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NVO-9

FACILITIES & SUPPORT REQUIREMENTS PLAN

PACIFIC AREA

VOLUME II
HAWAIIAN ISLANDS, OFF ISLANDS & KIRTLAND AFB

JOINT TASK FORCE EIGHT AND UNITED STATES ATOMIC ENERGY COMMISSION

PROPERTY OF U. S. GOVERNMENT

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW
T REVIEW DATE: 12-10-97
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D REVIEW-DATE: 1/26/98
JTHORITY: ADD
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NINTH EDITION
April, 1969

prepared by

HOLMES & NARVER INC
Logistics Planning Group
Las Vegas, Nevada

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TABLE OF CONTENTS

SECTION I	INTRODUCTION	PAGE
1.1	General	I-1
1.2	Purpose	I-1
1.3	Contents	I-1
1.4	Supersedure	I-2
1.5	Change Pages	I-2
1.6	Changes to Data	I-2
1.7	Procedure for AEC Facility and Logistical Support Approval	I-2
1.8	Procedure for DOD Agency Facility and Logistical Support Approval	I-3

SECTION II	DEFINITIONS AND ABBREVIATIONS	PAGE
2.1	General	I-5
2.2	Definitions	I-5

SECTION III	DOD PROGRAM SUMMARY	PAGE
	General	I-12
	MIGHTY SKY Program	I-13
	MIDGET FLY Program	I-17
	DISTANT WATERS Program	I-19

SECTION IV	FACILITIES	PAGE
4.1	General	I-21
4.2	Tabular Listing of Facilities	I-21
4.3	Narrative and Details	I-21
4.4	Island Site Plans	I-22

SECTION V	FACILITY DESCRIPTION	PAGES
05	Oahu Scientific and Support	5-1 thru 5-17
06	Oahu Communications	6-1 thru 6-13
07	Hickam AFB Scientific and Support	7-1 thru 7-51
09	NAS Barbers Point Scientific	9-1 thru 9-17
10	NAS Barbers Point Support	10-1 thru 10-9
11	Kauai, AEC-TRF Scientific	11-1 thru 11-29
12	Kauai, AEC-TRF Support	12-1 thru 12-8
13	Kauai, AEC-TRF Communications	13-1 thru 13-5
14	Maui Scientific	14-1 thru 14-8
16	Maui Communications	16-1 thru 16-2
17	Hawaii Scientific and Support	17-1 thru 17-10
18	Kirtland AFB Scientific	18-1 thru 18-6
19	Kirtland AFB Support	19-1 thru 19-4

[redacted]L

SECTION V	FACILITY DESCRIPTION (Cont'd)	PAGES
21	Canton	21-1 thru 21-13
22	French Frigate Shoals	22-1 thru 22-14
23	Kwajalein	23-1 thru 23-7
24	Midway	24-1 thru 24-18
25	Palmyra	25-1 thru 25-13
26	Upolu	26-1 thru 26-8
27	Viti Levu	27-1 thru 27-9
28	Wake	28-1 thru 28-11
29	Guam	29-1 thru 29-7
30	Okinawa	30-1 thru 30-3
31	Japan	31-1 thru 31-2
32	Washington	32-1 thru 32-3
33	Fanning	33-1 thru 33-3
34	Penrhyn (Tongareva)	34-1 thru 34-3
37	Tutuila	37-1 thru 37-4
38	Christmas	38-1 thru 38-5
39	Baker	39-1 thru 39-4
40	New Zealand	40-1
41	Tarawa	41-1 thru 41-5
42	Malden	42-1 thru 42-4
43	Arorae	43-1 thru 43-5
44	Aleutian Islands	44-1 thru 44-2
45	Majuro, Marshall Islands	45-1 thru 45-3
46	Ponape, Caroline Islands	46-1 thru 46-3
47	Truk, Caroline Islands	47-1 thru 47-3
48	Howland	48-1 thru 48-3
51	Philippines, Clark Field	51-1
52	South Vietnam, Saigon	52-1
53	Australia, North West Cape	53-1 thru 53-3

TABLES	TITLE	PAGE
2-1	Summary of Locations by the First Two Digits of the F&S No.	I-8
2-2	Abbreviations	I-10
5-1	Numerical Index of Active Facility Numbers	O-1

FIGURE	TITLE	PAGE
A-1	Summary of Facilities - Hickam AFB	A-2
A-2	Hickam AFB Scientific Facilities (Sheet 1 of 3)	A-3
A-2	Hickam AFB Scientific Facilities (Sheet 2 of 3)	A-4
A-2	Hickam AFB Scientific Facilities (Sheet 3 of 3)	A-5
A-3	Facilities - NAS Barbers Point (Sheet 1 of 2)	A-6
A-3	Secure Trailer Compound - NAS Barbers Point (Sheet 2 of 2)	A-7

[redacted]

FIGURE	TITLE (Cont'd)	PAGE
A-4	Trailer Compound - Damon Tract	A-8
A-5	Mauna Loa Simulator Station - Hawaii	A-9
A-6	AEC-TRF Facility Plot Plan - Kauai	A-10
A-7	AEC-TRF Secure Trailer Compound - Kauai	A-11
A-8	Mt. Haleakala Optical and Photo Station - Maui	A-12
A-9	Facilities - Kirtland AFB	A-13
A-10	Facilities - Canton	A-14
A-11	Facilities - French Frigate Shoals	A-15
A-12	Facilities - Kwajalein	A-16
A-13	Facilities - Midway	A-17
A-14	Facilities - Palmyra	A-18
A-15	Facilities - Upolu	A-19
A-16	Facilities - Viti Levu	A-20
A-17	Facilities - Wake Island	A-21
A-18	Facilities - Guam	A-22

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SECTION I

INTRODUCTION

1.1 GENERAL

The Facilities and Support Requirements (F&SR) Plan, NVO-9, is prepared and maintained by the Logistics Planning Group (LPG) of Holmes & Narver, Inc. in accordance with guidance furnished in: (1) The U. S. Atomic Energy Commission, Nevada Operations Office, Planning Directive for Off-Continent Activities (OC-10-6-68) FY 1969, dated June 28, 1968; (2) Annex I to Commander Joint Task Force EIGHT, Operations Plan 100 (current edition); and (3) The various Defense Atomic Support Agency Program Documents.

1.2 PURPOSE

This document provides a consolidated plan for engineering, procurement, construction, logistical support and funding requirements necessary to establish and maintain those facilities which will permit timely reaction to a decision to resume nuclear testing in the Pacific Operational Area. It is designed to serve as a basic information document for the U. S. Atomic Energy Commission (AEC), the Defense Atomic Support Agency (DASA) and Joint Task Force EIGHT (JTF-8).

1.3 CONTENTS

This Ninth Edition of the Facilities and Support Requirements Plan, commonly referred to as "The Gray Book", is published in three volumes and is based on currently known requirements submitted by all agencies.

Volume I contains descriptions of field construction related projects or major modifications which have been completed, are under way, or are proposed for accomplishment at Johnston Atoll.

Volume II contains information concerning field construction related projects or major modifications which have been completed, are under way, or are proposed for accomplishment at Kirtland AFB, Albuquerque, New Mexico; within the Hawaiian Islands; and at other Pacific Island locations. These latter locations are usually referred to as the Off-Islands.

Volume III contains information related to support requirements. These include detailed communications, special support personnel,

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space allocation and structure/facility numbers, office furniture and equipment, vehicle and support equipment and transporation requirements. A table of population forecasts at Johnston Atoll and a listing of scientific station numbers are also included.

1.4 SUPERSEDURE

This Ninth Edition of the Facilities and Support Requirements Plan, dated April 1969 supersedes and replaces the Eighth Edition, dated January 1, 1966.

1.5 CHANGE PAGES

This edition will be maintained in a current status through the issuance of periodic change pages providing new information on criteria, status, funding and support. A list of all currently effective pages is furnished with each change as a checklist. A record of changes to all volumes should be maintained in Annex Z of each volume.

1.6 CHANGES TO DATA

Changes or corrections to data contained in this publication should be sent to:

Manager, Logistic Planning Group
Holmes & Narver, Inc.
P. O. Box 14340
Las Vegas, Nevada 89114
Phone: (702) 734-3104

1.7 PROCEDURE FOR AEC FACILITY AND LOGISTIC SUPPORT APPROVAL AND INCORPORATION OF DATA RELATED THERETO IN THE FACILITIES AND SUPPORT REQUIREMENTS PLAN

The LPG is the organization responsible for compiling and maintaining facility and logistic support data in the F&SR Plan. This data will be coordinated directly between the User and the LPG.

The responsibilities of the AEC organizations, involved in nuclear testing in the Pacific Operational Area, with respect to the F&SR Plan are as follows:

The AEC Laboratories and/or contractors (Users) will submit their requirements, with preliminary concept and justification, to the Manager, NVOO, with a copy to the Manager, LPG.

Several alternative courses of action are available. For example, the Manager, NVOO, may approve the User's requirement outright; or prior to that action, solicit the recommendations of the Off-Continent Planning Committee (OCPC).

The LPG is then directed to develop the preliminary concept and criteria and obtain planning cost estimates, siting approval, etc., as appropriate. The LPG will obtain the User's approval before submitting the results of their investigations to the Manager, NVOO, CJTF-8 and to other pertinent AEC and DOD agencies for comment and concurrence, as necessary.

Based upon the recommendations of the OCPC, the Manager, NVOO, may either: (1) Disapprove the requirement; (2) Direct LPG to incorporate the requirements in the F&SR Plan as a proposed item pending approval; or (3) Approve the requirement with engineering, procurement and construction authorized in whole or in part.

AEC agencies are responsible for reviewing the F&SR Plan to ascertain accuracy and completeness of all criteria under their cognizance. Desired changes will be reported to NVOO, with a copy to the Manager, LPG.

1.8 PROCEDURE FOR DOD AGENCY FACILITY AND LOGISTIC SUPPORT APPROVAL AND INCORPORATION OF DATA RELATED THERETO IN THE FACILITIES AND SUPPORT REQUIREMENTS PLAN

As in the case with the AEC originated requirements, the LPG is the organization responsible for compiling and maintaining the DOD's facility and logistic support data. However, JTF-8 is the coordinating agency between the various DOD organizations and the LPG in all instances. Upon JTF-8 approval DOD furnished support is included in the F&SR Plan.

The responsibilities of the DOD organizations, involved in nuclear testing in the Pacific Operational Area, with respect to the F&SR Plan are as follows:

All DOD agencies requiring facility and logistic support from JTF-8 shall obtain HQ DASA project approval prior to requesting inclusion of their requirement(s) in the F&SR Plan. Any requirement that is to be included in the F&SR Plan will be submitted through appropriate channels to JTF-8, with a copy to the Manager, LPG, accompanied by a copy of DASA's approval.

Upon receipt of a requirement from a DOD organization and with JTF-8's concurrence, LPG is authorized direct contact with the requesting organization and others that may be interested. As appropriate, the LPG will develop the preliminary concepts and criteria and obtain planning cost estimates, siting approval, etc. Approval of this study will then be obtained from the requesting DOD agency before the results of the LPG's investigations are submitted to the CJTF-8 for further approval.

At this point, the CJTF-8 may approve the facility study, criteria, etc., outright; or, prior to that action, solicit the recommendations of the Pacific Planning Board. Based upon the recommendation of the Pacific Planning Board, the CJTF-8 will review the LPG's study(s) prior to including the requirement in the F&SR Plan as: (1) An approved item; (2) A proposed item pending approval; or (3) As an approved item with engineering, procurement and construction authorized in whole or in part.

DOD agencies are responsible for reviewing the F&SR Plan to ascertain accuracy and completeness of all criteria under their cognizance. Desired changes will be reported to CJTF-8, with a copy to the Manager, LPG.

SECTION II

DEFINITIONS AND ABBREVIATIONS

2.1 GENERAL

This section presents the definitions and abbreviations used throughout the three volumes of the F&SR Plan.

2.2 DEFINITIONS

BOD - FOD - These expressions are utilized to indicate the actual calendar date or a relative GO date when a facility will be required for occupancy. "BOD" (Beneficial Occupancy Date) is defined as the date when construction of a facility will reach a stage that will permit concurrent construction or installation of equipment by both the construction contractor and the using agency or its agent. "FOD" (Full Occupancy Date) is defined as the date when the construction of the facility will reach a stage that it may be used for its intended purposes with relatively little interference, restriction or inconvenience from the completion activities of the construction contractor.

If a facility is scheduled for participation in more than one event, the FOD is based upon the earliest scheduled requirement. An exception is in the scheduling of planned facilities for Nuclear Operational System Test (NOST) participation. Established design, procurement and construction schedules will not be adjusted to accommodate NOST participation, except for the facilities at Midway. Certain facilities at Midway are required specifically for NOST participation and have an FOD based on this requirement. If a facility is incomplete on the date of a NOST, an alternate facility may be used.

F&S No. - Facilities and Support number (F&S No.) is a five-digit identification number assigned to a project or facility. The first two-digits reflect the location and intended use of the facility. The exception being the off-island facilities, whereby the first two-digits reflect the location only. Table 2-1 lists a summary of these digits. The last three digits are assigned in line item sequence for each location and intended use.

Once a F&S No. has been assigned to a facility, it will not be reassigned to another facility or project. However, an assigned F&S No. may become inactive and subsequently be deleted (the facility requirement was rescinded prior to any effort expended), cancelled (the facility requirement was rescinded after some effort was expended) or transferred (the facility requirement was included as part of another project or facility which had an assigned F&S No.). These inactive

F&S Numbers will not be included in Table 5-1 of Volumes I and II. Only active F&S Numbers will be included in this Table. Tables 3-4 thru 3-6 of Volume III delineates the relationship between applicable active F&S Nos., building numbers, scientific station numbers and the Users of the various facilities and structures at Johnston Atoll, the Hawaiian Islands and Kirtland AFB. A complete listing of all active and inactive F&S Nos., as a matter of historical reference, is on file with the Logistics Planning Group.

Funding - The term "Funding Agency" indicates the source of funds for the design, procurement and construction of a facility. Funds may be allocated by a single agency or from a combination of agencies, depending upon participation in the particular project. Where funding responsibility for a facility has not yet been resolved, the Funding Agency block will be left blank. Where applicable, DOD funded facilities will include a separate amount for furniture; whereas, the furniture costs will be included in the construction costs for AEC funded facilities. The cost estimate for construction includes the estimated cost of procurement for both DOD and AEC funded facilities. In the listing of costs or estimates, values are in the thousands of dollars.

Prior Costs, as listed in this edition of the F&SR Plan, are defined as that portion of the money expended as of June 30, 1968. For all subsequent changes to the F&SR Plan, Prior Costs are defined as those costs expended as of the last completed fiscal year.

FY 69, FY 70, FY 71 and Post-GO costs are defined as estimated expenditures planned for the applicable time frame.

GO - "GO" is defined as the date Presidential Authorization is given to proceed to test with highest priority in the now prohibited environments. A BOD or FOD of GO+30 indicates that the facility will be required 30 days after "GO".

I. D. No. - Identification number assigned by H&N for cost identification purposes.

Narrative - The narrative section below the title block on the facility or project description page provides the current Pre-GO and Post-GO status of engineering, procurement and construction and includes a description of the facility. Holmes & Narver, Inc., is responsible for all engineering, procurement and construction mentioned in all volumes unless another organization is indicated.

Participation - As used in the Index, "Participation" indicates the program(s) in which the facility will be used. The abbreviations used to identify the various programs are as follows:

AD	-	AEC Air Drop Program
*BH	-	Baker-Howland
**DW	-	DISTANT WATERS
EX	-	Exercise/Rehearsal
HA	-	High Altitude Program, including MIGHTY SKY Program
**MF	-	MIDGET FLY
**NOST	-	Nuclear Operational Systems Test
S	-	Support
T	-	TAMARIN

*Baker-Howland is a part of the Land Based Program. Only that portion of the Land Based Program which involves facilities located overseas, namely Baker-Howland, is included in this document.

**A part of this program is conducted in the CONUS. Facilities required for the CONUS portion of the program are not included in this document.

A Scientific Station is any land-based facility or installation, either existing or approved for engineering and/or construction, used in a test program, which is required to launch payloads, or to observe, measure, collect, record, or display test results.

Structure/Facility No. - As noted on the individual facility description pages, as well as in the indexes, a Structure/Facility No. is assigned to each facility for record and base identification purposes. See Section III, Volume III, for a complete list of all Structure/Facility Numbers.

Subtask No. - Includes the designation assigned to all DOD/DASA subtasks (formerly projects). The Subtask No's. and titles for the MIGHTY SKY, MIDGET FLY and DISTANT WATERS programs are listed in Section III, of both Volumes I and II.

Title - Proper and official name of the facility or project.

User - The abbreviated title of the primary agency which has a requirement, or the agency having managerial responsibility, for the facility. JTF, in the User block or column, indicates that the facility is available for use by all test participants.

Vol. - Volume containing information concerning the project or facility.

TABLE 2-1

SUMMARY OF LOCATIONS IDENTIFIED BY THE FIRST TWO DIGITS OF THE F&S NUMBER

01	-	Johnston Atoll - Scientific	21	-	Canton
02	-	Johnston Atoll - Support	22	-	French Frigate Shoals
03	-	Johnston Atoll - Support	23	-	Kwajalein
04	-	Johnston Atoll - Communications	24	-	Midway
05	-	Oahu - Scientific & Support	25	-	Palmyra
06	-	Oahu - Communications	26	-	Upolu
07	-	Hickam AFB - Scientific & Support	27	-	Viti Levu, Fiji
08	-	Not Used	28	-	Wake
09	-	NAS, Barbers Point - Scientific	29	-	Guam
10	-	NAS, Barbers Point - Support	30	-	Okinawa
11	-	Kauai - Scientific	31	-	Japan
12	-	Kauai - Support	32	-	Washington
13	-	Kauai - Communications	33	-	Fanning
14	-	Maui - Scientific	34	-	Penrhyn (Tongareva)
15	-	Maui - Support	*35	-	Tongatapu
16	-	Maui - Communications	*36	-	Roratonga
17	-	Hawaii - Scientific	37	-	Tutuila
18	-	Kirtland AFB - Scientific	38	-	Christmas
19	-	Kirtland AFB - Support	39	-	Baker
20	-	Off-Islands - Introduction	40	-	New Zealand

*No facilities are planned at this time.

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- - Tarawa
- - Malden
43 - Arorae
- - Aluetians
- - Majuro
46 - Ponape
- - Truk
- - Howland
49 - Not Used
- - Scientific Facilities On-Board Ship
51 - Philippines
52 - Vietnam
53 - Australia
54 - Not Used
55 thru 67 - Baker, Howland and Canton Test Series (Previously Published)
80 - Johnston Atoll Project Sharp Nail
81 - Johnston Atoll Program 437

TABLE 2-2

ABBREVIATIONS

AD	-	AEC Air Drop Program
ADC	-	Air Defense Command
ADR	-	Air Drop Rehearsal
AEC	-	Atomic Energy Commission
AFTAC	-	Air Force Technical Applications Center
AFWTR	-	Air Force Western Test Range
AMICOM	-	U. S. Army Missile Command
ARPA	-	Advanced Research Projects Agency
BOD	-	Beneficial Occupancy Date
BH	-	Baker-Howland Program
BTL	-	Bell Telephone Laboratories
CAMRON	-	Consoldiated Aircraft Maintenance Squadron
CGD14	-	Coast Guard District Fourteen
DASA	-	Defense Atomic Support Agency
DOD	-	Department of Defense
DPWO	-	District Public Works Office (Officer)
DRL	-	Defense Research Laboratory, Division of AC Electronics, General Motors Corporation
DT	-	Damon Tract
DTC	-	Deseret Test Center
DW	-	DISTANT WATERS Test Series
EG&G or TG 8.1.6	-	EG&G, Inc. (Formerly Edgerton, Germeshausen & Grier)
ESSA	-	Environmental Science Services Administration
EX	-	Exercise/Rehearsal
FOD	-	Full Occupancy Date
FY	-	Fiscal Year
GD	-	General Dynamics
GEEIA	-	Ground Electronics Engineering - Installation Agency
H&N	-	Holmes & Narver, Inc.
HA	-	High Altitude Program
HAFB	-	Hickam Air Force Base
HATV	-	High Altitude Test Vehicle
HQ DASA	-	Headquarters, Defense Atomic Support Agency
JHEG	-	Joint Hazards Evaluation Group
JTF	-	Joint Task Force
JTF-8	-	Joint Task Force EIGHT
JTG 8.2 or TG 8.2	-	Joint Task Group 8.2 (Army)
JTG 8.3 or TG 8.3	-	Joint Task Group 8.3 (Navy)
JTG 8.4 or TG 8.4	-	Joint Task Group 8.4 (Air Force)
JTG 8.5 or TG 8.5	-	Joint Task Group 8.5 (AEC Logistical Support Group)
JTG 8.6 or TG 8.6	-	Joint Task Group 8.6 (Johnston Atoll Base Command)
JTG 8.7 or TG 8.7	-	Joint Task Group 8.7 (Safety Advisory Group)

LASL or TG 8.1.1	-	Los Alamos Scientific Laboratory
LPG	-	Logistics Planning Group, H&N, Inc.
LRL or TG 8.1.2	-	Lawrence Radiation Laboratory
MILCON	-	Military Construction Funds (Department of Defense)
MF	-	MIDGET FLY Test Series
MS	-	MIGHTY SKY Test Series
NASBP	-	Naval Air Station Barbers Point
NFECC	-	Naval Facilities Engineering Command Contracts
NOST	-	Nuclear Operational Systems Test
OICC-MID PAC	-	Officer in Charge of Construction Naval Facilities Engineering Command, Mid Pacific (Formerly District Public Works Officer (DPWO-14thND)
PACGEEIA	-	Pacific Region - Ground Electronics Engineering-Installation Agency
PACAF	-	Pacific Air Force
PMR or TG 8.1.5	-	Pacific Missile Range
PRESS	-	Pacific Range Electromagnetic Signature Studies
PWC	-	Public Works Center
ROAMA	-	Rome Air Material Area, Griffiss AFB
RDT&E	-	Research, Development, Test and Evaluation (Dept. of Defense)
S	-	Support
SAG	-	Safety Advisory Group (AEC/NVOO)
SAMSO or TG 8.1.7	-	Space and Missile Systems Organization
SC or TG 8.1.4	-	Sandia Corporation
SMAMA	-	Sacramento Air Material Area
SRI	-	Stanford Research Institute
T	-	Tamarin Program
TC or TG 8.1.3	-	Test Command, Defense Atomic Support Agency
USAF	-	United States Air Force
USWB	-	U. S. Weather Bureau
UW	-	University of Washington
14th INDMAN	-	Industrial Manager, 14th Naval District
1957th Comm. GP DET 1)	-	1957th Communications Group, Detachment 1

SECTION III

DOD PROGRAM SUMMARY

GENERAL The Resource Management System Structure (RMSS), reference DASA Circular 70-4, dated 1 July 1968, requires a coding of each subtask for the purpose of programming, budgeting, reporting, accounting, and logistical control. The new Subtask identification is an 8-digit alpha numeric code. In these 8-digit codes, five (5) alpha letters will precede the three (e) numeric subtask numbers. In the event an alpha letter has not been assigned, the alpha "X" will be used until assignment of an alpha letter is made. This 8-digit identification is abbreviated to the Subproject category and Subtask digits throughout the Facilities and Support Requirements Plan. For example, the 8-digit AAXPX202, described below, will be abbreviated as Subtask A202. The "A" identifies the Subtask as belonging to the MIGHTY SKY Program, and the "202" identifies the title as "Neutron Spectrum as a Function of Time."

For information only, the meanings of various components of the 8-digit alpha numeric code and example (AAXPX202) are as follows:

ITEM	EXAMPLE	
SUBPROJECT CATEGORY	MIGHTY SKY	A
FUNCTIONAL CATEGORY	Mission Operations	A
SUBFUNCTIONAL CATEGORY	None	X
PROJECT	Radiation Physics	P
TASK	None	X
SUBTASK	Neutron Spectrum as a Function of Time	202
A A X P X 202		

Subproject Category - A one-position alpha/numeric code identifying R&D classified subproject data. This category identifies the test programs as "A" - MIGHTY SKY, "B" - MIDGET FLY or "C" - DISTANT WATERS.

Subtask - A three-position numeric code further identifying cost data to an additional level of information below a task category.

The current subtask code, the previous project number and the current title for the various subtasks in the MIGHTY SKY, MIDGET FLY and the DISTANT WATERS Programs are included on the following pages:

[redacted]

MIGHTY SKY PROGRAM SUMMARY (A)

PROJECT A - MIGHTY SKY

Subtask	Superseded Project Number	Title
A805	8.5	X-ray Effects

PROJECT E - MIGHTY SKY

Subtask	Superseded Project Number	Title
A614	6.14	Measurement of EM Pulse

PROJECT H - MIGHTY SKY

Subtask	Superseded Project Number	Title
A601	6.1	Radar Propagation Through Fire ball & Disturbed D-E Region
A602	6.2	Rocket Borne Gamma Ray Scanner Refraction
A603	6.3	D-Region Attenuation and Refraction
A604	6.4	E & F Region Physical Chemistry
A605	6.5	Ionospheric Soundings & Auroral Observations
A606	6.6	Debris Tracking by Resonant Scattering Equipment
A607	6.7	Debris Expansion Experiment
A608	6.8	Radio Frequency Radiometry
A609	6.9	Radar Observations

PROJECT H - MIGHTY SKY (continued)

Subtask	Superseded Project Number	Title
A610	6.10	Airborne Ionospheric Observatory
A611	6.11	HF Communications Experiment
A612	6.12	Satellite Packages
A613	6.13.1	Instrumented Ship
A615	6.15	Measurement of Gamma, Neutron and Visible Radiation from Fission
A616	6.16	Vertical Soundings of the Ionosphere
A617	6.17	Incoherent Backscattering
A618 (Not Active)	6.18	Radar Attenuation in the Vicinity of Low Altitude Nuclear Bursts
A619	6.19	Satellite Communications
A620	6.20	Measurement of Effects on VLF and LF Radio Wave Propagation
A625	6.25	Debris Sampling
A626	6.26	Gun Fired Probes
A628	6.28.1	Riometers
A629	6.29.1	Electromagnetic Detection System
A630	6.13.2	PMR Island Radars (formerly a part of 613)
A802	8.2	UV, Visible and IR Radiation Effects
A804	8.4	Fireball and Debris Cloud Motion Photography
A807	None	Ultraviolet Output Measurements

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PROJECT M - MIGHTY SKY

Subtask	Superseded Project Number	Title
A401	4.1	Flashblindness and Chorioretinal Burns from Nuclear Detonations

PROJECT N - MIGHTY SKY

Subtask	Superseded Project Number	Title
A101	1.1	Airborne Free Field Measurements
A103	1.3	Surface Pressure Measurements
A104	1.4	Anti-Ballistic Missile Loading & Response
A105	1.5	Shock Photography
A108	1.8	Blast Wind Measurements
A109	1.9	Smoke Rockets

PROJECT P - MIGHTY SKY

Subtask	Superseded Project Number	Title
A201	2.1	Integrated Radiation Measurements
A202	2.2	Neutron Spectrum as a Function of Time
A203	2.3	Neutron & Gamma Dose Rate Measurements

PROJECT Y - MIGHTY SKY

Subtask	Superseded Project Number	Title
A901	9.1	Atmospheric Parameter Profiles (Formerly 901a)
A902	9.2	Ship Modification
A905	9.5	Unguided Rocket Support
A906	9.6 1.6	Balloon Delivery System (Formerly 106)
A907	N/A	Readiness Studies
A909	9.9	Central Data Handling/Program Response Center
A910	9.10	Test Command Field Support (Formerly 910d)
A913	9.13	Waterborne Recovery Package System
A914	32	STRYPI Warhead Carrier Missile System (Formerly 32)
A915	9.1	Upper Atmospheric Winds (Formerly 901b)
A921	9.10	Documentary Photography (Formerly 910a)
A922	9.10	DASA Technical Film Processing Facility (Formerly 910b)
A931	9.3	Aircraft Modification (Formerly 903a)
A932	9.3	Aircraft Support for Scientific Subtask (Formerly 903b)
A941	9.4	SOSR Missile System
A942	9.4	NIKE-HERCULES Missile System
A943	9.4	Range Safety and Warhead Carrier Tracking

PROJECT Y - MIGHTY SKY (continued)

Subtask	Superseded Project Number	Title
A944	NONE	Shipboard Launch Capability
A945	NONE	THOR Delivery Vehicle
A946	NONE	Central Environmental Data Processing and Distribution
A961	9.6	VHF Telemetry and Tracking System (Formerly 906a and b)
A962	9.6	L-S Band Telemetry and Tracking System (Formerly 906c)
A963	9.6	Ship, Aircraft Locating Equipment (Formerly 906d)

MIDGET FLY PROGRAM SUMMARY (B)

PROJECT E - MIDGET FLY

Subtask	Superseded Project Number	Title
B601	6.1	Electric Field Measurements
B602	6.2	Magnetic Loop Measurements
B603	6.3	Inherent Magnetic Field Measurements
B606	6.6	Cable Loop Measurements
B607	6.7	Energy Coupling Experiments
B609	6.9	Correlation of Present & Previous Electric Field Measurements

PROJECT E - MIDGET FLY

Subtask	Superseded Project Number	Title
B610	6.10	EMP Theoretical Studies
B613	6.13	Hardened Instrument Canisters (WEBS)

PROJECT N - MIDGET FLY

Subtask	Superseded Project Number	Title
B101	1.1	Air Blast Measurements
B102	1.2	Shock Photography (Interfaces M/F Subtask SE 801)
B103	NONE	Underwater Pressure Measurements (Provided by DISTANT WATERS Subtask 501)

PROJECT P - MIDGET FLY

Subtask	Superseded Project Number	Title
B202	2.2	Neutron and Gamma Dose Rate
B203	2.3	Integrated Neutron & Gamma Measurements
B701	7.1	Radiological Effects

PROJECT W - MIDGET FLY

Subtask	Superseded Project Number	Title
B801	8.1	Output Characteristics (Provided by MIGHTY SKY Subtask HA 802 and HA 804)

PROJECT Y - MIDGET FLY

Subtask	Superseded Project Number	Title
B907	9.7	Readiness Studies (Formerly 907a)
B910	9.7	Field Support (Formerly 907c)
B916	9.1	Maintenance and Servicing of Instrumentation Stations (Formerly 901)
B917	9.5	Timing Signals (Formerly 905)
B918	9.6	Communications (Formerly 906)
B919	9.7	Surface Zero Barge and Mooring System (Phase IIC) (Formerly 907b)
B921	9.2 & 9.3	Documentary Photography (Formerly 902 and 903)
B979	NONE	Publication of Reports

DISTANT WATERS PROGRAM SUMMARY (C)

PROJECT N - DISTANT WATERS

Subtask	Superseded Project Number	Title
C501	5.1	Underwater Pressure Measurements
C502	5.2	Air Blast from Underwater Events
C507	5.7	Bulk Cavitation Investigation
C514	5.14	Hydrographic Study of Cratering
C516	5.16	Underwater Explosion Bubble Measurements

[redacted]

PROJECT P - DISTANT WATERS

Subtask	Superseded Project Number	Title
C701	7.1	Radiological Effects from Water Surface and Underwater Nuclear Explosions
C702	7.2	Residual Radiation/Decontamination Studies

PROJECT W - DISTANT WATERS

Subtask	Superseded Project Number	Title
C503	5.3	Surface Phenomena Measurements
C504	5.4	Measurements of the Characteristics of Water Waves
C515	5.15	Oceanographic Environmental & Diffusion Surveys

PROJECT Y - DISTANT WATERS

Subtask	Superseded Project Number	Title
C920	9.1	Ocean Platform Installation (Formerly 901)
C910	9.5	General Support (Formerly 905)

[redacted]

SECTION IV

FACILITIES

4.1 GENERAL

This volume contains a compilation of field construction projects and major modifications which have been completed, are underway, or are proposed for accomplishment at Kirtland AFB, within the Hawaiian Islands, and at other Pacific Island locations in support of Pacific Test Operations. Included is an index of scientific, support and communication facilities, plus individual narrative descriptions that provide detailed information pertinent to each project or facility.

4.2 TABULAR LISTING OF FACILITIES

The numerical index of active facility numbers, Table 5-1, is a listing by F&S Number according to intended use. The F&S Item Number of facilities which have been consolidated or are no longer required have been omitted from this listing and are on record with the Logistics Planning Group (LPG).

4.3 NARRATIVES AND DETAILS

The information concerning each project or facility is presented in F&S Number sequence. The facility and project descriptions in this volume are presented on various colored pages to emphasize their status as follows:

- White Pages - Projects for which all requirements scheduled to be accomplished are completed. If additional work to a completed project or a new project is required for a future fiscal year or after "GO", and if problems as to funding and/or scheduling are not anticipated, said project is so indicated on a white page.

  Yellow Pages - Projects for which a requirement has been indicated formally by the User agencies but which, for various reasons, funding, engineering, procurement and/or construction have not been authorized by either AEC or DOD. Projects which have been deferred, or for some other reason are being held in abeyance, are also shown on yellow pages. Applicable comments are included.

Green Pages - Projects for which engineering, procurement and/or construction have been authorized and are scheduled in the present fiscal year.

Pink Pages - Projects currently scheduled for a future fiscal year or after "GO" which cannot be completed as scheduled to meet the required occupancy date. Administrative determinations are required to resolve the problems associated with thise projects.

4.4 ISLAND SITE PLANS

Appendix A of this volume includes drawings which show the location and physical arrangement of the major facilities within the Hawaiian Islands, at other Pacific Island locations and at Kirtland AFB.

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			OAHU - SCIENTIFIC AND SUPPORT										
05001	2, 3, 7, 10, 22, 23, 25, 26, 33		Material Handling and Storage Space, Damon Tract	JTF								X	
05006		04631 04651 04652 43715 43717 90128 90301 90143 90304 90185	Support Office Space, Ohohia St.	AEC H&N	X		X	X	X	X		X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
05007		43718 04557 90106 90121 90224 90129 90080 90104 90134 90227 04543	Secure Trailer Compound and Trailers, Damon Tract	JTF	X		X	X	X	X		X	
05010			Island Wave Sensor, Type III (Tamarin), Oahu	DRL									X
05013		90117 90025	Security Fixes, Damon Tract	AEC	X			X					
05014	37	90053 90334 90329	Rad Safe Laboratory, Damon Tract	JTF								X	
05015		90051	Fire Protection Equipment, Damon Tract	AEC								X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
05016		90056	Interim Phase Rehabilitation, Damon Tract	AEC								X	
05017		90069 90182 90904	Damon Tract Study	AEC								X	
05019		90110	Replace Air Conditioning Units, Oahu	AEC								X	
05027		04122 04557	Tamarin Program Central Office, Damon Tract	DRL	X							X	
05028			Radiological Surveillance, PRIMARY, Oahu	JTG 8.7	X							X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			OAHU - COMMUNICATIONS										
06001		33211	Teletype Message Center, Honolulu	AEC								X	
06002		33325 04655 90081 90100 90140 90165 90082 90070	VHF/FM Radio Systems, Oahu	JTF								X	
06003			Communications Filter Center, Damon Tract	AEC								X	
06004		33411	Message Center, NAS Barbers Point	AEC								X	
06005		04502	HF SSB Facility, NAS Barbers Point	AEC								X	
06006		33412	Message Center, Damon Tract	AEC								X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
06007		04506	Communication Facility, Hickam AFB, Hangar 2 (Building 2060)	JTF 8								X	
06008		04505	Communication Facility, Hickam AFB, Building 3225	TG 8.4								X	
06010		04574	Hawaii Tie-Line System, Hickam AFB and NAS Barbers Point	JTF								X	
06011		90049	Communication Maintenance Shop, Building 3, Damon Tract	AEC								X	
06015		90083 90084 90085 90178	Recable Trailer Parks, Communications, Oahu	JTF								X	
06016		90087	Communication Trailer, Hickam AFB	AEC								X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			HICKAM AFB - SCIENTIFIC AND SUPPORT										
07002		23927 23860 90109 23926 04558 90118 90098 90208 90129 90206 90210 04548 90097 90102 04547 90205 90225 90122 90132 90096 90181 90137 90138	Trailer Park and Trailers	JTF	X		X	X	X	X	X	X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
07002A		90361	Trailer Park Modifications	JTF	X		X	X	X	X	X	X	
07004	T-3207 T-3208	90102 90097 90214 23811	Laboratory Space	LASL EG&G	X		X	X	X	X			
07005	T-3214 T-3215 T-3216 T-3217	90103 90113 90216 23811	Laboratory Space	EG&G	X		X	X	X	X		X	
07006		04524 23101 04549 04530 04531 04544	Diagnostic Aircraft (NC-135A) Parking Apron	JTF	X		X	X	X	X	X		
07008	T-928 T-929 T-937	04625	Daytime Sleeping Facilities	TG 8.4	X		X		X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
07010	T-3059	23811 90136	Warehouse and Outside Storage Space	JTF								X	
07015	T-3225	23811 04545 04554 04525 90099 90072 04529 95060 04539 04554	Office and Conference Space	TG 8.4	X		X	X	X	X	X	X	
07018	2060	23812 04577 95901	Office and Laboratory Space - Subtasks A614, A625, A628, A629, A804 and A909	TC	X		X	X	X	X	X		
07022	T-2045	23813 04523	Personal Equipment Facility	TG 8.4	X		X		X		X		

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
07023	T-3222	23811 04566	Laboratory Space	EG&G			X		X	X			
07024		13912	Monitoring for Flightline and Maintenance Crews	TG 8.4	X		X		X	X	X		
07027	3248	23811 90071	Laboratory and Office Space - Subtasks A610, A802, A803, A804, A921, A922, and A933	TC			X		X	X			
07028		04518	Soil Stabilization	TG 8.4	X		X		X		X		
07029		04519	JP-4 Settling Tank	TG 8.4	X		X		X		X		
07031		04520	Aircraft Wash Rack	TG 8.4	X		X		X		X		
07033		04521	Engine Trim and Check Pad	TG 8.4	X		X	X	X		X		
07034	T-2075	23811	Office Space	JTF 8								X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
07035			Aircraft Parking Space	TG 8.4	X		X	X	X		X		
07036	T-2040		Hangar Space	TG 8.4	X		X		X				
07038			Maintenance Control Space	TG 8.4	X			X	X		X		
07039	7	43150 04527	Rehabilitate Building 7 at Bishops Point	TG 8.4	X		X	X	X				
07040			Microbarograph Station - Subtask A103	TC					X				
07041			Log Periodic Ionospheric Antennas - Subtask A611	TC					X				
07043			Riometer Station - Subtask A628	TC					X				
07045		04575	Aircraft Parking Space	LASL	X		X		X	X			

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
07050		04546	Area Stabilization	JTF 8	X			X					
07058		04550 90117	Security Fixes	AEC	X			X					
07060		90172	Machine Shop	LRL	X			X					
07061		04632 90027 90133 90323	Simulator Station	SANDIA EG&G	X			X					
07062		90067	Culvert and Parking Area	AEC								X	
07063	3237	90075	Service Building	AEC H&N								X	
07068		90203	Radar/DME Facility - Mauna Kapu, Oahu	SANDIA	X			X					

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			NAS BARBERS POINT - SCIENTIFIC										
09001	1682	04532 90300 90125 90101 90073 51702 04560 14703 90217 90321	Assembly Building	JTF	X			X					
09002		14703 04528 04562	Loading and Maintenance Area Facilities	SANDIA TG 8.4	X			X					

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
09003		23925 14704 04538 04556 90107 04507 04537 90079 90114 90119 90135 90116	Secure Trailer Compound and Trailers	JTF	X			X					
09006	286		Payload Storage Building	SANDIA	X			X					
09009		13311	Additional Power Requirement	JTF	X			X					
09010	1711 1712	13360 90094 90086	Transshipment Magazines A & B	SANDIA	X								

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
09013	1732	04536	Weapons Handling Equipment (WHE) Building	TG 8.4	X			X					
09014	1730	04535 90093 90115	Mission Support Kit (MSK) Storage Building	TG 8.4	X								
09020	1735	04563 90092	Companion Test Vehicle (CTV) Building	SANDIA	X			X					
09023	1733	90089	Staging Equipment Storage (SES) Building	SANDIA	X			X					
			NAS BARBERS POINT - SUPPORT										
10005	45	43150	Rehabilitate EM Barracks	TG 8.4	X			X				X	
10007			Shop Space	TG 8.4	X			X				X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
10015		04553 90108	Area Security Modifications	JTF	X							X	
10016		04555	Additional JP-4 Refueling Facilities	JTF	X			X				X	
10018		90050 90111	Aircraft Security Screens and Rope Stanchions	TG 8.4	X			X				X	
10019	1734	90074	Service Building	AEC H&N								X	
10020		90088 90130 90325	Area Drainage and Paving Modifications	JTF								X	
10021		90091	Roads to CTV and WHE Buildings	TG 8.4 SANDIA								X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			KAUAI - SCIENTIFIC										
11003		13921	HRT Tracking Station	SANDIA					X				
11006	659	13921	Igniter Checkout Building	SANDIA					X				
11007	7 & 10	13921	Rocket Motor Storage Caves	SANDIA						X			
11008		04516 04517	Primary Photo and Observations Station Subtasks A802 and A804	TC					X				
11010		13921	Launchers	SANDIA					X				
11013	656 661	13921 90184	Rocket Assembly Buildings	SANDIA					X				
11015	675	13921 90322	Signal Cable Shelter	SANDIA					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
11018		04514 90342	AME Field	SANDIA					X				
11019		13921 80315 90345	Rawidar Complex	SANDIA					X				
11020	668	04567	Dynamic Balancing Machine Facility	SANDIA					X				
11021			Island Wave Sensor, Type III (Tamarin)	DRL									X
11022			Radiological Surveillance, PRIMARY	JTG 8.7	X				X				
11023		13921 90313 90340 90341 90063 90170	Secure Trailer Compound and Trailers	JTF	X				X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
11024	680 681 682	13921 90322 90343	Electrical Power Distribution System	SANDIA	X		X	X	X			X	
11025		90335	Rocket Motor Staging and Holding Area	SANDIA					X				
11026			Camera Station	LASL					X				
			KAUAI - SUPPORT										
12001	669	13921 90305 90186 90336	Warehouse	LASL LRL SANDIA					X			X	
12007	671	13921 90320 90344	Payload Preparation Building	SANDIA					X			X	
12008		13921	Roads	JTF								X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
12012		90338	Maintenance and Service Building	SANDIA					X			X	
12013			Warehouse	LASL					X			X	
			KAUAI - COMMUNICATIONS										
13002			VHF/FM Mobile Radio System	AEC								X	
13003		04561	Message Center	AEC								X	
13004		04511	Telephones	AEC								X	
13005		04512	Sandia Signal Cable	SANDIA				X	X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			MAUI - SCIENTIFIC										
14003	M-1010		Photo-Optical Station	LASL EG&G SANDIA					X				
14006		04804	Airborne Ionospheric Observatory Subtask A610	TC					X				
14008			Ionospheric Sounding Antenna Subtask A616	TC					X				
14012			Island Wave Sensor, Type III (Tamarin)	DRL									X
14013			Radiological Surveillance, PRIMARY	JTG 8.7	X				X				
			MAUI - COMMUNICATIONS										
16002			VHF/FM Mobile Radio System	AEC								X	
16003			Telephones	AEC								X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			HAWAII - SCIENTIFIC AND SUPPORT										
17002		04504 90026 90105 90068 90204	Simulator Station	SANDIA EG&G	X			X					
17004		04633 04504 90207 90231	Power	JTF	X			X					
17005		04633	Roads	JTF	X			X					
17007			Communications	AEC								X	
17008			Radiological Surveillance, PRIMARY	JTF 8.7	X				X				
17009			Communications Experiment Subtask A620	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
17010			Island Wave Sensor, Type III (Tamarin)	DRL									X
17011		90064	Camera Station	SANDIA					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			KIRTLAND AFB - SCIENTIFIC										
18001		25902 (3)58601	Trailer Park and Trailers	JTF	X			X					
18008		(3) 58601	Simulator Units	EG&G SANDIA	X			X					
18011		OCTD 01777	LAPQ-1 Radar Workshop Building	LRL	X			X					
18012		OCTD 4060	Shop and Storage Bldg.	GD	X			X					

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			KIRTLAND AFB - SUPPORT										
19001		(3)58601	Aircraft Parking Area	JTF	X			X				X	
19004		(3)58601	Maintenance and Warehouse Building	JTF	X			X				X	
19007		OCTD 01750	Storage Building	EG&G	X			X				X	
19008		(3)58601	Electrical Power System	JTF	X			X				X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			CANTON - FACILITIES										
21001		04808	Debris Tracking by Resonant Scattering Equipment - Subtask A606	TC					X				
21002		04803	Radar Observations - Subtask A609	TC					X				
21003			HF Communications Simulation Experiment - Subtask A611	TC					X				
21004		04807	Vertical Soundings of the Ionosphere - Subtask A616	TC					X				
21007		04809	Riometer Station - Subtask A628	TC					X				
21010			Camp	JTF-8	X				X			X	
21012			Atoll Wave Sensor, Type II (Tamarin)	DRL	X				X				X
21013			Radiological Surveillance Facility, SECONDARY	JTG 8.7	X				X		X		

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
21014			Communication Center - (U. S. Army Strategic Communication Command)	JTF-8					X				
21015			Weather Station, USAF Air Weather Service (AWS)	JTF-8					X				
			FRENCH FRIGATE SHOALS - FACILITIES										
22001		04808	Debris Tracking by Resonant Scattering Equipment - Subtask A606	TC					X				
22002		04803	Radar Observations - Subtask A609	TC					X				
22003		04807	Vertical Soundings of the Ionosphere - Subtask A616	TC					X				
22004		04809	Riometer Station - Subtask A628	TC					X				
22005			EM Detection Systems - Subtask A629	TC					X				
22007		04801	Camp	JTF-8	X				X		X		

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
22008			Fireball and Debris Cloud Motion Photography - Subtask A804	TC EG&G					X				
22009		04802	Weather Station, USAF Air Weather Service (AWS)	JTF-8	X				X		X		
22010		04802	Communication Center - (U. S. Army Strategic Communication Command)	JTF-8					X				
22011			Radiological Surveillance Facility, SECONDARY	JTG 8.7	X				X		X		
			KWAJALEIN - FACILITIES										
23001			Measurement of Effects on VLF and LF Radio Wave Propagation - Subtask A620	TC					X				
23005			Satellite Communications - Subtask A619	TC					X				
23006			Weather Station, U. S. Weather Bureau (USWB)	JTF	X				X	X	X		

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
23007			Radiological Surveillance Facility, PRIMARY	JTG 8.7	X		X		X		X		
23008			Communication Center	JTF	X				X	X	X		
			MIDWAY - FACILITIES										
24001		04805	Ionospheric Soundings and Auroral Observations - Subtask A605	TC					X				
24002		04808	Debris Tracking by Resonant Scattering Equipment - Subtask A606	TC					X				
24003		04804	Airborne Ionospheric Observatory - Subtask A610	TC					X				
24004		04807	Vertical Soundings of the Ionosphere - Subtask A616	TC					X				
24007			HF Communications Simulation Experiment - Subtask A611	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
24008			Riometer Station - Subtask A628	TC					X				
24010			Aircraft Maintenance Facility	JTF-8 JTG 8.4							X		
24011			Sampler Storage, Rad Safe	JTF-8 JTG 8.4							X		
24012			Equipment Decontamination Pad	JTF-8 JTG 8.4							X		
24013			Aircraft Decontamination Pad	JTF-8 JTG 8.4							X		
24014			Personnel Decontamination	JTF-8 JTG 8.4							X		
24015			Antenna Pads	JTF-8 JTG 8.4							X		
24016			Command Post and Headquarters, Joint Task Group 8.4	JTF-8 JTG 8.4							X		

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
24019			Weather Station, U. S. Navy Weather Service (NWS)	JTF-8	X		X		X	X	X		
24020			Radiological Surveillance Facility, SECONDARY	JTG 8.7	X		X		X	X	X		
24021			Communication Center	JTF-8	X		X		X	X	X		
			PALMYRA - FACILITIES										
25001		04805	Ionospheric Soundings and Auroral Observations - Subtask A605	TC					X				
25002		04804	Airborne Ionospheric Observatory - Subtask A610	TC					X				
25003			HF Communications Simulation Experiment - Subtask A611	TC					X				
25005		04809	Riometer Station - Subtask A628	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
25007		04801	Camp	JTF-8	X				X	X	X		
25008			EM Detection Systems - Subtask A629	TC					X				
25009			Atoll Wave Sensor, Type II (Tamarin)	DRL	X				X				X
25010		04802	Weather Station, USAF Air Weather Service (AWS)	JTF-8	X		X		X	X	X		
25011		04802	Communication Center (U. S. Army Strategic Communication Command)	JTF-8					X				
25012		04802	Radiological Surveillance Facility, SECONDARY	JTG 8.7	X				X	X	X		
			UPOLU - FACILITIES										
26001		05001	Measurement of Gamma, Neutron, and Visible Radiation from Fission Debris - Subtask A615	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
26002		04807	Vertical Soundings of the Ionosphere - Subtask A616	TC					X				
26003		04809	Riometer Station - Subtask A628	TC					X				
26004			HF Communications Simulation Experiment - Subtask A611	TC					X				
26005		04802	Communication Center (U. S. Army Strategic Communication Command)	JTF-8					X				
26006		04801	Camp	JTF-8	X		X		X	X			
			VITI LEVU - FACILITIES										
27001		04804	Airborne Ionospheric Observatory - Subtask A610	TC					X				
27002			HF Communications Simulation Experiment - Subtask A611	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
27003		05001	Measurement of Gamma, Neutron, and Visible Radiation from Fission Debris - Subtask A615	TC					X				
27004		04809	Riometer Station - Subtask A628	TC					X				
27005		04801	Camp	JTF-8	X				X				
27006			Radiological Surveillance Facility, BACK-GROUND	JTG 8.7					X				
27007			Communication Center (U. S. Army Strategic Communication Command)	JTF-8					X				
			WAKE - FACILITIES										
28001			HF Communication Simulation Experiment - Subtask A611	TC					X				
28002		04807	Vertical Soundings of the Ionosphere - Subtask A616	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
28005		04809	Riometer Station - Subtask A628	TC					X				
28006			Debris Sampling - Subtask A625	TC					X				
28007			Communication Center	JTF-8					X				
28009			Camp	JTF-8					X				
28011			Atoll Wave Sensor, Type II (Tamarin)	DRL	X				X				X
28012			Radiological Surveillance Facility, SECONDARY	JTG 8.7					X				
28013			Weather Station, U. S. Weather Bureau (USWB)	JTF-8					X			X	
			GUAM - FACILITIES										
29001			HF Communications Simulation Experiment - Subtask A611	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
29002			Measurement of Effects on VLF and LF Radio Wave Propagation - Subtask A620	TC					X				
29005			Weather Station, U. S. Weather Bureau (USWB)	JTF-8					X		X		
29006			Radiological Surveillance Facility, BACK-GROUND	JTG 8.7					X				
29007			Communication Center	JTF-8					X				
			OKINAWA - FACILITIES										
30001			HF Communications Simulation Experiment - Subtask A611	TC					X				
30005			Communication Center	JTF-8					X				
30006			Satellite Communications - Subtask A619	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			JAPAN - FACILITIES										
31005			Weather Station, U. S. Air Force Air Weather Service (AWS)	JTF-8 (JTG 8.4)					X		X		
31007			Communication Center	JTF-8					X				
			WASHINGTON - FACILITIES										
32001		04810	Radiological Surveillance Facility, PRIMARY	JTG 8.7	X				X				
			FANNING - FACILITIES										
33001		04810	Radiological Surveillance Facility, PRIMARY	JTG 8.7	X				X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			PENRHYN (TONGAREVA) - FACILITIES										
34001		04810	Radiological Surveillance Facility, SECONDARY	JTG 8.7	X				X				
			TUTUILA - FACILITIES										
37001			Weather Station, U. S. Weather Bureau (USWB)	JTF-8	X		X	X	X	X	X	X	
37002			Radiological Surveillance Facility, BACKGROUND	JTG 8.7	X				X		X		
			CHRISTMAS - FACILITIES										
38001		04810	Radiological Surveillance Facility, PRIMARY	JTG 8.7	X	X			X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
38002			Weather Station, U. S. Air Force Air Weather Service (AWS)	JTF-8		X							
38003			Communication Center (U. S. Army Strategic Communications Command)	JTF-8		X							
			BAKER - FACILITIES										
39001			Weather Station, U. S. Air Force Air Weather Service (AWS)	JTF-8		X							
39004			Communications Center (U. S. Army Strategic Communications Command)	JTF-8		X							
			NEW ZEALAND - FACILITIES										
40001			HF Communications Simulation Experiment - Subtask A611	TC					X				

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			TARAWA - FACILITIES										
41001			Radiological Surveillance Facility, PRIMARY	JTG 8.7	X	X			X				
41002			Weather Station, U. S. Air Force Air Weather Service (AWS)	JTF-8		X							
41003			Communications Center (U. S. Army Strategic Communications Command)	JTF-8		X							
			MALDEN - FACILITIES										
42001			Weather Station, U. S. Air Force Air Weather Service (AWS)	JTF-8		X							
42002			Communications Center (U. S. Army Strategic Communications Command)	JTF-8		X							

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			ARORAE - FACILITIES										
43001			Weather Station, U. S. Air Force Air Weather Service	JTF-8		X							
43002			Communications Center (U. S. Army Strategic Communications Command)	JTF-8		X							
43003			Radiological Surveillance Facility, PRIMARY (Alternate Site)	JTG 8.7	X	X			X				
			ALEUTIAN ISLAND - FACILITIES										
44001			Weather Station, U. S. Weather Bureau (USWB)	JTF-8							X		
44002			Weather Station, U. S. Navy Weather Station (NWS)	JTF-8							X		

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
			MAJURO, MARSHALL ISLANDS FACILITIES										
45001			Weather Station, U. S. Weather Bureau	JTF-8	X		X	X	X	X	X	X	
			PONAPE ISLAND, CAROLINE ISLANDS - FACILITIES										
46001			Weather Station, U. S. Weather Bureau	JTF-8	X		X	X	X	X	X	X	
			TRUK, CAROLINE ISLANDS - FACILITIES										
47001			Weather Station, U. S. Weather Bureau	JTF-8	X		X	X	X	X	X	X	

TABLE 5-1. NUMERICAL INDEX OF ACTIVE FACILITY NUMBERS

F & S NO.	STRUC/ FAC. NO.	I.D. NO.	TITLE	USER	PARTICIPATION								
					AD	BH	DW	EX	HA	MF	NOST	S	T
48001			HOWLAND - FACILITIES Communications Center (U. S. Army Strategic Communications Command)	JTF-8		X							
51001			CLARK FIELD, PHILIPPINES Satellite Communications - Subtask A619	TC					X				
52001			SAIGON, SOUTH VIETNAM Satellite Communications - Subtask A619	TC					X				
53001			NORTH WEST CAPE, AUSTRALIA Satellite Communications - Subtask A619	TC					X				

F & S NO. 05001	TITLE Material Handling and Storage Space					
USER JTF	STRUCTURE/FACILITY NO. See Text		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	No Costs - Existing Structures					

COMPLETED

DESCRIPTION Existing Buildings 2, 3, 7, 10, 22, 23, 25, 26, and 33 will provide storage space for the users listed below.

USER	APPROXIMATE SPACE
*AEC/H&N	95,300 Sq. Ft.
JTF-8	300 Sq. Ft.
Sandia) DASA) Tamarin)	19,200 Sq. Ft.
Sandia	10,100 Sq. Ft.
AFTAC	300 Sq. Ft.
USPHS	300 Sq. Ft.
Unassigned	18,300 Sq. Ft.

An additional 200 sq. ft. of covered space will be required by Tamarin at "GO" for use as a work area. This area should be located adjacent to the Tamarin storage space.

DRAWINGS: None Required.

*Includes storage for five (5) AEC (Tamarin) camp trailers.

F & S NO.	TITLE					
05006	Support Office Space					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC/H&N	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	22.4		114.5	136.9	17.0
	TOTAL	22.4		114.5	136.9	17.0

COMPLETED

DESCRIPTION Twenty-five thousand square feet of office space at 531 Ohohia Street has been leased. The office space was modified to include the installation of partitions, telephone exchange console and switching, air conditioning equipment, acoustic treatment, a coffee mess, painting, and security alarm system. Additional office space is provided at 544 Ohohia Street (completed in 1965).

DRAWINGS: JS 95-010-A1, A3, A35, A40, A42, A44 and A45
JS 95-010-A/E7 and A/E9
JS 95-010-A/W1
JS 95-010-E23

F & S NO.	TITLE					
05007	Secure Trailer Compound and Trailers					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	21.7	28.0	321.4	371.1	38.2
	FY-71	10.7	48.0	47.7	106.4	
	TOTAL	32.4	76.0	369.1	477.5	38.2

IN ORDER TO MEET THE REQUIRED FULL OCCUPANCY DATE OF GO + 30, ENGINEERING AND PROCUREMENT MUST BE ACCOMPLISHED PRE-GO.

PRIOR YEARS

ENGINEERING Completed.

Drawings:

JS 95D-050-W2
JS 95D-058-A1 thru A3
JS 95D-058-A5 thru A17
JS 95D-058-A19
JS 95D-058-C3 thru C7
JS 95D-058-M1
JS 95D-058-M3
JS 95D-058-E1
JS 95-058.2-A2
JS 95-058-A4 thru A13
JS 95-058-A26 and A27
JS 95-058-A31
JS 95-058-A37
JS 95-058.1-A/E2
JS 95-058-C3
JS 95-058-M2
JS 95-058-E14
JS 95-058-E3 and E4
JS 95-058-W3 and W4
JS 95-058-X1
JS 95-077-W7 thru W9
F 95D-058-A10
F 95D-002-C1 thru C3
F 95D-002-C5
F 95D-080-E1 and E2
95-058-A11
95-077-W6 and W7

PROCUREMENT Completed.

CONSTRUCTION The Secure Trailer Compound is a partially paved 1.7 acre area, enclosed by a grounded 8-ft. high chain link security fence. The fence is topped with barbed wire outriggers. Parking space for thirty (30) trailers is provided at the trailer dock within the compound (completed in 1965).

A fresh waterline, sanitary sewer, telephone lines, and floodlights are provided. One personnel gate with a guardhouse situated nearby, and two (2) 20-ft. wide vehicle gates serve as access to the compound. Ten-foot wide elevated wooden

walkways connect the trailer berths. The walkways are roofed with aluminum sheeting and are lighted.

Incoming overhead 12 kw power is reduced in voltage by three (3) 167-1/2 kva pole mounted transformers prior to being fed to distribution panels at the north end of the trailer dock. From the distribution panels, 120/208 volt, 60 cycle, 3 phase power is routed to outlets along the trailer dock.

Trailers now in place are as follows (for trailer location see Appendix A):

USER & TRAILER #	USE/NAME	PROP. OR LICENSE #	FURN'D BY AEC	FURN'D BY USER	COMMENTS
LASL #1	Office	11031	X		
LASL #2	Office	11030	X		
LASL #3	Office	11032	X		
LASL #4	Office	11033	X		
LASL #5	Office	11034	X		
LRL #1	Office	11028	X		
LRL #2	Office	11029	X		
Sandia #1 & 2	Office	11026,11027	X		Double trailer
Sandia #3 & 4	Office	11024,11025	X		Double trailer
JTF	Communi-cations	2895	X		
JTF	Latrine	11035	X		
DRL #1	Office	11037	X		
DRL #2	Office	11038	X		
AEC/H&N	Office	11040	X		
TG 8.7	Office	11039	X		
JTF/HEG	Office	11036	X		

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Eleven (11) AEC furnished trailers will be procured, positioned, and connected with utilities:

USER & TRAILER NUMBER	USE/NAME	FOD
LASL #6	Office	GO + 30
LASL #7	Office	GO + 30
LASL #8	Office	GO + 30
LASL #9	Office	GO + 30
LASL #10	Office	GO + 30
JTF/HEG	Office	GO + 60
UNIV of WASH.	Office	GO + 30
JTF	Filter Center	GO + 30
EG&G	Office	GO + 60
EG&G	Office	GO + 60
EG&G	Office	GO + 60

F & S NO. 05010	TITLE Island Wave Sensor, Type III (Tamarin)		
USER TG 8.7	STRUCTURE/FACILITY NO. None	SCIENTIFIC STATION NO. 95-13-1 thru 95-13-13	BOD / FOD *

FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	Included in F&S No. 05027.				
	POST-GO					
	Estimate	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING None required.

PROCUREMENT Completed. Items in storage at Damon Tract or at Defense Research Laboratory (DRL), Santa Barbara, California.

POST-GO

CONSTRUCTION Nine AEC furnished Type III wave sensor equipped installations are to be located around the perimeter of the island of Oahu. The primary objective is to measure and record the amplitude and time of arrival of long period waves over a predetermined period. The equipment will be emplaced by DRL at various predetermined bay and harbor locations and will be housed in existing shelters or small AEC furnished utility sheds.

The installations will contain a differential sensor, data logging system, and an armored cable connecting the emplanted wave sensing transducer with the completely self-contained data logging system. The transducer will be installed by DRL scuba divers in approximately 30 to 50-ft. of water and located in a position to eliminate as much shore-induced phenomena as possible. H&N will furnish voice communications between Oahu Type III sites and the Damon Tract trailer offices.

DRL personnel will assemble at Damon Tract to prepare equipment prior to deployment. A DRL Type III installation team of 9 persons, including scuba divers and technical personnel, will emplace and roll up the equipment; 2 men will operate and maintain the equipment for the duration of the program. DRL personnel will obtain subsistence through the local economy.

*FOD SCHEDULE FOR TYPE III OAHU SITES

FOD	SITE NO.	FOD	SITE NO.
GO+45	02	GO+55	08
GO+47	07	GO+57	03
GO+49	01	GO+59	05
GO+51	04	GO+62	09
GO+53	06		

For a summation of Tamarin installations, see F&S No. 05027.

OAHU, DAMON TRACT SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
05013	Security Fixes					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Costs*	0.5		5.2	5.7	
		0.5		5.2	5.7	

COMPLETED

DESCRIPTION The guardhouse at the secure trailer compound was relocated to provide the guard with a clear view of the entry/exit gate while performing duties within the guardhouse. Interior communication lines were also relocated. A chain-link fence (7-ft. high and approximately 8-ft. long) was installed from the personnel gate to a point beyond the guardhouse door inside the secure area (completed in 1966).

DRAWING: JS 95D-058-A7

*Includes costs for F&S Nos. 07058 and 10015.

F & S NO.	TITLE				
05014	Rad Safe Laboratory				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD
JTF-8	31	None			FOD 9-1-69
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO				
	Prior Cost 10.9		63.8	74.7	
	FY 69 3.5		18.4	21.9	
	TOTAL 14.4		82.2	96.6	

PRIOR YEARS

ENGINEERING Completed.

Drawings: JS 95-37-A1 and A2, JS 95-37-S1 thru S4, JS 95-37-E1 thru E4, JS 95-37-C1, JS 95-37-M1 thru M8, JS 95-37-T1, F 95D-002-C

PROCUREMENT Completed.

CONSTRUCTION The rad safe laboratory, located in the southwest corner of Damon Tract, is a 32 x 50-ft. single story concrete block structure with a concrete floor slab. Roofing is built-up and insulated. The masonry walls are finished with gypsum board. The floor surface throughout is finished concrete. Height of the suspended acoustical ceiling is 8-ft. Lighting fixtures are surface mounted and fluorescent. This facility will be used for the calibration and repair of badges and instruments and for training rad safe personnel.

The building contains seven rooms: rad safe supply (450 SF), entry room (90 SF), calibration range room (285 SF), readout room (180 SF), darkroom (60 SF), toilet room (90 SF), and a radiac repair room (285 SF).

The darkroom has a stainless steel sink. The rad safe supply room has an 11-ft. long counter.

The entire building is air conditioned and dehumidified by an exterior unit. Power supplied to the building is 120/208 volt, 60 cycle, 3 phase. A fresh waterline and a sewer line service the building. Fire alarm and telephone service is provided. (Completed in 1966)

A partially completed gamma calibration well is located in the calibration range room. [illegible] square reinforced concrete collar encircles a 20-in. diameter steel pipe which serves as the outer casing of the well. The collar extends to 1-ft. above finished floor grade; when completed, it will be 3-ft. above finished floor grade. The inner casing is a 10-in. diameter steel pipe which extends [illegible] below grade. The space between the inner and outer casings is filled with [illegible]

FY 1969

ENGINEERING Completed.

PROCUREMENT The lead shot well lining, instrument, electrical controls, chill box, and shelving will be procured.

CONSTRUCTION Completion of this facility prior to 9-1-69 entails the installation of lead shielding in the calibration well; completion of the concrete collar; and installation of the calibration instrument mechanism and electrical controls. Also, shelving and storage bins will be installed and a chill box for the storage of crated film badges will be placed in the rad safe supply room.

[redacted]

F & S NO.	TITLE					
05015	Fire Protection Equipment					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	0.8		36.3	37.1	
	TOTAL	0.8		36.3	37.1	

COMPLETED

DESCRIPTION The fire alarm system at Damon Tract (completed in 1966) includes an annunciator, alarm initiator device, manual stations, alarm bells, and necessary circuitry to service the following zones:

Zone 1	Building 1 and underground gasoline storage
Zone 2	Buildings 2, 3, and 10
Zone 3	Buildings 4 and 5
Zone 4	Buildings 22, 23, and open storage areas
Zone 5	Buildings 25, 26, and 37
Zone 7	Building 7
Zone 8	Buildings 20, 21, and 33

Control panel space has been allocated for future construction. The fire alarm system is connected to the Pearl Harbor Navy Yard fire protection system.

DRAWINGS: JS 95-002-W1 and W2 JS 95-057-W1 thru W11

F & S NO. 05016	TITLE Interim Phase Rehabilitation					
USER AEC	STRUCTURE/FACILITY NO. See Text		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	1.7		15.7	17.4	
	TOTAL	1.7		15.7	17.4	

COMPLETED

DESCRIPTION Buildings 1, 2, 3, 4, 5, 7, 10, 20, 22, 25, and 33 were extensively rehabilitated following termite inspection and treatment (completed in 1966).

All broken or rotted structural members, siding, roofs, doors, and windows were repaired. The interiors of AEC owned structures were painted; the exteriors of all structures were painted.

DRAWINGS:

JS 95-1D-A1	JS 95-5D-A1	JS 95-20D-A1
JS 95-2D-A1	JS 95-7D-A1	JS 95-22D-A1
JS 95-3D-A1	JS 95-10D-A1	JS 95-25D-A1
JS 95-4D-A1		JS 95-33D-A1

F & S NO.	TITLE					
05017	Damon Tract Study					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	11.3			11.3	
	FY 69	1.0			1.0	
	TOTAL	12.3			12.3	

PRIOR YEARS

ENGINEERING STUDY A study is in progress to develop a plan for the use of a Damon Tract type complex at some location not yet designated. Decisions have not been reached by the State of Hawaii, Department of Transportation regarding its proposed action to utilize the Damon Tract Area as part of the Honolulu International Airport Complex. F&S Item numbers will be assigned to each facility or project as planning is authorized.

FY 1969

ENGINEERING STUDY The subject study has been authorized for continuation in FY 69. This study is to include an optimum AEC/HAO facility and alternate sites proposed by the State of Hawaii, Department of Transporation.

F & S NO. 05019	TITLE Replace Air Conditioning Units					
USER AEC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	2.3		63.1	65.4	
	TOTAL	2.3		63.1	65.4	

COMPLETED

DESCRIPTION Existing air conditioning units (43) were replaced in 1966 as follows:

Damon Tract	-	6 Units
Hickam AFB	-	28 Units
Barbers Point NAS	-	9 Units

Air conditioning ductwork, controls, and trailer roofs were modified and repaired to accept the new air conditioning units.

DRAWINGS:

JS 95-058-M1
JS 95-058-T1
JS 95B-058-M1 and M2
JS 95D-058-M1
JS 95H-058-M1 thru M3
F 95B-058-A2
F 95D-058-A10
F 95H-058-A12

F & S NO.	TITLE					
05027	Tamarin Program Central Office					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+7
DRL	None		None			FOD GO+14
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	1.4	0.6	*2.5	4.5	
	Post-GO					
	Estimate	TO BE DETERMINED				
	TOTAL	1.4	0.6	*2.5	4.5	

PRIOR YEARS

ENGINEERING Completed.

Drawings: F 95D-058-A10 95-064-35.7

PROCUREMENT Spare parts and ancillary equipment in storage at Damon Tract. Five (5) AEC furnished 7 x 17-ft. Model 16 Northwest camper trailers were shipped from California to Hawaii. These 5 trailers are stored at Damon Tract and are required Post-GO for Type II installations, one each at Canton, Palmyra, Wake and two (2) at Johnston Atoll. Two (2) additional AEC furnished 10 x 52-ft. office and laboratory trailers are in position in the Damon Tract trailer park and are operational. (See F&S No. 05007.)

POST-GO

CONSTRUCTION The Damon Tract facility will be used as the central office, repair parts depot, and training area for all Tamarin programs. Maintenance and machine shop, as well as photographic and duplicating facilities, will be provided to DRL personnel. Communication requirements in addition to local telephone service are voice communications from Damon Tract Trailer Park to the Navy Vessel (ATF) and to all Type II and Type III scientific sites.

For information on specific sites, refer to the following (Tamarin) F&S Numbers:

F&S No.	Location	Type	F&S No.	Location	Type
05010	Oahu	III	01114	JA	I
11021	Kauai	III	01115	JA	II
14012	Maui	III	21012	Canton	II
17010	Hawaii	III	25009	Palmyra	II
			28011	Wake	II

*Shipping Costs

The 14 DRL personnel assigned to the Damon Tract activity will live off the local economy. One secretary-typist will be required at GO+7 and one clerk-typist by GO+22.

[redacted]

F & S NO. 05028	TITLE Radiological Surveillance, PRIMARY					
USER JTG 8.7	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction will be required.

The facility is designated a PRIMARY radiological surveillance station because of the civilian population being in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. Hawaii State Health Department personnel will be assigned to this Rad Safe facility.

[redacted]

F & S NO.	TITLE					
06001	Teletype Message Center - Honolulu					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	533 Ohohia Street		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	0.9	2.3	34.2	37.4	
	TOTAL	0.9	2.3	34.2	37.4	

COMPLETED

DESCRIPTION The AEC Message Center (completed in 1964) in Honolulu is contained in a 27 x 30 x 8-ft. high shielded enclosure. The center is equipped to handle messages between the scientific personnel in the test areas and the continental United States. The center includes equipment, circuits and relay facilities to serve both the forward and Hawaiian areas.

DRAWINGS: 95-030-M1, 95-030-E1, 95-030-W1 thru W4, 95-030-W7, JS 95-030-W1 and W2, F 95-030-W1

F & S NO.	TITLE				
06002	VHF/FM Radio Systems				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF	None		None		FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	42.1	138.4	206.6	387.1	
	FY-69	14.0	23.0		37.0	
	SUBTOTAL	56.1	161.4	206.6	*424.1	
	POST-GO	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING Completed.

Drawings:
95-077-W1 thru W8
JS 95-077-S1
JS 95-077-W4 thru W9
JS 95D-050-W2
JS 95D-077-W1
JS 95H-050-W2
JS 110-077-E1
JS 110-077-W1 thru W26
JS 110-077-W29 thru W32
JS 110-077-W41

PROCUREMENT Completed.

CONSTRUCTION A VHF/FM voice radio system is provided in the Hawaiian Area for test operations, rehearsals, and for support and maintenance functions during standby periods. The system was installed in the time period between 1964 and 1968 and includes Hickam AFB; NAS Barbers Point; Damon Tract; AEC-TRF, Kauai; Mt. Haleakala, Maui, and Mauna Loa and Mauna Kea, Hawaii. The system is comprised of repeaters, fixed and remote stations, and portable and mobile stations. Individual nets are provided each participating organization as well as a common net for all participants.

FY 1969

ENGINEERING Design is proceeding to make a VHF mobile radio interface on the Launch Director Console at the AEC-TRF. A study is being performed to determine the scope of communications expansion required to support future programs in the Hawaiian Area.

PROCUREMENT Procurement of radios to be used in the Hawaiian Area VHF mobile radio system is being accomplished.

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*Includes costs for F&S Nos. 13002, 16002 and 17007.

POST-GO

PROCUREMENT Additional VHF/FM mobile radios will be procured for the Hawaiian Area as required.

F & S NO. 06003	TITLE Communications Filter Center - Damon Tract					
USER AEC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+150 FOD GO+180
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	POST-GO Est. 3/65			15.0	15.0	
	TOTAL			15.0	15.0	

PROPOSED

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION A filter center will be provided in a 10 x 50-ft. trailer and will include telephone, teletype, radio countdown and long range voice radio facilities for communications between Johnston Atoll and the Hawaiian Area. The location and equipment requirements have not yet been determined.

F & S NO.	TITLE					
06004	Message Center - NAS Barbers Point					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	Trailer #2882		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost		40.1		40.1	0.3
	TOTAL		40.1		40.1	0.3

COMPLETED

DESCRIPTION An 8 x 35-ft., air conditioned, RF shielded trailer is provided (completed in 1964) and is utilized as a message center. This trailer is fitted with an escape hatch and an intrusion alarm system. Communication equipment is installed for operational periods only. The trailer is normally stored without communication equipment.

DRAWINGS: 95-SK-8, 9 and 10

OAHU COMMUNICATIONS

F & S NO.	TITLE					
06005	HF SSB Facility at NAS Barbers Point					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC Financial Plan	PRE-GO Prior Cost			5.1	5.1	
	TOTAL			5.1	5.1	

COMPLETED

DESCRIPTION This facility consists of a transceiver trailer, power units, antennas, cables and Building 287. It is located at NAS Barbers Point, east and across the runway from the Secure Trailer Park area. DPWO provided trench work, concrete pedestals, guy-rods, anchors, and a nonmetallic fence. Site clearing was also involved. The three MCC trailers and communications trailer in the Secure Trailer Compound are used in conjunction with this facility to form the Mobile Mission Control Center. Public works prepared the site to receive the antenna installation. (Completed in 1964.)

F & S NO. 06006	TITLE Message Center - Damon Tract				
USER AEC	STRUCTURE/FACILITY NO. Trailer #2895	SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY AEC	($000)	ENGR	PROC	CONST	TOTAL	FURN
	PRE-GO Prior Cost		36.2		36.2	0.2
	TOTAL		36.2		36.2	0.2

COMPLETED

DESCRIPTION An 8 x 35-ft., air conditioned, RF shielded trailer is provided (completed in 1964) and is utilized as a message center. This trailer was fitted with an escape hatch and an intrusion alarm system. Communication equipment is installed for operational periods only. The trailer is normally stored during stand-down periods without communication equipment.

DRAWINGS: 95-SK-8, 9 and 10

OAHU, HICKAM AFB — COMMUNICATIONS

F & S NO.	TITLE					
06007	Communication Facility					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	T-2060 (Hangar 2)		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8/ RDT&E CRO 3-65	PRE-GO					
	Prior Cost	0.9		32.3	33.2	
	POST-GO					
	Estimate	TO BE DETERMINED				
	TOTAL	0.9		32.3	33.2	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 95-2060.1-M3 and M5; JS 95-2060.1-A1; 95-2060.1-W3 and W4; JS 95-2060.1-W7 and W8

PROCUREMENT Completed.

CONSTRUCTION A 21 x 28 x 8-ft. high air conditioned shielded enclosure is installed adjacent to Room 134 in Hangar 2. The enclosure suppresses emissions on the order of 60 db in the frequency range 15 kHz to 1 MHz. A communication center and teleconference facilities are located in the shielded enclosure. (Completed in 1965.) Room 134 was modified in 1966 to provide a message handling facility.

POST-GO

ENGINEERING To be accomplished by USAF-PACGEEIA.

PROCUREMENT To be accomplished by USAF-PACGEEIA.

CONSTRUCTION USAF-PACGEEIA will install racks, cabling and power and communications equipment. The 1957th Communications Group will operate and maintain this equipment.

F & S NO.	TITLE					
06008	Communication Facility					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	T-3225		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8/ RDT&E CRO 3-65	PRE-GO Prior Cost	2.2		16.6	18.8	
	POST-GO Estimate	TO BE DETERMINED				
	TOTAL	2.2		16.6	18.8	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 95-3225.1-A1, 95-3225.1-E5, E6 and E8, 95-3225.1-M2 and M4, 95-3225.1-W2 and W3

PROCUREMENT Completed.

CONSTRUCTION This facility provides command control communications for TG 8.4. It consists of Air-to-Ground HF, UHF and VHF radio system, and a telephone system for interior communications and exterior command telephone links to other operation centers. An adjacent communication center and teleconference facility is contained in an 8 x 32 x 8 1/2-ft. high air conditioned shielded enclosure. The enclosure suppresses RF emissions on the order of 60 db in the frequency range 15 kHz to 1 MHz. This enclosure was installed, including filters, in 1965. Subsequent modifications to the shielded enclosure have been accomplished.

POST-GO

Additional equipment will be installed in the shielded enclosure.

[redacted]

OAHU COMMUNICATIONS

F & S NO.	TITLE				
06010	Hawaii Tie-Line System - Hickam AFB and NAS Barbers Point				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD
JTF	Trailer #12874 - HAFB Trailer #12875 - NASBP	None			FOD
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost		3.9	3.9	
	TOTAL		3.9	3.9	

COMPLETED

DESCRIPTION Two automatic unattended dial telephone exchanges (PABX) are located in the trailer parks at Hickam AFB and NAS Barbers Point. The exchanges were installed in 1965 and are housed in 8 x 30-ft. AEC furnished trailers. These PABX systems are tied together and are satellites of the PABX installed at the AEC Ohohia Street offices.

DRAWINGS: 95-064-32 95-064-34

[redacted]

OAHU COMMUNICATIONS

F & S NO.	TITLE					
06011	Communications Maintenance Shop - Damon Tract					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	3		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost			1.6	1.6	
	TOTAL			1.6	1.6	

COMPLETED

DESCRIPTION The interior of Building 3 was modified to provide approximately 500 square feet for a communications maintenance shop. The shop (completed in 1966) is air conditioned and humidity controlled and is provided with lighting and receptacles. A 13 x 17-ft. shielded enclosure was erected in Building 3 adjacent to the maintenance shop. Storage space is available within the shop area.

DRAWINGS: JS 95-3-M1 JS 95-3-E1 110-077-W10

F & S NO. 06015	TITLE Recable Trailer Parks					
USER JTF	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	2.9		*	2.9	
	TOTAL	2.9			2.9	

COMPLETED

DESCRIPTION A backbone signal cable system is installed in the trailer parks at Damon Tract, Hickam AFB and NAS Barbers Point. The system provides connection and interconnection of all radio base stations, remote consoles and and speakers within and between each trailer park. (Recabled in 1967.)

DRAWINGS: JS 95B-050-W1 JS 95D-050-W1 JS 95H-050-W1

*Installation of the signal cable was accomplished with maintenance funds.

F & S NO. 06016	TITLE Communication Trailer - Hickam AFB					
USER AEC	STRUCTURE/FACILITY NO. Trailer #12897		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY AEC	($000)	ENGR	PROC	CONST	TOTAL	FURN
	Costs included in F&S Number 13003					

COMPLETED

DESCRIPTION An 8 x 20-ft., air conditioned, AEC furnished trailer is located within the trailer compound and is utilized as the message center. This trailer is fitted with an escape hatch and an intrusion alarm system. Communication equipment is installed for operational periods only. The trailer is normally stored without communication equipment. (Completed in 1966.)

DRAWINGS: 95-SK-8, 9 and 10

F & S NO.	TITLE					
07002	Trailer Park and Trailers					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	44.9	53.8	871.0	969.7	48.1
	FY 71	24.9	60.0	173.1	258.0	
	POST-GO					
	Est. 3/69			6.3	6.3	
	TOTAL	69.8	113.8	1050.4	1234.0	48.1

IN ORDER TO MEET THE REQUIRED FULL OCCUPANCY DATE OF GO+30, ENGINEERING AND PROCUREMENT MUST BE ACCOMPLISHED PRE-GO.

PRIOR YEARS

ENGINEERING Completed.

Drawings:

95-058-C2 thru C5	JS 95-058-C1 and C2
95-058-AT	JS 95-058-E2
95-058-A3 thru A5	JS 95-058-E6 thru E11
95-058-A8 thru A20	JS 95-058-X2
95-058-A23	JS 95H-058-C2 thru C4
95-058-E17 thru E25	JS 95H-058-A2 thru A24
F 95H-058-A10 thru A13	JS 95H-058-C6 and C8
F 95H-058-E2 thru E7	JS 95H-058-C13 thru C15
F 95H-058-E9	JS 95H-058-M1 thru M3
F 95H-058-E11 thru E17	JS 95H-058-M6 thru M8
F 95H-058-E19	JS 95H-058-E2 and E5

PROCUREMENT Completed.

CONSTRUCTION A secure trailer compound and technical trailer park are located near the Diagnostic Aircraft Parking Area. A chain link fence forms the boundary between the two paved areas. Area lighting and a guard shack are provided. The north, east and part of the south side of the Technical Trailer Park are fenced with a 7-ft. high wooden fence. The balance of the Technical Trailer Park and all of the secure trailer compound are enclosed by grounded, 7-ft. high chain link fence topped with barbed wire outriggers.

The Trailer Docks are connected by covered, elevated, wooden walkways. A freshwater line, sanitary sewer, and a photo waste sewer system are provided. Incoming overhead power of 11.5 kv is reduced in voltage by a substation

south of the Technical Trailer Park and by pole mounted transformers. Power distributed to the trailers is 120/208 volt, 60 cycle, 3 phase.

Construction of the Trailer Docks and initial shipment of trailers to HAFB was completed in 1965. For planned modifications to the trailer park, refer to F&S No. 07002A.

Trailers now in place are as follows (for trailer locations see Appendix A):

USER & TRAILER #	USE/NAME	PROP. # OR LICENSE #	FURN'D BY AEC	FURN'D BY USER	COMMENTS
LASL #6	Storage	11061	X		
LASL #7	Storage	11060	X		
LASL #49	Storage	11049	X		Located on flightline
LASL #14 (D-8-2)	Technical	E-26695		X	
LASL #12 (J-4-2)	Technical	E-28578		X	
LASL #8 (J-16-5)	Technical	E-28341		X	
LASL #15	Office	11023	X		
GEN. DYN.	Office	11096	X		
LRL #5	Electrical Equipment	11052	X		
LRL #6	Data Reduction	11059	X		
LRL #7	Photo	11053	X		
LRL #9	Optical	11054	X		
LRL #10	Office	11055, 11056	X		Double Trailer
LRL #11	Office	11057, 11058	X		Double Trailer
LRL #12	Storage	11066	X		
LRL #34	Storage	11050	X		Located on flightline
EG&G #1	Photo Instr. Elect.	11077	X		
EG&G #2	Photo Instr. Mech.	11076	X		
EG&G #3	Photo Instr. Elect.	11078	X		
EG&G #4	Photo Instr. Planning	11079	X		
EG&G #8	Timing and Firing Comm.	11080	X		
EG&G #9	Timing and Firing Comm.	11081	X		

USER & TRAILER #	USE/NAME	PROP. # OR LICENSE #	FURN'D BY AEC	FURN'D BY USER	COMMENTS
EG&G #10	Administration	11082	X		
EG&G #11	Dep. Cmdr. JTU 8.1.6	11083	X		
EG&G #12	EM & Optical	11075	X		
EG&G #13	Logistics Operations Support & Maintenance	11073	X		
SANDIA #6 & #7	Conference	11071, 11070	X		Double Trailer
SANDIA #8	Technical	11072	X		
SANDIA #9	Office & Ready Room	11041	X		
SANDIA #10	Data Analysis & Ready Room	11068, 11069	X		Double Trailer
SANDIA #11	Tracking FM/FM	11067	X		
SANDIA #12	Office	11042	X		
SANDIA B-34	Technical	E-27011		X	
SANDIA B-13	Technical	E-23259		X	
SANDIA B-40	Technical	E-25334		X	
SANDIA H-26	Technical	E-26494		X	
SANDIA K-10	Air Conditioning Unit	S-137286		X	
JTF	Latrine #1	11074	X		
JTF	Latrine #2	11046	X		
JTF	Conference	11062, 11063	X		Double Trailer
JTF	Communications	12897			
JTF	Joint Ready Room	11064	X		
JTF	Telephone	12874	X		
JTF	Office-Assoc. Sci. Deputy	11065	X		
JTG 8.4	Aircraft Maintenance	11051	X		Located on flightline
JTG 8.4	Office	11047, 11048	X		Double Trailer
JTG 8.4	Diagnostic	11044, 11045	X		Double Trailer
JTG 8.4	Personal Equipment	11043	X		

USER & TRAILER #	USE/NAME	PROP. # OR LICENSE #	FURN'D BY AEC	USER	COMMENTS
JTG 8.4 #1	JTU 8.4.1 - CMDR	11086	X		Located adjacent to Building T-3225
JTG 8.4 #2	Rad-Safe	11085	X		Located adjacent to Building T-3225
JTG 8.4 #3	Security	11084	X		Located adjacent to Building T-3225
JTG 8.4 #4	JTU 8.4.4	11087	X		Located adjacent to Building T-3224
JTG 8.4 #5	JTU 8.4.2	11088	X		Located adjacent to Building T-3225
JTG 8.4 #6	Ballistic - Safety Evaluation Group	11089	X		Located adjacent to Building T-3225
AEC/H&N	Office	11090	X		Located adjacent to AEC/H&N Service Building

The following trailers will be placed in the Trailer Park for exercises:

USER & TRAILER #	USE/NAME	PROP. # OR LICENSE #	FURN'D BY AEC	USER	COMMENTS
LRL #59*	Machine Shop	E-90154		X	Currently at Livermore, Calif.
LRL #60*	Machine Shop	E-90155		X	Currently at Livermore, Calif.
EG&G #6	Machine Shop	22095		X	Currently at Kirtland AFB
SANDIA B-64	Technical	E-27912		X	Currently at Kirtland AFB
SANDIA F-2	Technical	E-23943		X	Currently at Kirtland AFB
SANDIA F-22		E-26499		X	Currently at Sandia Corp., Albuquerque
SANDIA G-1		E-24540		X	Currently at Sandia Corp., Albuquerque
SANDIA H-25		E-26493		X	Currently at Sandia Corp., Albuquerque
JTF	Radio Maint. Van		X		Temporarily loaned to USAF

*LRL Machine Shop trailers #17 and #18 currently at Kirtland AFB may be substituted for these two (2) trailers.

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION

A. The following trailers will be procured and placed in the Trailer Park:

USER & TRAILER #	USE/NAME	PROP. # OR LICENSE #	FURN'D BY AEC USER	COMMENTS
LRL	Office and Lab	N/A	X	FOD - GO+30
LRL	Office and Lab	N/A	X	FOD - GO+30
LRL	Office and Lab	N/A	X	FOD - GO+30
LRL	Office and Lab	N/A	X	FOD - GO+30
LRL	Office and Lab	N/A	X	FOD - GO+30
JTG 8.4 #7	Technical	N/A	X	To be located adjacent to Building T-3225. FOD - GO+30
JTG 8.4 #8	Technical	N/A	X	To be located adjacent to Building T-3225. FOD - GO+30
JTG 8.4	Technical	N/A	X	To be located at east end of Runway 7-25. FOD - GO+30
JTG 8.4	Technical	N/A	X	To be located at east end of Runway 7-25. FOD - GO+30
JTG 8.4	Technical	N/A	X	To be located at east end of Runway 7-25. FOD - GO+30
EG&G #7	Photo Loading	N/A	X	FOD - GO+60
EG&G #16	EM & Optical	N/A	X	FOD - GO+60
EG&G #17	Reports	N/A	X	FOD - GO+60
EG&G #18	Flight Personnel	N/A	X	FOD - GO+60
EG&G #19	Logistics Support Personnel	N/A	X	FOD - GO+60
LASL	Office	N/A	X	FOD - 9-1-71
LASL	Office	N/A	X	FOD - 9-1-71

USER & TRAILER #	USE/NAME	PROP. # OR LICENSE #	FURN'D BY AEC USER	COMMENTS
LASL	Office	N/A	X	FOD - 9-1-71
LASL	Office	N/A	X	FOD - 9-1-71

B. The Trailer Park will be expanded. For details refer to F&S No. 07002A.

C. In conjunction with expansion of the Trailer Park, a Machine Shop will be constructed for use by LRL in lieu of their Machine Shop trailers. For details refer to F&S No. 07060.

POST-GO

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION The following trailers will be provided at HAFB:

USER & TRAILER #	USE/NAME	PROP. # OR LICENSE #	FURN'D BY AEC USER	COMMENTS
EG&G #5	Photo Maint.	N/A	X	FOD - GO+60
EG&G #14	Photo Processing (B&W)	N/A	X	FOD - GO+60
EG&G #15	Photo Processing (Color)	N/A	X	FOD - GO+60
TC	Laboratory	N/A	X	FOD - GO+150
TC	70mm Processing	N/A	X	FOD - GO+150
TC	Still Lab	N/A	X	FOD - GO+150
TC	16/35mm - B&W	N/A	X	FOD - GO+150
TC	16/35mm - Color	N/A	X	FOD - GO+150
TC	16/35mm - Color	N/A	X	FOD - GO+150
TC	60mm Color	N/A	X	FOD - GO+150
TC	Technical	N/A	X	FOD - GO+150
TC	Technical	N/A	X	FOD - GO+150

USER & TRAILER #	USE/NAME	PROP. # OR LICENSE #	FURN'D BY AEC	USER	COMMENTS
GEN. DYN.	Office/ Drafting	26174	X		To be brought from Kirtland. FOD is GO+45.
LASL J-16-3	Technical	N/A		X	FOD - GO+30
LASL 2	Technical	N/A		X	FOD - GO+30
LASL	Technical	N/A		X	FOD - GO+30
LASL	Technical	N/A		X	FOD - GO+30
LASL	Technical	N/A		X	FOD - GO+30
SANDIA B-59	Technical	N/A		X	FOD - GO+30

F & S NO. 07002A	TITLE Trailer Park Modifications					
USER JTF	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+0 FOD GO+0
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO FY-69			30.2*	30.2	
JTF-8/ DASA & AEC	FY-71			354.1*	354.1	
	TOTAL			384.3	384.3	

IN ORDER TO MEET THE REQUIRED FULL OCCUPANCY DATE AT GO + 0, DESIGN, PROCUREMENT AND CONSTRUCTION MUST BE ACCOMPLISHED PRE-GO.

FY 1969

ENGINEERING To be completed. Preliminary drawings completed to date are

JS 95H-058-C11 JS 95H-058-E8

PROCUREMENT To be accomplished.

CONSTRUCTION Current plans provide for combining and enlarging the Secure Trailer Compound and the Technical Trailer Park at Hickam AFB (see Vol. II, Plot and Site Plans, HAFB). The work will be accomplished in two (2) phases; Phase I will be accomplished in FY 1969 and Phase II in FY 1971.

Phase I

(A) The wooden fence along the east side of the Technical Trailer Park will be removed and a chain link security fence will be installed 10 feet from and parallel to the clear zone.

(B) The security fence along the south side of the trailer park will be extended to take in the balance of the area west of the substation.

*Includes cost of engineering and procurement.

(C) The interior fence separating the Secure Trailer Compound and the Technical Trailer Park will be removed. The security lights will be relocated to the new compound perimeter.

(D) The remaining section of the newly enclosed security area lying west and south of the substation and the area adjacent to the clear zone will be paved.

FY 1971

NOTE: Additional laboratory space for TC/DASA is planned in the southeast portion of the expanded trailer park (refer to F&S No. 07027). The division of costs between the AEC and JTF-8/DASA for the expansion necessary to accommodate these facilities will be resolved in the future.

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Phase II of modifications to the trailer park will be accomplished.

Phase II

(Planning Estimate: $276,800 for Items (A) through (J); $77,300 for Item (K) below)

(A) The trailer docks will be modified and extended to provide space for additional trailers.

(B) The trailers will be regrouped in accordance with the revised plot plan (H&N Drawing No. 95-064-52.2).

(C) The areas exposed as a result of trailer movements will be paved.

(D) The utilities will be modified as necessary.

(E) The FAA portion of the substation will be relocated outside the trailer compound.

(F) The southern and eastern boundary fences and perimeter lighting will be extended to enclose within the one trailer compound the area to the south and east of the substation.

(G) The newly enclosed area of the compound will be paved.

(H) The ditch at the southeast corner of the trailer park will be realigned or culverted.

(I) The trailer docks will be recabled.

(J) Additional 400 cycle power will be provided to meet added requirements. The following facilities require 400 cycle power:

USER	LOCATION	AMPS, PRE-GO	AMPS, POST-GO
EG&G	Trlr. No. 1	50	75
	Trlr. No. 3	50	75
	Trlr. No. 8	25	50
	Trlr. No. 9	25	50
	Trlr. No. 12	5	25
	Bldg. T-3208	5	25
LRL	Trlr. No. 7	20	20
	Trlr. No. 9	20	20
SANDIA	Trlr. No. F-2	3	4
	Trlr. No. 9	10	10
	Trlr. No. 11	3	4
	Trlr. No. 12	3	4
	Trlr. No. B-13	3	4
LASL	Trlr. No. 8	14	14
	Trlr. No. 9 (4-16-3)	0	14
	Trlr. No. 2	0	14
	Bldg. No. T-3207	14	14

(K) A machine shop will be constructed for LRL (see Volume II, Plot and Site Plans, HAFB, and F&S No. 07060).

[redacted]

HICKAM AFB — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07004	Laboratory Space					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
LASL & EG&G	T-3207 & T-3208		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost*	1.1		5.7	6.8	
	TOTAL	1.1		5.7	6.8	

COMPLETED

DESCRIPTION The original rehabilitation of Buildings T-3207 and T-3208 was completed in 1964. Building T-3207 is used exclusively by LASL. Building T-3208 is shared by LASL (east half) and EG&G (west half).

Rehabilitation of Building T-3207 consisted of rewiring, replacing two (2) wall mounted air conditioning units, and installing a partition to provide a 19 x 23-ft. office and a 19 x 29-ft. laboratory. Curtains were installed in the west end of the building. The east end was rewired to provide 60 cycle and 400 cycle power.

The west half (EG&G portion) of Building T-3208 was partitioned to form a 14 x 19-ft. office laboratory and a 9 1/2 x 19-ft. darkroom. Two (2) new doors, shelving and workbenches were installed. The east half (LASL portion) was painted and provided with workbenches.

Subsequent modifications to Building T-3208 included installation of a fresh waterline and sewer connection to the photo waste disposal system. A roof mounted exhaust fan and a new air conditioning system were also installed. The source of incoming electrical power to the two buildings was changed from that serving the Project Press quonset compound to that serving the trailer park.

DRAWINGS:

JS 95-3207-A1
JS 95H-058-C6
JS 95H-058-E4
JS 95-3208-A1 and M1
F 95H-3208-E1

*Costs are applicable to modifications following original rehabilitation. Costs of original rehabilitation are included in F&S No. 07015.

[redacted]

HICKAM AFB — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE				
07005	Laboratory Space				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
EG&G	T-3214, T-3215, T-3216 and T-3217		None		FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost*	1.6		15.1	16.7	
	TOTAL	1.6		15.1	16.7	

PRIOR YEARS

ENGINEERING Completed.

Drawings: JS 95-3214-A1, F 95H-3214-E1, JS 95-3215-A2, F 95H-3215-E1, F 95H-3216-E1, JS 95H-3216-M1, JS 95-3217-M1, F 95H-3217-E1, JS 95H-058-M5

PROCUREMENT Completed.

CONSTRUCTION Buildings T-3214, T-3215, T-3216, and T-3217 were rehabilitated in 1964. Rehabilitation consisted of painting, caulking, and cleaning. Subsequently the buildings were modified as follows:

1) Modifications to Building T-3214 included rewiring, installation of a hot water heater, repainting the darkrooms white and installing louvers in the darkrooms.

2) Building T-3215 was rewired, air conditioning was installed, new fresh water and sewer connections were provided, the darkrooms were painted white and ventilation fans were installed.

3) A vent stack was installed in Building T-3216. The building was rewired, and new double doors were installed at each end of the building.

4) Building T-3217 was rewired and air conditioned.

FY 1969

ENGINEERING Completed.

Drawings: JS 95H-3215-E1 JS 95H-3215-M1 and M2

PROCUREMENT Completed.

CONSTRUCTION Modifications to Building T-3215 included installation of a hot water heater, storage tank and injector pump, and modification of its existing air conditioning system. The cost of this work was paid for with maintenance funds. (Completed in 10/68)

*Costs are applicable to modifications following original rehabilitation. Costs of original rehabilitation are included in F&S No. 07015.

HICKAM AFB — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE				
07006	*Diagnostic Aircraft (NC 135A) Parking Apron*				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF	None		None		FOD
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON CRO 10-64	PRE-GO Prior Cost 8.1		157.2	165.3	
AEC	PRE-GO Prior Cost 10.9 FY 71		164.0 75.0	174.9 75.0	
	TOTAL 19.0		396.2	415.2	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 95-058-C2, C3 and C5; JS 95H-002-C4; JS 95H-058-C9 and C10; JS 95-002-C32 and C34; JS 95-003-E6; JS 95-058-C4 and C5; F 95H-003-E1 thru E3; F 95H-058-E3, E4, E10 thru E12, E14, E16 and E18

PROCUREMENT Completed.

CONSTRUCTION Approximately 240,000 square feet of asphalt surfaced parking area is provided for six (6) diagnostic aircraft. (Completed in 1965.) Three (3) aircraft are AEC sponsored and the other three (3) are Test Command sponsored. An electromagnetic clear zone is maintained from the AEC aircraft to the Simulator Station 800-ft. south (see F&S No. 07061).

The parking area is 4-in. thick asphaltic concrete and is coated with a jet fuel resistant seal coat. A catch basin and reinforced concrete box culvert drain the area. Combination aircraft tie-down anchors and ground rods are located along the north and south edges of the apron. In addition, each parking space has six (6) static grounding rods.

Each AEC aircraft parking area is provided with two (2) non-arcing 440 volt receptacles and each DASA aircraft parking area is provided with one (1) non-arcing 440 volt receptacle. The receptacles are in concrete pits with flush mounted, load bearing steel plate covers. Power is provided from Substation No. 1 south of the parking area. Substation No. 1 transforms the incoming overhead power of 11.5 kw to 120/208 and 440 volt, 60 cycle, 3 phase power.

The aircraft parking area is lighted by mobile floodlights with 1000 watt mercury vapor lamps on 8-ft. high standards. Receptacles for powering the floodlights are located along the south edge of the apron. An Aerospace Ground Equipment (AGE) parking area of approximately 6,000 square feet is located adjacent to the parking apron. The pad is 3-in. thick asphaltic concrete and is capable of supporting 4-wheeled vehicle loads of 8-tons.

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Each aircraft parking space will be provided with a waterline, one (1) 220 volt receptacle, and two (2) 110 volt receptacles. The receptacles will be non-arcing. The telephone cables serving each parking space will be embedded.

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO.	TITLE				
07008	Daytime Sleeping Facilities				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD
TG 8.4	T-928, T-929, and T-937	None			FOD
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO				
	Prior Cost		51.0	51.0	
	TOTAL		51.0	51.0	

COMPLETED

DESCRIPTION Rehabilitation of Buildings T-928, T-929 and T-937 to provide daytime sleeping facilities was completed in 1965. Rehabilitation consisted of insulating the second floor ceiling of each building, installing two (2) air conditioning units in each building, new doors, and providing blackout curtains.

A substation adjacent to Building 935 was modified by the installation of three (3) 50 kva, single phase transformers. Also,new direct burial 120/240 volt power cables were installed from the substation to the buildings.

DRAWINGS: JS 95-012-M1 thru M5 JS 95-012-E2

[redacted]

F & S NO.	TITLE					
07010	Warehouse and Outside Storage Space					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	T-3059		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost*	0.1		4.7	4.8	
	TOTAL	0.1		4.7	4.8	

COMPLETED

DESCRIPTION Building T-3059 was rehabilitated to provide approximately 51,200-square feet of warehouse space.

Space has been allocated to Users as follows:

USER	SPACE REQUIRED
EG&G	3,200 Sq. Ft.
JTF	2.400 Sq. Ft.
JTG 8.4	35,200 Sq. Ft.
LASL	4,800 Sq. Ft.
LRL	3,200 Sq. Ft.
SANDIA	2,400 Sq. Ft.

An office, 15 x 48-ft., was constructed for JTG 8.4 within their allocated space. An outside double door, 6 x 8-ft., was constructed to provide access into the office and an inside personnel door was constructed for access from the office into the warehouse area. The office is air conditioned with window type units and is provided with fluorescent lighting.

The area allocated to each user is physically defined by 7-ft. high chain link fence boundaries. Initial rehabilitation was completed in 1964. Subsequently, a latrine was installed in the southeast corner of the JTG 8.4 office in 1966.

Outside storage space has been allocated to satisfy Users' requirements as follows:

USER	SPACE REQUIRED	AREA
TG 8.4	20,000 Sq. Ft.	West of Bldg. T-3059
EG&G	5,000 Sq. Ft.	**West of Bldg. T-3059

*Cost figures shown are for latrine installation only; costs of initial rehabilitation are included in F&S No. 07015.

[redacted]

** Specific location will be determined by PACAF Base Commander when space is required.

DRAWINGS: JS 95-3059-A1 JS 95-0359-E1 JS 95H-3059-A1

F & S NO.	TITLE					
07015	Office and Conference Space					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	Hangar T-3225 Building 3225		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	68.5	21.3	426.7	516.5	52.8
JTF-8 MILCON CRO 7-67	PRE-GO Prior Cost			0.3	0.3	
	TOTAL	68.5	21.3	427.0	516.8	52.8

COMPLETED

DESCRIPTION Approximately 18,500 square feet of space within Hangar T-3225 is available for various uses as follows:

USE	AREA
Office Space	10,000 square feet
300-Man Briefing Room	5,000 square feet
Shop Space (AFTAC)	800 square feet
Maintenance Space	700 square feet
Storage Space (flyaway and aircraft support equipment)	2,000 square feet
Total:	18,500 square feet

This space was provided by erecting a new structure (Building 3225) within the confines of the existing hangar and by rehabilitating a lean-to within the hangar. The new 97 x 163-ft. building (completed in 1965) is wood-framed, has metal siding, and built-up roofing. A 20 x 31 x 8-ft. high RF acoustically treated screen room serves as a communications center. Latrine facilities are provided. Interior floor finish is exposed concrete except for the 300-man briefing room and the screen room which have asphalt tile floors. Fluorescent fixtures light the interior. To provide lighting in the event of power failure, battery-powered emergency lights (with chargers) are mounted in the hallways and larger offices of Building 3225. Convenience outlets of 110 volt capacity are provided throughout the interior of the building.

A 500 kva substation was constructed south of the building to meet the building's 120/208 volt, 60 cycle, 3 phase power demand. A 60 kw diesel generator located west of the building serves as an emergency source of power for the command post, communications center, and air/ground radio room. Transfer of power is remote manual.

The entire building is air conditioned by three (3) air conditioning units, two (2) air handling units (blowers) and two (2) air cooled condensers. Telephone service and a fire alarm system are provided. A fresh waterline, sanitary sewer, and sewage lift station were installed to serve the new building.

Security provisions included the installation of approximately 440-ft. of standard chain link security fence (with barbed wire outriggers) around the hangar; the placing of two (2) skid-mounted guardhouses (8 x 8 x 8-ft. high) within the secure area; and the installation of floodlights, mounted on the hangar, for area lighting.

A door in the west side of Hangar T-3225 provides access to the JTG 8.4 Trailer Complex. (See F&S No. 07002 for a description of these trailers.)

An existing 20 x 159 x 9-ft. high, wood-framed lean-to within Hangar T-3225 was also extensively rehabilitated. Rehabilitation of this maintenance/office area consisted of repair or replacement of all damaged wall panels, light fixtures, electrical outlets, doors and locks, and painting the interior and exterior of all offices. Storage bins and toolbox racks were constructed as required in the office spaces, and one new latrine was provided. Window air conditioners were installed in six offices, and a watercooler was installed in Office No. 1. Light fixtures were installed in the access way to the offices. A 10-ft. wide, 200-ft. long asphaltic concrete roadway was installed parallel to the east side of Hangar T-3225 to provide forklift access to the maintenance offices.

DRAWINGS:

95-3225.1-A1 thru A9
95-3225.1-C1 and C2
95-3225.1-S1 and S2
95-3225.1-S5 thru S7
95-3225.1-M4, M6 and M7
95-3225.1-E1, E5, E6 and E8
95-3225.1-W1 thru W3
JS 95-002-C33 and C34
JS 95-3225.1-A3 thru A6
JS 95-3225.1-A9 and A10
JS 95-3225.1-C1 and C2
JS 95-3225.1-M1, M5 and M6
JS 95-3225.1-E2 thru E6 and E9
JS 95-3225.1-W1 thru W4
JS 95H-3225-A1 and A2
JS 95H-3225-S1
JS 95H-3225-M1 thru M4
JS 95H-3225-E1
JS 95H-3225.1-E7, E8 and E10 thru E13
JS 95H-3225-W1

F & S NO.	TITLE				
07018	Office and Laboratory Space - Subtasks A614, A625, A628, A629, A804 and A909				
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.			BOD
TC	Hangar 2 (Building 2060)	None			FOD GO+180
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO				
	Prior Cost 64.7		329.8	394.5	46.2
USAF EAO S-68-132	PRE-GO				
	Prior Cost		24.3	24.3	
JTF-8 CRO8-65	PRE-GO				
	Prior Cost 16.3			16.3	
	FY (Undetermined)		116.7	116.7	
	POST-GO				
	Est. 5/66 2.0		54.8	56.8	
	TOTAL 83.0		525.6	608.6	46.2

PRIOR YEARS

ENGINEERING Completed.

Drawings:

95-2060.2-A1 thru A10
95-2060.2-E2 thru E10
95-2060.2-M1 thru M13
95-2060.2-S1 thru S4
95-2060.2-W1 thru W5
JS 95-2060.1-A1 and M3
JS 95-2060.2-A1
JS 95-2060.2-M3 and M5
JS 94-2060.2-S1 and S2
JS 95-2060.2-W1
JS 95-2060.3-A3
JS 95-2060.3-E1 and E2
JS 95-2060.3-M1
JS 95H-2060-A8
JS 95H-2060.1-A1 thru A9
JS 95H-2060.1-C1
JS 95H-2060.1-E1 thru E7
JS 95H-2060.1-M1 thru M8
JS 95H-2060.1-S1 thru S5
JS 95H-2060.1-T1
JS 95H-2060.1-W1 thru W5
JS 95H-2060.2-E1

PROCUREMENT Completed.

CONSTRUCTION Modifications to Hangar 2 (completed in 1965) provided office and laboratory space for various users. Space is currently allocated as follows:

ITEM	USER	APPROX. AREA
Office and Laboratory Space	TC	12,200 sq. ft.*
Office and Laboratory Space	Unassigned	4,100 sq. ft.
Office Space	JTF-8	4,300 sq. ft.
General Space (Hallways, Latrines, etc.)	———	7,300 sq. ft.

Interior floor finish varies from exposed concrete on the first floor to asphalt tile on the second and third floors. Interior walls and ceilings are mainly gypsum board, with some rooms having acoustical ceilings and/or walls. Rooms 223, 280, 286, and 287 have reflected ceilings; Room 223 also has a raised floor. Nominal ceiling height varies from floor to floor: 12-ft. for the first floor, 11 1/2-ft. for the second floor and 8-ft. for the third floor.

Interior lighting is by fluorescent fixtures with battery powered lights provided for emergency lighting in the event of commercial power failure. Convenience outlets of 110 volt capacity are provided throughout. A 750 kva substation located in a mechanical and electrical equipment room annex transforms incoming 11.5 kv power and serves the building with the following power: 120/208 volt, 60 cycle, 3 phase; 120/240 volt, single phase; and 277/480 volt, 60 cycle, 3 phase.

The building's air conditioning system is designed to maintain a temperature range between 70 and 80°F and a relative humidity of 50%. Telephone service, a fire alarm system, an automatic sprinkler system, and latrine facilities are provided. A communication center, screen room, and message center are located within the building (Refer to F&S No. 06007 for details).

PRE-GO

PROCUREMENT Procurement of long lead items necessary to provide computer space for Subtask A909 (Refer to Post-GO, below) will be initiated upon approval of funds by JTF-8. The items to be procured will include a 500 kva transformer, air handling units, and materials for a false elevated floor.

POST-GO

ENGINEERING To be completed. Drawings issued (for approval) to date are:

95-2060.1-A7 and A8
95-2060.1-E7 thru E11
95-2060.1-M8 thru M11

*Includes 1000 sq. ft. for Subtask A909.

PROCUREMENT Long lead items to be procured Pre-GO. Only minor items will be procured Post-GO.

CONSTRUCTION Approximately 1,000 sq. ft. of air conditioned computer and data analysis space for Subtask A909 will be provided by modifying the interior of Building 2060. Items of work to be accomplished include the modification of the existing 750 kva substation, installation of a 500 kva transformer, air conditioning equipment, sprinkler system, and a raised floor.

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07022	Personal Equipment Facility					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	T-2045		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON CRO 10-64	PRE-GO Prior Cost	2.9		21.9	24.8	1.0
	TOTAL	2.9		21.9	24.8	1.0

COMPLETED

DESCRIPTION Renovation of Building T-2045 to provide 1,000 square feet of air conditioned space for the storage of pressure suits and personnel equipment was completed in 1964. Interior surfaces of the building were patched and painted, and fluorescent light fixtures and asphalt tile flooring were installed.

An air compressor supplying compressed air at 4-5 psi to six (6) ceiling mounted outlets is provided. The compressed air is used for the pressure testing of flight suits. The building is provided with an air conditioning system designed to maintain a temperature of 65°F and a relative humidity of 50%, a fire alarm system, and an automatic sprinkler system.

Furnishings installed include workbenches, wheeled platforms for transporting oxygen bottles, parachute bins, personnel lockers, storage bins, and four (4) reclining type personnel suiting chairs.

DRAWINGS: JS 95-2045.1-A1 and A2 JS 95 2045.1-M1 JS 95-2045.1-E1

HICKAM AFB — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07023	Laboratory Space					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+15
EG&G	T-3222		None			FOD GO+60
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	4.8		*	4.8	
	FY 71	1.5		11.5	13.0	
	TOTAL	6.3		11.5	17.8	

PRIOR YEARS

ENGINEERING Completed.

Drawing: JS 95H-3222-A1

PROCUREMENT Completed.

CONSTRUCTION Rehabilitation of the west half of Building T-3222 for use as a photo laboratory was completed in 1965. The 20 x 53 x 13 1/2-ft. high quonset hut was rehabilitated by replacing termite damage structural members, replacing the existing plywood wall panels with new 10-ft. high gypsum wallboard panels and installing a 10-ft. high gypsum board ceiling.

A photo waste disposal sewer and fresh waterline were installed. Standard chain link security fencing was installed north, west and south of the building. The fence on the north and south sides tie-in to the fence of the secure trailer compound.

FY 1971

ENGINEERING Completed.

Drawings: JS 95-3222-A3 JS 95-3222-E2 JS 95-3222-M1

PROCUREMENT Completed.

CONSTRUCTION Building T-3222 will be modified to provide for the installation of a 16/35 mm. color film developing machine and related photographic equipment. Specific items of construction to be accomplished are as follows:

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*Prior Years construction costs included in F&S No. 07015.

1) Remove existing partitions and construct new partition walls to form a 9 x 12-ft. office and a 7 x 33-ft. darkroom.

2) Fabricate and install a platform 2-ft. 4-in. high and 33-ft. long inside the darkroom.

3) In the center of the building, remove a 16 1/2 x 19-ft. portion of the ceiling to provide installation space for the EG&G furnished processing machine.

4) Provide new interior fluorescent lights.

5) Provide 40 kva, 120/208 volt, 60 cycle, 3 phase power by tieing into an overhead power line.

6) Install a humidity controlled air conditioning system. A relative humidity of 20-80% will be maintained.

7) Install a 67 gallon hot water heater and associated plumbing to meet the maximum of ten gallons per minute of 100°F water demanded by the developing machine.

8) Install a workbench, storage cabinet, file, and miscellaneous furniture.

F & S NO.	TITLE					
07024	Monitoring for Flightline and Maintenance Crews					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	None		None			FOD GO+45
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON CRO 10-64	PRE-GO Prior Cost	6.0	4.2		10.2	
	POST-GO Estimate 12/65			60.5	60.5	3.4
	TOTAL	6.0	4.2	60.5	70.7	3.4

PRIOR YEARS

ENGINEERING Completed.

Drawings: JS 95-029-A1 thru A3 JS 95-029-C1 and C2 JS 95-029-E1 and E2

PROCUREMENT A sewage pump, lavatories and urinals, and a 112.5 kva transformer have been procured.

POST-GO

ENGINEERING Completed.

PROCUREMENT To be completed.

CONSTRUCTION This facility, which will be used for the monitoring and decontamination of sampler aircraft personnel, will be located east of the east end of taxiway 7 within a 128 x 142-ft. paved area surrounded by a chain link fence.

The facility will consist of two (2) standard eight man tents, a wash car and three (3) trailers. The tents will be wood-framed, 16 x 32-ft. in plan with a ridge height of 12 1/2-ft. The tents will be lighted and provided with 110 volt convenience outlets.

The skid-mounted wash car, to be located between the tents, will be 8 x 24 x 6 1/2-ft. high; will be provided with showers, water closets, urinals, and sinks. A sewage lift station will dispose of waste from the wash car. A waterline will be provided in the pump pit of the sewage lift station so that the effluent from the showers can be diluted prior to being discharged into the base sewer system.

Three (3) 10 x 52-ft. trailers will also be located within the compound.

HICKAM AFB — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE				
07027	Laboratory and Office Space - Subtasks A610, A802, A803, A804, A921, A922, A933				
USER: TC	STRUCTURE/FACILITY NO. Existing: 3248 Future: Undesignated	SCIENTIFIC STATION NO. None			BOD / FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	0.5*		2.7	3.2	
JTF-8 DASA	POST-GO Est. 1/68			463.3	463.3**	
	TOTAL	0.5		466.0	466.5	

PRIOR YEARS

ENGINEERING Completed.

Drawings:

JS 95-002-C28
JS 95-010-A10
JS 95-010-E1
JS 95-097-A1 and A2
JS 95-3225-E1
JS 95-3225-M1
JS 95-3232-A1
JS 95-3235-A2
JS 95-3237-A3 and A4
JS 95-3237-E1
JS 95-3237-M1
JS 95-3238-A4
JS 95-3248-A1 and A2
JS 95-3248-A4
JS 95-3249-A2
JS 95-3249-E2

PROCUREMENT Completed.

CONSTRUCTION The following thirteen (13) buildings located in the old Hawaiian National Guard Area and assigned to TC were demolished in 1966: 3232, 3235, 3237, 3243, 3246, 3247, 3249, 3250, 3251, 3252, 3253, 3254 and 3255. Building 3248 was rehabilitated to partially replace some of the space lost by the demolition of the buildings mentioned above. The rehabilitation of Building 3248 consisted of reroofing the entire building, replacing portions of walls, partitions and ceiling panels, rewiring, installing workbenches, shelving, and two (2) stainless steel sinks. (Completed in 1966).

POST-GO

ENGINEERING To be completed. Drawing completed to date is: LPG(SK)-5-68

*Additional engineering costs included in F&S Number 07015.

**Total shown is for most costly alternate. For cost of other alternatives, see text.

PROCUREMENT To be accomplished.

CONSTRUCTION The construction of a 5000 square foot laboratory building and the installation of nine (9) trailers in an addition to the Hickam Air Force Base Trailer Park has been proposed as means to replace the space lost by demolition of the thirteen (13) buildings identified under "Prior Years" above.

The division of costs between JTF-8/DASA and the AEC for preliminary work necessary before the laboratory building and trailers can be installed is to be resolved in the future (refer to F&S No. 07002A).

A description of the planned facilities and their estimated cost (as of January 1968) follows:

A. Nine (9) 10 x 50-ft. Office Trailers, With or Without Walkways

Alternate 1. User-Furnished, Existing Trailers

1a)	With walkways	$ 69.8K
1b)	Without walkways	$ 51.8K

Alternate 2. New Trailers

2a)	With walkways	$121.8K
2b)	Without walkways	$103.8K

B. 5000 Square Foot Laboratory Building - $271.7K

This prefabricated rigid frame building with a concrete floor slab will be 50 x 100-ft. in size with an eave height of 14-ft. Roofing and siding will be of corrugated aluminum. The entire building will be air conditioned and dehumifified to provide a temperature of 70°F at a relative humidity of 50%, except for a film storage room which will be refrigerated to 40°F. The interior will be partitioned into darkrooms and laboratories. Vinyl tile floors will be typical throughout. The installation of a pole-mounted 125 kw substation to meet the building's electrical demands, and connection to a freshwater line and to the photo-waste system will be required. Power required will be 110/220 volt, 60 cycle; 110 volt, 400 cycle, and 24 volt DC.

HICKAM AFB — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07028	Soil Stabilization					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON CRO 10-64	PRE-GO Prior Cost			91.7	91.7	
	TOTAL			91.7	91.7	

COMPLETED

DESCRIPTION Soil north of Runway No. 7-25 was stabilized. (Completed in 1964).

DRAWINGS: Completed by PACAF.

F & S NO.	TITLE					
07029	JP-4 Settling Tank					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
PACAF	PRE-GO Prior Cost			155.0	155.0	
JTF MILCON CRO 10-64	PRE-GO Prior Cost			18.9	18.9	
	TOTAL			173.9	173.9	

COMPLETED

DESCRIPTION The installation of improved storage and settling facilities and additional JP-4 Hydrant outlets to handle jet servicing requirements was completed in 1965.

DRAWINGS: Accomplished by PACAF.

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO. 07031	TITLE Aircraft Washrack					
USER TG 8.4	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON CRO 10-64	PRE-GO Prior Cost			28.4	28.4	
	TOTAL			28.4	28.4	

COMPLETED

DESCRIPTION The Aircraft Washrack Facility, completely reconditioned in 1964, is located in an open area at the southwest end of the Aircraft Parking Apron. A raised-curb pipe chase 2-ft. 8 in. wide (inside) with 6-in. thick concrete walls extends the full 200-ft. length of the east side of the washrack. The chase, covered with sections of steel plate, contains four utility lines: a 3-in. water line, a 1-in. chemical solution line, a 1 1/2-in. steam line and a 1 1/2-in. air line.

DRAWINGS: (PACAF) H100/2406 Sheets 1 & 2 of 2

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07033	Engine Trim and Check Pad					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON CRO 10-64	PRE-GO Prior Cost			127.0	127.0	
	TOTAL			127.0	127.0	

COMPLETED

DESCRIPTION An appendage of Taxiway "B", the Engine Trim and Check Pad (completed in 1965) is used for warming up and checking out aircraft engines prior to takeoff.

The mesh-reinforced concrete pad is 225-ft. long by 175-ft. wide. Nominally 18-in. thick, the concrete thickens to 2-ft. along the perimeter and in a 25-ft. square near the center of the pad where two (2) aircraft anchors are embedded.

Twenty (20) static ground rods, embedded to a depth of 6-ft., are arrayed in four (4) rows of five (5) each on 25-ft. centers in the pad.

Stabilized shoulders of asphaltic concrete, 25-ft. wide, border all but the west side of the pad and also border the turnout from Taxiway "B" which serves as an approach to the pad.

The asphaltic concrete turnout/approach connecting the pad and the taxiway is 75-ft. wide and 250-ft. long.

DRAWINGS: (PACAF) H100/2454 Sheets 1 thru 5

F & S NO. 07034	TITLE Office Space		
USER JTF-8	STRUCTURE FACILITY NO. T-2075 (MAC Terminal)	SCIENTIFIC STATION NO. None	BOD / FOD

FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost (Costs included in F&S No. 07015)				

COMPLETED

DESCRIPTION Approximately 1,450 square feet of space is available in Building T-2075 for the administrative functions of the Transportation Coordination Office (TCO). The building was modified and air conditioned (completed in 1964). Space is allocated as follows:

User	Approximate Area	Use
JTF-8	570 square feet	Badge Office & Badge Shop
TG 8.4	750 square feet	TCO Offices
H&N	130 square feet	Travel Office
TOTAL	1,450 square feet	

DRAWINGS: JS 95-010-A19 and A28, JS 95H-010-A1, JS 95-010-E12, JS 95H-010-E1

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07035	Aircraft Parking Space					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC		No Cost				

COMPLETED

DESCRIPTION Parking space for 38 aircraft is provided in the old Hawaiian National Guard area and along the unused runway 7-25.

DRAWINGS: None Required

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07036	Hangar Space					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	T-2040		None			FOD GO+45
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC		No Cost				

COMPLETED

DESCRIPTION Hangar T-2040 will provide space for three U-2 Aircraft, along with related office and supply areas.

DRAWINGS: None Required

F & S NO.	TITLE					
07038	Maintenance Control Space					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
N/A		No Cost				

COMPLETED

DESCRIPTION Maintenance control space is provided in CAMRON Maintenance Control.

DRAWINGS: None Required.

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO. 07039	TITLE Rehabilitate Building 7 at Bishops Point					
USER TG 8.4	STRUCTURE FACILITY NO. 7		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF/ MILCON CRO 10-64	PRE-GO Prior Cost			65.1	65.1	
AEC	Prior Cost	1.2			1.2	
DPWO	Prior Cost			25.4	25.4	
	TOTAL	1.2		90.5	91.7	

COMPLETED

DESCRIPTION Engineering, procurement and construction for the rehabilitation of Building 7 were done by OICC, Mid Pacific, Pearl Harbor, Hawaii.

Original rehabilitation consisted of repairing and painting interior walls and partitions, replacement of asphalt tile, repair of plumbing, restoration of latrine fixtures on the first floor and replacement of a hot water boiler. (Completed in 1964.)

Additional rehabilitation included partitioning the open bays with partial dividers to provide two-man cubicles for approximately 180 airmen. Venetian blinds or blackout curtains were installed on the windows, and floor runners were installed in the hallways. Each cubicle has been provided with individual clamp type lights and two duplex convenience outlets. Rooms at the end of each main hall have been completely enclosed and provided with doors. Electrical panels were reworked to provide separate circuits for large bays, halls and latrine areas. Each of the large bays was provided with individual master light switches. (Completed in 1965.)

Four commercial automatic clothes washers and three commercial dryers have been procured and installed for use in the building.

DRAWINGS: JS 95-701-A1 thru A3 JS 95-7-A2

F & S NO.	TITLE					
07040	Microbarograph Station - Subtask A103					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TC	None		95-3-15			FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION A microbarograph station will be contained in a TC furnished pickup truck.

F & S NO.	TITLE					
07041	Log Periodic Ionospheric Antennas - Subtask A611					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TC	None		95-3-16			FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
TC	POST-GO			12.0	12.0	
	TOTAL			12.0	12.0	

POST-GO

ENGINEERING None required, other than job site foundation design.

PROCUREMENT To be accomplished by TC.

CONSTRUCTION The antenna foundations for this facility will be designed by TC in the field. TC will furnish and erect three (3) 110-ft. high log periodic ionospheric antennas on sites to be selected Post-GO. Selection of a 390 x 480-ft. transmitting area and a 190 x 370-ft. receiving area will be required. The antennas will be provided with ground planes which will extend into the sea. A TC furnished trailer will also be required. Power will be provided by existing military or local sources. All construction crews will be supplied by TC.

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07043	Riometer Station - Subtask A628					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TC	None		95-3-17			FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
RDT&E	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION No support will be required by the contractor. Test Command will negotiate for their own land and will utilize available commercial power.

HICKAM AFB — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07045	Aircraft Parking Space					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
LASL	None		None			FOD 9-1-71
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	3.3			3.3	
	FY 71			81.0	81.0	
	TOTAL	3.3		81.0	84.3	

PRIOR YEARS

ENGINEERING Held pending revised criteria.

Drawings completed to date are: JS 95-003-E9 thru E11

FY 1971

ENGINEERING To be completed.

PROCUREMENT To be accomplished.

CONSTRUCTION Parking space for one (1) KC-135 aircraft in proximity to the existing NC-135A parking area and trailer park will be provided.

The parking ramp will be provided with one (1) 440 volt receptacle, one (1) 120 volt receptacle, one (1) 208 volt receptacle, a telephone junction box, and combination grounding/tie-down rods. A power supply of approximately 150 kva will be required to meet the parking ramp electrical demands.

HICKAM AFB SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07050	Area Stabilization					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	4.4		106.5	110.9	
	TOTAL	4.4		106.5	110.9	

COMPLETED

DESCRIPTION In 1965 the area south of the diagnostic aircraft parking ramps was paved with 2-in. thick asphaltic concrete following the removal of topsoil and recompaction. Those areas within the trailer park subject to personnel and vehicular traffic were also paved. Inaccessible areas of the trailer park, i.e., beneath the trailers and the docks, were covered with crushed rock for dust control. The area west of the park was also paved.

DRAWINGS: JS 95-002-C32 JS 95-002-C34 thru C36

F & S NO. 07058	TITLE Security Fixes					
USER AEC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost*	0.7			0.7	
	TOTAL	0.7			0.7	

COMPLETED

DESCRIPTION Two (2) guardhouses at the secure trailer compound were relocated to provide the guard with a clear view of the entry/exit gate while performing duties within the guardhouse. Interior communication lines were also relocated. A chain link fence (7-ft. high and approximately 8-ft. long) was installed from the personnel gate to a point beyond each guardhouse door inside the secure area (completed in 1966).

DRAWING: JS 95H-058-A1

*Additional costs are included in F&S No. 05013.

F & S NO.	TITLE					
07060	Machine Shop					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
LRL	None		None			FOD GO+0
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	0.5			0.5	
	FY 71 (For Estimated Costs, see F&S No. 07002A)					
	TOTAL	0.5			0.5	

PRIOR YEARS

ENGINEERING Outline specifications and preliminary drawing JS 95H-058-A17 have been completed.

FY 1971

ENGINEERING To be completed.

PROCUREMENT To be accomplished.

CONSTRUCTION A prefabricated metal building, 24 x 50 x 10-ft. high, will house a machine shop within the expanded HAFB trailer park (see F&S No. 07002A).

The building will have a concrete floor slab. Interior walls will be lined with gypsum board and the ceiling will be acoustical tile. The building will be insulated, air conditoned and dehumidified to maintain a temperature of 72 $\pm$ 4°F and a relative humidity of 50 $\pm$ 4%. An 8 x 9 1/2-ft. equipment door and one personnel door will be provided. A tool crib, compressed air outlets, and 120 and 208 volt power outlets will be provided in the interior. Fluorescent fixtures will illuminate work areas to a level of 100 foot candles. The north end of the building will be floodlighted.

The completed building will be furnished with typical machine shop equipment and spare parts. This equipment will include the following:

Storage cabinets and bench tops
Adjustable workbench stools
Grinder
Contour band saw and filer

Punch press
Drill presses
Milling machine
Lathe
Hand roller
Finger brake
Hand shear
Abrasive finishing machine
Arbor press
Air compressor and air hose reel

Note: Hand-tools are to be provided by LRL.

HICKAM AFB [redacted]

F & S NO.	TITLE				
07061	Simulator Station				
USER	STATION NAME/FACILITY NO.		SCIENTIFIC STATION NO.		BOD
SANDIA EG&G	None		None		FOD 9-1-69
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	2.3		12.8	15.1	
	FY 69	0.9		15.2	16.1	
	TOTAL	3.2		28.0	31.2	

PRIOR YEARS

ENGINEERING Completed.

Drawings: JS 95-071-A3 JS 95H-071-C1 JS 95-071H-E1 95-079-W1

PROCUREMENT Completed.

CONSTRUCTION An earth platform (completed in 1966) elevated above the surrounding terrain and approximately 40 x 100-ft. in plan is used as a simulator facility for calibrating instruments aboard the diagnostic aircraft. The platform was enlarged from its original size of 40 x 40-ft.

The simulator site is approximately 800-ft. south of the diagnostic aircraft parking area. An electromagnetic clear zone and unobstructed line-of-sight is maintained from the site to the aircraft.

The EG&G simulator components are housed in an 8 x 12-ft. shed 8-ft. high. The Sandia facilities are located in the 8 1/2 x 34-ft. trailer, designated A-1, which is shipped to Hickam from Kirtland AFB when required for exercises.

Approximately 50 kw, [redacted] volt, 3 phase power is supplied to the simulator site from the trailer park substation. Direct burial signal cable and telephone cable connects the simulator facilities with the aircraft parking area and with the [redacted] trailer compound.

FY 1969

ENGINEERING Completed.

Drawings: JS 95H-071-C2 JS 95H-071-W1

PROCUREMENT In progress.

CONSTRUCTION The simulator station earth platform will be provided with an access ramp and a driveway to facilitate placing Sandia Trailer A-1 into position. The compacted coral ramp, approximately 35-ft. long and 20-ft. wide, will be constructed from the existing paved road west of the site up to the elevated platform. North of this ramp, a 20-ft. wide, 280-ft. long compacted coral driveway will be constructed. The driveway, which initially will trend eastward from its juncture with the paved road, will turn southward and finally westward in a 40-ft radius curve to join the platform. New communication cabling will also be installed.

F & S NO.	TITLE					
07062	Culvert and Parking Area					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	1.1		54.8	55.9	
	TOTAL	1.1		54.8	55.9	

COMPLETED

DESCRIPTION An open ditch north of the HAFB trailer park was culverted with approximately 850 lin. ft. of asphalt-coated corrugated metal pipe. The 12-gage pipe is elliptical in cross-section with a span of 43-in. and a rise of 27-in.

Parking space for seventy-six vehicles was provided by installing 3600 sq. yds. of 2-in. asphaltic concrete pavement over the backfilled culvert area.

The grade of the paved area ascends from either side of a depressed axis over the centerline of the culvert to meet the grades of Kamakahi Road on the north and the trailer park on the south. Five catch basins along the course of the culvert funnel surface runoff into it. The water is discharged into Kumuauu Canal. (Completed in 1966.)

DRAWINGS: JS 95-002-C39 thru C41

[redacted]

HICKAM AFB — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
07063	Service Building					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC/H&N	3237		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	0.7		29.1	29.8	
	TOTAL	0.7		29.1	29.8	

COMPLETED

DESCRIPTION Building T-3237 was demolished and removed to prepare a site for a service building. Located in a fenced, non-secure area west of the trailer park, present Building 3237 (completed 1966) is structurally identical to its count - part at Barbers Point, Building 1734. Access to the building is provided by a 20-ft. wide double gate in the northern segment of fence.

The steel frame, prefabricated structure has metal siding and roofing and is used as a storage and shipping/receiving center. It is 40 x 50 x 12-ft. high and has a reinforced concrete floor slab. Screened louvers in the siding and three (3) rotary gravity ventilators on the roof ventilate the structure.

A 16 x 13-ft. reinforced concrete ramp on the north side serves as an approach to a pair of center opening sliding doors, each of which is 6 x 12-ft.

Suspended fluorescent fixtures light the interior, and weatherproof fixtures light the exterior doorways. Receptacles of 110 volt capacity are distributed throughout the interior of the building.

Power supplied to the grounded building is 120/208 volt, 3 phase.

DRAWINGS: JS 95-031-A1 JS 95B-031-C1 JS 95H-031-C1
JS 95-031-E1 F 95H-3237-E1

[redacted]

F & S NO.	TITLE					
07068	Radar/DME Facility, Mauna Kapu, Oahu					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
Sandia	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	0.7		3.8	4.5	
	TOTAL	0.7		3.8	4.5	

COMPLETED

DESCRIPTION A 30-ft. (24-ft. ground clearance) instrument pole was erected and fitted with an 8-ft. cross arm and a platform 4-ft. from the top. A wooden structure, 4-ft. square, sitting on a concrete slab was constructed at the base of the pole. Electrical requirements are 120/208 volt, single phase, three wire.

Sandia installed a 2 kw, 28 volt, DC rectifier inside the structure, antennas on each end of the cross arm and a transponder on the platform. This installation has a clear line-of-sight to the center of each NC-135, (aircraft Nos. 369, 370 and 371) grounding circle at Hickam AFB.

DRAWINGS: JS 95H-071-A1 JS 95H-071-E1

NAS BARBERS POINT SCIENTIFIC

F & S NO.	TITLE					
09001	Assembly Building					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	1682		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	79.1	12.3	586.0	677.4	8.2
	TOTAL	79.1	12.3	586.0	677.4	8.2

COMPLETED

DESCRIPTION Assembly Building 1682 (completed in 1964) is centered on a 204 x 216-ft. concrete pad within a lighted maximum secure compound enclosed by double runs of chain link fence on the south, east and west, and by a single run on the north. An electromagnetic clear zone, free of metallic objects, is maintained from antennas mounted on the roof to the CTV building and to the Loading and Maintenance Pad.

Asphalt roads, 15-ft. wide, connect the Assembly Building with the Payload Storage Building (Building 286) to the north and with the Loading and Maintenance Pad to the east.

The 46 x 104-ft. two-story, steel-framed, concrete block structure has equipment shelter lean-tos on its east and west ends of 11 x 21-ft. and 19 x 46-ft. respectively, and a 4 x 8-ft. compressor shelter on its north side. Low-bay areas 14-ft. high flank a central high-bay area 29-ft. high. The building's concrete floor slab can support a four-wheel castored load of 6-tons in the high-bay area where the concrete has a metallic additive.

Siding above the level of the low-bay areas is insulated aluminum; below that, painted concrete block. Roofing is built-up, insulated.

The roof has catwalks, access ladders, and safety railings to accommodate personnel traffic. The low-bay roofs support the building's air conditioning equipment.

The high-bay area is partitioned into east and west rooms of equal size with electrically operated roll up doors, 15-ft. wide by 16-ft. high, at the ends of each room. The doors are safety interlocked to prevent motion unless the door switch is continuously depressed and are wired to an alarm which sounds during operation.

Important rooms and their dimensions (wall-to-wall) are:

Room No.	Name	Size (ft)
102	Office	10 x 16
103	Office	10 x 12
107	Latrine	9 x 11
108	LASL Hazards Control	11 x 17
109	East High-Bay	26 x 45
110	West High-Bay	26 x 45
111	T. M. & Electrical Stores	14 1/2 x 22
112	Tool Crib & Shop	16 x 22
113	LRL Assembly Room	14 1/2 x 22
114	LRL Office	8 x 10
115	LASL Office	8 x 10

Asphalt tile flooring, gypsum board walls, and 9-ft. high suspended acoustical ceilings are typical except in the high-bays which are unfinished on the interior, and in the latrine which has ceramic tile flooring. Drop-out panels in the ceiling allow access to ductwork above.

Electromechanical locks to prevent unauthorized opening of the doors are controlled from a master panel off the east high-bay. An ultrasonic intrusion alarm system, security screens in the high-bays, and a guarded entrance on the north side are additional security provisions.

Exterior doors are equipped with either panic hardware or "break-glass" lock releases to permit emergency evacuation in the event of accidental contamination of the building's atmosphere by radioactive gas. Sensing instruments detect the toxic environment and automatically actuate four (4) emergency exhaust fans capable of changing the building's entire air volume once every minute.

The high-bays have three (3) 480-volt powered bridge cranes with 20-ft. hook lift heights and variable speed hoists. The single crane in the east high-bay has hoists of 7 1/2 and 25 tons. The west high bay has two (2) cranes: one with hoists of 3 and 15-tons and one with hoists of 3 and 7 1/2-tons. Runways extend the full 46-ft. building width.

Pendant push-button controls allow operation of the cranes from floor level.

The building's heat pump system maintains a nominal temperature of 72°F. Humidity is controlled to 50 $\pm$ 5%.

Suspended fluorescent fixtures provide 100 foot candles at three feet above interior floor level. Roof-mounted, weather-proof fixtures illuminate the area between the building and the perimeter security fence to 0.02 foot candles at ground level.

The compressor supplies filtered air at 100 psi to hoses on wall-mounted reels in the high-bays.

A fire-alarm system, intercom system, and telephone service to the Loading and Maintenance Pad are provided.

Building 1682 is grounded and is protected with lightning rods. The high-bay rooms have static grounding points.

Substation 1684, equipped with a 750 kva, 277/480-4160 volt, 3 phase transformer, supplies power to the Assembly Building. An additional transformer, 112 1/2 kva, 120/208-480 volt, is located within the building.

A 30 kw diesel generator in the west equipment shelter functions as a backup source of power. An automatic transfer switch is provided.

DRAWINGS:

F 95B-080-E1, E5 and E6
F 95-1682-A1 thru A8
F 95-1682-C1 and C2
F 95-1682-E1 thru E11 and E14
F 95-1682-S1 thru S4
F 95-1682-W7 thru W12
JS 95B-1682-A2 and A3
JS 95B-1682-E2 and E3
JS 95B-1682-M1 thru M3
JS 95B-1682-S1 and S3
JS 95B-032-A9 and A10
JS 95B-075-C2
95B-077-W1 and W2
JS 95-1682-A1.A
JS 95-1682-A1.B
JS 95-1682-A2 and A3
JS 95-1682-C1
JS 95-1682-E1
JS 95-1682-W1
JS 95-032-M2
JS 95-032-A6
95-032-W2

F & S NO. 09002	TITLE Loading and Maintenance Area Facilities				
USER SANDIA & TG 8.4	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD / FOD
FUNDING AGENCY AEC	($000)	ENGR	PROC	CONST	TOTAL	FURN
	PRE-GO Prior Cost	13.4	43.9	763.6	820.9	
	TOTAL	13.4	43.9	763.6	820.9	

COMPLETED

DESCRIPTION The B-52 loading and maintenance pad, an irregularly shaped area of approximately 21,400 square yards (4.4 acres) is located at the southwest end of Taxiway No. 3. The longest dimensions of the pad are 545-ft. (northwest-southeast) and 580-ft. (northeast-southwest). (Completed in 1964.)

The pad consists of 25-ft. square reinforced concrete panels bounded by contraction joints with dowels bonding adjacent panels. Panel thickness is 12-in. with the perimeter panels having an edge thickness of 15-in. Each panel has an aircraft tie-down ring embedded in its center.

Two (2) 480-volt receptacles are provided in the pad's interior. Flush-mounted, load-bearing taxiway lights, 120-volt and 208-volt receptacles are distributed along the perimeter of the pad. Ground rods and ground wells ground the entire pad. Power supply originates at a Power Shelter (Building 1685) to the northwest of the pad which contains two (2) 75 kva, 480-120/240 volt transformers and two (2) power panels. The power shelter is a 12 x 8 x 8-ft. high wood-framed, concrete-floored structure with galvanized roofing and siding.

A 1470-ft. long asphaltic concrete apron, 30-ft. wide, encircles the perimeter of the pad and a 590-ft. long asphaltic concrete road, 15-ft. wide, extends west from the pad to Coral Sea Avenue. Areas north and west of the pad have been paved with 1 1/2-in. thick asphaltic concrete. Approximate total area paved is 19,500 square yards including a 45 x 52-ft. AGE parking ramp between the MSK Building and the pad. In addition, there is a 40-car (61 x 75-ft.) parking lot east of the Assembly Building and a 15-car (26 x 125-ft.) parking lot south of the MSK Building.

A 10-ft. wide swale and six (6) dry wells along the southwest side of the pad collect surface runoff.

A maintenance shelter, 15 x 30 x 10-ft. high, is located at the north end of the AGE parking ramp. This wood-framed shelter has corrugated cement asbestos roofing and siding and is situated on a concrete slab. The interior is lighted with two (2) fluorescent fixtures.

DRAWINGS:

F 95B-003-C1 and C2
F 95B-003-E1 thru E3
F 95B-080-E1 and E5
JS 95-003-C8 thru C14
F 95-1682-E12 and E13

NAS BARBERS POINT SCIENTIFIC

F & S NO. 09003	TITLE Secure Trailer Compound and Trailers				
USER JTF	STRUCTURE FACILITY NO. See Text		SCIENTIFIC STATION NO. None		BOD / FOD

FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	31.4	5.8	336.5	373.7	18.7
	FY-71	1.3	6.0	6.0	13.3	
	SUBTOTAL	32.7	11.8	342.5	387.0	18.7
	POST-GO					
	Est. 3/68			0.4	0.4	
	TOTAL	32.7	11.8	342.9	387.4	18.7

PRIOR YEARS

ENGINEERING Completed.

Drawings:

JS 95B-058.1-A/E
JS 95B-058.1-AT
JS 95B-058.1-A1 thru A6
JS 95B-058-A2 and A3
JS 95B-058-A5
JS 95B-058-A7 thru A10
JS 95B-058-A12 thru A15
95-058-A24
JS 95-058-A28 thru A30
JS 95-058-A35
JS 95-058-E12
JS 95-058-M1
JS 95B-058.1-E1 thru E5
F 95B-058-A1 thru A2
F 95B-058-C1
F 95B-058-E2 and E3
F 95B-058-S1
JS 95B-058-C2 and C3
JS 95B-058-C5 thru C10
JS 95B-058-M1 thru M5
JS 95-058.2-A1
JS 95-058.2-E1
JS 95B-019-E1

PROCUREMENT Completed.

CONSTRUCTION The secure trailer compound is a fenced 3.6 acre area east of the Transhipment Magazine complex. Concrete barricades east of the magazines protect the compound. (Completed in 1964) Prior to their consolidation into one compound there were two separate trailer compounds: a secure trailer compound and a technical trailer park (see "Modifications" below).

The trailer docks are, however, still two separate entities. The "U" shaped Dock 1686 occupies the western portion of the compound and the linear-shaped Dock 1687 the eastern portion. The elevated, 10-ft. wide, wooden walkways of the docks are roofed with corrugated aluminum. A grounded, chain link fence encloses the compound. Perimeter lighting is provided. A freshwater

line and sanitary sewer service the compound.

Substation No. 1689, north of Dock 1686, serves the compound. It has three (3) 100 kva, 120/240-4160 volt, single phase transformers which are wired so that 120/208 volt, 60 cycle, 3 phase power is provided the trailers and area lights through two (2) power panels. Incoming power to the substation is 5 kv from the Naval Air Station's power plant. A 40 kw diesel generator, housed in a wood framed shelter, acts as a backup source of power in the event of failure in the commercial system. Transfer of power is automatic.

Access to the compound is through a 4-ft. wide personnel gate and is controlled from a guardhouse adjacent to the gate. An asphaltic concrete parking lot capable of accommodating 53 vehicles lies across the road north of the compound.

MODIFICATIONS

A. The wooden fence on the south side of the technical trailer park was replaced with approximately 200-lin. ft. of 8-ft. high chain link fence with barbed wire outriggers. The fence on the south and east sides of the Companion Test Vehicle (CTV) Building was relocated to provide a 30-ft. clearance from the building. In addition, the fence between the technical trailer park and the secure trailer compound was removed. Security lighting around the trailer compound was provided. (Completed in 1966).

Engineering effort was expended and a construction cost estimate prepared for paving the compound with asphaltic concrete. Paving installed to date is a portion around the Guardhouse and a 4-ft. wide segment from Dock 1686 to the road leading to the CTV Building. (Completed in 1966).

A summary of all trailers now in the compound, or at locations in close proximity to it, is set forth below (for trailer location see Appendix A):

User & Trailer #	Use/Name	Property # or License #	Furnished by AEC	Furnished by USER	Comments
LASL 1	Office	11007	X		Double Trailer
LASL 2	Technical	11008	X		
LASL 3	Laboratory	11006	X		
LASL J-16-4	Technical	E-28073		X	
Sandia 1	Office	11011	X		
Sandia 2	Office and Lab.	11010	X		
Sandia 3	Office	11013	X		
Sandia 4	Office	11014	X		
Sandia L-18	Technical Photo	E-26254		X	

User & Trailer #	Use/Name	Property # or License #	Furnished by AEC	Furnished by USER	Comments
Sandia 7-11	Duty Officer's	S/N Z-58926	X		
Sandia B-41	Technical	E-25336		X	
Sandia B-39	Technical	E-25335		X	
Sandia E-22	Technical	E-21613		X	Located adjacent to Ass'y Building
Sandia H-10	Technical	E-26819		X	Moved to loading pa during exercises.
LRL 1	Office	11003	X		Double trailer.
LRL 2	Office	11004	X		
LRL 5	Hazards Control	11020	X		Located west of Ass'y Building
TG 8.4-3	Office	11005	X		
TG 8.4-4	Operations MCC			X	Brought in from Hick-
TG 8.4-5	Operations MCC			X	am AFB for Exercis s
TG 8.4-6	Operations MCC			X	
TG 8.4-9	Instrument repair & Photo Process'g	11015	X		
TG 8.4 (No#)	Maint. Crew	11018	X		Located west of loading pad.
TG 8.4 (No#)	Maint. Crew	11019	X		Located west of loading pad.
JTF	Joint Conference	11001	X		Double trailer.
JTF	Joint Conference	11002	X		Double trailer.
JTF	Latrine	11009	X		
JTF	Bunk	11012	X		
JTF	Communications	2882	X		
JTF	Telephone	12875	X		
JTF	Latrine	11017	X		Located west of loading pad.
JTF-8	Security Office	11016	X		Located west of compound.
AEC/H&N	Field Office	11000	X		Located south of AEC/H&N service building.

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION An AEC furnished bunk trailer will be placed at Dock 1686 for use by Sandia.

POST-GO

ENGINEERING None required.

PROCUREMENT To be accomplished by LRL.

CONSTRUCTION LRL Technical Trailer No. 6 will be placed west of the Assembly Building (Building 1682).

NAS BARBERS POINT SCIENTIFIC

F & S NO.	TITLE		
09006	Payload Storage Building		
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.	BOD
SANDIA	286	None	FOD

FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO				

Existing Facility; No Costs Incurred.

COMPLETED

DESCRIPTION Existing Building 286, 40 x 126-ft. in plan, is a multi-cubicle payload storage magazine. Each of the building's 25 cubicles have 12-in. thick reinforced concrete walls. A 3-ft. thick reinforced concrete wall extends longitudinally along the structure's centerline.

There are four (4) 1 1/2-ton manually operated chain hoists provided in the building.

Access to the facility, which is surrounded by a 7-ft. high chain link security fence, is by a 14-ft. wide gate with electromechanically operated locks.

A 10-ft. high stabilized coral fill embankment abuts the building's south end, and a 12-ft. high barricade 30-ft. to the east extends more than the full length of the building. The 150-ft. long barricade consists of two separated reinforced concrete walls keyed into a common footing. The space between the walls is filled with sand.

Cells 14 and 15 are used for storage of backup rocket motors for Johnston Atoll.

DRAWINGS (DPWO): 802345 802349 802350 802353

NAS BARBERS POINT SCIENTIFIC

F & S NO.	TITLE					
09009	Additional Power Requirement					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost			55.2	55.2	
	TOTAL			55.2	55.2	

COMPLETED

DESCRIPTION New cable runs and power feeders were installed to Assembly Building 1682, and to the Trailer Compound. (Completed in 1964)

DRAWINGS: F 95-1682-E3 and E10

NAS BARBERS POINT SCIENTIFIC

F & S NO. 09010	TITLE Transshipment Magazines A (Building 1711) and B (Building 1712)				
USER SANDIA	STRUCTURE FACILITY NO. 1711 & 1712	SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	1.4	8.6	211.9	221.9	
	TOTAL	1.4	8.6	211.9	221.9	

COMPLETED

DESCRIPTION Transshipment magazines (Igloos) A & B are located in a fenced area southeast of the Payload Storage Building. The earth-covered, quonset-type structures were designed and constructed by the DPWO in 1965.

The igloos are strengthened with a floor slab and walls of 15-in. thick reinforced concrete. Measuring 27 x 32-ft. in plan, the magazines have a maximum ceiling height of 13-ft.

The two magazines are situated side-by-side on 50-ft. centers and share a common earth-fill blanket 150 x 70-ft. in plan which covers all but one end of each structure. Depth of the earthen blanket over the roof is 2-ft.

A 10-ft. high by 12-ft. wide doorway provides the only access to each igloo. Louvered intakes adjacent to the doorway ventilate each structure.

Air conditioning and dehumidification were provided as a result of a modification completed in 1966. An exterior unit, shared by the igloos, maintains a relative humidity of less than 50% and a temperature of $74^{\circ}F \pm 6^{\circ}$.

A 90-ft. long, 14-ft. high sand-filled barricade with 16-in. thick reinforced concrete walls lies 90-ft. east of the magazines.

Two similar magazines adjacent to these are to be constructed in the future.

DRAWINGS: (DPWO) 1018228 (H&N) JS 95B-092-M1
1038743 thru 1038747

NAS BARBERS POINT SCIENTIFIC

F & S NO.	TITLE					
09013	Weapons Handling Equipment (WHE) Building					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	1732		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	4.5	15.0	22.2	41.7	
	TOTAL	4.5	15.0	22.2	41.7	

COMPLETED

DESCRIPTION The Weapons Handling Equipment Building (completed in 1966) is located outside the southwest corner of the secure trailer compound. The pre-fabricated steel-framed building is 40 x 80 x 16-ft. high and is roofed and sided with corrugated aluminum. The concrete floor slab of the building can support a load of 2-tons on four wheels.

The entire building is used for storage except for two 10 x 12 x 8-ft. high insulated offices in the southwest corner. Each office has a wall-mounted air conditioning unit; the warehouse area is not air conditioned. Ventilation is provided by louvers in the siding and by two roof-mounted rotary gravity ventilators.

Eight skylights and two windows (one in each office) admit natural light. Fluorescent fixtures light the interior, while weatherproof incandescent fixtures light the exterior doorways.

Receptacles of 110 volt capacity are provided. Power supplied is 120/208 volt, 3 phase, 60 cycle, from Substation No. 1689 in the secure trailer compound.

Two truck doorways consisting of a pair of 8 x 15-ft. high, center opening, sliding doors are provided on the east and west side of the building. Sloping concrete ramps, 10 x 18-ft. serve as approach slabs to the doors.

DRAWINGS: JS 95-037-A3 and A5 JS 95-037-S1
JS 95-037-E4 JS 95B-037-A3

NAS BARBERS POINT SCIENTIFIC

F & S NO.	TITLE				
09014	Mission Support Kit (MSK) Storage Building				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
TG 8.4	1730		None		FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	3.6	11.8	32.5	47.9	
	TOTAL	3.6	11.8	32.5	47.9	

COMPLETED

DESCRIPTION The MSK Building (completed in 1965) is a warehouse located south of Payload Storage Building 286 and west of the Loading and Maintenance Pad.

The steel framed structure has corrugated aluminum roofing and siding, a concrete floor slab and is 40 x 100 x 18-ft. high. The building has skylights, roof mounted gravity rotary ventilators and louvered siding.

Double sliding doors, each door 8 x 15-ft., are provided on the east and west ends of the building, and a personnel door is located in the southeast corner. The sliding doors have 20 x 18-ft. concrete approach ramps capable of supporting forklift traffic.

Two (2) insulated 10 x 12-ft. offices, each with a window mounted air conditioning unit, are located in the southwest corner of the building. Ceiling mounted fluorescent fixtures illuminate the offices to 50 foot-candles at desk level, and the warehouse area is illuminated to 15 foot-candles by suspended fluorescent fixtures. Convenience outlets (110-volt) are provided throughout. Incandescent, weatherproof fixtures light the exterior doorways.

Power supplied is 120/208 volt, 3 phase, 60 cycle through an underground conduit originating at a power panel adjacent to the Maintenance Shelter (Building 1731). An embedded telephone cable from a pole 170-ft. to the east serves the building.

DRAWINGS: JS 95-037-A4, JS 95-037-E1, JS 95-037-S2, JS 95B-037-A1 and A2, JS 95B-075-C2, JS 95B-050-W3, F 95B-003-E1, 95B-077-W1

NAS BARBERS POINT SCIENTIFIC

F & S NO.	TITLE					
09020	Companion Test Vehicle (CTV) Building					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
SANDIA	1735		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	5.9		50.9	56.8	
	TOTAL	5.9		50.9	56.8	

COMPLETED

DESCRIPTION The Companion Test Vehicle (CTV) Building (completedin 1965) is located in the southeast corner of the Secure Trailer Compound. A 20-ft. wide asphaltic concrete access road extends from a 20-ft. wide gate in the north fence of the compound to the building.

The steel framed, 30 x 50-ft. building, with a clear height of 12-ft. has corrugated aluminum roofing and siding. A 15 x 50-ft. concrete ramp adjoins the west side of the building, and a 15 x 30 x 8-ft. high equipment shelter for storing dollies and materials handling equipment during operations is affixed to the north side.

A fresh water line and a sewer are provided. An underground electric conduit from a power panel at the west end of Dock 1687 provides 120/208-volt, 3-phase power.

The floor is a reinforced concrete slab designed to support castored loads of 1000 lbs. per wheel on 3-ft. centers.

Illumination is supplied by four (4) plastic skylights and by suspended fluorescent fixtures which provide 50 foot-candles at desk level. Two (2) exterior floodlights are provided for the concrete ramp. The only fixed partitions occur around the latrine in the northeast corner of the building, but 8-ft. high curtains on aluminum traverse tracks can be closed to partition two (2) 12 x 16-ft. areas in the south portion of the building.

The building is insulated and air conditioned to maintain a temperature of 75°F ($\pm 6^{\circ}$) and a relative humidity of 50%.

A 2-ton monorail with a manually operated chain hoist and a hook lift height of 8-ft. runs the full 50-ft. length of the building.

Nine (9) Sandia-furnished antennas are mounted on a platform atop the roof at the south end of the building; and an electromagnetic clearance zone, free of

metallic objects, is provided between these antennas, Building 1682, the Loading and Maintenance Pad and Tower No. 202 which is adjacent to Trailer Dock 1687. A ladder with safety cage on the south side of the building provides acces to the antenna platform.

DRAWINGS:

JS 95-032-A8	JS 95-032-C1	JS 95-032-E12	JS 95-032-M1
JS 95-058-A23	JS 95-071-S1	JS 95B-058-A11	JS 95B-075-C1
	JS 95B-086-W1	JS 95B-050-W2	

NAS BARBERS POINT SCIENTIFIC

F & S NO.	TITLE				
09023	Staging Equipment Storage (SES) Building				
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.			BOD
SANDIA	1733	None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	3.1		73.0	76.1	
	TOTAL	3.1		73.0	76.1	

COMPLETED

DESCRIPTION The Staging Equipment Storage Building (completed in 1966) is a 40 x 98-ft. warehouse located north of the secure trailer compound. The steel framed structure has aluminum siding and roofing and a concrete floor slab. Eave height is 14-ft.

Two (2) sliding doors at the south end of the building provide a 12 x 12-ft. opening. A concrete ramp the full width of the building and 15-ft. long serves as an approach to the doors. Four (4) personnel doors are provided.

Ventilation is provided by fixed louvers and three (3) roof-mounted gravity ventilators.

A 9-ft. high, 1080 square feet, wood-framed, insulated room at the north end of the building is air conditioned and dehumidified for the storage of electronic equipment.

The remainder of the building is used for normal warehouse storage. This portion is served by a separate air conditioning unit but is not dehumidified. Pallet racks and heavy-duty shelving are provided. An office, toilet, and an 8 x 8 x 7 1/2-ft. high walk-in refrigerator are located in the northeast corner of this portion.

DRAWINGS: JS 95-031-A2 and A3 JS 95B-031-C1, E1 and M1
F 95B-080-E2

NAS BARBERS POINT SUPPORT

F & S NO.	TITLE		
10005	Rehabilitate EM Barracks		
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.	BOD
TG 8.4	45	None	FOD

FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON CRO 10-64	Costs included in F&S No. 07039				

COMPLETED

DESCRIPTION EM Barracks No. 45 was rehabilitated for living space. (Completed in 1964)

DRAWINGS: None required.

NAS BARBERS POINT SUPPORT

F & S NO.	TITLE					
10007	Shop Space					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	None		None			FOD
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN	
N/A	No Cost					

COMPLETED

DESCRIPTION The existing Navy Shops are utilized by TG 8.4.

DRAWINGS: None required.

NAS BARBERS POINT SUPPORT

F & S NO.	TITLE					
10015	Area Security Modifications					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	Various; see Text		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	1.2		3.4	4.6	
	TOTAL	1.2		3.4	4.6	

COMPLETED

DESCRIPTION

Control Center (Building 947)

The Control Center atop Building 947 is an air conditioned 10 x 10 x 8-ft. high concrete block structure with concrete floor and roof slabs and an insulated built-up roof. Access is via a ladder from ground level up through a trapdoor in the floor. Bulletproof windows and gunports are provided on all sides. (Completed in 1964.)

Surveillance of the entire assembly area is possible from the Control Center except for a sector to the southwest which is obstructed by Assembly Building 1682. (Costs for this facility are included in F&S No. 09001--Assembly Building).

Guardhouses 1683 and 1688

New counters and tables installed in Guardhouses 1683 (east of the Assembly Building) and 1688 (in the Secure Trailer Compound) were arranged so the guard could face the entry gate at all times while performing his duties. A new glass-louvered door and security corridor were also installed at each guardhouse. The corridors, of 4-ft. high chain link fence extending from the gates to the guardhouses, prevent unauthorized wandering in the area by channeling personnel directly to the guardhouses. (The costs for Guardhouse 1688 are included under F&S No. 05013).

Additional Guardhouse

A 6 x 6-ft. skid-mounted guardhouse was placed at the southeast corner of the road intersection west of the Secure Trailer Compound. (Completed in 1966.)

Assembly Building Alarm System

The Assembly Building intrusion alarm system was checked out and calibrated.

DRAWINGS:

F 95-947-A1 thru A3
F 95-947-E1
F 95-1682-A8
F 95B-058-A2
JS 95-1682-A1
JS 95B-058-A3

NAS BARBERS POINT SUPPORT

F & S NO.	TITLE					
10016	Additional JP-4 Refueling Facilities					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	1.0		58.4	59.4	
	TOTAL	1.0		58.4	59.4	

COMPLETED

DESCRIPTION Additional JP-4 refueling facilities were provided by converting an existing 13,500 barrel avgas above ground tank (JP-5) to a JP-4 settling tank. (Completed in 1965).

DRAWINGS: By OICC MIDPAC

NAS BARBERS POINT SUPPORT

F & S NO.	TITLE					
10018	Aircraft Security Screens and Rope Stanchions					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.4	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	0.2		5.0	5.2	
	TOTAL	0.2		5.0	5.2	

COMPLETED

DESCRIPTION Sixteen (16) flashback security screens, wood-framed and plywood-faced, are used around the B-52 aircraft during loading operations. Concrete filled drums anchor the 10 x 12-ft. screens to prevent their being turned over by the wind.

Twenty-four (24) rope stanchions for loading and maintenance pad security control are provided. Each stanchion consists of a 1/2-in. diameter rod 4-ft. high affixed to a 1-ft. square base and has an open loop at the upper end through which manila rope is threaded.

The screens and stanchions were completed in 1966.

DRAWING: JS 95-056-A3

F & S NO.	TITLE					
10019	Service Building					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC/H&N	1734		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	0.6		19.8	20.4	
	TOTAL	0.6		19.8	20.4	

COMPLETED

DESCRIPTION This steel framed, prefabricated, structure (completed in 1966) located north of the secure trailer compound has metal siding and roofing and is used as a storage and shipping/receiving center. It is 40 x 50 x 12-ft. high and has a reinforced concrete floor slab. Screened louvers in the siding and three (3) rotary gravity ventilators on the roof ventilate the structure.

A 16 x 13-ft. reinforced concrete ramp on the north side serves as an approach to a pair of center opening sliding doors, each of which is 6 x 12-ft.

Suspended fluorescent fixtures light the interior, and weatherproof fixtures light the exterior doorways. Receptacles of 110 volt capacity are distributed throughout the interior of the building.

Power supplied is 120/208 volt, 3 phase, via an underground conduit from an electrical vault adjacent to the southwest corner of the building. The building is grounded.

DRAWINGS: JS 95-031-A1 JS 95-031-E1 JS-95B-031-C1

NAS BARBERS POINT SUPPORT

F & S NO.	TITLE				
10020	Area Drainage and Paving Modifications				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF	None		None		FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	2.7		51.2	53.9	
	TOTAL	2.7		51.2	53.9	

COMPLETED

DESCRIPTION Modifications intended to improve drainage and travel conditions were completed in 1966 as follows:

A. Drainage Improvement

Two (2) dry wells were added to the four (4) existing ones in the swale along the southwest perimeter of the loading and maintenance pad.

B. Asphalt Paving

1. A 100 x 30-ft. area north of the MSK Building was paved.
2. A 240 x 70-ft. area west of Assembly Building 1682 and an irregularly shaped area, approximately 180 x 570-ft. north of it, were paved.
3. A 53-car paved parking lot north of the secure trailer compound was constructed.
4. Minor patch paving was done at various locations.

DRAWINGS: JS 95B-075-C2 and C3

NAS BARBERS POINT SUPPORT

F & S NO.	TITLE					
10021	Roads to Companion Test Vehicle (CTV) and Weapons Handling Equipment (WHE) Buildings					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
SANDIA/ TG 8.4	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	0.1		4.2	4.3	
	TOTAL	0.1		4.2	4.3	

COMPLETED

DESCRIPTION A 20-ft. wide, 315-ft. long asphalt road extends from outside the secure trailer compound to the entrance of the CTV Building.

From the east vehicle door of the WHE Building, a 20-ft. wide, 165-ft. asphalt road extends along the south side of the building and connects with the approach road to the west vehicle door of the building. Both roads were installed in 1966.

DRAWING: JS 95B-075-C1

F & S NO.	TITLE					
11003	HRT Tracking Station					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
SANDIA	None		97-4-59			FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost			36.0	*36.0	
	POST-GO		TO BE DETERMINED			
	TOTAL			36.0	36.0	

PRIOR YEARS

ENGINEERING Completed.

Drawings:

F 97-058-S1	F 97-666-A1	JS 97-086C-S1
F 97-058-S11 thru S15	F 97-079-W2	JS 97-3224C-A9
97-3224B-E8	F 97-079-W28	JS 97-3224C-C12

PROCUREMENT Completed.

CONSTRUCTION The HRT Tracking facility (completed in 1965) is located at the northeast end of the trailer park. It consists of two (2) trailers, a roofed trailer dock, an amplidyne shelter, and three (3) antennas. A protective revetment borders the northern side of the facility. Geodesic domes enclose the antennas.

The trailer dock, elevated 4-ft. above grade, is a reinforced concrete slab 6-ft. wide by 75-ft. 8-in. long. A wooden stairway is located at its eastern end. The dock roof, which extends beyond the eastern terminus of the dock, is 17-ft. high, and 90-ft. long. Steel plate roofing protects the manned dock.

The three (3) antennas spaced on 15-ft. centers, are supported by steel towers which bear on reinforced concrete piers. The towers are 7 1/2-ft. square in plan and are 14-ft. high. A plywood platform 10-ft. wide and 55-ft. long is provided at the top of the towers. The platform is enclosed with a 3 1/2-ft. high wooden handrailing. An 8 x 35-ft. trailer and a 10 x 40-ft. trailer are located between the trailer dock and the towers.

The amplidyne shelter located in the middle of the tower complex is a 7 x 6-ft. wood-frame, plywood sided structure, 7 1/2-ft. high on a reinforced concrete slab. It is lighted and dehumidified. There are two underground runs from receptacles at the trailer dock each supplying 120/208 volt, 3 phase power to the amplidyne shelter. Signal cable from the cable termination shelter is laid in cable trays.

POST-GO

ENGINEERING Completed.

PROCUREMENT Completed.

CONSTRUCTION Construction includes the erection of three (3) additional tracking antennas; the emplacement of three (3) additional Sandia furnished trailers (south of the trailer dock); extension of the elevated platform; and attendant electrical and communications work.

*Engineering's estimated distribution of cost from I. D. No. 13921.

KAUAI, AEC-TRF — SCIENTIFIC

F & S NO.	TITLE					
11006	Igniter Checkout Building					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
SANDIA	659		None			FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost			12.0	*12.0	
	TOTAL			12.0	12.0	

COMPLETED

This facility (completed in 1965) is used for checking out rocket motor igniters. Located west of Rocket Assembly Building 661, Building 659 is a prefabricated RF shielded enclosure, the interior of which has been modified by the installation of plywood and masonite walls and a plywood ceiling. The 9 x 9 x 8 1/2-ft. building is insulated and air conditioned. The function of the RF shielding is to prevent accidental ignition of the igniter test samples.

The test chamber, in which the igniter specimens are placed, consists of a 6-ft. length of 10-in. diameter galvanized pipe. The pipe, mounted horizontally on a metal frame, enters the building from the outside. The end of the pipe inside the building is provided with a hinged plate which is closed during testing. The end of the pipe outside the building is fitted with a 90° elbow which opens downward to direct the blast, resulting from ignition, against the concrete slab on which the building rests.

A workbench and storage cabinet are provided within the building. Lighting over the workbench is 50-ft. candles. A 115 volt, single phase weatherproof receptacle is located outside the building, adjacent to the door.

DRAWINGS: F 97-027-E4, F 97-080-E1, 97-030-W1 and W2, JS 97-3224B-W2

*Engineering's estimated distribution of cost from I. D. No. 13921.

KAUAI SCIENTIFIC

F & S NO.	TITLE				
11007	Rocket Motor Storage Caves				
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.			BOD
SANDIA	7 and 10	None			FOD
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO				
	Prior Cost		*15.0	15.0	
	TOTAL		15.0	15.0	

COMPLETED

DESCRIPTION Existing caves 7 and 10 were modified to serve as a storage facility for approximately 100 rocket motors. (Completed in 1964.) The caves, separated a distance of 1/4 mile, are located in a steep volcanic bluff about three (3) miles from the AEC-TRF at Barking Sands.

The nearly identical caves consist of two (2) rooms which are offset with respect to each other. The rooms are a 6 x 47-ft. entry room and a 15 x 47-ft. storage room. The height of each room is approximately 11-ft. A 6-ft. wide, 12-ft. long corridor connects these rooms.

A pair of steel doors, set in a concrete wall, provide a 9 x 9-ft. entrance. The walls and ceilings of the caves are covered with gunite, and the floors are concrete. The corners of the walls at the offset were removed and the walls were resurfaced to provide more handling and storage space for larger rocket motors.

Each cave is ventilated by a fan mounted in the storage room. The intake for the fan is a 12-in. diameter pipe suspended from the ceiling. Monorails, suspended from the ceiling, extend the full length of the caves. The caves are provided with explosion proof wiring and lighting.

DRAWING: JS 97-090-C1

*Engineering's estimated distribution of costs from I. D. No. 13921.

F & S NO. 11008	TITLE Primary Photo and Observation Station - Subtasks A802 & A804				
USER TC	STRUCTURE FACILITY NO. None	SCIENTIFIC STATION NO. See Text			BOD FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
TC	PRE-GO Prior Cost	4.5			4.5	
	POST-GO* Est. 8/68	16.1		259.1	275.2	
	TOTAL	20.6		259.1	279.7	

PRIOR YEARS

ENGINEERING To be completed. Preliminary drawings completed to date are as follows:

JS 97-071-C2 JS 97-071-A1 thru A4 JS 97-071-E1 thru E3

POST-GO

ENGINEERING To be completed.

PROCUREMENT To be accomplished.

CONSTRUCTION This facility will be located on Niu Ridge and requires an area of approximately 100 x 120-ft. It will consist of a camera building, observation building, quarters tent, two (2) generators, generator shelter, a fuel rack, and the following TC furnished items: an 8 x 24-ft. photo trailer, an 8 x 24-ft. electrical trailer, a water trailer, an 8 x 8-ft. storage transportainer and a chemical toilet.

Camera Building (Scientific Station No. 97-3-1) A 20 x 32 x 7 1/2-ft. high, wood framed camera building with plywood siding and roofing and a concrete floor slab will be partitioned into two (2) camera rooms, a battery room, an instrument and maintenance room, and an electronics room.

By opening two (2) sets of folding doors on the building's west wall, it will be possible to obtain a 14 x 30-ft. unobstructed view of the outdoors. Each camera room will be provided with a covered hatch in the ceiling which, upon opening, will permit viewing the zenith.

*Post-GO estimate includes cost of constructing an all weather access road to the site.

The interior will be lighted and will be furnished with workbenches and shelving. Exterior lighting will also be provided. The instrument and maintenance room and the electronics room will be air conditioned and dehumidified.

The west and east sides of the building will be flanked by 4-ft. wide concrete sidewalks. Wooden walkways will be situated on the north and south sides and will also extend to the Observation Building, 18-ft. to the south.

Observation Building (Scientific Station No. 97-3-2) Situated to the south of the camera building, with the electrical trailer intervening, will be the 20 x 30 x 7 1/2-ft. high observation building. This wood-framed, plywood sided structure will have a concrete floor slab.

A 6-ft. wide doorway will provide access to the interior, which will consist of one room furnished with workbenches and cabinets. Interior and exterior lighting will be provided. Although no windows will be provided, four (4) sliding plywood panels on the west side will permit a 4 x 20-ft. opening. A 28 volt DC rectifier and a 12.5 kw, 400 cycle motor generator set will supply power for instruments.

Quarters Tent A 16 x 32-ft. quarters tent with a ridge height of 10-ft. will be located northeast of the camera building. Fly screens will encircle the tent which will be wood framed with a concrete floor slab. The interior will be lighted and will be furnished with eight (8) steel bunk beds, eight (8) cabinet/wardrobes, a table and chairs.

Generator Shelter A 14 x 16 x 8-ft. high generator shelter, to be located south of the quarters tent, will house two 56 kw diesel generators. The wood framed shelter will have plywood siding and roofing, a concrete floor slab, and a 5 x 7-ft. doorway. Wood louvers in the siding will provide ventilation.

A rack for supporting drums of fuel oil for the generators will be located south of the shelter. Fuel piped through the generators will pass through a gravity pollution separator. The generators will provide 120/208 volt, 60 cycle, 3 phase power to the camera building, observation building, quarters tent and trailers.

F & S NO.	TITLE					
11010	Launchers					
USER	STRUCTURE, FACILITY NO.		SCIENTIFIC STATION NO.			BOD
Sandia	See Text		See Vol. III			FODGO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	2.0		102.0	104.0	
	POST-GO					
	Estimate		TO BE DETERMINED			
	TOTAL	2.0		102.0	104.0	

PRIOR YEARS

ENGINEERING Completed.

Drawings:			
	97-3224B-C2 and C3	JS 97-002-C1 and C2	F 97-002-C1
	97-3224B-W2	JS 97-3224C-E7	F 97-027-E2 and E4
	97-3225-S1	JS 97-3224C-C1 thru C5	F 97-080-E4
	97-080-E1	JS 97-3251A-E2 and E3	F 97-086-C1 thru C4
		F 97-097-E1	F 97-086-E1

PROCUREMENT Completed.

CONSTRUCTION Fourteen (14) launch pads with ten (10) launchers are in place at the AEC-TRF (completed in 1965).

HAD Launchers: Nos. 8, 9, 10, 11, 12, 13, 14 and 16.
HAD Launch Pads Only: Nos. 17, 18 and 20.
Universal Launchers: Nos. 15 and 19.
Universal Launch Pad Only: No. 23.

Universal launcher foundations can withstand a 500,000 foot-pound overturning moment and concentrated loads of 2-tons 60-inches apart. HAD launcher foundations can withstand a 50,000 foot-pound overturning moment and concentrated loads of 1-ton 40 inches apart. Generators are the primary source of power to the launchers with commercial power functioning as back up, through an automatic transfer switch. Signal cable from each launcher terminates at a signal cable shelter (Building 675) in the Secure Trailer Compound.

POST-GO

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Twenty-five (25) additional launchers will be installed at the AEC-TRF making a total of thirty-nine (39) launchers.

KAUAI, AEC-TRF SCIENTIFIC

F & S NO.	TITLE				
11013	Rocket Assembly Buildings				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
SANDIA	Existing: 656 and 661 Future: Unnumbered		None		FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	6.3		159.7	*166.0	
	FY 71	12.0		114.0	126.0	
	TOTAL	18.3		273.7	292.0	

PRIOR YEARS

ENGINEERING Completed.

Drawings:
F 97-656-A1 and A2
F 97-656-S1 and S2
F 97-656-E1
JS 97-3224C-A2 and A3
JS 97-3224C-E6
JS 97-656-A1
JS 97-656-E1
JS 97-656-M1
JS 97-661-A1
JS 97-661-E1
F 97-661-A1 and A2
F 97-661-E1 and E2
F 97-661-S1 and S2
F 97-661-M1
97-3224B-S1

PROCUREMENT Completed.

CONSTRUCTION Two (2) Rocket Assembly Buildings (completed in 1965) are 36 x 38-ft. in plan with corrugated aluminum siding and roofing. The roofing rests on wood purlins supported by intermediate steel trusses and wood end walls. The trusses bear on timber columns tied into the wall framing.

The high bay assembly area is 30 x 36-ft. 6-in. with a clear height of 12-ft. 6-in. An 8 x 36-ft. lean-to on the north side of the building has a clear height of 8-ft. and is divided into an 8 x 8-ft. workroom and an 8 x 28-ft. office storage area. The floor is a reinforced concrete slab which has been extended 20-ft. out on the east and west sides of the building to form exterior flared loading aprons 30-ft. wide. The slab is designed to sustain a load of 2000 psi.

The insulated roofs and walls are paneled with gypsum wallboard. The high bay area has four 8 x 8-ft. vehicle doorways.

One 2 ton and one 3 ton chain hoist traverse the width of the high bay area, one on each of two parallel monorails 12-ft. apart.

*Includes engineering's estimated distribution of cost of $106.0K from I. D. No. 13921.

Each building is air conditioned and dehumidified by two (2) units. Three gravity ventilators are mounted on the ridge line of the roof.

Electrical power supplied is 120/208 volt, 60 cycle, 6 phase. The interior of the buildings and the exterior doorways are lighted by incandescent fixtures. A lightning protection system safeguards the building.

The air conditioning, dehumidification and aluminum siding were completed in 1968 to enhance the weatherproofing and comfort qualities of the buildings. As originally constructed, the buildings were sided with roll up, fire-resistant canvas.

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Two (a) additional Rocket Assembly Buildings, identical to the existing two, will be constructed during FY 1971.

POST-GO

An additional Rocket Assembly Building may be required.

[redacted]

KAUAI, AEC-TRF SCIENTIFIC

F & S NO.	TITLE					
11015	Signal Cable Shelter					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
Sandia	675					FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost			43.0	43.0	
	TOTAL			43.0	43.0	

COMPLETED

DESCRIPTION The Signal Cable Shelter (completed in 1965) is a 14 x 28 x 9-ft high wood framed structure with a concrete floor slab. A 3 1/2 x 7-ft. door provides access to the aluminum sided and roofed structure which is located at the trailer dock. The ceiling and interior walls of Building 675 are plywood; floor finish is natural concrete. The interior is insulated, air conditioned and dehumidified.

A power panel at the trailer dock is the source of 120/208 volt, 60 cycle, 3 phase power supplied to meet a demand of approximately 13 kw. Convenience outlets (110-volt) and lighting are provided in the interior.

Signal cables extend from the shelter to the following termination points:

Launcher Nos.: 8, 9, 10, 11, 12, 13, 14, 15, 16, and 19
Launch Pad No. 18
HRT Amplidyne Shelter
AME Field Preamp Shelter
Trailer Dock and Trailers

DRAWINGS: F 97-002-C1 F 97-079-W1, W4, W7 and W8 F 97-675-A1 and E1

[redacted]

[redacted]

F & S NO. 11018	TITLE AME Field				
USER Sandia	STRUCTURE/FACILITY NO. See Text		SCIENTIFIC STATION NO. 97-4-60		BOD FOD 7-1-69
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	0.7		12.5	13.2	
	FY 69	1.8		6.4	8.2	
	TOTAL	2.5		18.9	21.4	

PRIOR YEARS

ENGINEERING Completed.

Drawings: F 97-684-C1, F 97-684-A1, F 97-079-W9 and W10, JS 97-K-3253-E1

PROCUREMENT Completed.

CONSTRUCTION The AME facility (completed in 1965) monitors the flight of rockets and provides information on their location. The facility consists of sixteen (16) pole-mounted antennas and a preamp shelter. In plan, the antennas are arrayed in four (4) circles of varying radii: 47-ft., 63-ft., 142-ft., and 189-ft. The antennas are located in a cleared and level (± 1-ft.) circular area of 500-ft. diameter. Debris and soil removed during the clearing process was piled around the perimeter of the area to form a natural fence.

The antennas are precisely located. The relative location of any given antenna with respect to any other is within 0.001-ft. in elevation, azimuth, and horizontal distance.

A preamp shelter (Building 684) is located in the center of the AME Field. The shelter is a 3 x 8 x 4-ft. high wood frame structure with plywood siding. Signal cables laid in a concrete trough extend from the cable termination shelter in the secure trailer compound to Building 684 and to each antenna. Direct burial power cable extends parallel to the signal cable trough. Power supplied is 208 volt, 60 cycle, 3 phase.

FY 1969

ENGINEERING Completed.

Drawing: JS 97-684-A1

PROCUREMENT To be accomplished.

CONSTRUCTION The existing preamp shelter will be demolished and a new one will be erected in its place. The new shelter will be a 3 x 11 x 5-ft. high wood frame structure with plywood siding. Louvers will be provided in the siding. Pressure creosoted lumber will be used in construction of the new shelter.

KAUAI, AEC-TRF SCIENTIFIC

F & S NO.	TITLE					
11019	Rawidar Complex					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
SANDIA	See Text		97-4-61			FOD 7-1-69
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
SANDIA	PRE-GO					
	Prior Cost			9.2	9.2	
AEC	PRE-GO					
	Prior Cost			45.0	45.0	
	FY 69	0.2	3.0	11.1	14.3	
	TOTAL	0.2	3.0	65.3	68.5	

PRIOR YEARS

ENGINEERING Completed.

Drawings:

JS 97-3224C-C1 and C2	F 97-079-W14
JS 97-3224C-A5	F 97-651-M1
JS 97-3224C-S5 and S6	F 97-651-A1
JS 97-3224C-E3	F 97-651-E1
JS 97-3224-C15	F 97-662-C2
JS 97-071-S1	F 97-664-A1
F 97-002-C1 and C4	F 97-664-E1
F 97-027-E3	F 97-664-M1

PROCUREMENT Completed.

CONSTRUCTION The Rawidar Complex (completed in 1965) is utilized to acquire data on wind direction and velocity. On the basis of this input data, computerized adjustments in rocket launcher attitude are made to compensate for wind forces to insure adherence to planned rocket trajectory. The Rawidar Complex consists of two (2) Sandia furnished trailers, a trailer dock, two (2) balloon release stations, two (2) radar antennas and a radar target pole.

A 15-ft. wide stabilized coral road, approximately 550-ft. long, is provided from the main north-south Test Range Road to the Rawidar Trailer Dock. The trailer dock (Structure 662) is provided with overhead cover and is further protected by a 15-ft. high earth filled revetment 30-ft. long. Two (2) trailers, a Radar Contro Trailer and a Radar Workshop Trailer, are berthed at the dock, (refer to F&S No. 11023). A transportainer used for storing parts is also provided.

Two (2) radar antennas are provided; antenna J-1 is located 50-ft. north of the trailer dock, and antenna J-2 is located 50-ft. south of the trailer dock. An above-grade cable tray system conveys signal cable from the Radar Control Trailer to each antenna. A radar target pole is located approximately 2,100-ft. north of the trailer dock.

Balloon Release Station No. 1 (Building 664) is located 850-ft. southeast of the trailer dock and Balloon Release Station No. 2 (Building 651) is located 850-ft. northwest of the trailer dock. Each balloon release building is a 12 1/2 x 13 x 12-ft. high, wood framed structure with a concrete floor slab. Three (3) sides of each building are sided with plywood and the fourth side is provided with roll up canvas siding. Floodlights provide exterior illumination. The buildings are equipped with a helium manifold system and a helium cylinder bank. A 50-ft. balloon release pole is located 15-ft. from each building. The poles are equipped with a "Flagpole" type system for raising and automatically releasing inflated balloons varying in diameter from 2 to 6-ft. Each balloon release building has a power demand of 5 kw. The balance of the Rawidar Complex requires 10 kw of utility power and 30 kw for scientific power.

The source of power to the Rawidar trailer dock is a power panel at the main trailer dock. Incoming 600 volt, 60 cycle , 3 phase power is converted to 400 cycle power by a combination generator/convertor unit. An engine driven 30 kw generator provides back up power in the event of commercial power failure; transfer to back up power is accomplished manually.

FY 1969

ENGINEERING Completed.

Drawings: JS 97-058-A5 110-077-SK-W1

PROCUREMENT In progress.

CONSTRUCTION An 8 x 20 x 7-ft. high wood framed shelter will be constructed for the generator/converter unit. The structure will have a concrete floor slab and plywood siding and roofing. A personnel door and a pair of folding doors will be provided. The folding doors will provide a 7 x 8-ft. opening.

In order to coordinate the balloon release and tracking operations, a VHF net consisting of a base station and three (3) hand-held transceivers will be provided for the Rawidar Complex (refer to F&S No. 13002).

[redacted]

KAUAI. AEC-TRF SCIENTIFIC

F & S NO.	TITLE				
11020	Dynamic Balancing Machine Facility				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
SANDIA	668		None		FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	5.6		61.1	66.7	
	TOTAL	5.6		61.1	66.7	

COMPLETED

DESCRIPTION The Dynamic Balancing Machine facility is located at the trailer dock and is used by Sandia to balance rocket nose cones. This Sandia furnished balancing machine is housed in a 22 x 27-ft. steel frame building with corrugated aluminum siding and roofing and an eave height of 19-ft. There are two (2) motor operated doorways in the building. One (1) doorway is 8 x 8-ft. and the other is 7 x 10-ft. (Completed in 1966.)

A reinforced concrete pad, 16 x 17 x 3-ft. thick forms the base for the balancing machine. The pad is separated from the surrounding building footings by expansion joints. Isolation of the pad prevents the passage of vibrations induced by the machine into the building's structural framework. A monorail with a 2-ton manually operated chain hoist extends the full 22-ft. length of the building, plus 6-ft. outside of it. The hoist has a hook lift height of 14-ft. An elevated wooden deck, level with the trailer dock, is provided around the machine.

Incoming 208 volt power from a panel at the trailer dock is fed through a 120/208-440 volt, 30 kw transformer to a control console and motor generator set and into the dynamic balancing machine. Maximum output of the MG set is 18 kw of 440 volt, 60 cycle, 3 phase power.

Fluorescent and mercury vapor fixtures provide interior lighting. Red warning lights mounted over each entrance light up when the balancing machine is in operation. Convenience outlets of 110 volt capacity are provided in the interior. The building is insulated, air conditioned and dehumidified.

DRAWINGS: F 97-668-A1 and A2, F 97-668-E1, F 97-668-S1 and S2, JS 97-032-C1, F 97-668-M1

[redacted]

F & S NO. 11021	TITLE Island Wave Sensor, Type III (Tamarin)					
USER DRL	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD
						FOD *
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Costs Included in F&S No. 05027. POST-GO Estimate TO BE DETERMINED					

PRIOR YEARS

ENGINEERING None required.

PROCUREMENT Completed. Items in storage at Damon Tract or at Defense Research Laboratory (DRL), Santa Barbara, California.

POST-GO

CONSTRUCTION Seven AEC furnished Type III wave sensor equipped installations are to be located around the perimeter of the island of Kauai. The primary objective is to measure and record the amplitude and time of arrivial of long period waves over a predetermined period. The equipment will be emplaced by DRL personnel at various predetermined bay and harbor locations and will be housed in existing shelters or small AEC furnished utility sheds. A combination 400 square foot office and shop area in Nawili with telephone answering service will be furnished DRL.

The installations will contain a differential sensor, data logging system, and an armored cable connecting the emplanted wave sensing transducer with the completely self-contained data logging system. The transducer will be installed by DRL scuba divers in approximately 30 to 50 ft. of water and located in a position to eliminate as much shore-induced phenomena as possible. H&N will furnish voice communications between Kauai Type III sites and the Damon Tract trailer offices.

DRL personnel will assemble at Damon Tract to prepare equipment prior to deployment. A DRL Type III installation team of 8 people, including scuba divers and technical personnel will emplace and roll up the equipment; 2 men will operate and maintain the equipment for the duration of the program. DRL personnel will obtain subsistence through the local economy.

*FOD SCHEDULE FOR TYPE III KAUAI SITES

FOD	SITE NO.	FOD	SITE NO.
GO+63	K1	GO-70	K6
GO+64	K7	GO+72	K4
GO-66	K2	GO+74	K5
GO+68	K3		

For a summation of Tamarin installations, see F&S No. 05027.

KAUAI SCIENTIFIC

F & S NO.	TITLE					
11022	Radiological Surveillance, PRIMARY					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction will be required.

The facility is designated a PRIMARY radiological surveillance station because of the civilian population being in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. Hawaii State Health Department personnel will be assigned to this Rad Safe facility.

F & S NO.	TITLE				
11023	Secure Trailer Compound and Trailers				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF	None		See Text		FOD GO+60
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	43.5	0.9	343.7	388.1	
	FY 69			23.4	23.4	
	FY 71	5.0		35.0	40.0	
	SUBTOTAL	48.5	0.9	402.1	451.5	
	POST-GO					
	Estimate		TO BE DETERMINED			

PRIOR YEARS

ENGINEERING Completed.

Drawings:
F 97-002-C1
F 97-058-C2
F 97-058-A2 and A3
F 97-058-S1 thru S17
F 97-058-E4
97-3224B-C4
97-3224B-E8
JS 97-002-C6 and C8
JS 97-058-A1
JS 97-3224B-A1
JS 97-3224C-A6

PROCUREMENT Completed.

CONSTRUCTION Parking space for thirty-five (35) trailers is provided at the trailer dock within the AEC-TRF Secure Trailer Compound (completed in 1965). A 16-ft. high earth-filled revetment protects the trailers from the launcher area. The compound is a partially paved area of approximately one (1) acre, enclosed by a 7-ft. high chain link security fence, topped with barbed wire outriggers. A fresh waterline, sanitary sewer, telephone lines, and area lighting are provided. A personnel gate and two (2) vehicle gates provide access to the compound.

A guardhouse is situated near the personnel gate. A paved parking lot capable of accommodating fifty (50) vehicles is located east of the compound. Elevated concrete walkways connect the trailer berths. That part of the trailer dock which is manned during rocket launchings is roofed with steel plate; the unmanned part is roofed with aluminum. Lighting is provided throughout.

The trailers are provided with 120/208 volt, 60 cycle, 3 phase power through four (4) power panels at the trailer dock. A 225 kva substation with a 120/208 volt transformer, located south of the compound, is the source of power.

Trailers now in place are as follows (for trailer location see Appendix A):

User & Trailer #	Use/Name	Property # or License #	Furnished by AEC	Furnished by USER	Comments
Sandia F-25	Office	E-26934		X	
Sandia H-9	Ground Sta. Work Area	E-26818		X	
Sandia H-3	Ground Sta. Work Area	E-24045		X	
Sandia 5	Office	11097	X		
Sandia	Conference			X	Two (2) 10x20-ft. Portacamp bldgs. w/ common wall removed.
Sandia MO-34	Office	E-27241		X	
Sandia D-1	Work Area	E-28826		X	
Sandia B-28	Command	E-27167		X	Scientific Station No. 97-4-50
Sandia B-30	Receiving & Recording	E-27165		X	Scientific Station No. 97-4-48
Sandia B-31	Firing & Control	E-27168		X	Scientific Station No. 97-4-49
Sandia C-7	Payload Assemble	E-28831		X	
Sandia F-4	Darkroom	E-23991		X	
Sandia B-49	AME/DME Tracking	E-27284		X	Scientific Station No. 97-4-56
Sandia B-35	Computer	E-27012		X	
Sandia C-13	HRT Ground Storage	E-28830		X	
Sandia E-3	HRT Environment Storage	E-29377		X	
Sandia H-8	Radar	E-27163		X	Located at Rawidar Trailer Dock.
Sandia H-17	Radar Workshop	E-24524		X	Located at Rawidar Trailer Dock.
LASL P-4-1	Assembly Area	Not Avail.		X	
LASL J-16-11	Technical	E-26739		X	
LRL 55	Machine Shop & Assembly Area	Not Avail.		X	

User & Trailer #	Use/Name	Property # or License #	Furnished by AEC	Furnished by USER	Comments
LRL 36	Electronics Shop & Rocket Checkout	E-90291		X	
HAW. Tel. Company	Telephone Equipment Van	12844	X		

FY 1969

ENGINEERING Construction items A thru D are completed. Construction item E is to be accomplished.

Drawings:

Item A	Item B
JS 97-058-S4 and S5	JS 97-058-S1
Item C	**Item D**
JS 97-058-A4	JS 97-675-M1

PROCUREMENT To be accomplished except construction item B, which is completed.

CONSTRUCTION

A. Revetment Modifications and Stairway

Seventy (70) feet of old revetment southeast of the Signal Cable Shelter (Building 675) has been removed. A stairway will be installed from ground level to the manned trailer dock roof in this area.

B. Trailer Dock Modifications

In order to accommodate Sandia Office Trailer No. 5, which was shipped from Damon Tract to the AEC-TRF, the width of its assigned stall (No. 24) and the length of the walkway adjacent to it was increased. Also, the walkway adjacent to Stalls 28 and 29 was lengthened (completed November 1968).

C. Modifications to Conference Trailer and Trailer B-35

A door will be replaced in Sandia Trailer B-35 and the columns support-

ing the roof of the Conference Trailer will be strengthened.

D. Air Conditioning Modifications

Existing air conditioning units in the Signal Cable Shelter and in the Telephone Equipment Van will be replaced by a single unit which will serve both.

E. New Trailers

Four (4) Sandia furnished trailers, each 10 x 50-ft. in size and each air conditioned, will be placed within the trailer compound and will be provided with utilities.

The trailers are identified as follows:

Trailer No.	Use/Name
B-29	Payload Control
B-57	Office
B-58	Payload Checkout Lab.
B-65	Payload Checkout Lab.

An H&N Communications Trailer will also be placed at the trailer dock and provided with utility connections.

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Three (3) AEC furnished office/laboratory trailers for LASL's use will be placed within the trailer compound and will be provided with utilities. The required FOD is GO+60.

POST-GO

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION One (1) EG&G furnished Timing Trailer will be placed within the AEC-TRF Secure Trailer Compound and will be provided with connections to utilities and to the signal cable system. The required FOD is GO+60.

KAUAI, AEC-TRF SCIENTIFIC

F & S NO.	TITLE				
11024	Electrical Power Distribution System				
USER: Sandia	STRUCTURE/FACILITY NO.: Secondary Substations: 680, 681 and 682	SCIENTIFIC STATION NO.: None		BOD	
				FOD	GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost*	3.0		352.5	355.5	
	FY-70	—		100.0	100.0	
	SUBTOTAL	3.0		452.5	455.5	
	POST-GO	(TO BE DETERMINED)				

PRIOR YEARS

ENGINEERING Completed.

Drawings:

F 97-027-E3	97-3224B-E4 and E8	JS 97-032-E2
F 97-080-E1, E3 and E4		JS 97-3224C-C1
F 97-097-E1		JS 97-3224B-W1
F 97-684-C1		

PROCUREMENT Completed.

CONSTRUCTION The main substation at the AEC-TRF is located on a 20-ft. square concrete pad south of the Secure Trailer Compound. Incoming power is fed to it from the adjacent Kauai Electric Company substation. The main substation consists of a 225 kva, 120/208-2400 volt, 60 cycle, 3 phase transformer, a 600 amp automatic transfer switch, and a main power panel (completed in 1965).

Three (3) secondary (launcher) substations, each of 112 1/2 kva capacity, are fed by the main substation. During operational periods, the secondary substations and the commercial system back up two 75 kw generators which are used as the primary source of launcher power. During nonoperational periods, however, the generators back up the commercial system. Transfer of power is automatic. Besides serving the launchers, the secondary substations also serve the rocket assembly buildings and the igniter checkout building. The secondary substations are protected by blast deflectors (corrugated metal shields). Power of 120/208 volt, 60 cycle, 3 phase is provided to facilities other than those described above through four (4) panels located at the main trailer dock.

*Includes cost of F&S No. 12008

VOLIV
April 1969

FY 1969

ENGINEERING Completed.

Drawings: JS 97-094-C2 JS 97-094-A1 JS 97-080-E3 and E4

PROCUREMENT To be accomplished.

CONSTRUCTION To temporarily alleviate the presently overloaded commercial system at the AEC-TRF, a 600 kw AEC furnished diesel generator will be shipped from Damon Tract and will be installed on a concrete pier foundation south of the main substation.

The main substation slab will be enlarged to accommodate three (3) new 250 kva, 120/208-4160 volt, single phase transformers. The generator will supply power to the transformers and the transformers will supply power to a new 120/208 volt, 60 cycle, 3 phase power panel. Back up capability will be provided by tieing the two existing 75 kw generators into the substation's 600 amp automatic transfer switch. The back up generators will be connected in parallel and their output will be synchronized

A 30 x 30 x 14-ft. high prefabricated metal shelter will be installed over the enlarged substation. The shelter will have metal roofing but will be opensided. Chain link security fencing will enclose the new transformer portion of the substation.

The FY 69 work described above is a Maintenance and Operations project.

FY 1970

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION The major upgrading of the power system involving replacement of existing cables as needed, installation of new cables for planned facilities and a main breaker panel cooling system will be provided.

POST-GO

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION The ultimate power requirement for the AEC-TRF is estimated at 1800 kw. Complete separation of scientific loads from utility loads

will be effected with the further refinement that certain very sensitive scientific loads, totaling approximately 150 kw, will be provided with no-break power.

KAUAI, AEC-TRF — SUPPORT

F & S NO.	TITLE					
11025	Rocket Motor Staging and Holding Area					
USER: SANDIA	STRUCTURE/FACILITY NO.: None		SCIENTIFIC STATION NO.: None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	FY 69	9.0		80.0	89.0	
	FY 70			20.0	20.0	
	POST-GO (Estimated Nov. 1968)			109.0	109.0	
	TOTAL	9.0		209.0	218.0	

FY 1969

ENGINEERING In progress.

Drawings completed to date are: JS 97-095-C1, A1, and E1 thru E3

PROCUREMENT In progress.

CONSTRUCTION This facility, initially recommended by the Industrial Safety Branch of NVOO in 1966, is intended for the safe handling of rocket motors. It will also serve as a temporary holding area for assembled rockets which have not been fired due to a postponement. The facility will be capable of accommodating twenty (20) rocket motors.

The rocket motor staging and holding area will be located south of the launcher complex and east of Rocket Assembly Building 661. The siting will be in accordance with AMC range safety requirements for bermed facilities. An 8-ft. high wood-framed revetment with an earth fill core will border three (3) sides of the facility; only the north side, which faces the launcher complex, will not be bermed.

A 15-ft. wide stabilized coral road will be constructed for access to the facility. The road, approximately 900-ft. long, will be a loop of the main east-west road serving the launcher complex.

The layout of the facility, south to north, will consist of three (3) contiguous areas: a 40 x 40-ft. holding area, a 20 x 40-ft. staging area and a 20 x 40-ft. truck loading area. The areas will occupy a reinforced concrete floor slab and will be sheltered by a 40 x 80-ft. prefabricated rigid frame building with an eave height of 21-ft. The drive-through truck loading area will have concrete approach slabs. The building will have corrugated metal roofing and will be partially sided with the same material. The lower 9-ft. of the building will not be sided. The building will be provided with roof-mounted gravity ventilators.

An overhead bridge crane with a hoisting capacity of 4-tons and a hook lift h of 15-ft. will be provided. The crane will be capable of traveling the full 80 length of the facility and will be designed for explosion proof operation.

Power supplied to the facility from Substation 681 will be 120/208 volt, 3 ph Explosion proof mercury vapor fixtures will provide interior lighting. Area lighting will be furnished by incandescent, weatherproof floodlights mounted atop the revetment. Explosion proof convenience outlets (110 volt) will be provided.

Numerous flush-mounted grounding receptacles distributed throughout the fl slab will make possible the grounding of individual rocket motors. In additi the facility will be further safeguarded by roof-mounted lightning rods.

An explosion proof air compressor will provide 125 psi compressed air to fo (4) outlets in the staging area.

FY 1970

ENGINEERING To be completed in FY 1969.

PROCUREMENT To be completed in FY 1969.

CONSTRUCTION Of the total $100.0K construction cost of the facility, $20.0K will be spent during FY 1970.

POST-GO

ENGINEERING Engineering to be accomplished Post-GO will probably invol mainly siting and grading plans since much of the engineering for the Pre-G facility should be applicable to the Post-GO facility.

PROCUREMENT Will be completed Post-GO.

CONSTRUCTION One (1) additional staging and holding facility, identical to the Pre-GO facility, will be constructed.

F & S NO. 11026	TITLE Camera Station				
USER LASL	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FOD GO+60
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO FY-71	5.0		36.5	41.5	
	TOTAL	5.0		36.5	41.5	

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION A small building of wood frame and corrugated aluminum construction will be located at a site somewhere above the AEC-TRF rocket launch complex. A site for this facility has not yet been selected. In view of the remoteness of the terrain above the AEC-TRF, the facility must be accommodated with a generator, water tank, and portable latrine facility. Program scheduling and accessibility to the selected site may necessitate provision of a billeting-type trailer.

KAUAI, AEC-TRF SUPPORT

F & S NO. 12001	TITLE Warehouse				
USER SANDIA LASL,LRL	STRUCTURE/FACILITY NO. 669	SCIENTIFIC STATION NO. None			BOD FOD 9-1-69
FUNDING AGENCY AEC	($000)	ENGR	PROC	CONST	TOTAL	FURN
	PRE-GO					
	Prior Cost	2.4	2.4	70.6	75.4	4.3
	FY 69			10.3	10.3	
	TOTAL	2.4	2.4	80.9	85.7	4.3

PRIOR YEARS

ENGINEERING Completed.

Drawings: JS 97-669-A1
F 97-669-A1 thru A3
F 97-669-S1 and S2
F 97-669-E1
F 97-669-M1

PROCUREMENT Completed.

CONSTRUCTION Building 669, located at the east end of the trailer dock, is a steel and wood framed structure with a reinforced concrete floor slab. The building is 40 x 81-ft. in plan and has an eave height of 10-ft. Roofing and siding are corrugated aluminum with skylights in the roof. Insulated walls, lined with gypsum board, are typical throughout the interior. The floor is exposed concrete and the ceiling is exposed blanket insulation. (Completed in 1966)

The interior is paritioned into three (3) storage areas and a joint packaging area which has been allotted to satisfy user requests as follows:

Sandia Storage	680 Sq. Ft.
LRL Storage	820 Sq. Ft.
LASL Storage	820 Sq. Ft.
Joint Packaging	920 Sq. Ft.

There are six (6) double doors providing access to the building; five (5) are 8 x 8-ft. and one (1) is 6 x 7-ft. Each door is provided with a sloped concrete approach ramp. Suspended fluorescent fixtures light the interior; incandescent fixtures mounted above the doorways provide exterior lighting. Convenience outlets of 110 and 208 volt capacity are distributed throughout the interior.

Power to the building is 120/208 volt, 60 cycle, 3 phase. Total power dema is approximately 55 kw. The source of power is a distribution panel at the trailer dock. The entire building is air conditioned and humidity controlled. The air conditioning system is designed to maintain a temperature of 72°F at relative humidity of 50%.

FY 1969

ENGINEERING Completed.

Drawings: JS 97-669-A2 JS 97-669-S3

PROCUREMENT In progress.

CONSTRUCTION A 2-ton manually operated trolley hoist will be installed in the joint packaging area. The trolley will extend the entire length of the join packaging area plus 6-ft. outside the building. New steel columns and concr footings will be installed to support the trolley.

KAUAI, AEC-TRF SUPPORT

F & S NO.	TITLE					
12007	Payload Preparation Building					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
SANDIA	671		None			FOD 9-1-69
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	*2.4	*2.3	32.4	37.1	
	FY 69			20.0	20.0	
	TOTAL	2.4	2.3	52.4	57.1	

PRIOR YEARS

ENGINEERING Completed.

Drawings: F 97-671-A1 and A2, F 97-671-S1 and S2, F-97-671-E1, JS 97-671-A1, JS 97-671-E1, JS 97-671-M1, F 97-671-M1

PROCUREMENT Completed.

CONSTRUCTION This 15 x 75 x 10-ft. high building which will be converted to a payload preparation facility has been used as a maintenance shop since its completion in 1965. It is located south of the trailer park within a non-secure, chain link fenced area of 1/4 acre.

The plywood-sided, wood-framed structure with a reinforced concrete floor slab is partitioned into three rooms: a 10 x 15-ft. tool room, a 15 x 40-ft. shop area, and a 15 x 25-ft. office.

Wooden trusses and purlins support the corrugated aluminum roofing. The trusses bear on timber columns tied into the wall framing.

Air conditioning is restricted to the office which is served by a wall mounted unit. The walls and ceiling of the office are lined with gypsum board and are insulated.

Roof mounted gravity ventilators and shutters in the walls of the tool room and shop area provide ventilation.

*Costs applicable to modifications only. Engineering and Procurement costs for building as originally constructed were included in the Construction cost.

There are four (4) exterior doorways located on the north side of the building with sloped concrete approach slabs. The shop area has two 6 x 8-ft. exteri doorways. The office and tool room each have a 3 x 7-ft. exterior doorway.

An air compressor provides 100 psi compressed air to two wall outlets, one the office and another in the shop area that has a wall mounted hose reel with 25-ft. of air hose. The compressor rests on a concrete pad and is sheltered by a roofed, open side lean-to.

Skylights and truss-mounted fluorescent light fixtures provide interior illumi nation. The skylights over the office are blacked out to increase the efficienc of the air conditioning. Exterior lighting is provided by incandescent fixture mounted over each exterior doorway.

Power supplied to the building is 120/208V, 3-phase, 60 cycle originating fr a power panel at the main trailer dock.

The building is furnished with workbenches, a milling machine and a lathe.

The air conditioning and insulation of the office was accomplished as a modif cation item in 1968.

FY 1969

ENGINEERING In progress. Drawings completed to date:

JS 97-671-A2 JS 97-671-E3 JS 97-671-M2

PROCUREMENT To be accomplished.

CONSTRUCTION Building 671 will be converted to a Payload Preparation Building to house equipment such as vacuum pumps, liquid nitrogen pumps, and a heat chamber. Maintenance functions will be moved to the new Mainte nance and Service Building (see F&S No. 12012) upon its construction.

The existing partition between the tool room and shop area will be removed. A new wood stud, gypsum board partition will be installed 25-ft from the west end of the building thus dividing the building into three equal rooms, ea 15 x 25-ft.

The roof ventilators will be capped, and the shutters in the walls will be permanently secured.

Gypsum board will be installed on the walls and ceiling. The walls and ceili will be insulated and painted.

Additional air conditioning ducts and additional joists to support them will be installed. The entire building will be air conditioned by a unit located outside the building.

A new power distribution panel and additional 120 volt and 250 volt receptacles will be installed.

The existing fluorescent light fixtures will be rearranged.

KAUAI, AEC-TRF SUPPORT

F & S NO.	TITLE					
12008	Roads					
USER	STRUCTURE. FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	Cost included in F&S No. 11024				
	POST-GO					
	Estimate	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING Completed.

Drawings: F 97-002-C1 thru C4 97-3224B-C2 thru C4 JS 97-3224C-C1 thru C5 and C7

PROCUREMENT Completed.

CONSTRUCTION The main entrance road to the AEC-TRF is approximately 1 1/2 miles long and is composed of asphaltic concrete varying in thickness from 1 1/2 to 3 inches. The roadway width is 20-ft. Guardrails and warning signs are installed alongside the road, where needed. (Completed in 1965.) A 50-ft. long sheet pile retaining wall is provided where the roadbed passes over a drainage canal. Water is pumped across the road through a pipe embedded in the roadbed.

Stabilized coral roads branch from the main road to the AME Field and to the Rawidar Trailer Dock. A stabilized coral road extends east-west along the southern border of the launch complex and extends to Balloon Release Station No. 2.

POST-GO

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Access roads will be installed to the Post-GO launch pads and Rocket Motor Staging and Holding Area.

KAUAI, AEC-TRF SUPPORT

F & S NO.	TITLE					
12012	Maintenance and Service Building					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
Sandia	None		None			FOD6-30-71
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	FY-69	6.4			6.4	
	FY-71			95.1	95.1	
	TOTAL	6.4		95.1	101.5	

FY 1969

ENGINEERING In progress. Preliminary drawings issued for approval are:

JS 97-032-C2
JS 97-032-A7 thru A9
JS 97-032-S3
JS 97-032-M3
JS 97-032-E3 and E4

FY 1971

ENGINEERING To be completed in FY 1969.

PROCUREMENT To be accomplished.

CONSTRUCTION A steel framed building, 30 x 44 x 14-ft. high, erected on a concrete slab, will contain a vehicle servicing area and a maintenance shop. The 27 x 30-ft. vehicle servicing area will be equipped with battery charging facilities, sinks, storage facilities for grease and spare parts, and a compressed air system. A 12 x 18-ft. roll up door will provide access to the vehicle servicing area.

The maintenance shop, 17 x 30-ft. will have gypsum board walls and ceiling, will be insulated, air conditioned and dehumidified. Interior and exterior lighting will be provided. Convenience outlets (110-volt) will be distributed throughout the interior. Power supplied from a distribution panel at the trailer dock will be 15 kw 120/208 volt, 60 cycle, 3 phase.

A 2 post hydraulic lift will be installed on an extension of the building's concrete floor slab outside the south end of the vehicle servicing area. A gasoline pump and an underground storage tank will be located south of the building. The building will be supplied with a fresh waterline.

KAUAI, AEC-TRF SUPPORT

F & S NO.	TITLE					
12013	Warehouse					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
LASL	None		None			FOD GO+60
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO FY-71	6.5		58.5	65.0	
	TOTAL	6.5		58.5	65.0	

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION A 2,000 square feet warehouse will be constructed at the AEC-TRF. The warehouse will be a wood framed structure with corrugated aluminum roofing and siding.

KAUAI, AEC-TRF COMMUNICATIONS

F & S NO.	TITLE					
13002	VHF/FM Mobile Radio System					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	None		None			FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC Financial Plan	PRE-GO Prior Cost	Included in F&S No. 06002				
	POST-GO Estimate	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING Completed.

PROCUREMENT Completed.

CONSTRUCTION An inter-island Sandia Rocket Photo Net "H" Station is located at the AEC Test Readiness Facility in the Command Trailer. Hand held portable stations operate on this net. An "N" net is provided for local voice communications; both mobile stations in vehicles and hand held portable stations operate on this net. A Balloon Radar Net "R" consisting of a base station and portable stations serves as a control net for Balloon Releases.

FY 1969

ENGINEERING Completed.

PROCUREMENT To be accomplished.

CONSTRUCTION The "N" net mobile units will be increased by 5 dual frequency mobile units.

POST-GO

Both LRL and EG&G will require VHF/FM nets at the AEC/TRF. The specific equipment requirements have not be finalized.

F & S NO. 13003	TITLE Message Center					
USER JTF	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD FOD GO+135
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	1.2	16.0		17.2	
	POST-GO Estimate		TO BE DETERMINED			
	TOTAL	1.2	16.0		17.2	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 97-030-W3 and W4

PROCUREMENT A trailer has been procured and is stored at Damon Tract.

POST-GO

CONSTRUCTION A message center trailer will be located in the secure trailer compound and will serve all users in the Kauai area. Communications equipment will be installed by maintenance forces. Teletype conference service will be provided.

F & S NO.	TITLE				
13004	Telephones				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD
AEC	None		None		FOD GO+120
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost		5.2	5.2	
	TOTAL		5.2	5.2	

COMPLETED

DESCRIPTION An AE-300 telephone system with a capacity of 15 trunks and 169 lines serves the AEC-TRF (completed in 1965). The system is expandable to provide an ultimate capacity of 22 trunks and 250 lines. Thirty-one (31) lines are currently used for station transfer equipment.

F & S NO.	TITLE					
13005	Sandia Signal Cable					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
SANDIA	None		None			FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	8.5	206.1	5.4*	220.0	
	POST-GO					
	Estimate		TO BE DETERMINED			
	TOTAL	8.5	206.1	5.4	220.0	

PRIOR YEARS

ENGINEERING Completed.

Drawings: F97-079-W4 and W7 F97-079-W15 thru W27

PROCUREMENT Completed.

CONSTRUCTION Signal cables are laid to the following launchers and launch pads:

Launcher Nos.: 8, 9, 10, 11, 12, 13, 14, 15, 16 and 19

Launch Pad Only, No.: 18

The cables are conveyed between launchers by above-grade cable trays and by direct burial.

The cable from the launch pad area is run in an embedded concrete trough to the signal cable shelter in the secure trailer compound.

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*Cost is for cable tray modifications only; prior years costs for installation of cables is included in F&S No. 11024.

POST-GO

ENGINEERING Completed.

Drawings: F 97-079-W3 thru W6

PROCUREMENT Completed.

CONSTRUCTION Signal Cable will be installed for future launcher Nos. 1 thru 7, 18, 20 thru 30, and 32 thru 40.

[redacted]

F & S NO.	TITLE				
14003	Photo-Optical Station				
USER: LASL, EG&G, SANDIA	STRUCTURE/FACILITY NO.: M-1010 (Optical Building)	SCIENTIFIC STATION NO.: See Text		BOD	
				FOD GO+45	
FUNDING AGENCY: AEC	($000)	ENGR	PROC	CONST	TOTAL	FURN
	PRE-GO					
	Prior Cost	(Costs incurred prior to 1963)				
	FY 71	30.0		235.0	265.0	
	POST-GO					
	Estimate	TO BE DETERMINED				
	TOTAL	30.0		235.0	265.0	

PRIOR YEARS

ENGINEERING Completed.

Drawings:
98-1010-A1 thru A5
98-1010-C1 and C2
98-1010-S1 thru S4
98-1010-M1 thru M3
98-1010-E1 thru E7
JS 98-1010A-A1
JS 110-077-W6

PROCUREMENT Completed.

CONSTRUCTION The AEC Photo-Optical facilities at Mt. Haleakala, Maui are located on property leased from the FAA. Site elevation is 9,930-ft. The area is secured by chain link security fencing and a Guardhouse at the entry gate.

Optical Building (Scientific Station No. 98-1-1) is a 26x101 x 14-ft. high wood framed, plywood sided and roofed structure with a concrete floor slab. Concrete walkways surround the perimeter of the building. An observation platform and a mechanical platform are mounted atop the roof at the south end of the building. A wooden stairway provides access to the handrailed platforms.

Four 6 x 7-ft. doorways provide access to the interior which is comprised of nine (9) rooms as follows:

Room	Approximate Area (Sq. Ft.)
Spectroscopy	550
Photometric	220
LASL Camera	535
EG&G Camera	125
Sandia Spectrograph	210
RF Screen	350

[redacted]

Room	Approximate Area (Sq. Ft.)
Utility	85
Toilet	60
Hall	150

The walls and the insulated ceiling are lined with gypsum board with the walls of the photometric room painted black and the walls and ceiling of the RF screen room lined with copper screening. The interior is furnished with workbenches and shelving and is lighted by suspended incandescent lamps. Convenience outlets, (110 volt) are provided throughout.

Three (3) roof mounted air conditioning units maintain the temperature and humidity of the spectroscopy room at 78±1°F and 46-50%, respectively. A separate, roof mounted, air handling unit ventilates the RF screen room. Roof mounted fans ventilate the other rooms. Also, small fans are mounted beneath each of the thirty-seven (37) windows on the building's west wall. Water for the building is trucked in and stored in a 2500 gallon tank located adjacent to the generator shelter.

Photo Building (Scientific Station No. 98-1-2) is a 9 x 9 x 9-ft. high wood framed shelter is provided for LASL's camera equipment. The sides, roof and floor of the shelter are of plywood. This building is presently being used to house AEC VHF equipment.

Commercial power serves the facilities. A 225 kva, 120/208-480 volt, 60 cycle, 3 phase substation; a 235 kw backup diesel generator; and a LASL furnished motor generator set are provided. The generator and MG set are housed in a 16 x 23 x 12-ft. high wood framed shelter with a concrete floor slab. The shelter has plywood siding and roofing.

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Extensive modifications planned for the Photo-Optical Station will include the following:

Building M-1010 will be rehabilitated including reroofing and repainting as a minimum.

A new warehouse, wood framed and with corrugated aluminum siding and roofing, will be constructed.

Photo Building (LASL) is a new photo building to replace the existing photo building will be constructed. It will be an elevated, small wood frame structure with aluminum siding and roofing. One side will be open to expose the interior camera equipment.

The existing substation capacity, emergency power generating facility and associated switch gear and distribution system will be upgraded to accomodate the increased loads of the modifed station.

A new guard shack with lighting, heating and telephone will be provided.

Seven (7) AEC-furnished trailers will be placed at the Photo-Optical Site and provided with utilities:

User	Quantity	Type
Joint	1	*Bunk Trailer with Kitchen
LASL	3	Unspecified.
EG&G	2	Photo Instrumentation.
Sandia	1	Unspecified.

*Sleeping facilities for sixteen (16) personnel, lockers and a change room will be provided by this trailer. A section of the trailer will be provided with kitchen equipment for light cooking.

POST-GO

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Space will be provided for parking three (3) LASL furnished trailers. The trailers will require 10 kw of 208 volt, 60 cycle, 3 phase power.

MAUI SCIENTIFIC

F & S NO.	TITLE					
14006	Airborne Ionospheric Observatory - Subtask A610					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TC	None		98-3-1			FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
RDT&E	POST-GO Est. 3/65			5.5	5.5	
	TOTAL			5.5	5.5	

POST-GO

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Two (2) antenna fields, each requiring an area 40 x 120-ft., will be situated 600-ft. apart. A trailer will be located midway between the two (2) fields. The overall long axis of the array will be oriented broadside to Ground Zero. The power requirement (either commercial or generator) will be 15 kw of 110/220 volt, 60 cycle, single phase. TC will furnish and erect the antennas. The antennas will not require foundations.

MAUAI SCIENTIFIC

F & S NO.	TITLE					
14008	Ionospheric Sounding Antenna - Subtask A616					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TC	None		98-3-2			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	No Cost					

COMPLETED

DESCRIPTION This facility is used to measure the propagation of radio waves through the ionosphere.

MAUI SCIENTIFIC

F & S NO.	TITLE					
14012	Island Wave Sensor, Type III (Tamarin)					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.7	None		98-13-1 thru98-13-5			FOD *
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Costs Included in F&S No. 05027.					
	POST-GO					
	Estimate TO BE DETERMINED					

PRIOR YEARS

ENGINEERING None required.

PROCUREMENT Completed. Items in storage at Damon Tract or at Defense Research Laboratory (DRL), Santa Barbara, California.

POST-GO

CONSTRUCTION Five AEC furnished Type III wave sensor equipped installations are to be located around the perimeter of the island of Maui. The primary objective is to measure and record the amplitude and time of arrival of long period waves over a predetermined period. The equipment will be emplaced by DRL personnel at various predetermined bay and harbor locations and will be housed in existing shelters or small AEC furnished utility sheds. A combination 400 square foot office and shop area in Kihei with telephone answering service will be furnished DRL.

The installations will contain a differential sensor, data logging system, and an armored cable connecting the implanted waves sensing transducer with the completely self-contained data logging system. The transducer will be installed by DRL scuba divers in approximately 30 to 50-ft. of water and located in a position to eliminate as much shore-induced phenomena as possible. H&N will furnish voice communications between Maui Type III sites and the Damon Tract trailer offices.

DRL personnel will assemble at Damon Tract to prepare equipment prior to deployment. A DRL Type III installation team of 8 persons, including scuba divers and technical personnel, will emplace and roll up the equipment; 2 men will operate and maintain the equipment for the duration of the program. DRL personnel will obtain subsistence through the local economy.

*FOD SCHEDULE FOR TYPE III MAUI SITES

FOD	SITE NO.
GO+34	M2
GO+36	M1
GO+38	M5
GO+40	M4
GO+44	M3

For a summation of Tamarin installations, see F&S No. 05027.

F & S NO. 14013	TITLE Radiological Surveillance, PRIMARY				
USER JTG 8.7	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction will be required.

The facility is designated a PRIMARY radiological surveillance station because of the civilian population being in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. Hawaii State Health Department personnel will be assigned to this Rad Safe facility.

A similar facility will be established on the island of Molokai.

F & S NO.	TITLE					
16002	VHF/FM Mobile Radio System					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	Costs included in F&S Number 06002				
	POST-GO					
	Estimate	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING Completed.

Drawing: 110-077-SK-W1

PROCUREMENT Completed.

CONSTRUCTION A repeater and base station on "H" net are located at the Photo-Optical Station, Mt. Haleakala.

POST-GO

ENGINEERING To be determined and accomplished Post-GO.

PROCUREMENT To be determined and accomplished Post-GO.

CONSTRUCTION A VHF/FM radio system will be provided to serve all scientific users in the Maui Area.

F & S NO. 16003	TITLE Telephones		
USER AEC	STRUCTURE/FACILITY NO. None	SCIENTIFIC STATION NO. None	BOD
			FOD

FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	POST-GO Estimate	TO BE DETERMINED				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION Users have not determined telephone requirements. It is expected that the local telephone company will make all required installations.

F & S NO. 17002	TITLE Simulator Station					
USER SANDIA EG&G	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost*	9.0		93.5	102.5	4.1
	FY-71	2.7	12.0	11.9	26.6	
	TOTAL	11.7	12.0	105.4	129.1	4.1

PRIOR YEARS

ENGINEERING Completed.

Drawings: JS 104-071-C5
JS 104-071-A1 thru A7
F 104-071-M1
F 104-071-S1
F 104-079-W1

PROCUREMENT Completed.

CONSTRUCTION The Sandia Simulator Building is a 16 x 26 x 10 1/2-ft. high, prefabricated, rigid-frame structure with a concrete floor slab and metal roofing and siding. A 3-ft. high load bearing concrete block wall extends around the perimeter of the building. Access is via an 8 x 10-ft. double doorway on the north side. The building's interior is lighted and also acoustically treated. A 12 x 20-ft. concrete apron outside the building, used for displaying the simulator, can support a load of 3,000 pounds, distributed on 4 wheels. A heating and ventilating unit mounted on a platform outside the south end of the building serves the structure. Antennas are mounted on a floodlighted wooden platform atop the building. (Completed in 1964).

The Sandia Ground Plane is an area of wiring in the shape of a 45° sector, with a radius of 500-ft. It consists of No. 19 and No. 22 gauge wires which extend radially from the center point at 2 1/2 degree intervals. The ground plane follows the slope of the ground and is within ± 5-ft. of a straight line grade.

Trailers located in close proximity to the Sandia Simulator Building are as follows:

*Includes costs for F&S No. 17004.

TRAILER	SIZE
Sandia C-1	8 x 36-ft.
EG&G Photo instrumentation	10 x 45-ft.
Sandia Camper, E-24	8 x 12-ft.
Sandia Camper, E-25	8 x 12-ft.
AEC Communications Maintenance Van	8 x 16-ft.

FY 1971

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION A mess trailer and a bunk trailer will be placed at the Simulator Station. Both of the AEC furnished trailers will be provided with the necessary utility connections.

HAWAII, MAUNA LOA — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
17004	Power					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	Included in F&S Nos. 17002 and 17005				

PRIOR YEARS

ENGINEERING Completed.

Drawings: JS 104-069-E4, JS 104-069-E7, JS 104-069-E9, F 104-069-E1, JS 104-071-E2, F 104-080-E1 and E2

PROCUREMENT Completed.

CONSTRUCTION The Hilo Electric Company's transmission line serves the Mauna Loa site with 12.4 kv power. A 120/208-12,400 volt, 75 kva, 3 phase transformer transforms the incoming power for use by the AEC facilities. A 90 kw diesel generator serves as a back up source of power in the event of commercial power failure. Generator start-up and transfer of power is manually effected. (Completed in 1967.)

Experience has shown that the present generator at the Mauna Loa site is inadequate. This 90 kw generator was derated to 60 kw capacity primarily due to the great altitude of the site, but actually encounters difficulty in providing an output of 45 kw. The generator will be replaced with a larger unit capable of providing satisfactory backup capability and with less erratic fluctuations in voltage and frequency.

HAWAII, MAUNA LOA — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE				
17005	Roads				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF	None		None		FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost*	1.9		30.5	32.4	
	TOTAL	1.9		30.5	32.4	

COMPLETED

DESCRIPTION From State Highway 20 ("Saddle Road") a county owned access road approximately 17-miles long ascends from an elevation of 6,600-ft. to the 11,100-ft. + elevation of the Simulator and Camera Station site. The entire road is on a lava bed except for a 3,500-ft. paved section immediately adjacent to the facilities. Sections of the road have been treated with applications of oil.

DRAWING: F 104-071-C2

*Includes costs for F&S No. 17004.

[redacted]

F & S NO.	TITLE					
17007	Communications					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
AEC	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	None				
	FY-69	Costs included in F&S Number 06002				

PRIOR YEARS

ENGINEERING Completed.

Drawings: JS 110-077-W7 and W24 F 104-071-E7 and E8 F 104-079-W1

PROCUREMENT Completed.

CONSTRUCTION Four (4) VHF antennas are mounted on a 50-ft. pole located east of the simulator building. Three (3) of the antennas are oriented towards Mauna Kapu and the fourth is oriented towards Mauna Kea. Coaxial cable extends from the antennas to a panel located in an adjacent radio communications van.

FY 1969

ENGINEERING Completed.

Drawings: JS 110-077-W30 and W31 110-077-SK-W1

PROCUREMENT To be accomplished.

CONSTRUCTION A new 70-ft. antenna pole will be erected approximately 30-ft. north of the existing 50-ft. pole. The new pole will be guyed to concrete anchor blocks and to the existing pole. A concrete anchor block will be provided for the existing pole. Three (3) YAGI antennas will be mounted on the existing pole and six (6) YAGI antennas will be mounted on the new pole. Coaxial cables will extend from the antennas to a panel located in the adjacent radio communications van. This facility, together with the repeater located at Mauna Loa to Hilo, and provides radio coverage of the main roads from Mauna Loa to Hilo, and provides access to "D", "E" and "H" Nets from the Mauna Loa Station.

F & S NO.	TITLE					
17008	Radiological Surveillance, PRIMARY					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction will be required as the U. S. Weather Bureau (USWB) facilities will be used.

This facility is designated a PRIMARY radiological surveillance station because of the civilian population being in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. Two USPHS officers will be assigned to this Rad Safe facility.

F & S NO. 17009	TITLE Communications Experiment - Subtask A620					
USER TC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO.			BOD FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION This facility will be service funded and will require no support from DASA or JTF-8. The facility will use existing communication installations. In addition, one (1) TC furnished van and one (1) TC furnished 20 kw, 120/208 volt, 60 cycle, 3 phase generator will be provided.

HAWAII SCIENTIFIC

F & S NO.	TITLE					
17010	Island Wave Sensor, Type III (Tamarin)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
TG 8.7	None		104-13-1 thru 104-13-9			FOD *
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	Included in F&S No. 05027.				
	POST-GO					
	Estimate	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING None required.

PROCUREMENT Completed. Items in storage at Damon Tract or at Defense Research Laboratory (DRL), Santa Barbara, California.

POST-GO

CONSTRUCTION Nine AEC furnished Type III wave sensor equipped installations are to be located around the perimeter of the island of Hawaii. The primary objective is to measure and record the amplitude and time of arrival of long period waves over a predetermined period. The equipment will be emplaced by DRL personnel at various predetermined bay and harbor locations and will be housed in existing shelters or small AEC furnished utility sheds. A combination 400 sq. ft. office and shop area in Kailua with telephone answering service will be furnished DRL.

The installations will contain a differential sensor, data logging system, and an armored cable connecting the implanted wave sensing transducer with the completely self-containd data logging system. The transducer will be installed by DRL scuba divers in approximately 30 to 50-ft. of water and located in a position to eliminate as much shore-induced phenomena as possible. H&N will furnish voice communications between Hawaii Type III sites and the Damon Tract trailer offices.

DRL personnel will assemble at Damon Tract to prepare equipment prior to deployment. A DRL Type III installation team of 8 persons, including scuba divers and technical personnel, will emplace and roll up the equipment; 2 men will operate and maintain the equipment for the duration of the program. DRL personnel will obtain subsistence through the local economy.

*FOD SCHEDULE FOR TYPE III HAWAII SITES

FOD	SITE NO.	FOD	SITE NO.
GO+14	H9	GO+24	H1
GO+16	H3	GO+26	H2
GO+18	H8	GO+28	H7
GO+19	H6	GO+34	H4
GO+22	H5		

For a summation of Tamarin installations, see F&S No. 05027.

HAWAII, MAUNA LOA — SCIENTIFIC AND SUPPORT

F & S NO.	TITLE					
17011	Camera Station					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
Sandia	None		104-4-1			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	1.4		8.9	10.3	
	TOTAL	1.4		8.9	10.3	

COMPLETED

DESCRIPTION The Camera Building is a 12 x 14 x 9-ft. high, wood framed structure with corrugated aluminum siding and roofing. A 2 x 3 x 1 1/2-ft. high concrete camera mount rests on the building's concrete floor slab. The building is provided with a 7 x 8-ft. wide double door and a personnel door. Interior furnishings consist of workbenches and storage cabinets. Interior lighting and exterior floodlighting are provided. Concrete walks are provided on the north and west sides of the building and a wooden walkway connects the building with the U. S. Weather Bureau Facility Building 200-ft. to the east (completed in 1966). A camera alignment target board is located 300-ft. northwest of the Camera Building.

DRAWINGS: JS 104-071-A3 JS 104-071-C3 F 104-071-C3

KIRTLAND AFB SCIENTIFIC

F & S NO.	TITLE				
18001	Trailer Park and Trailers				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF	None		None		FOD In Use
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	6.3		85.8	92.1	
	FY 69	Costs will be included in F&S No. 18012.				
	TOTAL	6.3		85.8	92.1	

PRIOR YEARS

ENGINEERING Completed.

Drawings: K-058-C1 thru C7 K-058-S1 K-058-E1 thru E6 K-079-W1

PROCUREMENT Completed.

CONSTRUCTION An asphalt paved trailer park is located near the Diagnostic Aircraft Parking Area. Area lighting, utilities, and one manned guard station are provided. The trailer park is enclosed on the west and north sides with a 7-ft. high chain link fence, on the east side with a 40-in. high wooden fence. The south side is unfenced to provide access to the runways.

Trailers now in place are as follows (for trailer location see Appendix A):

ASSIGNED TO	UTILIZED FOR	LICENSE NUMBER	PROP. NUMBER	PROPERTY OF
1. Air Force	Office	NONE	26088	AEC
2. LRL/EG&G	P. E. & Storage	NONE	26099	AEC
3. LRL	Office	NONE	26098	AEC
4. LRL	Office	NONE	26097	AEC
5. LRL	Drafting	E-90111	-----	AEC
6. LRL	Data Reduction	E-90163	-----	AEC
7. LRL	Electronic	E-90088	-----	AEC
8. LRL	Photo	E-90118	-----	AEC

ASSIGNED TO		UTILIZED FOR	LICENSE NUMBER	PROP. NUMBER	PROPERTY OF
9.	LRL	Elec. Storage	E-90095	-----	AEC
10.	LRL	Mech.	E-90096	-----	AEC
11.	LRL	Machine Shop	E-90099	-----	AEC
12.	LRL	Mech.	E-90100	-----	AEC
13.	EG&G	Operations	NONE	26089	AEC
14.	EG&G	Photo Elec.	NONE	26096	AEC
15.	EG&G	Photo Mock-up	E-25065	13020	AEC
16.	EG&G	Photo Planning	-----	26094	AEC
17.	EG&G	Photo Loading	E-25064	13019	AEC
18.	EG&G	Photo Mechanical	-----	26095	AEC
19.	EG&G	Machine Shop	E-91204	22095	AEC
20.	G. D.	Work Shop	-----	-----	AEC
21.	G. D. (a)	Office/Drafting	-----	26174	AEC
22.	G. D.	Drafting	E-26317	-----	AEC
23.	Men & Women	Latrine	-----	26103	AEC
24.	EG&G	R. M. Lab	-----	26093	AEC
25.	EG&G	R. M. Office / Storage	-----	26090	AEC
26.	EG&G	T&C Office/Lab	-----	26092	AEC
27.	EG&G	T&C Office/Lab	-----	26091	AEC
28.	LASL	Office	E-27872	-----	AEC
29.	LASL	Office	-----	26100	AEC

ASSIGNED TO	UTILIZED FOR	LICENCE NUMBER	PROP. NUMBER	PROPERTY OF
30. LASL J-16-10	Lab	E-26730	-----	LASL
31. LASL J-8-3	P. E.	E-26149	-----	LASL
32. Sandia	PDS	-----	26102	AEC
33. Sandia	Data Reduction	E-27912	-----	SC
34. Sandia	DME	-----	26101	AEC
35 Sandia/F-2	Tracking	E-23993	-----	-----
36. Sandia/G5	Antenna	E-26371	-----	SC
37. Sandia	East-AM Fidu/ West-Tracking	-----	26212	SC
38. Sandia	Storage	E-23425	-----	SC
39. Sandia	East-FM FM/ West-HRT	-----	26213	AEC
40. Sandia/B-59	Free Space Probe	E-27406	-----	SC
41. Sandia	Laboratory	E-23998	-----	SC
42. Sandia (A-1) (b)	Simulator	E-27627	-----	SC
43. LASL (c)	Office/Lab	E-26344	26162	AEC
44. LASL/J-11-3 (c)	Storage	E-28575	-----	LASL

(a) This trailer will be shipped to Hickam AFB, Post-GO.

(b) See F&S No. 18008.

(c) These trailers support the LAPQ-1 Radar Workshop Building (F&S No. 18011).

FY 1969

A shop and storage building for General Dynamics will be constructed in the trailer park during FY 1969. For details refer to F&S No. 18012.

KIRTLAND AFB SCIENTIFIC

F & S NO. 18008	TITLE Simulator Units					
USER EG&G/ SANDIA	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD / FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO	Costs Included in F&S No. 18001				

COMPLETED

DESCRIPTION The simulator facilities (completed in 1964) are 800-ft. east of the NC-135 parking area. From them, a clear line-of-sight is maintained to the diagnostic aircraft. The EG&G simulator facilities are located in a 8 x 12-ft. wooden shed; power supply is 120 volt, single phase. The adjacent Sandia facilities are located in the 8 1/2 x 34-ft. A-1 trailer which is provided with 208 volt, 3 phase power.*

No utilities other than power are required at the simulator site.

Signal cable is provided from the aircraft parking area to the simulator site.

DRAWINGS: K-058-C1 K-079-W1

*When required, trailer A-1 is moved to Hickam AFB for operations.

KIRTLAND AFB SCIENTIFIC

F & S NO. 18011	TITLE LAPQ-1 Radar Workshop Building				
USER LRL	STRUCTURE FACILITY NO. None	SCIENTIFIC STATION NO. None		BOD	
				FOD	
FUNDING AGENCY AEC	($000)	ENGR	PROC	CONST	TOTAL	FURN
	PRE-GO Prior Cost	7.2		*	7.2	
	TOTAL	7.2		*	7.2	

COMPLETED

DESCRIPTION This prefabricated steel structure with a concrete floor slab was completed in 1968. The 24 x 48-ft. building with an eave height of 12-ft. has an 8 x 10-ft. equipment door and a personnel door. A humidity controlled air conditioning and heating system service the insulated building. Two (2) variable speed electric trolleys of 1/2-ton capacity and 12-ft. hook lift heights are provided.

A 45 kva transformer northwest of the building provides 120/208 volt, 60 cycle, 3-phase power.

Interior and exterior lighting are provided.

DRAWINGS: K-058-C8 K-058-S6 K-058-E14 & E16 K-058-M4 & M5

*Cost of construction included in F&S No. 19007.

F & S NO.	TITLE					
18012	Shop and Storage Building					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
GD	None		None			FOD 6-30-69
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO FY 69	3.8		11.6	15.4	
	TOTAL	3.8		11.6	15.4	

FY 1969

ENGINEERING In progress.

Drawings: K-031-C1 K-031-S1 K-031-E1

PROCUREMENT To be accomplished.

CONSTRUCTION This building will house tools, equipment, and spare parts used for maintenance of the diagnostic aircraft. It is to be located in the trailer park, and will be a 10 x 20 x 50-ft. prefabricated rigid frame structure with insulated, corrugated metal roofing and siding. The floor slab will be of reinforced concrete.

Two (2) 8 x 8-ft. sliding doors, each with a 4 x 9-ft. sloping concrete approach ramp, will be provided.

Suspended fluorescent fixtures and skylights will illuminate the interior. Floodlights will provide exterior illumination.

A service sink, fresh waterline (cold water only), and sewer line will be provided.

Electrical power supplied will be 120/208 volt, 3 phase. Receptacles (120 volt) will be distributed throughout the interior.

KIRTLAND AFB SUPPORT

F & S NO.	TITLE		
19001	Aircraft Parking Area		
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.	BOD
JTF	None	None	FOD

FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	Cost Included in F&S No. 18001					

COMPLETED

DESCRIPTION A 12-in. thick, 180 x 180-ft. concrete parking ramp is provided for each of the three NC-135 Aircraft. The ramps (completed in 1964) have receptacles of 120/208 and 440-volt power and phone jacks.

An asphalt paved area to the north is used for parking Aero-Space Ground Equipment (AGE).

DRAWINGS: K-058-C1 thru C3, K-058-C6 and C7, K-058-E1 thru E4, K-058-E13, K-079-W1

KIRTLAND AFB SUPPORT

F & S NO.	TITLE					
19004	Maintenance and Warehouse Building					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	Cost Included in F&S No. 18001					

COMPLETED

DESCRIPTION The Maintenance and Warehouse Building (completed in 1965) is a 24 x 40-ft. prefabricated steel building with an eave height of 10 1/2-ft. It has a concrete floor slab, with galvanized roofing and siding, and two overhead rolling doors: 8 x 8-ft. and 8 x 12-ft.

A 480-120Y/208 volt, 3 phase transformer is located within the building.

Interior and exterior lighting is provided. The building is insulated, air conditioned and heated.

DRAWINGS: K-058-C7 K-058-M2 K-058-E11 K-058-S2

F & S NO.	TITLE					
19007	Storage Building					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
EG&G	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Prior Cost	4.5		*25.4	29.9	
	TOTAL	4.5		*25.4	29.9	

COMPLETED

DESCRIPTION This structure is a 24 x 40-ft. prefabricated steel warehouse building erected on a 6-in. concrete slab and has an eave height of 10-ft. Roofing and siding are of corrugated steel. An overhead rolling door, 12 x 8-ft. is provided. (Completed in 1968.)

A 9 kva, 480-120/208 volt, 60 cycle, 3 phase transformer is located inside the building. Interior and exterior lighting are provided.

DRAWINGS: K-058-C8 K-058-S5 K-058-E13

*Includes construction cost of F&S No. 18011.

KIRTLAND AFB SUPPORT

F & S NO.	TITLE					
19008	Electrical Power System					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Costs Included in F&S No. 18001					

COMPLETED

DESCRIPTION A 750-kva substation (completed in 1964) lies west of the Trailer Park on a 12 x 18-ft. concrete slab. A 12-ft. wide gate in the enclosing 8-ft. high chain link fence (with barbed wire outriggers) provides access to the 34 x 28-ft. area.

Incoming overhead power is 4160 volt and 3 phase. Outgoing power is fed to Main Distribution Panel No. 1 (480 volt, 60 cycle, 3 phase) which, in turn, feeds three secondary distribution components as follows:

Transformer and Distribution Panel No. 2: 225 kva, 480-208Y/120 volt, 3 phase. Panel is 800 amp with a 4 wire bus.

Transformer and Distribution Panel No. 3: Similar to No. 2.

Motor Generator and Distribution Panel No. 4.

The Motor Generator is 60 kw, 480-208Y/120 volt, 400 cycle, 3 phase with a 400 amp, 120/208 volt, 3 phase bus.

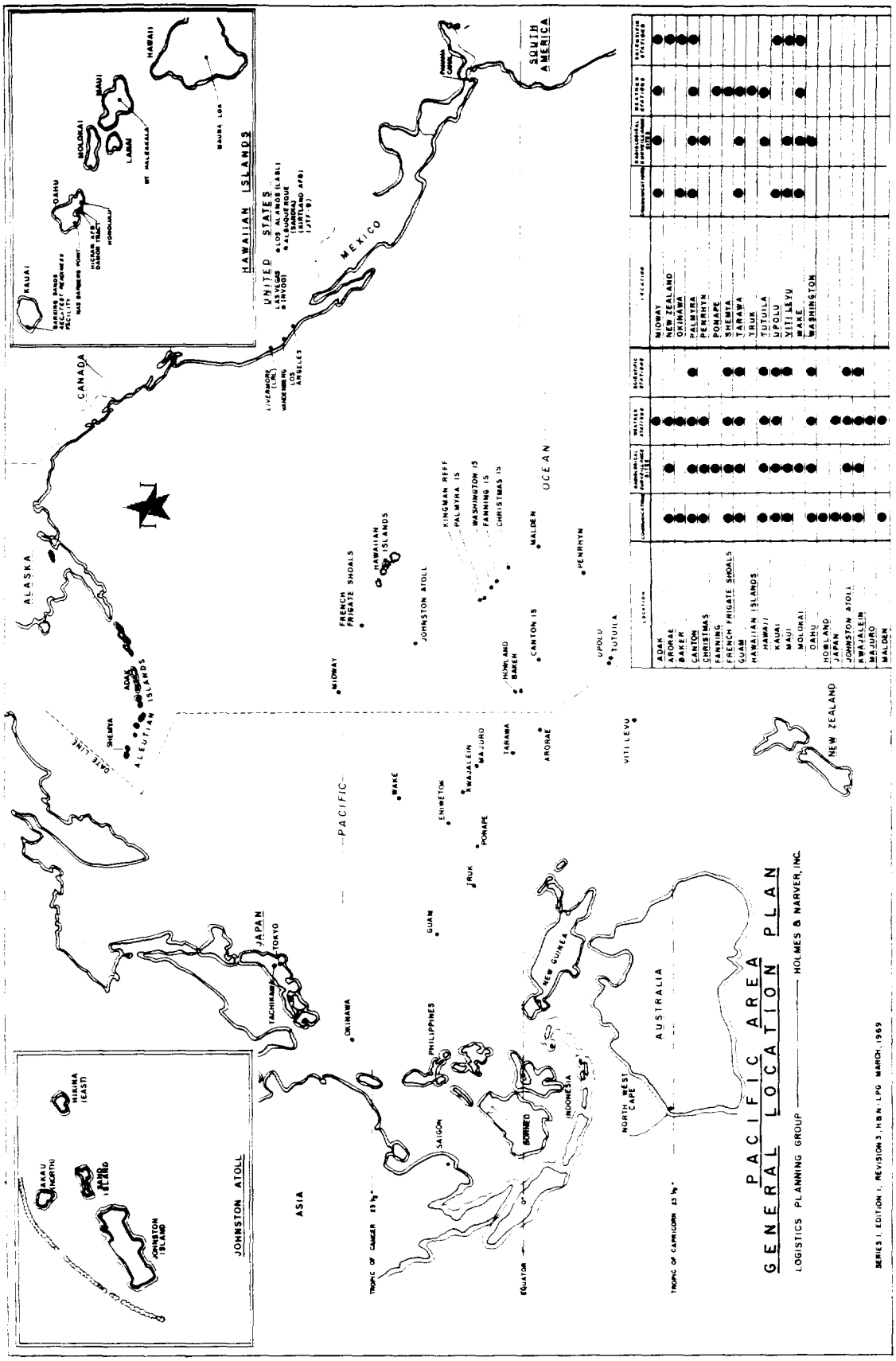
General Area Power

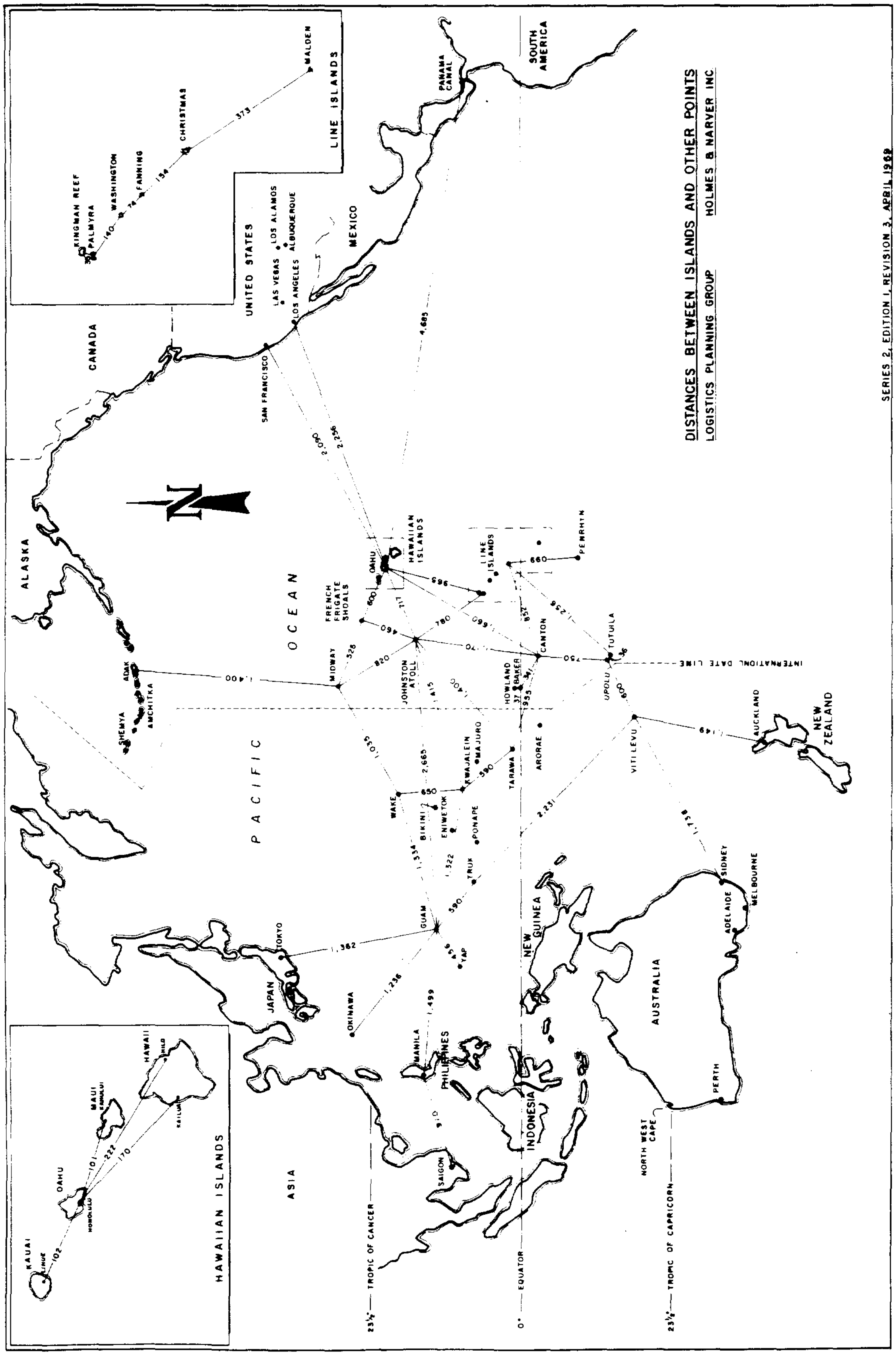
1. Two, 1kva, single phase, 480-120/240 volt transformers furnish power to the simulator site.

2. One, 3 kva, single phase, 480-120/240 volt transformer furnishes power to the guardhouse at the main gate.

3. One, 3 kva, single phase, 480-120/240 volt transformer furnishes power to security lights and obstruction lights.

DRAWINGS: K-058-E1 thru E6 K-058-E13


PACIFIC AREA
GENERAL LOCATION PLAN
LOGISTICS PLANNING GROUP ——— HOLMES & NARVER, INC.
SERIES I, EDITION 1, REVISION 3, HBN-LPG MARCH, 1969
HAWAIIAN ISLANDS
UNITED STATES
JOHNSTON ATOLL
ALASKA
CANADA
MEXICO
SOUTH AMERICA
PACIFIC
OCEAN
ASIA
AUSTRALIA
NEW ZEALAND
JAPAN
PHILIPPINES
INDONESIA
NEW GUINEA
BORNEO
TROPIC OF CANCER 23½°
TROPIC OF CAPRICORN 23½°
EQUATOR
MIDWAY
WAKE
GUAM
OKINAWA
SAIGON
ADAK
ATTU
SHEMYA
KWAJALEIN
MAJURO
TARAWA
ARORAE
TUTUILA
UPOLU
VITI LEVU
CANTON IS
ENDERBURY
PENRHYN
MALDEN
FANNING IS
WASHINGTON IS
CHRISTMAS IS
KINGMAN REEF
PALMYRA IS
JOHNSTON ATOLL
FRENCH FRIGATE SHOALS
HAWAIIAN ISLANDS
PONAPE
TRUK
YOKOHAMA
TOKYO
HONOLULU
PEARL HARBOR
KAUAI
OAHU
MOLOKAI
MAUI
HAWAII
LANAI
MT HALEAKALA
MAUNA LOA
NIKUNA (EAST)
AKAU (NORTH)
JOHNSTON ISLAND
LOCATION
ADAK
ARORAE
BAKER
CANTON
CHRISTMAS
FANNING
FRENCH FRIGATE SHOALS
GUAM
HAWAIIAN ISLANDS
HAWAII
KAUAI
MAUI
MOLOKAI
OAHU
HOWLAND
JAPAN
JOHNSTON ATOLL
KWAJALEIN
MAJURO
MALDEN
MIDWAY
NEW ZEALAND
OKINAWA
PALMYRA
PENRHYN
PONAPE
SHEMYA
TARAWA
TRUK
TUTUILA
UPOLU
VITI LEVU
WAKE
WASHINGTON


DISTANCES BETWEEN ISLANDS AND OTHER POINTS
LOGISTICS PLANNING GROUP
HOLMES & NARVER INC
SERIES 2, EDITION 1, REVISION 3, APRIL 1969
PACIFIC OCEAN
LINE ISLANDS
HAWAIIAN ISLANDS
INTERNATIONAL DATE LINE
TROPIC OF CANCER
EQUATOR
TROPIC OF CAPRICORN
CANADA
UNITED STATES
MEXICO
SOUTH AMERICA
PANAMA CANAL
ALASKA
ASIA
JAPAN
PHILIPPINES
INDONESIA
NEW GUINEA
AUSTRALIA
NEW ZEALAND

POST-GO OFF-ISLAND WEATHER FACILITIES

The U. S. Air Force Air Weather Service (AWS) has been tasked by JTF-8 OPLAN 100-69 to furnish weather data in the Pacific Basin in the event it is decided to resume nuclear testing in that area. All weather (WX) traffic will be unclassified. The Task Force will establish a RATT/CW radio net to handle WX traffic. Each AWS facility will provide weather service to scientific projects and support activities on the various islands. Weather reconnaissance aircraft will compliment the island and ship observational network.

The USAF AWS weather plan does not duplicate installations on islands that presently have similar facilities available for furnishing atmospheric and surface weather data. The map on the next page identifies the location of AWS weather facilities, which are also listed below:

Island	Weather Facility	Events	FOD
Canton	AWS	ALL	GO+30
French Frigate Shoals	AWS	ALL	GO+30
Palmyra	AWS	ALL	GO+30
Japan	AWS	NOST	GO+72
Christmas	AWS	BH	GO+240
Malden	AWS	BH	GO+240
Tarawa	AWS	BH	GO+240
Arorae	AWS	BH	GO+240
Baker	AWS	BH	GO+240

Those islands scheduled for various scientific experiments, but not included in the AWS weather plan, have existing weather facilities belonging either to the U. S. Navy Weather Service (NWS) or the U. S. Weather Bureau (USWB). The Navy will also take surface observations from aboard ship in selected areas. The responsible agency and weather facility locations are as follows:

Location	Weather Facility	Events	FOD
Kwajalein	USWB	ALL	GO+30
Majuro	USWB	ALL	GO+30
Ponape	USWB	ALL	GO+30
Truk	USWB	ALL	GO+30
Tutuila	USWB	ALL	GO+30
Wake	USWB	ALL	GO+30
Guam	USWB	NOST	GO+72
Shemya	USWB	NOST	GO+72
Adak	NWS	NOST	GO+72
Midway	NWS	ALL	GO+30

PACIFIC AREA WEATHER STATIONS

LEGEND

AWS ..... USAF AIR WEATHER SERVICE
NWS ..... USN WEATHER SERVICE
USWB ..... UNITED STATES WEATHER BUREAU

POST-GO OFF ISLAND COMMUNICATIONS

The U. S. Army Strategic Communications Command (USASCC) has been tasked to establish Defense Communication Systems (DCS) stations in the Pacific in the event it is decided to resume nuclear testing in that area. Planning to date envisages using AN/TSC-20's on point-to-point radio circuits from each island to DCS Aliamanu making use of voice plus secured teletype on one 3 KC voice channel to conserve the spectrum. These channels will be patched through to DCS Johnston Atoll via the JA-Oahu submarine cable. Each island communication station will provide telephone service to scientific projects and support personnel on the island. In addition, each station will be provided with tactical radio nets for local use, with terrain a prime consideration on selection of sites.

The USASCC communication plan covers a wide geographic area as illustrated on the accompanying map which includes the following two types of communication nets:

a. Communication Trunk/Circuits, DCS Net Control Station (NCS) Oahu to: French Frigate Shoals, Palmyra, Canton, Viti Levu and Upolu. (Mighty Sky Event)

b. Weather Communication Trunk Circuits, DCS Net Control Station (NCS) to: Baker, Christmas, Malden, Howland, Tarawa and Arorae (Baker Howland Event).

Those islands scheduled for the various events but not shown in the USASCC communication plan have Federal Government and civilian agency communication facilities available for each area as discussed below:

a. Scientific subtasks and support activities will use existing military communication facilities on: Kwajalein, Oahu, Guam, Wake, Midway, Tokyo, Okinawa and Adak.

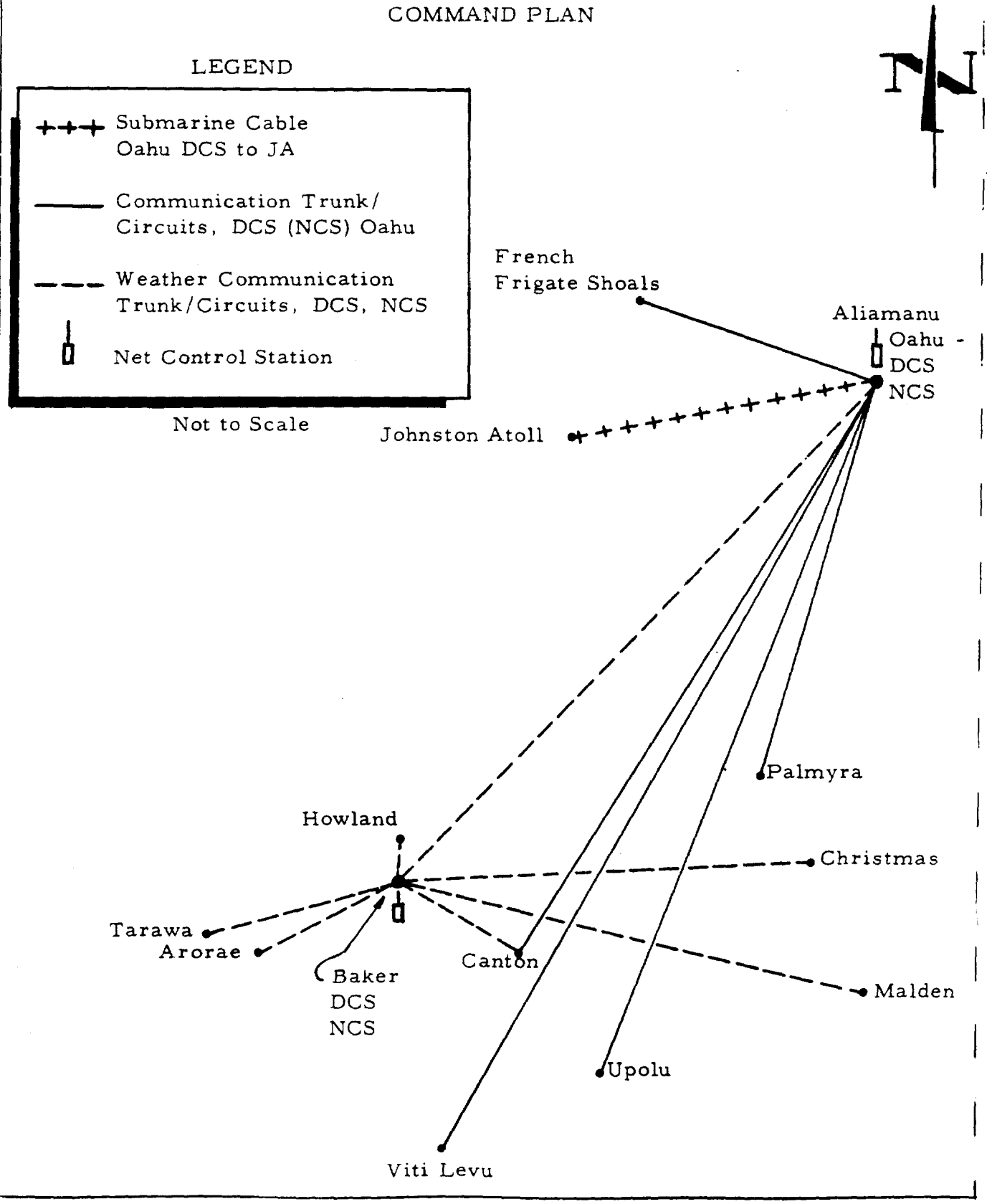
b. Scientific subtasks and support activities will use existing US Weather Bureau communication facilities on: Majuro, Ponape, Truk, Shemya and Tutuila.

c. Scientific subtasks and support activities will share use of communication centers, telephone and local radio service as furnished by the USAEC through its contractor on: Oahu, Kauai, Hawaii, and Maui.

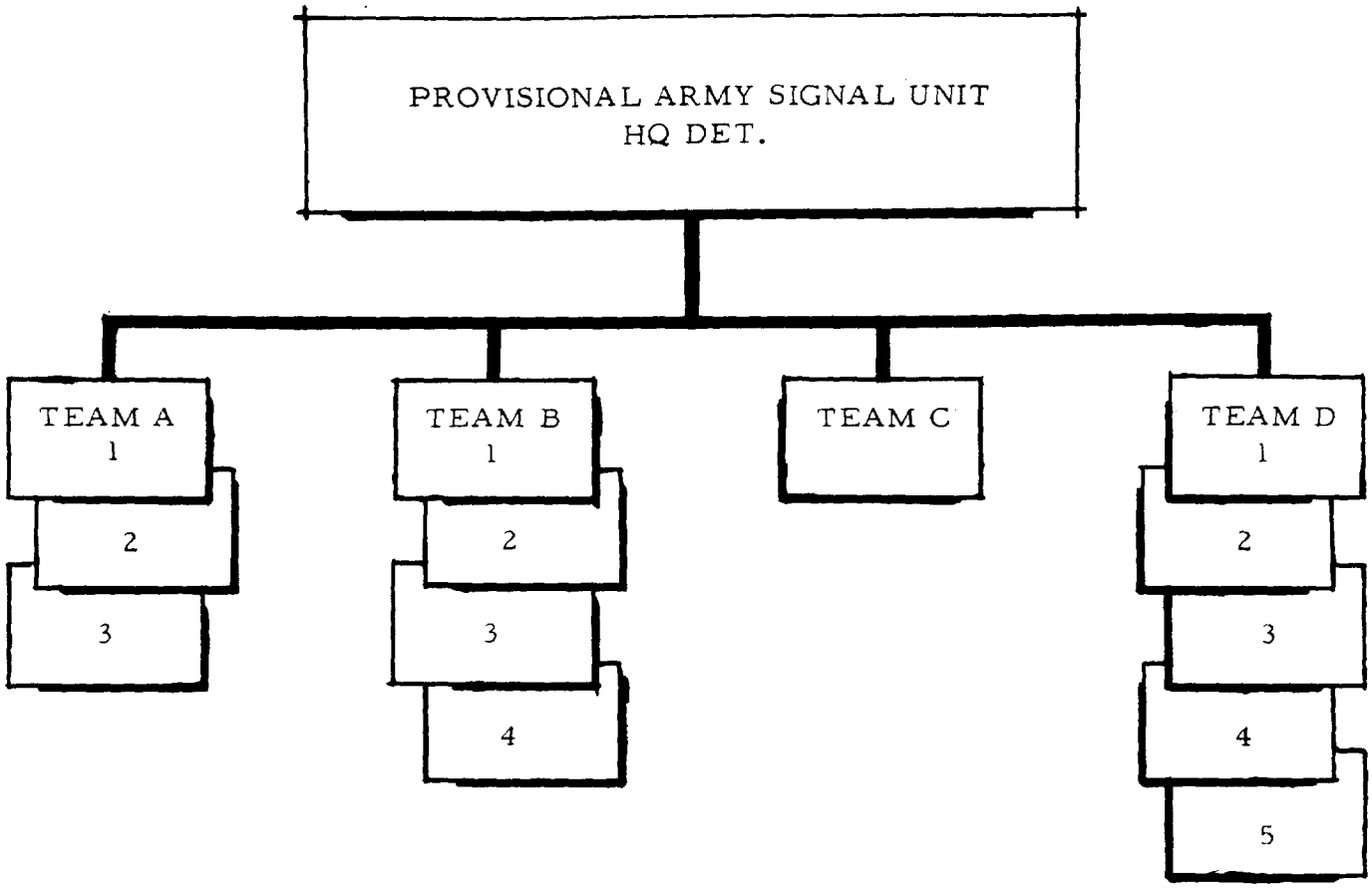
d. CJTF-8 will provide an unclassified side band voice radio net using KWM-2A/30S-1 radio sets for those sites which have no effective communications link for Rad-Safe purposes. USPHS personnel will operate radio sets on Christmas, Fanning, Penrhyn (Tongareva), Washington and Palmyra.

DCA SYSTEMS

U.S. ARMY STRATEGIC COMMUNICATIONS
COMMAND PLAN



ORGANIZATIONAL CHART



STRENGTH: 5 OFF 8 WO 235 EM TOTAL: 248

OPLAN LOCATION	PASU TEAM	ASSIGNED PERS.		VEHICLES		TRAILERS		FOD GO
		OFF	EM	2-1/2T	3/4T	1-1/2T	3/4T	
a. French Frigate Shoals	A-1	1	25	3	4	3	4	+30
b. Palmyra	A-2	1	25	3	4	3	4	+30
c. Canton	A-3	1	44	4	4	4	4	+30
d. Viti Levu	B-1	1	17	2	3	2	3	+150
e. Upolu	B-2	1	17	2	3	2	3	+150
f. Baker	C	1	23	8	2	8	2	+120
(1) Christmas	D-1	-0-	9	2	1	2	1	+240
(2) Malden	D-2	-0-	9	2	1	2	1	+240
(3) Howland	D-3	-0-	9	2	1	2	1	+240
(4) Tarawa	D-4	-0-	9	2	1	2	1	+240
(5) Arorae	D-5	-0-	9	2	1	2	1	+240

CANTON*
2°50'S 171°45'W

General Canton Island is the largest and most northerly of the Phoenix Island group. The U. S. portion is presently administered by the Department of Interior, and has been used in the past by the U. S. Navy, U. S. Air Force, Pan American Airways Inc., the Federal Aviation Agency and most recently by the National Aeronautical and Space Administration who terminated their use of the island during January 1968. Currently, the U. S. portion of Canton Island is uninhabited.

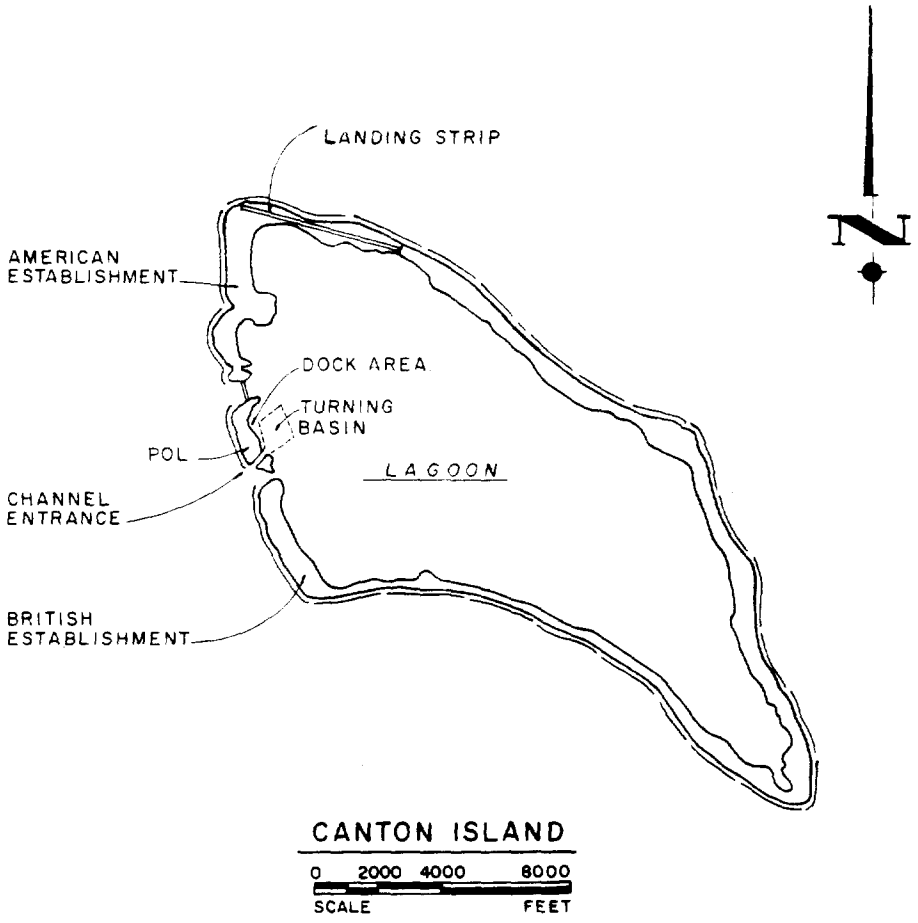
Physical Data Canton Island is a coral atoll triangular in shape and encloses a large lagoon studded with coral heads. The rim of the atoll is unbroken except for two openings on the west side. The land varies in width from 100 to 700 yards and in height from sea level to 20 ft. The west side lies in a north-south direction and is shortest in length, about 4 miles. The other sides trend southeasterly and meet about 9 miles from the northwestern extremity. There is a coral road around the atoll that takes approximately half an hour to drive.

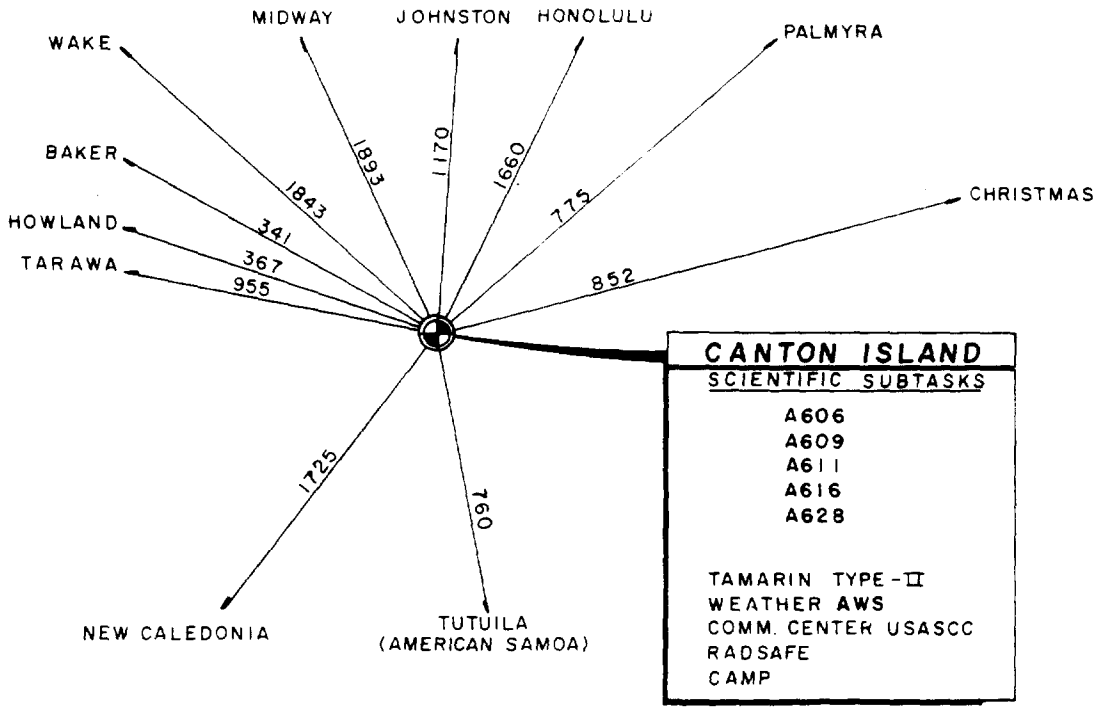
The soil is mostly coral rock and sand and is virtually bare of natural vegetation except for a few scattered palm trees, kou bushes and bunch grass. In addition to several species of birds, there are lizards and rats on the island. Fresh water is not available in large quantities.

Climate The climate is tropical with no noticeable seasons. Temperatures range from a night time low of 75°F to a daytime high of 95°F. Relative humidity ranges from about 64 to 80 percent. Annual rainfall varies from 8 to 40 inches. The prevailing winds are easterlies 90 percent of the year, ranging from east-northeast to east-southeast, with an average velocity of 12 to 18 knots. The winds rarely blow from the west, and hurricanes are unknown. The visibility is good, averaging from 12 to 30 miles; seldom are there low clouds, fog, mist or haze.

Facilities The 6,000 by 150 ft. asphalt surfaced runway has an additional 1,500 ft. overrun strip at the east end. The harbor entrance leads into a 1,800 by 1,600 ft. turning basin. The depth of the harbor varies between 27 and 39 ft. Tankers drawing up to 25 ft. of water and cargo ships of 411 ft. in length regularly utilized port facilities during 1967. Harbor facilities included warehousing and a 385 ft. quay with two 40 ft. spurs with a depth of 27 ft. alongside. It is believed that almost all the support facilities have been removed from the island. This includes the electrical power plant and electrical distribution system, water distillation plant, and some of the living quarters. Building shells, POL storage and the airstrip are a few of the items remaining on the island. The small UK installation is located on the west side, south of the harbor entrance.

*Jointly administered by the United States and Great Britain as ownership is in dispute between these two countries.





DISTANCES IN NAUTICAL MILES FROM CANTON ISLAND TO OTHER POINTS

CANTON

F & S NO. 21001	TITLE Debris Tracking by Resonant Scattering Equipment - Subtask A606				
USER TC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. 108-3-1		BOD GO+138 FOD GO+159
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Prior Costs	1.5*			1.5	
	POST-GO Estimate 12/65			8.9	8.9	
	TOTAL	1.5		8.9	10.4	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 108-002-C2 108-3-1-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION A technical operations shelter will be required to provide office and recording instrument space. This building will be 8 x 8-ft., wood frame construction with plywood siding, corrugated aluminum roof and erected on a concrete slab. It will be air conditioned and dehumidified to 50 percent humidity. A 6 x 6-ft. concrete pad 18-in. thick will be constructed about 20-ft. from the building for mounting TC furnished camera equipment. Electric power, including back up, will be provided by two 5 kw, 120/240 volt, 60 cycle, single phase generators. Refer to Figure A-18, Appendix A, for location. The number of scientific personnel assigned to Subtask A606 at this location is one.

*Includes engineering costs for F&S Numbers 22001 and 24002.

CANTON

F & S NO. 21002	TITLE Radar Observations - Subtask A609				
USER TC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. 108-3-2		BOD GO+105 FOD GO+138
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Prior Cost *1.6			1.6	
	POST-GO Estimate 12/65		19.1	19.1	
	TOTAL 1.6		19.1	20.7	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 108-002-C2 108-3-7-A1 108-3-7-C1 108-3-7-E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) All Sky Camera; b) an 8 x 40-ft. optics trailer; and, c) one storage transportainer. The contractor will furnish two 30 kw, 120/208 volt, 60 cycle, 3 phase diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) construct a 10 x 10-ft. concrete pad; b) site the optics trailer and storage transportainer near the concrete pad; and, c) install the generators and complete the electrical hookup to the optics trailer. The All Sky Camera will be located in a joint station with Subtask A628. The facilities for Subtasks A609 and A628 should be sited at the eastern end of the old fighter strip and as close to the ocean as possible. Refer to Figure A-18, Appendix A, for site location. Subtask A609 personnel will also operate the Subtask A628 facility at this location.

*Includes engineering costs for F&S No. 22002.

[redacted]

CANTON

F & S NO.	TITLE					
21003	HF Communications Simulation Experiment - Subtask A611					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+105
TC	None		108-3-3			FOD GO+125
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO					
	Prior Costs* 2.0				2.0	
	POST-GO					
	Estimate 12/65			8.3	8.3	
	TOTAL			8.3	10.3	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 108-002-C2

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) three 110-ft. high Log Periodic Ionospheric antennas; b) one instrument trailer; and, c) one 8 x 22-ft. camper trailer. The contractor will furnish two 20 kw, 120/240 volt, 60 cycle, single phase, low speed (1250 rpm) diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) prepare a cleared, flat, 540 x 620-ft. unobstructed area for the TC erected 110-ft. high Log Periodic Ionospheric antennas which will have a ground screen that extends into the sea; b) construct concrete antenna bases, as designed by TC in the field; c) provide longeron pads and anchors for the antennas; d) site the instrument trailer and camper trailer; and, e) install the generators and complete the electrical hookup to the instrument trailer. Refer to Figure A-18, Appendix A, for site location. Four scientific personnel are assigned to Subtask A611 at this location.

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*Includes engineering costs for F&S Numbers 24007, 25003, 26004, 27002, 28001, 29001 and 30001.

[redacted]

CANTON

F & S NO.	TITLE				
21004	Vertical Soundings of the Ionosphere - Subtask A616				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+130
TC	None		108-3-4		FOD GO+160
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO				
	Prior Costs* 2.3			2.3	
	POST-GO				
	Estimate 12/65		30.7	30.7	
	TOTAL 2.3		30.7	33.0	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 108-002-C2 108-3-4-C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish all antennas and one instrument trailer 8 x 36 x 10-ft. high. Contractor will furnish the following: a) two 60-ft. and two 80-ft. poles; b) one 100 gallon water tank; c) latrine and sewage facilities; and, d) two 30 kw, 120/208 volt, 60 cycle, 3 phase generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) the two 80-ft. poles will be erected 860-ft. apart and the two 60-ft. poles will be placed on a line offset 18-in. from the line connecting the 80-ft. poles; each 60-ft. pole will be 188-ft. from the center point between the larger poles; b) install TC furnished antennas on the poles; c) site the instrument trailer; d) install water tank and provide water for photographic processing; e) install generators with automatic switchgear; f) install septic system for sinks and toilet; and, g) provide electrical hookup where required. Refer to Figure A-18, Appendix A, for site location. Two scientific personnel are assigned to Subtask A616 at this location.

---

*Includes engineering costs for F&S Numbers 22003, 24003, 26002 and 28002.

CANTON

F & S NO. 21007	TITLE Riometer Station - Subtask A628				
USER TC	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. 108-3-7		BOD GO+105 FOD GO+135
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Prior Costs*	2.2			2.2	
	POST-GO Estimate 12/65			19.1	19.1	
	TOTAL	2.2		19.1	21.3	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 108-002-C2 108-3-7-A1, C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish the following equipment: a) one 30 and 90 mc oblique antenna; b) one 30 mc Riometer antenna; c) one 90 mc Riometer antenna; d) one 27 mc Radar antenna; e) one instrument van; and, f) one air conditioning unit. The contractor will furnish one storage CONEX. Power requirements are 10 kw, 120/240 volt, 60 cycle, 3 phase, plus 100% backup. This requirement will be served by utilizing the generators listed under Subtask A609 (F&S No. 21002).

The contractor will perform the following: a) provide a cleared, flat, unobstructed area approximately 75 x 150-ft.; b) site the instrument van and the storage CONEX in the vicinity of the Test Command antennas; and, c) install the generators and complete the electrical hookup to the instrument van. Refer to Figure A-18, Appendix A, for site location. Scientific personnel assigned to Subtask A609 will operate this Subtask A628 facility.

*Includes engineering costs for F&S Numbers: 22004, 24008, 25005, 26003, 27004 and 27005.

CANTON

F & S NO. 21010	TITLE Camp					
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+23 FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8/ MILCON CRO 7-65	PRE-GO Engineering costs included in F&S Number 22007. POST-GO Estimate 12/65*			152.7	152.7	
	TOTAL			152.7	152.7	

IN ORDER TO MEET THE REQUIRED BENEFICIAL AND FULL OCCUPANCY DATES AND MAINTAIN AN ORDERLY MOBILIZATION OF OFF-ISLAND CAMP CONSTRUCTION, PROCUREMENT FOR THE ACCEPTED CAMP CONCEPT MUST BE ACCOMPLISHED PRE-GO.

PRIOR YEARS

ENGINEERING Plan III B Preliminary Drawings - Completed.

Drawings:	93-002-C1	93-043-A1, M1, E1	108-002-C2
	93-023-A1	93-078-C1	TYP-035-A1 and A3
	93-024-A1	93-095-E1 and E2	TYP-036-A1

PROCUREMENT Some major items for Plan III B type camps are in stockpile at Damon Tract.

CONSTRUCTION Will be accomplished Post-GO.

POST-GO

ENGINEERING Plan III B Preliminary Drawings - Completed. If military field camp concept is adopted, engineering will be completed in the field, Post-GO.

PROCUREMENT Should be accomplished Pre-GO.

CONSTRUCTION A tent camp will be required for billeting and messing scientific and support personnel. JTF-8 is currently reviewing support camp requirements and material costs.

*Includes mobilization and demobilization costs based on Plan III B concept.

CANTON

F & S NO.	TITLE					
21012	Atoll Wave Sensor, Type II (Tamarin)					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+61
DRL	None		103-13-1			FOD GO+68
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	Included in F&S No. 05027.				
	POST-GO					
	Estimate	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING None required.

PROCUREMENT An AEC furnished 7 x 17-ft. Model 16 Northwest camper trailer, for use at the Canton Tamarin site, is on standby at Damon Tract, Oahu, Hawaii.

POST-GO

CONSTRUCTION The AEC furnished Type II Wave Sensor equipped installation is to be located at an undetermined off-shore location in the vicinity of Canton Island. The primary objective of this scientific site is to measure and record for Tsunami studies, the amplitude and time of arrival of long period waves over a predetermined period. The underwater equipment will be emplaced by Defense Research Laboratory (DRL) personnel. The auxiliary equipment will also be installed in the AEC camper trailer by DRL personnel.

This installation will contain a differential sensor and data logging system. An armored cable connects the implanted wave sensing transducer and the completely self-contained data logging system. The transducer and sensor will be installed by DRL scuba divers in approximately 30 to 50-ft. of water, located in a position to eliminate as much shore-induced phenomena as possible. Voice communications to Damon Tract will be provided by the U. S. Army Communications Center (F&S No. 21014).

DRL personnel will assemble at Damon Tract to prepare equipment prior to deployment. A DRL Type II installation team of 4 persons including scuba divers and technical personnel will emplace and roll up equipment; one man will operate and maintain the equipment for the duration of the program. DRL personnel will obtain subsistence in the camp facilities (F&S No. 21010). For a summation of Tamarin installations see F&S No. 05027.

CANTON

F & S NO.	TITLE					
21013	Radiological Surveillance Facility, SECONDARY					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction is required as the U. S. Air Force Air Weather Service (AWS) facilities, (F&S No. 21015) will be used.

This facility is designated a SECONDARY radiological surveillance station because the civilian and JTF-8 population are relatively remote from test areas. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing of radionuclide content of food, air, drinking water and rainfall. AWS personnel will operate the radiological equipment.

CANTON

F & S NO. 21014	TITLE Communication Center (U. S. Army Strategic Communication Command)					
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+23 / FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF MILCON CRO 7-65	PRE-GO Engineering costs are included in F&S No. 22009. POST-GO Construction cost estimate included in F&S No. 25010.					

PRIOR YEARS

ENGINEERING Completed.

Drawings: 108-002-C2, 108-038-C1 and E1, TYP-035-A1 and A3, TYP-036-A1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The U. S. Army Strategic Communication Command will furnish 2 communication vans. The contractor will construct a 20 x 20-ft. concrete pad for siting the communication vans.

The Communication Center will share the maintenance and joint operations tents with the U. S. Air Force Air Weather Service facility (F&S No. 21015). A site will be established after a reconnaissance of the area has been made by Air Weather Service personnel. Refer to Figure A-18, Appendix A, for possible site locations. Transmitting, receiving and cryptographic service will be provided to all agencies located on this island. One officer and 44 EM from a Provisional Army Signal Unit (PASU), Team A-3, will operate the communication center at this location.

[redacted]

CANTON

F & S NO.	TITLE				
21015	Weather Station, USAF Air Weather Service (AWS)				
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+23
JTF-8	None	None			FOD GO+30
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
JTF MILCON CRO 7-65	PRE-GO Engineering costs included in F&S No. 22009 POST-GO Estimate 12/65		26.0	26.0*	
	TOTAL		26.0	26.0*	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 108-002-C2 TYP 035-A1 and A3
108-038-C1 and E1 TYP 036-A1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The contractor furnished items include: a) two 16 x 32-ft. tents b) four 4 x 4 x 6-ft. hot lockers; and, c) two 20 kw, 120/208 volt, 60 cycle, 3 phase generators. One of the generators is utilized as a back up power source. In the event a central power system for the island is provided, only the back up generator is required.

The contractor will perform the following: a) prepare a level 60 x 250-ft. site oriented to the prevailing winds; when siting scientific equipment, obstructions within 500 yards in excess of 5° above the surface as well as signal reflections from the metal buildings should be avoided; b) erect a 16 x 32-ft. joint operations tent, with flooring, screen doors and screen siding with side flaps extended at the approximate slope of the tent roof for the use of AWS and communications personnel ; c) erect a 16 x 32-ft. maintenance and supply tent, screened for ventilation and insect control; d) install four hot lockers for storage of electronic spare parts; e) construct one 10 x 10-ft. concrete pad with ground rod in center; f) construct a 3 x 3-ft. concrete pad, with tie-down rings, located approximately 800-ft. within line-of-sight of the operations tent; and,

*Includes construction costs for F&S No. 21014.

[redacted]

g) to facilitate the inflation and release of balloons, prepare a 16 x 30-ft. compacted gravel area, oriented to the prevailing winds and graded for drainage with 30 x 100-ft. cleared areas extending from each of the 30-ft. sides of the gravel area.

The Weather Station will be located in a joint facility with the Communications Center (F&S No. 21014) and a site will be established after a reconnaissance of the area has been made by AWS personnel. Refer to Figure A-18, Appendix A, for possible site locations. Fifteen Air Force personnel will be assigned to the Air Weather Service facility at this location.

TERN ISLAND
23°52'N 166°17'E
FRENCH FRIGATE SHOALS

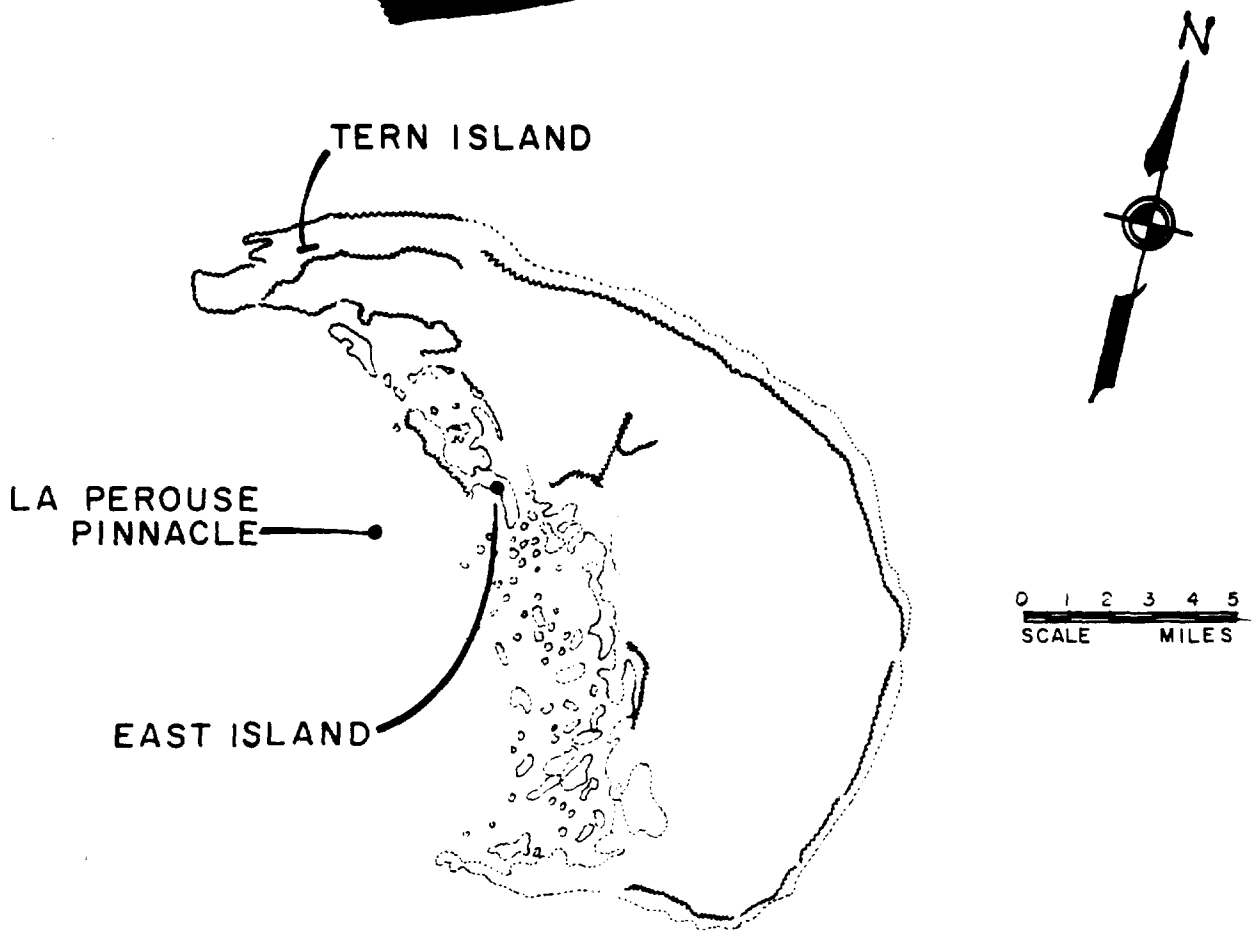
General Tern Island, French Frigate Shoals, is a U. S. possession located approximately 600 nautical miles west-northwest of Oahu, and is considered part of the Hawaiian Island Chain. At present, jurisdiction over French Frigate Shoals, which is 250 square miles in area, is exercised by the Depart. of the Interior, .Bureau of Sport Fisheries and Wildlife.

Physical Data French Frigate Shoals is a crescent-shaped atoll about 17 miles from tip to tip. (See map, next page.) Tern Island is the largest of 16 sand islets along the northern boundary of the atoll. It is about 25 acres in area and varies between 250 to 500 feet in width, 10 to 12 feet above sea level, and its length is about 3, 100 feet. It is oriented approximately east and west or on an azimuth of 252°. In general, the portions of the islands above sea level consist of loose sand, with small bodies of indurated sand. Much of the sand at, or below, sea level is hardened into a sandstone. About 7 miles south from Tern Island is the isolated La Perouse Rock, a mass of lava about 120 feet high, 500 feet long, and 80 feet wide.

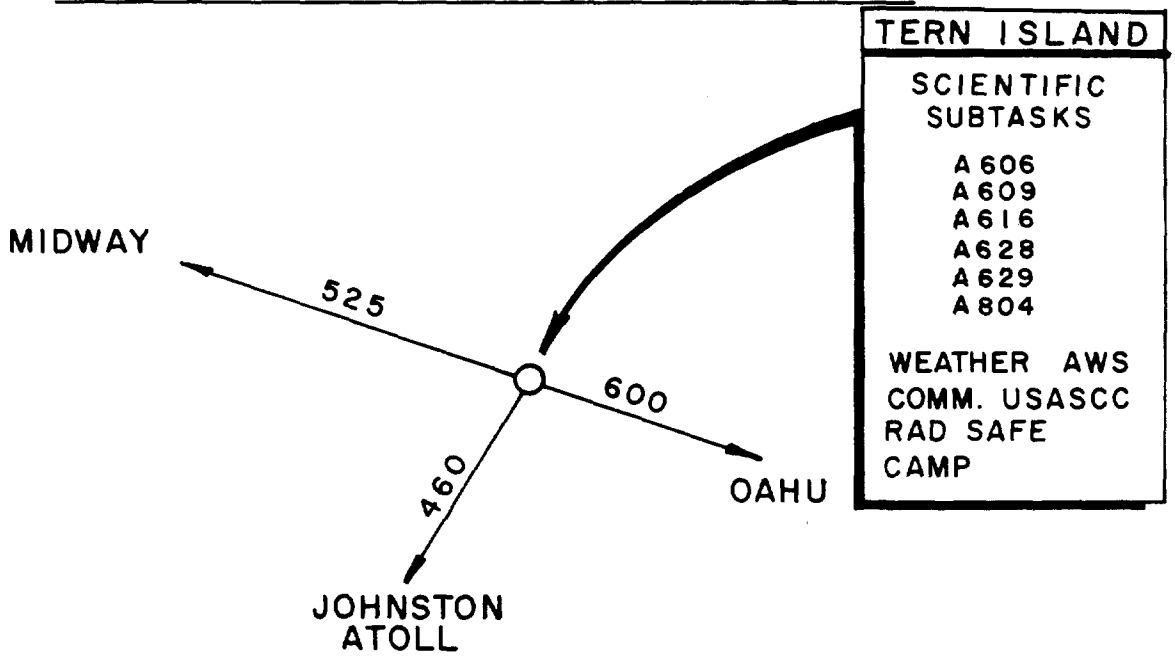
The reef outlines a subcircular area about 18 miles in diameter, which represents the sea level extent of a former conical volcanic island. The double crescent reef is in contrast to the usual single crescent atolls. The windward (easterly) reef, lying in the direction of the food-bearing currents, has better nourished reef organisms and, therefore, has grown more vigorously. The windward reef is nearly continuous and waves break strongly on it almost all the time. Vegetation is sparse or nonexistent and fresh water is very scarce.

Climate Northeast trade winds prevail in the summer. In the winter, more variable and stronger winds prevail. The climate is uniform the year around. The January mean temperature is about 71°F and July is approximately 78°F. Precipitation is negligible.

Facilities The Coast Guard LORAN Station, Tern Island, has limited facilities. On an emergency basis, and for only a short period, can the Coast Guard accommodate personnel other than their own. In addition to a scarcity of housing and messing facilities, water and electrical power are at a premium. The only medical facility is a first aid station. The 3000 x 250 ft. compacted coral airstrip is limited to aircraft no larger than C-47's, and at present a HU-16 from Barbers Point arrives weekly with supplies for the 15 man station complement. Offshore conditions require extreme care when resupply is by ship. Plans for dredging the ship channel have had to be postponed because of lack of funds. A half-loaded LCM is normally used to transfer POL and supplies from vessels anchored 3/4 mile from shore.



FRENCH FRIGATE SHOALS, TERN ISLAND



DISTANCES IN NAUTICAL MILES FROM TERN ISLAND, FRENCH FRIGATE SHOALS TO OTHER POINTS.

[redacted]

FRENCH FRIGATE SHOALS

F & S NO.	TITLE					
22001	Debris Tracking by Resonant Scattering Equipment - Subtask A606					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+138
TC	None		93-3-1			FOD GO+159
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO					
	Engineering costs included in F&S Number 21001.					
	POST-GO					
	Estimate 12/65			8.9	8.9	
	TOTAL			8.9	8.9	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 93-002-C2 93-3-1-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION A technical operations shelter will be required to provide office and recording instrument space. This building will be 8 x 8-ft. of wood frame construction with plywood siding, and corrugated aluminum roof and erected on a concrete slab. It will be air conditioned and dehumidified to 50 percent humidity. A 6 x 6-ft. concrete pad 18-in. thick will be constructed about 20-ft. from the building for mounting TC furnished camera equipment. Electric power, including back up, will be provided by two 5 kw, 120/240 volt, 60 cycle, single phase generators. Refer to Figure A-19, Appendix A, for site location. The number of scientific personnel assigned to Subtask A606 at this location is one.

[redacted]

FRENCH FRIGATE SHOALS

F & S NO.	TITLE				
22002	Radar Observations - Subtask A609				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+105
TC	None		93-3-2		FOD GO+138
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21002. POST-GO Estimate 12/65		19.1	19.1	
	TOTAL		19.1	19.1	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 93-002-C2 93-3-4-A1, C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) All Sky Camera; b) an 8 x 40-ft. optics trailer; and, c) one storage transportainer. The contractor will furnish two 30 kw, 120/208 volt, 60 cycle, three phase diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) construct a 10 x 10-ft. concrete pad; b) site the optics trailer and storage transportainer near the concrete pad; and, c) install the generators and complete the electrical hookup to the optics trailer. The All Sky Camera will be located in a joint station with Subtask A628. The facilities for Subtask A609 and A628 should be sited on the southwest corner of Tern Island, and as close to the ocean as possible. Refer to Figure A-19, Appendix A, for site location. Subtask A609 personnel will also operate the Subtask A628 facility at this location.

FRENCH FRIGATE SHOALS

F & S NO.	TITLE				
22003	Vertical Soundings of the Ionosphere - Subtask A616				
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+130
TC	None	93-3-3			FOD GO+160
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21004. POST-GO Estimate 12/65		30.7	30.7	
	TOTAL		30.7	30.7	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 93-002-C2 93-3-3-C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish all antennas and one instrument trailer 8 x 36 x 10-ft. high. Contractor will furnish the following: a) two 60-ft. and two 80-ft. poles; b) one 100 gallon water tank; c) latrine and sewage facilities; and, d) two 30 kw, 120/208 volt, 60 cycle, 3 phase generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) the two 80-ft. poles will be erected 860-ft. apart and the two 60-ft. poles will be placed on a line offset 18-in. from the line connecting the 80-ft. poles; each 60-ft. pole will be 188-ft. from the center point between the larger poles; b) install TC furnished antennas on the poles; c) site the instrument trailer; d) install water tank and provide water for photographic processing; e) install generators with automatic switchgear; f) install septic system for sinks and toilet; and, g) provide electrical hookup where required. Refer to Figure A-19, Appendix A, for site location. Two scientific personnel are assigned to Subtask A616 at this location.

FRENCH FRIGATE SHOALS

F & S NO.	TITLE				
22004	Riometer Station - Subtask A628				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+105
TC	None		93-3-4		FOD GO+135
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21007. POST-GO Estimate 12/65		19.1	19.1	
	TOTAL		19.1	19.1	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 93-002-C2 93-3-4-A1, C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish the following equipment: a) one 30 and 90 mc oblique antenna; b) one 30 mc Riometer antenna; c) one 90 mc Riometer antenna; d) one instrument van; and, e) one air conditioning unit. The contractor will furnish one storage CONEX. Power requirements are 10 kw, 120/240 volt, 60 cycle, 3 phase plus 100% backup. This requirement will be served by utilizing the generators listed under Subtask A609 (F&S No. 22002).

The contractor will perform the following: a) provide a cleared, flat, unobstructed area approximately 75 x 150-ft.; b) site the instrument van and the storage CONEX in the vicinity of the Test Command erected antennas; and, d) install the generators and complete the electrical hookup to the instrument van. Refer to Figure A-19, Appendix A, for location. Scientific personnel assigned to Subtask A609 at this location will operate Subtask A628.

[redacted]

FRENCH FRIGATE SHOALS

F & S NO.	TITLE				
22005	EM Detection Systems - Subtask A629				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD
TC	None		None		FOD GO+90
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
SERVICE FUNDED	POST-GO Estimate 12/65		8.3	8.3	
	TOTAL		8.3	8.3	

PROJECT IN HOLD STATUS PENDING DETERMINATION OF NEED BY USER

PRIOR YEARS

ENGINEERING Preliminary Planning.

Drawing: 93-002-C2

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish the following equipment: a) if a central power plant is not planned; one 30 kw, 120/240 volt, 60 cycle, 3 phase generator; b) one 40-ft. instrument trailer; and, c) one light sensor.

The contractor will perform the following: a) prepare a site located as far as possible from transmitter and Subtasks A609 and A628; b) drill two 4 1/2-in. diameter cased holes with the bottom 10-ft. (minimum) of the casing cemented. The holes should have a 6 to 12-ft. horizontal separation and the depths should differ by 100-ft. (± 1 foot). The shallower hole will have a minimum depth of 20-ft. The holes should be drilled in rock or coral of uniform density; c) the instrument trailer antenna should have a line-of-sight to all events and be located a minimum of 100-ft. from the cased holes; and, d) provide electrical hookup where required.

The project manager, USAF/ESD will determine the need and a site location for Subtask A629 at a later date. Refer to Figure A-19, Appendix A, island plot plan. Three scientific personnel will be assigned to Subtask A629 at this location.

[redacted]

FRENCH FRIGATE SHOALS

F & S NO. 22007	TITLE Camp					
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+23 FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8/ MILCON CRO 7-65	PRE-GO Prior Cost*	14.9			14.9	
	POST-GO Estimate 12/65**			205.1	205.1	
	TOTAL	14.9		205.1	220.0	

IN ORDER TO MEET THE REQUIRED BENEFICIAL AND FULL OCCUPANCY DATES AND MAINTAIN AN ORDERLY MOBILIZATION OF OFF-ISLAND CAMP CONSTRUCTION, PROCUREMENT FOR THE ACCEPTED CAMP CONCEPT MUST BE ACCOMPLISHED PRE-GO.

PRIOR YEARS

ENGINEERING Plan III B Preliminary Drawings - Completed.

Drawings: 93-002-C1 and C2, 93-023-A1, 93-024-A1, 93-043-A1, E1, M1, 93-078-C1, 93-095-E1 and E2, TYP 035-A1 and A3, TYP 036-A1

PROCUREMENT Some major items for Plan III B type camps are in stockpile at Damon Tract.

CONSTRUCTION Will be accomplished Post-GO.

POST-GO

ENGINEERING Plan III B Preliminary Drawings - Completed. If military field camp concept is adopted, engineering will be completed in the field, Post-GO.

PROCUREMENT Should be accomplished Pre-GO.

CONSTRUCTION A tent camp will be required for billeting and messing scientific and support personnel. JTF-8 is currently reviewing support camp requirements and material costs.

*Includes engineering costs for F&S Numbers 21010, 25007, 26006 and 27005.
**Includes mobilization and demobilization costs based on Plan III B concept.

[redacted]

FRENCH FRIGATE SHOALS

F & S NO.	TITLE					
22008	Fireball and Debris Cloud Motion Photography - Subtask A804					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+120
TC/ EG&G	None		93-3-6			FOD GO+140
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	POST-GO	TO BE DETERMINED				

POST-GO

ENGINEERING To be accomplished.

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish the following: a) one 8 x 24 x 12-ft. photo processing trailer; b) one 8 x 24 x 12-ft. workshop trailer; c) two 6 x 6 x 7-ft. transportainers; and, d) one Radio Receiver, RC-2, voice count-down. The photo trailer is equipped with electronic/photographic equipment and the workshop trailer is furnished with one drill press, one 14-inch band saw and a 5-inch electric bench grinder.

Services required for Subtask A804 include the following: a) communication facilities for a command link between JA, Hickam AFB, French Frigate Shoals and Kauai A804 sites; b) one HF Ground Scientific Net between Hickam AFB Hangar Number 2, Hickam AFB Trailer Park, Kauai and French Frigate Shoals A804 sites; c) meteorological service on French Frigate Shoals to include a daily synopsis of wind, pressure, temperature, dew point and relative humidity from ground surface to 100,000-ft.; d) air shipment of photographic film from French Frigate Shoals to Hickam AFB on a daily basis; and, e) rations and quarters for Subtask A804 personnel.

The contractor will furnish the following: a) one 12,000 BTU air conditioning/ dehumidifier for the electronic equipment; b) two 15 kw, 120/240 volt, 60 cycle, single phase generators, one generator will be utilized as a back up power source; in the event a central power source is available, a back up generator is still required; c) one 8 x 32-ft. screened tent with wooden flooring; and, d) one 400 gallon water tank.

The contractor will perform the following: a) prepare site, free from ocean spray, with a clear line-of-sight from the southern horizon in the direction of Johnston Island to 45 degrees above the northern horizon in the direction of the magnetic meridan; b) provide a fourth order survey; c) position trailers; d) erect tent; e) make necessary hookup and electrical connections; and, f)

[redacted]

install 400 gallon water tank for use at the photo trailer.

This scientific optical photo facility will provide supplementary coverage in the northern conjugate (NOCON). The optical station will be staffed with EG&G scientific personnel who will perform the photographic/spectrographic tasks. Refer to Figure A-19, Appendix A, for site location. Three EG&G personnel will be assigned to Subtask A804 at this location.

[redacted]

FRENCH FRIGATE SHOALS

F & S NO.	TITLE				
22009	Weather Station, USAF Air Weather Service (AWS)				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+23
JTF-8	None		None		FOD GO+30
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
JTF MILCON CRO 7-65	PRE-GO Prior Costs* 2.0 POST-GO Estimate 12/65		26.0	2.0 26.0**	
	TOTAL 2.0		26.0	28.0	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 93-002-C2 TYP 035-A1 and A3
93-038-C1 and E1 TYP 036-A1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The contractor will furnish the following items: a) two 16 x 32-ft. tents; b) four 4 x 4 x 6-ft. hot lockers; and, c) two 20 kw, 120/208 volt, 60 cycle, 3 phase generators. One of the generators will be utilized as a back up power source. In the event a central power system for the island is provided, only the back up generator will be required.

The contractor will perform the following: a) prepare a level 60 x 250-ft. site oriented to the prevailing winds; when siting scientific equipment, obstructions within 500 yards in excess of 5° above the surface as well as signal reflections from metal buildings should be avoided; b) erect a 16 x 32-ft. joint operations tent, with flooring, screen doors and screen siding with side flaps extended at the approximate slope of the tent roof for the use of AWS and communications personnel; c) erect a 16 x 32-ft. maintenance and supply tent, screened for ventilation and insect control; d) install four hot lockers for storage of electronic spare parts; 3) construct one 10 x 10-ft. concrete pad with ground rod in center; f) construct a 3 x 3-ft. concrete pad, with tie-down rings, located

*Includes engineering costs for F&S Nos. 21014, 21015, 22010, 25010, 25011 and 26005.

**Includes construction costs for F&S No. 22010.

approximately 800-ft. within line-of-sight of the operations tent; and g) to facilitate the inflation and release of balloons, prepare a 16 x 30-ft. compacted gravel area, oriented to the prevailing winds and graded for drainage with 30 x 100-ft. cleared areas extending from each of the 30-ft. sides of the gravel area.

The Weather Station will be located in a joint facility with the Communication Center (F&S No. 22010) and will be sited on the southeast side of Tern Island. Refer to Figure A-19, Appendix A, for site location. Fifteen Air Force personnel will be assigned to the Air Weather Service facility at this location.

FRENCH FRIGATE SHOALS

F & S NO.	TITLE					
22010	Communication Center (U. S. Army Strategic Communication Command)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+23
JTF-8	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF MILCON CRO 7-65	Engineering and Construction costs included in F&S No. 22009.					

PRIOR YEARS

ENGINEERING Completed.

Drawings: 93-002-C2, 93-038-C1 and E1, TYP-035-A1 and A3, TYP-036-A1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The U. S. Army Strategic Communication Command will furnish 2 communication vans. The contractor will construct a 20 x 20-ft. concrete pad for siting the communication vans.

The Communication Center will share the maintenance and joint operations tents with the U. S. Air Force Air Weather Service facility (F&S No. 22009). The joint installation will be located on the southeast side of Tern Island, French Frigate Shoals. Refer to Figure A-19, Appendix A, for site location. Transmitting, receiving and cryptographic service will be provided to all agencies located on this island. One officer and 25 EM from a Provisional Army Signal Unit (PASU), Team A-1, will operate the Communication Center at this location.

FRENCH FRIGATE SHOALS

F & S NO. 22011	TITLE Radiological Surveillance Facility, SECONDARY					
USER JTG 8.7	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction is required as the U. S. Air Force Air Weather Service (AWS) facilities (F&S No. 22009) will be used.

This facility is designated a SECONDARY radiological surveillance station because the civilian and JTF-8 population are relatively remote from test areas. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing of radionuclide content of food, air, drinking water and rainfall. AWS personnel will operate the radiological equipment.

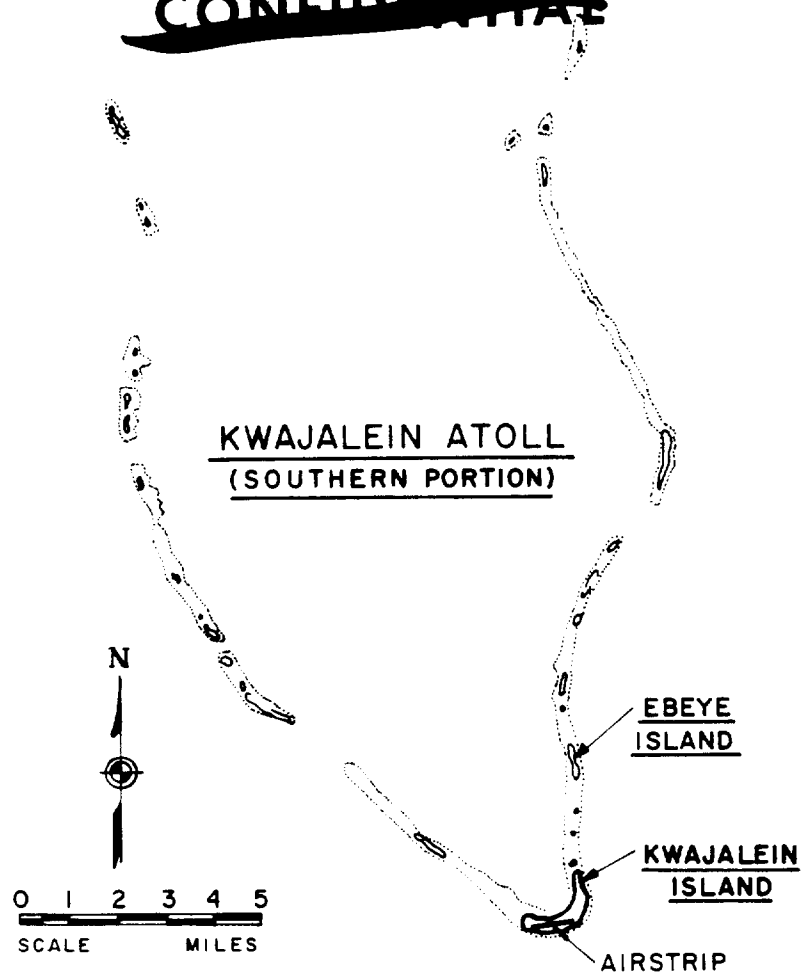
KWAJALEIN
8°44'N 167°44'E
MARSHALL ISLANDS

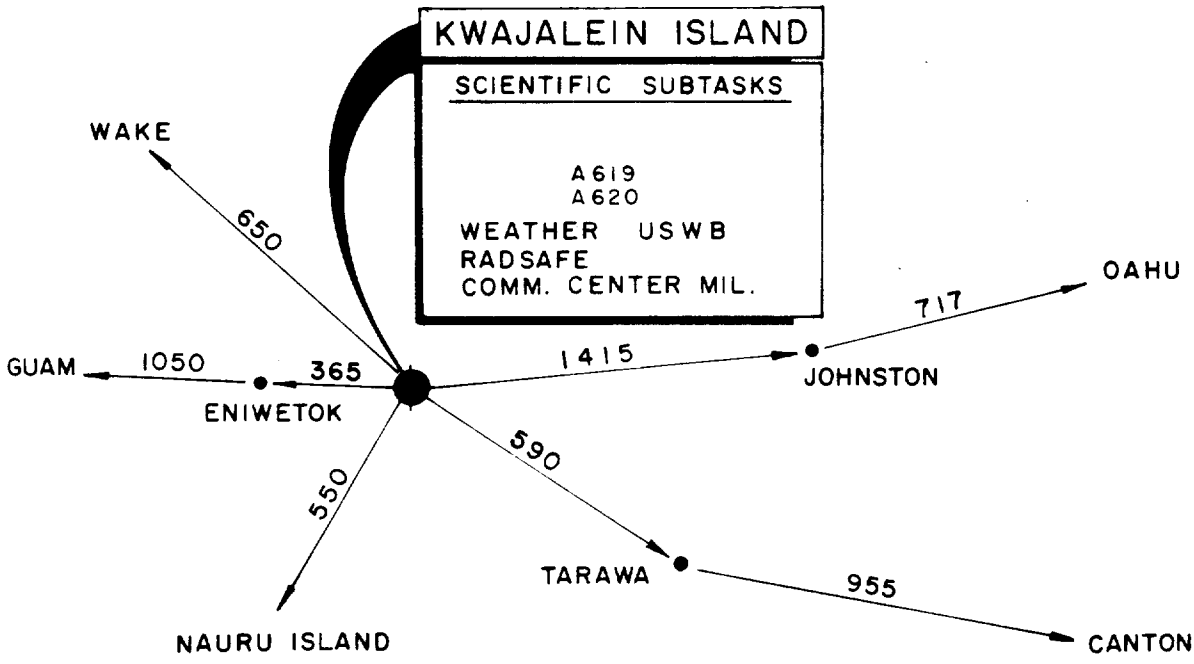
General Kwajalein Atoll is located in the Ralik Chain in the west central section of the Marshall Islands. The atoll is under the civil control of the U. S. Department of Interior and subject to the Code of the Trust Territories of the Pacific. The U. S. Army Materiel Command has the responsibility for management of Kwajalein Island and has designated it as the Kwajalein Test Site. Global Associates is the civilian logistic support contractor and Kentron Hawaii, LTD., is the technical support contractor. A community of nearly 3,500 people live on Kwajalein Island and provide guidance, supervision, logistics support and technical assistance in the conduct of testing ballistic missiles and related equipment.

Physical Data Kwajalein Atoll is crescent-shaped with the concavity facing southwest. The maximum length is 75 miles and the maximum width 30 miles. The lagoon is surrounded by a noncontinuous reef about 700 square miles in area, the largest in the Pacific. The atoll is composed of about 90 islets and islands on a nearly circumferential, slightly submerged, reef. Maximum elevations average 10 to 18 feet above sea level with a few dune crests reaching to 20 feet. The southern islands are covered with a dense growth of coconut palms and smaller vegetation. The northern islets have heavy vegetation but with few coconut palms. There are no mangrove swamps. The largest island is Kwajalein, located in the southeast corner of the atoll. (See map, next page.)

Climate The prevailing winds are mainly from the east and the northeast. Southeast winds sometimes blow during the rainy season. The prevailing east-northeasterly winds average 8 to 20 knots about 70 percent of the time, with a maximum velocity of 30 knots. The dry season is from December through March; the rainy season is from April through November. Temperatures: maximum high 90°-93°F; average mean 82°-83°F; and low 72°-73°F. Average yearly rainfall is about 100 inches.

Facilities Kwajalein Island is the site of the most important port and is the principal island; however, commercial activities are centered on Ebeye Island, the home of most of the 1500 natives of the atoll. Ebeye Island, where a U. S. Coast Guard Loran Station is located, lies approximately 2 miles north of Kwajalein Island. Kwajalein Island facilities include: (a) a modern airfield with MAC connections to Honolulu and Guam; (b) facilities for handling ship cargo with monthly service from San Francisco; (c) communications which include teletype, SSB CW and voice to all major islands and the mainland; and, (d) storage facilities include warehousing, refrigeration plants and POL storage. Utilities include water, power, sewage and fire protection. Medical facilities are also available. There are EM barracks and BOQ's which can accommodate transient personnel.





DISTANCES IN NAUTICAL MILES FROM KWAJALEIN ISLAND TO OTHER POINTS

[redacted]

KWAJALEIN ISLAND

F & S NO.	TITLE				
23001	Measurement of Effects on VLF and LF Radio Wave Propagation - Subtask A620				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+130
TC	None		60-3-1		FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	POST-GO Estimate 12/65		6.0		6.0	
	TOTAL		6.0		6.0	

POST-GO

ENGINEERING None Required.

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish the following items: a) two 10-ft. loop antennas; b) 4,000 ft. coaxial cable; c) one 6 x 7 x 10-ft. portable building; d) one 10-ft. diameter crossed loop antenna; and, e) one 28.7 x 10.8 x 8.5-ft. trailer. The contractor will furnish two 20 kw, 120/208 volt, 60 cycle, 3 phase diesel generators. One generator is to be used for back up power. In the event local power is available, only back up power is required.

This project is service funded and requires no support from DASA or JTF-8. Existing operational communications facilities will be used. This project will be directed and operated by the Defense Communications Agency at their discretion. The facility will be similar to the one required at Johnston Island. The site must be located in remote areas away from R. F. and electrical noises and will be selected after a field reconnaissance. Refer to Figure A-20, Appendix A, for Island Plot Plan. The number of scientific personnel to be assigned to Subtask A620 at this location is not firm at this time.

[redacted]

KWAJALEIN ISLAND

F & S NO.	TITLE					
23005	Satellite Communications - Subtask A619					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+120
TC	None		60-3-3			FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION This is a system oriented experiment and as such is not directly supported by DASA. There is no construction support required by the contractor. The Subtask A619 installation will utilize existing operational communications facilities. The U. S. Army Satellite Communications Agency (USASCA) will direct and provide operational personnel for the scientific installation. The USASCA will also provide funds for Subtask A619.

KWAJALEIN ISLAND

F & S NO.	TITLE					
23006	Weather Station, U. S. Weather Bureau (USWB)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Weather Bureau facility will be used; therefore, no building or construction will be required. The USWB staff will be augmented with JTF-8 personnel.

KWAJALEIN ISLAND

F & S NO.	TITLE					
23007	Radiological Surveillance Facility, PRIMARY					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+50
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN	
AEC	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction will be required as the U. S. Weather Bureau (USWB) facilities will be used.

This facility is designated a PRIMARY radiological surveillance station because of the civilian population being in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. Four USPHS officers are assigned to this Rad Safe facility.

KWAJALEIN ISLAND

F & S NO.	TITLE				
23008	Communication Center				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF	None		None		FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. military communication facilities will be used; therefore, no building or construction will be necessary. Communication services will be provided by this facility to all participants. If necessary, the communication center at this location will be augmented with JTF-8 personnel who will be furnished quarters and meals through the local economy.

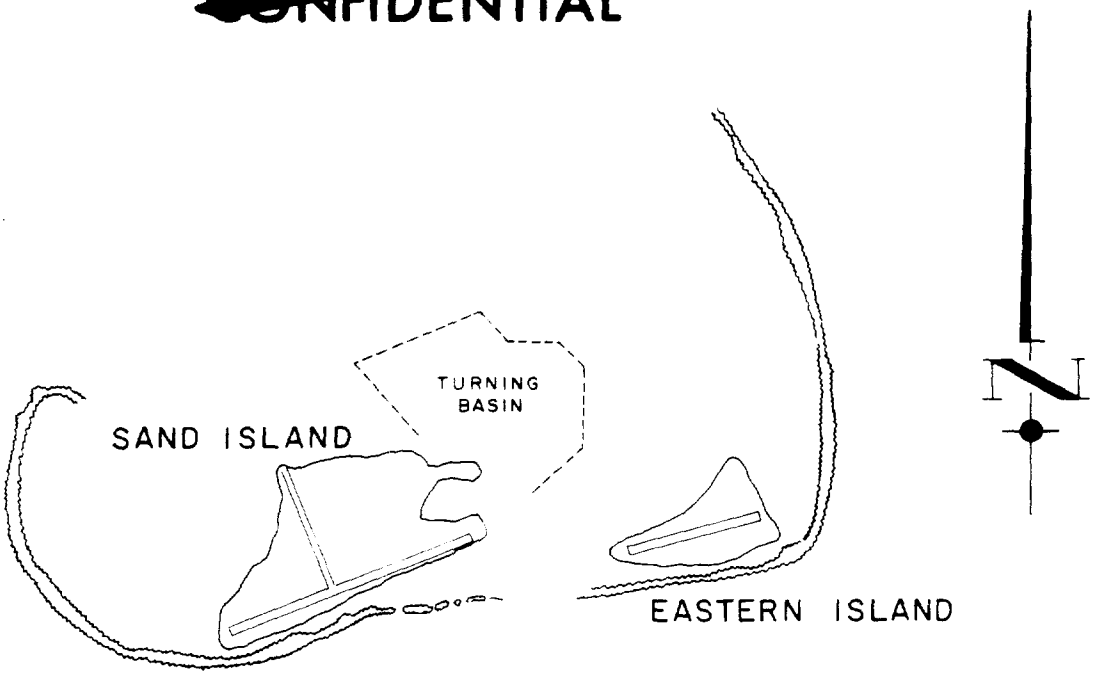
MIDWAY ATOLL
28°12'N 177°23'W

General Midway Atoll is near the end of the Hawaiian Island chain which extends to the northwest about 1200 miles from Honolulu. It is a U. S. possession; administrative responsibility is vested in the U. S. Navy. The U. S. Naval Air Station and its supporting activities are located at Midway.

Physical Data Midway is a reef atoll with a circumference of about 15 miles; the lagoon has an approximate diameter of 5 miles. There are two islands. Sand Island has a length of about 2 miles, a maximum width of 3/4 mile and an area of 1.4 square miles. Eastern Island has a length of about 1 mile, a width of 1/2 mile and an area of about 1/2 square mile or 360 acres. Sand Island at the western end of the reef is composed of white coral sand, and has a maximum height, above sea level, of 43 feet on the north. Eastern Island, at the southeast end of the reef, has a white sand beach with the exception of the coral rock on the eastern part; average elevations are between 6 to 12 feet. The circular reef rises 3 to 4 feet above sea level except for an area of about 2 miles in the west, where it is submerged. Almost all the vegetation has been planted. Scaevola and Verbesina scrub are dominant on both islands. Ironwood (Casuarina) is also abundant on Eastern Island and has a good start on Sand Island.

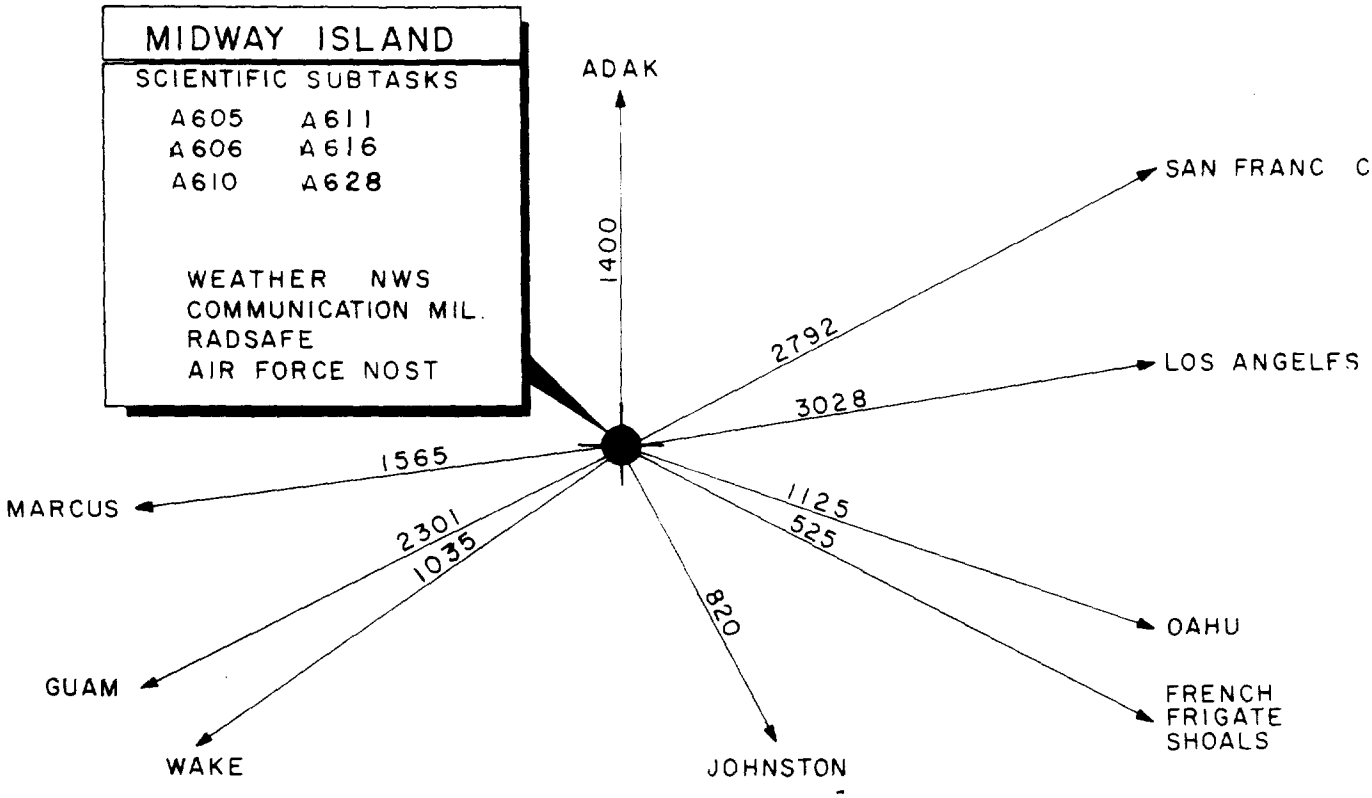
Climate Midway has a mild trade wind climate. Southwest winds prevail in January and February; east and southwest winds in March; northeast winds in April through November; and in December, the northwest and northeast winds prevail. Southwest winds precede frontal passages and are usually accompanied by rainy and squally weather. December through March wind velocities average 13-15 knots, and from 9-11 knots in May through September. Gusts to 67 knots have been recorded. Mean annual precipitation is 43 inches. Mean annual temperature is 71.5°F with a range of 65° to 78°F, and extremes of 91° and 46°F. Mean relative humidity is 76 percent.

Facilities The U. S. Naval Station, Midway, had facilities for supporting a population of 3,200 in 1964. Reduction in base operations has considerably reduced the population resulting in available housing and messing facilities for 500-800 personnel. The east-west hardtop runway is 7,900 by 200 ft. and the north-south runway is 5,775 by 200 ft. Marine facilities include handling equipment, and piers for ships. There are fuel tank farms, storage buildings, maintenance shops, community facilities, a hospital, recreational facilities and utility services such as electrical power, water, sanitary and storm sewers, and heating plants. There are telephones, teletype, and radio facilities including cable connections to Guam and the Hawaiian Islands. Water and electrical power are critical items.



MIDWAY ATOLL

0 2,500 5,000 10,000
SCALE FEET



DISTANCES IN NAUTICAL MILES FROM MIDWAY TO OTHER POINTS

MIDWAY

F & S NO.	TITLE					
24001	Ionospheric Soundings and Auroral Observations - Subtask A605					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+120
TC	None		112-3-1			FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO					
	Prior Costs	*2.1			2.1	
	POST-GO					
	Estimate 12/65			8.5	8.5	
	TOTAL	2.1		8.5	10.6	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 112-002-C1 112-3-2-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The Navy Public Works Department, Midway, will probably perform the majority of the work. Test Command furnished items are as follows: a) VLF noise station, loop antenna, one trailer; b) log periodic antenna 100-ft. high by 250-ft. wide by 340-ft. long, one instrument trailer; c) one sound transmitter; d) 15 kw, 115/230 volt, 60 cycle generator; and, e) one 250 gallon water tank for laboratory use. Navy P. W. D. requirements include: a) erect a 40-ft. pole for VLF station, mount loop antenna on pole, locate trailer 300-ft. from antenna; b) prepare 250 x 340-ft. area for log periodic antenna and point toward Palmyra, locate instrument trailer; c) site the sound transmitter in an electrically noise free area; d) site the TC furnished generator; e) build a 10 x 15-ft. wood frame building for a combination laboratory-office. The building is to be lighted and air conditioned; and, f) install 250 gallon water tank. Scientific Subtasks A611 and A628 are to be located in the vicinity of this subtask. Refer to Figure A-21, Appendix A, for location. Four scientific personnel are assigned to Subtask A605 at this location.

*Includes engineering costs for F&S Number 25001.

MIDWAY

F & S NO.	TITLE				
24002	Debris Tracking by Resonant Scattering Equipment - Subtask A606				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+138
TC	None	112-3-2			FOD GO+159
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21001. POST-GO Estimate 12/65		8.9	8.9	
	TOTAL		8.9	8.9	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 112-002-C1 112-3-1-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The Navy Public Works Department, Midway, will probably perform the majority of work. A technical operations shelter will be required to provide office and recording instrument space. This building will be 8 x 8-ft. wood frame construction with plywood siding, corrugated aluminum roof and erected on a concrete slab. It will be air conditioned and dehumidified to 50 percent humidity. A 6 x 6-ft. concrete pad 18-in. thick will be constructed about 20-ft. from the building for mounting TC furnished camera equipment. Electric power requirements, including back up, are two 5 kw, 120/240 volt, 60 cycle, single phase generators. A site selection with a minimum of artificial illumination is preferred. Refer to Figure A-21, Appendix A, for location. The number of scientific personnel assigned to Subtask A606 at this location is one.

MIDWAY

F & S NO.	TITLE					
24003	Airborne Ionospheric Observatory - Subtask A610					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+120
TC	None		112-3-3			FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO					
	Prior Costs	1.3			1.3	
	POST-GO					
	Estimate 10/65			5.8	5.8	
	TOTAL	1.3		5.8	7.1	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 112-002-C1 112-3-3-CE1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The Navy Public Works Department, Midway, will probably perform the majority of work. Location of the subtask (Figure A-21, Appendix A) has not been approved; however, the following instructions apply when the site has been selected. The scientific site requires an area of 2 1/2 acres for the operation of 3 HF transmitters (4, 9, 12 MHz). Power requirements to be supplied by local sources, are 40 kw, 220 volt, 60 cycle, 3 phase plus 100% backup. The 3 antennas, oriented to face Ground Zero, are TC furnished and TC erected and will not require foundations. Three scientific personnel are assigned to Subtask A610 at this location.

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*Includes engineering costs for F&S Numbers 25002 and 27001.

MIDWAY

F & S NO.	TITLE				
24004	Vertical Soundings of the Ionosphere - Subtask A616				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+130
TC	None	112-3-4			FOD GO+160
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21004. POST-GO Estimate 12/65		30.7	30.7	
	TOTAL		30.7	30.7	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 112-002-C1 112-3-4-C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The Navy Public Works Department will probably perform the majority of work. Test Command will furnish all antennas and one instrument trailer 8 x 36 x 10-ft. high. Contractor will furnish the following: a) two 60-ft. and two 80-ft. poles; b) one 100 gallon water tank; c) latrine and sewage facilities, and, d) two 30 kw, 120/208 volt, 60 cycle, 3 phase generators. One of the generators is utilized as a back up power source.

The contractor will perform the following; a) the two 80-ft. poles will be erected 860-ft. apart and the two 60-ft. poles will be placed on a line offset 18-in. from the line connecting the 80-ft. poles; each 60-ft. pole will be 188-ft. from the center point between the larger poles; b) install TC furnished antennas on the poles; c) site the instrument trailer; d) install water tank and provide water for photographic processing; e) if local power is not available install generators with automatic switchgear; f) install septic system for sinks and toilet; and, g) provide electrical hookup where required. Refer to Figure A-21, Appendix A, for site location. Two scientific personnel are assigned to Subtask A616 at this location.

MIDWAY

F & S NO.	TITLE					
24007	HF Communications Simulation Experiment - Subtask A611					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+105
TC	None		112-3-7			FOD GO+125
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21003 POST-GO Estimate 10/65			8.3	8.3	
	TOTAL			8.3	8.3	

PRIOR YEARS

ENGINEERING Completed

Drawing: 112-002-C1

POST-GO

PROCUREMENT To be accomplished

CONSTRUCTION The Navy Public Works Department will probably perform the majority of work. Test Command furnished items are as follows: a) one 110-ft. high Log Periodic Ionospheric antennas; and, b) one instrument trailer. If local power is not available two 20 kw, 120/240 volt, 60 cycle, single phase, low speed (1250 rpm) diesel generators are required. One of the generators is utilized as a back up power source.

The Navy Public Works Department will perform the following: a) prepare a cleared, flat, 310 x 320-ft. unobstructed area for the TC erected 110-ft. high Log Periodic Ionospheric antennas which will have a ground screen that extends into the sea; b) construct concrete antenna bases, as designed by TC in the field; c) provide longeron pads and anchors for the antennas; d) site the instrument trailer; and, e) install the generators and complete the electrical hookup to the instrument trailer. Refer to Figure A-21, Appendix A, for site location. The four scientific personnel assigned to Subtask A611 will also operate the Subtask A628 facility at this location.

MIDWAY

F & S NO.	TITLE				
24008	Riometer Station - Subtask A628				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+105
TC	None		112-3-8		FOD GO+135
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA RDT&E EAO 1106-4101-61	PRE-GO				
	Engineering costs included in F&S Number 21007				
	POST-GO				
	Estimate 12/65		19.1	19.1	
	TOTAL		19.1	19.1	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 112-002-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The Navy Public Works Department, Midway, will probably perform the majority of work. Test Command furnished items are as follows: a) one 30 and 90 mc oblique antenna; b) one 30 mc Riometer antenna; c) one instrument van; and, d) one air conditioning unit. The contractor furnished items are: a) one storage CONEX; and, b) in the event electrical power is not available, two 10 kw, 120/240 volt, 60 cycle, 3 phase (1250 rpm) diesel generators. One of the generators is utilized as a back up power source.

The Navy Public Works Department will perform the following: a) provide a cleared, flat unobstructed area approximately 75 x 150-ft.; b) site the instrument van and the storage CONEX in the vicinity of the Test Command erected antennas; and, c) if local power is not available, install the generators and complete the electrical hookup to the instrument van. Refer to Figure A-21, Appendix A, for location. Scientific personnel assigned to Subtask A611 will operate Subtask A628 at this location.

MIDWAY

F & S NO.	TITLE					
24010	Aircraft Maintenance Facility					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8 JTG 8.4	None		None			FOD GO+88*
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
RDT&E MILCON	POST-GO Estimate 3/65			25.0	25.0	
	TOTAL			25.0	25.0	

PRE-GO

ENGINEERING To be initiated upon construction criteria submittal.

POST-GO

ENGINEERING To be completed.

PROCUREMENT To be completed.

CONSTRUCTION Eight flight line maintenance tents will be required by the U. S. Air Force if facilities are not available at the Naval station. Surveillance, diagnostic C-135A, sampler, sampler controller and array control aircraft will operate from NAS, Midway. Aircraft maintenance crews will erect maintenance tents. Location of tent sites will be determined at a later date.

*FOD is required 30 days prior to "Minuteman" Nuclear Operations Systems Test.

MIDWAY

F & S NO. 24011	TITLE Sampler Storage, Rad Safe				
USER JTF-8 JTG 8.4	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FOD GO+88*
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
RDT&E MILCON	POST-GO Estimate 3/65			2.0	2.0	
	TOTAL			2.0	2.0	

PRE-GO

ENGINEERING To be initiated upon construction criteria submittal.

POST-GO

ENGINEERING To be completed.

PROCUREMENT To be completed.

CONSTRUCTION Navy Public Works Department will probably perform the majority of work. A fenced-in area approximately 10 x 10-ft. will be required for the Rad Safe sampler storage area. Sampler storage location has not been determined.

*FOD is required 30 days prior to "Minuteman" Nuclear Operational Systems Test.

MIDWAY

F & S NO. 24012	TITLE Equipment Decontamination Pad				
USER JTF-8 JTG 8.4	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FOD GO+88*
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
RDT&E MILCON	POST-GO Estimate 3/65			25.0	25.0	
	TOTAL			25.0	25.0	

PRE-GO

ENGINEERING To be initiated upon construction criteria submittal.

POST-GO

ENGINEERING To be completed.

PROCUREMENT To be completed.

CONSTRUCTION Navy Public Works Department will probably perform the majority of work. A concrete pad approximately 20 x 20-ft. will be required for equipment decontamination. Forklifts and other types of lifting equipment, vehicles and small items will be moved to this pad for decontamination. A separate decontamination pad will be provided for aircraft. Equipment decontamination pad location has not been determined.

*FOD is required 30 days prior to "Minuteman" Nuclear Operational Systems Test.

MIDWAY

F & S NO. 24013	TITLE Aircraft Decontamination Pad				
USER JTF-8 JTG 8.4	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FODGO+88*
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
RDT&E MILCON	POST-GO Estimate 3/65		80.0	80.0	
	TOTAL		80.0	80.0	

PRE-GO

ENGINEERING To be initiated upon construction criteria submittal.

POST-GO

ENGINEERING To be completed.

PROCUREMENT To be completed.

CONSTRUCTION Navy Public Works Department will probably perform the majority of work. A concrete pad approximately 70 x 300-ft. will be required for decontamination of surveillance, diagnostic, sampler, sampler controller and array control aircraft. This is a monitoring, decontamination/washdown installation for the aircraft. The location for the aircraft decontamination pad has not been determined.

*FOD is required 30 days prior to "Minuteman" Nuclear Operational Systems Test.

MIDWAY

F & S NO. 24014	TITLE Personnel Decontamination				
USER JTF-8 JTG 8.4	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FOD GO+88*
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
RDT&E MILCON	POST-GO Estimate 3/65		25.0	25.0	
	TOTAL		25.0	25.0	

PRE-GO

ENGINEERING To be initiated upon construction criteria submittal.

POST-GO

ENGINEERING To be completed.

PROCUREMENT To be completed.

CONSTRUCTION Navy Public Works Department will probably perform the majority of work. Two 16 x 32-ft. tents will be required for personnel decontamination. The facility will be located in the vicinity of the aircraft strip or hangar area and will be readily available to aircraft crews and aircraft maintenance personnel. Exact location has not been determined.

*FOD is required 30 days prior to "Minuteman" Nuclear Operational Systems Test.

MIDWAY

F & S NO. 24015	TITLE Antenna Pads				
USER JTF-8 JTG 8.4	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FODGO+88*
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
RDT&E MILCON	POST-GO Estimate 3/65		10.0	10.0	
	TOTAL		10.0	10.0	

PRE-GO

ENGINEERING To be initiated upon construction criteria submittal.

POST-GO

ENGINEERING To be completed.

PROCUREMENT To be completed.

CONSTRUCTION Navy Public Works Department will probably perform the majority of work. Approximately 1000 square feet of concrete pads will be required for antenna bases. Location of antenna pads has not been determined.

*FOD is required 30 days prior to "Minuteman" Nuclear Operational Systems Test.

[redacted]

MIDWAY

F & S NO. 24016	TITLE Command Post and Headquarters, Joint Task Group 8.4					
USER JTF-8 JTG 8.4	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD / FOD GO+88*
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
RDT&E MILCON	POST-GO Estimate 3/65			110.0	110.0	
	TOTAL			110.0	110.0	

PRE-GO

ENGINEERING To be initiated upon construction criteria submittal.

POST-GO

ENGINEERING To be completed.

PROCUREMENT To be completed.

CONSTRUCTION Navy Public Works Department will probably perform the majority of work. A 60 x 68-ft. area and a 50 square foot room in an existing hangar will be modified for use as the Test/Task Group Command Post and Headquarters. Exact locations are not firm.

*FOD is required 30 days prior to "Minuteman" Nuclear Operational Systems Test.

[redacted]

MIDWAY

F & S NO. 24019	TITLE Weather Station, U. S. Navy Weather Service (NWS)					
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD
						FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing Midway Navy Weather Service facilities and personnel will be used. JTF-8 will augment the weather station with their personnel in the event work schedules warrant additional help. Current planning anticipates no contractor supplied items and no construction needs. NAS, Midway, will feed and house all personnel. The Air Force will provide 2 officers and 6 EM for the Weather Advisory Service and 3 officers and 5 EM for Pilot Briefing service.

MIDWAY

F & S NO.	TITLE					
24020	Radiological Surveillance Facility, SECONDARY					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction is required as the U. S. Navy Weather Station (NWS) facilities (F&S No. 24019) will be used.

This facility is designated a SECONDARY radiological surveillance station because the civilian and JTF-8 population are relatively remote from test areas. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. NWS personnel will operate the radiological equipment.

MIDWAY

F & S NO. 24021	TITLE Communication Center					
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing military communication facilities will be used; therefore, no building or construction will be necessary. Communication services will be provided by this facility to all participants. If necessary, the communication center at this location will be augmented with JTF-8 personnel who will be furnished quarters and meals by NAS, Midway.

[redacted]

PALMYRA ISLAND
5°52'30"N 162°08'00"W
LINE ISLANDS

General Palmyra is one of the northern Line Islands approximately 965 nautical miles south-southwest of Honolulu. Many facilities on privately owned Palmyra were designed, developed, and built by the U. S. Navy, the U. S. Air Force, and others during, and since, World War II. Because of abandonment, pillage, the effects of the weather and high humidity, and other natural elements, the island facilities are in varying degrees of deterioration.

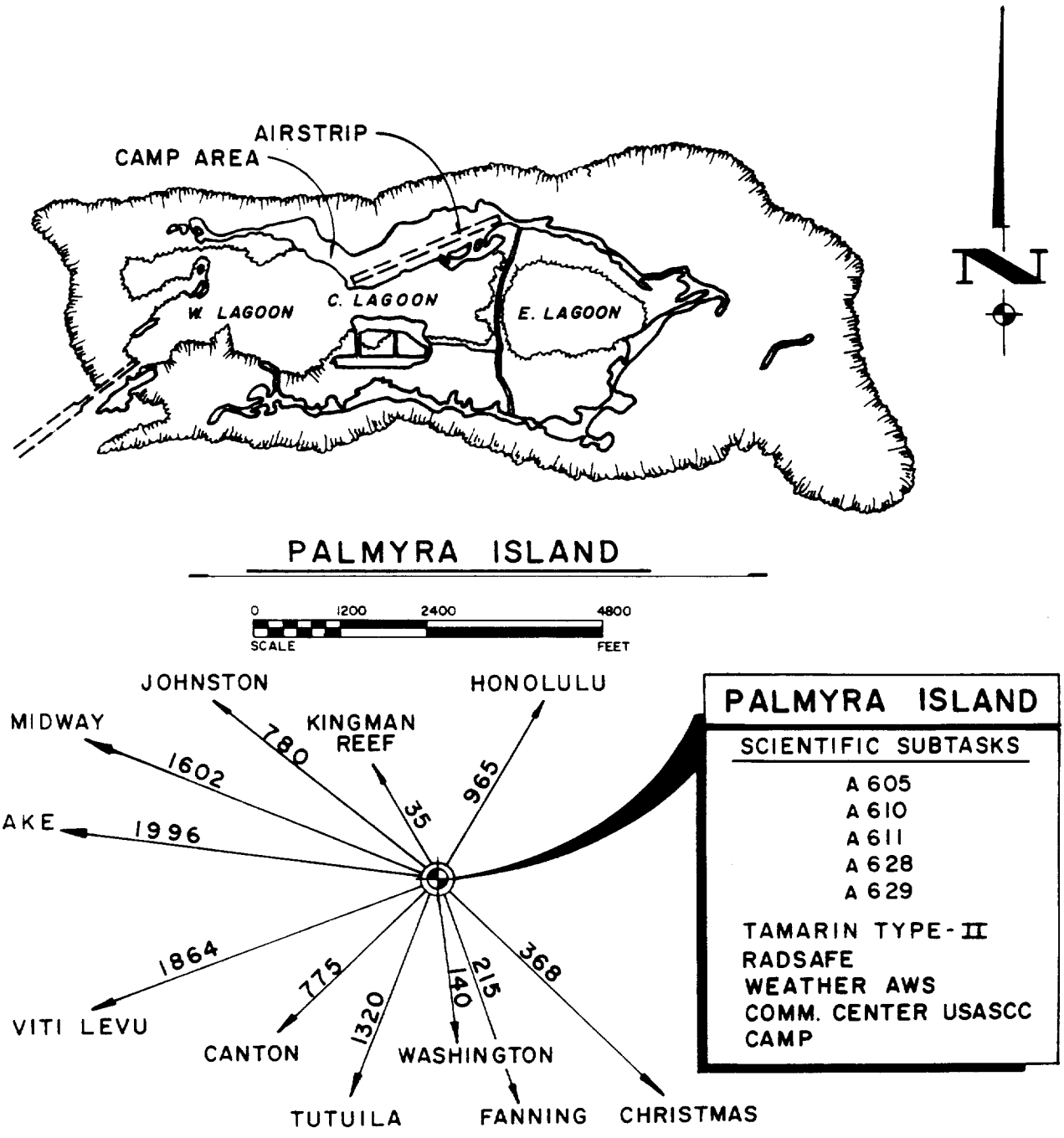
Physical Data Palmyra is a horseshoe shaped atoll about 5 1/2 miles by 1 1/2 miles, with the long axis running east and west. The total land area of about 1,470 acres is spread over 55 islets lying on a barrier reef which is surrounded by an extensive reef platform. The reef platform of coral and hard sand encloses three distinct lagoons with a total length of about 3 miles. The widest, measuring about 3/4 of a mile, is the Western lagoon which narrows to 400 yards in the approaches to the Center lagoon. During World War II, the U. S. Navy dredged a seaplane runway that merged the Center and Western lagoons. The lagoons vary in depth from 10 ft. to over 100 ft., and are flat-floored, but have numerous stalk-like columns of coral that reach up to the water surface. The coral reef growth is most rapid off the western end of the atoll which faces into the prevailing direction of wave approach. The reef surface surrounding Palmyra is flat and lies at a level about 1/3 of the tide range below mean high water. During high tide it is possible to wade between the exposed islets; at low tide most of the reef platform is dry. The maximum elevation for the islets is 6 feet above sea level. The mean tidal range is about 2 feet. (See map, next page.)

All of the islands on this barrier reef are heavily overgrown with vegetation. About 16 species have been recorded. Many sea and migratory birds and a few turtles are found here. Some of the birds are a nuisance and hazardous to aircraft.

Climate This is the only island in its latitude where fresh westerlies occur. The northeast and southeast trade winds meet here causing a tropical front to hover in the area; however, northeast trades prevail, with an average velocity of 10 to 12 knots. Short squalls with winds up to 22 knots are frequent, but typhoons are infrequent. Rainfall occurs daily resulting in high humidity. Average yearly rainfall is 100 to 180 inches. Temperatures: mean daily 80.5°F; mean maximum 84°F; and, mean minimum 77°F. Extreme temperature range is 71° to 93°F; however, on the basis of mean monthly temperatures, there is only 2° of variation between any two months. There is no fog, but rain and cumulus clouds cause frequent overcast.

Facilities Prominent installations are listed with an accompanying remark on major deficiencies: (a) 6,000 by 300 ft. coral airstrip overgrown with vegetation; (b) 11,000 by 3,000 ft. seaplane operating basin without markers; (c) ship passage channel requires dredging; and, (d) wharfs, piers, buildings, POL storage, water lines, water tanks, sewage system, etc., require rehabilitation or replacement.

[redacted]



DISTANCES IN NAUTICAL MILES FROM PALMYRA ISLAND TO OTHER POINTS.

PALMYRA

F & S NO.	TITLE				
25001	Ionospheric Soundings and Auroral Observations - Subtask A605				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+120
TC	None	101-3-1			FOD GO+150
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 24001 POST-GO Estimate 12/65		8.5	8.5	
	TOTAL		8.5	8.5	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 101-002-C6 101-3-1-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) VLF noise station, loop antenna, one trailer; b) log periodic antenna 100-ft. high by 250-ft. wide by 340-ft. long, one instrument trailer; c) C-4 Ionosounder station; d) one sounder receiver; and, e) one 250 gallon water tank for laboratory use. Contractor requirements include: a) erect 40-ft. pole for VLF station, mount loop antenna on pole, locate trailer 300-ft. from antenna; b) prepare 250 x 340-ft. area for log periodic antenna and point toward Midway Atoll, locate instrument trailer; c) erect 90-ft. contractor furnished pole, with C-4 Ionosounder station antenna, in center of 135-ft. diameter area at eastern end of runway; the area should be electrically noise free in the 1 mc to 30 mc frequency range; d) site the sounder receiver in an electrically noise free area; e) build a 10 x 15-ft. wood frame building for a combination laboratory office, the building is to be lighted and air conditioned; and, f) install 250 gallon water tank. Contractor furnished electrical power: C-4 Ionosounder requires 10 kw, 120 volt, 60 cycle, single phase; VLF requires 15 kw, 115 volt, 60 cycle, single phase, and, the sounder receiver requires 1 kw, 115 volt, 60 cycle, single phase. Refer to Figure A-22 Appendix A, for location. Six scientific personnel will be assigned to Subtask A605 at this location.

PALMYRA

F & S NO.	TITLE				
25002	Airborne Ionospheric Observatory - Subtask A610				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+120
TC	None	101-3-2			FOD GO+150
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 24003. POST-GO Estimate 12/65		5.8	5.8	
	TOTAL		5.8	5.8	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 101-002-C6 101-3-2-CE1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished and erected items are as follows: a) one 40 x 120-ft. antenna field, with the long axis broad side oriented to Midway Atoll; and, b) 3 HF receivers (4, 9, 12MHz). The antennas do not require foundations. The contractor will furnish two (2) 15 kw, 120/240 volt, 60 cycle, single phase generators. One of the generators is utilized as a back up power source. Refer to Figure A-22, Appendix A, for site location. Three scientific personnel will be assigned to Subtask A610 at this location.

PALMYRA

F & S NO.	TITLE				
25003	HF Communications Simulation Experiment - Subtask A611				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+105
TC	None	101-3-3			FOD GO+125
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21003 POST-GO Estimate 12/65		8.3	8.3	
	TOTAL		8.3	8.3	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 101-002-C6

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) one 110-ft. high Log Periodic Ionospheric antenna; b) one instrument trailer; and, c) one 8 x 22-ft. camper trailer. The contractor will furnish two 20 kw, 120/240 volt, 60 cycle, single phase, low speed (1250 rpm) diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following; a) prepare a cleared, flat, 230 x 370-ft. unobstructed area for the TC erected 110-ft. high Log Periodic Ionospheric antennas which will have a ground screen that extends into the sea; b) construct concrete antenna bases, as designed by TC in the field; c) provide longeron pads and anchors for the antennas; d) site the instrument trailer and camper trailer; and, e) install the generators and complete the electrical hookup to the instrument trailer. Refer to Figure A-22, Appendix A, for site location. The four scientific personnel assigned to Subtask A611 will also operate the Subtask A628 facility at this location.

PALMYRA

F & S NO.	TITLE					
25005	Riometer Station - Subtask A628					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+105
TC	None		101-3-5			FOD GO+135
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA RDT&E EAO 1106-4101-61	PRE-GO					
	Engineering costs included in F&S Number 21007					
	POST-GO					
	Estimate 12/65			19.1	19.1	
	TOTAL			19.1	19.1	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 101-002-C6

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) one 30 and 90 mc oblique antenna; b) one 30 mc Riometer antenna; c) one instrument van; and, d) one air conditioning unit. The contractor furnished items are: a) one storage CONEX; and, b) two 10 kw, 120/240 volt, 60 cycle, 3 phase (1250 rpm) diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) provide a cleared, flat unobstructed area approximately 75 x 150-ft.; b) site the instrument van and the storage CONEX in the vicinity of the Test Command erected antennas; and, c) install the generators and complete the electrical hookup to the instrument van. Refer to Figure A-22, Appendix A, for location. Scientific personnel assigned to Subtask A611 will operate Subtask A628 at this location.

PALMYRA

F & S NO.	TITLE					
25007	Camp					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+23
JTF-8	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON CRO 7-65	PRE-GO					
	Engineering costs included in F&S Number 22007.					
	POST-GO					
	Estimate 12/65*			210.1	210.1	
	TOTAL			210.1	210.1	

IN ORDER TO MEET THE REQUIRED BENEFICIAL AND FULL OCCUPANCY DATES AND MAINTAIN AN ORDERLY MOBILIZATION OF OFF-ISLAND CAMP CONSTRUCTION, PROCUREMENT FOR THE ACCEPTED CAMP CONCEPT MUST BE ACCOMPLISHED PRE-GO.

PRIOR YEARS

ENGINEERING Plan III B Preliminary Drawings - Completed.

Drawings:			
	93-002-C1	93-043-A1, M1 and E1	101-002-C6
	93-023-A1	93-078-C1	TYP-035-A1 and A3
	93-024-A1	93-095-E1 and E2	TYP-036-A1

PROCUREMENT Some major items for Plan III B type camps are in stockpile at Damon Tract.

CONSTRUCTION Will be accomplished Post-GO.

POST-GO

ENGINEERING Plan III B Preliminary Drawings - Completed. If military field camp concept is adopted, engineering will be completed in the field, Post-GO.

PROCUREMENT Should be accomplished Pre-GO.

CONSTRUCTION A tent camp will be required for billeting and messing scientific and support personnel. JTF-8 is currently reviewing support camp requirements and material costs.

*Includes mobilization and demobilization costs based on Plan III B concept.

PALMYRA

F & S NO. 25008	TITLE EM Detection Systems - Subtask A629					
USER TC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD FOD GO+90
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
SERVICE FUNDED	POST-GO Estimate 12/65			8.3	8.3	
	TOTAL			8.3	8.3	

PROJECT IN HOLD STATUS PENDING DETERMINATION OF NEED BY USER

PRIOR YEARS

ENGINEERING Preliminary Planning.

Drawing: 101-002-C6

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish the following equipment: a) if a central power plant is not planned; one 30 kw, 120/240 volt, 60 cycle, 3 phase generator; b) one 40-ft. instrument trailer; and c) one light sensor.

The contractor will perform the following: a) prepare a site location as far as possible from transmitters and Subtasks A605, A611, and A628; b) drill two 4 1/2-in. diameter cased holes with the bottom 10-ft. (minimum) of the casing cemented. The holes should have a 6 to 12-ft. horizontal separation and the depths should differ by 100-ft. (± 1 foot). The shallower hole will have a minimum depth of 20-ft. The holes should be drilled in rock or coral of uniform density; c) locate the instrument trailer antenna so as to have a line-of-sight to all events and at a minimum of 100-ft. from the cased holes; and, d) provide electrical hookup where required.

The project manager, USAF/ESD will determine the need and a site location for Subtask A629 at a later date. Refer to Figure A-22, Appendix A, for possible site location. Three scientific personnel will be assigned to Subtask A629 at this location.

PALMYRA

F & S NO.	TITLE					
25009	Atoll Wave Sensor, Type II (Tamarin)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+54
DRL	None		101-13-1			FOD GO+61
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	Included in F&S No. 05027.				
	POST-GO					
	Estimate	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING None required.

PROCUREMENT An AEC furnished 7 x 17-ft. Model 16 Northwest camper trailer, for use at the Palmyra Tamarin site, is on standby at Damon Tract, Oahu, Hawaii.

POST-GO

CONSTRUCTION The AEC furnished Type II Wave Sensor equipped installion is to be located at an undetermined off-shore location in the vicinity of Palmyra Island. The primary objective of this scientific site is to measure and record for Tsunami studies, the amplitude and time of arrival of long period waves over a predetermined period. The underwater equipment will be emplaced by Defense Research Laboratory (DRL) personnel. The auxiliary equipment will also be installed in the AEC camper trailer by DRL personnel.

This installation will contain a differential sensor and data logging system. An armored cable connects the implanted wave sensing transducer and the completely self-contained data logging system. The transducer and sensor will be installed by DRL scuba divers in approximately 30 to 50-ft. of water, located in a position to eliminate as much shore-induced phenomena as possible. Voice communications to Damon Tract will be provided by the U. S. Army Communications Center (F&S No. 25011).

DRL personnel will assemble at Damon Tract to prepare equipment prior to deployment. A DRL Type II installation team of 5 persons including scuba divers and technical personnel will emplace and roll up equipment; one man will operate and maintain the equipment for the duration of the program. DRL personnel will obtain subsistence at the camp facilities (F&S No. 25007). For a summation of Tamarin installations see F&S No. 05027.

PALMYRA

F & S NO.	TITLE				
25010	Weather Station, USAF Air Weather Service (AWS)				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+23
JTF-8	None	None			FOD GO+30
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
JTF MILCON CRO 7-65	PRE-GO Engineering costs are included in F&S No. 22009 POST-GO Estimate 12/65		26.0	26.0*	
	TOTAL		26.0	26.0*	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 101-002-C6 TYP 035-A1 and A3
101-038-C1 and E1 TYP 036-A1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The contractor furnished items include: a) two 16 x 32-ft. tents; b) four 4 x 4 x 6-ft. hot lockers; and, c) two 20 kw, 120/208 volt, 60 cycle, 3 phase generators. One of the generators is utilized as a back up power source. In the event a central power system for the island is provided, only the back up generator is required.

The contractor will perform the following: a) prepare a level 60 x 250-ft. site oriented to the prevailing winds; when siting scientific equipment, obstructions within 500 yards in excess of 5° above the surface as well as signal reflections from the metal buildings should be avoided; b) erect a 16 x 32-ft. joint operations tent, with flooring, screen doors and screen siding with side flaps extended at the approximate slope of the tent roof for the use of AWS and communications personnel; c) erect a 16 x 32-ft. maintenance and supply tent, screened for ventilation and insect control; d) install four hot lockers for storage of electronic spare parts; e) construct one 10 x 10-ft. concrete pad with ground rod in center; f) construct a 3 x 3-ft. concrete pad, with tie-down rings, located approximately 800-ft. within line-of-sight of the operations tent; and, g) to facilitate the inflation and release of

*Includes construction costs for F&S No. 25011.

balloons, prepare a 16 x 30-ft. compacted gravel area, oriented to the prevailing winds and graded for drainage with 30 x 100-ft. cleared areas extending from each of the 30-ft. sides of the gravel area.

The Weather Station will be located in a joint facility with the Communication Center (F&S No. 25011) and will be sited approximately 2000 yards northwest of the air strip at the old ship pier. Refer to Figure A-22, Appendix A, for site location. Fifteen Air Force personnel will be assigned to the Air Weather Service facility at this location.

PALMYRA

F & S NO.	TITLE		
25011	Communication Center (U. S. Army Strategic Communication Command)		
USER JTF-8	STRUCTURE/FACILITY NO. None	SCIENTIFIC STATION NO. None	BOD GO+23 FOD GO+30

FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
JTF MILCON CRO 7-65	PRE-GO Engineering costs are included in F&S No. 22009. POST-GO Construction cost estimate included in F&S No. 25010.				

PRIOR YEARS

ENGINEERING Completed.

Drawings: 101-002-C6
101-038-C1 and E1
TYP-035-A1 and A3
TYP-036-A1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The U. S. Army Strategic Communication Command will furnish 3 communication vans. The contractor will construct a 20 x 20-ft. concrete pad for siting the communication vans.

The Communication Center will share the maintenance and joint operations tents with the U. S. Air Force Air Weather Service facility (F&S No. 25010). The joint installation is located about 2000 yards northwest of the aircraft landing strip at the old ship pier. Refer to Figure A-22, Appendix A, for site location. Transmitting, receiving and cryptographic service will be provided to all agencies located on this island. One officer and 25 EM from a Provisional Army Signal Unit (PASU), Team A-2, will operate the communication center at this location.

PALMYRA

F & S NO.	TITLE					
25012	Radiological Surveillance Facility, SECONDARY					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction is required as the U. S. Air Force Air Weather Service (AWS) facility (F&S No. 25010) will be used.

This facility is designated a SECONDARY radiological surveillance station because the civilian and JTF-8 population are relatively remote from test areas. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. AWS personnel will operate the radiological equipment.

[redacted]

UPOLU
13° 49'00"S 171°45'30"W
WESTERN SAMOA ISLANDS

General Upolu is the most important and second largest of the nine major islands in the independent country of Western Samoa. This group of islands was a former German colony, then a League of Nations mandated territory, and finally a UN trusteeship administered by New Zealand. Foreign affairs are currently administered by NZ on Samoa request.

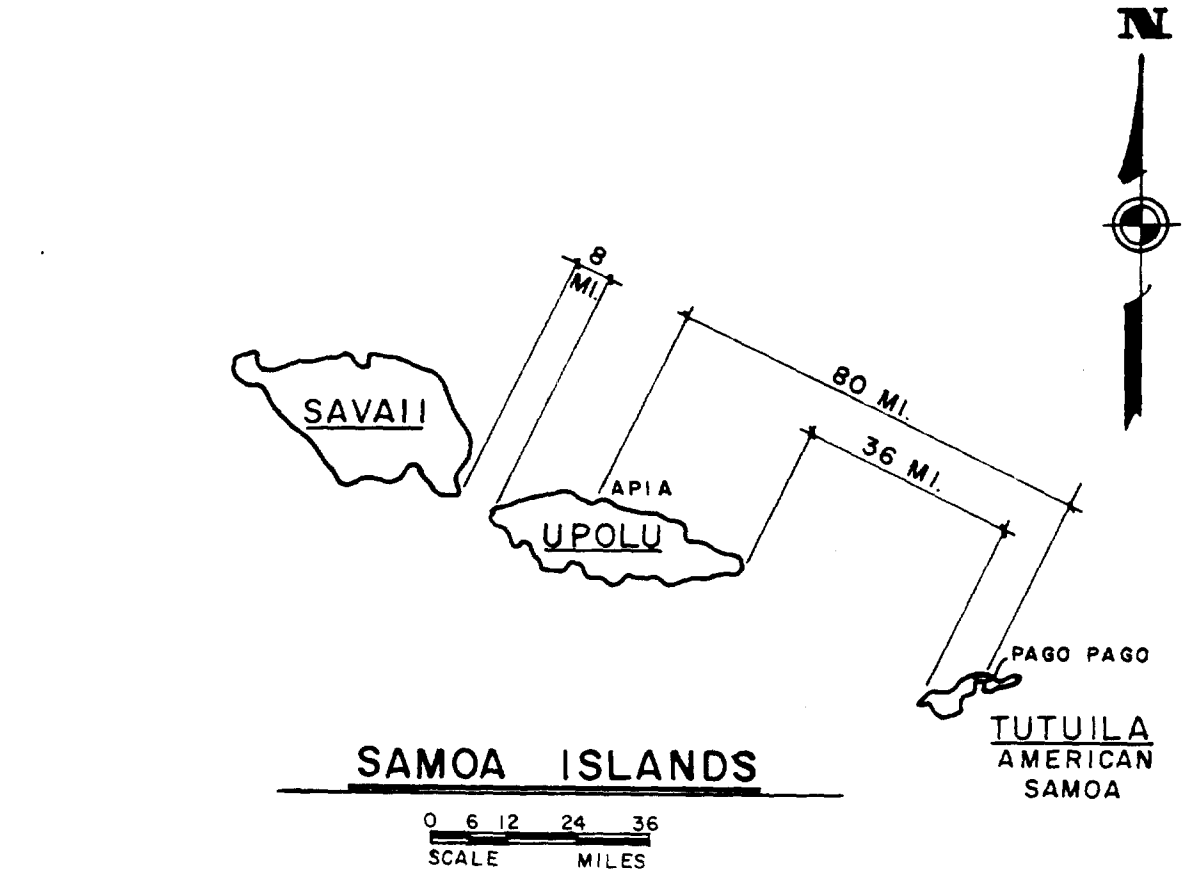
Physical Data Upolu is 36 miles west-northwest of the island of Tutuila (American Samoa), and eight miles east-southeast of Savaii, the largest island in the Samoa group. It is about 47 miles long from east to west, and 15 miles at its widest point, and covers an area of approximately 430 square miles. All of the Samoan islands are of volcanic origin, surrounded by coral reef, and lie in the Pacific earthquake belt.

Upolu is mountainous, rising to a height of 3,608 feet, and is a series of extinct volcanos traversing the length of the island. The mountains slope more steeply into the sea on the south side than on the north side. The eastern part is more mountainous than the other areas. Broad coastal plains are found on the north and south sides of the western portion of the main mountain range. The volcanic soil is rich and fertile and is farmed extensively wherever level stretches can be found along the narrow coasts, mountain valleys, delta areas, and coastal plains. Dense vegetation prevails throughout the Island.

Climate The climate of Upolu is mild, equable, and healthy. Temperature averages 85°F, maximum 94°F, minimum 61°F. December is the hottest month and July is the coldest, but the mean temperature for July is on an average of only 2.25°F below the December average. The dry season is May to October. The wet season is November to April. January rainfall records range from 5 to 65 inches. A 21 year record of annual rainfall shows a variance of 130 to 284 inches a year. The typhoon season occurs from January to March, occasionally extending into April. The prevailing east trade winds blow east-southeast most of the year. During the dry season, the winds are fairly constant but through the wet season the winds are broken by frequent periods of calm.

Facilities Apia, the nation's capital, has the only deep ocean port in Western Samoa. Ocean liners can dock at a 600 ft. wharf which is equipped for handling heavy cargoes. It has the world famous Apia Observatory, founded in 1902 by Germany, whose specialties include meteorology, terrestrial magnetism, seismology and oceanography. In Apia there is a 280 bed government hospital; also, over 200 hotel rooms including 90 at Aggie Greyes, and 75 at the Casino Hotel. Rental vehicles are available. Commercial air and boat service from Tutuila is on a daily basis. Valid passport and visa are required, but no permit or visa is needed for stays of 3 days or less.

[redacted]



SAMOA ISLANDS

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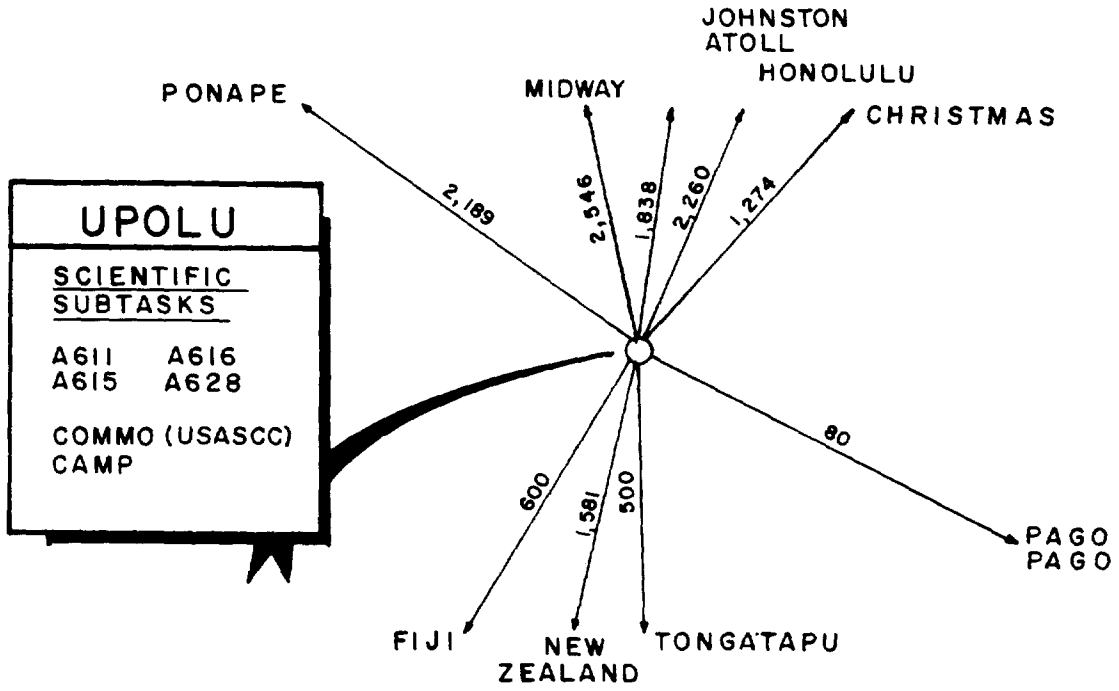
SCALE MILES



DISTANCES IN NAUTICAL MILES FROM UPOLU TO OTHER POINTS

UPOLU

F & S NO.	TITLE				
26001	Measurement of Gamma, Neutron, and Visible Radiation from Fission Debris - Subtask A615				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+122
TC	None		121-3-1		FOD GO+152
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO					
	Prior Cost*	1.3			1.3	
	POST-GO					
	Estimate 12/65			31.1	31.1	
	TOTAL	1.3		31.1	32.4	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 121-002-C1 121-3-1-C1 and E1

POST-GO

PROCUREMENT To be accomplished. Contractor will also provide 10,000 cu. ft. of (STP) helium.

CONSTRUCTION Test Command furnished items are as follows: a) two instrument trailers; b) eight (8) 60-ft. antennas; c) balloon launch instrumentation; and, d) optical instrumentation. The contractor will perform the following: a) erect a combination office laboratory, 16 x 32-ft. wood frame tent, supplied with 5 kw, electrical power; b) provide each of the two instrument trailers with 20 kw electrical power; c) construct eight (8) 4 x 4 x 1/2-ft. concrete pads and d) erect the TC 60-ft. antennas on the completed pads. The total electrical installation requires two contractor furnished 50 kw, 120/240 volt, 60 cycle, single phase generators. One of the generators is utilized as a back up power source.

The antenna area will be located at a minimum of 3 miles from the Subtask A616 site. The contractor will prepare level areas for the balloon launch facilities, optical facilities and the antenna area. The optical area will have a line-of-sight in a horizontal azimuth from northeast to south-southwest. If optical and antenna areas are not tied together electrically, separate back up generators will be required. A site will be selected after the project officer has made a field reconnaissance of the area shown in Figure A-23, Appendix A. Three scientific personnel will be assigned to A615 at this location.

*Includes engineering costs for F&S No. 27003.

UPOLU

F & S NO.	TITLE				
26002	Vertical Soundings of the Ionosphere - Subtask A616				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+130
TC	None	121-3-2			FOD GO+160
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21004. POST-GO Estimate 12/65		30.7	30.7	
	TOTAL		30.7	30.7	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 121-002-C1 121-3-2-C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish all antennas and one instrument trailer 8 x 36 x 10-ft. high. Contractor will furnish the following: a) two 60-ft. and two 80-ft. poles; b) one 100 gallon water tank; c) latrine and sewage facilities; and, d) two 30 kw, 120/208 volt, 60 cycle, 3 phase generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) the two 80-ft. poles will be erected 860-ft. apart and the two 60-ft. poles will be placed on a line offset 18-in. from the line connecting the 80-ft. poles; each 60-ft. pole will be 188-ft. from the center point between the larger poles; b) install TC furnished antennas on the poles; c) site the instrument trailer; d) install water tank and provide water for photographic processing; e) install generators with automatic switchgear; f) install septic system for sinks and toilet; and, g) provide electrical hookup where required. Refer to Figure A-23, Appendix A, for site location. Two scientific personnel are assigned to Subtask A616 at this location.

UPOLU

F & S NO.	TITLE				
26003	Riometer Station - Subtask A628				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+105
TC	None		121-3-3		FOD GO+135
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21007 POST-GO Estimate 12/65		19.1	19.1	
	TOTAL		19.1	19.1	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 121-002-C1 121-3-1-C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish the following: a) one 30 and 90 mc oblique antenna; b) one 30 mc Riometer antenna; c) one instrument van; and, d) one air conditioning unit. The contractor will furnish the following: a) one storage CONEX; and, b) two 10 kw, 120/240 volt, 60 cycle, 3 phase (1250 rpm) diesel generators. One of the generators will be utilized as a back up power source.

The contractor will perform the following: a) provide a cleared, flat unobstructed area approximately 75 x 150-ft.; b) site the instrument van and the storage CONEX in the vicinity of the Test Command erected antennas; and c) install the generators and complete the electrical hookup to the instrument van. Refer to Figure A-23, Appendix A, for location. Scientific personnel assigned to Subtask A611 will operate Subtask A628 at this location.

UPOLU

F & S NO.	TITLE				
26004	HF Communications Simulation Experiment - Subtask A611				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+105
TC	None	121-3-4			FOD GO+125
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21003 POST-GO Estimate 12/65		8.3	8.3	
	TOTAL		8.3	8.3	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 121-002-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) one 110-ft. high Log Periodic Ionospheric antennas; and, b) one instrument trailer. The contractor will furnish two 20 kw, 120/240 volt, 60 cycle, single phase, low spee (1250 rpm) diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) prepare a cleared, flat 180 x 370-ft. unobstructed area for the TC erected 110-ft. high Log Periodic Ionospheric antennas which will have a ground screen that extends into the sea; b) construct concrete antenna bases, as designed by TC in the field; c) provide longeron pads and anchors for the antennas; d) site the instrument trailer; and e) install the generators and complete the electrical hookup to the instrument trailer. The site location will be selected after a reconnaissance by the project officer. Refer to Figure A-23, Appendix A, for general location. The five scientific personnel assigned to Subtask A611 will also operate Subtask A628 at this location.

UPOLU

F & S NO.	TITLE				
26005	Communication Center (U. S. Army Strategic Communication Command)				
USER	STRUCTURE, FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+143
JTF-8	None		None		FOD GO+150
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
JTF MILCON CRO 7-65	PRE-GO Engineering costs included in F&S Number 22009. POST-GO Estimate 12/65		26.0	26.0	
	TOTAL		26.0	26.0	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 121-002-C1 and E1 121-038-C1 and E1 TYP-35-A1 and A3
TYP-36-A1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The U. S. Army Strategic Communication Command will furnish 2 communication vans. The contractor will furnish the following: a) one operations 16 x 32-ft. screened tent, and, b) two 10 kw, 120/208 volt, 60 cycle, 3 phase generators. One generator will be utilized as a back up power source. A back up generator will still be required in the event a central electrical power source is provided.

The contractor will perform the following: a) construct a 20 x 20-ft. concrete pad for siting the communications vans; b) erect the 16 x 32-ft. operations tent; and, c) hookup and install electrical connections.

This is a DCS Station and will use AN/TSC-20's on point to point to DCS Aliamanu; it will patch thru to DCS J. A. via J. A. Oahu cable. This facility will provide all participants with transmitting, receiving and cryptographic service. The Communication Center will be sited after the scientific project locations have been selected and after a reconnaissance has been made of the area. Refer to Figure A-23, Appendix A, for possible locations. One officer and 17 EM from a Provisional Army Signal Unit (PASU), Team B-2, will operate the communication center at this location.

UPOLU

F & S NO. 26006	TITLE Camp					
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8/ MILCON CRO 7-65	PRE-GO Engineering costs included in F&S Number 22007. POST-GO Estimate 12/65*			212.1	212.1	
	TOTAL			212.1	212.1	

IN ORDER TO MEET THE REQUIRED BENEFICIAL AND FULL OCCUPANCY DATES AND MAINTAIN AN ORDERLY MOBILIZATION OF OFF-ISLAND CAMP CONSTRUCTION, PROCUREMENT FOR THE ACCEPTED CAMP CONCEPT MUST BE ACCOMPLISHED PRE-GO.

PRIOR YEARS

ENGINEERING Plan III B Preliminary Drawings - Completed.

Drawings:

93-002-C1	93-043-A1, M1, E1	121-002-C1
93-023-A1	93-078-C1	TYP-035-A1 and A3
93-024-A1	93-095-E1 and E2	TYP-036-A1

PROCUREMENT Some major items for Plan III B type camps are in stockpile at Damon Tract.

CONSTRUCTION Will be accomplished Post-GO.

POST-GO

ENGINEERING Plan III B Preliminary Drawings - Completed. If military field camp concept is adopted, engineering will be completed in the field, Post-GO.

PROCUREMENT Should be accomplished Pre-GO.

CONSTRUCTION A tent camp will be required for billeting and messing scientific and support personnel. JTF-8 is currently reviewing support camp requirements and material costs.

*Includes mobilization and demobilization costs based on Plan III B concept.

[redacted]

VITI LEVU
18°08'00"S 178°25'00"E
FIJI ISLANDS

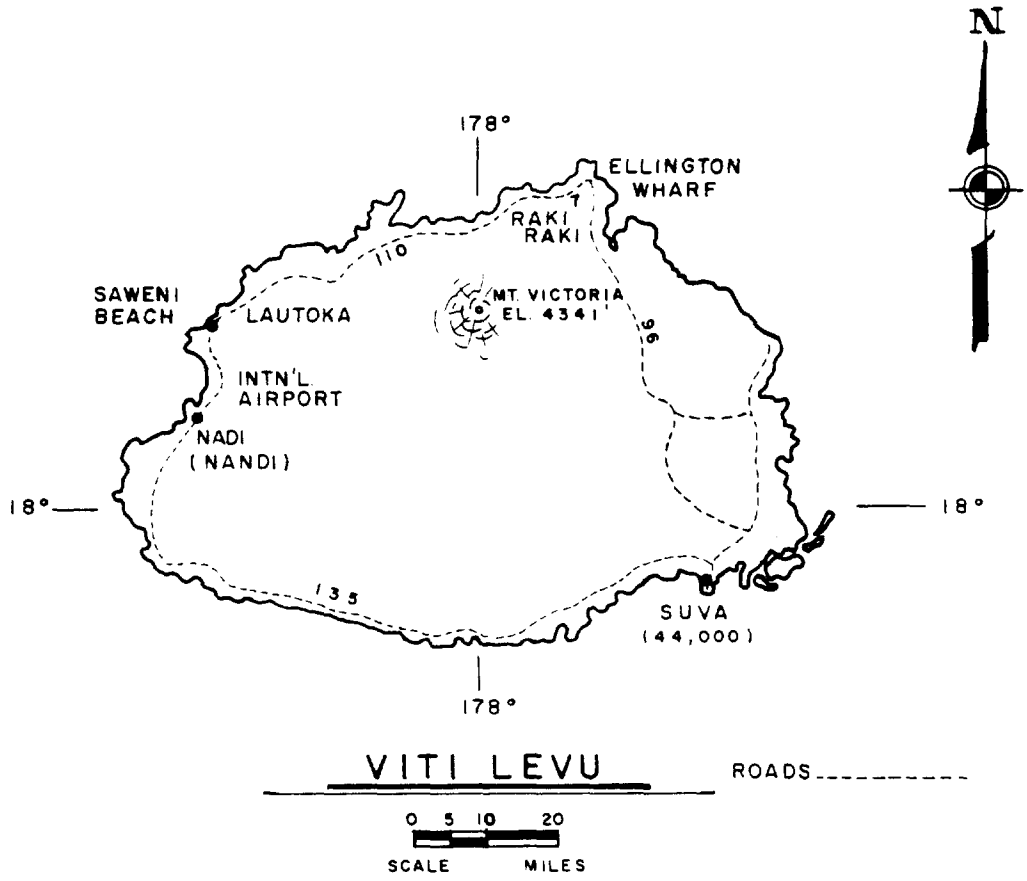
General The British Crown Colony of Fiji is centrally located in the southwest Pacific and acts as a gateway to this area. Viti Levu Island is one of the most southerly of the Fiji Island group and is located approximately 1,100 miles south of the equator and about 630 miles west of the international date line. It is on the main air and sea routes between Australia, New Zealand, the United States and Canada.

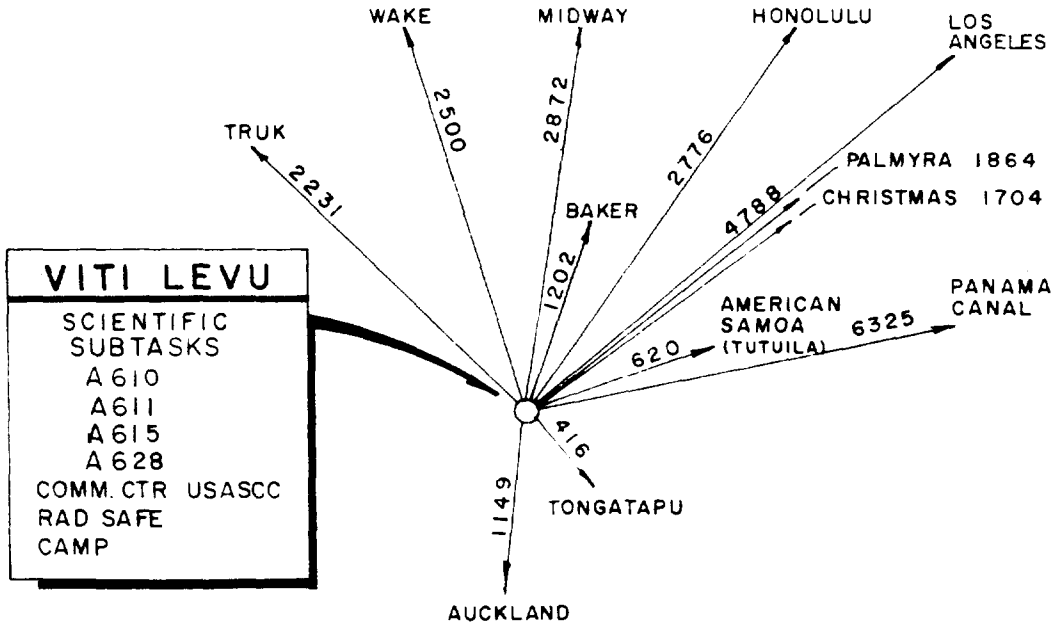
Physical Data Viti Levu is the largest of the 844 islands, islets, narrow atolls and reefs in the Fiji group. This 4,010 square mile egg-shaped island is approximately 67 miles north-south by about 98 miles east-west. It is a mountainous, volcanic island surrounded by barrier reefs and has four major types of terrain features: (1) plateau - the high 3,000 to 5,000 ft. central Rairaimatuku Plateau is swampy with dense forests, has sheer drops on the east and west to river valleys, and merges with mountains to the north and south; (2) mountains - from the plateau, mountains fan out including the highest peak, Mount Victoria, north of the plateau at an elevation of 4,341 ft.; (3) uplands - the large areas of hilly uplands at elevations of 1,000 to 2,000 ft. are well dissected by rivers. The Tholo East Uplands located in the northeast are the largest, and are covered by rain forest in the west, grass in the east with some forest cover in low areas. The similar Navan Uplands are north of the southern coast range and are more difficult to penetrate than the Tholo East. The Tholo West Uplands are on the leeward (west) side of the island and are mostly grass-covered with occasional patches of forest; and (4) coast - the coastal zone is a low, hilly transitional region including the plains fringing the coast. This area is intensively cultivated and densely populated. Dense forest occur on the windward side of the island and grassy plains are found on the leeward slopes. Mangrove swamps are on beaches and swampy delta lands.

Climate The climate is hot and rainy. Southeast trade winds prevail most of the year. Annual rainfall varies from 60 inches on the leeward side to 140 inches on the windward side. The hot wet season is from February through March, and the dry season is from June through October. Tempertures range from 60°F to 96°F with an annual average of 82°F. On the southeast coast at Suva the relative humidity averages 80 percent and on the northwest coast, 72 percent.

Facilities The international airport at Nadi (Nandi) is equipped to handle all types of aircraft. The airstrip for Suva is 15 miles away at Mausori, but can accommodate only light aircraft. Seaplanes can be handled in Suva at Lauthala Bay. Suva Harbor has a wharf with 1,500 ft. of berthing space with depths of 24-36 ft. alongside. Lautoka has a 135 ft. wharf with depths of 21 ft. alongside. Accommodations are available at the 2 large hotels at Nadi, 6 hotels at Suva and others scattered around the island perimeter. State hospitals are located at major towns. Rental vehicles are also available and there is an all-weather gravel road around the island. Visas and passports are required.

[redacted]





DISTANCES IN NAUTICAL MILES FROM VITI LEVU TO OTHER POINTS

VITI LEVU, FIJI

F & S NO.	TITLE					
27001	Airborne Ionospheric Observatory - Subtask A610					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+120
TC	None		106-3-1			FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO					
	Engineering Costs included in F&S Number 24003					
	POST-GO					
	Estimate 12/65			5.8	5.8	
	TOTAL			5.8	5.8	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 106-002-C1 106-3-1-CE1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION The scientific site location will be on leased land adjacent to the Mocambo Hotel, Nadi. The contractor will furnish two 15 kw, 120/240 volt, 60 cycle, single phase generators. Back up power will be provided by the second generator. The generators will be located away from the hotel so as not to disturb guests. The TC furnished antenna and trailer will be TC installed, and includes 3 HF receivers (4, 9, 12 MHz) and an All Sky Camera. Refer to Figure A-24, Appendix A, for site location. Because of the proximity of the Mocambo Hotel and use of their land, the 12 scientific civilian personnel, and the one officer and 2 enlisted men will probably obtain lodging and subsistence at the hotel.

VITI LEVU, FIJI

F & S NO.	TITLE				
27002	HF Communications Simulation Experiment - Subtask A611				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+105
TC	None	106-3-2			FOD GO+125
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21003 POST-GO Estimate 12/65		8.3	8.3	
	TOTAL		8.3	8.3	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 106-002-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) one 110-ft. high Log Periodic Ionospheric antenna; and, b) one instrument trailer. The contractor will furnish two 20 kw, 120/240 volt, 60 cycle, single phase, low speed (1250 rpm) diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following; a) prepare a cleared, flat, 265 x 345-ft. unobstructed area for the TC erected 110-ft. high Log Periodic Ionospheric antenna which will have a ground screen that extends into the sea; b) construct concrete antenna bases, as designed by TC in the field; c) provide longeron pads and anchors for the antennas; d) site the instrument trailer; and, e) install the generators and complete the electrical hookup to the instrument trailer. A site on Saweni Beach at the town of Lautoka has been leased; refer to Figure A-24, Appendix A, for site location. The five scientific personnel assigned to Subtask A611 will live off the local economy and also operate Subtask A628.

[redacted]

VITI LEVU, FIJI

F & S NO.	TITLE				
27003	Measurement of Gamma, Neutron, and Visible Radiation from Fission Debris - Subtask A615				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BOD GO+122
TC	None		106-3-3		FOD GO+152
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 26001 POST-GO Estimate 12/65		31.1	31.1	
	TOTAL		31.1	31.1	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 106-002-C1 106-3-3-C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) two instrument trailers; b) eight 60-ft. antennas, and, c) optical instrumentation. The contractor will perform the following: a) erect a combination office laboratory, 16 x 32-ft. wood frame tent, supplied with 5 kw electrical power; b) provide each of the two instrument trailers with 20 kw electrical power; c) construct eight (8) 4 x 4 x 1/2-ft. thick concrete pads; and d) erect the TC 60-ft. antennas on the completed pads. The total electrical installation requires two contractor furnished 50 kw, 120/240 volt, 60 cycle, single phase generators. One of the generators is utilized as a back up power source.

The contractor will prepare level areas for the optical facilities and the antenna areas. The optical instruments will have a line-of-sight in the horizontal azimuth from northeast to south-southwest. Separate back up generators must be provided if optical and antenna areas are not tied together electrically. Subtask A628 will be located in the same area.

The project officer will conduct a field reconnaissance of the 3 AEC lease option locations to determine the best possible site prior to selecting a permanent location for Subtask A615. Refer to Figure A-24, Appendix A for general location of areas at Raki Raki, Ellington Wharf and Tucuriu School, Suva. The two scientific persons assigned to Subtask A615 may live off the local economy.

VITI LEVU

F & S NO.	TITLE					
27004	Riometer Station - Subtask A628					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+105
TC	None		106-3-4			FOD GO+135
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21007 POST-GO Estimate 12/65			19.1	19.1	
	TOTAL			19.1	19.1	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 106-002-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) one 30 and 90 mc oblique antenna; b) one 30 mc Riometer antenna; c) one instrument van; and, d) one air conditioning unit. The contractor furnished items are: a) one storage CONEX; and, b) two 10 kw, 120/240 volt, 60 cycle, 3 phase (1250 rpm) diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) provide a cleared, flat unobstructed area approximately 75 x 150-ft.; b) site the instrument van and the storage CONEX in the vicinity of the Test Command erected antennas; and, c) install the generators and complete the electrical hookup to the instrument van. Refer to Figure A-24, Appendix A, for location. Scientific personnel assigned to Subtask A611 will operate Subtask A628 at this location.

VITI LEVU, FIJI

F & S NO.	TITLE					
27005	Camp					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	None		None			FOD GO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8/ MILCON CRO 7-65	PRE-GO Engineering costs included in F&S Number 22007. POST-GO Estimate 12/65*			210.0	210.0	
	TOTAL			210.0	210.0	

IN ORDER TO MEET THE REQUIRED BENEFICIAL AND FULL OCCUPANCY DATES AND MAINTAIN AN ORDERLY MOBILIZATION OF OFF-ISLAND CAMP CONSTRUCTION, PROCUREMENT FOR THE ACCEPTED CAMP CONCEPT MUST BE ACCOMPLISHED PRE-GO.

PRIOR YEARS

ENGINEERING Plan III B Preliminary Drawings - Completed.

Drawings:	93-002-C1	93-043-A1, M1 and E1	106-002-C1
	93-023-A1	93-078-C1	TYP-035-A1 and A3
	93-024-A1	93-095-E1 and E2	TYP-036-A1

PROCUREMENT Some major items for Plan III B type camps are in stockpile at Damon Tract.

CONSTRUCTION Will be accomplished Post-GO.

POST-GO

ENGINEERING Plan III B Preliminary Drawings - Completed. If military field camp concept is adopted, engineering will be completed in the field, Post-GO.

PROCUREMENT Should be accomplished Pre-GO.

CONSTRUCTION A tent camp will be required for billeting and messing scientific and support personnel. JTF-8 is currently reviewing support camp requirements and material costs.

*Includes mobilization and demobilization costs based on Plan III B concept.

VITI LEVU, FIJI

F & S NO.	TITLE					
27006	Radiological Surveillance Facility, BACKGROUND					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction is required as the U. S. Army Strategic Communications Center (STRATCOM) facilities (F&S No. 27007) will be used.

This facility is designated a BACKGROUND radiological surveillance station as it is in a remote location from the test area and requires routine monitoring for purposes of documentation and for maintaining public confidence. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. Provisional Army Signal Unit personnel from STRATCOM will operate the radiological equipment.

VITI LEVU, FIJI

F & S NO.	TITLE					
27007	Communication Center (U. S. Army Strategic Communication Command)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+143
JTF-8	None		None			FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF MILCON CRO 7-65	POST-GO Estimate	TO BE DETERMINED				

POST-GO

ENGINEERING None required.

PROCUREMENT To be accomplished.

CONSTRUCTION The U. S. Army Strategic Communication Command will furnish 2 communication vans. The contractor will furnish two (2) 10 kw, 120/208 volt, 60 cycle, 3 phase generators. One generator will be utilized as a back up power source. A back up generator will still be required in the event a central electrical power source is provided.

In previous tests, the U. S. Army Signal Corps located their communication equipment at the Royal New Zealand Air Force Base, Laucala Bay, Suva. It is assumed the Radio Communication Sending and Receiving Center will be located in Building T-147 or a reasonable substitute. As in previous tests, officer and enlisted personnel will be messed and quartered at the base and will receive all benefits normally associated with a military installation, such as: medical, recreational, and post exchange privileges. Refer to Figure A-24, Appendix A, for island plot plan. One officer and 17 EM from a Provisional Army Signal Unit (PASU) Team B-1 will operate the communication center at this location.

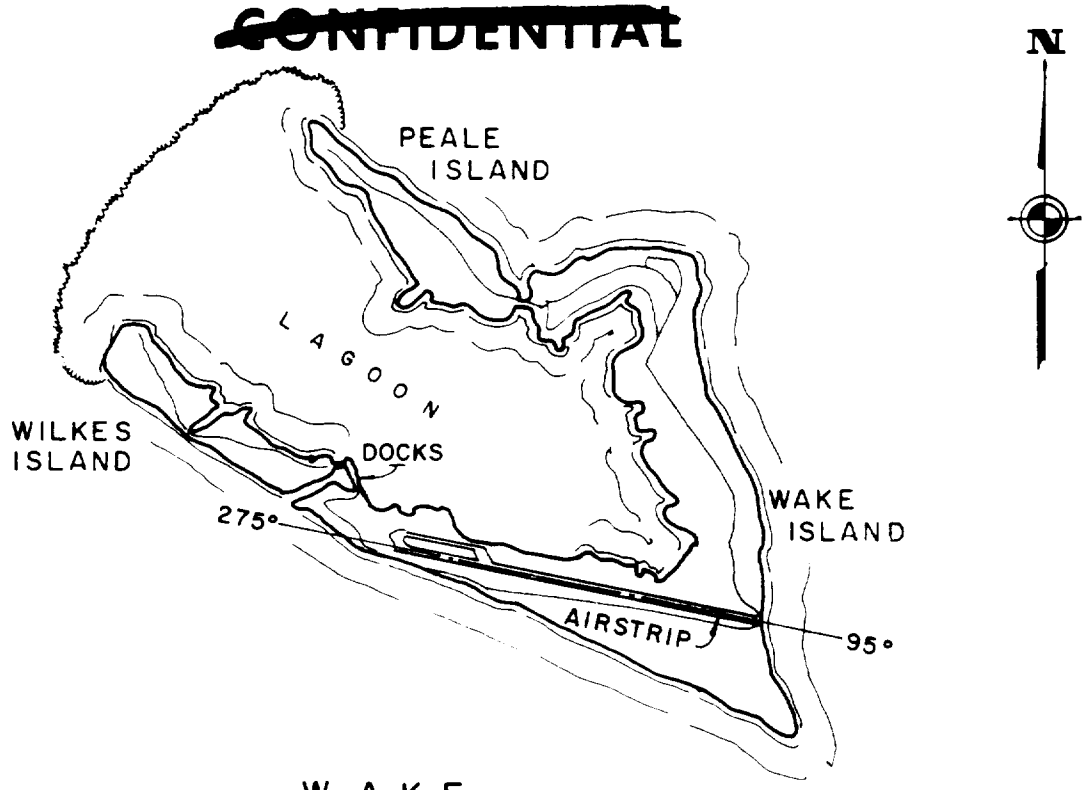
WAKE
19°18'N 166°38'E

General Wake Island is an atoll about 2,000 nautical miles west of Honolulu. It has been owned by the United States since 1899. Wake lies about midway between Japan and Hawaii, and serves as a major airline stop-over and fueling station. The Island is under the jurisdiction of the Federal Aviation Agency. Military activity is limited to operations of the Military Airlift Command, and those of Search and Rescue.

Physical Data The Wake Island atoll consists of three islets, Peale, Wilkes, and Wake, which encloses a lagoon on three sides. Each arm of V-shaped Wake Island is about three (3) miles long by one-half mile wide. (See map, next page.) Smaller Peale and Wilkes Islands are approximately 1-1/2 miles long and one third mile wide. The average land elevation is about 12 feet. The atoll encloses a 1-1/2 x 4 miles shallow lagoon. A steep coral reef completely surrounds the islands, including the northwestern end of the lagoon and is broken by a channel only on the southwestern side between Wilkes and Wake Islands. This narrow channel leads to an 800 x 270 ft. boat basin within the lagoon. Vegetation is limited to about 20 species and includes bushes, low shrubs and several different kinds of grasses. Sea birds include terns, boobies, petrels, frigate and red-tailed tropic birds. A bird sanctuary is on the western end of Wilkes Island.

Climate Easterly winds are most frequent from May to October during the warmer months, but change their direction to east northeasterlies from November through April. Twelve to fifteen mph average wind velocities occur with variations throughout the year. Typhoons (over 64 knots) occur about one in 5 years, the latest in September 1967, causing extensive damage to facilities and family housing. The highest and lowest extreme temperatures recorded for the dry season from December through June are 64°F and 90°F, and during the wet season May through October temperatures have been recorded at 65°F and 95°F. The mean annual temperature is 80°F. The annual relative humidity is 75 percent and varies from a low of 66 to a high of 82 percent. The annual precipitation averages about 39 inches, with monthly figures ranging from a January average of 1.14 inches in the dry season to 7.08 inches in August.

Facilities The 9,850 x 150 ft. airstrip, including aircraft servicing facilities, accommodates daily PAA, TAL, MAC, and chartered flights between Hawaii and the Far East. Communications include one 4-channel multiplex system to Honolulu; one duplex system provides radio-teletype communications to Guam and Honolulu; radio-telegraph to Japan; and teletype and crypto services to Honolulu. Lighters must be used to unload ships in the dock area. A 7 and 14 ton crane are furnished by FAA for loading and unloading purposes. Pacific Far East Lines deliver supplies by ship on a monthly basis. Mid Pac Operators deliver fuel by tankers on a regular schedule. The FAA has no extra housing or messing facilities for transients, however, the contractor for MAC might be able to provide them on a temporary basis. Limited hospital facilities are available.



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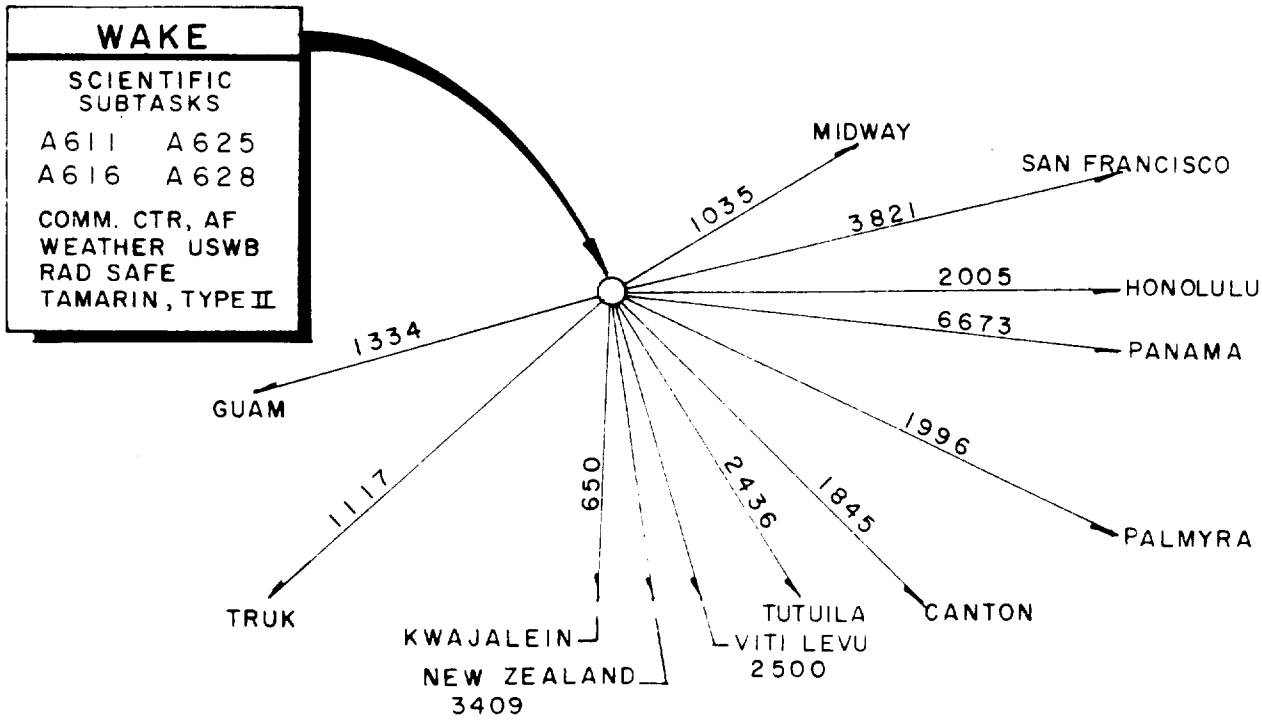


DISTANCES IN NAUTICAL MILES FROM WAKE ISLAND TO OTHER POINTS.

WAKE

F & S NO.	TITLE					
28001	HF Communication Simulation Experiment - Subtask A611					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+105
TC	None		111-3-1			FOD GO+125
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21003. POST-GO Estimate 12/65			8.3	8.3	
	TOTAL			8.3	8.3	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 111-002-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) two 110-ft. high Log Periodic Ionospheric antennas; and, b) one instrument trailer. The contractor will furnish two 20 kw, 120/240 volt, 60 cycle, single phase, low speed (1250 rpm) diesel generators. One of the generators is utilized as a back up power source. In the event local power is available, only back up power is required.

The contractor will perform the following; a) prepare a cleared, flat, 440 x 670-ft. unobstructed area for the TC erected 110-ft. high Log Periodic Ionospheric antennas which will have a ground screen that extends into the sea; b) construct concrete antenna bases, as designed by TC in the field; c) provide longeron pads and anchors for the antennas; d) site the instrument trailer; and, e) install the generators and complete the electrical hookup to the instrument trailer. Refer to Figure A-25, Appendix A, for site location. The four scientific personnel assigned to Subtask A611 will also operate Subtask A628 at this site.

WAKE

F & S NO.	TITLE					
28002	Vertical Soundings of the Ionosphere - Subtask A616					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+130
TC	None		111-3-2			FOD GO+160
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21004. POST-GO Estimate 12/65			30.7	30.7	
	TOTAL			30.7	30.7	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 111-002-C1 111-3-2-C1 and E1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish all antennas and one instrument trailer 8 x 36 x 10-ft. high. Contractor will furnish the following: a) two 60-ft. and two 80-ft. poles; b) one 100 gallon water tank; c) latrine and sewage facilities; and, d) two 30 kw, 120/208 volt, 60 cycle, 3 phase generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) the two 80-ft. poles will be erected 860-ft. apart and the two 60-ft. poles will be placed on a line offset 18-in. from the line connecting the 80-ft. poles; each 60-ft. pole will be 188-ft. from the center point between the larger poles; b) install TC furnished antennas on the poles; c) site the instrument trailer; d) install water tank and provide water for photographic processing; e) install generators with automatic switchgear; f) install septic system for sinks and toilet; and, g) provide electrical hookup where required. Refer to Figure A-25, Appendix A, for site location. Two scientific personnel are assigned to Subtask A616 at this location.

WAKE

F & S NO.	TITLE				
28005	Riometer Station - Subtask A628				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+105
TC	None	111-3-5			FOD GO+135
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
DASA RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21007 POST-GO Estimate 12/65		19.1	19.1	
	TOTAL		19.1	19.1	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 111-002-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) one 30 and 90 mc oblique antenna; b) one 30 mc Riometer antenna; c) one instrument van; and, d) one air conditioning unit. Contractor will furnish the following: a) one storage CONEX; and, b) two 10 kw, 120/240 volt, 60 cycle, 3 phase (1250 rpm) diesel generators. One of the generators is utilized as a back up power source.

The contractor will perform the following: a) provide a cleared, flat unobstructed area approximately 75 x 150-ft.; b) site the instrument van and the storage container in the vicinity of the Test Command erected antennas; and, c) install the generators and complete the electrical hookup to the instrument van. Refer to Figure A-25, Appendix A, for location. Scientific personnel assigned to Subtask A611 will operate Subtask A628 at this location.

WAKE

F & S NO. 28006	TITLE Debris Sampling - Subtask A625					
USER TC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD FODGO+120
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
USAF (AFTAC)		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION Existing facilities will be used; therefore, no construction or engineering is required. Aircraft will be used to sample bomb debris and determine debris location in both the conjugated and burst areas during test events.

This is a system oriented test or experiment and may include other service scatter system oriented experiments. The Debris Sampling program, Subtask A625, will be directed and operated by the USAF (AFTAC) at this location.

WAKE

F & S NO. 28007	TITLE Communication Center				
USER JTF-8	STRUCTURE FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing AF military communication facilities located at Military Airlift Command (MAC) will be used; therefore, no building or construction will be necessary. Communication services will be provided by this facility to all participants. If necessary, the communication center at this location will be augmented with JTF-8 personnel who will be furnished quarters and meals by MAC, Wake Island.

WAKE

F & S NO.	TITLE					
28009	Camp					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
MILCON		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION Arrangements will be made with Military Airlift Command, U. S. Air Force, and the Federal Aviation Agency, Wake Island, for housing and feeding all participants.

WAKE

F & S NO.	TITLE				
28011	Atoll Wave Sensor, Type II (Tamarin)				
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+68
DRL	None	111-13-1			FOD GO+75
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO					
	Prior Cost	Included in F&S No. 05027				
	POST-GO					
	Estimate	TO BE DETERMINED				

PRIOR YEARS

ENGINEERING None required.

PROCUREMENT An AEC furnished 7 x 17-ft. Model 16 Northwest camper trailer, for use at the Wake Tamarin site, is on standby at Damon Tract, Oahu, Hawaii.

POST-GO

CONSTRUCTION The AEC furnished Type II Wave Sensor equipped installation is to be located at an undetermined off-shore location in the vicinity of Wake Island. The primary objective of this scientific site is to measure and record for Tsunami studies, the amplitude and time of arrival of long period waves over a predetermined period. The underwater equipment will be emplaced by Defense Research Laboratory (DRL) personnel. The auxiliary equipment will also be installed in the AEC camper trailer by DRL personnel.

This installation will contain a differential sensor and data logging system. An armored cable connects the implanted wave sensing transducer and the completely self-contained data logging system. The transducer and sensor will be installed by DRL scuba divers in approximately 30 to 50-ft. of water, located in a position to eliminate as much shore-induced phenomena as possible. Voice communications to Damon Tract will be provided by the existing United States Air Force Communications facility (F&S No. 28007).

DRL personnel will assemble at Damon Tract to prepare equipment prior to deployment. A DRL Type II installation team of 3 persons including scuba divers and technical personnel will emplace and roll up equipment; one man will operate and maintain the equipment for the duration of the program. DRL personnel will obtain subsistence through the local economy (F&S No. 28009). For a summation of Tamarin installations see F&S No. 05027.

WAKE

F & S NO.	TITLE					
28012	Radiological Surveillance Facility, SECONDARY					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FODGO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction is required as the U. S. Weather Bureau (USWB) facilities, (F&S No. 28013) including communications, will be used.

This facility is designated a SECONDARY radiological surveillance station because the civilian and JTF-8 population are relatively remote from test areas. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. USWB personnel will operate the radiological equipment.

WAKE

F & S NO. 28013	TITLE Weather Station, U. S. Weather Bureau (USWB)					
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+23 / FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Weather Bureau facility will be used; therefore, no building or construction will be required. The USWB staff will be augmented with JTF-8 personel.

GUAM
13°29'N 144°48 E
MARIANA ISLANDS

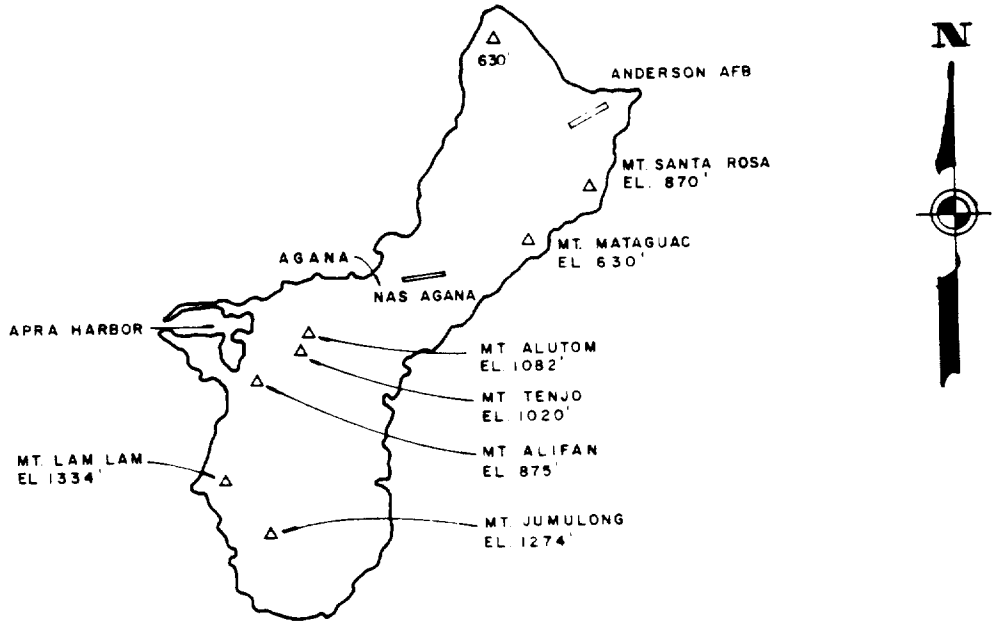
General Guam is a territory of the United States under the jurisdiction of the U. S. Department of the Interior, and is the most populous, and largest island in the Marianas. The capital is Agana. The commercial port of Agana is Apra Harbor. Guam is strategically located between Hawaii, the Philippines and other S. E. Asian countries and serves as a major airline fueling station for civilian and military aircraft. Military installations include Navy, Air Force, and Coast Guard.

Physical Data Guam is located at the southern extremity of the Mariana Archipelago. The peanut-shaped island is 28 miles long and varies in width from 4 to 8 miles. The northern coral-capped plateau varies between 200 to 600 feet in height. The plateau surface slopes southwestward toward the lowland in the vicinity of Agana and the Agana River. The seaward edges of the plateau adjoin narrow discontinuous plains separated by rocky headlands on the north and west, and drops directly to the water on the northeast. An area of low hills marks the plateau descent to the Agana River valley on the south. The entire plateau area is underlain by porous limestone. Forest and scrub cover the area.

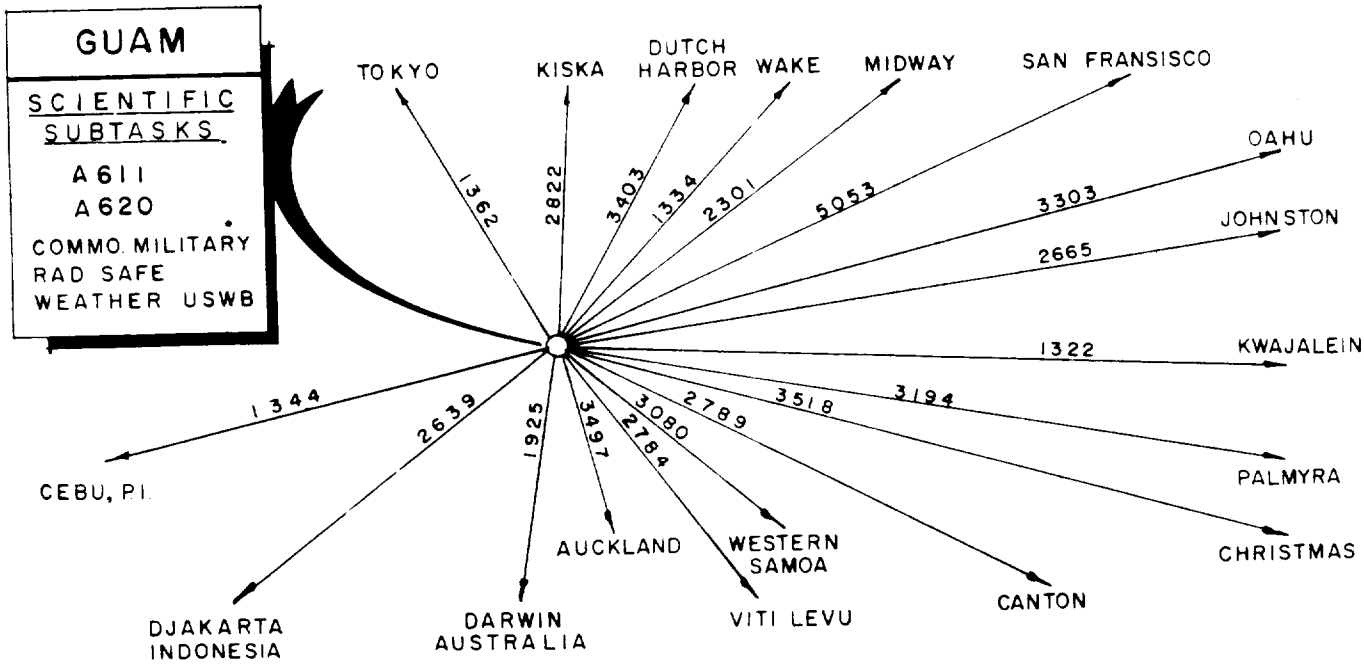
Across the center an area of volcanic hills separates the plateau from the remainder of the island. These hills continue as a line of peaks southward along the western coast. Lamlam Mountain, elevation 1,334 feet, is the highest. The mountain range descends to a narrow broken coastal plain on the west side; on the east side the terrain descends from 500 to a 300 ft. plateau, with steep slopes and cliffs along the beaches. East flowing streams cross the plateau and have cut the area into valleys and uplands. Along the southern portion, numerous small bays indent the coast. Sword grass is the chief vegetation found in the volcanic areas. The forest between Mt. Alifan and Mt. Lamlam extends eastward across the island merging with a forest area along the East Coast.

Climate Annual rainfall is about 90 inches and approximately 60 percent of this occurs during the rainy season from June through November with a monthly average between 8 and 15 inches. The driest period is from January through May with an average monthly rainfall between 2 and 3 inches. The driest month is April. Mean average temperature is 81°F, the mean maximum is 90°F. January and February are the coolest months. Humidity is high throughout the year with an average of 76 percent. From December to May, northeasterly and east-northeasterly winds predominate. Light westerly winds may prevail during the summer months; however, typhoons occur most often during the summer.

Facilities Apra Harbor provides facilities for ships of all sizes. Cargo handling is provided at the wharves, and on lighters and barges. Wharf cranes of 1-ton to 45-ton and floating cranes of 125 tons are available. The U. S. Naval Station, Guam, and the U. S. Coast Guard Station are located in the port area. This is a port of call for major steamship lines. The Commercial Air Terminal handles Pan American and other carriers and is located at the U. S. Naval Air Station, Agana. Anderson AFB handles military aircraft only and does accommodate large planes. Radio, teletype, telephone and cable systems, including SEACOM connect with Australasia, South East Asia, Japan, the Philippines, Saipan, Hawaii and the United States. Hospital facilities are also available.



GUAM



DISTANCES IN NAUTICAL MILES FROM GUAM TO OTHER POINTS.

GUAM

F & S NO.	TITLE					
29001	HF Communications Simulation Experiment - Subtask A611					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+105
TC	None		113-3-1			FOD GO+125
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO 1106-4101-61	PRE-GO Engineering costs included in F&S Number 21003. POST-GO Estimate 12/65			8.3	8.3	
	TOTAL			8.3	8.3	

PRIOR YEARS

ENGINEERING Completed.

Drawing: 113-002-C1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish two 110-ft. high Log Periodic Ionospheric antennas, and one instrument trailer. The contractor will furnish one 20 kw, 120/240 volt, 60 cycle, single phase, low speed (1250 rpm) diesel generator for use as a back up power source. Primary power will be provided from existing military or local sources. Construction will probably be accomplished by a local contractor.

The contractor will perform the following: a) prepare a cleared, flat, 405 x 590-ft. unobstructed area for the TC erected 110-ft. high Log Periodic Ionospheric antennas which will have a ground screen that extends into the sea; b) construct concrete antenna bases, as designed by TC in the field; c) provide longeron pads and anchors for the antennas; d) site the instrument trailer; and, e) install the generator and complete the electrical hookup to instrument trailer. Refer to Figure A-26, Appendix A, for site location. Four scientific personnel will be assigned to Subtask A611 at this site.

GUAM

F & S NO.	TITLE					
29002	Measurement of Effects on VLF and LF Radio Wave Propagation - Subtask A620					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+130
TC	None		113-3-2			FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	POST-GO Estimate 12/65		6.0		6.0	
	TOTAL		6.0		6.0	

POST-GO

ENGINEERING None Required.

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command will furnish the following items: a) two 10-ft. loop antennas; b) 4,000 ft. coaxial cable; c) one 6 x 7 x 10-ft. portable building d) one 10-ft. diameter crossed loop antenna; and, e) one 28.7 x 10.8 x 8.5-ft. trailer. The contractor will furnish two 20 kw, 120/208 volt, 60 cycle, 3 phase diesel generators. One generator is to be used for back up power. In the event local power is available; only back up power is required.

This project is service funded and requires no support from DASA or JTF-8. Existing operational communications facilities will be used. This project will be directed and operated by the Defense Communications Agency at their discretion. The facility will be similar to the one required at Johnston Island. The site must be located in remote areas away from R. F. and electrical noises and will be selected after a field reconnaissance. Refer to Figure A-26, Appendix A, for Island Plot Plan. The number of scientific personnel to be assigned to Subtask A620 at this site is not firm at this time.

GUAM

F & S NO.	TITLE					
29005	Weather Station, U. S. Weather Bureau (USWB)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+65
JTF-8	None		None			FOD GO+72
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Weather Bureau facility will be used; therefore, no building or construction will be required. The USWB staff will be augmented with four JTF-8 personnel.

GUAM

F & S NO.	TITLE					
29006	Radiological Surveillance Facility, BACKGROUND					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction is required as the U. S. Weather Bureau (USWB) facilities (F&S No. 29005) including communications, will be used.

This facility is designated a BACKGROUND radiological surveillance station as it is in a remote location from the test area and requires little more than routine monitoring for purposes of documentation and for maintaining public confidence. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. USWB personnel will operate the radiological equipment.

GUAM

F & S NO.	TITLE					
29007	Communication Center					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Navy communication facility will be used; therefore, no building or construction will be necessary. Communication services will be provided by this facility to all participants. If necessary, the communication center at this location will be augmented with JTF-8 personnel who will be furnished quarters and meals by NAS Agana, Guam.

[redacted]

OKINAWA

F & S NO.	TITLE				
30001	HF Communications Simulation Experiment - Subtask A611				
USER	STRUCTURE/FACILITY NO.	SCIENTIFIC STATION NO.			BOD GO+105
TC	None	119-3-1			FOD GO+125
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
DASA/ RDT&E EAO1106-4101-61	PRE-GO Engineering costs included in F&S Number 21003. POST-GO Estimate 12/65			8.3	8.3	
	TOTAL			8.3	8.3	

PRIOR YEARS

ENGINEERING Completed.

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION Test Command furnished items are as follows: a) two 110-ft. high Log Periodic Ionospheric antennas; and, b) one instrument trailer. The contractor will furnish two 20 kw, 120/240 volt, 60 cycle, single phase, low speed (1250 rpm) diesel generators. One of the generators is utilized as a back up power source. In the event local power is available, only back up power is required.

The contractor will perform the following: a) prepare a cleared, flat, 355 x 515-ft. unobstructed area for the TC erected 110-ft. high Log Periodic Ionospheric antennas which will have a ground screen that extends into the sea; b) construct concrete antenna bases, as designed by TC in the field; c) provide longeron pads and anchors for the antennas; d) site the instrument trailer; and, e) install the generators if local power is not available, and complete the electrical hookup to the instrument trailer. The site location will be selected after a reconnaissance by the project officer. Six scientific personnel will be assigned to Subtask A611 at this site.

[redacted]

OKINAWA

F & S NO.	TITLE					
30005	Communication Center					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. military communication facilities will be used; therefore, no building or construction will be necessary. Communication services will be provided by this facility to all participants. If necessary, the communication center at this location will be augmented with JTF-8 personnel who will be furnished quarters and meals through the local economy.

OKINAWA

F & S NO.	TITLE					
30006	Satellite Communications - Subtask A619					
USER	STRUCTURE FACILITY NO.			SCIENTIFIC STATION NO.		BOD GO+120
TC	None			None		FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION This is a system oriented experiment and as such is not directly supported by DASA. There is no construction support required by the contractor. The Subtask A619 installation will utilize existing operational communications facilities. The U. S. Army Satellite Communications Agency (USASCA) will direct and provide operational personnel for the scientific installation. The USASCA will also provide funds for Subtask A619.

JAPAN, FUCHU

F & S NO. 31005	TITLE Weather Station, U. S. Air Force Air Weather Service (AWS)					
USER JTF-8 (JTG 8.4)	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+65 FOD GO+72
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Air Force Air Weather Service facilities will be used; therefore, no building or construction will be required. The AWS staff will be augmented with two JTF-8 personnel.

JAPAN, TOKYO

F & S NO. 31007	TITLE Communication Center				
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None		BOD FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. military communication facilities will be used; therefore, no building or construction will be necessary. Communication services will be provided by this facility to all participants. If necessary, the communication center at this location will be augmented with JTF-8 personnel who will be furnished quarters and meals through the local economy.

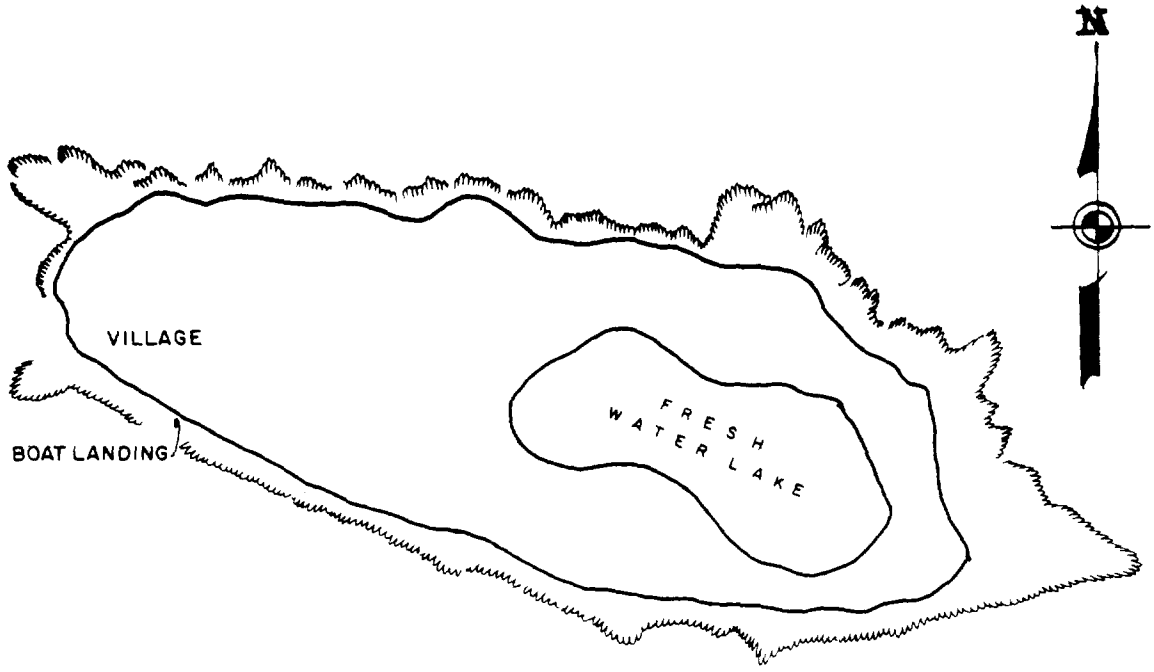
WASHINGTON ISLAND
04°43'N 160°25'W
LINE ISLANDS

General Washington Island is a British possession and belongs to the Line Island District, comprising Fanning, Christmas, and Washington Islands, with headquarters on Christmas Island. The land is all owned by Fanning and Washington Island Estates, Burns-Philips Trading Company, who employ about 80 Gilbertese for copra production and to maintain the 200,000-palm tree plantation.

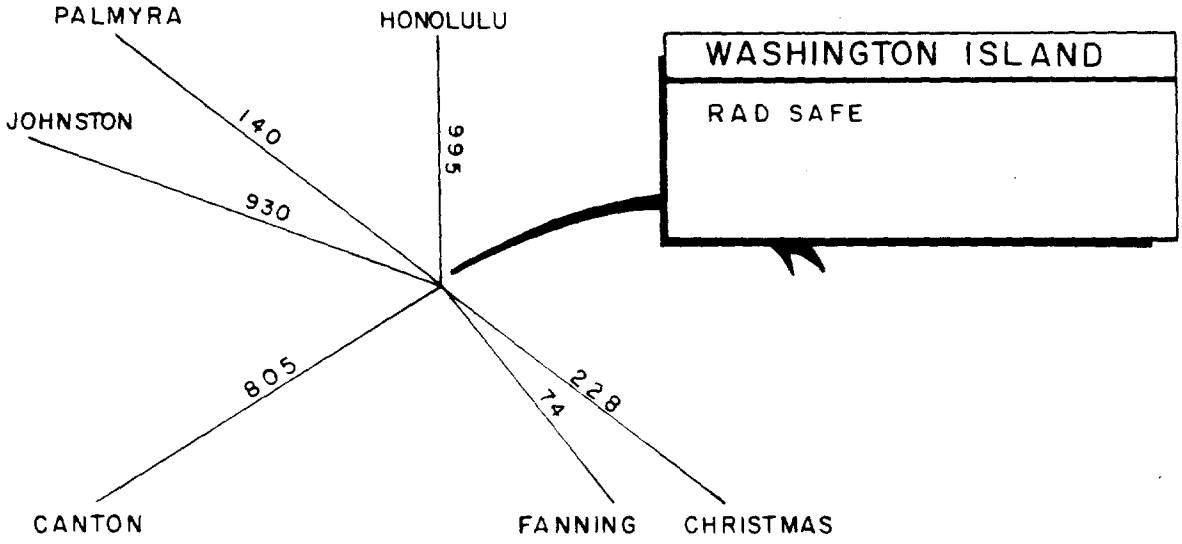
Physical Data Washington Island is about 9 miles in circumference and averages 10-ft. in elevation. The island is encircled by a fringing reef which extends for about 1,000 yards off the eastern point and for some distance off the northern side. Two tongues of reef extend from 600 to 800 yards off the western shore. In all other parts of the island the fringing reef is narrow. Landing by boat is nearly always dangerous and often impracticable because of the heavy surf. There is a boat landing area on the beach in a small gap between the two spits of reef at the western end of the island; however, it is recommended that native boats be used in going ashore. The island is covered with a luxuriant growth of coconut palms and other tropical vegetation. There is a fresh water lagoon in the interior of the eastern section of the island which is the only area not covered with vegetation. Many sea and migratory birds are found here.

Climate Washington Island is located near the southern edge of the equatorial counter current and is in the equatorial trough zone the year around. The weather records for this island are not complete as a meteorological station has never been established to collect data; however, it can be assumed that climatological records would be similar to Palmyra and Fanning Island data since Washington Island lies between these two islands. On Washington, easterly winds predominate with the exception of northeasterlies in the Spring and southeasterlies in the Autumn. Mean wind velocities vary between 9 and 13 knots. Mean annual temperature is 82°F, highs 95°F. Wet seasons are from January to June with a monthly precipitation average of 10 to 13-1/2 inches. Dry seasons are July to December with an average of 3 to 4-1/2 inches of precipitation each month. Relative humidity is high.

Facilities The village, located on the western end of the island, has no public facilities. The island perimeter gravel road allows easy access to most areas of the island. A small piper cub airstrip is also located here.



WASHINGTON ISLAND



DISTANCES IN NAUTICAL MILES FROM WASHINGTON IS. TO OTHER PO I

WASHINGTON ISLAND (04°43'N 160°24'W)

F & S NO.	TITLE				
32001	Radiological Surveillance Facility, PRIMARY				
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.			BOD
JTG 8.7	None	None			FODGO+50
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO				
	Prior Cost* 0.9			0.9	
	POST-GO				
	Estimate 12/65		4.7	4.7	
	TOTAL 0.9		4.7	5.6	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 99-002-C1 123-029-AE1

PROCUREMENT To be accomplished.

CONSTRUCTION JTF-8 will furnish portable communication equipment including one broad band HF antenna (3-30 MHz), one KMW-2A transceiver, and a 30 S-1 amplifier to be operated by Radiological Surveillance personnel. The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment. The contractor will perform the following: a) provide 250 square feet of shelter for office, living and equipment purposes; b) provide two 15 kw, 115/230 volt, 60 cycle, single phase generators for operating the radiological communication, and miscellaneous equipment; one of the generators will be utilized as a back up power source; and, c) furnish rations.

This facility is designated a PRIMARY radiological surveillance station because the civilian population will be in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. One USPHS officer will be assigned to this Rad Safe facility.

*Includes engineering costs for F&S Nos. 33001 and 34001.

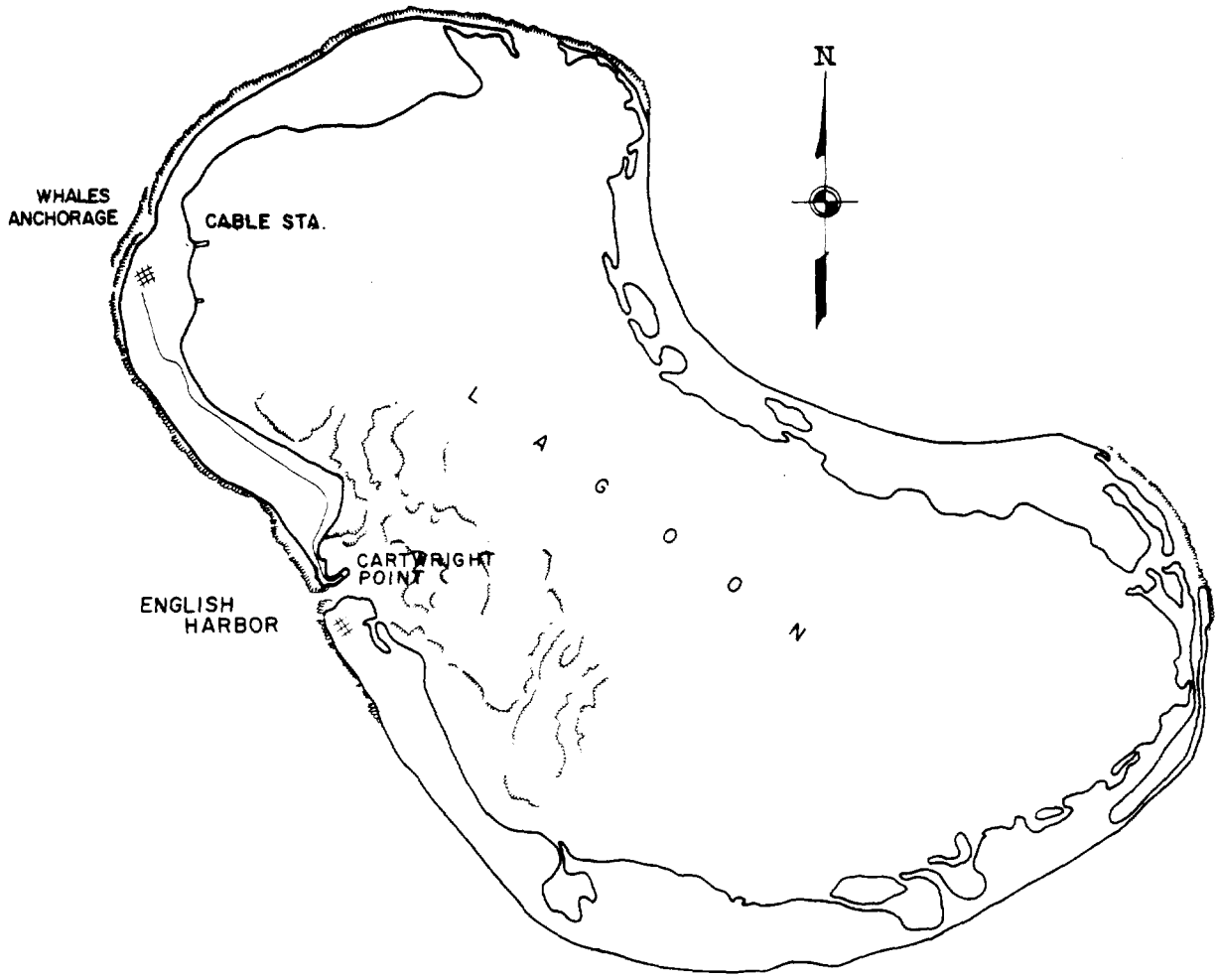
FANNING ISLAND
03°54'N 159°23'W
LINE ISLANDS

General Fanning Island, with its neighbors, Washington and Christmas, forms the British Line Islands administrative district under the charge of a District Commissioner. With one exception, all the land is owned and used for a coconut plantation by the Washington and Fanning Island Estates, Burns-Philips Trading Corporation. The small section of Crown land around the abandoned Cable Station is now leased from the Crown by the Research Corporation of the University of Hawaii.

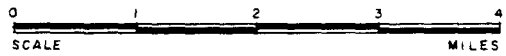
Physical Data Fanning Island is approximately 32 miles in circumference. It is a typical atoll, a narrow land area enclosing a lagoon with an area of about 45 square miles; it is 10-1/2-miles long and a half-mile at its widest land point; total land area is approximately 8,500 acres. The barrier reef is not more than 2 to 4-ft. high, except where sea action on the northern and eastern sides has thrown up a rim or barrier about 10-ft. high. A fringing reef encircles the atoll. A boat channel runs from the Whales Anchorage on the northwestern side of the atoll, in the vicinity of the Cable Station, to English Harbor on the southwestern side of the atoll. The only entrance for ships into the lagoon is at English Harbor which can accommodate ships of less than 500 tons in 20-ft. of water. The lagoon, except for the inner harbor at English Harbor, is choked with coral heads and patches. In addition to the palm plantation, the area is overgrown with a tropical vegetation of plants, low brush and trees. Many sea and migratory birds are also found on Fanning.

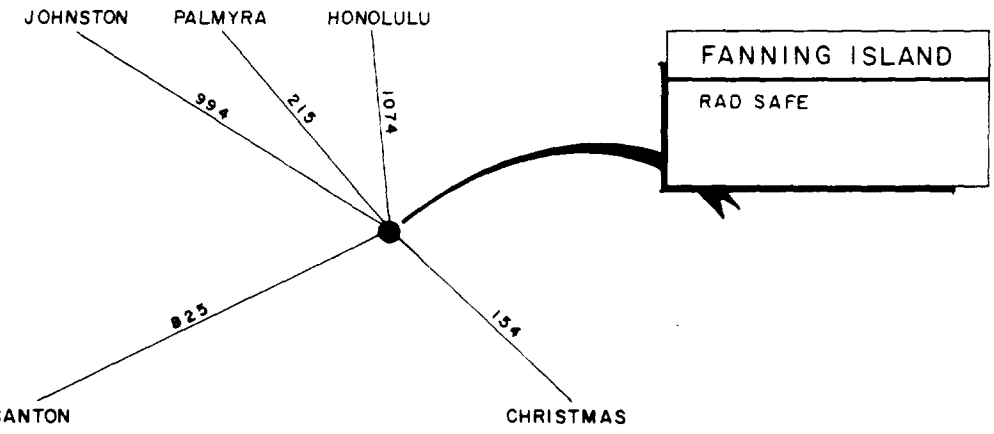
Climate The island lies in the southern boundary of the equatorial moist zone. Prevailing winds are from the east to east-northeast. Average wind velocity is 10 mph. The mean annual temperature is 82°F. High temperatures of 95°F and upward occur in all months. 100°F temperatures occur from September through November with lows of 68°F from February to September. Average annual rainfall is 99 inches. Wet season - January to June - with monthly precipitation averages of 10 to 13-in. Dry season - July to December - with precipitation averaging between 3 and 5-in. each month. Rainfall is capricious and varies greatly at times; i.e., in 1904 over 207-in. was recorded and in 1931 only 47-in. Relative humidity is high, ranging from a low of 69% to a high of 81%, throughout the year.

Facilities The abandoned British Cable Station installation is available for scientific use via the University of Hawaii. No public housing or facilities are available. A small 2,700-ft. airstrip for small aircraft is on the south side of the island. Wharfs and 5-ton cranes are located on each side of the main pass (English Harbor). LST's can unload directly onto the wharfs where depth alongside is 5-ft; also, there are good landing beach areas for LCM or LCU craft in this section. There is an all-weather hard-packed coral road from English Harbor (Cartwright Point) to the Cable Station. Vehicles are not for hire as the plantation has only a few for their own use.



FANNING ISLAND





DISTANCES IN NAUTICAL MILES FROM FANNING ISLAND TO OTHER POINTS

FANNING ISLAND (03°28'N 159°35'W)

F & S NO.	TITLE				
33001	Radiological Surveillance Facility, PRIMARY				
USER	STRUCTURE FACILITY NO.	SCIENTIFIC STATION NO.			BOD
JTG 8.7	None	None			FOD GO+50
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Engineering costs included in F&S Number 32001. POST-GO Estimate 12/65		4.7	4.7	
	TOTAL		4.7	4.7	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 99-002-C1 100-029-AE1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION JTF-8 will furnish portable communication equipment including one broad band HF antenna (3-30 MHz), one KMW-2A transceiver, and a 30 S-1 amplifier to be operated by Radiological Surveillance personnel. The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment. The contractor will perform the following: a) provide 250 square feet of shelter for office, living and equipment purposes; b) provide two 15 kw, 115/230 volt, 60 cycle, single phase generators for operating the radiological, communication, and miscellaneous equipment; one of the generators is utilized as a back up power source; and, c) furnish rations.

This facility is designated a PRIMARY radiological surveillance station because of the civilian population being in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. One USPHS officer is assigned to this Rad Safe facility.

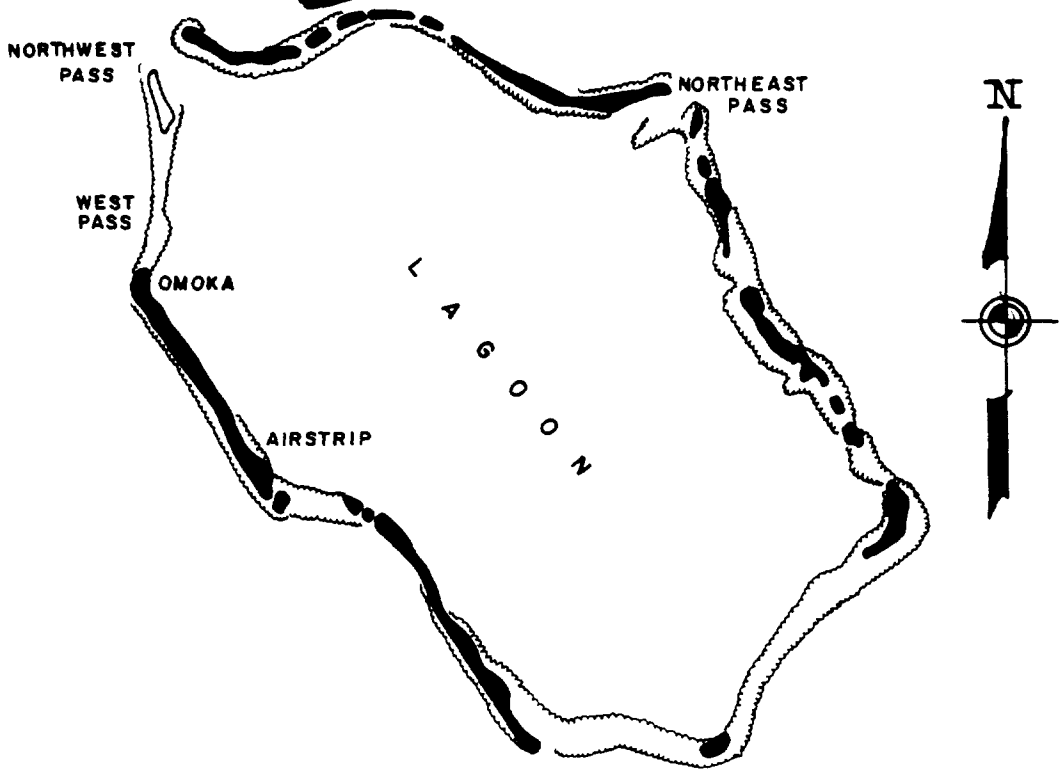
PENRHYN ISLAND
09°00'S 158°00'W
TONGAREVA

General Penrhyn is a part of the northern Cook Islands Group which, since 1965, is internally self-governing but linked to New Zealand by a common Head of State, H. M. Queen Elizabeth II. New Zealand maintains a High Commissioner in Rarotonga to handle the foreign affairs, defense and fiscal matters of the 15 islands belonging to the Cook Islands Group. Its people are New Zealand citizens. A resident agent is headquartered at the village of Omoka, Penrhyn.

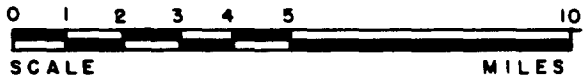
Physical Data Penrhyn is one of seven atolls of the Northern Cook Group. The egg-shaped coral atoll consists of numerous wooded, low islets (maximum elevation is 15-ft.), connected by a 40-mile circumference barrier reef surrounding the lagoon which is approximately 7-miles wide and 12-miles long. The lagoon covers 108 square miles and the land area is 2,432 acres. The barrier reef is broken by 3 passages into the lagoon: Northeast, Northwest and West Pass. The lagoon is obstructed in many places by coral heads, pinnacles and shoals. Fair anchorage can be obtained outside the lagoon just southward of West Pass and anchorage inside the lagoon can be had in the vicinity of Omoka village. Vegetation is mainly coconut palms and some Pandanus. Animals include rats, lizards, and many seabirds. Most of the land is occupied by coconut plantations or taro cultivations.

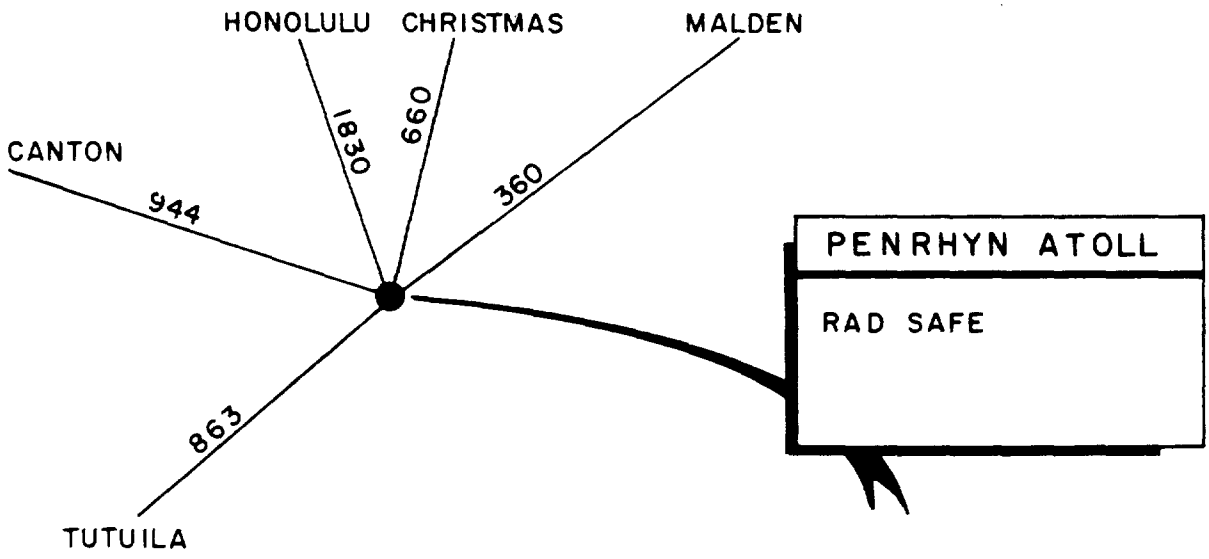
Climate There are no accurate data on climate, but it is very similar to Malden Island. The mean monthly temperature is approximately 80°F, with a range from about 65° to 95°F. Annual rainfall is approximately 40-inches, with the wet season from December through February. Trade winds are usually from an easterly direction, with occasional north and northwest winds between December and March. Hurricanes are said to form in the vicinity of the atoll, but winds of hurricane force are unknown on the Penrhyn islets.

Facilities During World War II, a 5,600 x 200-ft. coral airstrip was built about 4 miles south of Omoka on the southern half of the islet. The airfield is for emergency use only as scheduled aircraft do not land at Penrhyn. An unmarked seaplane anchorage is located on the southeastern part of the lagoon. A radio station, small hospital-dispensary, general stores and post office are located at Omoka. There is a 150-ft. stone wharf at Omoka village with a depth of 14-ft. alongside. A coral fill dock, 135-ft. long by 90-ft. with a depth of 4-ft. alongside, is also available. There are no hotels, no electricity and water is at a premium in Penrhyn.



PENRHYN (TONGAREVA) ATOLL





DISTANCES IN NAUTICAL MILES FROM PENRHYN TO OTHER POINTS

[redacted]

PENRHYN (TONGAREVA) 9°00' S 155°00' W

F & S NO. 34001	TITLE Radiological Surveillance Facility, SECONDARY				
USER JTG 8.7	STRUCTURE FACILITY NO. None	SCIENTIFIC STATION NO. None			BOD FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	PRE-GO Engineering costs included in F&S Number 32001 POST-GO Estimate 12/65			4.7	4.7	
	TOTAL			4.7	4.7	

PRIOR YEARS

ENGINEERING Completed.

Drawings: 99-002-C1 99-029-AE1

POST-GO

PROCUREMENT To be accomplished.

CONSTRUCTION JTF-8 will furnish portable communication equipment including one broad band HF antenna (3-30 MHz), one KMW-2A transceiver, and a 30 S-1 amplifier to be operated by Radiological Surveillance personnel. The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment. The contractor will perform the following: a) provide 250 square feet of office and equipment type shelter; b) provide two 15 kw, 115/230 volt, 60 cycle, single phase generators for operating the radiological, communications, and miscellaneous equipment; one of the generators is utilized as a back up power source; and, c) furnish rations.

This facility is designated a SECONDARY radiological surveillance station because the civilian and JTF-8 population are relatively remote from test areas. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. One USPHS officer is assigned to this Rad Safe facility.

[redacted]

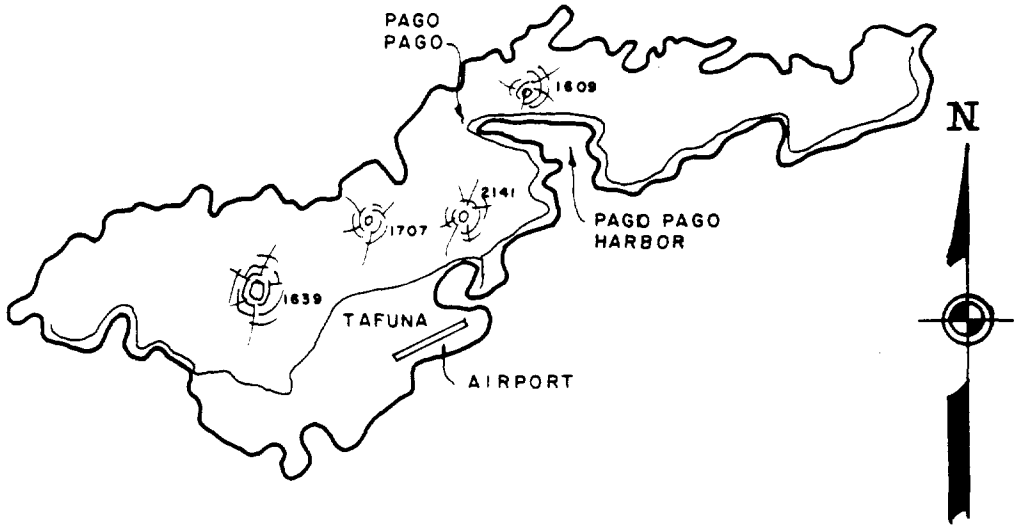
TUTUILA
14°20'S 170°42'W
AMERICAN SAMOA

General American Samoa, sometimes referred to as Eastern Samoa, is an unincorporated territory of the United States administered by the Department of the Interior. The administration of the islands is headed by a civilian Governor, appointed by the Secretary of the Interior. The capital and Government administrative offices are located on Tutuila at Pago Pago.

Physical Data There are seven islands in the American Samoan group: Tutuila; Annu'u; the three islands of the Manu'a group (TA'u, Olosega and Ofu); and two coral atolls, Rose and Swains. The main islands are of volcanic origin and are now mostly a series of ridges rising abruptly from the sea. Tutuila is of irregular shape, approximately 18 miles long and 6 miles across at the widest point and contains 42 square miles of land. A mountain range, with elevations to 2,140-ft., extends almost the whole length of the island, which is nearly bisected by Pago Pago Bay, one of the finest harbors in the South Pacific.

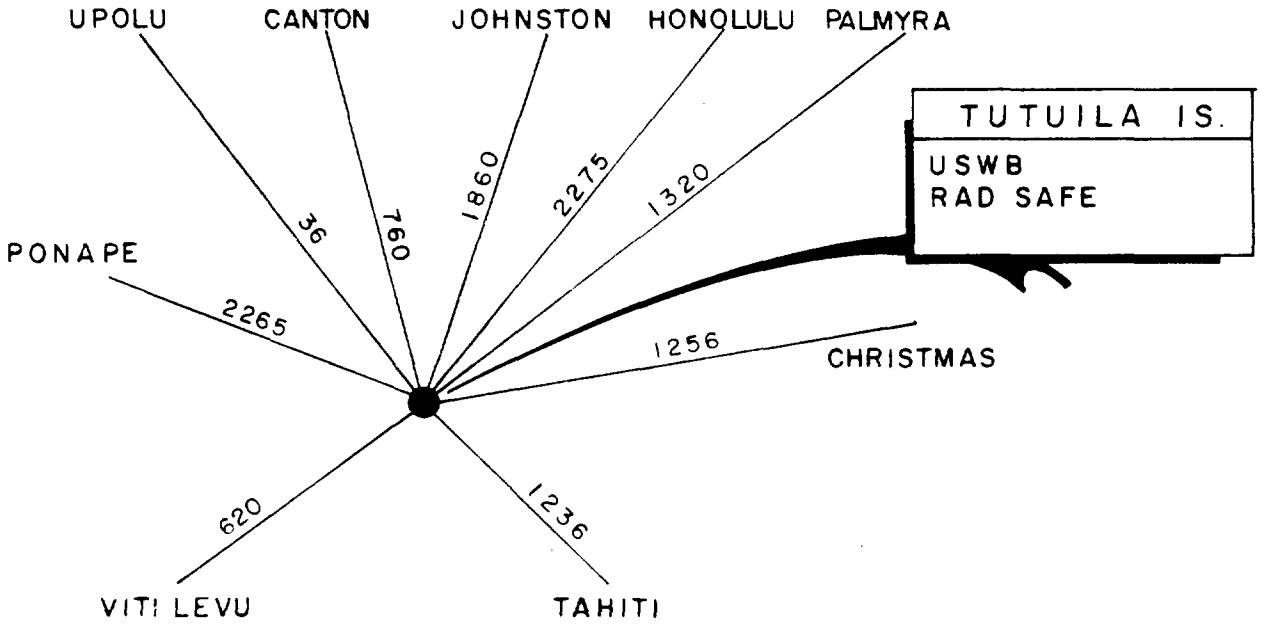
Climate The climate of the islands is tropical. From May to November moderate southeast trade winds blow. During the other months, the winds are variable. The heaviest rainfall occurs from December to March and the average per year for the past 40 years has been approximately 200 inches. The yearly temperature ranges from 70 to 90 degrees Fahrenheit and the humidity is almost constant at 80 per cent.

Facilities The Samoan Medical Services Department provides the only medical service and operates a 200 bed general hospital and two dispensaries on the main island of Tutuila and two small cottage hospitals in the Manu'a group. Radio-wireless communications are available. There are regular surface and air connections with the United States; several inter-island vessels make weekly trips to Western Samoa and local airlines normally make daily flights. The International Airport at Tafuna, 9 miles SE of Pago Pago, can handle the largest of aircraft on its 9,000-ft. runway. There is a USAF installation with facilities for 244 men located at the airport and a 101 room modern hotel is in Pago Pago. Passports are not required for American citizens but are recommended in order that visits may be made to neighboring islands under foreign jurisdiction. The International Certificate of Vaccination is also a requirement.



TUTUILA ISLAND

0 1 2 3 6
SCALE MILES



DISTANCES IN NAUTICAL MILES FROM TUTUILA TO OTHER POINTS

TUTUILA ISLAND (14°20'S 170°42'W)

F & S NO.	TITLE				
37001	Weather Station, U. S. Weather Bureau (USWB)				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF-8	None		None		FOD GO+30
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
	No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Weather Bureau facilities located at the International Airport, Pago Pago, will be used. No building or construction will be required. JTF-8 will augment the weather station with four personnel. They will obtain housing and subsistence through the local economy.

This facility is also required during DOD High Altitude WET events.

TUTUILA ISLAND (14°20'S 170°42'W)

F & S NO.	TITLE					
37002	Radiological Surveillance Facility, BACKGROUND					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC	No Cost					

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction will be required as the U. S. Weather Bureau (USWB) facilities, (F&S No. 37001) including communications, located at the Pago Pago International Airport will be used.

This facility is designated a BACKGROUND radiological surveillance station as it is in a remote location from the test area and requires little more than routine monitoring for purposes of documentation and for maintaining public confidence. The radiological surveillance activities of this installation include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. USWB personnel will operate the radiological surveillance equipment at this location.

CHRISTMAS ISLAND *
01°59'N 157°29'W
LINE ISLANDS

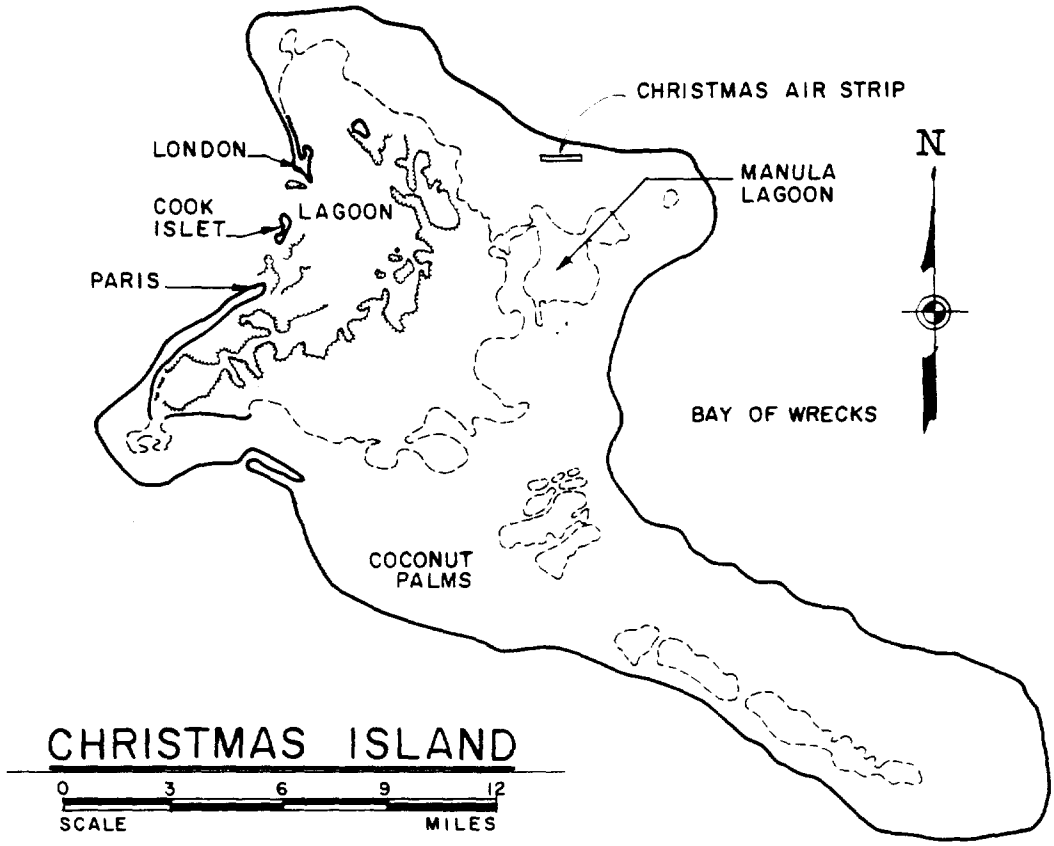
General Christmas Island is one of the 3 islands in the Line Island Group which is administered by the United Kingdom. The other 2 islands, Fanning and Washington, are located northwest of Christmas. The island is headquarters for the Line Island District of the Gilbert and Ellice Islands Colony (Headquarters - Tarawa). The population is variable. Some 400 Gilbert Islanders are brought in annually for coconut plantation work. The United Kingdom conducted atomic nuclear tests here in 1957 and 1958 and the AEC utilized the island as a base facility for atmospheric testing in 1962-1963 during Operation Dominic.

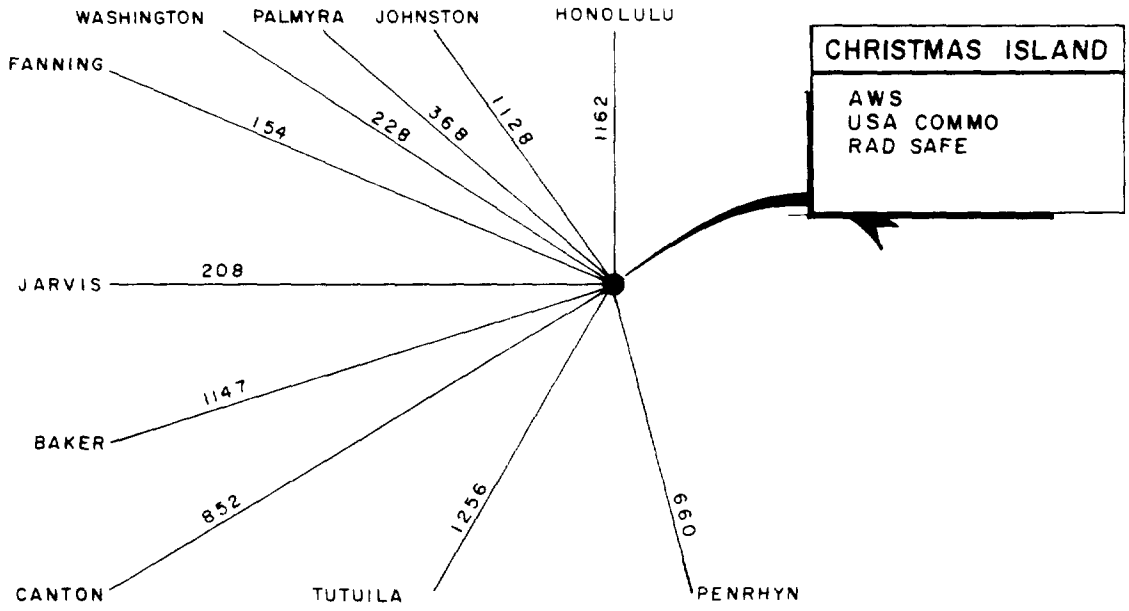
Physical Data This is the largest atoll in the Pacific; approximately 222 square miles in area and 100 miles in circumference. It is about 30 miles long; 15 miles wide at the west end, and 5 miles wide at the east end. Christmas Island is composed completely of coral rock and coral sand. The average elevation is 15 feet; the hills toward the west end of the island rise to 40-ft. There are many salty to brackish ponds and lagoons in the interior. Well water is mostly brackish. The principal thin scrub vegetation is the rounded Scaevola trees scattered over the island to form park landscape. There are large areas of bunchgrass. The east end of the island is practically barren, but there are many trees on the west end. Some 500,000 coconut palms, occupying 6,000 acres, are located on the west end of the island. There are many seabirds such as gannets, tropic-birds, frigate birds, and terns in addition to many house flies and mosquitoes. Fish include the mullet, bonefish, and baitfish; several of the species are poisonous, and are dangerous to eat. Poisonous water snakes are sometimes found.

Climate The mean temperature is 80°F; temperatures below 70° and above 90° are quite rare. Rainfall is uncertain as the area lies within the equatorial dry zone. The rainy season is from April through June with monthly averages varying between 2 to 7 inches of rainfall and annual figures range between 10 and 100 inches. Humidity is high. Wind is dominantly from the east and may swing to the southeast from September through February.

Facilities Minor port facilities containing safe anchorage in calm weather, and some dock facilities are available at the village of London on the west end of the island. Housing facilities are also available for a large number of men. The airfield has three airstrips, two of them are 6,900 feet long. Storage, POL, communications, electrical, and other facilities are also available on the island.

* Ownership is in dispute between the United States and Great Britain.





DISTANCES IN NAUTICAL MILES FROM CHRISTMAS ISLAND TO OTHER POINTS

[redacted]

CHRISTMAS ISLAND (02°00' N 157°30' W)

F & S NO.	TITLE					
38001	Radiological Surveillance Facility, PRIMARY					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrcial power. No building or construction will be required as the U. S. Air Force Air Weather Service (AWS) facilities (F&S No. 38002) will be used.

This facility is designated a PRIMARY radiological surveillance station because of the civilian population being in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. One USPHS officer will operate the radiological equipment at this location.

[redacted]

CHRISTMAS ISLAND (02°00'N 157°30'W)

F & S NO.	TITLE		
38002	Weather Station, U. S. Air Force Air Weather Service (AWS)		
USER: JTF-8	STRUCTURE/FACILITY NO.: None	SCIENTIFIC STATION NO.: None	BOD GO+230 FOD GO+240

FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
	POST-GO Estimate	TO BE DETERMINED				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Air Force will locate an Air Weather Service facility on property previously used by the Air Force. A minimum of maintenance will rehabilitate present buildings for the Baker Howland events. Logistical support, including rations, must be provided. Fifteen (15) Air Force personnel will be assigned to this AWS facility.

BH: Baker Howland Event Only

[redacted]

CHRISTMAS ISLAND (02°00'N 157°30'W)

F & S NO.	TITLE					
38003	Communication Center (U. S. Army Strategic Communications Command)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+230
JTF-8	None		None			FOD GO+240
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON	POST-GO Estimate	TO BE DETERMINED				

POST-GO

ENGINEERING None required.

PROCUREMENT *To be accomplished.*

CONSTRUCTION The U. S. Army Strategic Communication Command will locate a Provisional Army Signal Unit (PASU) communications center on this island for the purpose of furnishing communication facilities and services to all scientific and support personnel.

A suitable site for this mobile unit will be selected after an island reconnaissance has been made by responsible PASU team personnel. The PASU, Team D-1, will install, maintain and operate the communication center at this location. Logistics support, including rations, must be provided to the nine enlisted men who will be assigned to this activity.

BH: Baker Howland Event Only

MALDEN ISLAND *
04°03'S 154°59'W
LINE ISLANDS

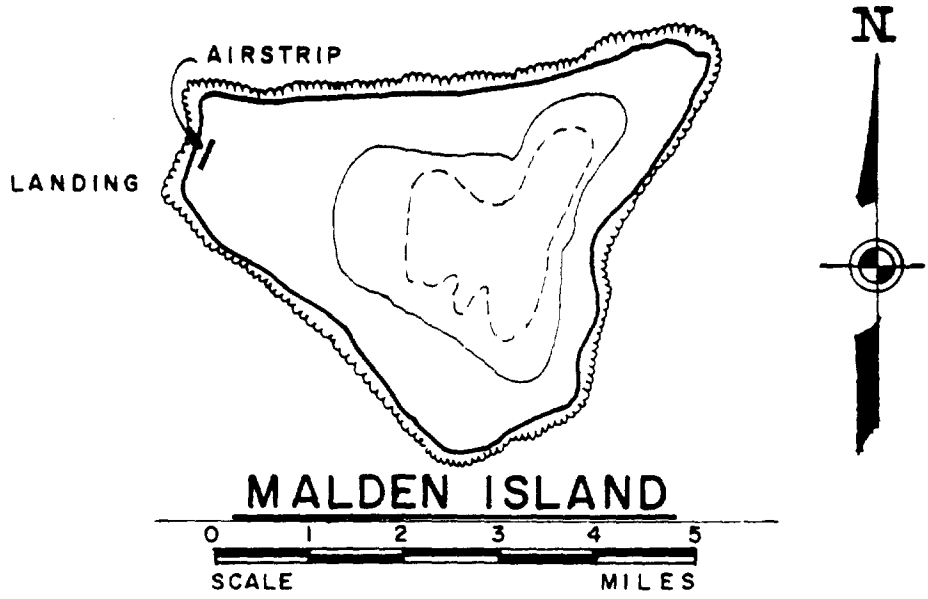
General Malden Island is administered directly by the British High Commissioner of the Western Pacific. This island has remained uninhabited since the AEC Dominic Program was completed in 1962.

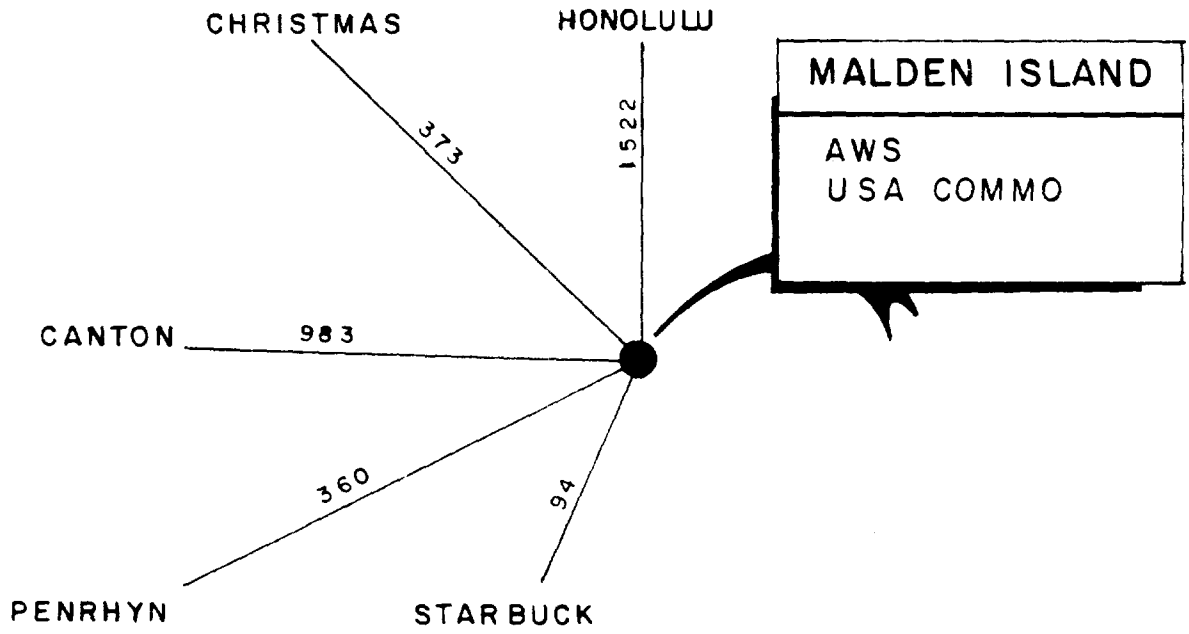
Physical Data This island is a flat, triangular-shaped barrier reef measuring about 5-mi. by 4-mi., enclosing a large lagoon with no entrance or exits to the sea. The land area of about 10,700 acres is almost barren but covered with stunted vegetation in the wetter sections. A narrow fringing reef not exceeding 200-ft. in width encircles the island except for an open beach area of about 200-ft. located on the west shore. A sandy rim or beach crest circumventing the island varies in elevation from 15-ft. on the east side to 25 to 30-ft. on the northwest, southwest and west sides. The beach rises sharply from the water's edge. Beach materials grade from course coral sand through fine gravel into coarse gravel and coral pebbles. Extending inland, successive ridges with elevations to 8-ft. have been formed by wind and wave action. The enclosed lagoon rises and falls with the tide, alternately exposing and covering with brackish water considerable areas of muddy flat land. Vegetation is sparse, only about 10 species are found here; mainly grasses, herbs and low bushes of Sida Fallax. The only trees are a dozen stunted Pisonia on the beach crest and a few coconut palms. Seabirds are abundant, including large colonies of sooty tern.

Climate The winds blow almost entirely from the east most of the year. Seldom do temperatures rise above 92°F or drop much below 72°F. Annual rainfall varies between 20-in. to 40-in. with a yearly average of about 27-in. The rainy season is from January to May; however, 7-in. of precipitation have been recorded in July with as much as 10-in. in March. Fog is unknown.

Facilities Water is scarce; therefore, previous occupants provided condensors and fresh water storage basins. A 4,800 x 100-ft. hard packed coral airstrip is located on the west end of the island. Anchorage off the island is precarious; the best area is off the western end where boats can land through a gap in the reef on the open beach area. Strong off shore currents cause beach boat landings to be dangerous.

* Ownership in dispute between the United Kingdom and the United States.





DISTANCES IN NAUTICAL MILES FROM MALDEN IS. TO OTHER POINTS

MALDEN (4°03'S 154°59'W)

F & S NO.	TITLE					
42001	Weather Station, U. S. Air Force Air Weather Service (AWS)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+230
JTF-8	None		None			FOD GO+240
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Air Force will locate an Air Weather Service facility on Malden; however, no building or construction will be required. Logistical support, including rations, must be provided. Fifteen (15) Air Force personnel will be assigned to this AWS facility.

BH: Baker Howland Event Only

MALDEN ISLAND (4°03'S 154°59'W)

F & S NO.	TITLE					
42002	Communications Center (U. S. Army Strategic Communications Command)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+230
JTF-8	None		None			FOD GO+240
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON	POST-GO Estimate	TO BE DETERMINED				

POST-GO

ENGINEERING None required.

PROCUREMENT To be accomplished.

CONSTRUCTION The U. S. Army Strategic Communications Command will locate a Provisional Army Signal Unit (PASU) communications center on this island for the purpose of furnishing communication facilities and services to all scientific and support personnel.

A suitable site for this mobile unit will be selected after an island reconnaissance has been made by responsible PASU team personnel. The PASU, Team D-2, will install, maintain and operate the communication center at this location. Logistics support, including rations, must be provided to the nine enlisted men who will be assigned to this facility.

BH: Baker Howland Event Only

[redacted]

ARORAE ISLAND
02°38'S 176°49'E
GILBERT ARCHIPELAGO

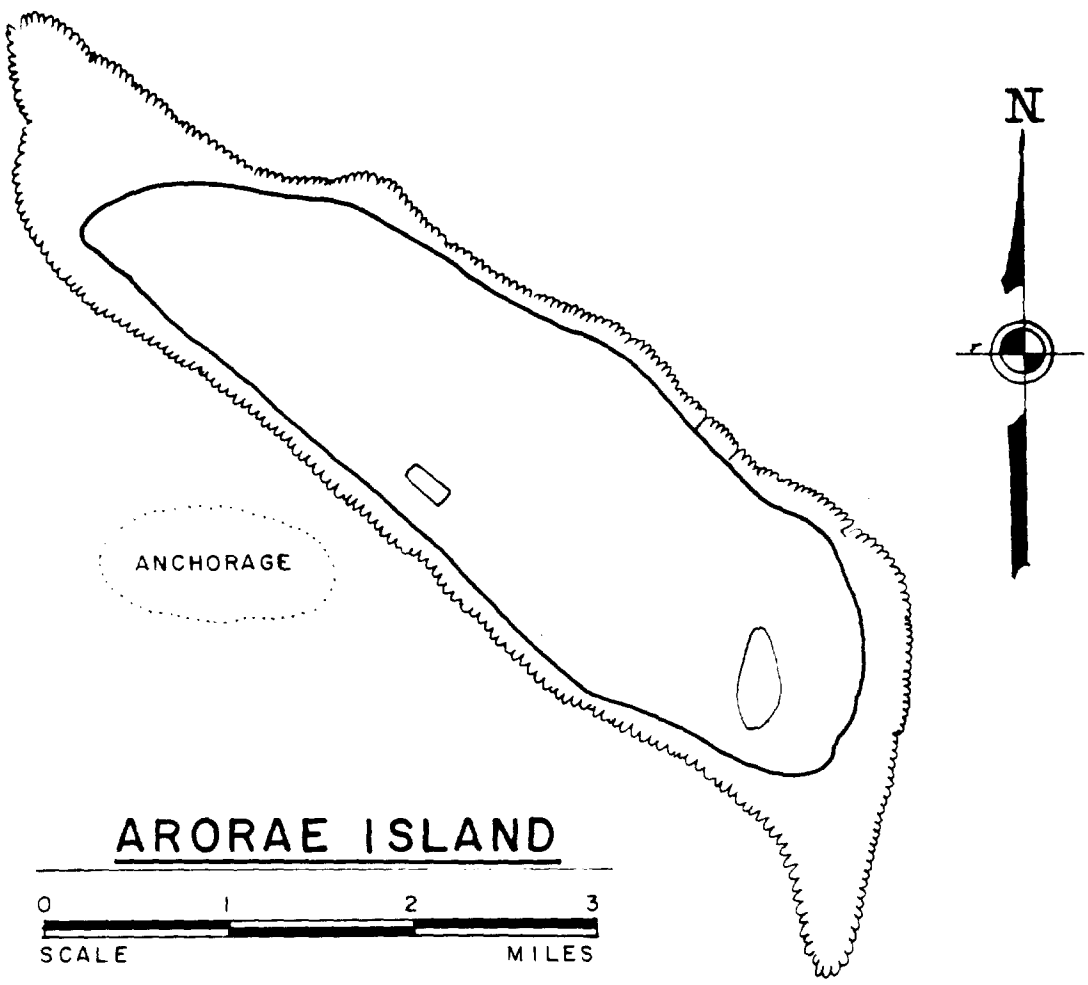
General Arorae Island belongs to the Southern Gilberts British Crown Colony which is administered by a Resident Commissioner whose headquarters are at Bairiki, Tarawa. The island is administered locally by a British appointed Native Magistrate who has offices in the Government Station located between the two villages of Tamaroa and Roreti on the west side of the island.

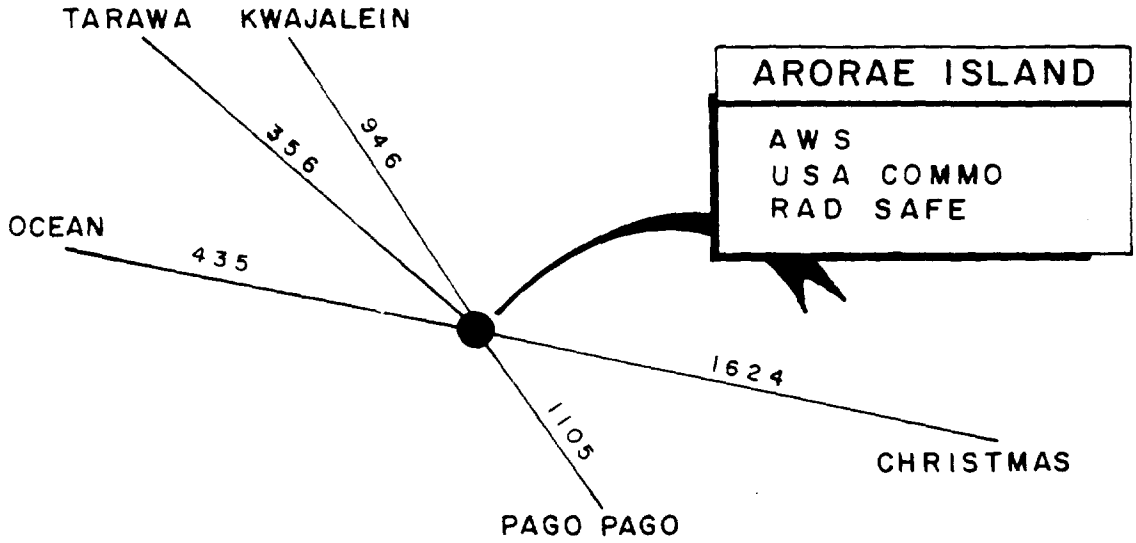
Physical Data The island with elevations to 15-ft. is about 5 miles long in a northwesterly and southeasterly direction and one mile wide. The western side is fronted by sunken reefs, spits and coral patches; however, a fringing reef up to 600 yards in width encircles most of the island and extends about 2 miles from the northwestern point with depths of 2 to 4 fathoms. The best landing area is on a beach near the center of the west side of the island. The reef extends out approximately 400 yards in this area but all coral heads have been cleared for a distance of 300 yards. The surf breaks quite heavily approximately 100 yards in from the outer edge of the reef. From this point to a sandy beach, which slopes upward at about a 15° angle to the edge of the palm trees there is clear water, 1 to 2-ft. deep. Tropical vegetation is scarce, evidently native flora does not appear to grow spontaneously. The planted flora is largely restricted to salt-tolerating plants; i.e., coconut palm, pandanus, breadfruit, hibiscus and taro. There are no snakes and only a few lizard species. There is a great variety of marine life.

Climate The northeasterly trade winds blow from March through October and from September through February, westerly winds also blow in this area. Rainfall varies considerably, and periodic droughts last many months, with as little as 8 inches of rain occurring in one year. During the dry season, from March to November, average monthly precipitation measurements of 2 to 7 inches have been recorded; during the wet season, from December to February, monthly precipitation measurements of 11 to 12 inches have been recorded. The temperatures and humidity are high, but are moderated by oceanic influences. The monthly temperatures average between 80° and 85°F. Afternoon temperature highs are from 91° to 94°F and at night drop to 70°-75°F. Relative humidity is from 70 to 80 percent. There is no fog.

Facilities There is a government radio station and an airstrip large enough to accommodate DC-4 type aircraft. There is no scheduled air service to Arorae; however, Fiji Airways has a scheduled weekly flight between Tarawa and Funafuta, Ellice Islands. There are no stores; however, fish, pigs, poultry and vegetables can be purchased from the natives. There are no hotels nor rental vehicles. Fresh water is a critical item.

[redacted]





DISTANCES IN NAUTICAL MILES FROM ARORAE IS. TO OTHER POINTS.

[redacted]

ARORAE (2°39'S 179°50'E)

F & S NO. 43001	TITLE Weather Station, U. S. Air Force Air Weather Service (AWS)					
USER JTF-8	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+230 FOD GO+240
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Air Force will locate an Air Weather Service facility on Arorae; however, no building or construction will be required. Logistical support, including rations, must be provided. Fifteen (15) Air Force personnel will be assigned to this AWS facility.

BH: Baker Howland Event Only

[redacted]

ARORAE ISLAND (2°39'S 179°50'E)

F & S NO.	TITLE					
43002	Communications Center (U. S. Army Strategic Communications Command)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+230
JTF-8	None		None			FOD GO+240
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON	POST-GO Estimate	TO BE DETERMINED				

POST-GO

ENGINEERING None required.

PROCUREMENT To be accomplished.

CONSTRUCTION The U. S. Army Strategic Communications Command will locate a Provisional Army Signal Unit (PASU) communications center on this island for the purpose of furnishing communication facilities and services to all scientific and support personnel.

A suitable site for this mobile unit will be selected after an island reconnaissance has been made by responsible PASU team personnel. The PASU, Team D-5, will install, maintain and operate the communication center at this location. Logistics support, including rations, must be provided to the nine enlisted men who will be assigned to this activity.

BH: Baker Howland Event Only

ARORAE (2°39' S 179°50' E)

F & S NO.	TITLE					
43003	Radiological Surveillance Facility, PRIMARY					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTG 8.7	None		None			FOD GO+50
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
AEC		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The U. S. Public Health Service (USPHS) will furnish portable radiological surveillance equipment which requires 1.5 kw, 110 volt, 60 cycle, single phase electrical power. No building or construction will be required as the U. S. Air Force Air Weather Service (AWS) facilities (F&S No. 43001) will be used. This is an alternate site and the location is tentative depending on location and scheduling of tests.

This facility is designated a PRIMARY radiological surveillance station because of the civilian population being in close proximity to the test location. Radiological surveillance activities include the continuous monitoring of external radiation levels, and the testing for radionuclide content of food, air, drinking water and rainfall. AWS personnel will operate the radiological equipment at this location.

SHEMYA, ALEUTIAN ISLANDS (53°N 174°10'E

F & S NO.	TITLE					
44001	Weather Station, U. S. Weather Bureau (USWB)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+65
JTF-8	None		None			FOD GO+72
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Weather Bureau facility will be used; therefore, no building or construction will be required. The USWB staff will be augmented with four JTF-8 personnel.

ADAK, ALEUTIANS (51°40'N 176°28'W)

F & S NO.	TITLE					
44002	Weather Station, U. S. Navy Weather Station (NWS)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	None		None			FOD GO+72
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Navy Weather Station will be used; therefore, no building or construction will be required. If necessary, the NWS staff will be augmented with JTF-8 personnel.

[redacted]

MAJURO ATOLL
07°09'N 171°12'E
MARSHALL ISLAND DISTRICT

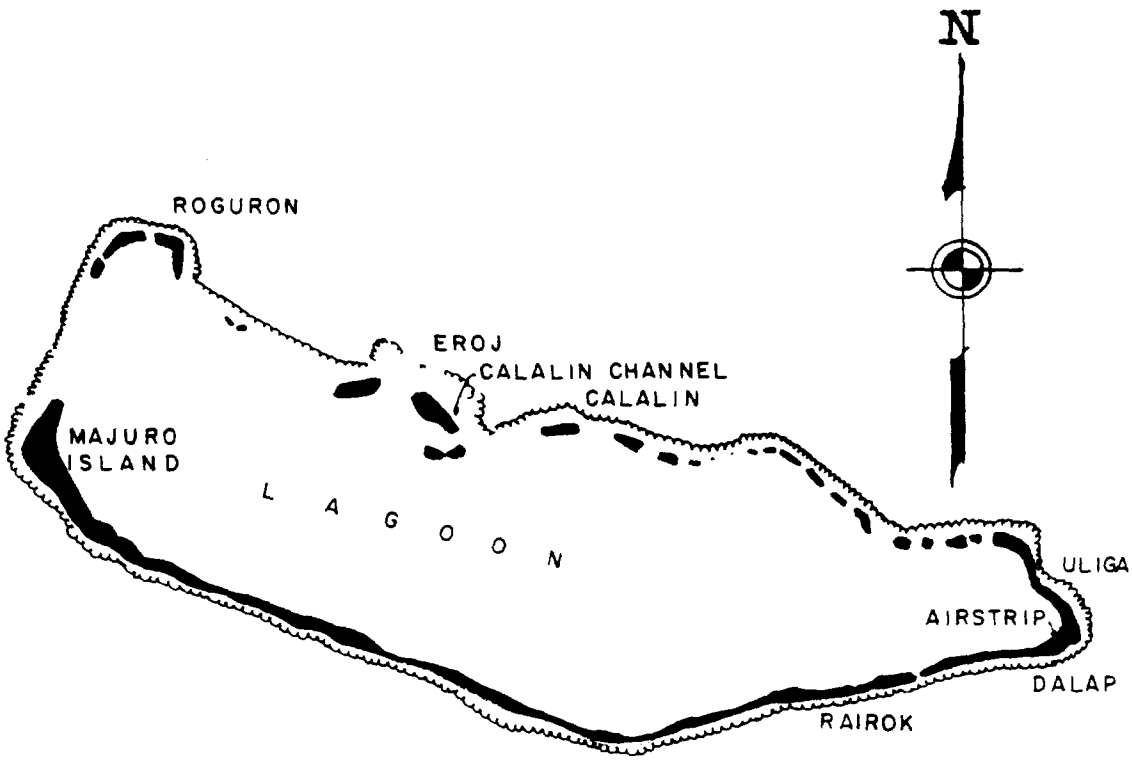
General Majuro Atoll belongs in the Ratak Group and is part of the Marshall Island District of the U. N. Trust Territory of the Pacific, which is administered by the U. S. Department of Interior. The headquarters for the Marshall Island District is located on the Island of Majuro.

Physical Data The atoll is roughly rectangular in shape; it is approximately 22 nautical mi. long by 5-1/2-mi. wide. It contains about 45 islands, comprising a total land area of 3-1/2 sq.mi.; the area of the enclosed lagoon is about 113 sq.mi. The maximum elevation is less than 15-ft., and the average elevation is 8 to 10-ft. The highest points are low sand dunes on the reef sides of the more windward (eastern) islands. Few islands are more than 400-yds. in width (widest - Dalap/550-yds., Djarit/500-yds., and western end of Majuro Island/1,200-yds.). Majuro Island, is nearly 13-mi. long, although in places it has a width of less than 75-yds. The most important islands are at the eastern end of the atoll where 5 islands have been joined by causeways to make a single easily accessible unit. The reef fringing the atoll varies from 150 to 300-yds. in width with one major opening, Calalin Channel, midway along the northern portion of the reef. The channel lies close to Eroj Island with a minimum depth of 49-ft. and a width of 350-yds. The eastern end of the lagoon is completely land locked offering excellent and extensive anchorages. All the islands bear a moderate to heavy cover of coconut palms, restricted to the central and lagoon side areas. A thick to very dense scrub from 10 to 30-ft.-tall usually backs the beach on the reef side and is frequently used as a protective barrier against wind and salt spray; its composition includes Scaveola, Messerschmidia, Wedelia and Ipomea species.

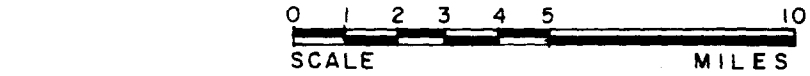
Climate Majuro has a tropical marine climate with a high annual rainfall of approximately 140-in. Much of the rain comes in the form of sharp, short, and often violent squalls. The mean annual temperature is about 82°F, with an average daily variation of between 12°-13°F. The relative humidity averages 82 to 85%. Northeast trade winds blow between December and April. From May to December, easterly to southeasterly winds are common.

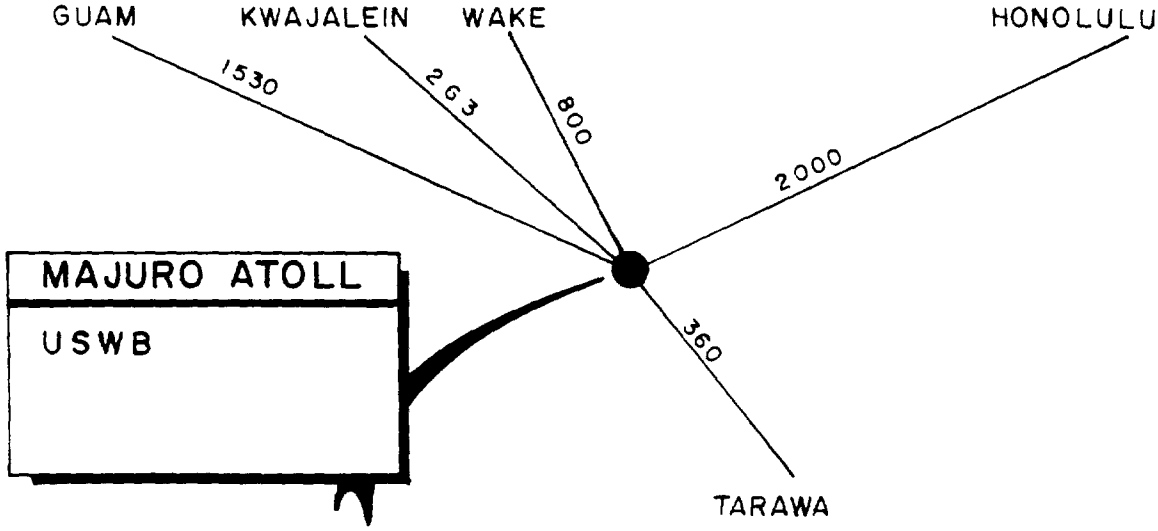
Facilities There is a store, hotel, seven large warehouses, a modern hospital, communications, and a 5,600-ft. airstrip on the atoll. Trust Territory Contract aircraft make connections at Guam, Saipan, and Kwajalein on a once-a-week schedule. A 186-ft. pier with depths of 35 to 40-ft. alongside is located on Uliga Island. There are 5, 7, and 9-ton mobile cranes available. Coral roads connect the eastern islands, including the northern end of Rairok Island. At low tide, it is possible to cross the reef to Majuro Island and drive all the way to the western end of the atoll. Water supplies are limited.

[redacted]



MAJURO ATOLL





DISTANCES IN NAUTICAL MILES FROM MAJURO IS. TO OTHER POINTS

MAJURO ATOLL (07°05'N 171°23'E)

F & S NO.	TITLE					
45001	Weather Station, U. S. Weather Bureau (USWB)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Weather Bureau facility will be used; therefore, no building or construction will be required. The USWB staff will be augmented with four JTF-8 personnel.

[redacted]

PONAPE ISLAND
06°59'N 158°13'E

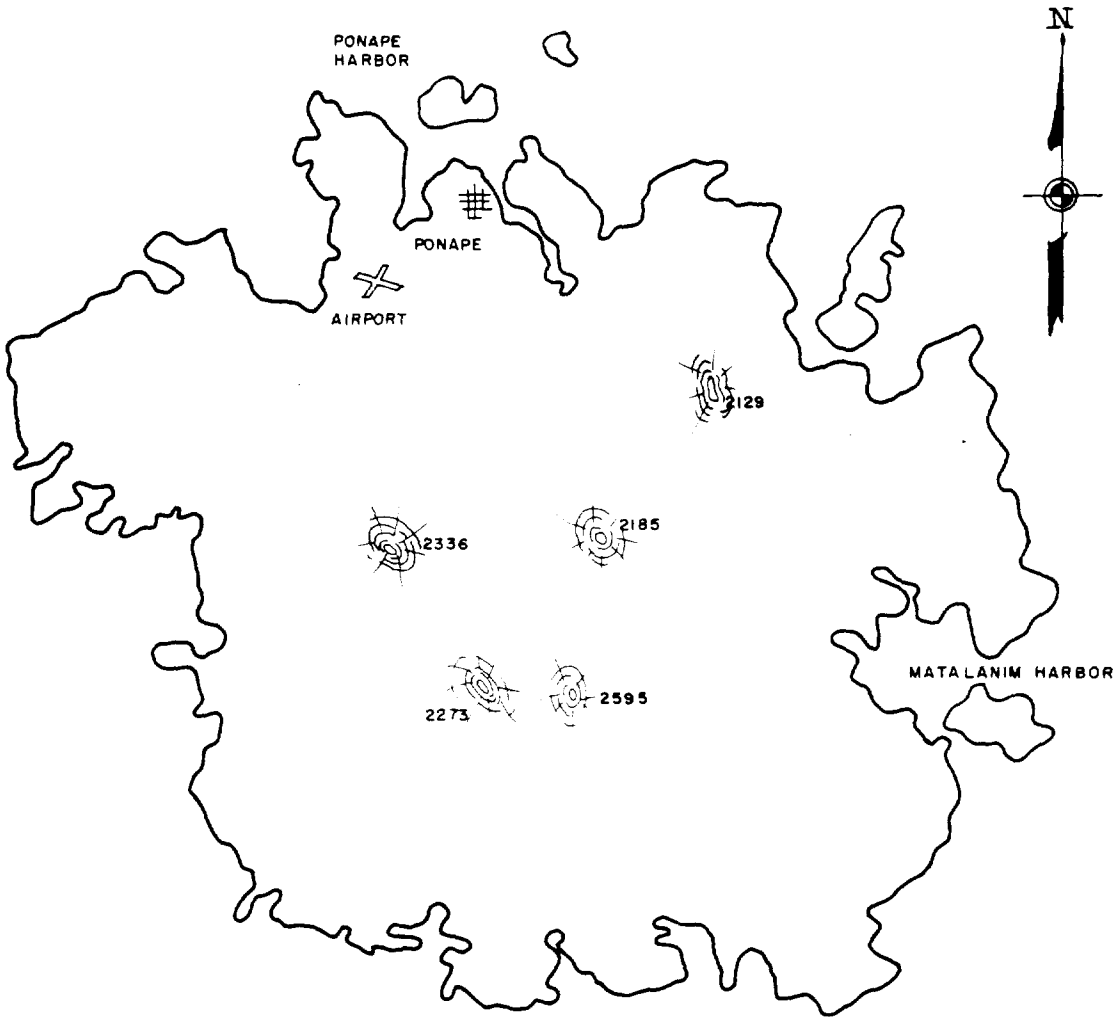
General Ponape Island is part of the Strategic Trust Territory of the Pacific administered by the United States (Department of Interior) for the United Nations. The population of Ponape is about 19,000.

Physical Data Ponape is a roughly circular volcanic island (mean diameter about 12 miles) surrounded by a lagoon and barrier reefs (55 miles in circumference) which, on the southeast coast, abut against the island as fringing reefs. Large islands, many basaltic rather than coralline, lie in the lagoon just off the coast of Ponape proper; some small islands are on the barrier reef. In all, there are some 26 islands with a total land mass of 129 sq.mi. The area of the lagoon is 69 sq.mi. There are 4 distinct topographic units: the coral reef and lagoon, the coastal lowlands and mangrove swamps, the hilly areas, and the mountainous interior. The barrier reef encloses a lagoon whose maximum depth is 40 fathoms and mean depth is about 15 fathoms. Conditions in this zone are similar to typical atoll conditions. Inland of the lagoon is a belt of lowlands with a maximum width of 3-1/2 mi. and frequently fringed with mangrove swamps. Between the coastal lowlands and the interior mountains lies a belt of foothills. The interior is composed of rock eroded into elongated crenulated ridges from the foothill zone to the vicinity of the center of the island, where they coalesce to form Totolom Peak (2,595-ft.). Half a dozen other points along the ridges are over 2,000-ft. Relief averages about 1,000-ft. The reef supports coconut palms and the run of atoll plants; the swampy coastal strip is occupied by mangrove. Inland, these give place to nipa palms, tree ferns, and, in the elevated interior, to a low, dense forest of areca palms and various timber trees. Patches of grassland occur in the interior.

Climate Weather is dominated by maritime air masses associated with the northeast trade wind regime. The trades blow almost entirely from the east (east, southeast, northeast) throughout the year. Rainfall averages 180 to 220 inches and exceeds 10 inches in every month but February. A total of over 60 inches falls in April and May. Rain can be expected 310 days of the year, usually in the form of 20-minute squalls. Air temperatures are near 80°F throughout the year (82°in March, 78°in August & September). Mean maximum is 86°; mean minimum is 72°F. Typhoons are rare. Haze is nonexistent.

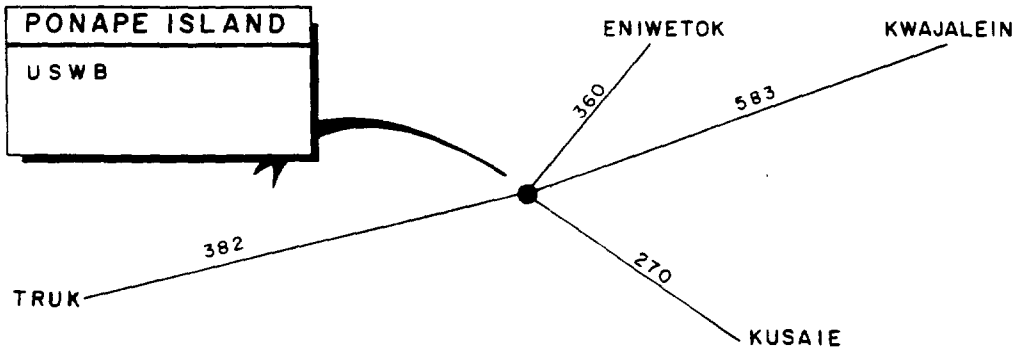
Facilities Docking facilities in Ponape Harbor are limited by pier-side water depth to vessels equivalent to an LCU or a 500-ton barge loaded to 200 tons. Beaching facilities are limited to the beaching of LCU's at high tide. Large ships can be anchored in the roadstead and discharged to barges for lightering to the pier. Aircraft landing facilities are limited. Landings have also been made in the lagoon with SA-16 and UF-1 aircraft. Commissary and hospital facilities are available from Trust Territory installations. A communications relay center operates in the vicinity of the weather station. Ponape town is electrified and well supplied with water.

[redacted]



PONAPE ISLAND

0 1 2 3 4 5 10
SCALE MILES



DISTANCES IN NAUTICAL MILES FROM PONAPE TO OTHER POINTS

[redacted]

PONAPE ISLAND (06°59' N 158°13' N)

F & S NO.	TITLE				
46001	Weather Station, U. S. Weather Bureau (USWB)				
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.		BOD
JTF-8	None		None		FOD GO+30
FUNDING AGENCY	($000) ENGR	PROC	CONST	TOTAL	FURN
	No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Weather Bureau facility will be used; therefore, no building or construction will be required. The USWB staff will be augmented with four JTF-8 personnel.

[redacted]

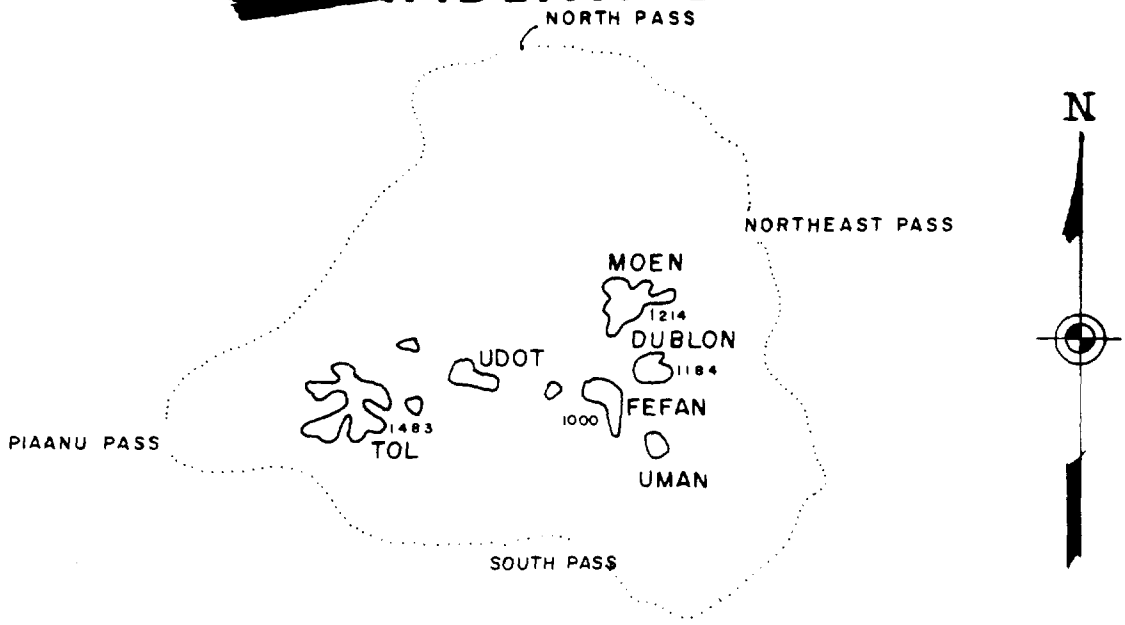
TRUK DISTRICT
07°28'N 151°52'E
MOEN ISLAND

General The Truk District comprises the central portion of the Caroline Islands. It is a part of the Trust Territory of the Pacific Islands under the jurisdiction of the U. S. Department of the Interior, with headquarters at Saipan. The Truk District Civil Administrator's headquarters are located on Moen Island.

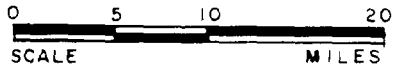
Physical Data The Truk District consists of nearly 90 islands and islets, 50 of which are on a great encircling barrier reef that encloses a wedge-shaped 30 by 12 mile lagoon and provides one of the best anchorages in the Carolines. Within this lagoon are the large islands of Moen, Dublon, Fefan, Uman, Udot, Fanapenges and Tol, with elevations from 375-ft. to over 1,400-ft. above sea level. Instead of being the usual low and narrow atolls strung along an encircling reef, they are high, broad, volcanic islands in the center of the lagoon. These islands are of basalt, rugged, densely wooded, with mangrove swamps and fringing reefs around their coastlines. Inland from the mangroves and farming areas are steeply rising hills and mountains. There are a few sandy beaches on these volcanic islands, most of which are on Moen. The lower coastal areas are used for coconut plantations, taro and breadfruit plots.

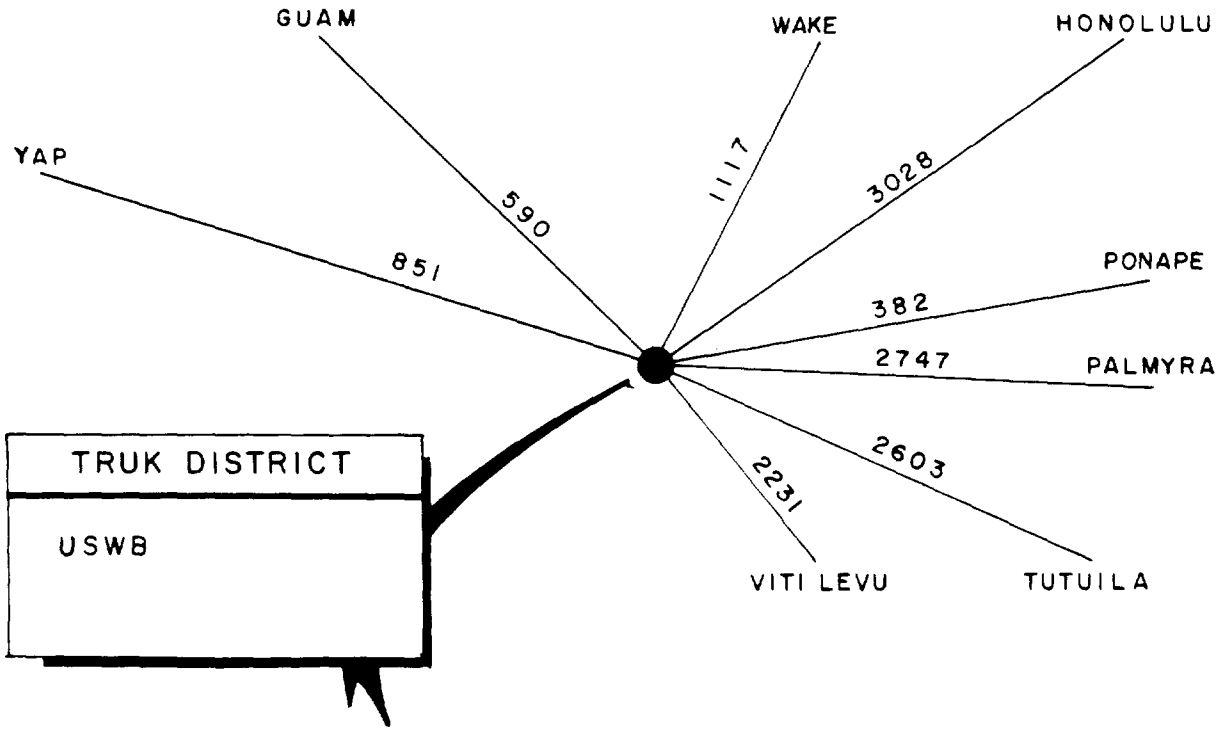
Climate North-northwest and east trade winds prevail in the dry season, which is from November through June. In the wet season, from July through November, the prevailing winds are from the south or southeast. The average yearly temperature seldom varies from 80° to 81°F, with recorded highs of 94°F and lows of 70°F. Precipitation is lightest in the November-June period. Many of the islands report annual precipitation in excess of 180 inches; 32 and 34 inches have been recorded for July and December; however, average monthly measurements are between 6 and 13 inches. Relative humidity is high with recorded lows of 77 percent and highs of 92 percent. August and September are the months of greatest frequency for typhoons; however, the Truk area is seldom in the path of these cyclonic disturbances as they occur to the west and north of the Truk Islands. Local magnetic disturbances of 2° have been reported in the Truk Harbor Area.

Facilities The main harbor is on Dublon Island; it has a 300-ft. wharf with depths of 35-ft. alongside. Fresh water and POL are available. The settlement on the northwest side of Moen Island is the center for government activities. The 300-ft. concrete pier on Moen can dock LST's; however, there is no cargo handling equipment. A 100-ft. pier with depth alongside of 16-ft. is on the northwest side of Moen. There are warehouses, cold storage and oil storage facilities, and a small hospital on Moen. The Moen airstrip, 3,960 x 150-ft., connects MAC and Trust Territory Contract aircraft with Guam and other Pacific Islands. Communication facilities to Guam and U. S. Navy installations are also available.



TRUK DISTRICT





DISTANCES IN NAUTICAL MILES FROM MOEN IS. TO OTHER POINTS

TRUK ISLAND (07°28'N 151°51' E)

F & S NO.	TITLE					
47001	Weather Station, U. S. Weather Bureau (USWB)					
USER	STRUCTURE FACILITY NO.		SCIENTIFIC STATION NO.			BOD
JTF-8	None		None			FOD GO+30
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION The existing U. S. Weather Bureau facility will be used; therefore, no building or construction will be required. The USWB staff will be augmented with four JTF-8 personnel.

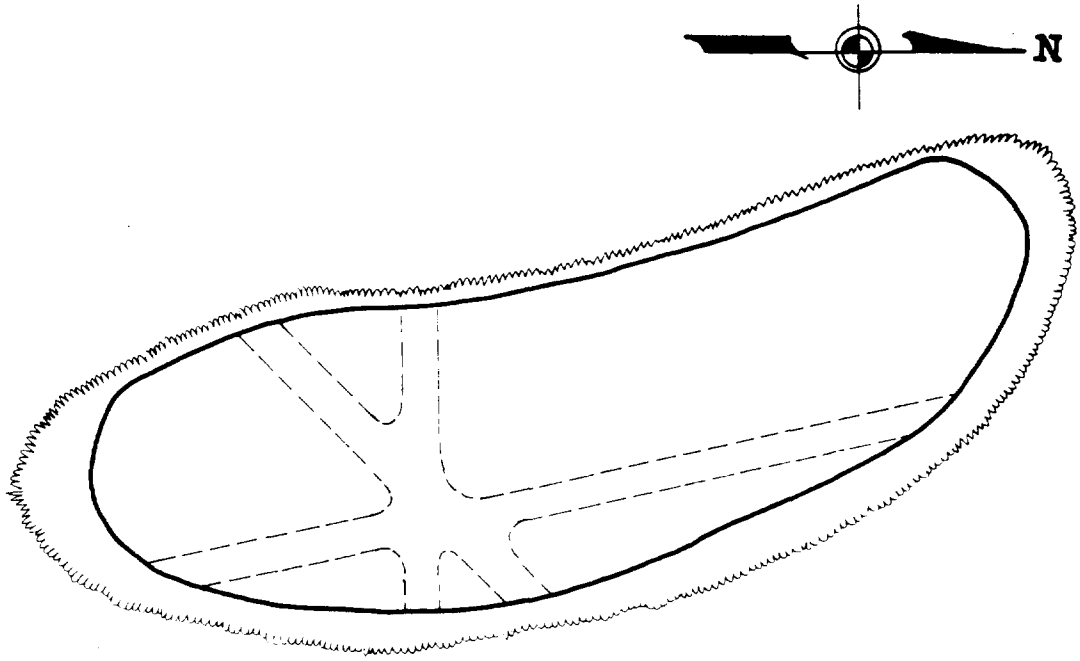
HOWLAND ISLAND
00°48'N 176°38'W

General Howland Island is a U. S. possession. By Executive Order (May 13, 1936), the island was placed under the jurisdiction of the Secretary of the Interior for administrative purposes. Four Hawaiians were landed by the Coast Guard ship ITASCA at Howland's boat landing - now known as Itascatown. Their presence was designated to insure the American claim against British occupation. They were removed in 1941. Howland is at present uninhabited.

Physical Data A coral island roughly kidney-shaped and oriented with its long axis north-south. It is about 1-1/2 miles long and about 1,000 yards wide; its area is about 400 acres. Maximum elevations are 18 to 20 feet. A fringing reef surrounds the island (completely awash at low tide), and extends for hundreds of yards north and south of the island's north-south axis; the reef is almost completely etched by anastomosing surge channels. Depths fall off rapidly past the reef. The best available boat landing is located at the midpoint of the west coast in the vicinity of the lighthouse. It is the only area offering protection from prevailing easterly winds and high seas. The west (leeward) coast beach is composed of coral sand and slopes up at a gentle angle. The east (windward) coast beach, much narrower, is composed of coral blocks and coral rubble. Behind it the island rises abruptly to a height of about 10 feet. The plant cover is sparse. Only six species of plants exist on Howland: a variety of bunchgrass, Boerhavia herb, two kinds of purslane or pig weed, and Tribulus bushes, dominate the surface. There is one small "grove" of stunted kuo trees 1/4 mile southwest of Itascatown. Sea and migratory birds, insects, and abundant marine life, hermit crabs and gray Polynesian rats are also found here.

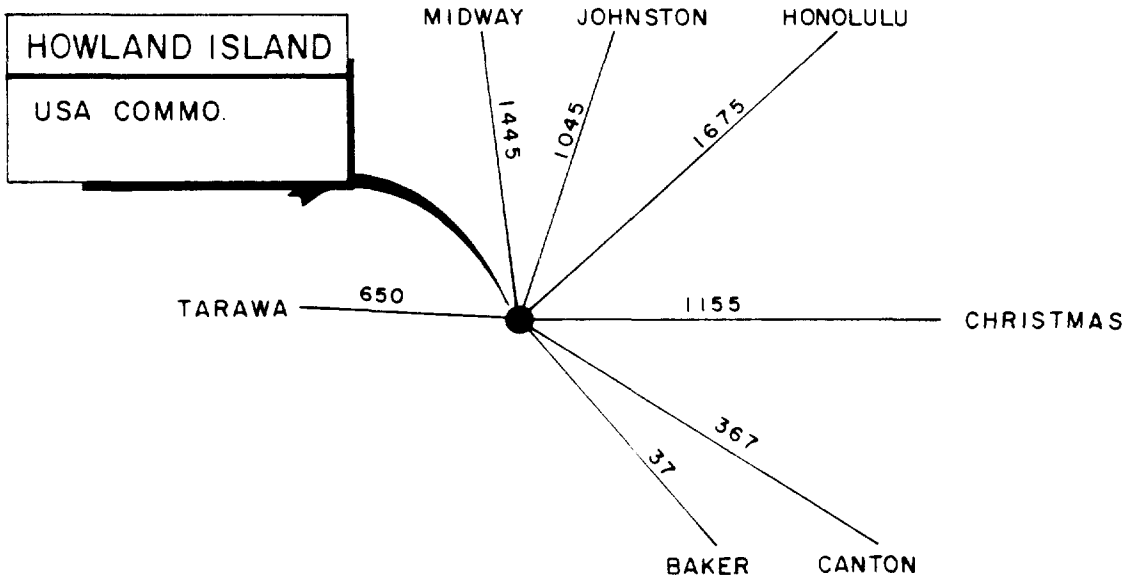
Climate Howland has a mean annual temperature of 83°F. The extreme mean maxima are 89° in September and 86° in March; mean minima are always near 79°F. Extremes recorded are 101° and 71°F. The area as a whole is dominated by trade winds, and while the general direction of the wind is from the east, they are apt to vary between northeast (winter), and southeast (summer). The tendency is for the amount of precipitation to be strongly influenced by changes in the trades. Howland is in a zone of generally low but capricious rainfall; annual precipitation is estimated at 25 inches.

Facilities An airfield, built in 1936 for the flight of Amelia Earhart from New Guinea to Howland, is now in complete disrepair. During World War II, the landing field was in use. Brush, however, has grown through the matting making its present condition unusable. Facilities installed during the war have either been removed or are in disrepair. The lighthouse is not operational. No other facilities of any sort exist. Howland Island is visited annually by the Coast Guard.



HOWLAND ISLAND

0 1/4 1/2 3/4 1



DISTANCES IN NAUTICAL MILES FROM HOWLAND ISLAND TO OTHER POINTS

[redacted]

HOWLAND ISLAND (00°48'N 176°38'W)

F & S NO.	TITLE					
48001	Communications Center (U. S. Army Strategic Communications Command)					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+230
JTF-8	None		None			FOD GO+240
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
JTF-8 MILCON	POST-GO Estimate	TO BE DETERMINED				

POST-GO

ENGINEERING None required.

PROCUREMENT To be accomplished.

CONSTRUCTION The U. S. Army Strategic Communications Command will locate a Provisional Army Signal Unit (PASU) communications center on this island for the purpose of furnishing communication facilities and services to all scientific and support personnel.

A suitable site for this mobile unit will be selected after an island reconnaissance has been made by responsible PASU team personnel. The PASU, Team D-3, will install, maintain and operate the communication center at this location. Logistics support, including rations, must be provided to the nine enlisted men who will be assigned to this activity.

BH: Baker Howland Event Only

[redacted]

[redacted]

CLARK FIELD, PHILIPPINES

F & S NO.	TITLE				
51001	Satellite Communications - Subtask A619				
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.		BODGO+120
TC	None		None		FODGO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION This is a system oriented experiment and as such is not directly supported by DASA. There is no construction support required by the contractor. The Subtask A619 installation will utilize existing operational communications facilities. The U. S. Army Satellite Communications Agency (USASCA) will direct and provide operational personnel for the scientific installation. The USASCA will also provide funds for Subtask A619.

[redacted]

[redacted]

SAIGON, SOUTH VIETNAM

F & S NO.	TITLE					
52001	Satellite Communications - Subtask A619					
USER	STRUCTURE/FACILITY NO.		SCIENTIFIC STATION NO.			BOD GO+120
TC	None		None			FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION This is a system oriented experiment and as such is not directly supported by DASA. There is no construction support required by the contractor. The Subtask A619 installation will utilize existing operational communications facilities. The U. S. Army Satellite Communications Agency (USASCA) will direct and provide operational personnel for the scientific installation. The USASCA will also provide funds for Subtask A619.

[redacted]

NORTH WEST CAPE
21°47'S 114°10'E
AUSTRALIA

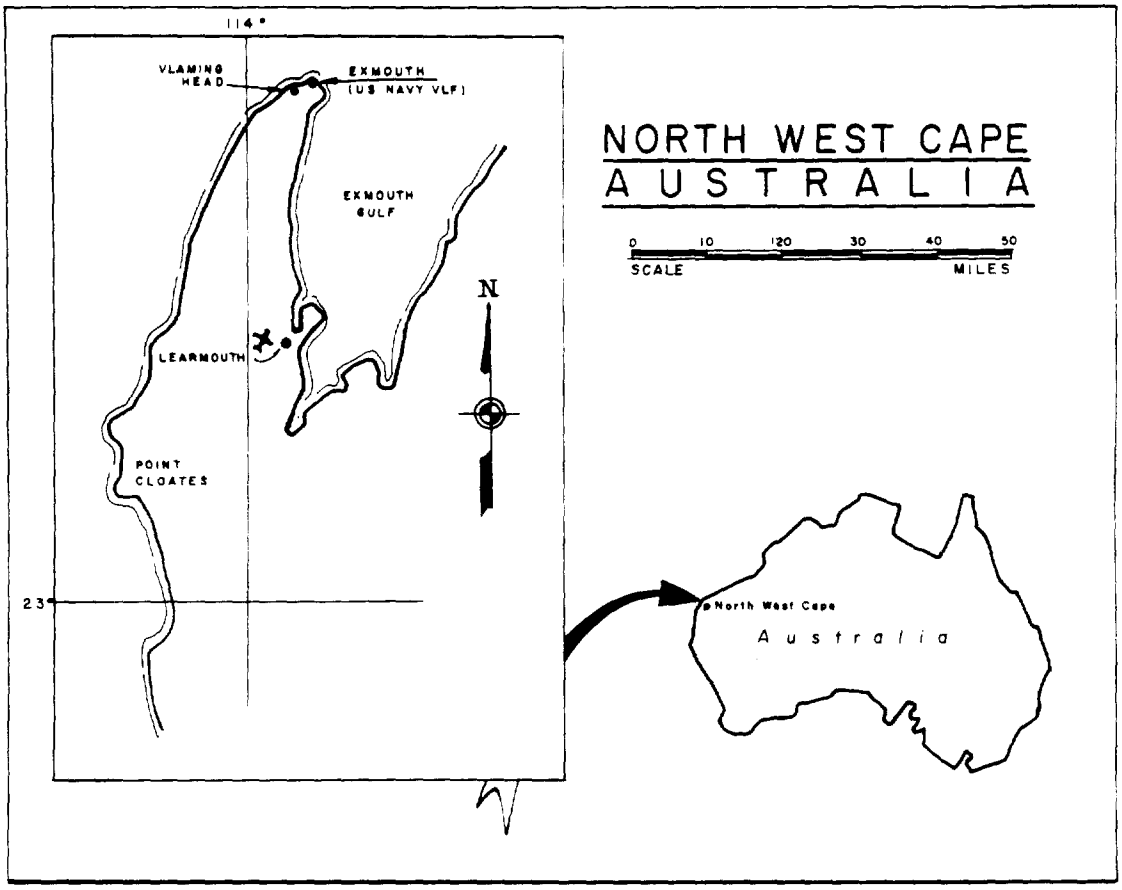
General North West Cape is part of the State of Western Australia in the Commonwealth of Australia. It is in the northwest part of Western Australia, on the Indian Ocean at the termination of the peninsula forming the western shore of Exmouth Gulf (Map on next page).

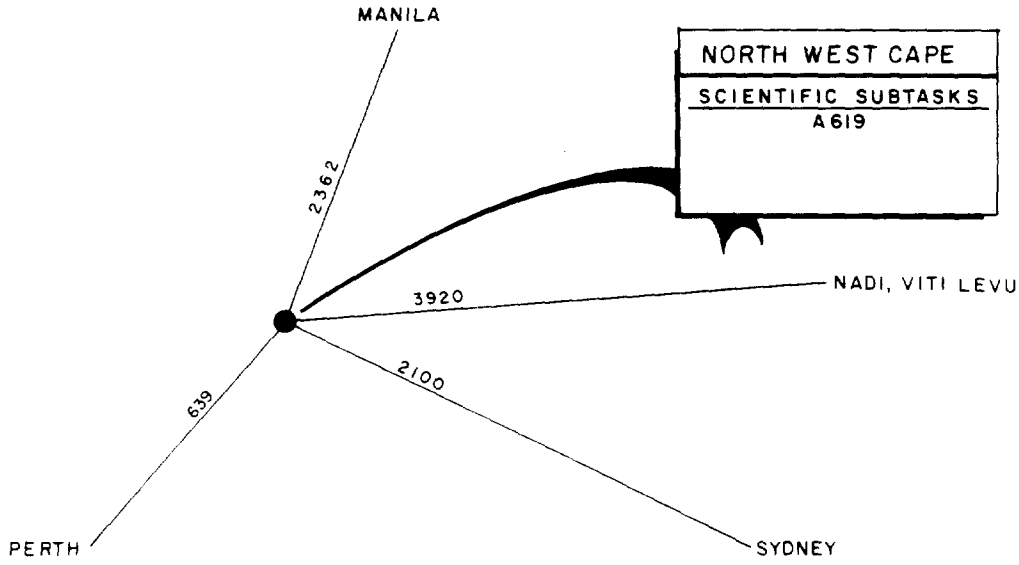
Physical Data The western half of Australia is an extensive plateau with large areas of sand and dunes. The western edge of this plateau is bordered by coastal lowlands, 60 to 70 miles wide. The peninsula is approximately 45 miles long and 10 miles wide and terminates at North West Cape. The Cape is an area of flat, low, sandy land about 2 1/2 by 2 1/2 miles, bordered by a ridge of sandhills 40 to 60 feet high extending southeast and southwest around the coast. Within the sandhills the land is low, flat, and partly covered with vegetation. Three miles to the southwest, the sandhills reach to Vlaming Head which is the northern extremity of a conspicuous range of hills that terminates on the coast. They extend 40 miles to the southwest with a rocky rugged outline 200 to 1,000 feet high. The slopes, covered with coarse grass and bushes, are steep to the west (seaward), and are gradual and blend with 60 to 90 foot sandy ridges to the east (gulf) side. The seacoast is all sandy.

The entire shore of the cape is fringed with coral reef. There are some bays on the gulf with anchorages in the vicinity of Point Murat, 2.3 miles south of North West Cape and at Exmouth Gulf.

Climate North West Cape is in the dry tropical coastal belt of true desert. The temperature varies 40° to 50° annually with a mean of about 78°F. The temperature may exceed 100°F, about 40 days annually. The southeast monsoon season is May through September and the northwest monsoon season is September through April. In March of 1958, two tropical cyclones damaged Onslow. A record 125 mph gust was recorded. Annual precipitation is about 9-in. There is an average of 20 to 25 days of rain per year and an average of approximately 10 thunderstorms annually.

Facilities The U. S. Navy's Very Low Frequency radio communication station is located at the extreme north end of North West Cape on Exmouth Gulf, a short distance from Vlaming Head. A Navy ship pier with 20-ft. depths alongside and lifting equipment is in use at this location. An airstrip for MAC use, limited housing, commissary privileges and other facilities are available for scientific groups at the new town of Exmouth where the VLF station is located.





DISTANCES IN NAUTICAL MILES FROM NORTH WEST CAPE TO OTHER POINTS

NORTH WEST CAPE, AUSTRALIA

F & S NO. 53001	TITLE Satellite Communications - Subtask A619					
USER TC	STRUCTURE/FACILITY NO. None		SCIENTIFIC STATION NO. None			BOD GO+120 FOD GO+150
FUNDING AGENCY	($000)	ENGR	PROC	CONST	TOTAL	FURN
		No Cost				

POST-GO

ENGINEERING None required.

PROCUREMENT None required.

CONSTRUCTION This is a system oriented experiment and as such is not directly supported by DASA. There is no construction support required by the contractor. The Subtask A619 installation will utilize existing operational communications facilities. The U. S. Army Satellite Communications Agency (USASCA) will direct and provide operational personnel for the scientific installation. The USASCA will also provide funds for Subtask A619.

APPENDIX A

SITE PLANS

A.1 GENERAL

Site plans for the Hawaiian Islands, Off-Islands and Kirtland AFB are presented in this section. This supplemental information to the facility descriptions shows the locations and physical arrangement of the facility or facilities.

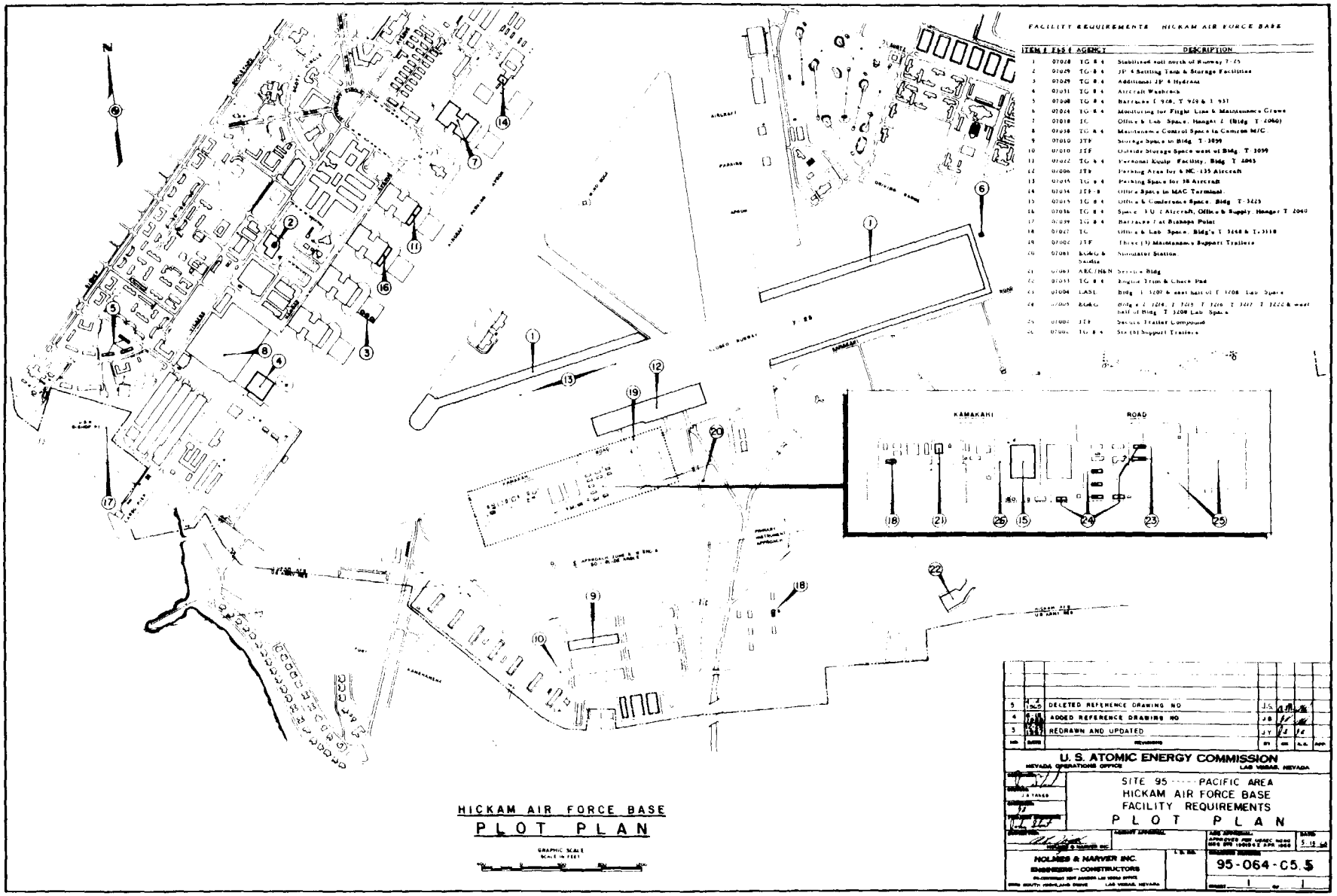


FIGURE A-1. SUMMARY OF FACILITIES - HICKAM AFB

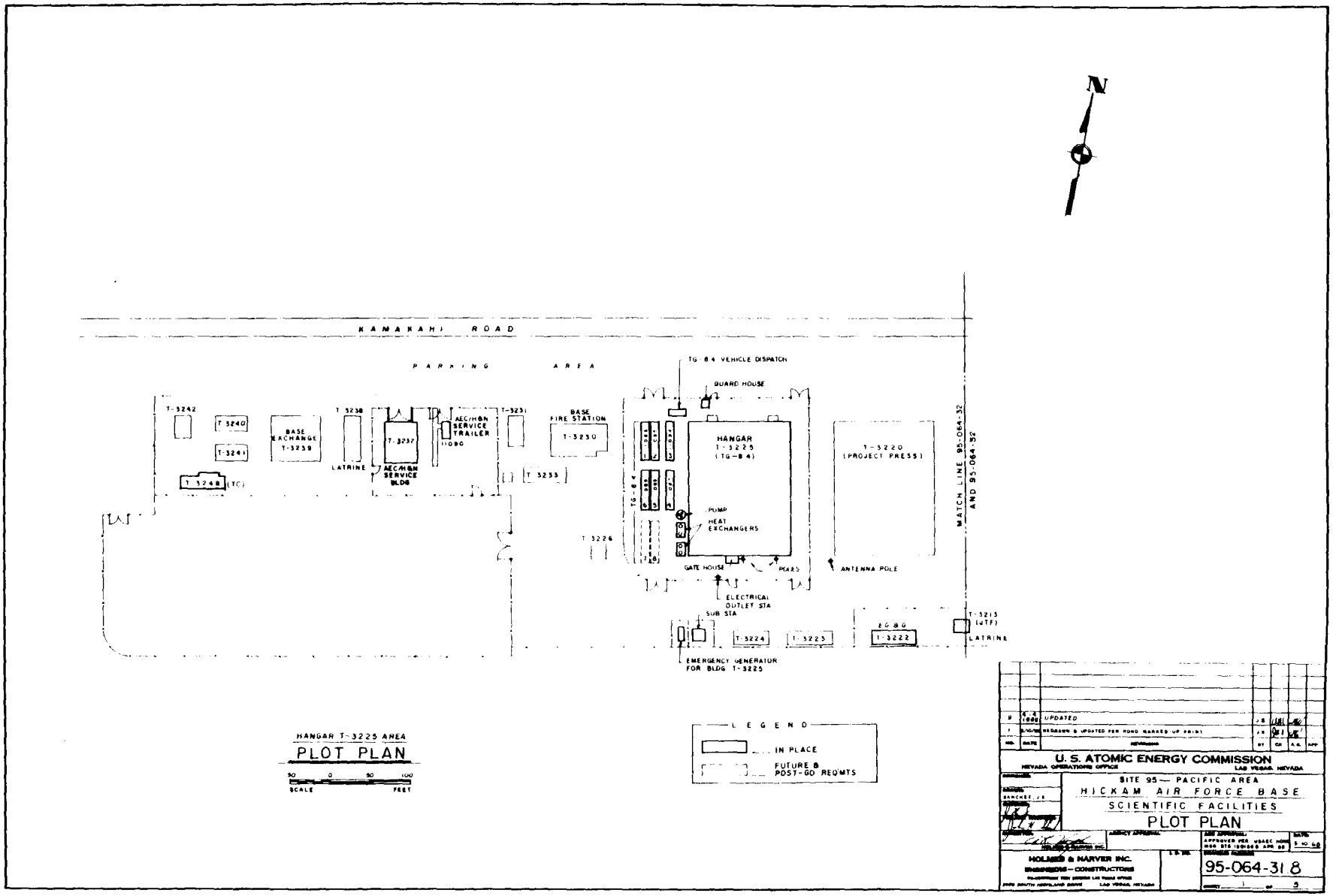


FIGURE A-2. HICKAM AFB SCIENTIFIC FACILITIES (SHEET 1 OF 3)

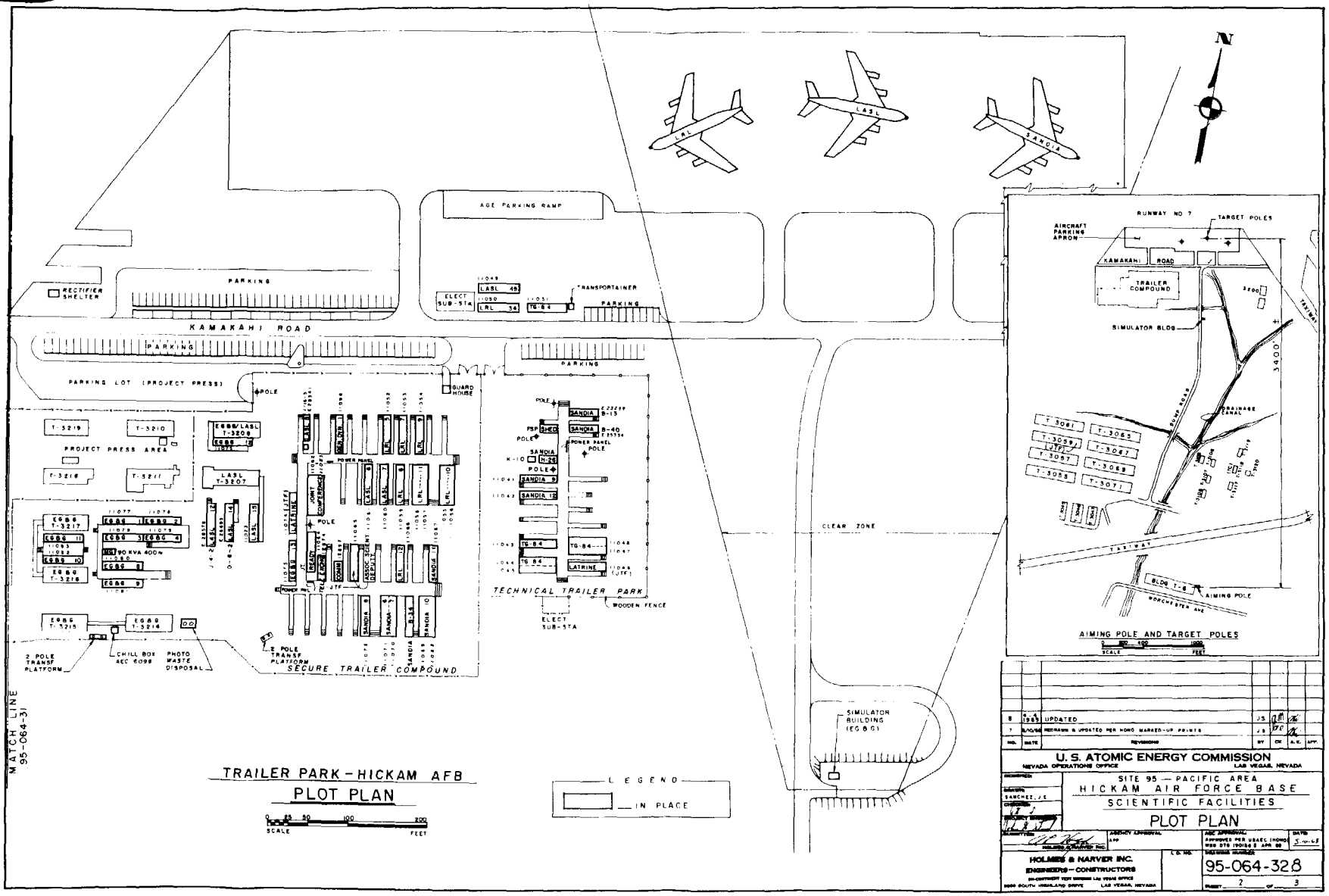


FIGURE A-2. HICKAM AFB SCIENTIFIC FACILITIES (SHEET 2 OF 3)

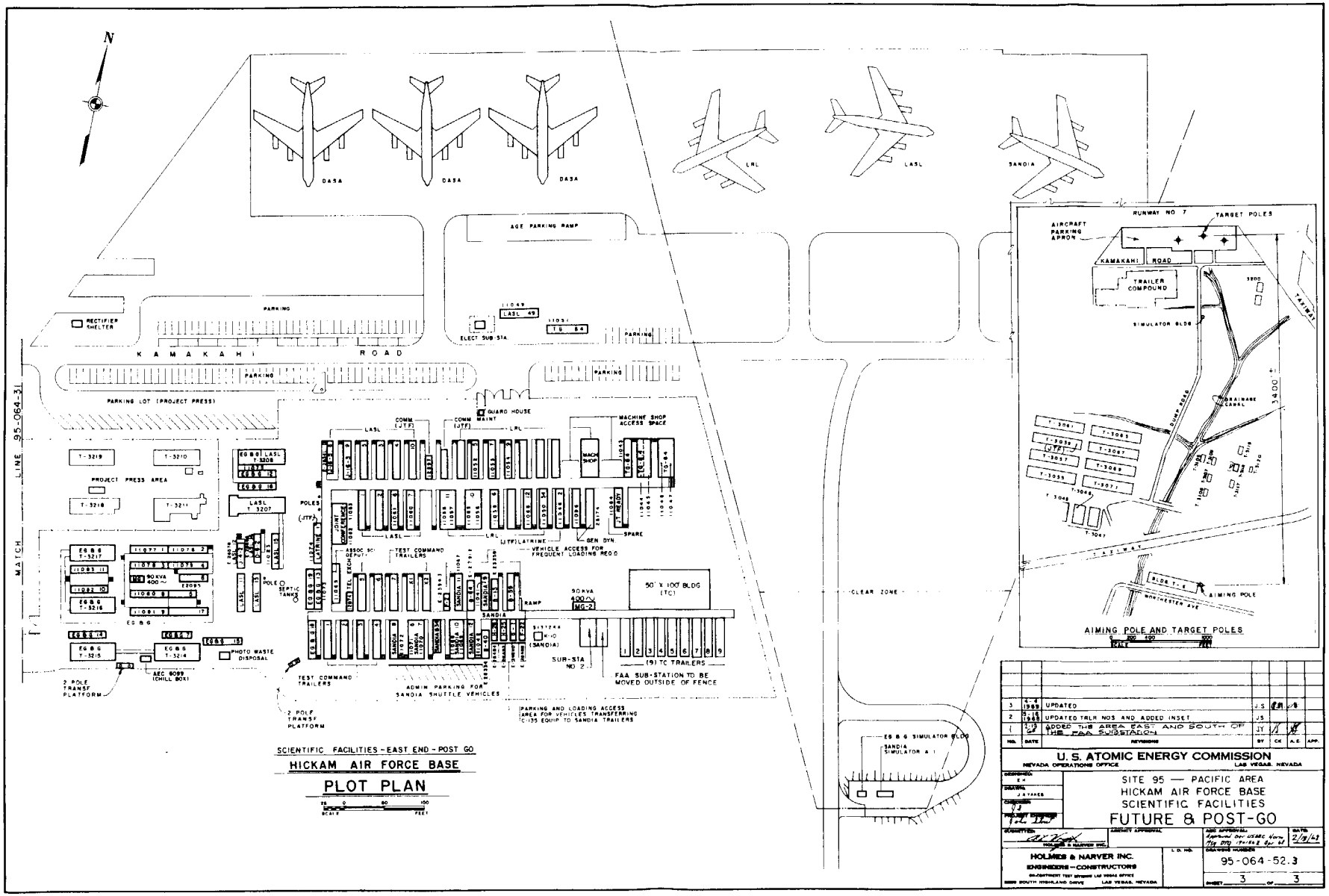


FIGURE A-2. HICKAM AFB SCIENTIFIC FACILITIES (SHEET 3 OF 3)

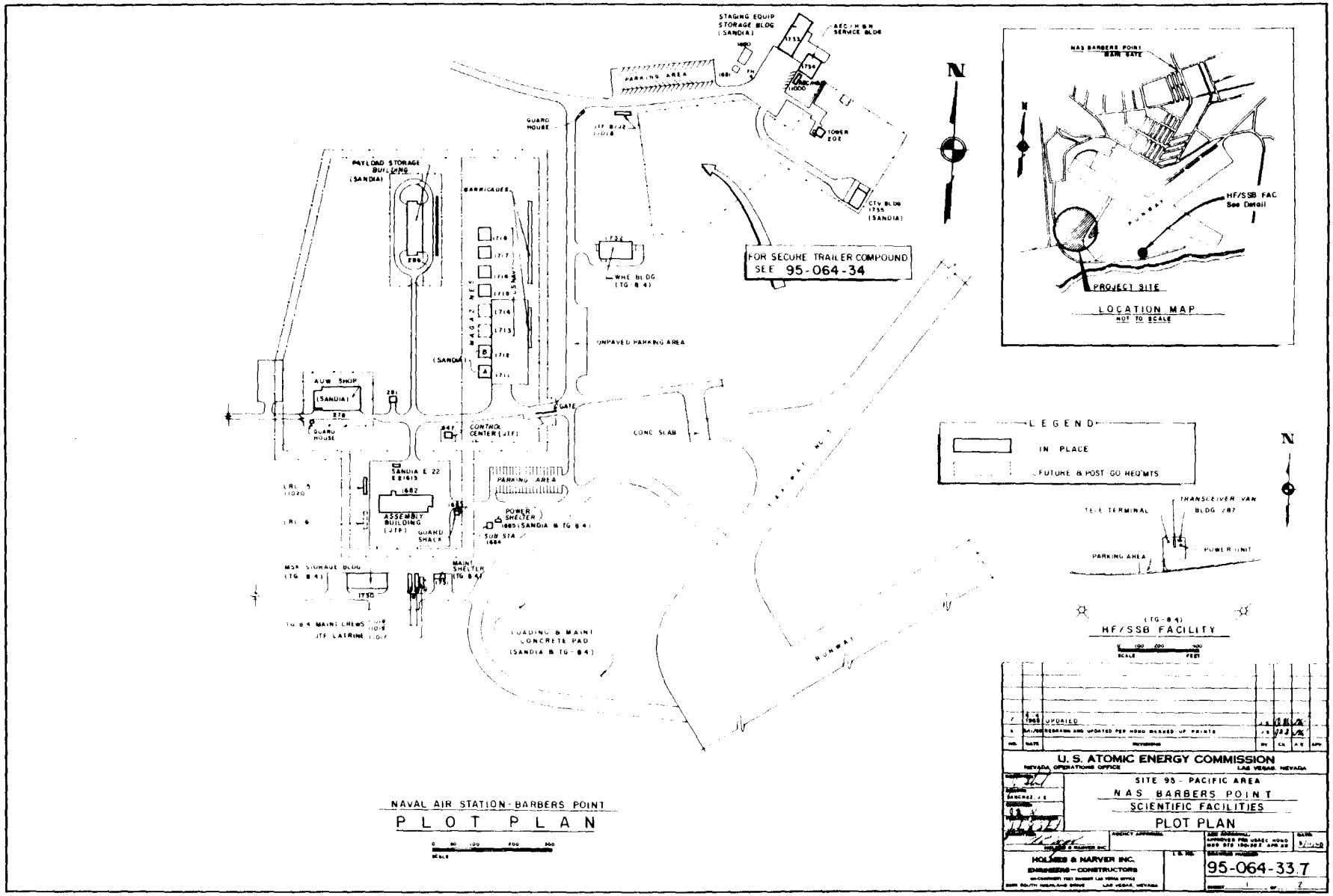


FIGURE A-3. FACILITIES - NAS BARBERS POINT (SHEET 1 OF 2)

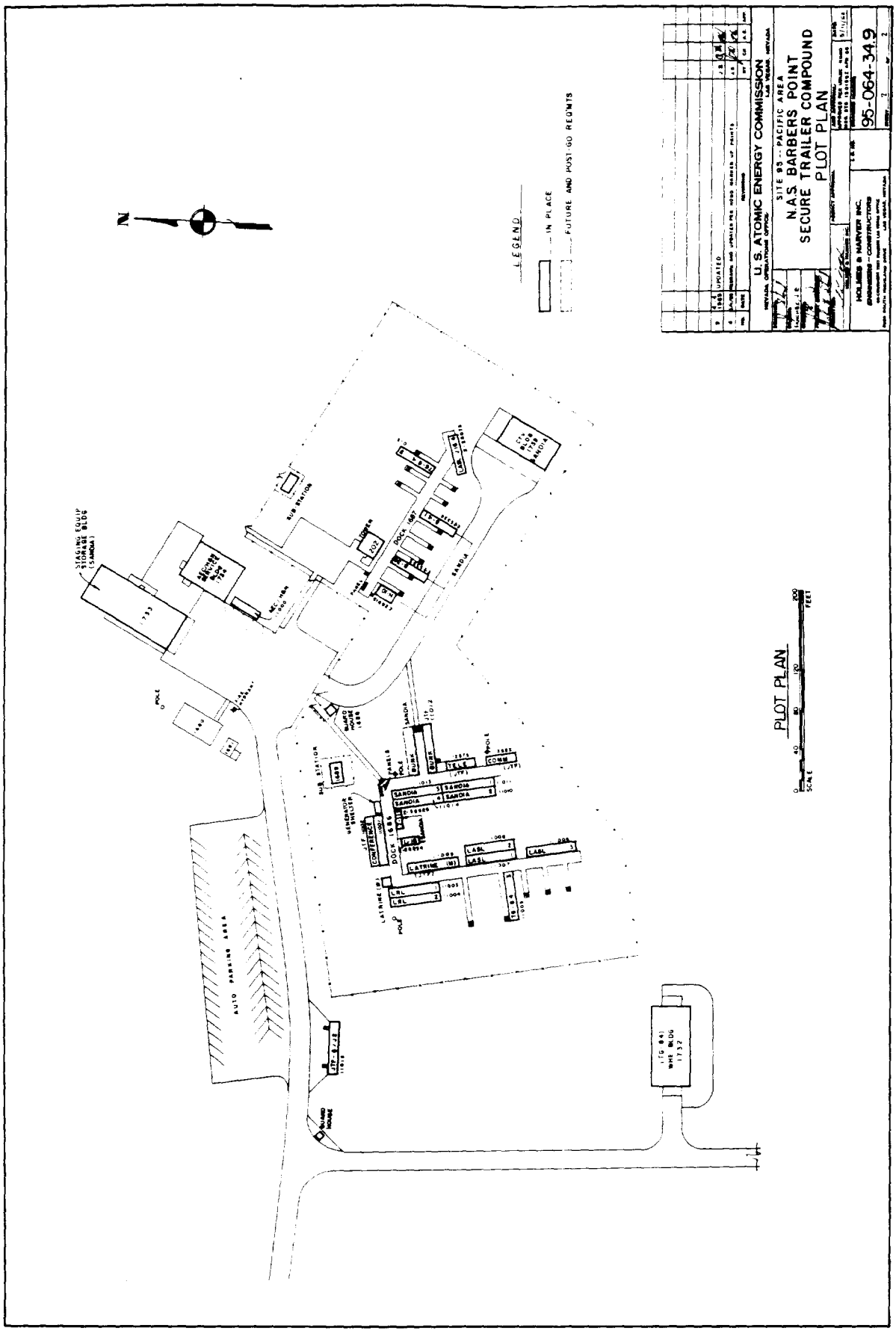


FIGURE A-3. SECURE TRAILER COMPOUND - NAS BARBERS POINT (SHEET 2 OF 2)

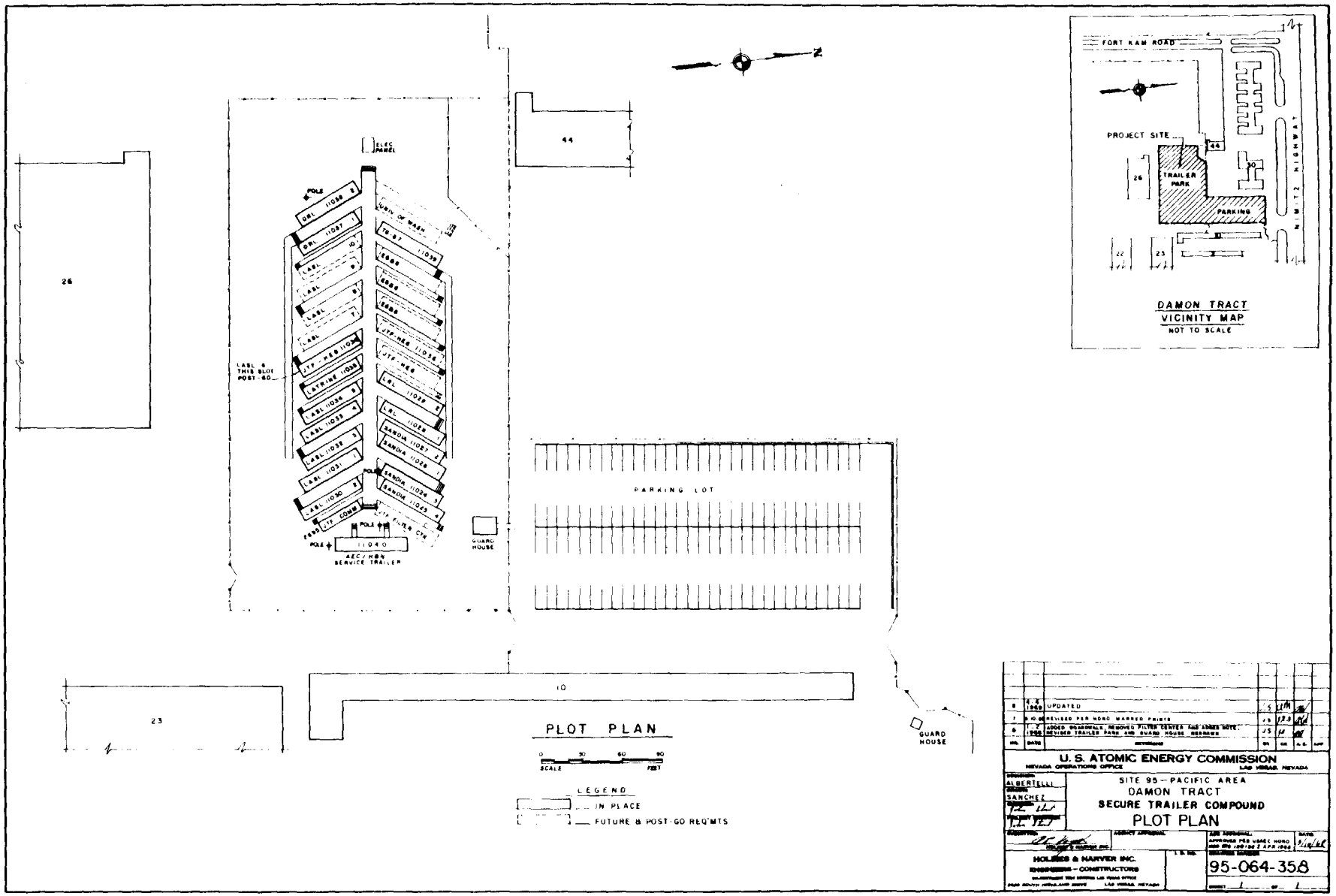


FIGURE A-4. TRAILER COMPOUND - DAMON TRACT

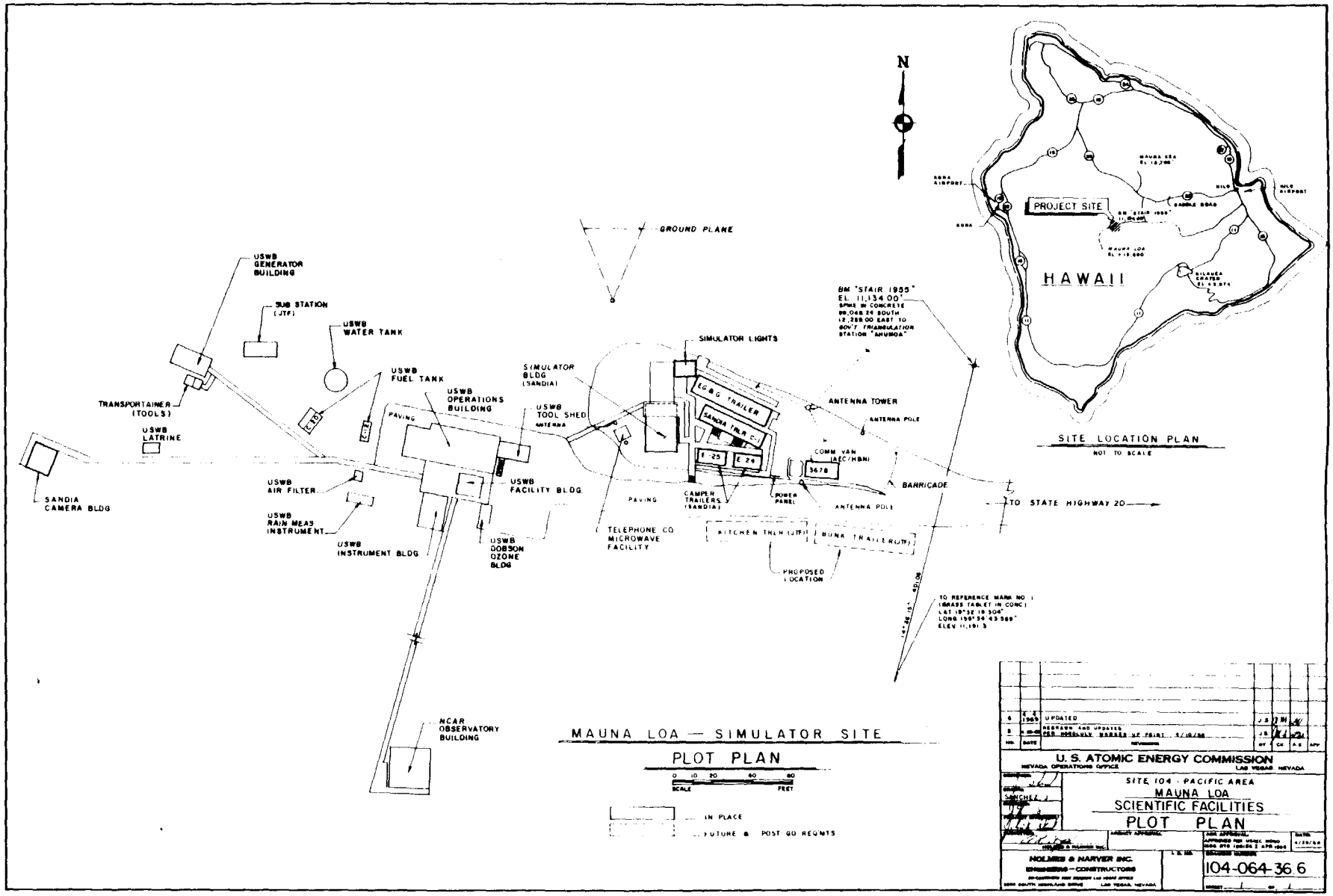


FIGURE A-5. MAUNA LOA SIMULATOR STATION - HAWAII

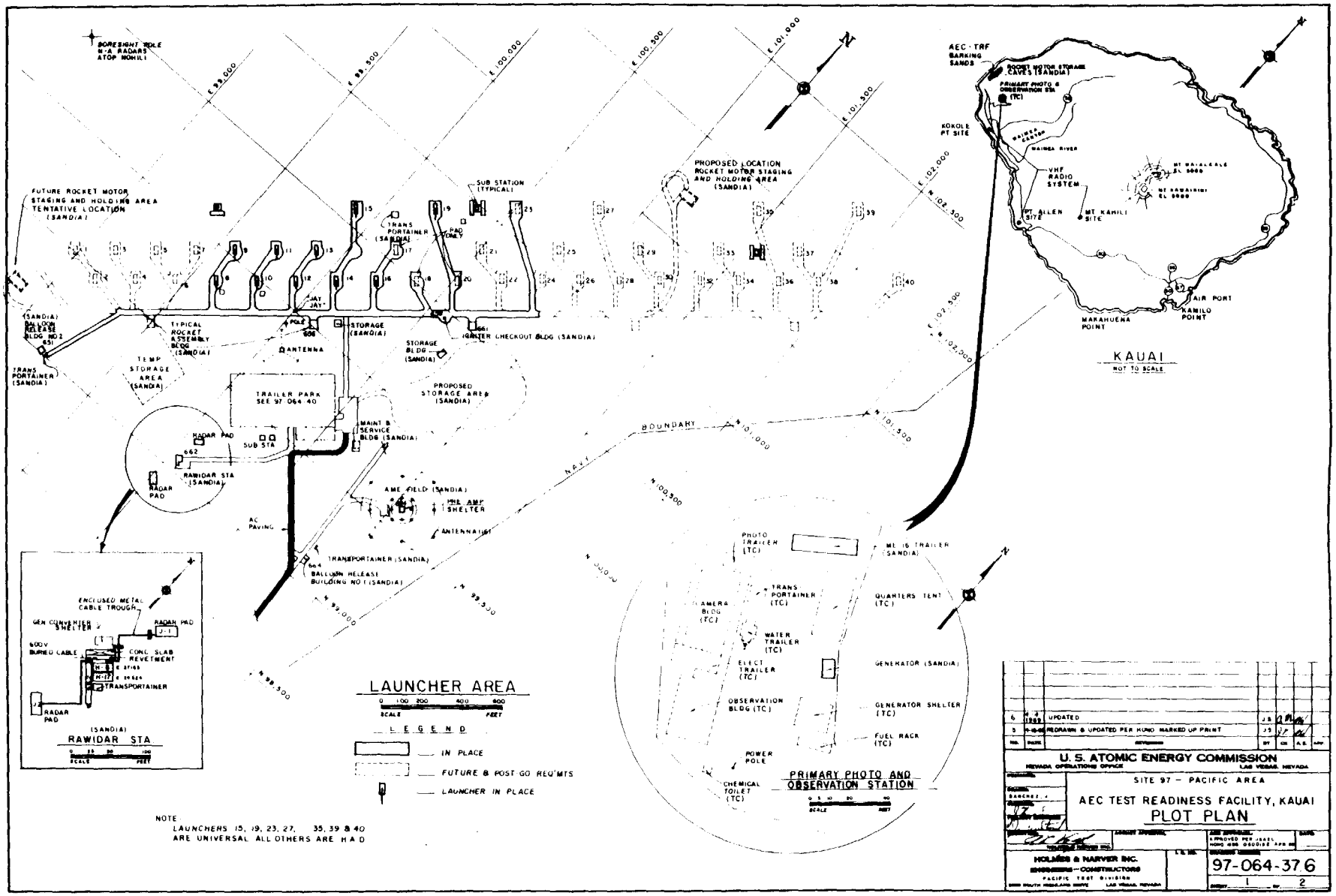


FIGURE A-6. AEC-TRF FACILITY PLOT PLAN - KAUAI

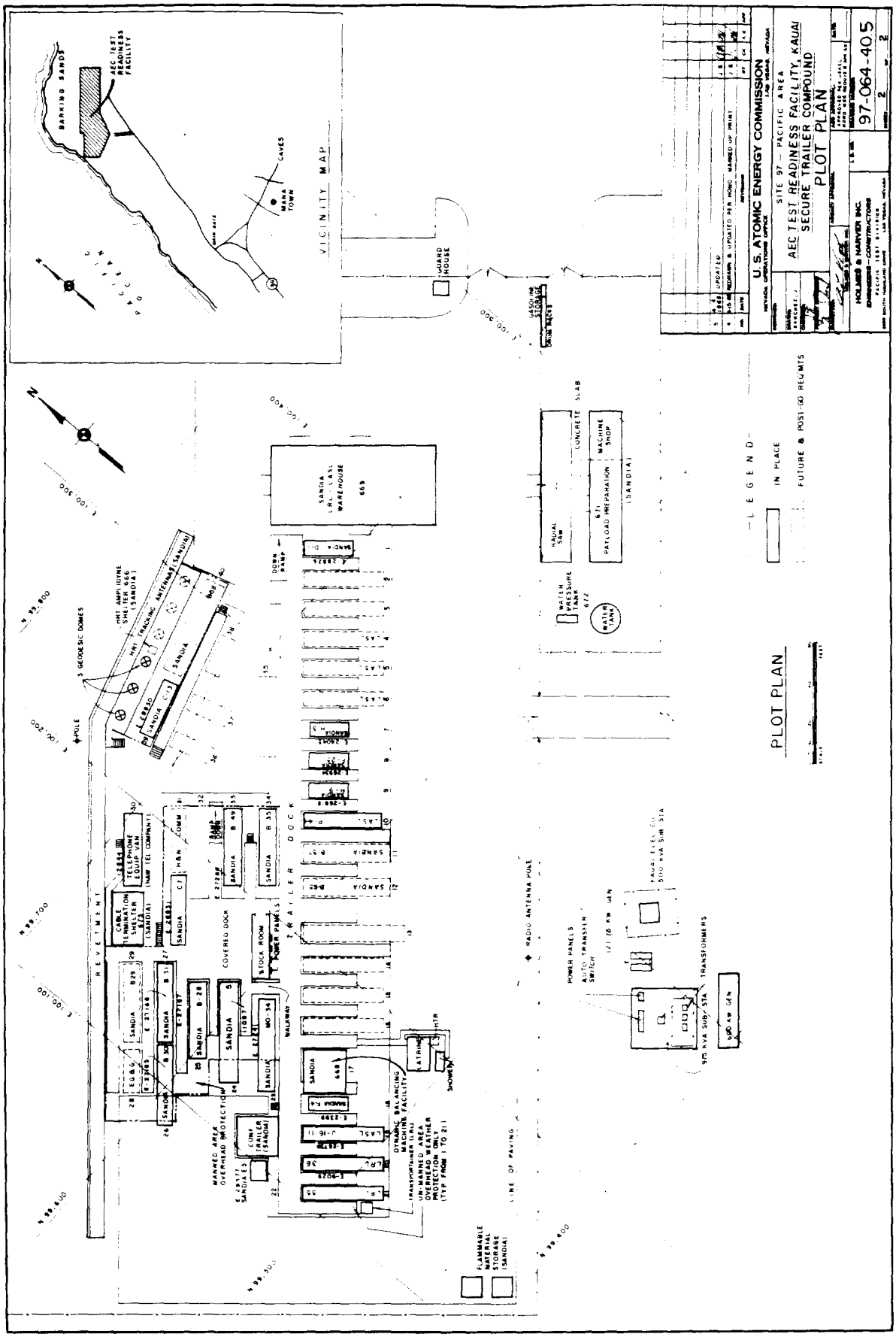


FIGURE A-7. AEC-TRF SECURE TRAILER COMPOUND - KAUAI

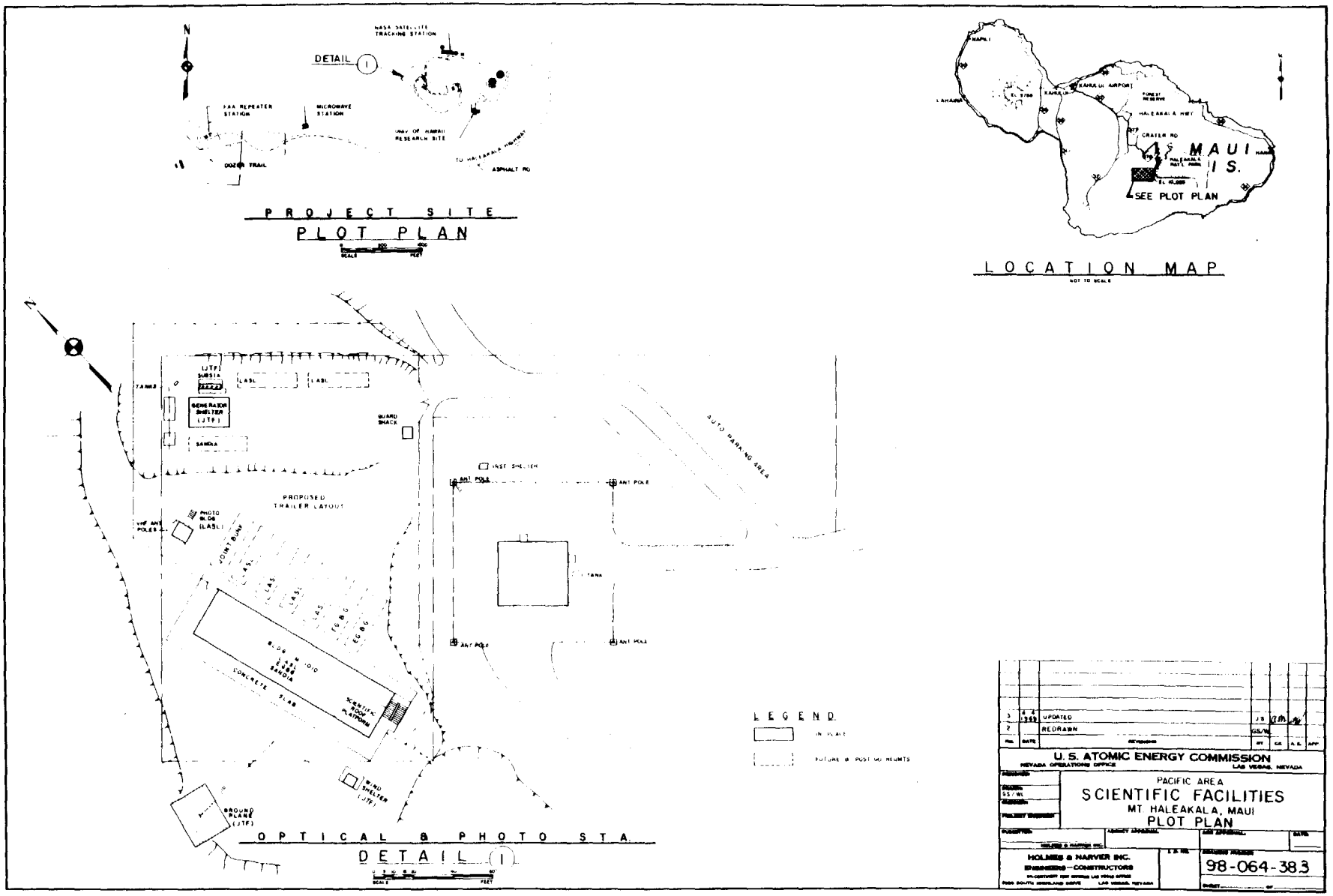


FIGURE A-8. MT. HALEAKALA OPTICAL AND PHOTO STATION - MAUI

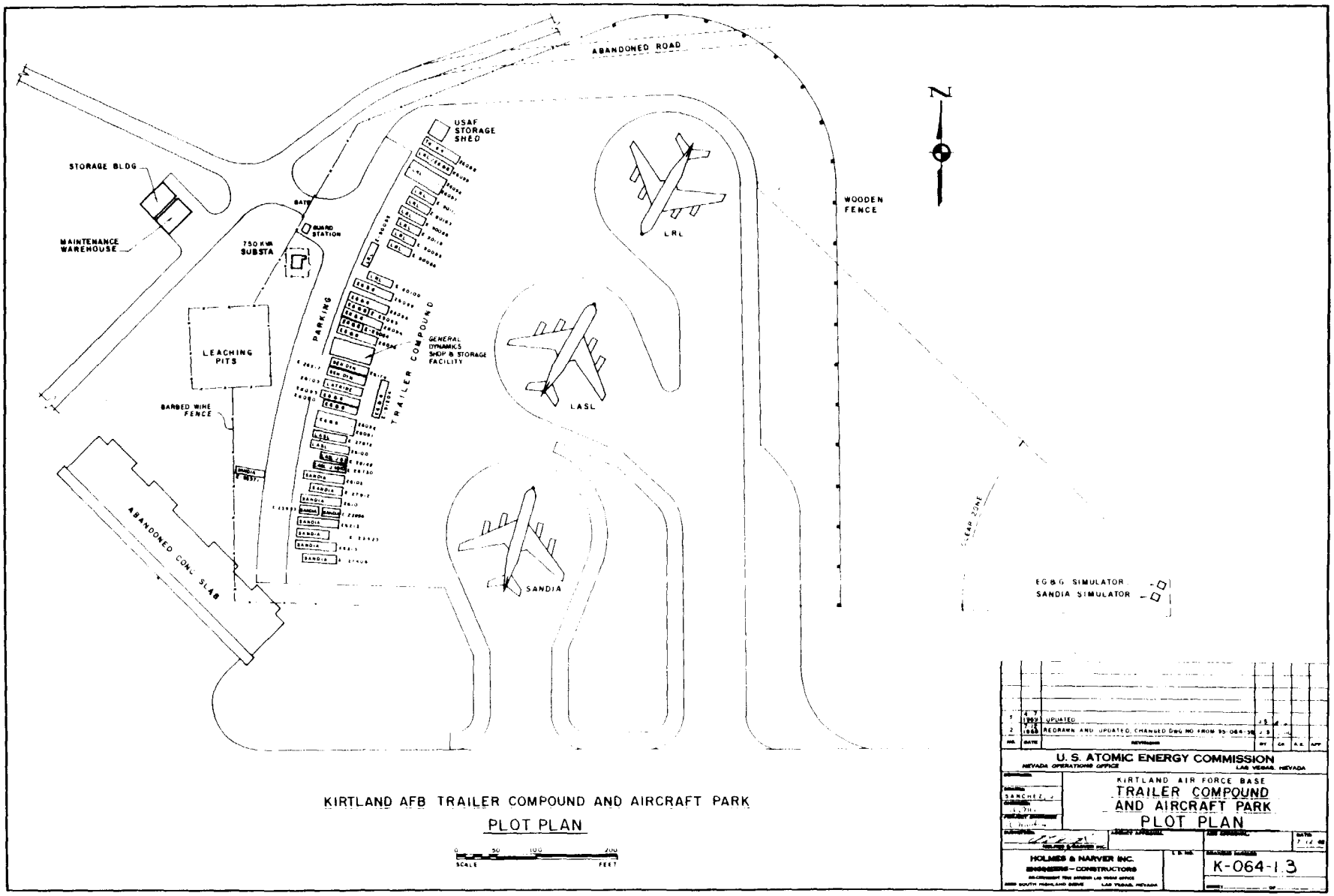


FIGURE A-9. FACILITIES - KIRTLAND AFB

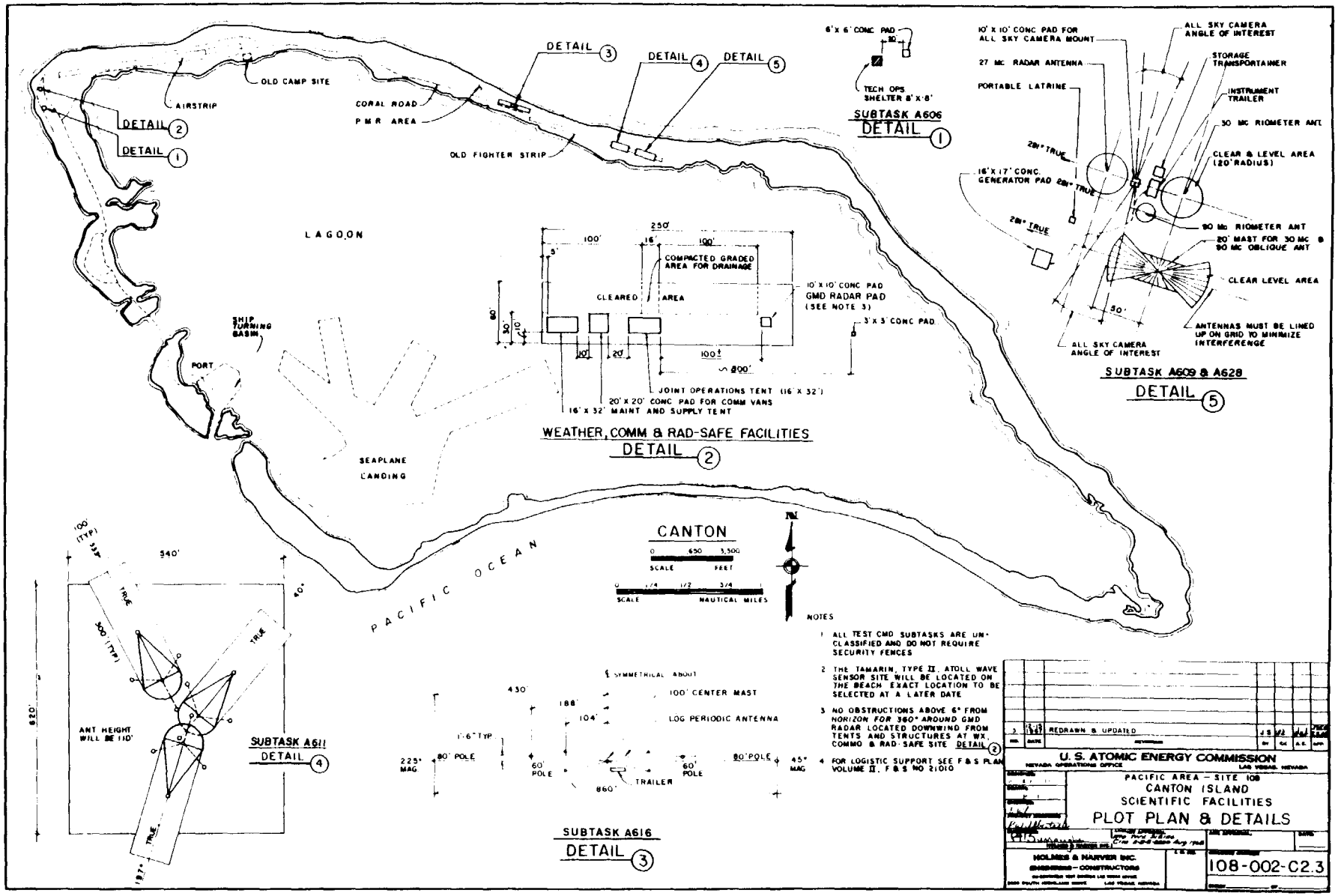


FIGURE A-10. FACILITIES - CANTON

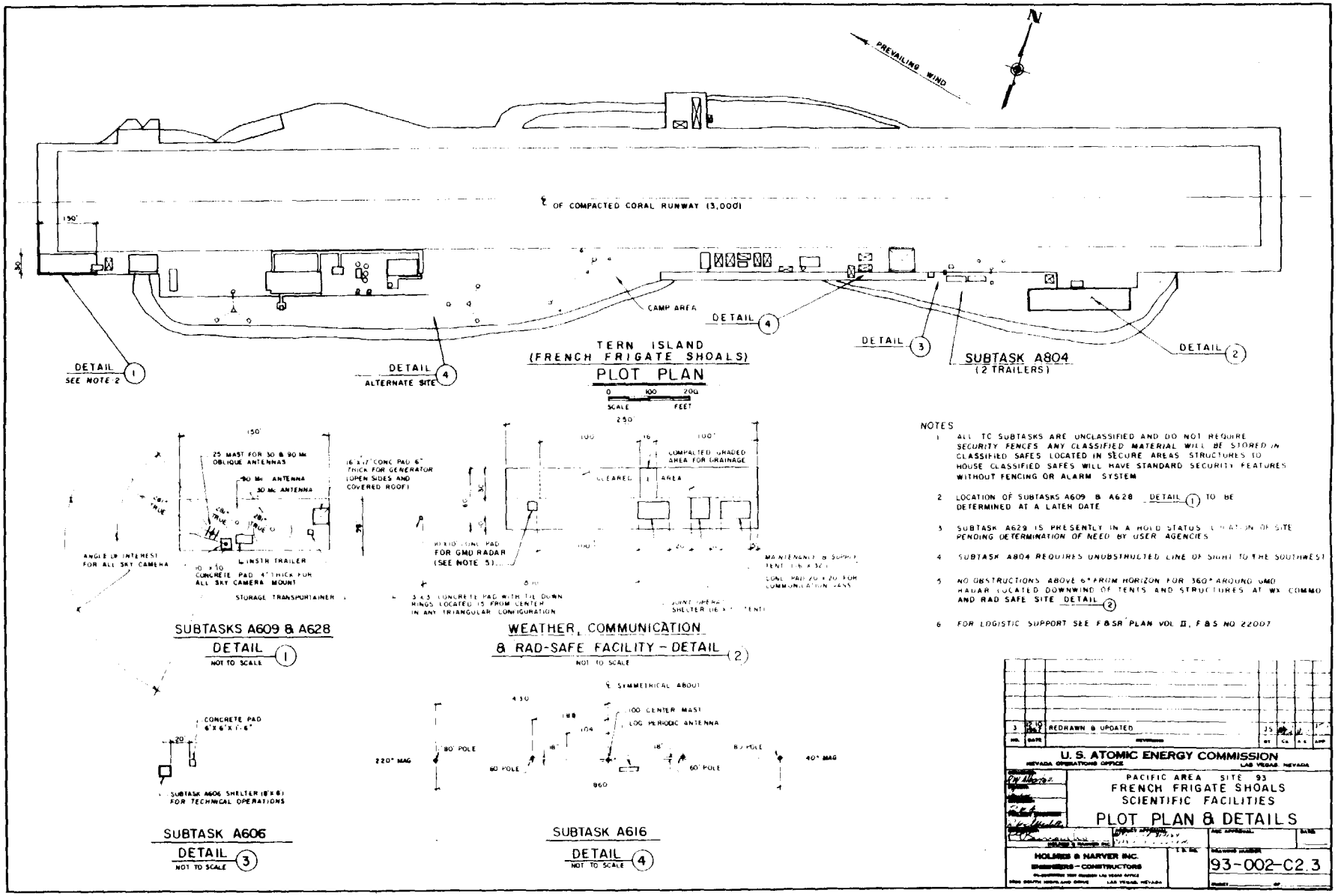


FIGURE A-11. FACILITIES - FRENCH FRIGATE SHOALS

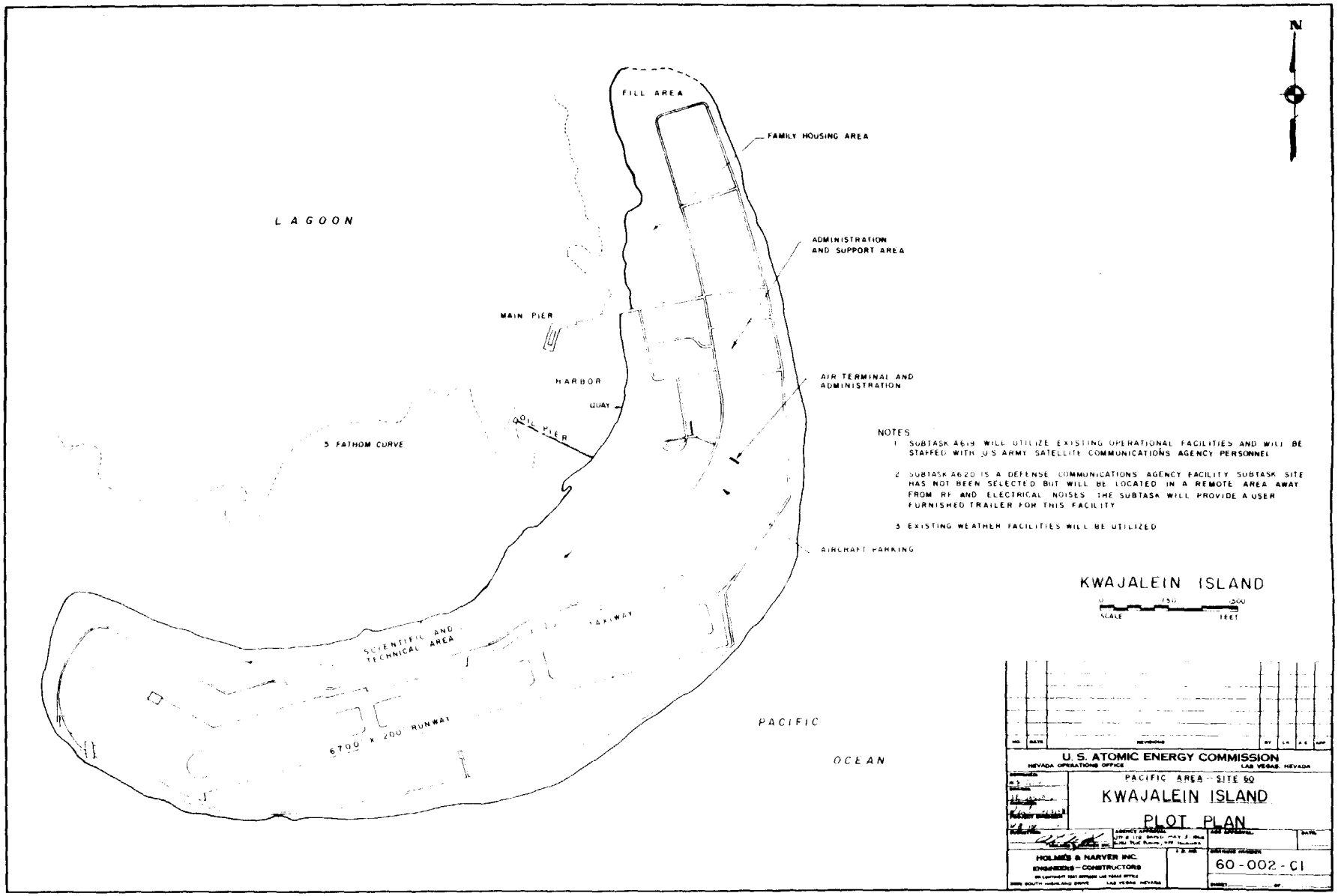


FIGURE A-12. FACILITIES - KWAJALEIN

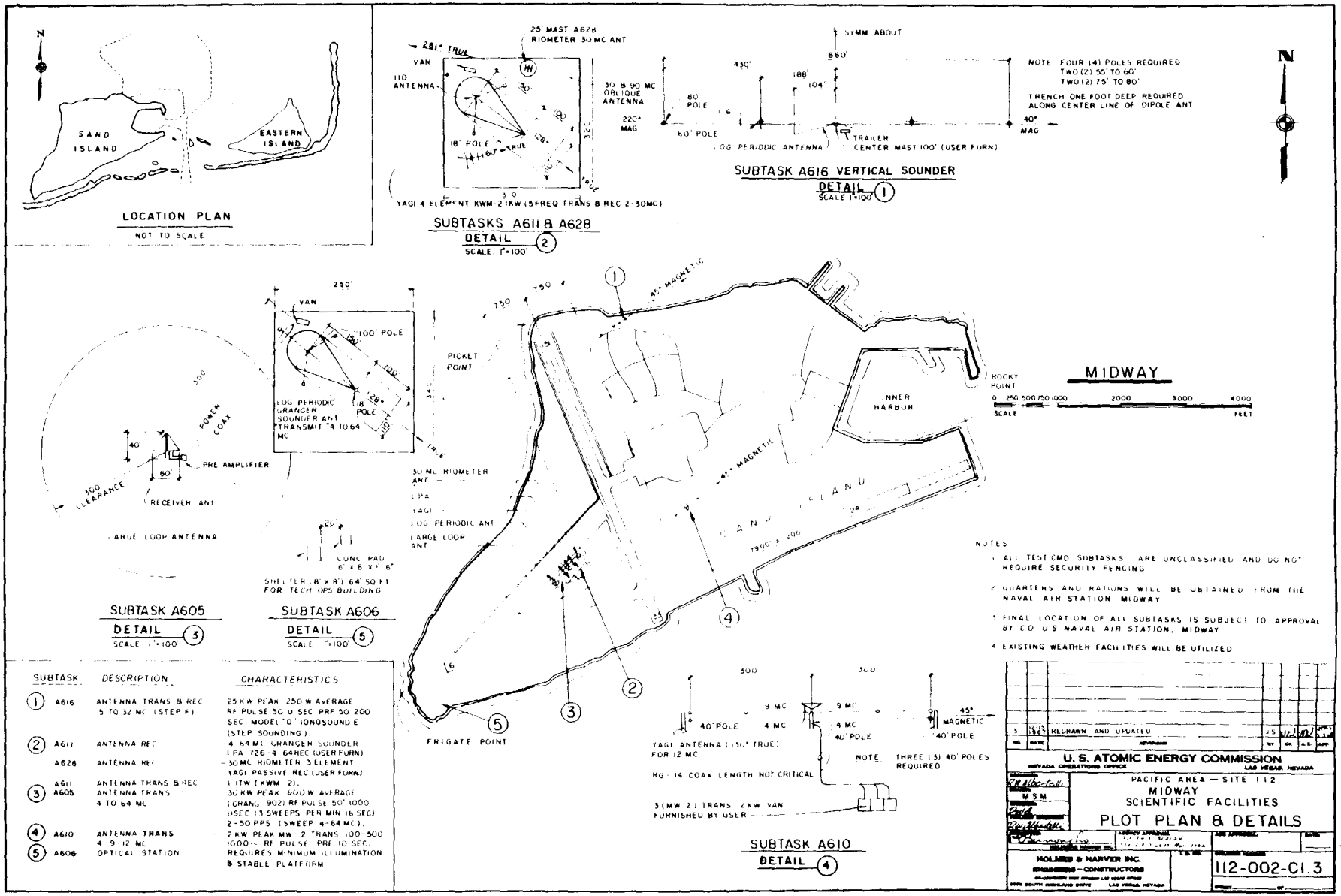


FIGURE A-13. FACILITIES - MIDWAY

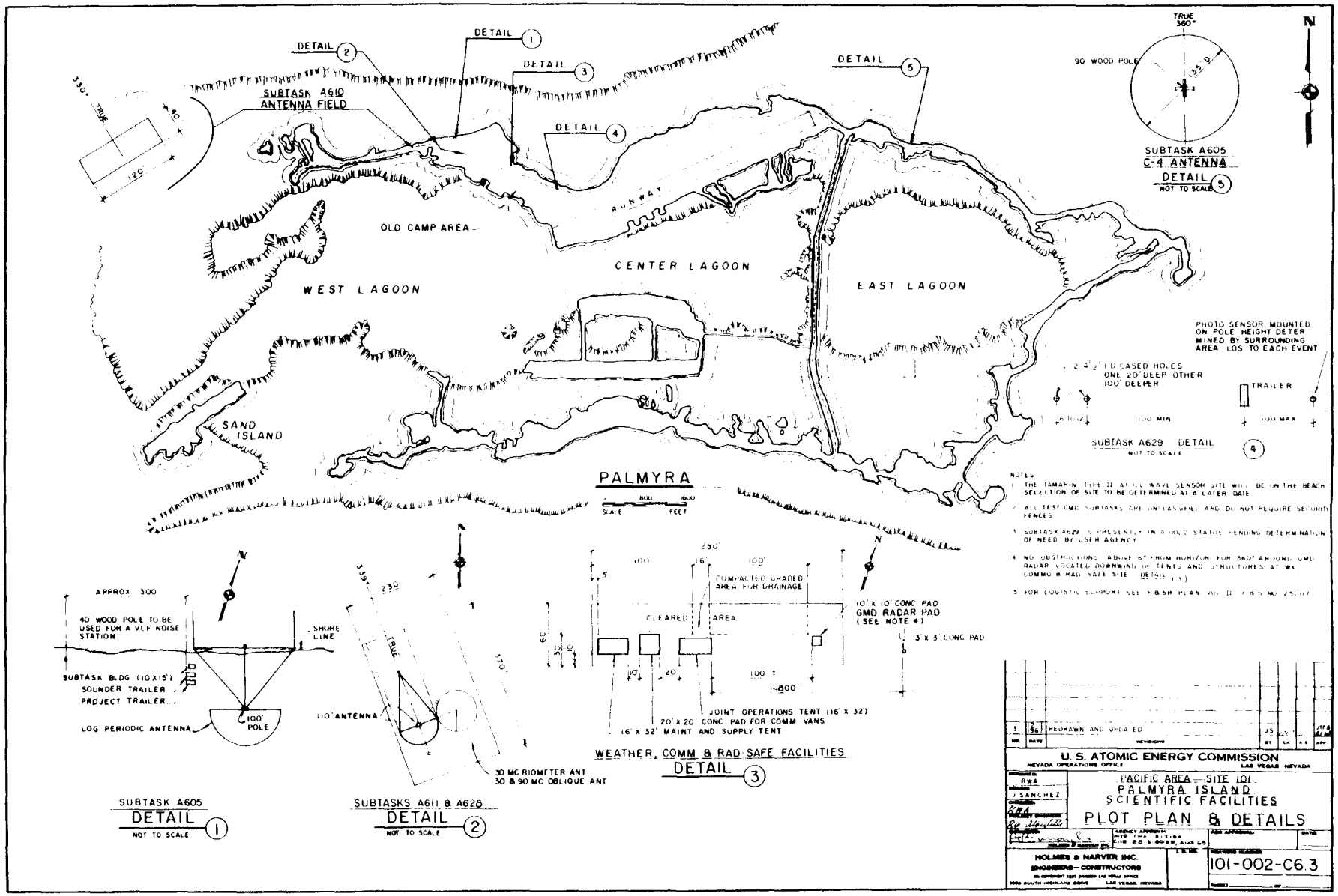


FIGURE A-14. FACILITIES - PALMYRA

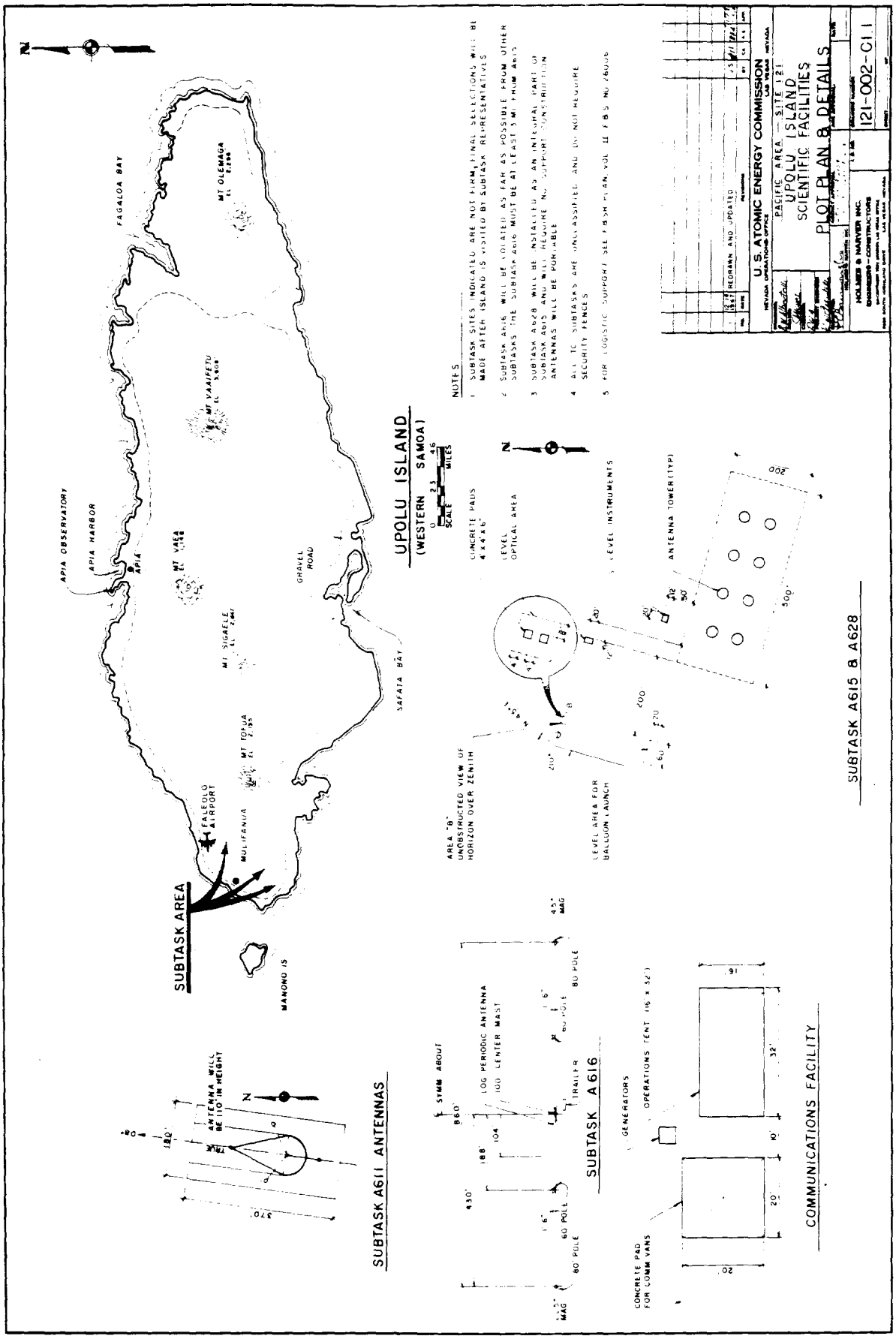


FIGURE A-15. FACILITIES - UPOLU

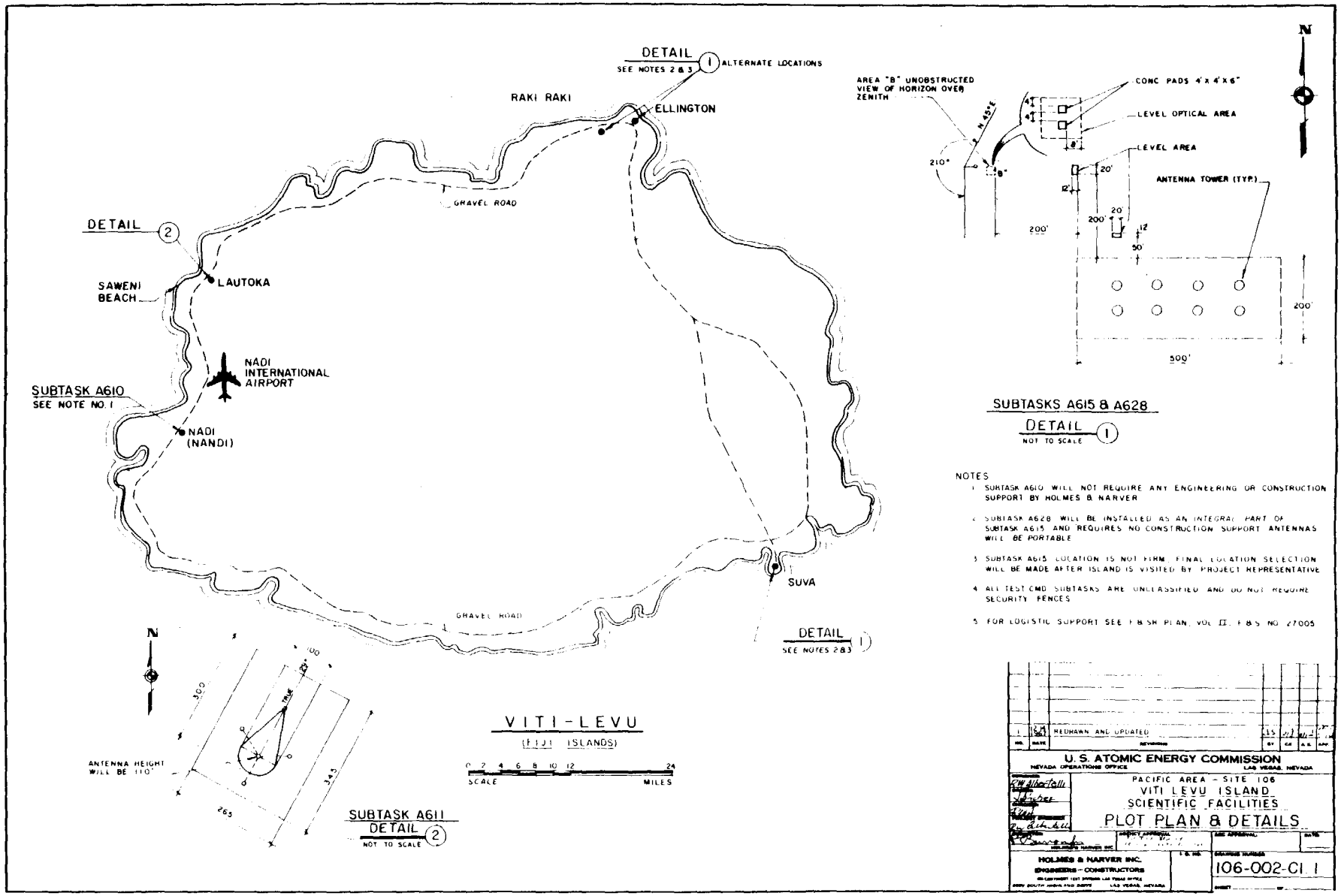


FIGURE A-16. FACILITIES - VITI LEVU

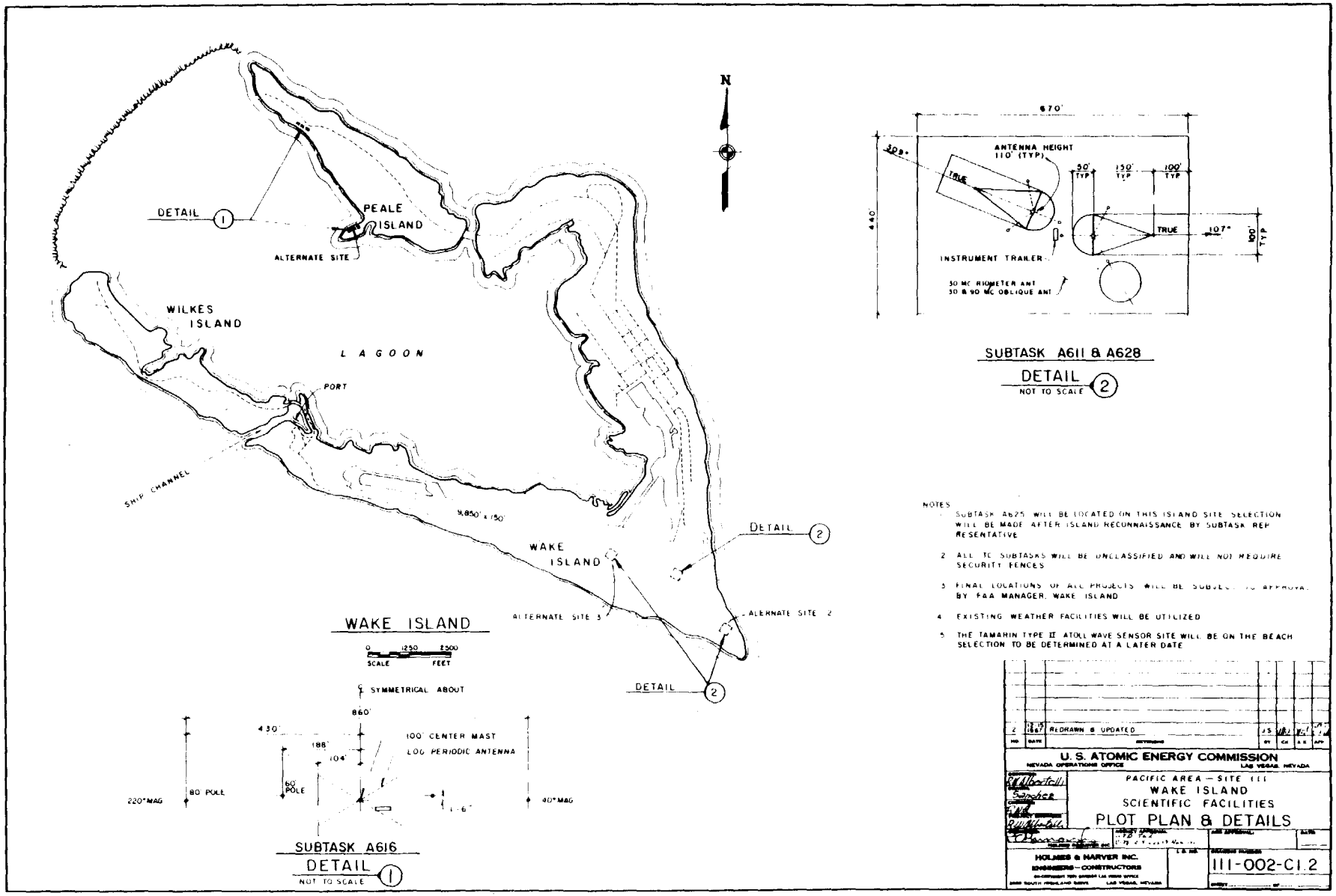


FIGURE A-17. FACILITIES - WAKE ISLAND

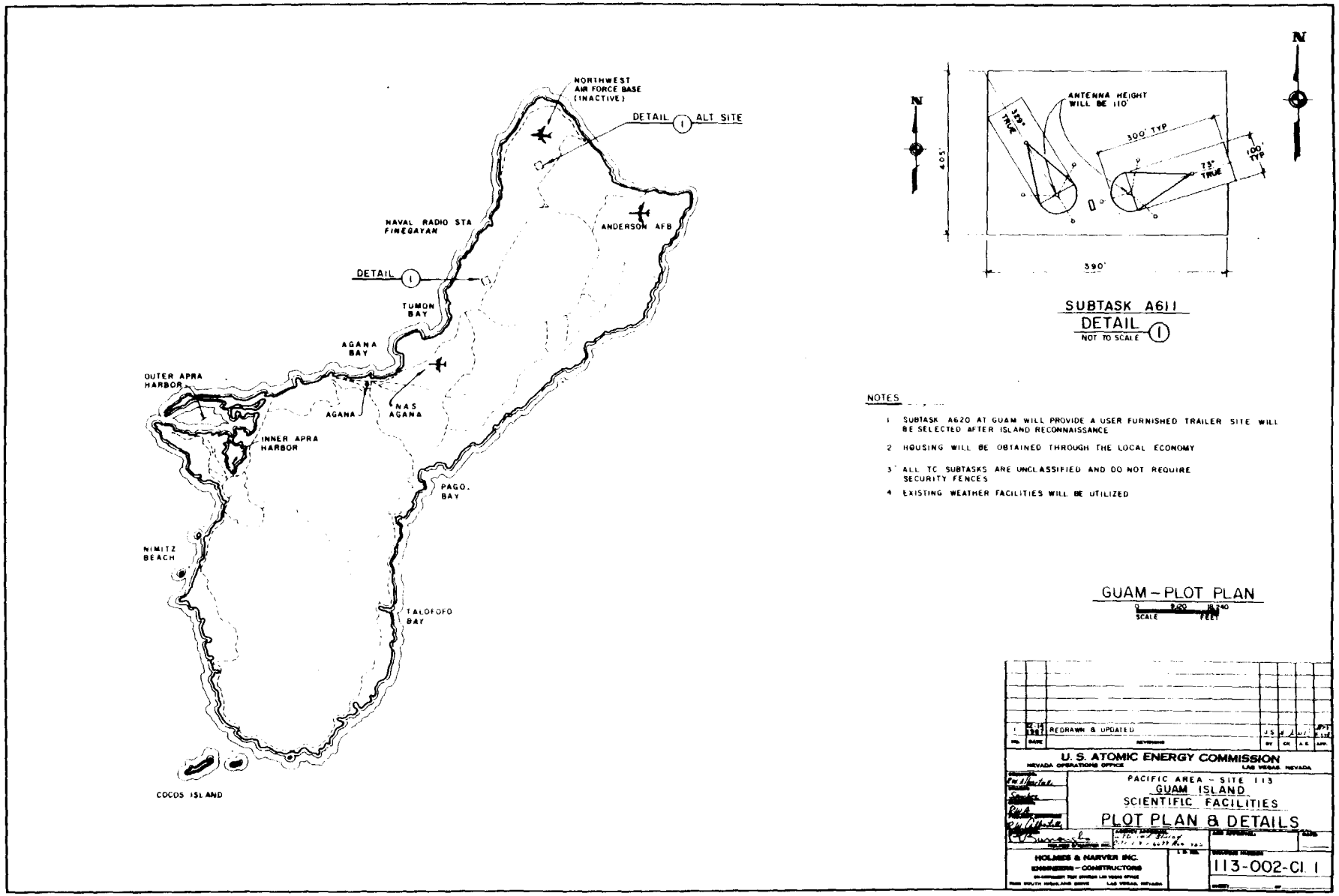


FIGURE A-18. FACILITIES - GUAM

[redacted]

ANNEX Z
RECORD OF CHANGES
FACILITIES AND SUPPORT REQUIREMENTS PLAN
VOLUME II

Z.1 GENERAL

The Facilities & Support Requirements Plan will be updated by the issuance of revised pages to replace existing pages or additional pages to add new requirements. These CHANGE PAGES will be transmitted to all holders of the F&SR Plan with a transmittal letter giving detailed instructions relative to the required changes. Each package of Change Pages transmitted will be assigned a CHANGE NUMBER which is to be recorded in the CHANGE REGISTER. The date of issuance of the change package will be indicated on the lower outside corner of each page. The volume number in which the page is to be inserted will appear on each change page immediately above the date.

Z.2 CHANGE REGISTER

Retain this page and insert it as the last page in this volume. Make an entry in the CHANGE REGISTER recording incorporation of each change page package.

CHANGE NO.	DATE OF CHANGE	DATE ENTERED	BY WHOM ENTERED	REMARKS
	Aug. 27, 1969	9-15-69	T. L. [illegible]	

[redacted]