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Abstract: AIR FORCE ACADEMY CONSTRUCTION TOPICS INCLUDE: CONTRACTS; FUNDS; LEGAL; ADMINISTRATION; AND OPERATIONS. REAL PROPERTY TOPICS INCLUDE: MILITARY CONSTRUCTION PROGRAM (MCP), FISCAL YEAR 1961, FISCAL YEAR 1962 AND FISCAL YEAR 1963; MINOR CONSTRUCTION PROGRAM; BOMARC; NORAD COC (425) (NORTH AMERICAN AIR DEFENSE COMMAND COMBAT OPERATIONS CENTER); ADC/NORAD (AIR DEFENSE COMMAND) REDEPLOYMENT; ACW (AIRCRAFT CONTROL AND WARNING) SYSTEM; GAP FILLER RADARS; PHASE OUT OF RADAR SITES; FREQUENCY DIVERSITY RADAR; SAGE (SEMI-AUTOMATIC GROUND ENVIRONMENT); FAA (FEDERAL AVIATION ADMINISTRATION); TROPOSPHERIC COMMUNICATIONS; ZERO LAUNCH (ZEL) HARDENING OF FIGHTER AIRCRAFT; MATADOR TM-76 (MACE) MISSILE PROGRAM; BALLISTIC MISSILES AND SPACE PROGRAM; SPECIAL PROJECTS; SAC (STRATEGIC AIR COMMAND) HEAVY BOMBARDMENT BASES; COMBAT OPERATIONS CENTERS; EARTH COMMUNICATION SYSTEM AND EMERGENCY ROCKET COMMUNICATION SYSTEM; MAJOR COMMAND FINAL PROGRAM, FISCAL YEAR 1962 (ARDC (AIR RESEARCH AND DEVELOPMENT COMMAND), AMC (AIR MATERIEL COMMAND), ATC (AIR TRAINING COMMAND), AU (AIR UNIVERSITY) AND HEADQUARTERS COMMAND); LEGISLATION EFFECTING ACQUISITION; AIR FORCE RANGES; ACQUISITION AND DISPOSAL APPROVAL IN ACCORDANCE WITH 10 USC 2662 (UNITED STATES CODE) (FORMERLY TITLE VI CLEARANCES); ICBM (INTERCONTINENTAL BALLISTIC MISSILE) PROGRAM; CONDEMNATIONS; CLOSING OF MITCHEL AIR FORCE BASE NY. CONSTRUCTION AND ENGINEERING TOPICS INCLUDE: MASTER PLANNING; BOMARC (IM-99C AND IM-99B); AIRCRAFT FUEL SYSTEMS MAINTENANCE DOCKS; ACW FREQUENCY DIVERSITY RADAR PROGRAM; NAVIGATIONAL AIDS; ARCHITECT/ENGINEER SERVICES; INVESTIGATIONAL ENGINEER; NUCLEAR POWER; PROTECTIVE CONSTRUCTION; SANITARY; MECHANICAL (AIR CONDITIONING); AIR FORCE RESERVE; ANDREWS AIR FORCE BASE MD; NUCLEAR ENGINEERING TEST FACILITY; SOLAR FACILITIES; LAJES WATERFRONT IMPROVEMENT PROJECT (AZORES); AIRCRAFT LABORATORY FATIGUE TEST (SONIC); HEATH MAINTENANCE ANNEX FACILITIES; HILL MISSILE MAINTENANCE (RECYCLING) FACILITY; HILL AIR FORCE RANGE; OVERSEAS FACILITIES; MILITARY ASSISTANCE PROGRAM; SAC GAM (GUIDED AIR MISSILE) FACILITIES; SAC MAINTENANCE DOCKS; AIR FORCE DESIGN RESPONSIBILITY;; OKINAWA M SITE (MOBILE RADAR SITE); BITBURG METRO TANGO; CONSTRUCTION FOR SAC MANNED AIRCRAFT; GAM 87 (SKYBOLT); NORTHERN TANKER BASES; SPANISH BASE PROGRAM; FIGHTER INTERCEPTOR AIRCRAFT; BOMARC CONSTRUCTION; BMEWS (BALLISTIC MISSILE EARLY WARNING SYSTEM); ACW OVERSEAS; ACW ZONE OF THE INTERIOR (ZI); MISSILES (ATLAS, TITAN, MINUTEMAN AND SNARK); AND SPACE PROGRAM. BASE MAINTENANCE TOPICS INCLUDE: IMPROVEMENT OF MANAGEMENT OF MAINTENANCE OF REAL PROPERTY FACILITIES; HEATING AND POWER CONFERENCE; TRAINING COURSES; AND POLICY GUIDANCE. FAMILY

HOUSING TOPICS INCLUDE: COST OF MORTGAGE FINANCING; SURPLUS COMMODITY FAMILY HOUSING OVERSEAS; QUARTERS OF CHIEF OF STAFF OF THE AIR FORCE; SHELL HOUSING; CAPEHART PROGRAM; WHERRY ACQUISITION, REHABILITATION AND IMPROVEMENT PROGRAM; ACW FAMILY HOUSING; NORTHERN TIER BASES; INADEQUATE QUARTERS; PRELIMINARY AND FINAL CLOSINGS. INCLUDES GLOSSARY.

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 BY
 ADMINISTRATIVE BRANCH, AFOCE

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- ✓ 2. SPACE
- ✓ 3. MISSILE Base
- ✓ 4. Airfields - Opn + Manage Maint, p. 70-73
- ✓ 5. HOUSING, P. 74

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CHAPTER I

PREFACE

CHAPTER I

PREFACE

Organizational Changes

During this period there were no significant organizational changes or changes in key personnel. The directorate continued to operate with two Deputy Directorates reporting to the Director of Civil Engineering.

Long Range Planning

AFXPD has completed and received staff approval for both objective and attainable forces projected through 1971. These projections will be kept up to date on a periodical basis and used by operating offices for guidance in various actions, such as programming, construction and maintenance of real property facilities. This directorate is now following up on advanced systems, particularly those relating to space operations, to determine effects on Air Force installations as early as possible. Progress on space systems is expected to accelerate from its previous dormant state as the space ROC has been published which should clarify the military role in space to a great degree.

CHAPTER III

AIR FORCE ACADEMY CONSTRUCTION

CHAPTER II

AIR FORCE ACADEMY CONSTRUCTION

The U. S. Air Force Academy Construction Program closed the calendar year with only one project physically incomplete.

(1) The value of completed work jumped from approximately \$115,198,000 to \$116,644,138.

(2) Seven (7) contracts were closed out financially during this period, at a total value of \$1,984,954.14.

(3) A Capehart housing contract was closed out financially for a total value of \$19,387,419.

(4) Major physically completed building contracts soared to 100 but three (3) projects remain contractually unfinished (pending completion of contractual obligations beyond the construction itself).

(5) The work under contract moved from \$138,096,152 on 30 June 1960 to \$138,675,892 on 31 December 1960.

(6) Labor-management-Air Force relations continued outstanding during the period. Further, construction personnel continued their excellent safety record during the period.

(7) On-site construction personnel has been reduced from 117 to approximately 29. This reduction has been occasioned by rejection of aluminum panels for roof of Chapel and subsequent delay in agreement of suitable fix and resultant shop refabrication.

(8) The Chapel contract completion date has been extended eighty-one (81) days as a result of the steel strike. New completion date is 20 August 1961.

Funds

The dwindling balance of funds available for construction requires that an ever increasing emphasis be placed on existing claims which have to be paid as adjudicated by ASBCA.

Legal

The Armed Services Board of Contract Appeals overruled the Government's motion to dismiss on ASBCA Nos. 5869, 5870, 5871, 5872, 5967 and 5768. These claims were remanded to AFACA for negotiation and totaled \$2,339,706.87. Negotiated settlement of these claims was made in the amount of \$1,281,675.25. Six (6) other opinions were rendered by ASBCA during the period on appeals by the contractors from decisions of the Contracting Officer of AFACA. The contractors were sustained in the amount of \$136,000.00 and the Government in the amount of \$394,000.00.

Administration

The AFACA continued to release additional space in the Bradford Building, 3333 N. El Paso Street. At the beginning of the period the Agency was utilizing 7042 square feet of leased space. Presently the Agency is occupying 4389 square feet.

Engineering & Operations

At the end of the period all as-builts were complete, with the exception of the Chapel.

All Operation and Maintenance Manuals are complete, with the exception of the Chapel.

The construction schedule at the end of the period was 98.5% complete.

At the present time the Chapel construction progress shows an actual 47.5% completion, versus a scheduled 52.5%.

CHAPTER III

PROGRAMMING AND REAL PROPERTY

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CHAPTER III

PROGRAMMING AND REAL PROPERTY

FY 1961 Military Construction Program

The FY 1961 Military Construction Authorization Bill was approved by Public Law 86-500, 8 June 1960. This bill approved new authorization in the amount of \$727,305,000 an increase in prior years authorization of \$52,740,000 and an Air Force Reserve authorization of \$4,497,000. The FY 1961 Military Construction Appropriation Program was enacted into Public Law 86-630, 12 July 1960. This appropriation bill cleared projects in the amount of \$717,294,000; however, only a total of \$609,501,000 was received as new funds. The appropriation program as approved will require that \$107,793,000 will have to be financed by use of savings and reprogramming of prior years appropriations. The appropriation bill also contained an appropriation of \$4,000,000 for the Air Force Reserve Program. (Unclassified)

FY 1962 MCF

Within the reporting period, the initial Major Air Command submittal of the FY 1962 MCF progressed along different lines than that previously experienced. The Air Staff developed the program at a total of four (4) different budget levels. The program as submitted to the Secretary of the Air Force 19 September 1960 amounted to; A-Budget \$751,002,000, B-Budget \$791,966,000,

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C-Budget \$562,100,000, and D-Budget \$970,800,000. The New Authorization program forwarded to OSD, 14 October 1960 was A-Budget \$471,628,000, B-Budget \$574,512,000, C-Budget \$694,154,000, and D-Budget \$811,635,000. OSD approved and forwarded to BOB the FY 1962 Military Construction Authorization Program in the amount of \$466,527,000, and the Military Construction Appropriation Program in the amount of \$536,000,000. The Air Force Reserve Program submitted to BOB amounted to an authorization of \$4,297,000 and an appropriation of \$4,757,000. (Unclassified)

FY 1963 MIP

The policy guidance to the major air commands for development of the FY 1963 MIP was transmitted on 31 December 1960. This guidance continued the use of command program dollar ceilings as a management tool to maintain project submittals at a level consistent with normal attrition and expected funding. Projects exempt from these ceilings such as missiles, technical facilities, design, and minor construction are estimated to cost \$460 million. This figure, added to the established command ceilings of \$340 will result in an anticipated Command FY-1963 Program submittal of \$800 million. (Unclassified)

Minor Construction Program

The FY 1961 Minor Construction Program as approved by the Congress amounted to \$15 million. There was a carry-over of \$4 million of P-341 funds from FY 1960, making a total of 19.9

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million available for fiscal year 1961. Of the \$19.9 million available for obligation during FY 1961, approximately 25% had been awarded as of 31 December 1960.

A great deal of progress was made during the reporting period in the area of providing morale, welfare, and recreational facilities. A backlog of exceptions to criteria (approximately 60) were forwarded to SAI/OSD by 15 July 1960. With the acceptance of these items at Secretarial level, the Air Staff released the "hold" order to the Major Air Commands. This meant that a routine flow of exceptions to criteria started to arrive from the field. On 18 August 1960, the Office, Secretary of Defense delegated authority to the Secretary of the Air Force to approve exceptions to criteria when they were to be established utilizing non-appropriated funds, subject to certain provisions. An all major command letter was dispatched 19 October 1960 outlining the procedures to be followed in preparing future exceptions to criteria as established in DOD Instruction, 1330.3. Approximately 90 projects requesting an exception to criteria have been processed under the new delegation of authority. (Unclassified)

BOMARC

The Continental Air Defense Program directed by OSD on 19 June 1959 established a requirement for 18 BOMARC installations, including two (2) to be built by Canada. The plan provided for a total of 56 launching shelters at each site to support the IM-99A (liquid

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propellant rocket) or the IM-99B (solid propellant rocket). This program was reduced on 30 March 1960 to a total of 10 locations, including two in Canada. (Confidential)

Construction of the 56 launcher IM-99A sites at McGuire and Suffolk County, and the 28 launcher IM-99A sites at Otis and Dow, as authorized in the FY 1958 MFP, is complete. (Unclassified)

In the FY 1959 MFP, construction is completed for both IM-99A and IM-99B complexes at Langley Air Force Base. Construction is completed for the initial increment of 26 IM-99B shelters at Kincheloe and DLRth. Niagara is approximately 97% complete for the initial increment of 26 IM-99B shelters. Augmentation with 28 IM-99B shelters and support facilities started in late November 1960 at Otis and in late December 1960 at McGuire. The 20 IM-99B shelter augmentation at Niagara is scheduled to start in February 1961. Construction on the three augmentations will be completed in the first half of calendar year 1962. (Confidential)

No authorization was required for BOMARC construction in the FY 1960 MFP. (Unclassified)

In view of the revised Air Defense Program, no FY 1961 authorization will be required for augmentations. (Unclassified)

No additional programming will be required as prior authorization completes the latest approved program. (Unclassified)

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NORAD CCC (425L)

As a result of the Headquarters USAF directed in-house re-examination of the proposed NORAD CCC, action was initiated during August 1960 to reactivate the project. The re-examination was made by the Air Force Command and Control Development Division of ARDC. (Unclassified)

The NORAD CCC was placed in a hold status in FY 1960 due to its low category listing and because of the austere Air Force budget at the time. Slippage to FY 1961 was permissible and would still provide a FY 1964 operational date. At the time the hold order was placed on this system, numerous problems concerning the increased functional, equipment and space requirements had not yet been resolved. (Confidential)

The first increment of \$10 million in support of this project was appropriated within Public Law 86-275. This was to secure necessary real estate, provide access roads and tunnel and chamber excavation. Of the \$10 million appropriated, all of which has been apportioned, \$1.5 million was utilized to secure necessary real estate and to construct the access roads (less final surfacing) to the side of the mountain where excavation is to commence. However, the remaining \$8.5 million which would have provided for the tunnel and chamber excavation was included as an item in the Secretary of Defense letter of 13 April 1960 to the Congress which indicated that there were \$130 million of savings generated by cancellations or

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reductions in the FY 1961 and prior years military construction programs. Therefore, approval must be obtained from the House and Senate Appropriations Sub-committees prior to proceeding with excavation. The Committees are presently reviewing the request to proceed. It is anticipated a favorable determination will be forthcoming in the very near future. (Unclassified)

The second increment of \$12.4 million which is to provide a three story 154,000 structure to house the communications equipment, computers and displays, is contained in the FY 1962 Military Construction Program. This FY 1962 MCF increment completes the now known P-300 requirement for this system. (Unclassified)

ADC/NORAD Redevelopment

In support of the recently revised Fighter Interceptor Deployment, the Air Defense Command requested approval of 60 projects totaling \$9,709,800 at 18 bases. (Unclassified)

A detailed review of subject items resulted in 12 projects totaling \$2,332,000 being approved for inclusion in the FY 1962 MCF and 3 projects totaling \$492,100 being approved and processed through minor new construction (P-341) channels. Seventeen projects totaling \$795,700 were approved as Major Repair and Modification Projects (P-349.3/P-459.1). (Unclassified)

Twenty-two projects totaling \$4,324,000 were deferred and 4 P-341 projects totaling \$1,440,000 were disapproved. Two P-459.3 projects for \$326,000 were also disapproved. (Unclassified)

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The Air Defense Command was advised that deferred projects may be reconsidered by this headquarters in the event slippage occurred in the mission requirement for construction projects currently included in the FY 1962 MIP. In instances where deferral or deletion action was taken, each project was evaluated as to the need to support long term and/or expanded missions in the light of existing or programmed facilities, along with those facilities which could economically be restored or expanded to a usable condition. Project justifications were reviewed on the basis of data presented. In most instances, the data presented did not justify the proposed construction, or the nature of the project was such that it could not adequately be supported before Congressional Committees as an item of emergency construction. (Unclassified)

ACM System

The historical report for the period 1 January 1960 to 30 June 1960 described the many changes that had taken place in the ACM system. Major program decisions, revised deployments, and delivery schedules were made in that period for all phases of the ACM program, except Gap Fillers and disposal of Radar Sites. A report on the various elements of the ACM system for the period July to December 1960, follows: (Unclassified)

Gap Fillers

On 25 October 1960, AFODC established the final Air Defense Gap Filler Program. This final program officially deleted the FY 1961 \$6 million requirement for USAF financed Gap Fillers in Canada.

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The total Gap Filler program now envisioned is as follows:

ZI

Existing valid sites	115
FY 60 and FY 61	15
FY 62 MMAP	19
Total	<u>149</u>

Canada

Existing valid sites	6
CADEN*	45
Total	<u>51</u>

*No U. S. construction cost (Confidential)

Under the revised Gap Filler program, 6% of the operating Gap Fillers in the U. S. were declared excess to requirements and were eliminated. Press release on these Gap Fillers was made 26 October 1960. (Unclassified)

Phase-Out Of Radar Sites

One of the major Air Defense plan changes which was made official after 30 June 1960 was the elimination from the Air Defense system of 14 ACW sites. This was a result of various Air Defense studies. Phase-out of these sites was announced in a series of press releases beginning 18 July 1960. (Unclassified)

Frequency Diversity Radar

Practically no changes were made in the FD radar deployment as it was established prior to 30 June 1960. The schedule is presently considered firm and is being implemented. With regard to the FTS 27 radar, several statements were made by Electronics System Center (ESC) indicating that the radar was not compatible with SAGE and had other difficulties. As of 31 December 1960, this headquarters was still in the process of trying to win down to specification and

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was not meeting with much success. Contract award for FY 1961 HDP FFS-27 radar tower construction is being held in abeyance until the FY 1961 FFS-27 radar procurement contract is awarded. (Unclassified)

SAGE

On 11 October 1960, a decision was made by this headquarters on the method of providing a SAGE combat center capability in the central and western portions of the U. S. where no combat centers exist due to previous program changes, such as elimination of the soft CC's and cancellation of the hardened super combat centers. It was determined that remote combat centers would be provided for the 28th and 29th Air Divisions at Hamilton and Richards-Gebaur respectively. Remote display equipment would be installed in the existing manual block houses at these locations and these remote displays would receive display information from SAGE direction centers at Sioux City and Stead. Each of these manual block houses has to be modified at a cost of about \$150 thousand. It is felt that this work is properly chargeable to the \$2.7 million FY 1961 IS SAGE package, since that package was authorized specifically for the provision of a combat center capability for the 28th and 29th Air Divisions. The \$2.7 million package, however, specified that this work would be accomplished by converting the direction centers at Sioux City and Stead. The currently approved plan is far less costly in the construction area. The Budget Director feels

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that it is necessary to advise Congress of our intent to provide this construction at Hamilton and Richards-Debour in lieu of Sioux City and Stead. He has prepared a letter for Mr. Garlock's signature to OSD asking OSD to advise the Appropriations Committees of the Air Force's intent. As of 31 December 1960, this paper was still being held in Mr. Garlock's office. By separate action, however, the Air Force has obtained written OSD permission for the Air Force to be the design and construction agent for this work. (Unclassified)

FAA

A memo of understanding between FAA and ADC covering joint use of a number of AGEN sites has been submitted to this headquarters for review and is presently being processed by the Director of Operations. In this connection, the Air Force has a requirement for stationing units in FAA Air Route Traffic Control Centers at Salt Lake City and Denver for the purpose of transmitting radar data from these centers into the SAGE system. Small amounts of minor construction work will be required in each of these centers and the method of funding is under study. (Unclassified)

Tropo Communications

An urgent requirement exists for a reliable communication link into the DEW Line to support SAC and NORAD. This link is to be between Fort Yukon of the White Alice System to Barter Island on the DEW Line. An emergency request for this work has been prepared and

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is being processed. It will require two construction seasons to accomplish this work and it is hoped that construction funds will be available in time to award a contract and have materials delivered to the Seattle dockside by June 1961. (Secret)

The final increment of the Trans Mid Tropo System of \$4,446,000 is included in the FY 1962 MFP. This increment along with the approximately \$6 million approved in FY 1961 and FY 1960, will be used at one time for the complete construction of 18 stations throughout Spain, Italy, Germany, Turkey and North Africa. This is an important strategic and intelligence communications link. (Secret)

Zero Launch (ZEL)/Hardening Of Fighter Aircraft

On 19 August 1960, a meeting was held to firm up the requirements and concept for ZEL, for inclusion in MFP program. As a basis for planning purposes, the ultimate requirements were set at \$103.4 million, of which \$92.4 million would be included in the FY 1962 MFP, \$10.8 million in FY 1963 MFP and \$0.2 million for FY 1964 MFP. These figures were based on 72 ZEL unit tactical aircraft for USAF and 44 aircraft for PACAF. The method of launching by either outside shelter or movable roof with interior launching was undetermined. (Secret)

The ZEL concept features a piloted fighter weapon system being rocket-boosted from a stationary position without ground roll into flight, regardless of weather, for the purpose of conducting a nuclear weapons mission. This concept will provide a sheltered atomic force

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located at protected sites which will be difficult for the enemy to destroy. The force will contain aircraft, munitions and crews poised in an alert status within five minutes with subsequent launching at three minute intervals, ready to launch an attack against targets whose destruction is most critical to friendly forces. This concept is divided into two phases with neither dependent on the other.

- a. Phase 1. Alert shelters with launching capability
- b. Phase 2. Recovery

An initial ZEL program of \$30 million, included in the FY 1962 RCP, subdivided \$6.4 million for USAFE and \$23.6 million for PACAF, was submitted to OSD on 5 October 1960. The program in USAFE involved construction of 6 hardened above-ground protective structures (6 buildings with 2 aircraft each) at various locations; PACAF area, Kaduna \$3.6 million and Kusan \$3.55 million (4 buildings with 4 aircraft each); Ogan, \$6.44 million (3 buildings with 4 aircraft each). (Secret)

On 18 November 1960, OSD in their work-up of the ZEL program deferred approval of these projects on the basis that insufficient data was available to warrant implementing this ZEL program at this time. Item has been resubmitted to OSD in the Reappraisal Program. (Unclassified)

Matador TM-76 (MAGE) Program

The MAGE is a surface-to-surface tactical mission, designed primarily to operate against a fixed target within enemy/territory held

The physical characteristics of the TM-76A and TM-76B are essentially

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the same, the principal differences between the two being in guidance systems and range. The launching sites are located around the parent base, dispersed as the commander requires. (Secret)

The FY 1959 MFP included \$5.816 million for Okinawa "MF" site, including operational and support type facilities. The FY 1960 MFP of \$10.1 million for MAGE facilities provides \$6.0 million for hardening shelters at Bitburg, Germany and \$4.1 million for hardening shelters at Okinawa "MF" site. This program was deferred during Congressional review and was included in the FY 1961 MFP, along with additional request for funds in the amount of \$6.0 million at Okinawa "MF" site, and \$10.531 million at six (6) Ogan locations for MAGE hardening; however, the mission at Ogan has since been deleted and then became a part of the Radson MAGE program. The FY 1961 MFP also contained \$6.0 million for hardening MAGE facilities in Germany. The FY 1960 MFP appropriation request for hardening MAGE facilities in Germany was refused, with the provision that if the deployment of missiles in this area is firm, the Secretary of Defense may reprogram the project out of funds available. (Secret)

The operational facilities at Taiwan, Formosa (\$750,000) were provided by utilizing emergency authorization under Section 302, Public Law 963, 84th Congress. All MATADOR facilities constructed in Germany prior to FY 1953 were funded by the German Government, resulting in no construction cost to the USAF for three installations.

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\$2.4 million has been funded in the FY 1959 MIP for construction of facilities to provide a soft configuration at Hahn and Sembach. Projects for Bitburg have been deleted from the FY 1959 MIP in lieu of the construction of hardened facilities contained in the FY 1960 MIP. (Secret)

The FY 1962 MIP includes \$1.1 million for MACE facilities at Hahn, Bitburg and Sembach, Germany. It provides for the construction of 6 warhead assembly buildings; 48 guided missile shelters, cargo storage, alert alarm systems, ammunition magazine buildings, wash-rack, dormitory, cuisine kennels, dining hall and administration buildings. This program as submitted by USAF was approved by OSD in their review of the FY 1962 MIP on 14 November 1960. (Secret)

On 21 December 1960, at the urgent request of PACAF, this headquarters approved the construction of 400 additional dormitory spaces and 20 OQ's at Kaduna in support of the MACE program on Okinawa. The funds for the implementation of this program are to come from contract savings from the previously approved \$5.6 million of the FY 1959 MIP. (Secret)

Ballistic Missiles & Space Systems

During this reporting period many different ballistic missile and space postures were examined with consideration being given to follow-on missiles and acceleration of the Space Systems. Four different budget submissions were prepared. One supported a maximum force of 13 Atlas, 16 Titan, and 13 hardened and dispersed 1st squadrons.

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The final FY-1962 MIP as approved by OSD was based on 13 Atlas, 14 Titan, and 9 HED H² squadrons plus support for Space Systems. (Secret)

Summary of the total Missile Program through the FY-1962 MIP Submittal is as follows:

Atlas: 13 Operational Squadrons at 11 Bases

<u>Squadron</u>	<u>Base</u>	<u>FY</u>	<u>Configuration</u>
1	Vandenberg	58	Various
2	Warren	58	1x6, Mod III Soft
3	Warren	58	3x3, Mod III Soft
4	Offutt	58	3x3, Mod III Soft
5	Fairchild	58	1x9, 25 psi
6	Foxhas	59	1x9, 25 psi
7	Warren	60	1x9, 25 psi
8	Schilling	60	1x12, 200 psi
9	Lincoln	60	1x12, 200 psi
10	Altus	60	1x12, 200 psi
11	Dyess	60	1x12, 200 psi
12	Walker	60	1x12, 200 psi
13	Plattsburgh	60	1x12, 200 psi

Titan: 14 Operational Squadrons at 9 Bases

<u>Squadron</u>	<u>Base</u>	<u>FY</u>	<u>Configuration</u>
1	Lowry AFB	59	3x3, 200 psi
2	Lowry AFB	59	" " "
3	Ellsworth AFB	60	" " "
4	Beale AFB	60	" " "
5	Larson AFB	60	" " "

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<u>Squadron</u>	<u>Base</u>	<u>FI</u>	<u>Configuration</u>
6	Mc. Home AFB	60	3x3, 200 psi
7	Davis-Monthan I	61	1x9, 300 psi
8	Davis-Monthan II	61	" " "
9	McCormell I	61	" " "
10	McCormell II	61	" " "
11	Little Rock	61	" " "
12	Little Rock	61	" " "
13	Griffiss	62	" " "
14	Griffiss	62	" " "

Minnesota: 9 Operational Squadrons at 3 Bases

<u>Squadron</u>	<u>Base</u>	<u>FI</u>	<u>Configuration</u>
1	Malstrom	61	1x50, 300 psi
2	Malstrom	61	1x50, 300 psi
3	Malstrom	61	1x50, 300 psi
4	Ellsworth	62	" " "
5	Ellsworth	62	" " "
6	Ellsworth	62	" " "
7	Unstated	62	" " "
8	Unstated	62	" " "
9	Unstated	62	" " "

(Secret)

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Summary of the total Space Systems Program through the FY 1963 RDP initial
is as follows:

	SUMM				
	TOTAL GENERAL				
	FY 59	FY 60	FY 61	FY 62	FY 63
Launch					
Launch Support		6,096	750*	9,700	
Missile Support			500*		
Control Operations		304	990*	975	
Tracking & Telemetry	2,300		1,120		
Tracking & Telemetry		2,369			
Tracking & Telemetry	1,715				
Tracking & Telemetry			1,062		
Tracking & Telemetry				1,012	
Advance Planning	920	592	600	200	
Revised budget estimates (Confirms AFMD msgs. 27 May & 20 Jun 60)	6,819	12,599	3,960	10,875	
Initial station deactivated on 1 Nov 59					

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UNITALS

	PL 58	PL 59	PL 60	PL 61	PL 62
<u>INTELL RND PROGRAM</u>					
Defense Alarm Readout Sta Alaska		5,500	3,700		
Tracking & Telemetry New Boston, N. H.			.500		
Tracking & Telemetry South Africa			.500*		
Tracking & Telemetry Vandenberg AFB		.200		.200	
Medical Support Vandenberg AFB				.350	
Hostile Support					
<u>ALERTING RND PROGRAM</u>					
Tracking, Telemetry & Control Okinawa, Japan				8,500	
Defense Alarm Readout Sta United Kingdom				2,000*	
<u>OPERATIONAL TRAINING PROGRAM</u>					
Control Operations Keyly in Area, USA					2,500
Defense Alarm Readout Sta North Atlantic					7,000
<u>ADVANCE PLANNING PROGRAM</u>					
TOTAL		6,050	4,712	12,650	9,500

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The Construction Program in support of Manned Aircraft Missions on SAC bases was submitted to this headquarters for review on 6 July 1960, and consisted of 468 projects, an additional 46 projects were received as late starters during the development of the program. The total value of these projects as compared with the program submitted to Congressional Committees follows:

Original Submission	\$112,840,000
Late Starters	52,592,000
FY 1961 MFP Carry Overs	<u>10,292,000</u>
Total	\$175,724,000

FY 1962 MFP (New Authorization) \$ 51,533,000

Total Program (1) and (2) \$303,433,000

(For Official Use Only)

Special Projects

Items of special interest which are unusual or reflect new concepts in maintenance or operation were considered during the period covered by this report and are listed below:

1. Lighting the SAC Maintenance Parking Apron to facilitate night movement of aircraft and work by night maintenance crews.

(Unclassified)

2. B-58 Ready Shelters. These shelters were originally requested at three bases and were required as protection of electronics equipment

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in ready aircraft. This equipment must be inspected and re-calibrated while the aircraft is in a ready status protection from the elements is required during the time the aircraft canopy is open for this purpose. (For official use only)

3. Offutt Flood Control project previously considered during the FY 1961 MFP Review was re-submitted and included in the FY 1962 MFP. This project includes protection for Offutt Air Force Base from floods occurring on Papillion Creek. The project has been recommended by the Corps of Engineers as economically justified. (For official use only)

4. Maximum use of available facilities. Emphasis of maximum economic use of available facilities was continued during the six month reporting period. A nation-wide dock analysis was conducted in November 1960 to determine where surplus aircraft maintenance docks were available for relocating to bases deficient in covered maintenance space. Members of the Strategic Manned Aircraft team made on the site analysis and attended "ways and means" conferences with other staff agencies of AFCEC in an effort to resolve this problem. These coordinated results of the "dock" survey indicate that all standard large aircraft maintenance dock for SAC and COMAC Res requirements through the FY 1962 MFP can be satisfied by relocation. This involves 22 facilities and savings as compared to the cost of procuring and erecting new docks should approximate \$2,000,000. (For official use only)

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SAC Heavy Bombardment Bases

One additional Heavy Bombardment Dispersal Base (Dyess) was programmed in the FY 1962 MIP. Making a total of 38 bases having this type of mission, the cost of the most urgently needed construction items required for this new mission at Dyess is estimated to be \$5,215,000 and consists primarily of increasing the pavement capability. (Secret)

Combat Operations Centers

The problem of furnished "COO" facilities sufficiently dispersed and hardened to insure a maximum survivability sufficient to control the retaliatory striking force has been of increasing concern to the Air Force, the Department of Defense and the Congress for some time. The development of ICBM capability by a potential enemy and attainment of electronic capability to control our force has had the effect of requiring these facilities to have greater resistance to blast effects and an increased area to accommodate these later control techniques. As a result our program to replace the present inadequate Combat Operations Centers has been under constant revision. (Secret)

The following is the present status of programming for the four Combat Operations Centers required for the Strategic Air Command:

1. Offutt AFB. The soft facility of 15 to 38 ISI will be replaced by a hard (500 ISI) COO of 50,000 SF at \$11,000,000. This project was submitted to the Air Staff for approval as a late starter for the FY 1962 MIP.

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2. Barksdale AFB. A COC of 42,950 SF at \$6,952,000 was authorized in the FY 1961 MIP. Since a greater hardness (500 PSI) is desired, this project will require additional authorization of about \$5,548,000 and funding in amount of about \$12,500,000. The revised project was submitted to the Air Staff for approval as a late starter to the FY 1962 MIP.

3. Hirsch AFB. A COC of 42,950 SF at \$5,651,000 was authorized in the FY 1960 MIP. To provide a greater hardness (600 PSI), additional funds of \$2,114,000 were authorized in the FY 1961 MIP. Since appropriation was denied, the Air Force has submitted a request to Congress in the total amount of \$7,765,000 (including \$45,000 for the purchase of 100 acres of land) for funding against FY 1961 funds.

4. Westover AFB. The existing soft facility of 20 PSI will be replaced by a hard (600 PSI) COC of 42,950 SF, at a cost of \$8,000,000 and is presently contained in the FY 1962 MIP. (Secret)
Earth Communication System and Emergency Rocket Communication System

The above emergency communication systems were considered for inclusion in the FY 1962 MIP at a total combined cost of \$24,700,000. The first system was planned to connect by an almost sabotage free method, the major command and control centers of the United States. The second system was to provide a method of communicating pre-recorded target data to major strategic forces in case of disaster to the key control centers.

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Both systems were deferred to future Military Construction Programs in order to provide more time for further research.

(Unclassified)

Major Command Final Program - FY 1962

During the reporting period the FY 1962 MDP submitted by the major commands was reviewed, staffed, and finalized for submission to Congress. A summary of the major items approved by DOD and BSB expected to be included in the final program is as follows:

ANDC

ANDC: Development and Test Facilities	\$18,500,000
Edwards: Res and Dev Facs; Utilities	1,825,000
Wallops: Operational Facs	345,000
L. G. Hanscom: Res and Dev Fac; Personnel Fac, Utilities	2,819,000
Patrick (including Auxiliaries) Opnl Facs; Res and Dev Facs; Personnel Facs	10,636,000

Items of special interest in the above list include the Aerospace Environmental Chamber at ANDC, which will enable full scale environmental testing of satellite vehicles; and 12 line items, mostly on Cape Canaveral and down-range, will provide for flight testing and tracking of DUNA-SOAR.

AME

The rapidly changing characteristics of weapons systems were reflected in requirements for new types of maintenance and storage facilities. Existing space was being utilized to the maximum extent

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possible to meet the new requirements; however, because of the unique, non-standard nature of many required facilities considerable new construction was required to adequately house and perform the changing maintenance and storage missions.

The FY 1962 Program contains the following:

Normal Support Facilities	\$ 8,801,000
Logistical & Maintenance Facilities	<u>15,832,000</u>
	\$24,633,000

One major item included in the above is the Hill Air Force Range, a new satellite site to Hill Air Force Base which will provide an air-to-air surveillance capability for the Air Force.

AIC

School of Aviation Medicine (Brooks) (2nd phase of 2nd increment)	2,700,000
Recruit Training & Hsg Fac (Lackland)	3,350,000
Runway Repair & Lighting (Randolph)	1,338,000
Tech Training Facilities	2,900,000
Maint Support Facilities	2,100,000

AU

Normal support items	\$3,257,000
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Projects requested by the Command in the amount of \$9.5 million to consolidate and improve scholastic activities at Maxwell Air Force Base and AFIT, Wright-Patterson Air Force Base were deleted.

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Headquarters Command

Andrews - Ops Mission Bldg, A/C Maint Shop and
Parasuites Shop (1,800,000)

(4th increment of construction in support of move from
Bolling Air Force Base and Washington National Airport)

ANDC Headquarters Addition (1,700,000)

(Unclassified)

Legislation Affecting Acquisition

During the period 1 July - 31 December 1960, the following
legislative proposals were made to the Department of Defense:

a. Amend Section 2672 of Title 10, U.S.C., to increase monetary
limit from \$25,000 to \$50,000 (minor land package authority).

b. Amend Section 2677 of Title 10, U.S.C., to:

(1) Authorize the Secretary of a military department to
acquire an option on real property whenever he considers it suitable
and likely to be needed for a public works project of his department.

(2) Increase the amount that may be paid as consideration
for an option from 3% to 5% of the appraised fair market value of the
property.

c. Omit from the proposed Military Construction Appropriation
Act for 1962 the provision limiting the price to be paid for land over
\$25,000 to the appraised value as determined by the Corps of Engineers
or the Bureau of Yards and Docks. (Unclassified)

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Air Force Ranges

Action was continued on processing legislation for withdrawal of land from Public Domain for Nellis Air Force Range, Nevada, 81,000 acres, Luke Williams Air Force Range, Arizona, 479,000 acres, and Matagorda Air Force Range (Overwater), Texas, 1,033,000 acres. As a result of recommendations by the House Interior and Insular Affairs Committee, the proposed bill for Nellis (HR 10402) was ^{re-}written. Congressional hearings on this legislation will have to be re-initiated because Congressional action was not consummated in 1960. Resubmittal of the bill early in January 1961 is planned. Conferences relative to the Memorandum of Understanding for Nellis Air Force Range between the Department of Interior and the Air Force were held and differences resolved. The finalized document is being processed for signature. A preliminary Memorandum of Understanding between Air Force and the State of Nevada Fish and Game Commission was prepared at base level. A conference between representatives of Headquarters, USAF and the Director of the Nevada Fish and Game Commission was held in an effort to resolve differences. A revised Memorandum of Understanding is being prepared in Headquarters, USAF for further consideration. The proposed bill for Luke Williams Air Force Range, Arizona, was revised incorporating comments by the Department of Interior and re-coordinated among the services. Clearance for submission of this bill to Congress was requested from BOB on 18 November 1960. The bill was cleared by BOB

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on 23 December 1960 for submittal to Congress in January 1961. Legislation on the Mt. St. Helena Air Force Range was submitted to Congress in July 1960 as the differences with Department of Interior on Mineral restrictions were resolved. Since no action was taken on the legislation in the 86th Congress, it will be resubmitted to the 87th Congress. A draft of proposed legislation for the withdrawal of land at Guadalupe Lake Air Force Range, California was prepared and forwarded to AFMIA-14 for review and comment. This will require submittal to SAFLL for further legislative processing to OSD and DOD to Congressional Committees. Efforts have been continued to find a suitable site for an East Coast LABS Range for TAC. A revised Leasehold Planning Report for the Brittons Neck area, South Carolina, is being prepared by the Savannah District Engineer, Department of Army. Further attempts are being made to obtain shared use of Cherry Point and Stumpy Point with the Navy. Headquarters TAC has been requested to effect disposal of Claiborne Air Force Range, Louisiana, when the Fort Polk Range (Army) becomes operational. Air space and budgetary problems must be resolved before this action can be effected. The Weapons Range Board has unofficially approved the continued use of Milrose Air Force Range, New Mexico, thus negating the requirement for the alternate site now being studied. Action has been initiated to dispose of Elmer Lake Air Force Range, Alaska, except for a portion to be retained as a jettisoning area. A permit has been issued to the National Aeronautics and Space Agency for the use of Plum Tree Island Air Force Range, Virginia, for two years. Disposal of Ship Shoal Island AF

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Range, Virginia has been initiated. (Unclassified)

The Air Force disposed of Boardman Range, Oregon, by transferring 58,375 acres to the Navy and 290 acres to the Army. ^{1/}
The 37,320.31 acres of Public Domain land in the range were previously declared excess to be returned to the control of the Department of Interior. (Unclassified)

Action was initiated to enter into a leasing arrangement with the State of Florida for a large portion of Avon Park Air Force Range now used by the State under a permit issued by the Air Force to the Department of Justice, Bureau of Prisons. We proposed to lease to the State Division of Corrections 202 acres in addition to the 457.45 acres now used by that institution. ^{2/}
(Unclassified)

An unsuccessful attempt was made to have Army assume real estate and funding responsibilities for the Holloman Air Force Range. ^{3/} Annual rental payments on this range amount to approximately \$250,000. Army, as Executive Agent at Holloman Air Force Range - White Sands Proving Ground, should have the responsibility for funding the entire range complex. This follows the

^{1/} Memorandum for the Secretaries of the Army and the Navy from the Special Assistant for Installations, dated 22 Nov 60, subject, Transfer of Portion of Boardman Air Force Range, Oregon, from Department of the Air Force to Department of Army (Navy).

^{2/} Letter from AFOCE-RM to Chief of Engineers, dated 16 Dec 60, subject, Leasing of Portion of Avon Park Air Force Range to Florida State Division of Corrections.

^{3/} Memo dated 3 Aug 60 from SAFIE to Secretary of Army, subject, Proposed Transfer of Real Estate Responsibility for Holloman Air Force Range, New Mexico.

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pattern set at the other national missile ranges. Air Force is Executive Agent at the Atlantic Missile Range and Navy has this responsibility for the Pacific Missile Range. The Holloman Air Force Range and the White Sands Proving Ground are actually a single complex. Army has been funding the White Sands portion of the leasehold. (Unclassified)

During this reporting period Air Force objected, on behalf of the Department of Defense, to the enactment of H. R. 13162 which would give former owners of property within the Ellsworth Air Force Range the opportunity to purchase such property when it becomes excess to the needs of the Department of the Air Force. (Unclassified)

Acquisition And Disposal Approval In Accordance With 10 U.S.C. 2662 (Formerly Title VI Clearances)

Acquisition

During this reporting period there were five (5) acquisition projects before the Armed Services Committees and all were approved. These projects covered the following items:

- a. Transfer from Navy to Air Force - 120.84 acres at no cost.
- b. Lease 72,520 square feet - \$253,820.
- c. Fee 315 acres - \$264,540.

Disposals

During this reporting period there were 19 disposal projects before the Armed Services Committees, and all projects were approved.

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These projects covered the following:

- a. 8,221 acres - \$46,515,609.
- b. Transferred from Air Force to Army - 426 acres at no cost.
- c. Transferred from Air Force to Political Sub-division - 6.92

acres at no cost. (Unclassified)

ICBM Program

It was determined that restrictive easements would be required at Atlas and Titan I ICBM sites. Atlas site easements are based upon a distance of 1,875 feet to inhabited buildings requiring approximately 216 acres. Real Estate directives have been issued for restrictive easements for 7 Atlas locations. Titan I easements are based on a distance of 1,750 feet to inhabited buildings, or approximately 225 acres per launch site. Titan II restrictive easement requirements are under study, as are the Minuteman restrictive easement requirements. However, the sites for Minuteman were based on a distance of 785 feet to primary highways and railroads, 300 feet to secondary roads, and 1,310 feet to inhabited buildings. Revised siting criteria for the Ellsworth area is 300 feet to secondary roads, 400 feet to primary roads and railroads, and 670 feet to inhabited buildings. (Unclassified)

There were 1144 acres acquired for five new missile sites for 11 squadrons. 2,958 miles of communication cable easements were acquired for 10 missile sites. (Unclassified)

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Condemnations

There were 133 condemnation cases processed for 3,096.77 acres in fee, 3,577.86 acres in easements, 12.33 acres in leasehold and 7.33 acres of mineral rights at a cost of \$663,039 during this reporting period. (Unclassified)

Closing Of Mitchel Air Force Base

It was announced on 29 November 1960 (AF Press Release) that Mitchel Air Force Base, with a history of service dating back to the Revolutionary War, would be closed. Mitchel Air Force Base consists of 1,169 acres of fee-owned land and easements over approximately 186 acres. A preliminary estimate places the value of the property to be disposed of at \$35,000,000. At the end of this reporting period, the Declaration of Excess covering the excess property was in transit from COMAC to Headquarters USAF. (Unclassified)

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CHAPTER IV

CONSTRUCTION AND ENGINEERING

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CONSTRUCTION AND ENGINEERING

Master Planning

The access road program continued at an accelerated pace, providing pre-construction haul roads to missile launch sites and permanent roads to operational installations. Eighteen projects in the FY 61 MCP totaled \$18.9 million. Eight of these projects provide roads from the support base to missile launch complexes. (Unclassified)

SAC was authorized to survey areas in the vicinity of Minot AFB, NDak, Grand Forks AFB, NDak, Pease AFB, NY, Robins AFB, Ga, Olmsted AFB, Pa, Grenier AFB, NH, Griffiss AFB, NY, Mather AFB, Tex, and Whiteman AFB, Mo, and Duluth Municipal Airport, Minn, for possible ICBM sites. (Confidential)

As a result of the above surveys, Griffiss was selected as the support base for two Titan Squadrons and the Pease AFB area, through preliminary investigation, was found worthy of further study for possible Minuteman sites pending the outcome of authorized soil boring tests. Ellsworth AFB, NDak, was selected as the second support area for Minuteman missiles as a result of previous surveys. (Unclassified)

SAC was also directed to conduct surveys in the vicinity of Westover AFB, Mass., to select a location for the 8th AF Combat Operations Center. This facility is intended to replace the present "semi-hard" structure now located near Mt. Hitchcock, Mass. The new COC is to be constructed to withstand 600 psi overpressure. SAC selected a site at Mt. Hitchcock. Core boring and a seismological survey are now underway to determine the feasibility of the site. (Secret)

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Surveys for selection of missile launch sites in the vicinity of the following previously approved support bases were completed during this period. Little Rock AFB, Ark., Davis-Monthan AFB, Ariz., and McConnell AFB, Kans., each selected for two Titan Squadrons. (Unclassified)
BOMARC (IM-99A and IM-99B)

Design of the facilities to augment the "A" site at Otis AFB with "B" missiles was resumed after being held in abeyance since 30 March 1960.

Design of facilities to augment both the "A" site at McGuire AFB and the "B" site at Niagara Falls Municipal Airport with "B" missiles was started.
3/4 (Unclassified)

Aircraft Fuel System Maintenance Docks

Standard working drawings are being prepared for new Fuel System Maintenance Docks. These docks will provide full covered maintenance facilities for repair, testing and/or replacement of aircraft fuel cells and bladders on large bombers and tankers.

Criteria is being furnished for the remodeling of existing surplus aircraft regular maintenance docks for re-use as fuel system maintenance. It is anticipated that new fuel system docks will be built at locations where suitable surplus docks are available for remodeling.

(Unclassified)

- 1/ Classified ltr fr AFCVC to NORAD, 30 Mar 60, "Rev AD Program (U)"
- 2/ AFOCE-CD ltr to AFRCE-NA, 27 Jul 60, "Design Modifications for IM-99B Augmentation at Otis AFB, FY-59 MCP"
- 3/ AFOCE-CD ltr to AFRCE-NA, 7 Jul 60, "Design Guidance for BOMARC IM-99B Augmentation at McGuire AFB"
- 4/ AFOCE-CD ltr to AFRCE-NA, 24 May 60, "Design Guidance for BOMARC IM-99B Augmentation at Niagara AFB, FY-59 MCP"
- 5/ AFOCE-EA ltr to ASC(AMG), 3 Nov 60, subj: Fuel Systems Modification Program Plan

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AC&W Frequency Diversity Radar Program

Investigation was conducted and all changes affecting standard designs for frequency diversity radar support structures, with particular emphasis on those changes requiring mandatory application and action, were renewed. ^{6/} Of particular significance were changes affecting standard designs for the AN/FPS-7, AN/FPS-26 and AN/FPS-35/24 radar structures. These changes were necessitated by post-review of completed drawings, equipment production modifications, introduction of new equipment or components thereof, realignment of previously designed equipment, Engineering Change Proposals (ECP), and results of operational suitability tests. (Unclassified)

Navigational Aids

GEEIA advised Hq USAF of an immediate requirement for a standard Air Force working drawing of a small navigational aids building to house the Wilcox 492 Marker Beacon equipment as part of the permanent USAF Instrument Landing System. ^{7/} This equipment, recently procured, will be utilized at approximately 75 Air Force Bases world-wide. The Wilcox Model 492 is currently being installed, pole-mounted, without a building. This type of installation has been cited as a safety hazard by AACS who requested GEEIA to initiate action for design of a standard building as a base support requirement for future installations. (Unclassified)

^{6/} M/R dated 8 Aug 60, subj: Field Trip Report - AFOCE-EA
^{7/} GEEIA (ROZMSC) ltr dtd 31 Oct 60, subj: Development of a Standard Navigational Aids Building

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Architect-Engineer Services

An A-E contract ^{8/} was negotiated and approved ^{2/} for the preparation of definitive drawings for a proposed School of Engineering, Institute of Technology, Air University, Wright-Patterson AFB, Ohio. (Unclassified)

Investigational Engineering

Investigations of pavements are being accomplished by the Rigid Pavement Laboratory at Cincinnati and the Flexible Pavement Laboratory at Vicksburg. In addition to the investigation of design thickness for pavement, the program includes such related projects as investigation of tar rubber pavements for making flexible pavements resistant to jet fuel spillage, determination of pavement temperatures caused by various aircraft, investigation of heat resistant pavements suitable for jet aircraft and rocket test stands, both model and field tests of blast fence, and the evaluation of airfield pavements at overseas air bases. Also being investigated are new types of joint sealing compounds consisting of elastomeric polymer usually combined with tar and polysulfide rubbers and a new type of flexible pavement in which epoxy resin is added to the binder. Projects are being carried on to improve maintenance procedures. The principal task of this program is to produce design criteria specifications and construction procedures for both rigid and flexible pavements. Schools have been held at both laboratories to train Air Force personnel in design, construction and repair of airfield pavements.

Nuclear Power

Construction was completed on the secondary building and the primary loop housing for the FM-1 at Sundance, Wyoming. Administrative action

8/ Contract Nr AF 49(604)-2703, Giffels & Rossetti, Inc., Detroit, Mich.
2/ Effective date: 23 September 1960.

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was initiated to have the AF crew transferred to the Martin Company plant at Baltimore in January 1961 to participate in the final assembly of the PM-1. Arrangements were completed for TAC to provide C-130s to fly the package from Baltimore to Ellsworth AFB. SAC and the base commander at Ellsworth AFB agreed to furnish support for handling the packages and transporting them from Ellsworth AFB to Sundance. (Unclassified)

Protective Construction

Design was completed for the excavation phase of a combat operations center at March AFB and preliminary design of the structure was finished. This marked the furthest point to which design has been carried for this type of facility built within a mountain. Costs appear to be about as predicted. (Unclassified)

Sanitary

Water supply and sewage problems continued at ACW and missile sites and at larger bases. Because of their small populations and relative isolation, these problems are much less conducive to economical per capita solutions at the former than at the larger bases where population averages between five and ten thousand. At the present time, there are active research projects continuing at the University of Florida on the basic principles of the aerobic digestion process and at Syracuse University on design criteria for raw sewage lagoons (waste stabilization ponds). There is a contract for research into the use and instrumentation of ozone in sewage treatment under negotiation with the University of Florida. The projects on use of polyelectrolytes for dispersal and coagulation of sewage solids and on use of compressed air to accelerate the wet burning process have been completed. (Unclassified)

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Mechanical (Air Conditioning)

Air conditioning criteria for NORAD, and SAC Combat Operations Centers was established. Approval was secured for replacing mechanical ventilation with air conditioning at certain northern bases. Policy for air conditioning of GAM 77/72 and TM-76 MACE facilities was developed. Policy of no air conditioning of GATR Buildings unless unusual conditions warrant was also established. (Unclassified)

Approval of the FY 1961 Military Construction Program

The Congressionally approved FY 1961 MCPs totalled \$717.3M for Military Construction Air Force and \$4.1M for Military Construction, Air Force Reserve. For these programs, funds totalling \$609.5M and \$4.0M, respectively, were provided. The balance of the MCAF approved program was to be financed from FY 1960 and prior appropriations. These prior year savings were identified to the appropriation committee as program savings derived primarily from the reduction in the SAGE and BOMARC programs.

The following is a summary of the FY 1961 Military Construction Air Force Appropriation Program:

Projects	(000,000)
Planning	40.0
Z/I Bases	191.0
O/S Bases	86.3
Minor Construction	15.0
Support Activities	22.5
Missiles	<u>370.0</u>
	724.8
Less A/C Maint Docks Reduction	<u>-7.5</u>
Net Program Approval	717.3
Less Program Financed from Prior Savings	<u>107.8</u>
New Appropriation	609.5

(Unclassified)

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FY 1961 MCAF Availability and Apportionment

Availability for FY 1961 totalled \$1,233.6M, consisting of: \$619.1M unobligated carryover; \$609.5 new MCAF appropriation; and \$5.0M estimate for FY 1961 reimbursements. Of the carryover it was determined that approximately \$516M was required to complete FY 1960 & prior years projects, the balance became available to finance the FY 61 appropriation deficiency or other high priority projects requiring special congressional clearance. FY 60 & prior funds, for which reapportionment was requested, covered: unawarded whole projects totalling \$142M, an amount of approximately \$171M required to complete going missile site construction including unawarded increments, claims, SIOH, and contingencies; approximately \$91M for unawarded increments (other than missile sites); a total of \$45M for continuation of Design, Minor Construction and Access Roads Programs; and an estimated \$67M for SIOH, Contingencies and Claims on award construction (except missile sites). As of 31 December 1960, exclusive of the reapportionment, new requests totalling \$643M were approved. Apportionments pending or to be requested were: \$25M of miscellaneous space & missile items; base items totalling \$12M (including \$6.0M for March AFB pavements); \$23M of emergency and special clearance type of items; and six hospitals totalling \$13M. (Unclassified)

Funds Released

During the first half of FY 1961 action was taken to release a net of \$583M to the Construction Agents. Unreleased funds totalled \$165M and they were reserved for: \$100M of unreleased apportioned items (Missiles & Space, & AC&W Radar Improvement, Access Roads, NORAD, Planning, etc.); \$45M for anticipated missile overruns, claims & modifications; and \$20M maintained

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in this Headquarters as a Contingency Reserve in lieu of providing Construction Agents contingency amounts on each line item. (Unclassified)

Contract Awards

Through the first six months of this Fiscal Year projects totalling \$365M were placed under contract. This amount primarily represents award of items carried over from FY 1960, with some major FY 61 MCP items included. This follows previous contract award experience in which the first six months awards are usually prior years carryover projects. As of this date there remained approximately \$600M of items yet to be awarded. (Unclassified)

Construction Completion Progress

As of 31 December 1960, projects totalling \$1,900M were under construction with \$1,350M already in place. During this period approximately \$500M of construction line items were completed, for an average of \$85M per month. The average rate of completion decreased from last year which is attributable to the reducing size of the Military Construction Program in the past few years. (Unclassified)

Air Force Reserve

On 2 February 1960, the Secretary of the Air Force approved a new system for the management of the Air Reserve Forces, and a concept for future Reserve Forces utilization. The Secretary directed that a detailed plan for implementing the new management system be prepared with a target date of 1 January 1961 for completed implementation of that plan. The plan was approved by the Chief of Staff, USAF, on 17 May 1960, and is now directive upon the major commands and Air Staff agencies for implementing

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action. The plan provides for conversion to the new system for management of the Air Reserve Forces, and the establishment of a "pilot test" Recovery Unit Program for the Air Force Reserve in accordance with the new concept for the utilization of the Air Reserve Forces in a post-attack Recovery Role. Principal features of the plan are:

Transfer of responsibility from ConAC to the wartime "Gaining Commands" for the supervision of training and inspection of existing Air National Guard and Air Force Reserve Units.

Assumption by other USAF Commands of certain ConAC responsibilities not directly associated with the management of the Air Force Reserve and auxiliary programs.

Utilization of qualified inactive duty Reservists to manage subordinate Air Force Reserve elements.

Conversion of six Air Reserve Centers to Reserve Recovery Groups and activation of six new Reserve Base Support Groups.

Realignment of the ConAC organizational structure to reflect revised mission responsibilities.

ConAC will retain its basic command responsibilities for directing the activities of the Air Force Reserve and providing logistical, budgetary, administrative, and personnel support; also, recruiting, processing, assignment and training of Reserve personnel. A key factor in the new Reserve Management Plan is the utilization of qualified inactive duty Reservists to manage subordinate Reserve elements. The bases retained by ConAC will be "civilianized", i. e., manned entirely by Reservists in a normal civilian capacity with a minimum of active Air Force personnel as advisors. (Unclassified)

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Andrews Air Force Base

All of the FY 1960 Military Construction Program has been awarded except the approach lighting. The total current working estimate for all line items in the FY 1960 Military Construction Program, including all known change orders to date, is approximately \$16,400,000. It appears that a tentative savings of approximately \$600,000 has been effected when compared to the appropriation of \$16,980,000. All of the FY 1961 Military Construction Program has been awarded except the road. The total current working estimate for all line items in the FY 1961 Military Construction Program is approximately \$2,084,000. It appears that a tentative savings of approximately \$200,000 has been effected when compared to the appropriation of \$2,282,000. Approximately \$16.0 millions of the Navy's \$17.0 millions FY 1959 and FY 1960 Military Construction Programs has been placed under contract and the balance will be advertised and placed under contract as soon as designs are completed. (Unclassified)

Nuclear Engineering Test Facility

The over-all facility located at Wright-Patterson Air Force Base is reported 96% completed. The engineering studies generated by the additional \$1,100,000 funding in May 1960 are still in progress. These studies indicate that the facility desired will cost approximately \$1,500,000 and every effort is being made to reduce this cost. The addition is currently scheduled for award in March 1961 with a Beneficial Occupancy Date for the complete facility established as January 1963. (Unclassified)

Solar Facilities

No decision on the construction of the Solar facilities at Holloman Air Force Base, New Mexico has been rendered by the Secretary of the Air

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Force and design is currently held in abeyance. The funds specifically appropriated for this facility are not available for other Air Force construction. (Unclassified)

Lajes Waterfront Improvement Project

Prior to expiration of authorization on 30 June 1960, a contract was awarded to Portuguese Hydraulic Work Society and Healy-Tibbetts of California, a combination Portuguese and American firm, with a low bid of \$3,688,021. The current working estimate based on this low bid of eight bids is \$4,050,000. Construction of this project has started with most of the past six months being spent in mobilization of equipment. (Unclassified)

Aircraft Laboratory Fatigue Test (Sonic)

This project, on the site of the old 20-foot subsonic wind tunnel at Wright-Patterson Air Force Base, was awarded in March 1960 and construction is currently reported 9% completed. A contract for the sirens and associated instrumentation estimated at \$1,170,000 is scheduled for award in February 1961. The beneficial occupancy date for this facility is still maintained as February 1962. (Unclassified)

Heath Maintenance Annex Facilities

The Master Calibration Facility and the Inertial Guidance Maintenance Shop at Heath Maintenance Annex, authorized under Public Law 86-500, did not receive favorable consideration under the FY 1961 appropriation and no funds were provided for this construction. Design was accomplished by Air Materiel Command and was completed for the calibration facility in November 1960 and for the Inertial Guidance Maintenance Facility in January 1961. The Bureau of Yards and Docks has been designated as the construction agent. On 28 December 1960, approval of the Congressional

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appropriation Committees for re-programming action, whereby these items would be funded in lieu of other specified approved items, was requested. To date, there has been no final action taken on this request. (Unclassified)

Hill Missile Maintenance (Recycling) Facility

This project was authorized in the FY 1961 Military Construction Program, however, appropriation has been denied by Congress. The project provides for the construction of a recycling facility adjacent to the Boeing Minuteman Plant #77 at Hill Air Force Base for the repair, testing and check-out of Missile Components, to be operated by the Air Materiel Command. The Corps of Engineers has been designated as the construction agent and approval was granted on 20 October 1960 for the Air Materiel Command to perform the design. P-313 funds were released to Air Materiel Command on 10 November 1960. Leo A. Daly of Seattle, Washington is the architect-engineer, and design is currently scheduled for completion in May 1961. On 28 December 1960, approval of the Congressional Appropriation Committees for reprogramming action, whereby these items would be funded in lieu of other specified approved items, was requested. To date, there has been no final action taken on this request. (Unclassified)

Hill Air Force Range

On 21 September 1960, the Newfoundland Mountain Air Force Range, Utah was re-designated as the Hill Air Force Range. Approximately 6.5 million dollars worth of construction is contained in the FY 1962 Military Construction Program. Air Materiel Command has been designated as the design agent for the technical facilities and the Corps of Engineers is responsible for the design of Personnel and Base Support Facilities.

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Authority to proceed with design only through the preliminary stage, has been granted. Air Materiel Command has selected F. C. Torkelson, Salt Lake City, Utah as the architect-engineer for the technical facilities. However, notice to proceed has not been issued to date. No architect-engineer has been selected to date by the Corps of Engineers for the Personnel and Base Support Facilities. (Unclassified)

Minor Land Acquisition

As of 31 December 1960, there remained \$169,751 of FY 1961 and prior years appropriation unawarded and the FY 1961 appropriation added an additional \$300,000 for the acquisition of minor land procurement of not in excess of \$25,000 to support the current Air Force program. (Unclassified)

Overseas Facilities

Deletion of dependent facilities such as schools, chapel and AFEX expansion projects, etc., resulted from a presidential directive curtailing dependent travel in calendar year 1961 and in the future. Generally, projects in support of dependents in excess of 50% complete were allowed to continue to completion. Those less than 50% complete or not under contract, were cancelled. Subsequent changes to policy have reduced the number of facilities deleted, primarily in Okinawa. (Unclassified)

Relocation of excess installed generating capacity to areas short of supply was initiated. Major project so far involves 2500 KW units now located in Morocco, which are to be moved and installed in the Philippines. (Unclassified)

Changes to Tropo scatter program occurred during this period as follows: In August 1960, the Spain-Med Troposcatter system included in FY 1960 and FY 1961 Military Construction Program, was revised by the

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Air Staff and expanded to include seventeen stations (six fixed and eleven transportable). This resulted in relocation on two sites in the FY 1960 Military Construction Program, and one site in the FY 1961 Military Construction Program in order to provide facilities for the fixed type stations. An additional project of \$4.4 million in FY 1962 Military Construction Program will provide for construction requirements for the eleven transportable sites. Since these revisions necessitated adjustment of the program to conform to USAF requirements, preliminary site surveys and design previously under way for two stations (Torrejon and Wheelus) were halted and additional siting had to be established for three new stations (Athens, Naples, and Barcelona). The Spain-Med Tropo facilities are currently programmed as follows:

FY 1960 Military Construction Program at Majorca Island; Cagliari (Sardinia); Reggio (Italy); Naples (Italy); and Athens (Greece).

FY 1961 Military Construction Program at Barcelona (Spain) and additional facilities at Majorca, Cagliari and Reggio. (Unclassified)

As of 31 December 1960, site surveys were well under way at all stations in the Spain-Med portion of the system. Criteria is being provided by European GHEIA. The U. K. - Iceland Troposcatter system in FY 1961 Military Construction Program includes two stations in Iceland and one station in Faroes Island, a colony of Denmark. Site surveys are currently under way in both areas. Considerable difficulty was experienced in obtaining right of entry for Faroes Island and site surveys were delayed until January 1961. BMEWS Project Office is to provide criteria for design of these facilities. Two stations, at Aberdeen, Scotland and Driffield, England, comprise the U. K. portion of the Troposcatter system.

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Site surveys are currently under way in these areas. A third station, previously programmed for Shetland Islands, has been deleted. European GMEIA is providing criteria for design of these facilities. It is anticipated that design, FY 1960 and FY 1961, of Troposcatter facilities for each area will be completed early in 1961 and contracts awarded in single package for each area in April 1961. FY 1962 Military Construction Program requirements are being held in abeyance pending determination of requirements for the transportable stations in the Spain-Med area. (Confidential)

Military Assistance Program

Total Military Assistance Program was authorized and funded for \$19,888,800. Of this, only the Turkey program is under contract. There will be new construction in Korea, Thailand and Saudi Arabia. Much of the design authorized in FY 1961 will cover new future construction programs. Progress was made during this period on preparation of SOP's and guides on responsibilities for management of the Military Assistance Program, but was not completed during this period. This will be available sometime in February and should, for the first time, spell out activities required of all field echelons handling the Military Assistance Program.

(Unclassified)

SAC GAM Facilities

(1) GAM 77 (Hound Dog) - Operational reprogramming deleted the requirement for a two-squadron GAM 77 project at Castle Air Force Base and substituted single squadron projects at Fairchild and Ellsworth Air Force Bases. Design at Castle had not started. Later reprogramming deleted the requirement for GAM 77 project at McCoy Air Force Base and re-established a project at Castle for a single squadron. Design at McCoy was complete.

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No contract award. Fixed air-conditioning for missile and consoles to replace the mobile units in GAM 77 service shop was approved for all GAM 77 projects except Eglin which was accepted by using agency prior to establishing the requirement. Decision was made to use GAM 77 Missile ammonia system in lieu of mobile air-conditioning system in the GAM 77 Missile Run-up Shop. Five additional projects were completed during this period for a total of eleven. Eleven additional projects were placed under contract for a total twenty four. Five additional will be awarded in the last half of FY 1961 with completion in the last half of FY 1962. (Confidential)

(2) GAM 72 (QUAIL) - Operational reprogramming deleted the requirement for GAM 72 project at Barksdale Air Force Base and re-established the requirement at Minot Air Force Base. Project at Barksdale carried to completion due to construction status. Project at Minot had been nearly complete at the time construction was curtailed in May 1960. Construction contracts have been awarded for all GAM 72 projects (14 Sqn). Six are complete and remainder are to be completed prior to October 1961. (Unclassified)

SAC Maintenance Docks

Under Public Law 86-500, Congress authorized the construction of 34 SAC Aircraft Maintenance Docks but limited the funds to \$7,531,000 which was half of the programmed cost estimate for the entire quantity. These docks are divided into the following categories:

(1) A fuel system dock for which a new criteria has been developed. This new plan is scheduled for completion in February 1961. There are ten of these fuel system docks under the FY 1961 appropriation. These

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docks will be procured and erected by Air Materiel Command at Blytheville, Clinton-Sherman, Glasgow, Grand Forks, Kincheloe, K. I. Sawyer, Minot, Robins, Wright-Patterson and Wurtsmith Air Force Bases. (Unclassified)

(2) Six excess docks from Biggs will be dismantled, transported and re-erected at Clinton-Sherman, Grand Forks, Minot, Kincheloe, K. I. Sawyer and Wurtsmith Air Force Bases through the normal construction Agency at the respective installations. (Unclassified)

(3) One new large standard dock will be procured and erected at Glasgow Air Force Base by Air Materiel Command. (Unclassified)

(4) The normal construction agency will provide the support facilities for all of these large standard docks and all of the fuel system docks except at Wright-Patterson Air Force Base. The pilot fuel system dock will be constructed at Robins Air Force Base and it is scheduled to be placed under contract in March 1961 with a beneficial occupancy date in September 1961. (Unclassified)

Air Force Design Responsibility, FY 1962 Military Construction Program

In connection with the FY 1962 Military Construction Program, the Air Force has requested and received approval to design the following facilities:

(1) Through Air Materiel Command

Hill Air Force Base

Missile Maintenance Facility - Original Recycle authorized but not funded in FY 1961		\$2,900,000
Standard Calibration Laboratory Depot	13,900 SF	283,000
Guided Missile Radiographic Laboratory, Addition	4,356 SF	288,000

The design of the second phase of the recycle facility was authorized but action has deleted this work from the program.

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Hill Air Force Range

G/M Radiographic Laboratory	4,356 SF	274,000
Rocket Test Building, Horizontal	12,000 SF	315,000
Rocket Test Preparation	4,950 SF	278,000
Rocket Test, Data Recording	750 SF	68,000
Rocket Test Pad	852 SF	21,000
Rocket Test Vertical	1,200 SF	344,000
G/M Storage Components Vertical	27,000 SF	1,488,000
G/M Storage Components Horizontal	54,000 SF	2,300,000

McClellan Air Force Base

Quality Control Laboratory, Depot (modified)	26,520 SF	543,000
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Olmsted Air Force Base

Instrument Repair Shop Depot, Modification	30,000 SF	755,000
Standard Calibration Laboratory Depot Modification	10,000 SF	284,000

Robins Air Force Base

Quality Control Laboratory Depot, Modification	8,400 SF	198,000
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(2) Through Air Research and Development Command

Wright-Patterson Air Force Base

Electro Gasdynamic Facility		10,000,000
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This facility was authorized for design by Air Research and Development Command but the item has since been deleted from the program.

Arnold Engineering Development Center

Propulsion Wind Tunnel, Supersonic	LS	1,835,000
Aerospace System Environmental Chamber MARK I		20,000,000

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Cloudercroft New Mexico

Special Test Facility, Electro-Optical 7,200 SF 300,000
Surveillance

(Unclassified)

Effective liaison with the construction agencies will be maintained throughout the entire design period of the above facilities to assure that upon completion, the plans and specifications will be accepted for continued action with a minimum of delay. All of the above items will be constructed by the normal construction agency on the respective bases.

(Unclassified)

Okinawa "M" Site

The entire FY 1960 Military Construction Program, comprising both support and operational facilities, has been awarded at a total current working estimate of approximately \$7,540,000. This represents a savings of approximately \$7,000,000. Additional operational facilities will be provided under the FY 1961 Military Construction Program, preliminary cost estimate \$7,850,000. Contract for preliminary grading was awarded in December 1960. Advance procurement of long lead time items was advertised in December 1960. Construction contract is scheduled for March 1961 award. PACAF has also been authorized to design and construct 400 dormitory and 20 officers' quarters spaces. Preliminary estimate and present funding for operational facilities is believed to be sufficiently high to enable this housing construction without additional funding.

(Confidential)

Bitburg Metro Tango

This entire project was planned for NATO funding. The first increment comprising both support and operational facilities, is estimated to

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cost approximately \$5,600,000. Under the FY 1960 Military Construction Program, P-331 funds in the amount of \$5,850,000 were allocated for pre-financing in the event that NATO funds were not available when required. The latter funds have become available and the Military Construction Program funding reduced to \$200,000. That amount is to cover construction of a Contractor Maintenance Facility which has not yet qualified for NATO funding. The second increment, which provides additional operational facilities, is estimated to cost approximately \$6,000,000. It will be accomplished under NATO funding. None of the first or second increment items have been placed under award. (Confidential)

Construction for SAC Manned Aircraft (First Half FY 1961)

Facilities for the 42-squadron B-52/KC-135 Weapon System were available at 34 bases, an additional base (Glasgow) having been added in the second quarter of FY 1961. Construction was proceeding for conversion of one additional base (McCoy) by provision of heavy duty pavement inlays or "keels" and widening of the runway. Authorization and funds are available to permit conversion of three additional B-47 bases (Homestead, Schilling and March) to heavy bomber requirements. Authorization for another base (Dyess) is being requested in the FY 1962 Military Construction Program. This leaves one base (Little Rock) yet to be requested in a Military Construction Program for the total of 39 bases, increased from 38, by end FY 1965. Carswell is to be dropped as a base for this weapon system. Contracts were also awarded for repair of pavements by construction of "keels" at Fairchild Air Force Base after distress developed due to heavy aircraft operations. Similar work was completed at Ellsworth and Seymour-Johnson Air Force Bases and programmed in the FY 1962 Military Construction Program at Barksdale AFB. Additional maintenance dock and shop facilities to support the dispersed

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maintenance concept are being programmed and constructed. (Confidential)

GAM 87 (Skybolt)

Operational facilities criteria was reviewed. Final criteria will be released in March 1961. The project for Strategic Missiles, \$6,900,000 in FY 1962 Military Construction Program, was deleted by the Secretary of Defense. No reclaims to be made until after the next briefing to Office, Secretary of Defense in February 1961. (Confidential)

Northern Tanker Bases

The four Canadian bases were completed in September 1960. Final costs will be reported by Strategic Air Command in 4th Quarter FY 1961.

(Unclassified)

Spanish Base Programs

The entire USAF Military Construction Program in Spain continued with satisfactory progress. Essential Strategic Air Command facilities have been completed. FIS facilities were placed under contract and will be completed in 4th Quarter FY 1961. Community facilities under McCarran Amendment program are largely completed except schools at Madrid and Seville areas. Reprogramming was accomplished to approve construction of manual arts (Dorm Modification 9,000 SF) at Torrejon and a chapel at Moron Annex No. 3. These projects have subsequently been held in abeyance as a result of general curtailment on dependent facilities. Resolution expected in 3rd Quarter FY 1961. (Confidential)

Fighter Interceptor Aircraft

Delays incident to the broad revision of the Air Defense Fighter Interceptor Program were resolved and support facility requirements largely satisfied during this period. Redeployment plans have led to

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some additional construction of Ammo Storage Magazines in support of the GAR II Rocket. Necessary modifications to existing buildings are being made at some Bases for rocket assembly and checkout requirements and for ready storage of secondary armament on the flight line. Approximately \$17,100,000 of FY 61 and prior construction was awarded at Main and Tenant Bases. There remains in deferred status, pending a firm deployment determination, twenty line items at four Bases. The estimated cost of deferred items is \$8,400,000. (Unclassified)

BOMARC Construction

(1) Construction is completed for both IM-99A and IM-99B complexes at Langley AFB. Construction is completed for the initial increment of 28 IM-99B shelters at Kincheloe and Duluth except for the intrusion alarm systems. Niagara is approximately 98% complete for the initial increment of 28 IM-99B shelters. Augmentation with 28 IM-99B shelters and support facilities started in November 1960 at Otis and in December 1960 at McGuire. The 20 IM-99B shelter augmentation at Niagara is scheduled to start in February 1961. Construction on the three augmentations will be completed in 1st half of C. Y. 1962. Construction at all IM-99B sites has met required advance access for installation of equipment and agreed completion dates. The completion schedule for the Niagara augmentation has been recently advanced 60 days. (Unclassified)

EMENS

(1) Recovery of funds based upon a re-evaluation of undistributed costs on the Thule EMENS project resulted in a reduction in the overall cost estimate of EMENS construction from \$187,000,000 to \$182,000,000.

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(Includes Thule and Clear detection sites plus related communications)
(Unclassified)

(2) THULE DETECTION SITE. In August 1960 a directive was issued authorizing construction of facilities to permit installation of a tracking radar in Building #3 at the Thule site. Cost of this work is estimated at \$2.7 million. Overall cost estimate for the Thule site is \$100,000,000. All other BMEWS construction at Thule has been completed.
(Unclassified)

(3) CLEAR DETECTION SITE. As of 31 December 1960 construction was 96% complete. Remaining work consists of completing the power plant, phase two of the composite support building, and passageway extension. The first turbine in the power plant began delivering power 15 December 1960. The cost for this site remains at \$53,500,000. (Unclassified)

(4) FLYINGDALES DETECTION SITE, UNITED KINGDOM. Based on an inter-governmental agreement, the U. K. is providing the construction for this site while the U. S. is furnishing the technical equipment. The major construction contracts were awarded during November and December 1960. At the end of the period, construction of the third site was estimated to be 3% complete. (Unclassified)

(5) REARWARD COMMUNICATIONS

(a) THULE ROUTES: Excellent progress has been made on construction of tropo-scatter communication facilities. Beneficial occupancy was achieved for the equipment rooms at all locations. Estimated cost of the Thule route communications construction is \$11,400,000.
(Unclassified)

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(b) ALASKA ROUTES: This portion of the BMEWS Rearward Communication system involved construction at 31 locations. This work was essentially completed in one construction season and beneficial occupancy provided to Western Electric Company as required by their schedule. Estimated cost of this portion of the system is \$17,200,000.
(Unclassified)

AC&W Overseas

(1) DEWLINE (MAIN): Construction of the six (6) air freight/passenger terminals was 95% complete at end of this reporting period. Design of the FY 61 MCP items warehousing and water storage has been completed. Design of FY 62 MCP items has been initiated and PCE's reviewed. (Unclassified)

(2) DEW EAST EXTENSION: Construction was completed at the four (4) radar stations and all facilities have been accepted by ADC. O&M contract with Federal Electric Corporation will be effective 1 January 1961. The airlift operations have been very satisfactory. The Danish Government has requested that the airstrip at DYE-4 be improved. Action is still pending as to the minimum requirements to satisfy Danish requirements. The ninth (9) generator at DYE-4 will be delivered during August 1961. Current working estimate for construction is \$62.3 million. (Unclassified)

(3) ALASKA AC&W: Proposed conversion of 100 KW Cummins units, surplus to AC&W ZI, for Bethel, Northeast Cape and Sparrevohn has been authorized; the FPS-6 towers scheduled for Bethel, Kotzebue and Sparrevohn have been designed, and the FPS-20 towers scheduled for Bethel and Kotzebue have been delayed. (Unclassified)

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(4) ALASKA INTEGRATED COMMUNICATION SYSTEM: Soldatna - Neklasson

Lake tropo by-pass has been completed, and the Bluegrass tropo scatter link is 75% complete. Construction is currently on schedule. (Unclassified)

(5) CANADA AC&W: Design of the FPS-27 towers, FPS-26 towers and electric power plants has been completed. The gap fillers in the CADIN program will be adequate for this area, accordingly, the gap filler program in FY 61 MCP has been deleted. (Unclassified)

AC&W Zone of Interior

(1) The Master Plan for Air Defense of North America has been finalized. Considerable reallocation of equipment and revisions to the Military Construction Programs were required. A series of Joint Air Force - Construction Conferences were held in July and August, during which realistic design and construction schedules for all FY-61 and prior MCP items were developed. On 18 July 1960 the Air Force announced that changes in the defense plan eliminated the need for 14 AC&W Stations and that these stations would be deactivated. On 26 August 1960 it was announced that 63 gap filler stations were no longer required and would be deactivated. All design and construction previously underway at these sites were terminated during this period. (Confidential)

(2) AC&W P-Site Program: As a result of the revised Air Defense plan five sites in the P-Site Program were declared excess by this Headquarters and ADC and are in the process of deactivation and disposal. Five additional sites will be completely phased out by ADC or jointly maintained and operated by ADC and FAA for air traffic control and limited air defense coverage. Negotiations with FAA on these sites were

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underway at the end of the period. (For Official Use Only)

The total construction funds authorized by Congress for the AC&W P-Site Program in the FY 61 and prior MCP is \$168.6 million. Of this amount a total of \$139.5 million has been completed and transferred to inventory. A total of \$0.6 million was placed under construction contract during the period and a total of \$2.4 million is under design.

(For Official Use Only)

(3) AC&W M-Site Program: As a result of the revised Air Defense plan nine sites in the M-Site Program were declared excess to the needs of the Air Force by this Headquarters and ADC and are in the process of deactivation and disposal. Two sites will be completely phased out by ADC or jointly maintained and operated by ADC and FAA for air traffic control and limited air defense coverage. Negotiations with FAA on these sites were underway at the end of the period. (For Official Use Only)

The total construction funds authorized by Congress for the M-Site Program in the FY 61 and prior MCP is \$137.7 million. Of this amount, a total of \$72.6 million has been completed and transferred to inventory. A total of \$3.1 million was placed under construction contract during the reporting period and a total of \$8.4 million is under design and remains to be placed under contract. (For Official Use Only)

(4) Radar Improvement Program: The Radar Improvement Program, originally authorized in the FY 59 MCP for \$100 million, was realigned in accordance with the revised defense plan. Fund requirements for this program at the end of the period was as follows:

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TYPE RADAR	NO.	FY 59	FY 60	FY 61	FY 62	TOTAL
		* & Prior MCP	* & Prior MCP	* & Prior MCP	* & Prior MCP	
AN/FPS-7	12	2.2	1.2	---	---	3.4
AN/FPS-24	12	5.5	4.4	---	---	9.9
AN/FPS-35	12	9.5	0.4	---	---	9.9
AN/FPS-27	28	---	1.0	3.8	7.6	12.4
AN/FPS-28	1	1.4	---	---	---	1.4
AN/FPS-26	83	4.1	7.6	5.4	8.6	25.6
Elec PursUtl		<u>26.7</u>	<u>2.6</u>	<u>0.2</u>	<u>8.8</u>	<u>38.3</u>
		49.4	17.2	9.3	25.0	100.9

* - Millions of dollars

(For Official Use Only)

A total of seven million dollars was placed under contract during the reporting period making a total of \$54 million dollars placed under contract to date out of \$77.0 authorized in the FY 61 and prior programs. Design of the balance is underway. (For Official Use Only)

(5) Gap Filler Program: As a result of the revised Air Defense Plan this Headquarters and ADC have declared sixty-three Gap Filler sites excess to the needs of the Air Force and they are in the process of disposal. (For Official Use Only)

Total funds authorized for this program in the FY 61 and prior MCP is \$14.3 million. Of this amount \$11.4 million has been completed, and transferred to inventory. Items totalling \$740,000 were put under contract during this period. Eleven sites in the FY 61 and prior MCP at a total estimated cost of \$976,000 are under design and remain to be placed under construction contract. Design of nineteen FY 62 sites was authorized during this period. (For Official Use Only)

(6) Missile Master Program: The Missile Master Program comprises facilities at ten sites at a total cost of \$9.1 million. Nine sites were completed essentially during this period at a total cost of \$7.8 million. Facilities at Gibbsboro, N. J., total cost \$1.3 million, were

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75% complete at the close of the period.

(7) SAGE Program: The total funds in the FY 61 and prior MCF authorized for the SAGE Program is \$161.6 million. Technical facilities for a total of \$121.5 million have been completed and transferred to inventory. Twenty-two SAGE direction centers and three combat centers are completed. Direction centers for the Phoenix and Sioux City SAGE Sectors at a total cost of \$12.9 million were completed during this period. (Unclassified)

Design of facilities for the 28th and 29th Air Division Combat Centers at Richards-Gebaur and Hamilton AFB was authorized to ADC during the above period. This work at an estimated cost of \$166,000 at each location will consist of modifying existing facilities to provide remote display facilities. (Unclassified)

During this period the final decision not to proceed with underground hardened super combat centers for SAGE was announced. Design work for \$111.2 million of facilities in the FY 61 and prior MCF in support of this program was terminated. (Confidential)

(8) NORAD COC: In early August 1960 the ARDC Study for a reduced facility was presented to the Air Council which recommended that the Chief of Staff approve "go ahead" on the project. In September 1960 the Chief of Staff informed the JCS that the AF intended to proceed. The JCS subsequently approved the project. OSD must obtain Congressional approval to permit use of \$8.5 million still available to AF from other projects. (Secret)

Revised design instructions for the excavation were issued 16 September 1960. The scope of the initial excavation was revised to

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accommodate a structure reduced from 265,000 SF to approximately 154,000 SF of floor area. The bidding documents will provide for 25% increase or decrease in the scope of work in the main chambers and certain adjacent areas to permit equable contract adjustment occasioned by structure changes as design proceeds. (Unclassified)

Establishment of firm design criteria for the building cannot be completed until a systems contractor has been hired and has developed firm weapon system equipment requirements. It is now anticipated the weapon systems contractor will be hired by 1 July 1961 and design criteria will be complete by December 1961. The delay in selecting the weapon systems contractor has caused a re-evaluation in the complete schedule resulting in a probable slip of two months in the tentative October 1964 operational date. (Secret)

Atlas Missile

Approximately \$311.8 million of the FY 1960 Military Construction Program has been obligated to provide facilities for the Atlas ICBM Weapon System. This program provides facilities for additional research and development at Patrick Air Force Base; Atlas "F" silo configuration OSTF (Operational Systems Test Facility) and training facilities at Vandenberg Air Force Base; technical support facilities for Atlas "E", coffin configurations, at Fairchild and Forbes Air Force Bases; and essential facilities for seven additional Atlas squadrons. Facilities for the seven additional squadrons included technical and technical support facilities for an Atlas "E" squadron at Warren Air Force Base and Technical facilities for six Atlas "F" squadrons at Schilling, Lincoln, Altus, Dyess, Walker and Plattsburgh Air Force Bases. Technical support facilities for Schilling

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and Lincoln Air Force Bases were also included in the FY 1960 Military Construction Program but in view of Atlas operational schedules, time permitted programming technical support facilities for Altus, Dyess, Walker and Plattsburgh Air Force Bases in a later program. (Confidential)

Construction of Atlas "D" facilities was completed in September 1960 for the squadrons at Warren II and Offutt Air Force Bases, and in 1959 for the squadrons at Vandenberg and Warren I Air Force Bases. Construction of Atlas "E" facilities at Fairchild and Forbes Air Force Bases was scheduled to be completed in November and December 1960 respectively. However, due to contaminated PLS at Fairchild and labor strikes at Forbes, completion of these squadrons has been re-scheduled for completion during March and April 1961.

(Confidential)

Construction of facilities for the six Atlas "T" squadrons is well underway with programs at Lincoln and Altus Air Force Bases on or ahead of schedule. Progress at the Schilling, Dyess, Walker, and Plattsburgh squadrons are running 15 to 29 days behind schedule, but completion of construction is not expected to delay or interfere with the installation and checkout operations. (Confidential)

Titan Missile

Construction contracts have been awarded and work is in progress on 12 Titan squadrons. Construction of two Titan I operational squadrons at Lowry Air Force Base, authorized in FY 1959 Military Construction Program, is over 90% complete with installation and checkout of technical equipment well underway. Construction of four

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additional Titan I squadrons at Ellsworth, Beale, Larson and Mt. Home Air Force Bases, authorized in FY 1960 MCP, ranges from 45% to 70% complete. Completion of construction of all Titan I squadrons is scheduled for early 1962 at an estimated cost of about \$300 million. Phase I construction contracts, which include excavation and basic structural work were awarded in November and December 1960 and work has been started on two Titan II squadrons each, at Davis-Monthan, McConnell, and Little Rock Air Force Bases. Phase I construction for these ⁶ Titan II squadrons plus Phase II construction scheduled for award in CY 1961 is estimated to cost about \$200 million using authorization from FY 1961 Military Construction Program. Two additional Titan squadrons to be located near Griffiss Air Force Base are currently programmed in the FY 1962 Military Construction Program. (Confidential)

Minuteman Missile

Construction of FY 1959 R&D projects at Patrick Air Force Base was essentially completed during this period except for two launch silos which are scheduled for completion in early 1961. The FY 1960 Mobile Launching Facility was placed under contract in July and is scheduled for completion in March 1961. The FY 1961 item for the Precision Trajectory Measuring System was placed under contract in late December. (For Official Use Only)

The FY 1960 item at Vandenberg Air Force Base for advanced utilities for Operational Readiness Training/Combat Training Launch facilities was placed under contract in September 1960 and is approximately 84% completed. The FY 1961 item for the ORT/CTL facilities

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for hardened and dispersed training was advertised for bids and award is scheduled for early January 1961. The FY 1961 item for OMT/CTL facilities for mobile training is scheduled for award in early 1961.

(For Official Use Only)

Hill Air Force Base, Utah, has been selected to support the first two operational mobile Minuteman squadrons. Design of the FY 1961 mobile support facilities is currently being accomplished by an A-E firm under supervision of AFEMD. Award of the construction contract is currently scheduled for June of 1961. (For Official Use Only)

For the project at Malmstrom Air Force Base, design was completed by Parsons-Wenzel, the architect-engineer firm under the supervision of AFEMD. The A-E firm made a reasonable cost estimate, and AFEMD transmitted plans, specifications, and the cost estimate to the Corps of Engineers' Ballistic Missile Construction Office (CEEMCO) in Los Angeles. CEEMCO reviewed them, prepared and assembled the various contractual documents, made the official government estimate, and advertised the project for bid. (For Official Use Only)

The funds programmed for this construction, in the current Minuteman Development Plan, total \$53,550,000 which also provides for a subsequent contract award for environmental control equipment, estimated to cost approximately \$5,000,000. Thus, a net of only \$48,550,000 is currently available based on the Development Plan. In addition, the programmed funds also must provide 10% for contingencies and 7.5% for government costs. Approximately \$1,000,000

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has been released to Hq SAC for negotiating power contracts to the sites. Since the low bid greatly exceeded the government estimate and was more than the government is willing to pay, all bids were rejected on 23 December 1960 by CEBMCO. (For Official Use Only)

At Chamute Air Force Base, a contract was let in December for construction of hardened and dispersed training facilities. Design of training facilities for mobile Minuteman is currently being accomplished and contract award is scheduled for early 1961. The programmed cost for mobile facilities has increased substantially from approximately \$302,000 to \$866,000 because of increased scope and refinement of personnel training requirements. (For Official Use Only)

SNARK Program

Contracts for operational and support facilities for a Snark Missile squadron at Presque Isle Air Force Base, Maine, were awarded in FY 1958. Technical training facilities for Snark, at Patrick Air Force Base, were placed under contract during FY 1959. Construction for all facilities is completed, at a total cost of approximately \$12,000,000.00. Present planning does not provide for any future construction for the Snark Missile system. (Confidential)

Space Program

In the Midas program the missile support item at Patrick Air Force Base contained in the FY 1958 Military Construction Program has been completed; the defense alarm readout station in Alaska and the tracking and telemetry station at Vandenberg Air Force Base, contained in the FY 1959 Military Construction Program have been completed. In the FY 1960 Military Construction Program, the communications relay

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station in Alaska is 99% complete, the tracking and telemetry stations in New Boston, N. H. and South Africa have been designed and construction is scheduled for completion in calendar year 1961.

(Secret)

In the FY 1961 Military Construction Program, design for a tracking and telemetry station addition and technical support facility modifications for Vandenberg Air Force Base is scheduled for completion in early 1961 with construction completion in mid-1961; and design for a tracking, telemetry, and control station complete with support facility at Ottumwa, Iowa and a defense alarm readout station in the United Kingdom is currently underway with schedule for construction completion in calendar year 1962. (Secret)

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CHAPTER V
BASE MAINTENANCE

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Improvement of Management of Maintenance of Real Property Facilities

During the reporting period, the Base Maintenance Division continued efforts to improve maintenance of real property facilities by improving the systems and procedures utilized by management to control maintenance efforts on real property facilities.

Heating and Power Conference

This Conference was held at Wright-Patterson Air Force Base on 26 - 28 July 1960 with major command and industry representatives to review problems encountered in the operation and maintenance of Air Force heating and power facilities and to establish specific actions to be taken. Some of these actions taken are as follows:

(1) Studies have been conducted of state and city methods of licensing heating and power plant operators leading to publication of similar Air Force Licensing Program.

(2) A modernization program for utilities plants and systems has been established and funds have been made available to major commands.

(3) Revised steam plant logs and new logs for high temperature hot water heating and electric generating plants have been completed and will be published in 1961.

(4) An interagency solid fuels advisory Committee has been formed to deal with fuel problems in Government installations.

Included is the problem of improving fuels quality control in Federal agencies, including the Air Force.

(5) Active assistance has been provided to major commands in the procurement of utilities facilities supplying acquired Wherry Housing projects and in service contracts involving central metering and billing for Wherry Housing projects. This program is now approximately 99% complete.

(6) Proposal from Golden Valley Electric Cooperative to wheel power from Ladd Air Force Base to Murphy Dam AGEN was transferred to U. S. Army, subsequent to transfer of Ladd Air Force Base to the Army. The Army is now processing the contract which will be funded by the Air Force, approximate cost \$350,000. The new power source will replace presently operated Diesel engine generating equipment at Murphy Dam. Savings will amortize investment in less than three years.

Training Courses

Training requirements for pavement maintenance schools were completed and schools were started at the Corps of Engineers Rigid Pavements Laboratory, Cincinnati, Ohio, and at the Corps of Engineers Flexible Pavements Laboratory, Vicksburg, Mississippi. Approximately 410 Air Force personnel both civilian and military are attending these courses.

Technical assistance and guidance was provided to ATO in establishing a course of training for Base Civil Engineering post

central personnel. This course is to be conducted by the Navy for the Air Force at Jacksonville, Florida, and Alameda, California. Four hundred Air Force personnel are to be trained in the next two years.

Policy Guidance

During this period the Directorate made specific recommendations and provided firm justification for the development of improved technical data and operating and maintenance instructions for missile facilities. These procedures will also apply to all new construction including non-complex installations.

Projects

Approval of the first phase of the Dormitory Modernization Program was completed as follows:

<u>BASE</u>	<u>NUMBER OF BLDGS</u>	<u>TOTAL ESTIMATED COST</u>	<u>PERCENT COMPLETE 31 DEC 1960</u>
Chanute	55	\$1,873,000	10
Keesler	40	1,378,000	20
Lackland	64	2,165,000	1.5
Loney	61	22,114,000	10
Nerrin	10	387,000	30
Sheppard	60	2,268,000	28
Castle	24	953,000	0
Turner	10	353,000	0
Luke	14	765,000	41
Hollis	23	967,000	18
		\$13,228,000	

Action was initiated to factory modernize and rebuild 130 units of over-age snow removal equipment. These vehicles fall within the maximum repair allowances criteria, which is not realistic since the in-use operational hours and miles driven are not extensive enough to

warrant removal of these vehicles after seven years operation. These vehicles will be modernized and rebuilt at approximately 35% of the replacement cost and provide the Air Force with 130 new vehicles for an additional seven years usage. A savings of approximately \$2 million will be effected through this program without any adverse effects upon the Air Force snow removal missions.

Twenty-six modification and repair projects with total estimated cost of \$3,971,500 were processed and approved.

Six golf courses were approved for construction in a total amount of \$377,850.

Savings of \$290,000 were effected at Travis Air Force Base, California, by modifying existing facilities and providing new 20,000 barrel holding tank at dockside.

CHAPTER VI

FAMILY HOUSING

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FAMILY HOUSING

The accrual of new family housing units to the Air Force inventory decreased slightly from the previous reporting period. However, the inventory input amounted to 40 units per day, with a daily dollar value of \$650,000. Following is the status of completed units by program for this period:

Program	Units Completed <u>1 Jul 60</u>	Units Completed <u>1 Dec 60</u>	Net
Caspart-Hains	39,564		6,376
Surplus Commodity	5,037	5,435	378
HDF	3,287	3,422	135

The decrease in new housing construction was offset to a considerable degree by extensive activity in the Wherry Rehabilitation and Improvement Program. At the start of this reporting period there were 17,643 units either completed or under construction. By 31 December 1960 this figure became 23,694; a net increase of 6,046 units. The dollar value of this program in the construction phase is \$72 million. Additionally, at the end of this reporting period, projects for 4,216 units were advertised for bids at an estimated dollar value of \$12.6 million.

The following housing programs were in the construction phase as of 31 December 1960:

<u>Programs</u>	<u>Units Under Construction</u>
Caphart-Bains	12,924
Surplus Commodity	999
MCP	161
Wherry H&I	16,366
Inadequate Quarters	645
Residential BOQ	40

Cost of Mortgage Financing

The discount rate peaked at 8% in early 1960 and by the year's end was approximately 4%. The decrease in the discount rate was also an indication of more plentiful mortgage funds, and contractors experienced little difficulty in obtaining financing.

Surplus Commodity Family Housing Overseas

During the second half of 1960, 378 Surplus Commodity family housing units at 10 overseas installations were completed. During this period construction was started on a total of 208 units at two locations, bringing the total under construction, as of 31 December 1960, to 781 units. No Rental Guaranty housing construction has been started or completed during the second half of Calendar Year 1960. The inventory of Rental Guaranty housing, therefore, remains at 3386 units. As of the end of 1960, the award of contracts for overseas projects which have been developed and the development of new projects has been suspended until the final impact of the President's directive of 16 December 1960, regarding reduction of overseas

dependent populations, have been determined. Investigation of feasibility of constructing additional family housing on Okinawa, in Japan and at Clark Air Base in the Philippine Islands, has been carried forward in anticipation of possible future approvals of family housing construction at those locations.

Quarters for Chief of Staff of the Air Force

Construction of the modifications and alterations to Quarters #7, Fort Myer, Virginia, for the Chief of Staff of the Air Force, was started on 8 November 1960. It is expected that this work will be completed about 1 March 1961.

Shell Housing

The "shell housing" rehabilitation program was implemented during this period. For this program an additional \$500,000 was apportioned to the Air Force for the rehabilitation and improvement of housing projects at Andrews, Scott and Lowry Air Force Bases. The total number of units affected at these locations is 284 and plans call for conversions with an end result of 142 residual units. Unfunded "shell housing" projects remaining in the sub-standard quarters program are located at Ellsworth, Travis, Mt Home and Castle Air Force Bases and continued effort will be made to obtain approval of funds to rehabilitate and improve these projects.

Capehart Program

During the first half of FY 1961, \$4.6 million was apportioned to the Air Force in support of the Capehart program. This consisted of \$2.3 million for acquisition of land and construction of off-site

utilities and site preparation in support of 2,090 family housing units, and \$2.5 million for procurement of architect-engineer services required for design, FHA appraisals and supervision of construction on authorized projects in the current program and approved projects proposed for FY 1962. It should be noted that funds approved for land and utilities during this period average \$1,112 per unit. However, the average support per unit for the over-all funded program is currently \$900 per unit.

Wherry Acquisition, Rehabilitation And Improvement Program

From 1 July thru 31 December, the Air Force was allocated \$36.7 million, in connection with the Wherry Acquisition, Rehabilitation and Improvement Program, as follows:

<u>Item</u>	<u>Units</u>	<u>Projects</u>	<u>Amount (Million)</u>
New Acquisitions	3,100	3	6.3
Utilities Systems (Acquisition & Rehab)	18,394	30	4.0
Rehabilitation & Improvement	15,850	24	25.5
A-E Services	16,306	23	.7
Miscellaneous			.2

The \$4 million allocated for acquisition and rehabilitation of utilities systems serving Wherry family housing projects was the first allocation of funds of any size received by the Air Force and consisted of projects for which the Air Force had been attempting to fund as long as two years prior to the time funds were actually approved. The 3,100 units newly acquired consisted of projects of 600 units at Carswell, 500 at Hunter and 2,000 at Wright-Patterson Air Force Bases. The acquisitions completed the Air Force Wherry Family Housing Program. Of the total

Force Base remains unacquired. The Air Force has no plans to acquire this project inasmuch as disposal action of the base has been initiated.

ACSW Family Housing

The Air Force has been successful in obtaining an apportionment of funds in the amount of \$2,025,000 for construction of 27 units each of ACSW family housing at Cross City, Dauphin Island, Bufala, Thomasville and Crystal Springs Air Force Stations. The final determination as to what type housing should be constructed at these stations was decided to be of the transportable or relocatable type. Although the appropriation for construction of the units was in the amount of \$17,000 per unit, the current working estimate and funding is \$15,000 per unit.

Northern Tier Bases

A total of 760 Caphart units were authorized at five northern tier bases but because of a ceiling limitation of 25,000 units on the number of Caphart units that could be constructed after 30 June 1959 these 760 units were not allocated for construction by OSD. Because of the necessity to "slip" assignment of operational units to these bases due to lack of housing, vigorous reclama action to OSD was initiated to effect allocation. This action resulted in OSD's allocation of 650 of these units:

Glasgow	90
Kincheloe	190
H. I. Sawyer	100
Minot	210
Wurtsmith	60
	<u>650</u>

The allocation was tempered, however, with the stipulation that this housing must be constructed as transportable units. Inasmuch as construction of transportable housing at these long-range, hard-core bases is contrary to the accepted Air Force housing policy another request was made to OSD to reconsider this decision and permit construction of Caphart units. Final action had not been taken at the end of the report period, but because of the high level interest generated in this problem informal information indicates at least a major portion of the Air Force request will be honored.

Inadequate Quarters

With reference to Inadequate Quarters OSD is of the opinion that many units which do not lend themselves to rehabilitation to adequate standards are in fact too good structurally to tear down or remove from the housing inventory prior to the 30 June 1962 date required by law. OSD believes that with a small expenditure of funds many of these units can be made safe and livable and kept in the housing inventory on a rental basis for at least another five years. To this end OSD has prepared mandatory legislation which will remove the existing requirement to take this housing out of the inventory by 30 June 1962, and will permit a limited expenditure of funds to rehabilitate the existing structures. This legislative proposal will be presented for Congressional consideration during the present session of Congress.

Preliminary and Final Closings

Statistics reflecting output as to preliminary and final closings follow:

Initial Closings

<u>Mortgagor-Builder Corporations</u>	<u>Units</u>	<u>Total Figures</u>
33	3,899	\$63,875,960

Final Closings

<u>Closed</u>	<u>Mortgagor-Builder Corporations</u>	<u>Units</u>	<u>Total Figures</u>
1 July 1960	265	39,153	\$616,973,649
31 Dec 1960	319	45,728	723,245,586
Increase	54	6,575	\$106,271,937

GLOSSARY

ADC	Air Defense Command
AC&W	Aircraft Control and Warning
AE	Architect Engineer
AFBMD	Air Force Ballistic Missile Division
AFR	Air Force Regulation
AFROE	Air Force Regional Civil Engineer
ARDC	Air Research and Development Command
ASBCA	Armed Services Board of Contract Appeals
ATC	Air Training Command
BAN	Budget Authorization Number
BOB	Bureau of Budget
BOD	Beneficial Occupancy Date
BMEWS	Ballistic Missile Early Warning System
BOQ	Bachelor Officer Quarters
CEBMC/O	Corps of Engineers' Ballistic Missile Construction Office
COC	Combat Operations Center
ConAC	Continental Air Command
DEW	Distant Early Warning
DOD	Department of Defense
DCS/O	Deputy Chief of Staff, Operations
FAA	Federal Aviation Agency
FHA	Federal Housing Authority
FY	Fiscal Year
GAM	Guided Aircraft Missile
GATR	Ground Air Transmitter Receiver

GEETA	Ground Electronic Engineering Installation Agency Regions
GPREF	Ground Passive Electronic Reconnaissance Facilities
GSA	General Services Administration
HQDS	Headquarters
ICBM	Intercontinental Ballistic Missile
IRBM	Intermediate Range Ballistic Missile
MATS	Military Air Transport Service
MCA	Military Construction Authorization
MCO	Manpower & Organization
MCP	Military Construction Program
NATO	North Atlantic Treaty Organization
NERAD	North American Air Defense
OCE	Office, Corps of Engineers
OM	Organization & Manning
OSD	Office, Secretary of Defense
OSD (IAL)	Office, Secretary of Defense, Installations and Logistics
PACAF	Pacific Air Forces
PL	Public Law
SAC	Strategic Air Command
SAF	Secretary of the Air Force
SAGE	Semi-Automatic Ground Environment
SAFIE	Special Assistant for Installations
SCC	Super Combat Centers
TAC	Tactical Air Command
USAF	United States Air Force

USAF

United States Air Force Academy

USAFE

United States Air Forces in Europe