

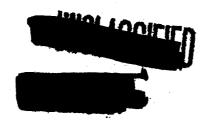
SUBJECT: Dilization of Camp Cooke

WDO WDI (IN TURN) FROM: WITE THE

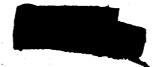
Sept 12, 1956 COMMENT NO. L Comdr Truax/dh/1344

- 1. A Development Directive has been received for WS 117L. A priority of lA and a precedence of 1-6 has been assigned. Initial funding has been received. A contract is being negotiated with Lockheed for development of the System. It is therefore desirable to make firm planning with respect to test sites as soon as possible.
- 2. The Camp Cooke IOC site appears to meet ideally the requirements for southerly and westerly firings outlined in WDTR memo to WDO dated 7 May 1956. Assuming confirmation of this site, WDTR would like concurrenct by WDO and WDI in the following:
- a. The basic principle of joint 107A-117L use of land and base facilities at Camp Cooke.
- b. Use of guidance site number 4 and its associated launchers on a minimum interference interim basis by WS 117L beginning early in 1959 for westerly firings only.
- c. Use of the southern launch facility A, in conjunction with guidance site number 4 for overflow WS 117L workload on a longer term basis. This combination will give WS 117L the ability to launch in the southwest quadrant for operational firings.
- d. Construction of an independent WS 117L launch complex, probably at the extreme southern end of the Camp Cooke area using funds requested for FY 58.
- 3. It is desired to determine what modifications or additions to the facilities currently being planned would be required to make these facilities usable for WS 117L purposes. For this purpose, meetings between R-W, Lockheed and Holmes and Narver are being scheduled (in accordance with verbal agreement with WDIO). When the nature of the modifications have been determined, and an estimate made of the cost and probably delays that would result if the modifications were to be incorporated, WDTR will consult with WDO and WDI to determine a mutually acceptable course of action.

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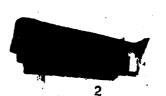


WDTR 56-140



4. It is requested that WDTR be advised of meetings or deadline action dates which would affect the WS 117L program.

/s/ Frederic C. E. Oder
FREDERIC C. E. ODER
Lt Colonel, USAF
Assistant for WS 117L
Technical Operations





SUBJECT: Utilization of Camp Cooke

TO: WDTR THRU: WDI FROM: WDO

DATE: 17 Sep 56 COMMENT NO. 2 Col Sheppard/bs/540

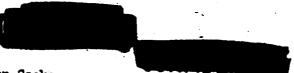
- 1. WDO has tacitly visualized and in so far as possible (due to our limited) knowledge about 117L program) provided during planning for the utilization of Camp Cooke generally as outlined in Comment No. 1.
- 2. Currently I have designated Lt Col Lyster, in his capacity as one of the senior members of WDO rather than Chief of WDOM, to lead the preparation of a somplete, standard operations order for directing the phased activation of Camp Cooke in all its aspects. I expect that pertinent sections of WDT, WDS and WDI as well as WDO offices will prepare or assist in the preparation of the standard annexes and any special annexes required. He is now preparing correspondence to WDT, WDS and WDI which will initiate action in detail. WDTR should contact him prior to completion of the draft of this correspondence, to insure that 117L aspects are included.
- 3. It is urgent that activities or resources not directly connected with the technical operation of the 117L activities at Cooke but which are required in operations, logistic, personnel or general administrative support be rapidly identified so that proper attention is given them. In this connection WDTR should be prepared to nominate a representative to participate fully in the generation of the operations order.

SIGNED

WILLIAM A. SHEPPARD Colonel, USAF Deputy Commander Plans and Operations

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SUBJECT: Utilization of Camp Cooke

TO: WDTR

FROM WDI

DATE: 19 Sept 56

COMMENT NO. 3 Lt Col V.L. Hastings/hd

- 1. Ref paragraph la of Comment 1, Basic use of Camp Cooke is programmed, facilities-wise, for WS 107A 315A. Both of these system requirements must, therefore, be considered in proposed utilization by 117L.
 - 2. Comments as to joint use of launch facilities by 117L are as follows:
- a. Launch/guidance Site No. 4 is the only complex for which construction is scheduled to start in FY 57. Completion will be early in Calendar 1959.
- b. Construction of the southern launch facility, (Site No. 1) was purposely scheduled to follow the facility at Site No. 4 to permit a final evaluation of WS 117L requirement for a multiple use launch facility.
- 3. Construction of an independent 117L launch complex at the extreme southern end of Cooke may be influenced by a requirement presented by the Navy on 28 Aug 1956 to the CSD Ballistic Missiles Committee, for use of full area south of Site No. 1.
- 4. Any modifications required by 117L for use of Site No. 4 must be definitized not later than 1 October 1956 if construction completion dates are to be met as scheduled. The architect-engineer is presently preparing preliminary design of this facility which will receive review and approval by WDD/R-W/ Contractors during period 15-30 October. To insure the best multiple use launch complex, it is recommended that the 117L requirements be included in the second launch complex scheduled for start of construction in early
- 5. The WDI representative for contact on the utilization of facilities at Camp Cooke is Capt Sam H. Wood.

SIGNED

VERNON L. HASTINGS Lt Colonel, USAF Assistant for IOC





SUBJECT: Utilization of Camp Cooke

TO: WDI

FROM: WDTR

DATE: 4 Oct 56 COMMENT NO. 4 Lt Herther/eh/1344

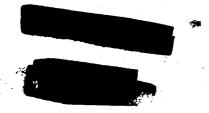
- 1. Reference paragraph 4 of Comment No. 3, WS 117L requirements for consideration in Camp Cooke ICC Site No. 4 planning are inclosed. These requirements are those which can be foreseen by Lockheed Aircraft Corporation and WDTR as of the moment, but it is realized that, due to the rapid change of detail plans that is currently underway by your architect-engineer, continuous Holmes and Narver contact by Lockheed and WDTR will be required to insure the best multiple use of this site.
- 2. The WDTR representative for contact on WS 117L use of Camp Cooke is 1/Lt. John C. Herther.

1 Incl 1 copy Key Items in WS 117L IOC Flanning, 4 pages (S)

copy furnished:

/s/ R. C. Truax, Commander, USN
for FREDERIC C. E. ODER
Lt Colonel, USAF
Assistant for WS 117L
Technical Operations

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MEMO TO: Colonel Terhune

(U) Modification of Launch Stands at AFMIC for 117L SUBJECT:

- 1. Reference your meeting with Col Oder on Wednesday, 24 Apr 57 re above subject in which Col Oder expressed concern that modifications of stands 11 and 13 might delay BOD of these stands to such an extent that test programs now scheduled for 11 and 13 might have to be shifted to 12 and 14. As requested Majors Zelenka and Collier have investigated this matter and reach the following conclusions based on information available at this time.
- a. The 107A-1 program office is not concerned than 12 and 14 will in any way be affected by delays in 11 and 13.
- b. The problem is a continuing one which requires contimmous monitoring to be sure that most recent developments have not changed the situation as indicated in (a) above.
- c. After the Corps of Engineers contract for the transfer rooms on launch complexes il and 13 is awarded, a better evaluation can be made.
- d. 117L plans should proceed on the premise that down time for stands 12 and 14 is not materially changed and that necessary modification to accommodate the 117L can be accomplished in this period.
- 2. We will continue to menitor events in this area and will advise you immediately of any significant changes.

end R. Zelen

jor, usaf Project Officer

WB-117L

COLLTER

Major, USAF

Spec. Asst. to Dep. Cadr.

Weapon Systems

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L- apr-Jun 58, pp 1-1, 1-2 Tile as of 16 Jul 57

the DP is not ovailable

DESCRIPTION OF PLANNED PROGRAM

PROGRAM PLANNING

The present Sentry Program is based on the System Development Plan, Advanced Reconnaissance System, WS-117L (WD - 03076 b), dated 16 July 1957, as modified by reprogramming directives issued in January and March, 1958.

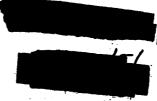
The January reprogramming provided for the flight testing of Sentry/Atlas satellites on a one-per-month basis starting in June 1959, and for the acceleration of the Pioneer Visual and Pioneer Ferret programs by approximately one year. It also introduced a new program, identified as Program IIA, in order to provide for use of the Thor IRBM as a booster. A reprogramming directive issued on 10 March 1958 by AFFMD instructed IMSD to: (1) prepare a plan for acceleration of the basic WS-117L Program through the use of Sentry/Thor flights for early tests of components, and to incorporate into the plan the concept of recoverable capsule flights for aeromedical research purposes, and (2) re-orient the Sentry/Thor flight program so that all flights will be launched from Cooke Air Force Base, commencing with a first flight in November 1958.

A summary Development Program which reflects this reprogramming is shown in Figure 1-1.

Sentry Program Objectives

A summary of the flight test objectives for Programs I, II, IIA and III is as follows:

Program I. Launch of nine Sentry/Atlas vehicles from AFMTC (one each month from June 1959 through February 1960) into a low-latitude orbit at an altitude of 300 s mi for flight testing visual, ferret, and infrared reconnaissance payload components and, ultimately, subsystem.

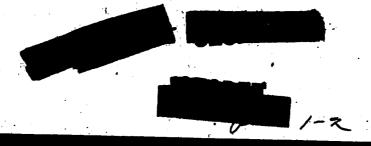


DOWNGRADED AT 12 YEAR INTE VAS; NOT U O TATICALLY DECLASSIFIED, DOD DIR 5200.10 Program II. Launch of five Sentry/Atlas vehicles from Cooke AFB (one every two months from March through November 1960) into a Polar orbit at 300 s mi for Pioneer visual reconnaissance of Soviet-bloc areas of interest, with a ground resolution of 100 feet and a locational accuracy of one mile.

Program IIA. Launch of 10 Sentry/Thor vehicles from Cooke AFB (one every month from November 1958 through August 1959) into a high latitude orbit at an altitude from 160 s mi to 240 s mi for engineering flight testing to attain orbital capability, develop recovery techniques and carry out biomedical experiments. A detailed listing of the individual flight objectives is presented by Figure 1-2.

Program III. Launch of five Sentry/Atlas vehicles from Cooke AFB (one every two months from April through December 1960) into a Polar orbit at an altitude of 300 s mi for Pioneer ferret reconnaissance of electromagnetic emissions from equipments in Soviet-bloc territories.

The key milestones for the overall Sentry program, the subsystems, and support functions are presented in Figures 1-3 to 1-21.





WDIR

MEMORANDUM FOR COLONEL TERHUNE

JUL 9 1957

SUBJECT: WS 117E Military Construction Program - FY 59

l. The WS 117L FY 59 Military Construction Program which was handcarried to Baltimore, Maryland on 1 July 57 was modified by Hq ARDG (RDSI) as follows:

a. \$50,000 increase was added to the sites at Haumii and South Central U. S. stations for the possible acquisition of real estate.

b. A lump sum of \$500,000 was added for the medification of facilities at AFMIC for WS 117L.

These changes were made on the advice of Mr. Diam and Mr. Teppen of the Installations Plans group of RDSI. The total increase of \$600,000 made to total FY 59 MCP for MS 117L \$8,500,000.

2. Copies of the rewritten AF Form 161 will be mailed to AFRED by RDSIP.

cer WDI - Cal. Leonbard

Colonel, USAF Birector, MS 117L

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WDTR 57-222



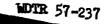
MEMORANDUM FOR COLONEL TERHUNE

LUL 22 1957

SUBJECT: Site Selection - WS 117L

- l. Per our discussion on 18 July of the above subject, submitted herewith is a proposed plan of action to accomplish the surveys "in-house". Sites which must be selected at this time are: Northwest, Northeast and South Central tracking and data stations plus the Hawaiin tracking station (although the S. Central and Hawaii are the only ones in the FT59 MCP the other sites are so technically interrelated that they must be also selected). By taking the "due date" of the final selection (set by Hq USAF as 1 Jan 58) and working back the time required for initiation of the various steps has been determined. The
- a. 1-21 Aug 57 Intensive map exercise to establish those sites which must be visited before they can be accepted or eliminated. Most of the necessary plans (base lay out and master plans) are available; however, no master plans are available for Hawaiin stations.
- b. 22 Aug 57 Initiate a request to Colonel Banks, AFCIE, for permission for the AFRMD team to visit those sites selected as a result of la, above.
 - c. 2-13 Sept. 57 Team visits ZI installations
 - d. 23-27 Sept 57 Team visits Hawaiin installations
- e. 7 Oct. 57 Initiate request to AMC for electronic surveys required. Although a given survey should take less than six (6) weeks there will be more than one required. The time required may also be lengthened by inclement weather expected during this time of year.
- f. 23 Dec 57 Initiate action to Hq USAF nominating final sites.
- 2. There are a few disadvantages coupled with doing the site selection survey "in-house".
- a. Hq USAF, by not participating, will have less first hand knowledge of the care taken and will probably require more "selling" than would otherwise be the case.
- b. Ultimately the sites will require a high capacity communications link. Participation by AMC representatives would make this aspect of the siting more effective.

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DECLASSIFIED, DOD DIR 5200.10





- 3. For the reasons we discussed, however, the "in-house" methods advantages, at this time, outweigh the disadvantages.
- 4. We are studying in some detail the problems associated with accomplishing the functions planned for the S. Central site on a temporary initial basis at Cooke AFB. At first estimate such a step appears feasible if absolutely necessary; however, this would be costly both as to money and time.
- 5. I suggest that the course of action proposed in par 1, above, be discussed by you and me with Colonel Leonhard as soon as possible. If mutually acceptable authority to proceed plus committment of WDI and aircraft support (for the survey) is requested.

Colonel, USAF Director, WS 117L



WDTR

MEMORANDUM FOR COLONEL TERHUNE

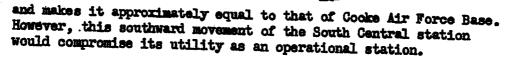
SEP 24 1957

SUBJECT: Site Selection, WS 117L

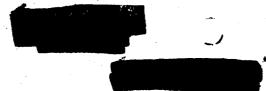
- 1. Reference WDTR Memo "Site Selection 117L", 22 July 57. During our discussions concerning WS 117L facilities requirements and site selection for WS 117L, you proposed that we look at the feasibility of using Cooke Air Force Base rather than the proposed South Central station as the R&D data read-out station. We, together with IMSD, have made a study of this solution with the following results.
- a. Analysis of the tracking system has demonstrated the need for an improved tracking contact capability during the first pass of an orbital flight to accurately predict subsequent orbit paths. In order to adequately accomplish acquisition on the first pass, the tracking radar must see the vehicle at an elevation of 10 or more degrees for at least two minutes. This means that the circle of coverage for the station accomplishing initial acquisition is materially reduced for the first pass.
- b. As previously planned, the South Central station would serve as a tracking station for the low latitude test flights of Program I, as well as, an operational station. In this role the station was restricted to latitudes south of 40° N. latitude to accomplish both of these missions. The early activation of the Cooke Air Force Base to accomplish the R&D function of Phase I would remove the latitude restriction on the South Central station and allow freedom of choice of northern location with a more nearly optimum operational capability. It would also permit the delay of the three U. S. Operational Stations until the FY 60 MCP.
- c. Detailed analysis of interestical characteristics of both AFMTC and IOC launched less laterated than less led us to the conclusion that Cooks Air Force Base would be a more efficient and less costly test data acquisition station for the following reasons:
- (1) Cooke has approximately double the contact capabilities on the first few passes of low latitude orbits launched from AFMTC or Cooke. Over a large number of passes the contact time of each station integrates to quantities which are approximately equal. But, on test flights, as much contact time as possible on early passes is desirable. Morthward and/or eastward movement of the South Central station further decreases contact time. Southward movement, to Brownsville, Texas, increases contact time

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(1)



- (2) It was originally planned that there would be a complete complex of ground equipment at Cooke Air Force Base except the data read-out equipment. Therefore, considerable savings in the early program accrue if a complete test complex of ground equipment is placed at Cooke Air Force Base only. In addition, no personnel would be required at the South Central station during this early period.
- (3) The site selection, construction and activation of the South Central station would be delayed.
- (4) Objectives of the operational and test stations would not be compromised. Compromise of objectives results in a less optimum location for either test or operational usage.
- d. This approach is a more conservative and cautious approach to the facilities problem, and would provide for design changes in the brick and mortar as required by the experience gained in the R&D facilities at Cooke.
- 2. There are several disadvantages to delaying the installation of a South Central station and including data read-out at Cooks Air Force Base. These are:
- a. The delay of the South Central station will reduce the total tracking and telemetry capability during the R&D phase of the program. Tracking and telemetry capability was originally planned for Station on the AFMTC Range, Hawaii, Cooke AFB and the South Central station. This will reduce the number of tracking and telemetry contacts during the first few passes.
- b. An "Operational Type" facility will not be available for training of data read-out and analysis crews. This function will now have to be performed at Cooke Air Force Base.
- c. There will be no ground-to-ground communications systems experience in the early R&D phase to obtain orbital computation smoothing as was planned between Cooke and the South Central station.
- d. Although savings accrue in the early phase of the R&D program, the long range facilities and equipment costs will be greater.



3. As a result of the above analysis and an evaluation of the advantages and disadvantages, it has been concluded that the FY 59 MCP should be medified to include R&D facilities at the following stations only: AFMTC and down range, Cooke Air Force Base, and the Hawaiian Islands. Plans are being made accordingly to use Gooke Air Force Base rather than a South Central U. S. Operational Station as a Test Data Acquisition Station.

4. Site selection in the Hawaiian Island group should be initiated internally so that a recommended site could be included in the detailed project folders for each facility site. The Hawaiian site is the only "site selection" required for the FY 59 MCP. Your approval of the approach outlined above is requested.

Colonel, USAF Director, WS 117L



WDTR

NOV - 6 1957

MEMORANDUN FOR COLONEL TERHUNE

SUBJECT: "WS 117L Facilities"

HMY

1. Reference telephone call from Lt. Col. D. W. Campbell AFOIE-RS on 5 November '57 and WDTR Memo 31 Oct. '57 subject the same as above, specifically paragraph 2. After Lt. Col. Campbell returned to Washington, D. C., and discussed the WS 117L Hawaiian siting problem with his superiors, he determined that the siting of the Hawaiian station was not within the responsibility of AFOIE-RS. This responsibility rests with the Major Command needing the facility and the Theater Commander of the overseas area, in this case probably FRAF or CINCPAC. Clearance into FRAF and other DCD installations in the Hawaiian Islands will have to be arranged by AFRMD, Hq ARDC as will the transportation required.

2. Col. Campbell is continuing to gather the information on all Air Force other DOD and government owned or controlled land in the Islands. This data should be available to AFRMD in the near future.

FREDERIC C. E. ODER Golonel, USAF

Director, WS 117L

Oder (Truax) w/note
"Please keep me
advised of our actions
on this area prior
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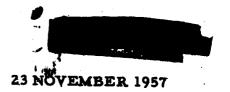
MEMORANDUM FOR COLONEL TERHUNE

SUBJECT: Plans for WS 117L Site Selection

- 1. In accordance with your note of 8 November with reference to WS 117L site selection in the Hawaiian Islands, the following steps are under way or planned.
- a. Col. Campbell (AFOIC-PS) Headquarters, USAF, is assembling data on all Federally owned or controlled property in the Hawaiian Islands. This step should be completed this week.
- b. Lt. Cel. Swanke, WDI, plans to go to Washington, D.C. the week of 18 November to accomplish the following: (1) pick up the data assembled in AFOIE and (2) make arrangements for the clearance of a small group to visit CINCPAC and FRAF Hqs. to acquaint them with the 117L requirements and obtain their assistance. The group that will go on this trip includes 1 member from WDT, WDI, LAC, Philco and Parsons. This trip will be scheduled as soon as possible.
- 2. The purpose of this trip will be more exploratory in nature rather than detailed site selection. NO BMD commitments will be made.

FREDERIC C. E. ODI Colonel, USAF Director, WS 117L





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TO COMDR AFBMD ARDC INGLEWOOD CALIF
COMDR AFBMO AMC INGLEWOOD CALIF

INFO:

COMDR ATC RANDOLPH AFB TEXAS

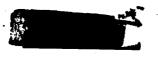
COMDR AFMTC PATRICK AFB FLA

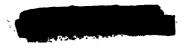
COMDR ARDC BALTIMORE MD COMDR AMC WP AFB OHIO CINC SAC OFFUTT AFB NEBR

/SEGRET/ CITE AFCGM 53147. DEPARTMENT OF DEFENSE APPROVED THIS DATE THE AIR FORCE REQUIREMENT FOR PEACE TIME ICBM/IRBM LAUNCHES FROM COOKE AFB. THIS APPROVAL INCLUDES REMOVAL OF OSD RESTRICTIONS ON ITEM 44.5.2 LAUNCH CONTROL AND SAFETY. YOU ARE HEREBY DIRECTED TO PROCEED WITH YOUR PLAN AS GENERALLY OUTLINED IN 10 OCT 57 COMBINED AFBMD-SAC-AFMTC STUDY WDDOS-57-49 FOR PEACE TIME SYSTEM EXERCISES FROM COOKE. APPROPRIATE ACTION WILL BE TAKEN BY THIS HQS TO CONCLUDE THE JOINT AIR FORCE/NAVY AGREEMENT ON COOKEMUGU RANGE OPERATIONS AT THE EARLIEST POSSIBLE DATE. NAVY ACCEPTANCE INDICATED IN PRELIMINARY JOINT MEETING 21 NOV 57.



WDSSAT-57-852





WDIR

NEMORANDOM FOR THE RECORD

SUBJECT: 117L Preliminary Site Selection Conference, Hawaii

- 1. Purpose of the conference was to establish an Agenda of the visit of the 117L group to Hawaii, and assign responsibilities of each member of the party.
 - 2. Those in attendance were:
 - * Lt. Colonel Q. A. Riepe WDTR
 - * Major J. W. Everhart WDID
 - Mr. E. Burciaga WDID
 - Mr. C. W. Brandt Parsons Co.
 - Mr. J. Gran Parsons Co.
 - * Mr. R. C. Kelly Persons Co.
 - Mr. E. S. Dean LAC/MSD
 - * Mr. R. D. King LAC/MSD
 - * Mr. D. B. McKey Philos Corp.

Those starred will be members of the team on the trip.

- 3. It. Col. Riepe and Major Everhart will arrive in Hawaii at 0200, Monday merning. Monday will be spent setting up appointments with the proper Air Installations group of Pacific AF and Sea Frontier of CINC Pac. Staff. A series of short briefings have been assigned to the members of the group to inform the Pacific AF and CINCPAC Installations people of the 117L requirements. These are:
 - a. Brief description of the 117L System Lt Col Riepe WDTR
 - Requirement, criteria and purpose of the Hawaiian Site -Mr. Ralph King - LAC/MSD
 - c. Technical Performance Limitations of the Hawaiian Site Mr. Dixie McKey, Philos Corp.
 - d. Typical Tracking Station design layout and design limitations and objectives, Mr. R. P. Jelly The Ralph Parsons Co.
 - e. How the AFRMB facilities programming is accomplished, what we want from Pacific AF and CINCPAC. Schedule of events leading to an operational tracking station. Major John Everhart WDID.
- Company has shown that from a geometrical standpoint alone there are a very minimum of locations in Hawaii that will satisfy the Site Selection Criteria generated by Philos and IAC/MSD. It was agreed that this criteria is accepted as being the ideal situation only. IAC/MSD and Philosophia in Wias parts of the criteria can be compromised and INTERVALS; NO1 AUTOMATICALLY DECLASSIFIED. DOD DIR 5200.10

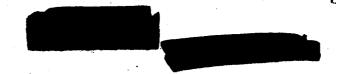


what it will cost in operational effectiveness of the Test Tracking station.

5. The ultimate objective of this trip is to locate areas for siting the 117L tracking station in the Hawaiian Islands that are acceptable from the standpoint of land availability, geometrically and geographically satisfies the selection criteria with compromises, and is not obviously in violation to the electronic interference criteria. These sites will be further studied by IAC, Philos and the Parsons Company for a more detailed siting survey prior to the recommendation of commitment to a specific site.

Lt. Colonel, USAF

WS 117L Office



WDIR

MEMORANDUM FOR COLONEL TERRIBLE

DEC 11 1957

SUBJECT: Status of 117L Facilities

- 1. Facilities planning for WS 117L are presently being planned on the basis of the following decision:
- a. The first launching from AFMTC will occur from launch complex # 14 in June 1959. An agreement has been reached with WDTC which allows WS 117L use of launch complex # 14 from May through December 1959. A maximum of four launches will be scheduled during the period all of which will be orbital in nature. These launches will require tracking and telemetry equipment at Hawaii and Cooke (TIM-18 modified) to receive full use of these orbital vehicles.
- b. The first W3 117L launch at Cooke will occur the first quarter of 1960 (March) from a W5 117L launcher constructed adjacent to complex 65-1 and utilizing the G. E. Mod II guidance equipment at that site. The launcher and probably a minimum blockhouse will be oriented and sited to provide maximum utility to 117L and use of existing services and equipment. A second 117L launcher may be constructed later if 117L is accelerated.
 - 2. The following decisions need to be made:
- a. Siting and orientation of the WS 117L launch stand with respect to other 65-1 stands and facilities, particularly the G. E. Mod II guidance.
 - b. Type of launcher to be built, wet or dry.
- 65-1 blockhouse, or the construction of a new one.
- d. Use of RIM and MAB now under construction for 117L operations for that part that involves the 8M-65. If not feasible the number and size of buildings required.
 - e. Sites for tracking stations at Cooke and Hawaii.
- 3. Action that has been taken or is planned by WDTR and WDI in conjunction with the 117L facilities problem.
- a. Support and data requirements for the tests to be conducted at AFMTC are currently being submitted to the Patrick Base by MTCT. Technical modifications and additions to the launch complex (service towers, umbilical mast, etc.) are under design by IMSD and/or subcontractors. All of these efforts are being completely coordinated with WDTT, WDTC and WDT.

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- b. A memorandum from Colonel Terhune to Colonel Leonhard (WDI) has been written outlining the approach to the WS 117L launch complex at Cooke. This memo recommends the construction of a separate launcher and blockhouse.
- c. WBO has been requested to outline the amount of assistance they can commit to the WS 117L program in the areas of receiving, inspection, maintenance, assembly, checkout, erection and launch of the SM-65 portion of the 117L system. This will determine the requirement for new RIM, MAB, construction and the need for training 117L contractor personnel to receive, inspect, maintain, etc. through launch.
- d. Representatives from WDTR, WDIO, WDID, LAC/MSD, Philos and The Ralph M. Parsons Company visited Cooke AFB 25 November 1957. The group, with the assistance of Colonel Lyster, Colonel Daughton, and Major Stringer toured the 65-1 complex and the Northeastern part of the base. Two feasible sights for the 117L tracking station at Cooke were selected. LAC, Parsons, and Philos are conducting further survey of these sites to determine their suitability. WDTR, WDIB is preparing a paper for the Cooke Installations Board pinpointing the site selected and requesting the Board's consideration.
- e. A party, consisting of representatives from WDFR, WDI, LAC, Philos and Parsons are visiting Hawaii the week of 9 December. The purpose of this trip is to acquaint the PAC AF of the 117L requirements in the Hawaiian Islands, and gather as much data as possible on locations suitable for a 117L tracking station.
- 4. Siting of facilities at Cooke and Hawaii will not require a formally constructed AF selection board. However, soon after 1 Jan. 58 a formal Site Selection Board should be convened to select the U.S. data and readout stations. The representation on this Board will be determined by the Preliminary Operational Concept for 117L to be published by Hq UEAF on 6 December according to unofficial information received from AFGOP-OCR.
- 5. Design objectives and typical site plot plans including single line drawings have been drawn up by Parsons for the tracking stations. Preliminary definitive plans for these typical stations are to be engineered by 15 December 1957. Detailed site adaption and construction drawings will be made as soon as the sites for the tracking stations are selected.

Colonel, USAF Director, WS 117L



DEC 17 57

PRIORITY

COMDR, BMD, INGLEWOOD, CALIFORNIA: COMDR, ARDC BALTIMORE 3, MARYLAND

PART I PD IN ACCORDANCE WITH YOUR TELEPHONE REQUEST OF 16 DECEMBER
1957 THE FOLLOWING INFORMATION IS SUBMITTED WITH REFERENCE TO WS 117L
P-300 PROGRAM ACCELERATION PD A TOTAL OF 13.5 MILLION P-300 FUNDS WILL
BE REQUIRED IN FY 58 PD THESE ARE BROKEN DOWN AS FOLLOWS CLN
8.5 MILLION DOLLARS MOVED FORWARD TO FY 58 FROM THE CURRENT FY 59
MCP PD 5.0 MILLION DOLLARS ADDITIONAL TO PROVIDE A NEW LAUNCH
FACILITY AT COOKE AIR FORCE BASE FOR WS 117L PD PART II PD THE FY 59
MCP ASSOCIATED WITH THE FY 58 PROGRAM OUTLINED IN PART I ABOVE WILL BE
13.0 MILLION DOLLARS TO CONSTRUCT FACILITIES PREVIOUSLY PROGRAMMED IN
FUTURE YEARS PD PART III PD THE TOTAL PROGRAM FACILITY REQUIREMENTS
FOR 117L WILL PROBABLY NOT EXCEED THE TOTALS SHOWN IN THE WS 117L
DEVELOPMENT PLAN CMM 16 JULY 1957 CMM HOWEVER CMM THEY WILL BE REQUIRED

DOWNGRADED AT 12 YEAR INTERVALS, NO. A. WATICALLY WDTR DECLASSIFIED. DOD DIR 5200.10

WDTR 57-467

17 DEC 1957

Lt Col Quenten A. Riepe/iz 2533

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FREDERIC C. E. ODER Colonel, USAF Director, WS 117L

SECRET

VM

12 Pobracry 1956

SUBJECT: Apportionment of Funds to Support Revised W8-117L Development Flon

THRU: Gommander

Air Research and Development Command

Attal ROSS

Andrews Air Ferce Base Washington 25, D. G.

TO: Director of Installations Readquarters, VSAF

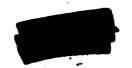
Atta: AFOER

Washington 25, D. C.

- 2. Acceleration of the WS-117L program requires the prevision of necessary facilities on a highly compressed acquickles schedule. Because these facilities are pacing in neture, priority faciling action must be taken to proclude any delay in the construction effort.
- 2. Facility requirements for this accelerated program are set forth in the Tacilities Annex to the Revised W\$-117% Sevelepment Plan which is identified as Management Report No. 8 (32 Jan 30) in accordance with ARSC Manual 30-4. A copy of this document is attached as Indocure \$1. It should be noted that the dates of constanction contract award for the various line Huma in the revised facility areas are significantly advanced ever the dates specified in the former development plan deted 16 July 1957.
- 3. It is currently intended that the Revised WS-117L Development Plan will be hand-carried to ARDC and USAF on or before 17 February. The attached copy is submitted in advance in order that necessary funds can be expeditionally apportioned as specified in the Facilities Annex. The supporting Forms 161 are attached as Inclosure §2.



WHEX-58-4



AFBMD (ARDC), WAI, Subj. Appartitument of Funds to Support Rev. WS-1172, Dov. Plan

- 4. For the Smilline at AFATE, it is contemplated that design and modification will be accomplished by the Jacksonville District Ingineer. For the remaining items in the program, it is intended that design will be accomplished by AFBMD and that construction will be undertaken by the acquisitest District Engineer or Public Works Officer pursuant to the provisions of AFER Infletin SP-1 (Revised), deted 27 March 1957.
- 5. The revised WS-117L Pacifities Ames represents the minimum MCP facilities required to support an accelerated effect in this program. Requirements have been minimised on the premise that necessary installations will be sited on, or adjacent to, active government stations which will obviste the need for support facilities.
- 6. The recent action of the President affording the WS-117L equal national priority with the IC and [RRM's companies the urgency associated with acceleration of this program. Consistent with this priority, it is requested that immediate action be taken to apportion the necessary funds in accordance with the requirements presented in the Pacifities Annex of the Revised WS-117L Development Plan.

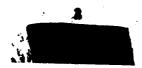
1 hele

- Rev. WS-117L Dev. Plan (Mgt Rpt 90, 22 Jan 90) 10 cys (WD-56-06522)
- 2. Forms 161, 10 eye (WDER-50-6)

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- 6- 25

Wil-LiAM R. LEGNMARD Gelenel, WRAP Assistant for Installations



DEPARTMENT OF THE AIR FORCE AIR FORCE BALLISTIC MISSILE COMMITTEE WASHINGTON 25, D. C.

AFCGM Cont. #581249

AFBMC 1/16

14 March 1958

MINUTES OF SIXTEENTH MEETING AIR FORCE BALLISTIC MISSILE COMMITTEE Held in Room 4C-1052, The Pentagon

Present:

Members: Hon James H. Douglas, Secretary of the Air Force

Hon Lyle S. Garlock, Asst Secy (Fin Mgmt) Hon Dudley C: Sharp, Asst Secy (Materiel) General Curtis E. LeMay (Vice Chief of Staff) Maj Gen Charles M. McCorkle (Asst C/S (GM))

Staff: Col R. E. Soper, Secretary, AF-BMC

Col A. E. Krieger, Alternate Secretary, AF-BMC

Others

Present: SAFUS Hon M. A. MacIntyre Mr. Jack Reilly

Col R. F. Burnham Mr. Geo. Robinson

OSAF Hr. W. Weitzen Mr. D. L. Jackson

B/Gen R. E. Greer Col J. J. Courtney Major E. Istvan

AFCGM

AFCIG L/C G. W. Wischmann

AFCAD Col S. M. Porter

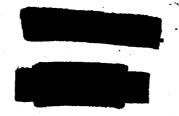
AFCIN M/Gen J. H. Walsh Col R. S. Stewart L/C D. M. Adkins L/C R. D. Kemp Maj C. E. Giraud

AFXDC M/Gen H. C. Donnelly B/Gen J. D. Donohew B/Gen H. T. Wheless Col R. C. Richardson L/C B. Gunderson L/C W. W. Eakins Maj R. E. Angel

AFABF Hr. L. C. Meyer

AFPDC Haj E. Wilson

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and the second

MINUTES OF SIXTEENTH MEETING (Contd)

Others Present:

AFDDC
M/Gen J. S. Mills
M/Gen L. S. Stranathan
B/Gen H. A. Boushey
Col F. W. Dyer, Jr.
Col R. J. Nunziato
Col J. T. Stewart
Col D. H. Heaton
Col J. B. Williams
L/C J. A. Hancock
L/C W. C. Nielson
L/C J. R. Finton
L/C K. G. Lindell
L/C W. A. Walker
Capt W. S. Rogers

AFODC
W/Gen T. C. Musgrave
B/Gen W. R. Rentz
B/Gen F. J. Sutterlin
B/Gen T. J. Gent
Col C. C. Andrews
L/C R. J. Reed
L/C T. F. Johnson
Maj R. C. Brown
Maj G. W. White
Dr. Hugh Miser

Col R. T. Holland Col H. W. Powell L/C B. J. Cavnar L/C B. M. Wayne

L/C M. A. Bradshaw L/C G. F. Hammett L/C A. B. Smith, Jr. Maj C. L. Vacanti

Ramo-Wooldridge Dr. Lawrence AFRMD(ARDC)
B/Gen O. J. Ritland
Col F. C. E. Oder

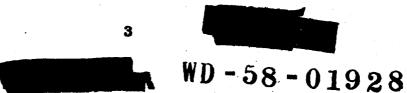
SAC/MIKE L/C E. W. Cutler Maj W. H. Weaver

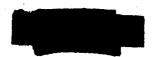


- 1. The Committee convened during the period 1530 to 1715, 14 March 1958, to review a revised development plan for weapon system 117L, based on a recent decision by the Secretary of Defense to accelerate this program.
- 2. A detailed briefing on the accelerated program was presented by an Air Force Ballistic Missile Division team headed by Brig Gen Ritland. A summary of the material presented is documented by Inclosure #1 as a part of the record copy of these minutes.
- 3. In considering the program matter presented, the Committee

NOTED

- a. The accelerated program advances operational dates by approximately one year and provides PIONEER VISUAL and FERRET reconnaissance by CY 1960. The first 117L satellite test vehicle launchings begin in November 1958.
- b. A direct benefit to the manned satellite program is derived from the fact that excess capacity in volume and weight in some of the earlier THOR boosted satellite flights might be used in an animal recovery program.
- c. Providing the first two Project ABLE flights are engineering successes, a satellite attempt could be made in June 1958.
- d. The first THOR flights (Project ABLE) will be from Cape Canaveral on equatorial orbit and when suitable facilities are available at Camp Cooke, 117L tests will continue from this location. Polar orbits are not feasible from Cape Canaveral because of the relative position of populated areas.
- e. The Havailan and Cooke AFB tracking stations have been sited, and a survey is underway for suitable tracking sites in the northeastern and northwestern parts of the United States.
- f. The facilities schedules indicate that beneficial occupancy dates can be met.





- g. The use of the THOR booster presents no unusual engineering problem, and satellite launchings with this booster appear entirely feasible.
- h. Resources required to support this program are estimated as follows (FY 1958 figures shown are already funded):

	FY 58	FY 59	FY 60
P-100	35.1	107.6	154.6
P-200	7.6	51.4	73.8
P-300	7.8	23.4	-0-
P-600	10.0	32.5	21.4
TOTAL	60.5	214,9	249,8

These figures are not identical with previous estimates furnished the Office of the Secretary of Defense, and this disparity must be reconciled.

AGREED

i. THOR boosters will be used to test system components in orbital satellites because the early availability of these boosters will appreciably advance the entire program.

DIRECTED

- j. The funding requirements for this program are to be reconciled with previous estimates provided the Joint Chiefs of Staff and OSD. The cost of biological experiments leading toward a manned space flight capability, to include such flights with laboratory animals as may be feasible in WS-117L test vehicles, will also be submitted at the earliest practicable date.
- k. The revised development plan shall be presented for approval to the Director, Advanced Research Projects Agency.





4. The OSD Director of Guided Missiles has directed the Air Force to investigate and report upon the feasibility of utilizing storable propellants in the TITAN missile including the effects such reorientation would have on TITAN schedules. As a part of this study, Mr. Holaday also requested the Millikan Committee to consider this matter. The Air Force held preliminary discussions with the Millikan Committee in a meeting 14 March. A brief summary report on the status of this investigation was given by Dr. Lawrence for the information of the Committee.

ANDREW E. KRIEGER

Colonel, USAF

Alternate Secretary, Air Force Ballistic Missiles Committee



MEMO TO: Colonel Terhune

box

SUBJECT: Current Status of Facilities Construction at Lockheed Missile Systems Division, Santa Crus Test Base (SCTB)

- 1. Site development and construction activities, for WS 117L, at the SCTB have been underway for approximately eleven months.
- 2. Separate areas to be involved specifically in WS 117L testing at the SCTB, and their current status, are listed below:
- a. Administration, Assembly and Checkout Building Area.
 The building which houses WS 117L offices, and vehicle and component assembly and checkout, is complete and in use; present activity centered on preparation of Propulsion Test Assembly for near-future test in Components Test Lab.
- b. Ordnance Test Area (OTA). The OTA is essentially complete and has been used for WS 117L simulated-tank destruction tests. It will be used shortly for vehicle separation pyrotechnic testing.
- c. Components Test Laboratory Area (CTL). The CTL will be ready for occupancy during the last week in March. The first test on the Propulsion Test Assembly will begin the second week in April in #1 ceil of three in the Lab.
- d. System Test Stand and Blockhouse Area. Test Stands #1 and #2, of a total of three to exist eventually, have reached a stage of rough-concrete-pour completion. Concrete clean-up, facility plumbing and wiring, and superstructure assembly and/or erection will begin within the next several weeks. Flame Bucket is not in place. Flume and all contouring are complete.
- e. Water Supply System Areas. The Test Stand Water Supply System is complete and essentially ready for use. The reservoir, dam, pumps, and lines have been cleaned and checked.
- f. Miscellaneous. Two permanent-type Administration buildings will be constructed adjacent to existing assembly and checkout building, for housing central base control functions.

A tent is presently housing an active engine-valve and plumbing test rig; surrounded by sand bags, which shield the control console and personnel. This test is destined to move to the Components Test Lab shortly.

The road from the base entrance to the Test Stand Area, passing the Components Test Laboratory, and the road to the OTA, are

not surfaced with asphalt or concrete, however it is hard-packed and adequate for near-future transportation needs. Surfacing is to follow shortly.

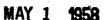
A purification system will be incorporated shortly to service drinking needs, using reservoir water as source.

The access road to the base is in fair to poor condition due to unfavorable soil conditions and seasonal shifting. Lockheed will have to fund repair of this road under existing easement provisions.

3. This facility survey indicated that it may well be possible for the facility to be ready as required for pursuance of WS 117L Captive and Component Test Objectives, however, the condensed nature of the Test Schedule of the program illuminates immediate slippages whenever other than ideal weather, hardware delivery, labor, checkout and crew training situations develop.

fr - FREDERIC C. E. ODER
Colonel, USAF
Director for WS 117L

Forwarded in present form to save retyping for my signaling.



WDTSRF

MEMORANDUM FOR COLONEL EVANS, WDIS

SUBJECT: Trip Report

- 1. It. Colonel Q. A. Riepe and Captain G. P. Buck of the WS 117L Project Office, and Mr. John Gavin and Mr. Sid Rosenberg of IMSD visited Hq ADC on 28 April 1958 to present and attempt to resolve the electronic interference problem between ADC's Frequency Diversity (FD) Program and the tracking and data gathering stations of WS 117L.
- 2. Contacts and arrangements for the meeting were made through Colonel S. L. Huey, Directorate of Communications and Electronics, Hq ADC.
- 3. Upon arrival at ADC, Lt. Colonel Riepe discovered that the presentation would be attended by relatively low level staff members of ADC, primarily due to the fact that people contacted by the C & E Directorate were not at all familiar with WS 117L.
- 4. After a brief presentation of the WS 117L program to Colonel J. H. Weiner, Director of C & E, the WS 117L presentation was rescheduled and appropriate high ranking staff members of ADC were notified.
- 5. The first part of the briefing was given by Lt. Colonel Riepe to personnel listed on the attached attendance sheet. The outline of the presentation is also attached.
- a. The presentation was well received, the only specific comment being that Lt. General Lynn desired his staff investigate the feasibility of changing the planned BOMARC site at Camp Adair to Ft. Stevens. It was his thought that better utilization could be made of Tongue Point Naval Station if it supported both a WS 117L tracking and data gathering station at Ft. Stevens and ADC's BOMARC site.
- b. The second part of the presentation was given by Mr. Sid Rosenberg and was attended by working members of ADC's staff. Mr. Rosenberg discussed the calculated field strength of signals from ADC's FD radars at proposed WS 117L sites and what field strengths WS 117L Subsystem "H" could tolerate.
 - 6. The following plan was agreed on:

AFRMD will notify ADC of the WS 117L site selected for the Northwest and the frequencies of ADC's FD radar that can be tolerated.

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WDTSR 58-236

by WS 117L Subsystem "H". At this time ADC will decide whether to operate their FD radar in a restricted frequency band to avoid interference with WS 117L or to relocate their FD radar which is scheduled for operation in December 1962. At this time it appeared that FD radars would not affect WS 117L sites in the Northeast or Central United States.

- 7. After the presentation, Colonel E. B. Gravette, Directorate of Plans, conferred with the AFRID representatives concerning ADC's desire to obtain a more detailed technical briefing on WS 117L and its capabilities. He was somewhat perturbed that the first briefing of ADC on WS 117L was presented as a result of a communications and electronics problem instead of an ADC request to Hq ARDC which had been submitted several months ago requesting a WS 117L briefing.
- a. Colonel Gravette was informed of the rapid growth and many changes in the WS 117L program within the last few months and that the possibility of a thorough briefing for ADC could probably be arranged in the next several weeks.
- b. Colonel Gravette gave the following as an ADC contact for matters pertaining to WS 117L:

Colonel W. A. Tapscott Symbol ADLAN-G Extension 2183 Hq ADC ENT AFB, Colorado

2 Incls:

1. Attendance List, (U),

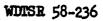
2 pgs.

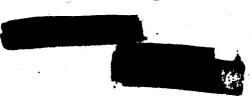
2. Outline, Presentation to ADC dtd 28 Apr 58, (S) 2 pgs., WDISR 58-236

FREDERIC C. E. ODER

Colonel, USAF

Director for WS 117L

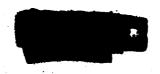




PERSONNEL ATTENDING BRIEFING by the AIR FORCE BALLISTIC MISSILE DIVISION on PROJECT 117L 1400 hrs, 28 April 1958

L/Gen Lynn	mes	T /G .
M/Gen Grant	TS	V/Comdr
M/Gen Muchleisen	TS	D/Opns:
ny den muentersen	TS	D/Plans
	• •	
Col Weiner, James H.	TS	ADOCE
Col Gravette, E. B.	TS	D/Plans
Col McCollom, L. G.	TS	D/Plans
Col Techner	TS	ADORQ
Col Linder	TS	Comdr/3rd Wea
Lt/Col Fedorovich, V.	TS	ATMEL
Lt/Col Riepe, Quentin A	TS	AFEMD
Lt/Col Riepe, Quentin A Lt/Col Worden, Willard L.	TS	ADOCE.
LT/COL Camp, Donald W.	TS:	ADOCE
Lt/Col Martin, R. W.	TS	ADOOP
Lt/Col Baril. C. A.	TS	ADMEL
Lt/Col Cartwright	TS	3rd Wea
Lt/Col Veneziano	TS:	ADORQ
Major DeLosier, Bernard C. Major Hughes, J. B. Major Clinger, B. W. Major Diver, W. L. Major Stapleton, James B. Major Collins	TS TS TS TS TS	ADOCE ADLAN ADORQ ADOCE ADOCE
Capt. Buck, Guy P. Capt. Foreman, George R. Capt. Boyer, Glenn	TS TS TS	AFEMD ADOCE ADCCO

Mr.	Gavin, John	GRES	Lockheed
	Rosenberg, Sid	GRFS:	Lockheed
	Douglas, Haman W.	TS	ADOCE
	Blaylock, Wm. F.	TS:	ADOOA
	Chapman, James M.	GRES	ADOOA
Mr.	Sanders	TS	ADOCE



PRESENTATION TO ADC 28 April 1958

I. Introduction

- 1. Advanced Reconnaissance Vehicle
- 2. (History) ARS Evolution

II. The ARS System

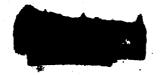
- 3. WS 117L Trajectory to Orbit
- 4. Satellite Orbit Schematic
- 5. Pioneer Recommaissance Vehicle
- 6. Satellite Vehicle Weight Analysis
- 7. Ground Traces Minimum Latitude Orbit.
- 8. Ground Traces 83° Orbit
- 9. WS 117L Subsystems
- 10. Pioneer Advanced Performance
- 11. Electronic Reconnaissance
- 12. (I-R) ICBM Attack Alarm

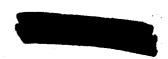
III. How Do We Achieve the GOR Capability

- 13. ARS Program Schedule
- 14. Thor Test Vehicle Description
- 15. Facility Requirements
- 16. Facility Milestones
- 17. T. & D. A. Station Locations
- 18. Dev./Opnl. Station Schematic

WDTSR 58-236







IV. Possible Tracking and Data Gathering Sites

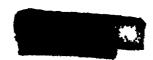
Northwest Area

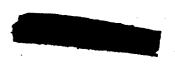
Ft. Stevens (Army) Adair (Army) Larson AFB

Northeast Area

Sampson AFB Grenier AFB Drum (Army) Dow AFB

WDTSR 58-236







5 MAY 1958

WDTSR

SUBJECT: WS 117L Support Requirements from the National Pacific Missile Test Range

TO:

Assistant Chief of Staff for Guided Missiles Headquarters USAF Washington 23, D. C.

- 1. Reference WEIR letter to AFCGM dated 15 April 1958, Subject "Request for Approval of WS 117L Launching Site, Cooke Air Force Base." The referenced letter cites a WS 117L requirement for the construction of a WS 117L/SM-65 launch complex in the South Cooke-Navy area.
- 2. In addition to the above outlined requirement, there are other requirements which are currently being generated. These requirements can be generally placed into three categories: (a) Space (land area) on which to place specialized facilities and equipment, (b) the support of these facilities and equipment, and (c) the direct support of WS 117L by providing certain range instrumentation and facilities.
- 3. Certain of the above requirements can be defined at this time, others must be defined through negotiation and availability of the required item or service.
- 4. It is, therefore, requested that USAF confirm, to the Navy, the need for Pacific Range Support for WS 117L and advise the AFBMD has to action taken. It is further requested that direct communications be authorized between the Air Force Ballistic Missile Division and the Naval Air Missile Test Sunge to establish WS 117L support requirements.

FOR THE COMMANDER:

DOWNGRADED AT 12 YEAR INTERVALS; NO: AUTOMATICALLY DECLASSIFIED. DOD DIR 5200.10

WDTSR

Col Riepe

2781

SIGNETON Colonel, USAF Executive Officer



WDTSR-58-230

Date: 20 gune 1958

"AC_PARAPHRASING NOT REQUIRED EXCEPT PRIOR TO CATE-DORY B ENCRYPTION A PRIVATE ALLY REMOVE ALL INTERNAL REF-MENCES BY DATE TIME GROUP PAIOR TO DECLASSIFICATION— NO UNCLASSIFIED REFERENCE IF DATE-TIME GROUP IS QUOTED."

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COMBR TAC LANGLEY AFB WA
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INFO COMBR ARBC ANDREWS AFB MB
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ACTION WOTSE

22 JUN 1958 14 (15

RECEIVED

WDE WOGE

OF THE RESEARCH AND DEVELOPMENT OPERATIONS ON WS-117L, ADVANCED REGONNAISSANCE SYS WILL COMMENCE IN EARLY BY SP. THE EFFORT ON WS-117L HAS BEEN ASSIGNED HIGHEST NATIONAL PRIORITY AND CARRIES A DX RATING OF .011 BRICK-BAT, AND PRICEDENCE RATING OF I-I, WHICH WILL BE REPLICTED IN FORTHCOMING AMENDMENT TO OPU SE-6. COMMAND INVOLVEMENT VARIES IN DEGREE FROM SUPPORT OF SATELLITE TRACKING STATIONS TO SUPPORT OF COMBINED SATELLITETRACKING AND DATE LLITE LAUNCHING FACILITIES GENERALLY, SUPPORT REQUIRED OF COMMANDS CONCERNED WILL BE THAT ASSOCIATED WITH JOINT-TENANCY AGREEMENTS. DETAILS OF SUPPORT REQUIRED FROM

DOWNGRADED AT 12 YEAR INTERVALS; NOT AUTOMATICALLY DECLASSIFIED, DOD DIR 5200.10

PAGE TWO RJUZNF 15F
INDIVIDUAL COMMANDS ARE IN THE PROCESS OF PREPARATION AND WILL BE MADE KNOWN BY DIRECT CONTACT FROM REPRESENTATIVES OF THE AFBID. HQ ARDC. UPON RECEIPT OF REQUIREMENTS, ALL COMMANDS ARE ENJOINED TO PROVIDE HIGHEN PRIORITY SUPPORT FROM WITHIN EXISTING RESOURCES AT THE EXPENSE OF LESSER PRIORITY EFFORTS. WHERE THIS IS NOT POSSIBLE, COMMANDS WILL USAF, ATTN AFCOM BY MOST EXPEDITIOUS MEANS

THIS IS AC MSG
20/2214Z JUN RIWZNF

W DSMCC -58-15

MINORALISM FOR GRIENAL RESEARCH

SUBJECT: WE LLTL Bevolupment Flow Food Boyelstonest for FY 59

- 1. At the request of the Communitar, ATRS, Wright-Suttaneon Air Perce Ress, on MF Sten of \$500,000 P-350 Sunts was included in the W 1172 Sevelepunt Flow fund requirement for FY 59. "Ship item to provide funds for a proposed 12,000 sq. ft. expension of 314g. 259 at WAFS to most "the additional requirements of WS 1272".
- 2. At the request of MINNEY, preliminary design critoria for this expansion has been provided by AZES. Detailed functional requirements are being prepared by AZES and should be completed by 20 July 1958.
- 3. When and them plan to review these exiteria to estimate the cost and adequary. These will be transmitted to the Air Force Destallation Representative at Cincinnati, Chic, for design and construction.
- 4. The centest at AZIS has been Calenck John G. Brillman, USAF Commisson, AZIS.

SIGNED

MARRY I. BYANG Calend, WAY Antistast Deputy Commander Spine Systems

DOWNGRADED AT 12 YEAR INTERVALS: NO AUTOMATICALLY DECLASSIFIED. DOD DIR 5200.10





FORCE BA

AIR RESEARCH AND LEVELO-MENT COMMAND UNITED STATES AIR FORCE POST OFFICE BOX 262 INGLEWOOD, CALIFORNIA

D

31 JUL 1958

WDI

SUBJECT: (Secret) Request for Site Approval WS 117L Development/Operational Tracking Station, Northeast U. S.

TO

Assistant Chief of Staff for Guided Missiles
Headquarters USAF
Washington 25, D. C.

- 1. The WS 117L Site Selection Board has concluded its study of potential sites in the Northeast United States for a suitable location for a Development/Operational Tracking Station. Inclosures 1 and 2, subject: "Reconnaissance Report Northeast Site Selection Team" and "Site Selection Study Addendum," respectively, provide details of criteria utilized by the Board and their findings with respect to the various sites investigated.
- 2. Principal considerations for the selection of the tracking station site were (1) technical suitability, (2) availability of Government-owned land, (3) availability of a suitable support base, and (4) economy of construction. No site in the Northeast area fitted all requirements ideally, but least compromise will have to be made at the New Boston Range location. It is requested that approval of this site be secured from the Air Force Ballistic Missile Committee and that this Division be authorized to proceed accordingly. A representative from AFBMD will be available to present this site selection recommendation to the Ballistic Missile Committee if desired.
- 3. Inclosure 3 is a summary report of the Site Selection Board actions forwarded pursuant to your message AFCGM 51678, dated 4 June 1958.

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SIGNED

3 Incls

1. Recon. Rept (5) (WD-58-0211) (in dup)

2. Site Selection Study (S) (WD-58-04462) (in dup)

3. Site Summary (WDI-58-37)(dup)

Copy furnished: Comdr. ARDC (w/incls) AFIR NER, WDIR, WDTSR O. J. RITLAND Brig. Gen., USAF Vice Commander

> WDI-58-37 Cv & of ///Cve

Memorandem for colonel custin

SUBJECT: WS-117L RkD operations at Souke Air Force Base

- is order that appropriate planning and programming actions can be taken. You are directed to establish as ad hot Task Group under the supervision of the LITL program director, having representation from BEC, SAC-MIKE, WDI, and the Sid-63 Program Cities, to study and recommend a course of action with respect to these items not later than 13 August.
- a. The question of using SAC evens to supervise the booster phase of the launch operation during RhO (lights.

FCTE: General Funk, General Large, and the undersigned have substantially agreed that this should be contractor operated with over the shoulder training permitted for SAC military personnel.

- b. Establish a date for initiation of operational flights for planear reconnaissance. All factors such as the test program, training, availability of incilities, etc., should be considered.
- c. Launch and guidance facility requirements to accommodate simultaneous RkD operational flights. Detailed consideration should be given to the atflication of Complex id-1 for operational flights and use of the GE blad-2 guidance for both operational and RkD flights.
- d. Riki building requirements to accommodate receipt and check-out operations for both E&D and operational flight articles.
- e. Deliants the responsibilities which each of the following agencies will have in support of 127L operations:
 - (1) First Musile Division
 - (2) Contractors, i.e., Convair, Lackband, etc.
 - (3) AMC



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(i) Pacific Missile Rauge.

In considering this item it must be assumed that additional Air Force RaD activities will be conducted from Cooks and Arguelle in the fore-secable future. These will be limited to projects for which AFMTC is ensuitable.

B. A. SCHRIRYER Major General, USAF Communder

cc: Ceneral Feah - BMC Ceneral Large - SAC/MINZ Colonel Leggard - WDI WDIB

Mr. L. Bugene Root Vice President and General Manager Lockheed Hissile Systems Division Summyvale, California

Dear Gene:

My staff has informed you of my decision to establish Lt Colonel Mathison in residence with the 117L Program in Palo Alto. He and his staff will establish for me control over development operations under the 117L Contract. It seems clear now that this activity is likely to be more extensive and important than we had at first visualized.

I have now concluded that we must establish a Development Control Center as a permanent Air Force facility in the Bay area. I visualize that this facility may ultimately occupy approximately 100,000 square feet of building area. The initial requirement of approximately 50,000 square feet, should be made available at the earliest possible date. It will, of course, accommodate contractor personnel as well as Air Force personnel.

I have asked my staff to develop a plan under which FY79 funds will be made available for its construction. In this connection, Colonel Bill Leonhard, my facilities man, plans to visit Jack Carter at Palo Alto on Monday of next week to discuss this matter in further detail.

This new circumstance may effect Lockheed's already well advenced facility planning for the 117% Program. I would like to discuss the whole facilities question with you at the earliest possible time.

Can you meet with me envire Monday or Tuesday, August 11 or 12, in Inglewood to discuss this matter? I am leaving Tuesday night August 12, for an extended trip.

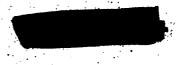
Sincerely,

15/

B. A. SCHRIEVER Major Consrel, USAP Commender

ACTUDED AS A COMMITTEE OF THE STREET





MDGO

2 Scytomber 1993

METORATION FOR COLORED BYANG

SUBJECT: Requirement for Resovery Force Ships

- 1. As you know, Lockingd has held rather firm that five destroyer-class wessels are needed during recovery force operations. The recent CNO TWKs, with which you are familiar, bring this down to three although I believe this is a Moval idea and not concurred in by LAC.
- 2. A requirement for a large sea force will prove exbarrassing in a number of different ways. First, its cost is an item which has not been budgeted and which is likely to threaten the existence of the program if we need to budget. Second, it will require substantial coordinating effort which means unappear and organizing problems at the Brazian base. Thirt, it provides an opportunity for undue publicity.
- 3. Simple time and distance calculations convince me that one ship stationed at the center of the predicted impact area could proceed to the farthest course of such an impact area within four hours. This factor coupled with the fact that the recovery capsule should float for at least four hours; that the recovery side should function for at least that long; and that the RC-121a should be able to maintain an accurate pingeint fix on a floating capsule leads as to believe that one ship is adequate. Dear in mind that the functioning recovery side are necessary for whip recovery and that the same side make it possible for the RC-121 to keep the floating assemble pingeinted.
- 4. In view of the immune desirability of saving costs and avoiding an ARPA-Air Force-Havy "coordinating" problem of major proportions, I suggest that a two- or three-was team; possibly led by Gol Gibbs, attack this publish sad that their puisary method of attack be: "Prove that more than one ship is a clear requirement."

SIGNED

2 Incla

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2. Cy COMPACHIERAN Pt Mugu 1518262

Cy farmished: Col Curtin WILLIAM A. SEMPPARD Colomel, WAY Assistant for Special Projects



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WD00-58-17

WDL

Cintery Request for Design and Construction Funds - WS-117L

30. Director

Assemble Research Projects Agency

Markington 25, D. C.

Le Passuant to Advanced Research Projects Agency Memorandum of Laugus 1856, anthreat. ARPA Cyder 9-58, 7 is is requested that filled in the amount of \$20, \$74,0000.00 be made available to this bletken together design and construction of the following facilities in supposing Vacilities.

Tracking and Data-Acquisition Stations-\$10, 647, 000

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Eleten Beaten, New Hampshire

1. 3 Ottunies, lowe

b. James Copplet Core AFB

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the Building Lasenbly Building: Cooks AFB

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Total

\$20,474,000

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SUBJECT: Request for Design and Construction Funds - W5-1171.

TO:

Director

Advanced Research Projects Agency

Washington 15, D. C.

1. Parsunt to Advanced Research Projects Agency Manuscription of 7 August 1958, subject: "ARPA Order 9-58," it is seminated that funds in the amount of \$20,474,990.90 by made available within histories for the design and construction of the following malicina in support of Willitz programs.

- 4. Three Tracking and Date-Adquisition Stations of the State
 - (1) Fort Mercuty, Oragen
 - (2) New Books. New Etmochine
 - (3) Ottomwa, Soun
- b. Lannok Complex, Goole AFB
- e. Missile Autombly Buildings Cooks AFB

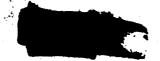
Total

The Preliminary Constanting Proposals as published in the Bulbeure to your minners which here with proposal his dispositions and are attached being

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AI'B. 4D ltr to ARPA, subj: Request for Design and Genetrustien Funds

presentations. Alletment of the above funds is requested prior to 15 October 1958 to permit selicitation of bids for construction which is scheduled in most cases in early Nevember 1958. As soon as firm criteria becomes available for the other programmed facilities, additional funds in the amount of \$2,913,000.00 will be requested.

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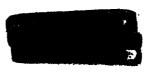
- 1. (6)(WDIR 58-46)(4 eys)
 Date Acq. and Track, Sta.
- 2. (8)(WDIR 58-49)(4 eys) Pt. Arguello Launch
- 3. (5)(WDIR 58-50)(4 eys) G/M Assembly Bidg. Cooks AFB

SIGNED

B. A. SCHRIEVER Major General, USAF Commander

Info Cy (ltr only)
AFCGM
Hq USAF
Hq ARDC (RDZGA)
WDP
WDC

Dictated by Lt Col Lutman/sb/WDIR Coordination A WDI, WDIR, WDIO, WDC, WDTSR



WEER SO-SI Cy M et M eye MEMORANDUM FOR WOT

SUBJECT: Future Utilization of Complex 65-1 at Cooks AFB

- 1. It appears that the best utilisation of subject facility is to convert it for WS-117L purposes after its utility as an ICHM facility has become marginal. However, it has not been fully established that this is feasible either from a technical or from a range safety point of view.
- 2. Considerable discussion seems to have centered around the above aspects. However, we are in need of specific documentation so that definitive planning may proceed. I therefore wish that written reports be prepared on both the technical and safety aspects and the entire matter of future utilization of this facility be presented to me in a suitable briefing when the reports are available.
- 3. What is your estimate of the date by which the above mentioned reports can be presented and the briefing given?

ORIGINAL SIGNED: B. A. SCHRIEVER

B. T. SCHRIEVER Major General, USAF Commander

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Dear Gase

I want to douglism, as a matter of record, previously made verbal Agreements conserving the aptablishment of an AFMED Field Office to want to be the Cartingment Control Center at your Falo Alto facility.

The Development Control Conter has been set up as a division of my NE 1/12 project Office and, as such, will be primarily responsible for the NE primarily sessions phase of the Nespons System and such related sessivity as obsessanty to develop sound and acceptable plans for the specialism of all binase of the Yespon System. The satablishment of Max Development Control Denter will not change the existing working relationship between your It branch and the Inglewood Divisions of my MS 1/1. Project Office empty on matters partaining directly to system Man Specialism. However, it is my desire that the services of the Development of the required Nember contribute to the efficient and timely development of the required Nember System. The Chief of the Development Control Senter vill set as the over-all Test Controller on all ME 1/1 Max Jamanher and, as such, will be responsible for the total system and set support residings and operation.

I have selected it Colonel Charles G. Mathiern as the Chief of the Development Control Cepter and he is new in place at Palo Alto. The office vill initially consist of four officers, one airman, and due officers and vill expent gradually to an approximate total of 18 ptracerni, by I become 1958. Additional growth is expected but the expectation will be galabed directly to precently unidentified requirements, system development progress and may meet to provide an in-

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It has been brought to by attention that it Colonel Sathings's office has already been affectively setablished and achieves an extremely efficient and amough integral serving relationship with the IA Branch. It is indeed gratifying that your personnel, under the guidance of Mr. J. H. Carter, tholeheartedly extended the namework effort to community this action and all should be communical accordingly.

GHARLES H. TERHUNE, JR. Colonel, USAF Deputy Commander Teatmical Operations

I. X. SCHRIEVER

Major, General, USAR

Commander

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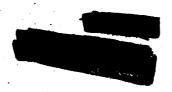
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29 Saytenber 1958

MINISTERNAL POR PRINCIPA

STREETS: WE-1175 Atlant Spouton Mill Activity at Cooks AFE

- 1. General Schriever expressed the findings of the Group by signing the attempt muse.
- 2. Companie Schrister, Frak and Large agreed (with Mg SAS emprovement by SAS/MANN) that the Well/K MAN new completing design would be utilized for Well/K MAN plus We-65 and afforts; and that an additional, assertially similar, MAN would be designed and built in the general MAN area at Godes for SAS use in Atlas and Well/K operational programs the MAN's Shr increments of this latter building to assert with Mg UNAY approval specutional plans and ashethles.

SIGNED

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VILIAN A. SHIPPARD Galanni, UMAP Anc't Sur Special Projects

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