Mr. McEwen, please go ahead with the questions.

FORT RITCHIE, MD.

Mr. McEWEN. Turn to Fort Ritchie, Md.

Please insert page 209 in the record.

[The information follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Fort Ritchie										
4. COMMAND OR MANAGEMENT BUREAU U.S. Army Strategic Communications Command			5. INSTALLATION CONTROL NUMBER Maryland - 625 Pennsylvania - 745		6. STATE/COUNTRY Maryland									
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1951		9. COUNTY (U.S.) Washington	10. NEAREST CITY Waynesboro, Pennsylvania									
11. MISSION OR MAJOR FUNCTIONS Support of Headquarters, STRATCOM, and other tenant activities.				12. PERSONNEL STRENGTH		13. INVENTORY								
						PERMANENT		STUDENTS		SUPPORTED				
						OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)
				a. AS OF <u>31 Dec 72</u>		113	1,091	573						1,777
				b. PLANNED (End FY 75)		119	832	548	0	0	53	152	1	1,705
						LAND		ACRES (1)	LAND COST (\$000) (2)	IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)		
				a. OWNED				1,881	233	50,799		51,032		
				b. LEASES AND EASEMENTS				23	9*	1		9		
				c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 1972								51,041		
				d. AUTHORIZATION NOT YET IN INVENTORY								1,790		
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								1,394						
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS								6,896						
g. GRAND TOTAL (c + d + e + f)								61,121						
SUMMARY OF INSTALLATION PROJECTS														
PROJECT DESIGNATION				TENANT COMMAND c	UNIT OF MEASURE d	AUTHORIZATION PROGRAM		FUNDING PROGRAM						
CATEGORY CODE NO. a	PROJECT TITLE b	Page No. c	SCOPE e			ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h						
721	64 - Barracks Modernization	1 210	483	1,394	483	1,394								

FORT RITCHIE, MARYLAND

\$1,394,000

Fort Ritchie is located 8 miles southeast of Waynesboro, Pennsylvania. The mission of the installation is to support the Alternate Joint Communication Center. The program consists of barracks modernization.

Status of Funds

	(\$000)
Funded Program Not in Inventory	1,790
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
64	Barracks Modernization	58	10

ENLISTED BARRACKS SUMMARY, FORT RITCHIE, MARYLAND

	<u>MEN*</u>
Total Requirement	570
Existing Substandard	1,509**
Existing Adequate	59***
Funded, Not in Inventory	0
Adequate Assets	59
Deficiency	511
FY 1974 Program	483
Barracks spaces occupied, 15 Mar 73	414

* 90 square feet per man permanent party personnel;
72 square feet per man trainees.

** Includes 483 spaces that can be made adequate

*** Private housing

Mr. McEwen. Provide for the record a statement on the need to retain Fort Ritchie.

[The information follows:]

Facilities at Fort Ritchie are required to support the Alternate National Military Command Center (ANMCC) ———.

On May 17, 1972, the Worldwide Military Command and Control System (WWMCCS) Council concurred in the mission objective for the ANMCC, and on May 19, 1972, the Deputy Secretary of Defense rescinded restrictions that had been placed on new expenditures, upgrades, and expanded facilities at the ANMCC.

Those facilities at Fort Ritchie provide the basis for retaining Fort Ritchie.

ARMY MEDICAL DEPARTMENT

Mr. McEwen. Next is the Army Medical Department.

WALTER REED ARMY MEDICAL CENTER, DISTRICT OF COLUMBIA AND MARYLAND

Mr. McEwen. Walter Reed Army Medical Center, District of Columbia and Maryland. Insert page 217 in the record.

[The information follows:]

1 DATE 1 Feb 73	2. DEPARTMENT ARMY		3. INSTALLATION Walter Reed Army Medical Center					
4. COMMAND OR MANAGEMENT BUREAU Army Medical Department		5. INSTALLATION CONTROL NUMBER District of Columbia-865 and Maryland-605		6. STATE/COUNTRY District of Columbia and Maryland				
7. STATUS Active	8. YEAR OF INITIAL OCCUPANCY 1908		9. COUNTY (U.S.) District of Columbia & Montgomery Co., MD	10. NEAREST CITY Washington, D. C.				
11. MISSION OR MAJOR FUNCTIONS Treatment of sick and injured personnel of the Armed Services and their dependents; medical research and development; and support of all Walter Reed Army Medical Center Activities, to include: WRAIN - Walter Reed Army Institute of Nursing WRAIR - Walter Reed Army Institute of Research AFIP - Armed Forces Institute of Pathology USAMBRL - U.S. Army Medical Biomechanical Resch Lab USARDA - U.S. Army Regional Dental Activity USAIDR - U.S. Army Institute of Dental Research R&D - Research and Development			12. PERSONNEL STRENGTH					
			PERMANENT					
			STUDENTS					
			SUPPORTED					
			TOTAL					
			OFFICER (1)					
			ENLISTED (2)					
			CIVILIAN (3)					
			OFFICER (4)					
			ENLISTED (5)					
			OFFICER (6)					
			ENLISTED (7)					
			CIVILIAN (8)					
			TOTAL (9)					
			a. AS OF <u>31 Dec 72</u>					
			b. PLANNED (End FY 78)					
			13. INVENTORY					
			LAND					
			ACRES (1)					
			LAND COST (\$000) (2)					
			IMPROVEMENT (\$000) (3)					
			TOTAL (\$000) (4)					
			a. OWNED					
			b. LEASES AND EASEMENTS					
			c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>					
			d. AUTHORIZATION NOT YET IN INVENTORY (Exclusive of family housing - \$8,089)					
			e. AUTHORIZATION REQUESTED IN THIS PROGRAM					
			f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$8,712)					
			g. GRAND TOTAL (c + d + e + f)					
SUMMARY OF INSTALLATION PROJECTS								
PROJECT DESIGNATION								
CATEGORY CODE NO	PROJECT TITLE		TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM	
a	b		c	d	SCOPE	ESTIMATED COST (\$000) f	SCOPE	ESTIMATED COST (\$000) h
					e		g	
740	91 - Patient Visitor Facility			SF	54,300	1,997	54,300	1,997
	<u>PRIOR AUTHORIZATION</u> PL 92-145							
510	87.10 - Parking Facility, Main Section			SF				10,830
	Total					1,997		12,827

WALTER REED ARMY MEDICAL CENTER, D.C., \$12,827,000

Walter Reed Army Medical Center is located in Washington, D.C. The mission of this medical center is to provide medical treatment for members of the armed services and their dependents, to engage in medical research and development, and to support all medical center activities. The program provides a patient visitor facility and parking facilities.

Status of funds

	<i>Thousands</i>
Funded program not in inventory-----	\$135,877
Unobligated projects, Mar. 31, 1973 (actual)-----	13,740
Unobligated projects, June 30, 1973 (estimated)-----	0

DESIGN INFORMATION

Project No.	Project	Design cost (thousands)	Percent complete Apr. 30, 1973
87.10-----	Parking facilities-----	\$541	100
91-----	Patient visitor facility-----	100	5

COST OF NEW HOSPITAL

Mr. McEWEN. What is the current working estimate for the new Walter Reed Hospital, and how does this compare to the amount authorized for this project?

General COOPER. Mr. Carton has that in great detail.

Mr. CARTON. The current working estimate for the hospital is approximately 9 percent above the amount originally authorized. It is approximately \$123 million, including the parking garage in this program.

Mr. McEWEN. What amount for contingency does this estimate contain?

Mr. CARTON. This includes 5-percent contingency, which is our normal percentage after award of a contract.

Mr. McEWEN. I note that the long-range projected strength at Walter Reed, shown at the time this hospital was approved as 8,149 for end-fiscal 1976, is now projected to be 7,215 for end-fiscal year 1978. Most of the reduction appears to be in the personnel supported. What is the reason for this?

General COOPER. We will have to provide that for the record.

[The information follows:]

The 1,390 is in error in that it should carry the patient load under the supported column. If we project an average patient load of approximately 1,000, these two figures will be quite similar.

ARMY HOSPITAL WORKLOADS

Mr. McEWEN. In the fiscal year 1972 hearing, on page 260, a table was provided which showed workloads for the Army teaching hospitals. Could you update this table for the record? Also provide a table showing the present and projected bed and outpatient loads at each of the class I and II hospitals.

General COOPER. Yes, sir.

[The information follows:]

WORKLOADS FOR 3 ARMY TEACHING HOSPITALS¹

Hospital	Average daily workload July 1971 through June 1972		
	Admissions	Transfers in	Clinic visits
William Beaumont Army Medical Center.....	45.6	2.2	2,612
Letterman Army Medical Center.....	30.5	4.8	1,522
Walter Reed Army Medical Center.....	42.8	10.7	3,247

¹ Statistics on referrals of outpatients are not maintained.

AVERAGE DAILY BEDS OCCUPIED*

	<u>FY 72</u> <u>Actual</u>	<u>FY 73</u> <u>9 Mo. Actual</u>	<u>FY 74</u> <u>Projected</u>	<u>FY 75</u> <u>Projected</u>	<u>FY 76</u> <u>Projected</u>	<u>FY 77</u> <u>Projected</u>	<u>FY 78</u> <u>Projected</u>
<u>First US Army</u>	<u>1512</u>	<u>1341</u>	<u>1319</u>	<u>1303</u>	<u>1303</u>	<u>1303</u>	<u>1303</u>
Aberdeen Proving Ground, MD	45	37	37	37			
Carlisle Barracks, PA	12	11	11	11			
Ft Belvoir, VA	150	144	146	146			
Ft Devens, MA	128	66	76	80			
Ft Dix, NJ	413	352	330	320			
Ft Eustis, VA	79	56	56	56			
Ft Knox, KY	404	466	460	450			
Ft Lee, VA	105	83	83	83			
Ft George G. Meade, MD	101	76	70	70			
Ft Monmouth, NJ	75	50	50	50			
<u>Third US Army</u>	<u>1852</u>	<u>1391</u>	<u>1322</u>	<u>1303</u>	<u>1303</u>	<u>1303</u>	<u>1303</u>
Ft Benning, GA	304	230	220	220			
Ft Bragg, NC	353	342	342	332			
Ft Campbell, KY	236	201	200	200			
Ft Jackson, SC	373	380	350	340			
Ft McClellan, AL	47	50	50	50			
Ft McPherson, GA	46	44	45	45			
Ft Rucker, AL	64	52	50	50			
Ft Stewart, GA	23	23	43	44			
Redstone Arsenal, AL	24	22	22	22			
Hunter Army Airfield, GA	68	47	--	--			
Ft Gordon, GA	314	--	--	--			
<u>Fifth US Army</u>	<u>1342</u>	<u>1334</u>	<u>1328</u>	<u>1268</u>	<u>1268</u>	<u>1268</u>	<u>1268</u>
Ft Benjamin Harrison, IN	25	22	30	30			
Ft Hood, TX	257	212	220	220			
Ft Leonard Wood, MO	319	386	370	350			
Ft Leavenworth, KS	42	37	37	37			
Ft Polk, LA	217	271	270	250			
Ft Riley, KS	253	212	210	200			
Ft Sill, OK	210	181	181	181			
Ft Wolters, TX	19	13	10	--			

AVERAGE DAILY BEDS OCCUPIED* (Cont.)

	FY 72	FY 73	FY 74	FY 75	FY 76	FY 77	FY 78
	<u>Actual</u>	<u>9 Mo. Actual</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>
<u>Sixth US Army</u>	<u>615</u>	<u>652</u>	<u>628</u>	<u>618</u>	<u>618</u>	<u>618</u>	<u>618</u>
Ft Carson, CO	152	177	180	180			
Ft Huachuca, AZ	54	52	52	52			
Ft Ord, CA	358	417	390	380			
Dugway Proving Ground, UT	4	3	3	3			
Sierra Army Depot, CA	1	1	1	1			
Yuma Proving Ground, AZ	2	2	2	2			
Ft McArthur, CA	44	--	--	--			
<u>US Military Academy West Point, NY</u>	<u>52</u>	<u>52</u>	<u>55</u>	<u>55</u>			
<u>The Surgeon General</u>	<u>4123</u>	<u>3460</u>	<u>3415</u>	<u>3417</u>	<u>3417</u>	<u>3417</u>	<u>3417</u>
Brooke Army Medical Center	705	570	580	590			
Ft Sam Houston, TX							
Fitzsimons Army Medical Center, Denver, CO	644	538	550	560			
Letterman Army Medical Center	452	390	400	410			
Presidio of San Francisco, CA							
Madigan Army Medical Center Tacoma, WA	480	338	343	360			
Walter Reed Army Medical Center, Washington, DC	847	717	717	717			
William Beaumont Army Medical Center, Ft Bliss, TX	485	370	380	390			
US Army Medical Center Ft Gordon, GA		257	295	390			
Valley Forge General Hospital Phoenixville, PA**	510	280	150	---			

*Subject to adjustment based on potential changes in professional personnel strengths, overseas evacuation policy, regionalization policy, and the Army Stationing and Installations Plans.

**Projected to close.

PRESENT AND PROJECTED WORKLOAD FOR ARMY TEACHING HOSPITALS*

PROJECTED OUTPATIENT CLINIC VISITS

(Daily Average)

	<u>FY 72</u>	<u>FY 73</u>	<u>FY 73</u>	<u>FY 74</u>	<u>FY 75</u>	<u>FY 76</u>	<u>FY 77</u>	<u>FY 78</u>
	<u>Actual</u>	<u>Actual</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>
Class II								
William Beaumont Army Medical Center Ft Bliss, TX	2612	2404	2720	2830	2950	3070	3200	3330
Brooke Army Medical Center Ft Sam Houston, TX	2226	2347	2510	2620	2720	2830	2950	3070
Fitzsimons Army Medical Center Denver, CO	1735	1873	2030	2100	2170	2250	2320	2410
Letterman Army Medical Center Presidio of San Francisco, CA	1522	1377	1480	1520	1550	1590	1630	1670
Madigan Army Medical Center Tacoma, WA	2322	2091	2420	2500	2530	2560	2590	2620
Walter Reed Army Medical Center Washington, DC	3247	3285	3280	3280	3280	3280	3280	3280
Class I								
DeWitt Army Hospital, Ft Belvoir, VA	1322	1292	1320	1330	1340	1350	1360	1370
Martin Army Hospital, Ft Benning, GA	2057	1637	1710	1720	1730	1740	1750	1760
Womack Army Hospital, Ft Bragg, NC	1996	2173	2170	2180	2200	2210	2220	2230
US Army Hospital, Ft Campbell, KY	955	1016	950	960	970	980	990	1000
Walson Army Hospital, Ft Dix, NJ	1988	2356	2310	2320	2330	2340	2350	2360
Darnall Army Hospital, Ft Hood, TX	1705	1652	1630	1640	1650	1660	1670	1680
Ireland Army Hospital, Ft Knox, KY	1937	1926	1870	1880	1890	1900	1910	1920
US Army Hospital, Ft Ord, CA	1547	1579	1510	1520	1530	1540	1550	1560
Lyster Army Hospital, Ft Rucker, AL	933	770	740	750	760	770	780	790
Reynolds Army Hospital, Ft Sill, OK	1268	1333	1300	1310	1320	1330	1340	1350
Class II								
Valley Forge General Hospital Phoenixville, PA (To be closed by mid-FY 1974)	695	531	510	260	----	----	----	----

*Subject to adjustment based on potential changes in professional personnel strengths, overseas evacuation policy, regionalization policy, and the Army Stationing and Installations Plan.

PRESENT AND PROJECTED OUTPATIENT CLINIC VISITS FOR NON-TEACHING HOSPITALS* (Daily Average)

	FY 72	FY 73	FY 73	FY 74	FY 75	FY 76	FY 77	FY 78
	<u>Actual</u>	<u>Actual</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>	<u>Projected</u>
		(9 Mo.)						
Class I								
Hawley Army Hospital, Ft Benjamin Harrison, IN	304	320	320	325	330	335	340	345
US Army Hospital, Ft Carson, CO	1340	1422	1410	1420	1430	1440	1450	1460
Cutler Army Hospital, Ft Devens, MA	487	506	500	505	510	515	520	525
McDonald Army Hospital, Ft Eustis, VA	750	646	640	645	650	655	660	665
Kimbrough Army Hospital, Ft George G. Meade, MD	768	871	850	855	860	865	870	875
US Army Medical Center, Ft Gordon, GA	1566	1412	1520	1530	1540	1550	1560	1570
Moncrief Army Hospital, Ft Jackson, SC	1595	1584	1580	1590	1600	1610	1620	1630
Kenner Army Hospital, Ft Lee, VA	786	738	738	750	762	784	796	808
General Leonard Wood Army Hospital Ft Leonard Wood, MD	1389	1677	1670	1680	1690	1700	1710	1720
US Army Hospital, Ft McPherson, GA	383	384	370	375	380	385	390	395
US Military Academy, West Point, NY	412	394	394	420	430	440	450	460
Dunham Army Hospital, Carlisle Bks, PA	323	342	340	345	350	355	360	365
Kirk Army Hospital, Aberdeen Proving Ground, MD	646	556	550	555	560	565	570	575
Patterson Army Hospital, Ft Monmouth, NJ	558	510	510	515	520	525	530	535
Noble Army Hospital, Ft McClellan, AL	409	397	400	405	410	415	420	425
Tuttle Army Hospital, Hunter Army Airfield, GA (To be closed)	317	237	240	---	---	---	---	---
US Army Hospital, Ft Stewart, GA	175	156	150	395	400	405	410	415
US Army Hospital, Redstone Arsenal, AL	257	260	260	265	270	275	280	285
Beach Army Hospital, Ft Wolters, TX (To be closed)	146	117	120	120	---	---	---	---
Irwin Army Hospital, Ft Riley, KS	1248	1139	1140	1150	1160	1170	1180	1190
Munson Army Hospital, Ft Leavenworth, KS	571	595	595	600	605	610	615	620
US Army Hospital, Ft Polk, LA	1265	1007	1000	1010	1020	1030	1040	1050
Bliss Army Hospital, Ft Huachuca, AZ	433	599	600	605	610	615	620	625
US Army Hospital, Sierra Army Depot, CA	27	26	25	25	25	25	25	25
US Army Hospital, Dugway Proving Ground, UT	41	35	35	35	35	35	35	35
US Army Hospital, Yuma Proving Ground, AZ	41	44	44	44	44	44	44	44
US Army Health Clinic, Ft MacArthur, CA	368	300	305	310	315	320	325	330

*Subject to adjustment based on potential changes in professional personnel strengths, overseas evacuation policy, regionalization policy, and the Army Stationing and Installations Plan.

Mr. McEWEN. Will you meet your earlier projection of a 9,720 average daily bed load in fiscal year 1973? Have outpatient loads met or exceeded projections?

General PIXLEY. I think we will. I would like to recheck that for the record to be absolutely sure.

[The information follows:]

Due to rapid withdrawal from Vietnam and decline of the strength of the Army to 838,900 man years for fiscal year 1973, the as yet unaudited average daily patient load for fiscal year 1973 is 8,093.

Outpatient loads have exceeded projections despite the reduction in Army strength. The unaudited average daily health clinic visits for fiscal year 1973 is 60,491 as compared with a projection of 56,953.

Mr. McEWEN. Put it in the record and also discuss with us now the chart which shows the construction phasing for the Walter Reed complex.

SCHEDULE FOR WALTER REED CONSTRUCTION

General PIXLEY. Yes, sir. We are prepared to show some charts on the progress and status. Major Peacock.

Major PEACOCK. In addressing the question of phasing of construction of Walter Reed over the next few years, I would like to use about four charts and we will discuss the phasing over the time period. The question of phasing has been a matter of importance to the medical personnel and the Corps of Engineers, who are interested in the overall development of the Walter Reed plan. For your information, it is located about 6 miles to the north-northeast of this building and near the District line, in the northern tip of the District of Columbia. The main campus of Walter Reed, displayed on this first chart, is about 112 acres. The main hospital activity is located in the middle, what is called building No. 1, and the projections stem out from that.

The outpatient facility is located on the east side of the campus with the logistic and engineering support to the north; troop barracks and family housing are in this corner; community facilities, including NCO club and swimming pool, Armed Forces Institute of Pathology in the northwest corner; chapel and family housing, research, officers' open mess, Walter Reed Army Institute of Nursing in the southwest corner with other community support and regional dental activity here with engineering support, steam plant, fire station, PX, gas station, officers quarters. Back into the outpatient area.

The next chart shows the status as of January 1, 1973 and where we are now. There are two projects planned to be ongoing at this time. One is the new hospital for which funds were appropriated in 1972. The excavation has been completed on this project and we are now coming up out of the ground. Parts of the foundation have been poured and they are still working on the foundation. This area is the site of the 1973 enlisted barracks complex.

The status on this project right now is that we expect to open the bids and award the contract this summer. We are going to completion of these temporary buildings in this area; they will be demolished, and we begin with construction.

Mr. TALCOTT. Are they for men and women?

Major PEACOCK. Yes, sir.

We hope by October 1, 1974 the construction of this area will have expanded and we will have reached 80 percent completion on the concrete and steel work and will be at 30 percent completion on the in-

terior of the hospital and that by that time we will have completed demolition of all of the buildings of this area which will house the new parking garage which will tie directly and support the hospital parking garage for outpatients and visitors.

The EM barracks, at this time, will be 50 percent completion, and the patient visitor facility, if approved in this area, would be at 20 percent completion.

Mr. MCEWEN. Are you eliminating the enlisted men's barracks shown at the upper right, before the others are completed?

Major PEACOCK. That is true.

Mr MCEWEN. Where will you house the troops then?

Major PEACOCK. There is about 13 to 18 months' period which is anticipated during which there will be no appreciable number of barracks for troops on post. We have made some arrangements to use these houses in here, which serves as family housing, for those enlisted men who must be on post close to the hospital during duty hours. We have made arrangements for some unused housing in Fort Meade which will house the balance of the troops who do not wish to maintain quarters off a military reservation.

Mr. MCEWEN. Will you provide transportation to and from the hospital?

Major PEACOCK. We will provide that transportation by military bus on schedule.

Mr. TALCOTT. How many floors will the garage have?

Major PEACOCK. I am not familiar with the design, but Mr. Carton can address that question.

Mr. CARTON. Two floors.

Major PEACOCK. By July 1, 1975.

General COOPER. The garage is totally underground.

Major PEACOCK. This will be as it looks afterward with the two drives coming in off Georgia Avenue and the circular drive in front. The entrances from the garage will be at the two lower levels of the hospital.

By July 1, 1975, and thereafter, we hope to have the hospital 100-percent complete on concrete and steel, and interior 70-percent completion, anticipating a move into that facility by May of the following year.

At this time, the enlisted barracks will have no major construction going on. It will be at 90-percent completion, wrapping up the interior portion of that facility. The patient visitor facility here will be 90 percent complete if all goes well. Building No. 1 at this time, which is the present hospital and clinic facilities, will be in final design. We anticipate moving people out of here into the new hospital and beginning construction to remodel this into a minimum support facility to house the administrative functions on this post.

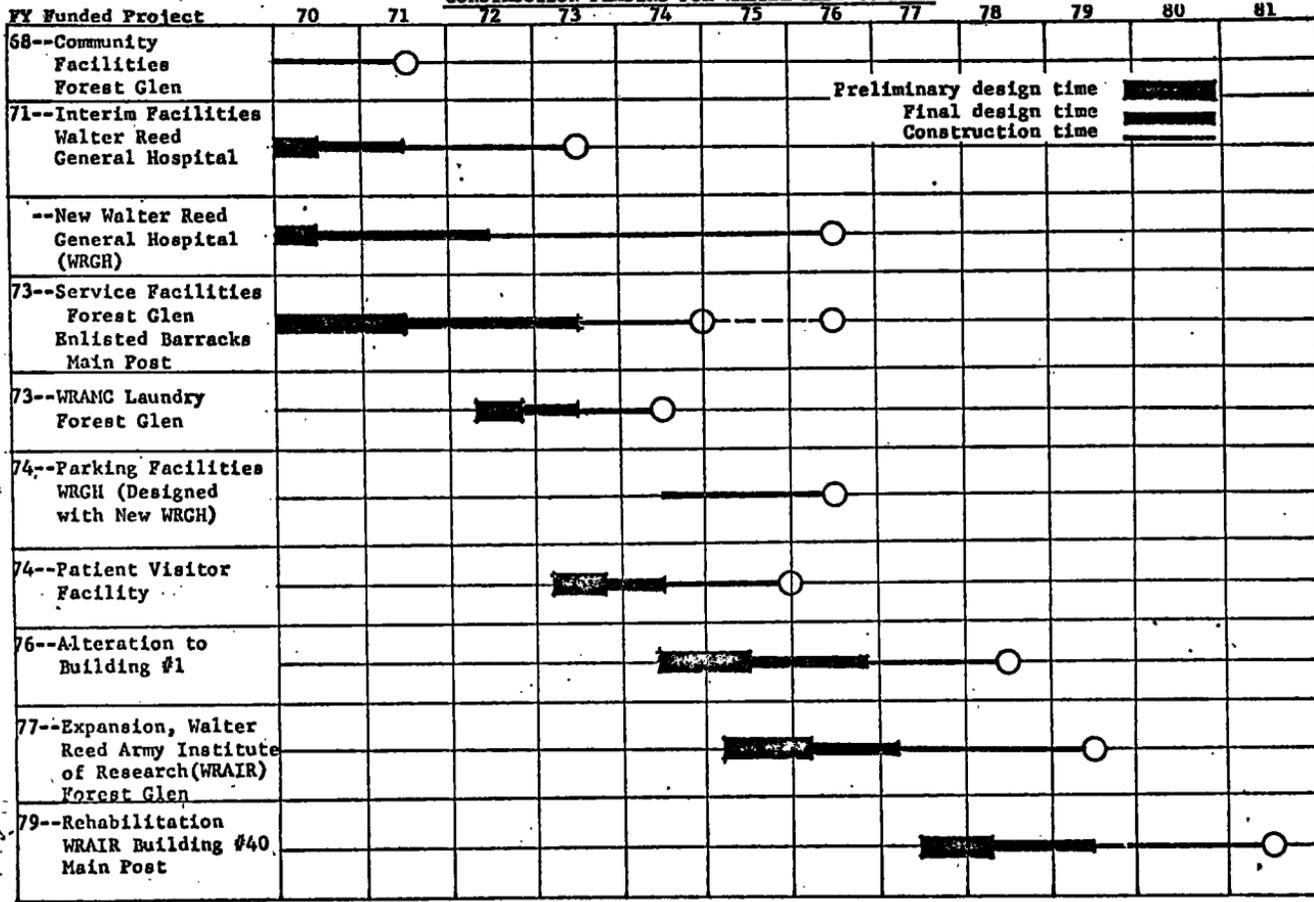
Parking and community facilities in our program for fiscal year 1977 at this point will be in concept design at this stage but there is no construction going on. There are facilities there now.

Further on in our program we anticipate an expansion of the Walter Reed Army Institute of Research. At this point in time it will still be a couple of years away and we will not have started conceptual design at this point. That is a large number of projects. Some of those already going on have not been mentioned.

This chart will put it all into perspective, one relative to the other.

[The chart follows:]

CONSTRUCTION PHASING FOR WALTER REED COMPLEX



Preliminary design time: ■■■■■
 Final design time: ■■■■■
 Construction time: ■■■■■

775

Major PEACOCK. We have the fiscal year 1971 through 1979 projects listed here with the calendar years running across here. The large bar represents the preliminary design, the smaller bar the final design, and the single line represents the construction period, with the circle indicating anticipated completion of the construction of each project.

As you see in the mid-1973, this summer, calendar year, we anticipate completion of the interim facilities project, which is in the fiscal year 1971 program. Construction for the Walter Reed Hospital will be continuing, and we hope to be underway with construction on the enlisted barracks.

Still in the design stage is the patient visitor facility. When we progress to the next year, we hope to be engineering the final stages of construction on the enlisted barracks and begin construction of the parking facility and about 40 percent along with the patient visitor facility. In 1976, we will wrap up the new hospital and the parking garage and the patient visitor facility at approximately the same time, so as to be ready to move into the ultimate hospital by 1976.

Are there any questions?

[Discussion off the record.]

Mr. McEWEN. The existing building, Major, is that the main hospital?

Major PEACOCK. Building 1, yes, sir.

Mr. McEWEN. Are there going to be any beds in there after the new facility is completed?

Major PEACOCK. No, sir. This will house the logistical forces, post engineer's office, comptroller, I think, and a number of support services that are not directly required to be in the new hospital.

PERSHING SUITE AND WARD 8

Mr. McEWEN. General Pixley, I feel that the so-called Pershing Suite where General Pershing lived during the last years of his life and where he died should be preserved if at all possible, that part of building 1 where the suite is, because of the significance of those quarters. Does the Army plan to do that?

General PIXLEY. I was talking to Colonel Christ, who is assigned to Walter Reed, and he tells me that within the last 40 days there has been formed a special committee at Walter Reed that is studying how the Pershing Suite could be made a historical point for the future. Also, there is some consideration of ward 8. The Pershing Suite has the highest priority.

Mr. McEWEN. I understand that and agree with that.

Coming to ward 8 and particularly one end of the ward; that is, where General Eisenhower spent the last days of his life. I wonder if thought is being given to preserving that?

General PIXLEY. Yes, sir.

Mr. McEWEN. Let me say I am pleased to hear that. While I know you need space and I am sure that all space can be utilized for some offices, I think it would be most appropriate if those two areas, which are relatively small in relation to the overall size of this hospital, could be preserved.

Mr. TALCOTT. I wish the accolade Mr. McEwen gave to Walter Reed Hospital had been on the record. Anyway, we will go on with this.

Mr. McEWEN. I might be accused of conflict of interest because I have been at Walter Reed three times in surgery and it rendered great service to me. We can put that on the record.

Mr. TALCOTT. Besides that, you indicated it was the best hospital you knew.

PROJECTED WORKLOAD FOR WALTER REED HOSPITAL

Do you expect that the workload of Walter Reed will meet the workload projected at the time the new hospital was designed?

General PIXLEY. Yes, sir. There is no question that that hospital will always be occupied. The reason is twofold: First of all, as we draw down from the medical support required in many other CONUS hospitals because of Southeast Asia, the highly sophisticated surgical skills and medical skills will be reduced at many of our class I hospitals and become more centralized as the Army draws down in size. In other words, we won't have a capability for certain neurosurgical skills in some of our hospitals which we have had to maintain because of Vietnam.

The second reason is that Walter Reed is a recognized international center for training, and perhaps in the Volunteer Army of the future the greatest recruitment for physicians, nurses, dentists, and other health professions is training. Therefore, we will always make sure that we can divert a good teaching load into the hospital.

Mr. TALCOTT. There is a trend in civilian hospitals and Veterans' Administration hospitals to have less and less time in the hospital and more and more time in outpatient clinics. I wondered if that might contribute to having—

General PIXLEY. That will not influence Walter Reed so much because in certain of the specialties we find in Walter Reed, like neurosurgery, the outpatient work is much less. In heart surgery, other types of chest surgery, vascular surgery, these types of specialty services offered at Walter Reed, there is little impact on the ambulatory load.

General COOPER. The trend, you notice, is downward. Walter Reed is the Army's premier hospital. We will reevaluate the other hospitals. If the downward trend continues, there may be other hospitals later on in the program that we will decide not to build.

PARKING STRUCTURE

Mr. TALCOTT. Does the parking structure proposed meet all the Federal and District of Columbia safety and fire standards?

General COOPER. Yes, sir.

Mr. TALCOTT. Is it the proper size for this kind of facility?

General COOPER. As far as we can determine, sir.

Mr. McEWEN. If you will yield on the matter of parking, I know that the present inadequate parking has been a source of vexation to the staff and to visitors, in fact to everyone there. Is the new facility going to provide greater space relative to the size of the hospital we are building than we have now? What will be the ratio of parking to staff or beds?

Colonel CHRIST. Initially we will be better off, somewhat better than right now. The total program requirement for Walter Reed is

4,500 parking spaces overall. We started off with about 2,300 before construction started. This envisions, of this project, 1,000 cars, and a parking with the barracks, which is 500 cars, for a total of about 1,500. Then the additional parking structures in the future years. With what exists on post right now, the parking in front of the hospital and parking with the barracks, we anticipate we will get up to 2,600 to 2,800 cars and still have structures in the future programs.

The next parking structure is in 1977, along with some other community services across from it.

General COOPER. We hope the Metro system, which will have a station right near Walter Reed, will divert some of the people that normally would drive and park. We do want to reduce air pollution and gasoline consumption and things like that.

Mr. McEWEN. Is the Metro station quite close to Walter Reed?

Colonel CHRIST. About two blocks east of the main entrance to the hospital.

Mr. TALCOTT. Do you plan to award a contract for parking in fiscal 1974?

General COOPER. Yes; we have an option in the earlier contract. The option runs out in February 1974. We would plan to award the contract as soon as the funding is available.

PATIENT VISITOR FACILITY

Mr. TALCOTT. Have you checked thoroughly, to your own satisfaction, to insure that the need for an expanded patient visitor facility cannot be met by the community?

General COOPER. Yes sir. I went out there personally and visited it. There is at least one motel nearby, but it is outside the post and, all things considered, people would much prefer to be right on the installation and be within easy walking distance.

Mr. TALCOTT. Have you figured out what the average length of stay is at the visitor facility?

General COOPER. I think they said it is about 4 or 5 days or so.

Mr. TALCOTT. Does that coincide with the length of stay of the patient, friend, or family?

Colonel CHRIST. Not necessarily. Many times the visitors will be there just during the period in which the patient is critically and very seriously ill. General Cooper is right. I have some figures here in front of me. The average stay is 4.5 days.

Mr. TALCOTT. Are there any other comments that you would like to make about Walter Reed?

If not, we will go on to the next base.

CORPS OF ENGINEERS

U.S. ARMY COLD REGIONS AND ENGINEERING LABORATORY, N.H.

Mr. TALCOTT. U.S. Army Cold Regions Research and Engineering Laboratory, N.H. Insert page 221 in the record.

[The information follows:]

1. DATE 1 Feb 73		2. DEPARTMENT ARMY		3. INSTALLATION FY 1974 MILITARY CONSTRUCTION PROGRAM			4. INSTALLATION U.S. Army Cold Regions Research and Engineering Laboratory							
5. COMMAND OR MANAGEMENT BUREAU Office, Chief of Engineers				6. INSTALLATION CONTROL NUMBER New Hampshire - 450			8. STATE/COUNTRY New Hampshire							
7. STATUS Active				8. YEAR OF INITIAL OCCUPANCY 1961			9. COUNTY (U.S.) Grafton			10. NEAREST CITY Lebanon, N.H. - 8 miles				
11. MISSION OR MAJOR FUNCTIONS Conduct basic and applied research pertaining to snow, ice and frozen ground and other elements of earth physics. Perform scientific and engineering investigations pertaining to materials, facilities, systems, and operations in cold environments. Conduct research into methods and techniques of using various energy forms and systems to obtain information about surface and subsurface features in all environments for engineering, military and related scientific purposes. Perform environmental and such other research as required in support of mission activities. Conduct investigations and establish general criteria for design, construction and maintenance of military facilities in cold regions. Provide scientific and technical advice to Government agencies and other qualified requestors.				12. PERSONNEL STRENGTH		PERMANENT			STUDENTS		SUPPORTED		TOTAL (9)	
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)			
				a. AS OF 31 Dec 72		2	35	230						267
				b. PLANNED (End FY 75)		2	5	293						300
				13. INVENTORY										
				LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)		
				a. OWNED										
				b. LEASES AND EASEMENTS		20				3,907		3,907		
				c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 92								3,907		
				d. AUTHORIZATION NOT YET IN INVENTORY								0		
				e. AUTHORIZATION REQUESTED IN THIS PROGRAM								597		
				f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS								2,233		
				g. GRAND TOTAL (c + d + e + f)								6,737		
SUMMARY OF INSTALLATION PROJECTS														
PROJECT DESIGNATION														
CATEGORY CODE NO. a	PROJECT TITLE b			Page No. c	TENANT COMMAND d	UNIT OF MEASURE e	AUTHORIZATION PROGRAM		FUNDING PROGRAM					
							SCOPE f	ESTIMATED COST (\$000) g	SCOPE h	ESTIMATED COST (\$000) i				
441	4 - Logistics & Storage Facility			51	222	SF	22,100	597	22,100	597				

COLD REGIONS LABORATORIES, NEW HAMPSHIRE, \$597,000

The Cold Regions Laboratory is located 8 miles from Lebanon, N.H. The mission of this installation is to conduct basic and applied research and scientific and engineering investigations pertaining to operations in cold environments, methods and techniques of using various energy forms and systems to obtain information about surface and subsurface features and to perform environmental and such other research in support of mission activities. The program provides a logistics and storage facility.

Status of funds

	<i>Thousands</i>
Funded program not in inventory-----	\$0
Unobligated projects, Mar. 31, 1973 (actual)-----	0
Unobligated projects, June 30, 1973 (estimated)-----	0

Design information—Project No. 4, logistics and storage facility

Design cost-----	\$43,000
Percent complete, Apr. 30, 1973-----	100

Mr. TALCOTT. This is a relatively low priority project?

General COOPER. Yes, sir.

Mr. TALCOTT. Can you continue to use the existing leased facility?

General COOPER. We can, but we consider it an unsatisfactory arrangement because the facility is a potential fire hazard. It is also a potential safety hazard where it happens to be located. We looked at other possible leased facilities before we included this project, but we could not find any suitable ones in that area.

Mr. TALCOTT. Can you give us a breakdown of the cost to operate this installation?

General COOPER. I do not have the details here on the specific costs. I can provide that for the record.

Mr. TALCOTT. I think that will be adequate.

[The information follows:]

Real property, personnel, and other operating costs—U.S. Army Cold Regions Research and Engineering Laboratory, N.H.

[In thousands of dollars]

Activity:

Backlog of essential maintenance and repair-----	
Initial cost of improvements-----	3,907
Replacement cost (excluding land)-----	14,847

FISCAL YEARS

	1972	1973	1974
Real property maintenance-----	(152)	(158)	(171)
Other operating cost-----	642	721	865
Personnel:			
Military expense-----	39	77	83
Civilian cost-----	848	1,039	1,110

Mr. TALCOTT. Will you also provide for the record the major discoveries made at this laboratory in the past few years to show it is worth its cost to the taxpayer and to the military.?

General COOPER. Yes, sir. I know we use people from the laboratory specifically in the land disposal of sewage. Their particular expertise is useful in trying to look at various alternatives to the tertiary treatment. That is the only one I happen to know about personally. We will provide other details for the record.

Mr. TALCOTT. We need something to justify this kind of expense.

General COOPER. The facility we are trying to replace is a leased facility. The main laboratory building, as far as I know, is not leased. [The information follows:]

Research and development efforts at the U.S. Army Cold Regions Research and Engineering Laboratory (USACRREL) in Hanover, N.H., over the past 5 years have resulted in a benefits-to-cost ratio of better than 3 to 1. One of the recent major research accomplishments which has contributed to this record is the development of a floating tube settler system for sewage treatment. This unique and patented unit provides efficient clarification of liquid and solid fractions in wastewater, can be constructed at one-half the cost of present systems, and is expected to save \$2 million in construction costs at military facilities where improved wastewater systems must be constructed to meet environmental standards. Even more promising is the ongoing research now being conducted concerning land disposal of wastewater. USACRREL is the lead laboratory for the Army in this development, and is coordinating this work with the Office of the Surgeon General, Environmental Protection Agency, and others, as well as directing evaluation tests at communities in California (Livermore, Fresno, and Manteca) and at Fort Devens, Mass. This research shows extreme promise and may easily result in eventual savings of several hundred million dollars to civilian and military communities.

Another very recent accomplishment is the development and nearly completed evaluation of the so-called upside-down roof. This design more formally termed the protected membrane roof, reverses classical flat roof construction methods where roof insulation is usually placed under a waterproof cover. In the protected membrane roof design, a moistureproof membrane is placed directly over roof decking with insulation blocks on top of the membrane in much the same manner that nature provides protection for fur-bearing animals. Performance records to date indicate that protected membrane roof life will be at least three times greater than conventional construction, and may possibly be as permanent a feature of buildings as are foundations and walls.

In the area of military combat engineering research and development, equally promising research has been accomplished, although cost savings are difficult to assess. New shock-isolation systems and baseplates have been designed for Army mortars; assistance has been given to Picatinny Arsenal in the development of a solid rocket propellant which is reliable at low temperatures; the first mass parachute drop onto Arctic ice by Army Rangers in 1971 was made possible through advice and direction of USACRREL personnel; expedient military road design has been developed where 4 inches of foamed plastic under either a plastic or metal mat has been substituted for 5 feet of gravel to quickly construct roads over otherwise nearly impassable ground; development of expedient protective structures for combat personnel in a winter environment using snow and ice has been accomplished with preliminary field evaluations completed; and of vital importance has been the research in connection with all-weather, all-season reliability for the Nation's ballistic missile system sites, many of which are located in the northern tier of States.

In addition to these areas of Corps of Engineers-directed research and development, USACRREL has also conducted approximately 250 research projects in the past 5 years for other agencies ranging from a major contribution to the future development of surface-effects vehicles for the Advanced Research Projects Agency, to snow and ice adhesion problems for the Federal Aviation Administration with regard to aircraft landing and navigation equipment and in other areas such as remote sensing technology for NASA, ice cutting for the U.S. Coast Guard, participation in voyages of the SS *Manhattan*, successful drilling of the polar ice caps and retrieval of ice cores for weather prediction and pollution base line data for the National Science Foundation advice and technical review of the Alaskan pipeline, development of new and less costly airfield construction criteria for B-52 airfields to be constructed in the northern tier of States, and a new program in the field of ice mechanics aimed at extending the navigation season in winter icebound U.S. waterways and reducing the annual damage caused by ice jams and ice jams induced floods.

CRREL scientists and engineers are also recognized worldwide as the leading U.S. specialists on the nature and occurrence of ice, snow, and frozen ground. As such they are important points of contact with the scientific communities of the

Soviet Union and strong liaisons are being formed in accordance with directives of the President.

In summary, USACRREL has made both wise and profitable use of its research and development funds over a considerable period of time.

MILITARY TRAFFIC MANAGEMENT AND TERMINAL SERVICE

Mr. TALCOTT. Turn to the Military Traffic Management and Terminal Service. Insert page 223 in the record.

[The page follows:]

INSTALLATION SUMMARY

[In thousands of dollars]

	Prior authorization	Proposed authorization	Proposed funding
Military traffic management and terminal service:			
Bayonne Military Ocean Terminal, New Jersey.....	3,603	0	3,603
Oakland Army Base, California.....		485	485
Sunny Point Army Terminal, North Carolina.....		1,628	1,628
Total.....	3,603	2,113	5,716

MILITARY OCEAN TERMINAL, BAYONNE, N.J.

Mr. TALCOTT. Under "Military Ocean Terminal, Bayonne, N.J.," insert page 224 in the record.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Military Ocean Terminal, Bayonne											
4. COMMAND OR MANAGEMENT BUREAU Military Traffic Management & Terminal Service			5. INSTALLATION CONTROL NUMBER New Jersey 515		6. STATE/COUNTRY New Jersey										
7. STATUS Active			8. YEAR OF INITIAL OCCUPANCY 1941		9. COUNTY (U.S.) Hudson										
					10. NEAREST CITY Bayonne										
11. MISSION OR MAJOR FUNCTIONS The mission of the Military Ocean Terminal, Bayonne is to handle, process, prepare DOD cargo for transshipment by water to overseas or other ports of entry, or by other means to inland ports and to provide Host Support services to the following tenants: a. US Naval Supply Center, Newport, R.I., Bayonne Annex b. US Navy International Logistics Control Office c. General Services Administration Supply Depot d. Supt. of Shipbuilding, Bayonne Annex e. Homeports for US Navy and MSTC ships.				12. PERSONNEL STRENGTH		PERMANENT		STUDENTS		SUPPORTED		TOTAL			
				OFFICER (1)		ENLISTED (2)	CIVILIAN (3)		OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)	
				a. AS OF <u>31 Dec 72</u>		33	59	1002				55	470	1319	2,938
				b. PLANNED (End FY 75)		107	167	2039		0	0	22	398	599	3,332
				13. INVENTORY											
				LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)			
a. OWNED		679		4,736				87,083							
b. LEASES AND EASEMENTS															
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 <u>72</u>															
d. AUTHORIZATION NOT YET IN INVENTORY															
e. AUTHORIZATION REQUESTED IN THIS PROGRAM															
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS															
g. GRAND TOTAL (c + d + e + f)															
94,257															
SUMMARY OF INSTALLATION PROJECTS															
PROJECT DESIGNATION					TENANT COMMAND		UNIT OF MEASURE		AUTHORIZATION PROGRAM		FUNDING PROGRAM				
CATEGORY CODE NO.	PROJECT TITLE			Page No	c	d	e	ESTIMATED COST (\$000) (f)	SCOPE (g)	ESTIMATED COST (\$000) (h)					
				PRIORITY											
	<u>PRIOR AUTHORIZATION</u> <u>PL 92-545</u>														
610	37 - Administrative Facilities			1	225	SF			115,000		3,203				
813	38 - Electric Substation			1	226						400				
	Total										3,603				

MILITARY OCEAN TERMINAL, BAYONNE, N.J., \$3,603,000

Military Ocean Terminal, Bayonne, is located at Bayonne, N.J. The mission of this installation is to load and discharge cargo for movement to CONUS and overseas destinations, to transship cargo and passengers to CONUS destinations, and to embark and disembark passengers. The program consists of administrative facilities and an electric substation.

Status of funds

Funded program not in inventory.....	\$3, 607, 000
Unobligated projects, Mar. 31, 1973 (actual).....	362, 000
Unobligated projects, June 30, 1973 (estimated).....	362, 000

DESIGN INFORMATION

Project	Project No.	Design cost (thousands)	Percent complete Apr. 30, 1973
Administrative facilities.....	37	\$186	20
Electric substation.....	38	29	100

SAVINGS DUE TO MOVE TO BAYONNE

Mr. TALCOTT. General, would you discuss for us, please, the economies of the planned move of the Navy and Army transportation functions from Brooklyn to Bayonne. This has been before us for a long time. You may need to provide details for the record, but generally what can you tell us now?

General COOPER. Generally, the figure is that we would save \$1,800,000 a year by closing down this terminal, which we originally proposed to do quite a few years ago. I think it was in 1964-65.

Mr. TALCOTT. What are the major savings?

General COOPER. The major savings result from reduction in the operation of the fairly large facility there. We use only a small part of it. We lease part of it to the State of New York and the city of New York, and the post office uses part of it.

We will be able to take our people, a relatively small number of people, and move them into an existing base.

We are trying to eliminate small, inefficient places. These people do not have to be located there. They are not directly related to the operation of the Port of New York, which was the original purpose of that facility.

VALUE OF EXISTING REAL ESTATE AT BROOKLYN

Mr. TALCOTT. What is the estimated value of the properties to be disposed of in Brooklyn as a result of this move?

General COOPER. I do not have that immediately available. Mr. Lockwood may have it.

I do know the facilities for the most part are very much run down. I personally went up and looked at it.

Mr. TALCOTT. We have this in the record of past years' hearings, but I think we need it in the record at this time.

General COOPER. It is valuable, I think, because of the land rather than because of the specific building.

Mr. Lockwood?

Mr. LOCKWOOD. The inventory acquisition cost of the improvements there are about \$40.5 million.

Mr. TALCOTT. But that was some time ago.

Mr. LOCKWOOD. Yes, sir.

General COOPER. I think the main value is in the land. There have been various proposals by the city of New York which I think are slightly up in the air now.

Mr. TALCOTT. Once it has been declared excess by the Defense Department, the General Services Administration will dispose of it in the regular, routine way, cooperating with the city and State of New York?

General COOPER. That is correct.

Mr. LOCKWOOD. There are 100 acres of very valuable waterfront property.

Mr. TALCOTT. Hopefully, we can put it to a higher and better use if the military does move.

For what are the current facilities and connected property being utilized? Where are the facilities?

General COOPER. There are several piers that are being used by the State of New York. They have some warehouses, one of which is being used by the Post Office Department at the present time.

Mr. TALCOTT. How about the property nearby, contiguous with it? What other uses are being made of this property?

General COOPER. I do not believe there are any other uses.

Mr. LOCKWOOD. The Navy is temporarily using 2 piers.

General COOPER. That is at Bayonne.

Mr. LOCKWOOD. That is right.

Mr. TALCOTT. What future use could this be put to upon excessing? Of course, that is not really your concern, I suppose.

General COOPER. One of the things being talked about is a modern containerized port, which would mean tearing down the existing facilities and starting the project from scratch.

One of the reasons the proposal is a little bit in limbo now, according to what was told me in New York, is the concern they feel in the New York-Baltimore-Philadelphia area that they may have overbuilt containerized ports. Somebody has had a few second thoughts about developing Brooklyn Army Terminal as a containerized port.

CONSOLIDATION OF NAVAL ACTIVITIES IN NEW YORK

Mr. TALCOTT. How will this fit in with the overall plan for proposed consolidation of naval activities in the New York and Brooklyn area?

General COOPER. It is certainly consistent. It is collocated with us now. They are planning to move their group also over to Bayonne.

Mr. TALCOTT. Can we be satisfied that the Navy and the Army are working together in the overall consolidation, particularly with regard to the Brooklyn-Bayonne situation?

General COOPER. Yes, sir. It was a Navy captain who toured me through the site when I went up there a few months ago.

Mr. TALCOTT. Are there any other questions?

LOCATIONS OF MILITARY OCEAN TERMINALS

Mr. McEWEN. General Cooper, will you tell me how many of these terminals we have all together?

General COOPER. I do not know the exact number. We have Sunny Point, which is a main one. We have Kings Bay, which is in standby. There is Bayonne Ocean Terminal and Oakland Army Terminal. There is probably one down on the gulf coast.

I can provide those for the record, sir.

[The information follows:]

We have a total of four military ocean terminals, two for general cargo and two for ammunition. The general cargo terminals are located at Bayonne, N.J., and Oakland, Calif. The ammunition terminals are located at Sunny Point, N.C., near Wilmington, N.C., and Kings Bay, Ga., which is 30 miles north of Jacksonville, Fla. Military Ocean Terminal, Kings Bay, is in an inactive standby status. Military cargo is shipped through a number of other terminals, either owned by the Navy or under contract arrangement with port authorities and commercial interests.

Mr. McEWEN. How many do you have on the Great Lakes?

General COOPER. I do not know of any that we have on the Great Lakes.

Mr. McEWEN. I have wondered when the military would come around and take a look at the Great Lakes-St. Lawrence Waterway area.

General COOPER. The Corps of Engineers, in the civil works plan, has looked at it extensively. You are correct, a lot of the tonnage that used to be shipped out, such as repair parts and spare parts from the auto industry, is now going directly overseas from inside the Great Lakes.

There is a problem in the fact that ice closes the whole thing down, but there is a separate program under civil works which would extend the season.

Mr. McEWEN. Is the absence of a terminal on the Great Lakes important? Would the amount of military cargo moved through such a terminal be significant?

General COOPER. I cannot give you a quantitative answer, sir. We can provide it for the record.

[The information follows:]

The absence of a military terminal on the Great Lakes is not important, as military cargo can be moved through any port which provides adequate service, whether or not there is a military terminal there. Prior to 1969, when there was American flag service from the Great Lakes, we used the Great Lakes to the extent possible, and had an outport at Toledo, Ohio. The Great Lakes outport used commercial facilities under contract at various Great Lakes ports. Before the end of the 1968 shipping season, there was no longer any American flag shipping service operating out of the Great Lakes. The Comptroller General ruled that the Cargo Preference Laws prohibit the military from using foreign flag service from the Great Lakes if American flag service is available from tidewater. Accordingly, the Great Lakes outport was discontinued December 31, 1968.

Even if American flag service were available, only a relatively small portion of the total military cargo could move through Great Lakes ports because of cost and service considerations.

OAKLAND ARMY BASE, CALIF.

Mr. TALCOTT. One of the bases you mentioned was the Oakland Army Base in California.

We will insert page 227 in the record.

[The page follows:]

1. DATE 9 July 1973	2. DEPARTMENT ARMY		3. INSTALLATION Oakland Army Base							
4. COMMAND OR MANAGEMENT BUREAU Military Traffic Management and Terminal Service		5. INSTALLATION CONTROL NUMBER California 605		6. STATE/COUNTRY California						
7. STATUS Active		8. YEAR OF INITIAL OCCUPANCY 1940		9. COUNTY (U.S.) Alameda	10. NEAREST CITY Oakland					
11. MISSION OR MAJOR FUNCTIONS Command assigned installations and activities, provide for area-wide implementation of MMTS Single Manager responsibilities for traffic management, ocean terminal operations and related transportation services involved in the movement and transshipment within and through CONUS of cargo and personnel sponsored by the Department of Defense and other Government Agencies; develop and maintain plans for operational readiness under mobilization, emergency or special contingencies; train related military units, military personnel and civilians as assigned; and provide administrative and logistical support to tenant and satellite agencies.										
12. PERSONNEL STRENGTH										
		PERMANENT		STUDENTS		SUPPORTED		TOTAL		
		OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	(9)
a. AS OF 31 Dec 72		159	666	2,475		556*				3,856
b. PLANNED (End FY 75)		145	1411	1,912	4*	850*				4,322
13. INVENTORY										
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)		
a. OWNED		574		1,638		35,866		37,504		
b. LEASES AND EASEMENTS		15				3,496		3,496		
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								41,000		
d. AUTHORIZATION NOT YET IN INVENTORY								0		
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								485		
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS								6,389		
g. GRAND TOTAL (c + d + e + f)								47,874		
SUMMARY OF INSTALLATION PROJECTS										
PROJECT DESIGNATION						AUTHORIZATION PROGRAM		FUNDING PROGRAM		
CATEGORY CODE NO.	PROJECT TITLE	Page No.	TENANT COMMAND	UNIT OF MEASURE	SCOPE	ESTIMATED COST (\$000)	SCOPE	ESTIMATED COST (\$000)		
a	b	c	d	e	f	g	h			
721	7- Barracks Modernization (EW)	1 228		EW	148	343	148	343		
812	74 - Security Lighting	48 229				142		142		
	Total					485		485		

OAKLAND ARMY BASE, CALIFORNIA

\$485,000

The Oakland Army Base is located at Oakland, California. The mission of this installation is to provide for traffic management, ocean terminal operations and related transportation services of cargo and personnel, to train related military units and military and civilian personnel as assigned, and to provide administrative and logistical support to tenant and satellite agencies. The program provides modernization of barracks for enlisted women and security lighting.

Status of Funds

	(\$000)
Funded Program Not in Inventory	0
Unobligated Projects, 31 March 1973 (actual)	0
Unobligated Projects, 30 June 1973 (estimated)	0

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
7	Barracks Modernization EW	17	25
74	Security Lighting	7	25

ENLISTED BARRACKS SUMMARY, OAKLAND ARMY BASE, CA.

	<u>MEN/WOMEN*</u>
Total Requirement	1,922
Existing Substandard	921**
Existing Adequate	0
Funded, Not in Inventory	0
Adequate Assets	0
Deficiency	1,922
FY 1974 Program	148
Barracks spaces occupied, 15 Mar 73	414

* 90 square feet per man - permanent party personnel;
72 square feet per man - trainees.

** Includes 921 spaces that can be made adequate

Mr. TALCOTT. Can you provide for the record statistics on pilferage at the Oakland Army Base?

General COOPER. Yes, sir.

[The information follows:]

Statistics derived from the Provost Marshal statistics reports for the period April 1, 1972, through March 31, 1972, disclose a total of 471 larcenies (pilferages and larcenies under and over \$50) were committed with a value of \$137,000.00. These incidents and the monetary value concern Government property in transit to overseas destinations. Additionally, 18 incidents are under investigation which have total value of \$30,000.00.

Mr. TALCOTT. Is pilferage higher or lower at this base than at other Army bases?

General COOPER. We have some specific information on Oakland, but we do not have a comparison.

Last year, there were some 470 larcenies, anything over \$50 in total value, which amounted to \$137,000.

Mr. TALCOTT. Does this concern you?

General COOPER. Yes, sir. That is one of the reasons we are asking for security lighting for the Oakland Army Terminal.

Mr. TALCOTT. To try to cut down the pilferage?

General COOPER. Yes, sir.

Mr. TALCOTT. Does most of it happen at night?

General COOPER. I would think that pilferage would be more apt to happen at night. You also worry about the people who work there stashing it away in their automobiles, and things like that.

Mr. TALCOTT. I heard of one place, where a lot of manufacturing is done for the U.S. Government, where they had a check at the gate on the employees' parking lot for stolen articles and that evening \$25,000 worth of small hand tools and equipment were left on the parking lot grounds.

That seems impossible. This was not \$25,000 that they were taking every night. These were company tools that they had in their car, probably, all the time. Security lighting would not help that situation any.

General COOPER. No. That is correct. That is the reason I added that other comment.

Mr. TALCOTT. Are there any other efforts being made to reduce pilferage?

General COOPER. I am sure there are, but I do not have the details.

MILITARY OCEAN TERMINAL, SUNNY POINT, N.C.

Mr. TALCOTT. Military Ocean Terminal, Sunny Point, N.C.

Insert page 230 in the record.

[The page follows:]

1. DATE 1 Feb 73		2. DEPARTMENT ARMY		3. INSTALLATION Military Ocean Terminal, Sunny Point											
4. COMMAND OR MANAGEMENT BUREAU Military Traffic Management and Terminal Service			5. INSTALLATION CONTROL NUMBER North Carolina 745		6. STATE/COUNTRY North Carolina										
7. STATUS Active			8. YEAR OF INITIAL OCCUPANCY 1955		9. COUNTY (U.S.) Brunswick	10. NEAREST CITY Wilmington									
11. MISSION OR MAJOR FUNCTIONS Receiving, handling, loading, and shipping outbound and retrograde ammunitions, explosives, and other DOD cargo. Military Ocean Terminal, Sunny Point, is a CONUS logistical facility essential to support of military operations.				12. PERSONNEL STRENGTH			PERMANENT		STUDENTS		SUPPORTED		TOTAL (9)		
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)				
				a. AS OF 31 Dec 72			10	9	131			1	9	289	449
				b. PLANNED (End FY 75)			11	27	326						364
				13. INVENTORY											
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)							
a. OWNED		11,275		2,077		25,952		28,029							
b. LEASES AND EASEMENTS		5,050		282		0		282							
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								28,311							
d. AUTHORIZATION NOT YET IN INVENTORY								1,736							
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								1,628							
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS (Exclusive of family housing - \$396)								1,092							
g. GRAND TOTAL (c + d + e + f)								32,767							
SUMMARY OF INSTALLATION PROJECTS															
PROJECT DESIGNATION				TENANT COMMAND c	UNIT OF MEASURE d	AUTHORIZATION PROGRAM		FUNDING PROGRAM							
CATEGORY CODE NO. e	PROJECT TITLE b					SCOPE a	ESTIMATED COST (\$000) f	SCOPE g	ESTIMATED COST (\$000) h						
422	27 - Container Transfer and Marshalling Facility 22 231				SY	72,100	1,628	72,100	1,628						

SUNNY POINT ARMY TERMINAL, N.C., \$1,628,000

Military Ocean Terminal, Sunny Point, is located at Wilmington, N.C. The mission of this installation is to receive, handle, load, and ship outbound and retrograde ammunition, explosives, and other Department of Defense cargo. This program provides a container transfer/marshaling facility.

Status of funds

Funded program not in inventory-----	\$1,736,000
Unobligated projects, Mar. 31, 1973 (actual)-----	802,000
Unobligated projects, June 30, 1973 (estimated)-----	0

Design information—Project No. 27, container transfer/marshaling facility

Design cost-----	\$70,000
Percent complete, Apr. 30, 1973-----	30

Mr. TALCOTT. This is a relatively low priority project, also, is it not?

General COOPER. It is No. 22. I would say, considering the fact that 80 percent of the No. 1 priority was used up in barracks, that this is not low.

Mr. TALCOTT. You can defer this a year without hurting your program?

General COOPER. You could defer it, but I think it is a very worthwhile project. This is our main facility for the east coast. The impact of delay depends, again, on the probability of going to war.

We do need it. I think, in deferring it, the cost will be up by the amount of escalation, but presumably, taxes will be, also. I do not think there is any point in deferring it. I think it is worthwhile and will be needed, although we will not generate the big savings until such time as we actually use it in time of war.

Mr. TALCOTT. It is your judgment and you are saying that it is necessary to implement our contingency plans?

General COOPER. Yes, sir. We will generate about \$150,000 a year in peacetime, but in wartime we figure the savings would be up to \$1.8 million per year. In peacetime, it will take 10 or 12 years to amortize it.

U.S. ARMY, ALASKA

Mr. TALCOTT. Next is U.S. Army, Alaska. Insert page 232 in the record.

[The page follows:]

INSTALLATION SUMMARY

[In thousands of dollars]

	Prior authorization	Proposed authorization	Proposed funding
U.S. Army, Alaska:			
Fort Greely-----		3,489	3,489
Fort Richardson-----		2,140	2,140
Fort Wainwright-----		2,715	2,715
Total-----	0	8,344	8,344

REALIGNMENTS IN ALASKA

Mr. TALCOTT. Will you briefly discuss the proposed realignment actions occurring in Alaska?

General COOPER. The main realignment action in Alaska was to close down the North Post of Fort Wainwright.

Mr. TALCOTT. What was the function there?

General COOPER. The function there was the same as the overall function of Fort Wainwright. We have troops there. We have the 4th Battalion of the 9th Infantry and other individual units of Stratcom.

Mr. TALCOTT. With the winding down of the war in Vietnam, the détente with China and Russia, and the turn to isolation, do we still need all of these bases in Alaska?

General COOPER. Yes, sir. We do not have very many bases in Alaska. It is a very large area.

With deference to Mr. McEwen, it is the best cold region that we have.

Mr. McEWEN. I yield on that.

Mr. TALCOTT. Is there any more you want to tell us about the realignment up there? I did not mean to cut you off.

General COOPER. That is the only realignment.

Mr. TALCOTT. When you accomplish these actions, then have you squeezed all the fat out of the Army base structure in Alaska? You could not squeeze it all out, but have you tried very hard?

General COOPER. We have tried, but we will review these along with every other base we have as a part of our specific study. We do not expect to get much. There are only a small number of bases here, so there is not the opportunity to make the savings that there is within the Continental United States.

NECESSITY FOR FOREIGN BASES

Mr. TALCOTT. Sometime, I wish that you would explain for the record why it is necessary to have any foreign bases. Some Members of Congress, mostly in the Senate, have advocated very strongly that before we close down a single base in the Continental United States, we ought to close down all of our bases overseas.

They are getting a lot of believability out of that kind of statement.

Would you give some thought to that and put a statement in the record as to why it is really essential to our national defense and national security that we maintain bases overseas when, at the same time, we are consolidating and closing bases in the continental United States?

General COOPER. Yes, sir, although I will have to interject that this subject is not primarily related to construction. It is part of the national policy and the treaties we have with NATO, and others.

Mr. TALCOTT. I think it is important. We are charged by the Congress with providing money for military construction. Some people are saying it is unwise to provide money for any kind of construction programs outside the United States when we are closing and consolidating bases here and putting people out of work.

Why do we not have bases just in America and not overseas?

General COOPER. Actually, we are providing very little funds for military construction overseas now. If you close down the bases overseas and move those troops to the United States, your costs will go up tremendously if you are going to provide them the same facilities.

Mr. TALCOTT. I wish you would put something additional in the record explaining this better.

[The information follows:]

The necessity for overseas bases is directly related to national policy and treaties with other countries. As long as national policy calls for the presence of Army forces overseas there will be a requirement for bases to support them.

To use Europe, where the bulk of our overseas forces are stationed, as an example, the fundamental issue is why do we maintain forces there. The function of our military forces along with our allies is to deter war and to defend our nations if war breaks out. Within this context, our main objectives in Europe are:

(a) To maintain a strong NATO, and through it to exercise influence on European security matters, encourage our Allies to improve and increase their defense contributions, and prevent and expansion of Soviet influence or control;

(b) To reduce the possibility of armed conflict in Europe, while providing for various war-fighting options should deterrence fail;

(c) To discourage pressures for nuclear proliferation.

The United States commitment in support of NATO calls for a specified number of division equivalents within a severely constrained time period. If we return our forces to the United States but still plan to meet NATO commitments, we would need the capability to rapidly reintroduce forces into Europe in the event of an imminent threat of war. To do this would require additional airlift capacity and, in order to reduce the demands on airlift, prepositioned equipment in Europe.

Returning troops from Europe or other overseas locations would also generate a sizable one time budgetary impact for housing and operational facilities required at Conus locations. We do not have adequate facilities for the troops now stationed in Conus. Redeployment of overseas forces would greatly expand this existing deficit and extend the time period needed to provide permanent facilities for our Conus force.

FORT GREELY, ALASKA

Mr. TALCOTT. Going to Fort Greely, Alaska, insert page 233 in the record.

[The page follows:]

1. DATE 9 July 1973	2. DEPARTMENT ARMY		3. INSTALLATION Fort Greely									
4. COMMAND OR MANAGEMENT BUREAU United States Army, Alaska		5. INSTALLATION CONTROL NUMBER Alaska 341		6. STATE/COUNTRY								
7. STATUS Active	8. YEAR OF INITIAL OCCUPANCY 1947		9. COUNTY (U.S.)	10. NEAREST CITY Fairbanks								
11. MISSION OR MAJOR FUNCTIONS Provide a commander, staff and station complement for the command, control, administration, and operation of Fort Greely. Provide administrative and logistical support as outlined in applicable cross-service agreements to the US Army Arctic Test Center, Northern Warfare Training Center, and such other units and activities as may be directed. Maintain Allen Army Airfield and Hangar. * Includes transient and students			12. PERSONNEL STRENGTH	PERMANENT		STUDENTS		SUPPORTED		TOTAL		
			OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)	TOTAL (9)	
			a. AS OF 31 Dec 72	105	1,032	142	16	150				1,445
			b. PLANNED (End FY 75)	94	691	160	25*	350*	0	0	0	1,320
			13. INVENTORY	LAND	ACRES (1)	LAND COST (\$000) (2)	IMPROVEMENT (\$000) (3)	TOTAL (\$000) (4)				
a. OWNED	639,063	0	58,308	58,308								
b. LEASES AND EASEMENTS				0								
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72				58,308								
d. AUTHORIZATION NOT YET IN INVENTORY				3,057								
e. AUTHORIZATION REQUESTED IN THIS PROGRAM				3,489								
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS				1,763								
g. GRAND TOTAL (c + d + e + f)				66,617								
SUMMARY OF INSTALLATION PROJECTS												
PROJECT DESIGNATION												
CATEGORY CODE NO.	PROJECT TITLE	Page No.		TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM				
a	b	PRIORITY	No.	c	d	SCOPE	ESTIMATED COST (\$000) (f)	SCOPE	ESTIMATED COST (\$000) (h)			
721	71 - EM Barracks w/o Mess	1	234		MN	182	3,060	182	3,060			
740	113 - Auto Self-Help Garage	46	235		SF	4,304	429	4,304	429			
			Total				3,489		3,489			

FORT GREELY, ALASKA

\$3,489,000

Fort Greely is located at Fairbanks, Alaska. The mission of this installation is to provide for the command, control, administration and logistical support to the U.S. Army Arctic Test Center, Northern Warfare Training Center and other units and activities as may be directed and to maintain Allen Army Airfield and Hangar. The program provides barracks without dining facilities and an automotive self-help garage.

Status of Funds

(\$000)

Funded Program Not in Inventory	3,057
Unobligated Projects, 31 March 1973 (actual)	2,468
Unobligated Projects, 30 June 1973 (estimated)	494

Design Information

Project No	Project	Design Cost (Thousands)	Percent Complete 30 Apr 73
71	EM Barracks w/o Mess	140	34
113	Automotive Self Help Garage	22	15

ENLISTED BARRACKS SUMMARY, FORT GREELY, ALASKA

MEN*

Total Requirement	1,029
Existing Substandard	604**
Existing Adequate	0
Funded, Not in Inventory	0
Adequate Assets	0
Deficiency	1,029
FY 1974 Program	182
Barracks spaces occupied, 15 Mar 73	380

* 90 square feet per man - permanent party personnel;
72 square feet per man trainees.

** Includes 496 spaces that can be made adequate

Mr. TALCOTT. Provide for the record the cost of operating and maintaining the base.

General COOPER. Yes, sir.

[The information follows:]

Real property, personnel, and other operating costs, Fort Greely, Alaska

Activity :	Cost
Backlog of essential maintenance and repair.....	\$1, 000, 00
Initial cost of improvements.....	58, 308, 000
Replacement cost (excluding land).....	221, 570, 000

FISCAL YEARS

	1972	1973	1974
Real property maintenance.....	1, 175	1, 705	1, 478
Other operating costs.....	1, 272	1, 869	1, 573
Personnel:			
Military expense.....	2, 882	3, 002	2, 602
Civilian cost.....	968	1, 049	1, 216

¹ Estimated.

Mr. TALCOTT. Then will you break out the costs associated with real property and show the replacement value of the facilities there.

General COOPER. Yes, sir. The replacement value is about \$220 million. Greely is a very high-cost construction area. It costs about 120 percent more to build at Greely than it does to build in Washington, D.C.

AUTO SELF-HELP GARAGE

Mr. TALCOTT. I note that the auto self-help garage is a very low priority item. Can you give us the priority?

General COOPER. The priority is No. 46, sir. Something has to be at the bottom, you realize. When we review projects we go through the whole system * * *

Mr. TALCOTT. It is unfair, really, to assign priorities to everything. We do not get a chance to go around to the bases and make an independent judgment. We need your counsel.

General COOPER. In terms of accomplishing the overall mission, it is lower.

Mr. TALCOTT. What are you using now?

General COOPER. We are using some temporary facilities at Fort Greely.

Mr. TALCOTT. You could use these for another year or so, maybe another decade?

General Cooper. Yes, sir, but the priority will probably never get very high, because some people will say we can always use the existing facilities; the project is not mission-essential.

But I will have been to Fort Greely, and know that the troops use those auto self-help garages tremendously.

Mr. TALCOTT. If we had a referendum among the troops, would it have a higher priority?

General COOPER. I think it would have a higher priority than some of the barracks.

Mr. KEENAN. I would like to emphasize what General Cooper just said.

I have quite often gone out into the field on Comptroller business. While I am out at the posts, I always try to take a tour if I possibly can, and talk to the troops. I have found that almost without exception the enlisted men that I have talked to have told me that the automotive self-help garages are the most popular of the special activities on the post.

Mr. TALCOTT. You find general acceptance to these not just in Alaska?

Mr. KEENAN. I have never been in Alaska. I am talking about around the United States and the Pacific.

General COOPER. It is true everywhere.

Mr. TALCOTT. I think this makes a difference, too. That is why I asked you about a referendum, what is popular with the troops as well as what is popular with the command. I think we have to take all views into consideration.

This is why we were rather adamant some years ago in insisting that wives be consulted about family housing. We think there are some other ingredients that have to be considered.

FORT RICHARDSON, ALASKA

Mr. TALCOTT. Fort Richardson, Alaska.

Insert page 236.

[The page follows:]

1. DATE 9 July 1973		2. DEPARTMENT ARMY		3. INSTALLATION Fort Richardson											
4. COMMAND OR MANAGEMENT BUREAU U.S. Army, Alaska			5. INSTALLATION CONTROL NUMBER Alaska 781		6. STATE/COUNTRY Alaska										
7. STATUS Active			8. YEAR OF INITIAL OCCUPANCY 1939		9. COUNTY (U.S.) Anchorage										
11. MISSION OR MAJOR FUNCTIONS Logistic support for all Army Operations in Alaska, including special requirement for supply and maintenance facilities for both Alaska Civilian components and continental active Army units receiving tactical training in Alaska. Provide ground and surface-to-air defense for Elmendorf Air Force Base. * Includes transients and students				12. PERSONNEL STRENGTH		PERMANENT			STUDENTS			SUPPORTED	TOTAL		
				OFFICER (1)	ENLISTED (2)	CIVILIAN (3)	OFFICER (4)	ENLISTED (5)	OFFICER (6)	ENLISTED (7)	CIVILIAN (8)			(9)	
				a. AS OF 31 Dec 72	634	5,647	1,268	0	50						7,599
				b. PLANNED (End FY 78)	595	4,965	1,398	20*	90*	0	0	0			7,068
				13. INVENTORY											
LAND		ACRES (1)		LAND COST (\$000) (2)		IMPROVEMENT (\$000) (3)		TOTAL (\$000) (4)							
a. OWNED		72,329		62		166,704		166,766							
b. LEASES AND EASEMENTS								0							
c. INVENTORY TOTAL (Except land rent) AS OF 30 JUNE 19 72								166,766							
d. AUTHORIZATION NOT YET IN INVENTORY								8,375							
e. AUTHORIZATION REQUESTED IN THIS PROGRAM								2,140							
f. ESTIMATED AUTHORIZATION - NEXT 4 YEARS								9,501							
g. GRAND TOTAL (c + d + e + f)								186,782							
SUMMARY OF INSTALLATION PROJECTS															
PROJECT DESIGNATION															
CATEGORY CODE NO.	PROJECT TITLE			Page No.		TENANT COMMAND	UNIT OF MEASURE	AUTHORIZATION PROGRAM		FUNDING PROGRAM					
a	b			c		d	e	ESTIMATED COST (\$000) f	g	ESTIMATED COST (\$000) h					
721	252 - Barracks Modernization			1 237		MN	270	2,140	270	2,140					