



DEPARTMENT OF THE NAVY
 COMMANDER
 PACIFIC MISSILE TEST CENTER
 POINT MUGU, CALIFORNIA 93042

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JOINT PMTC/MSCPAC/HC-1 OPERATIONS DIRECTIVE V3253

From: Commander, Pacific Missile Test Center
 To: Special Distribution List

Subj: Aerial Radiological Survey of the Northern Marshall Islands
 (Phase II); support of

1. Purpose. The purpose of this Operations Directive is to provide all Pacific Missile Test Center and supporting activities with the basic information and instructions necessary for initiating and coordinating the required operational support when the subject program is scheduled for operation.

2. Action. This Directive is effective for planning and implementation upon receipt.

3. Responsibility. It is the responsibility of all addressees to provide operational support for the subject program as outlined herein. Inability of any activity to provide essential support should immediately be brought to the attention of the Logistics Support Task Commander.

Helicopter Support
 Squadron ONE

Military Sealift
 Command - Pacific

Commander, Pacific Missile
 Test Center, Navy Project
 Manager



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USNS WHEELING

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REVISION CONTROL SHEET

OD V8233

CLASS.

BASE DATE

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OD V8253

SECURITY CLASSIFICATION

All aspects of the Aerial Radiological Survey of the Northern
Marshall Islands (Phase II) is UNCLASSIFIED.

ABBREVIATIONS AND DEFINITIONS

A/C	Aircraft
DOE	Department of Energy
DOI	Department of Interior
DON	Department of Navy
HC-1	Helicopter Support Squadron - One
HF	High Frequency
KH	Kilohertz
KMR	Kwajalein Missile Range
LCO	Landing Control Officer
LSTC	Logistics Support Task Commander
MHZ	Megahertz
MOA	Memorandum of Agreement
NA	Not Applicable
NR	Not Required
NVOO	Nevada Operations Office
OD	Operations Directive
PACMISTESTCEN	Pacific Missile Test Center
SDR	Sponsor Designated Representative
SINS	Shipboard Inertial Navigation System
SPFD	Survey Project Field Director
SSB	Single Side Band
TBD	To be determined
TTY	Teletype

1.0 GENERAL INFORMATION

The following general information is provided and is applicable within the limits of the Memorandum of Agreement signed by DON, DOE, and DOI.

1.1 Command Control

1.1.1 The Commander, Pacific Missile Test Center (PACMISTESTCEN) is designated the Navy Project Manager for the survey in CNO message 010007Z Apr 78 and will continue in this capacity through project completion, coordinating and providing on behalf of the Department of the Navy (DON), all logistics support required by the Department of Energy (DOE) for the accomplishment of survey objectives.

1.1.2 The DOE, represented by the Nevada Operations Office, Las Vegas, Nevada (NVOO), is designated the Range User and exercises the following command and control.

a. Interprets the directives for the Aerial Radiological Survey of the Northern Marshall Islands and provides the guidance necessary for the establishment of the purposes, objectives, and scope of the survey.

b. Approves schedule for the survey.

c. Reports results of the survey to appropriate authority as directed by DOE, Washington, D. C.

1.1.3 Survey Project Field Director (SPFD)

1.1.3.1 The SPFD is the DOE representative embarked in USNS WHEELING, designated to act for the DOE NVOO Survey Project Manager.

1.1.3.2 The SPFD exercises the following command and control:

a. Responsibility for on-site technical direction of the survey.

b. Directs the efforts of DOE and DOE contractor personnel.

c. Requests Navy-provided logistics support from the Logistics Support TASK Commander (LSTC).

d. Is solely responsible for establishing/directing Radiological Safety, Health and Decontamination Criteria/procedures.

1.1.4 Logistics Support TASK Commander (LSTC)

1.1.4.1 The Logistics Support TASK Commander, embarked in USNS WHEELING, will exercise overall operational control and management responsibility for DON provided support during Phase II of the survey. He is assigned the additional responsibility of the Sponsor Designated Representative as defined in paragraph 1.1.4.2.

1.1.4.2 Sponsor Designated Representative (SDR)

The Sponsor Designated Representative is the official PACMISTESTCEN Representative embarked in USNS WHEELING and exercises command and control in the area of requesting ships sailing orders, operational maneuvers, and project personnel matters as specified in Memorandum of Agreement between Commander, Military Sealift Command and Commander, PACMISTESTCEN, and COMMSCPAC RIS OP-ORDER 302-YR.

1.1.4.3 The PACMISTESTCEN Technical Representative will act as primary advisor to the LSTC on logistics support matters and will assume the functions and responsibilities of the LSTC in his absence. Additionally, he is the primary contact between the PACMISTESTCEN Technical Contractor and other agencies.

1.1.5 Master, USNS WHEELING

The ship's Master will have absolute authority and responsibility for the safety of his ship and embarked personnel as prescribed in Memorandum of Agreement between Commander, Military Sealift Command and Commander, PACMISTESTCEN, dated 13 September 1977/20 October 1977 and COMMSCPAC RIS OP-ORDER 302-YR while responding to the operational requests and recommendations of the LSTC.

1.1.6 Officer-in-Charge, HC-1 Detachment

The embarked helicopter detachment officer-in-charge will have absolute authority and responsibility for all matters relating to flight operations, particularly safety of flight, while responding to the operational requests and recommendations of the LSTC. Administrative control and procedural matters regarding NATOPS and maintenance remain with the parent helicopter squadron commander.

1.1.7 A diagram of organizational relationships is shown in Figure 1-1.

1.1.8 Cognizant Personnel

1.1.8.1 Range User

Department of Energy, Nevada Operations Office,
Las Vegas, Nevada (NVOO), Mr. Roger Ray.

1.1.8.2 Survey Project Field Director

Survey Series A: TBA
Survey Series B: TBA
Survey Series C: TBA

1.1.8.3 Logistics Support TASK Commander

Survey Series A: TBA
Survey Series B: TBA
Survey Series C: TBA

1.1.8.4 PACMISTESTCEN Technical Representative

Mr. D. Kaiser, Code 3201-2, telephone (805)
982-7925, AUTOVON 351-7925, C/O USNS WHEELING (TAGM-8), FPO San Francisco,
CA 96601.

1.1.8.5 Master, USNS WHEELING

CAPT Wayne Taylor, USNS WHEELING (TAGM-8)
FPO San Francisco, CA 96601.

1.1.8.6 Officer-in-Charge, HC-1 Detachment

LT Alan Hagar, USN.

1.2 Range Time Utilization

1.2.1 Range Scheduling

The LSTC will assist as necessary in scheduling preliminary checkouts and actual survey support.

DIAGRAM OF ORGANIZATIONAL RELATIONSHIPS

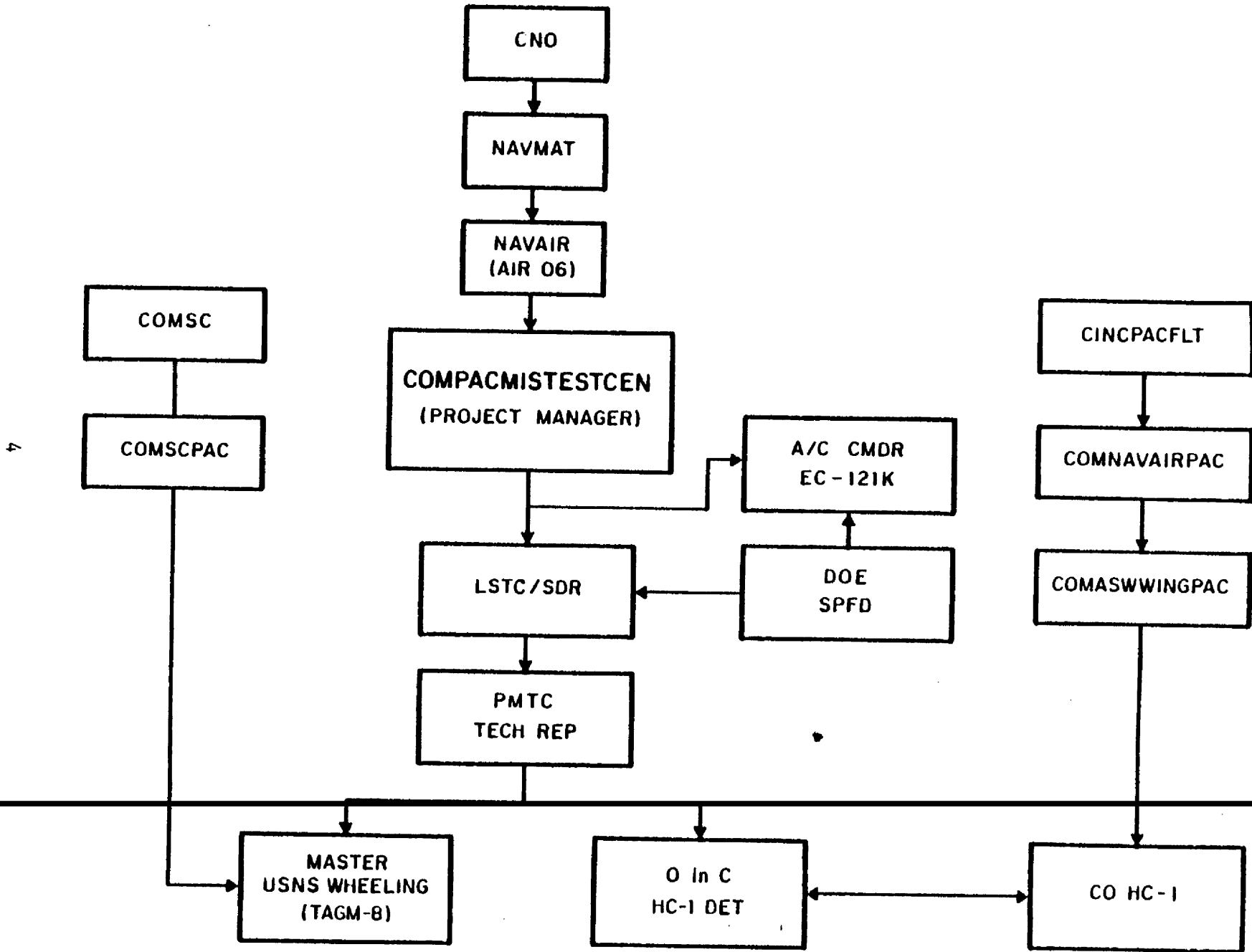


FIGURE 1-1

10

1.2.2 Test Duration and Frequency

The current plan is to limit the USNS WHEELING time on station to seventy-seven days and to limit transit time to fifty-seven days. While on station, a twelve hour working day will be standard. The specific schedule is shown in paragraph 1.4. An overview of the survey follows:

1.2.2.1 Survey Series A

	<u>DAYS</u>
a. Depart Kwajalein enroute Ailingnae Atoll (16 hrs transit)	1
b. Survey Ops Ailingnae Atoll	5
c. Loadout and enroute Bikini (6 hrs transit)	1
d. Survey Ops Bikini Atoll	12
e. Loadout and enroute Wotho Atoll (16 hrs transit)	1
f. Survey Ops Wotho Atoll	4
g. Loadout and enroute Kwajalein for DOE crew change and reprovisioning	1
Sub-Total	25

1.2.2.2 Survey Series B

	<u>DAYS</u>
a. Depart Kwajalein en- route Rongelap Atoll (20 hrs transit)	1
b. Survey Ops Rongelap Atoll	7
c. Loadout and enroute Rongerik Atoll (6 hrs transit)	1

	<u>DAYS</u>
d. Survey Ops Rongerik Atoll	5
e. Loadout and enroute Bikar Atoll (15 hrs transit)	1
f. Survey Ops Bikar Atoll	3
g. Loadout and enroute Utirik Atoll (7 hrs transit)	1
h. Survey Ops Utirik Atoll	4
i. Survey Ops Taka Atoll	2
j. Loadout and enroute Kwajalein for DOE crew change and reprovisioning	1
Sub-Total	26

1.2.2.3 Survey Series C

a. Depart Kwajalein enroute Ailuk Atoll (12 hrs transit)	1
b. Survey Ops Ailuk	6
c. Loadout and enroute Mejit Island (3 hrs transit)	1/2
d. Survey Ops Mejit Island	1
e. Loadout and enroute Jemo Island (6 hrs transit)	1
f. Survey Ops Jemo Island	1
g. Loadout and enroute Likiep Atoll (3 hrs transit)	1/2
h. Survey Ops Likiep Atoll	7
i. Loadout and enroute Ujelang Atoll (2 days transit)	2

	<u>DAYS</u>
j. Survey Ops Ujelang Atoll	5
k. Loadout and enroute Enewetok (16 hrs transit)	1
Sub-Total	26
1.2.2.4 Survey Summary	
a. Series A	25
b. Series B	26
c. Series C	<u>26</u>
Total Survey Days	<u>77</u>

1.3 Program Objectives

The objective of the program is to determine the Radiological parameters of the Northern Marshall Islands.

1.4 Operation Description

Utilizing data gathered from the photographic survey (Phase I), an Aerial Radiological Survey of eleven (11) atolls and two (2) islands will be conducted by means of SH-3G helicopters equipped with DOE-provided radiation detection and recording instrumentation. The helicopters will normally operate from USNS WHEELING (TAGM-8), the base support ship which will, in addition, provide a wide range of logistics support. Flying relatively precise tracks at specified altitudes and air speeds, the data collected will be reduced and result in the radiological documentation and characterization of the eleven (11) atolls and two (2) islands in the Northern Marshalls, for later use as deemed appropriate by DOE and DOI in on-going rehabilitation and resettlement programs. Additionally, the helicopters will be utilized to transport project personnel and equipment (e.g., Backhoe, etc.) to selected atolls to perform the ground portion (collect soil samples, etc.) of the survey.

Operations of USNS WHEELING (TAGM-8) will generally be in accordance with the Memorandum of Agreement between COMPACMLSTESTCEN/COMMSC dated 13 September 1977/20 October 1977 and the Memorandum of Agreement between DOI, DOE and DON dated . Should there be a conflict as a result of conducting operations in accordance with these two source documents, the provisions of the former will apply while clarification and resolution is sought by the Project Manager.

A Boston Whaler, operated by MSC personnel assigned to the USNS WHEELING, will be utilized to transport project personnel within selected lagoons designated by the SPFB to collect additional data including samples of water, plant, and marine life.

Additionally, the DOE may utilize other platforms (i.e., YFU, etc.) to conduct a separate and independent survey. This independent survey will be under the technical and operational control of the DOE/SPFD. The DON has no support responsibilities to this effort.

1.4.1 Operation Schedule

The following schedule will be utilized for planning purposes. Any changes to the schedule will be approved by the LSTC. Phase II: Radiological Survey utilizing USNS WHEELING (TAGM-8) and three (3) SH-3G helicopters:

<u>DATE(S)</u> (1978)	<u>EVENT</u>
10 Apr - 23 May	Phase Up of WHEELING
24 May - 04 Jun	Preparations for overhaul
05 Jun - 03 Aug	Shipyard Overhaul
04 Aug - 06 Sep	Pre-deployment workup; Prepare for overseas movement
07 Aug - 08 Aug	Fuel and provision ship at MSC - PAC NSC, Oakland
09 Aug	Transit San Diego
10 Aug - 11 Aug	Embark helo det men and equipment
11 Aug	Transit Port Hueneme
14 Aug - 16 Aug	Commence COMSURFPAC Readiness Inspection and Training
16 Aug	Helicopter O-in-C chop OPCON to LSTC Helo Fly-On
16 Aug - 01 Sep	Flight Training - Pilot Qual
21 Aug - 31 Aug	Embark DOE Equipment and Supplies
02 Sep - 05 Sep	Labor Day - Holiday

<u>DATE(S)</u> (1978)	<u>EVENT</u>
06 Sep	Ship prepare for departure
07 Sep	Deploy from Port Hueneme; enroute Pearl
12 Sep	Arrive Pearl; Logistics
14 Sep	Depart Pearl; enroute Kwajalein
20 Sep	Arrive Kwajalein; Logistics; Disembark 1 SH-3G and 10-man HC-1 Det; Embark DOE Survey Party; Equipment Checkout
22 Sep	Depart Kwajalein for Survey Series A; 25 Days
16 Oct	Arrive Kwajalein; Disembark DOE Survey Party
16 Oct	Depart Kwajalein enroute Guam
23 Oct	Arrive Guam; refuel and reprovizion
25 Oct	Depart Guam; enroute Kwajalein
31 Oct	Arrive Kwajalein; Embark DOE Survey Party
31 Oct	Depart Kwajalein for Survey Series B; 26 Days
26 Nov	Arrive Kwajalein; Disembark DOE Survey Party
26 Nov	Depart Kwajalein; enroute Guam
02 Dec	Arrive Guam; refuel and reprovizion
04 Dec	Depart Guam; enroute Kwajalein
10 Dec	Depart Kwajalein for Survey Series C; 26 Days
<u>1979</u>	
05 Jan	Arrive Kwajalein; Disembark DOE Survey Party

<u>DATE(S)</u> 1979	EVENT
05 Jan	Depart Kwajalein; enroute Pearl
11 Jan	Arrive Pearl; Logistics
12 Jan	Depart Pearl; enroute Port Hueneme
18 Jan	Arrive Port Hueneme; Commence Phase-down
02 Feb	WHEELING returned to ROS

1.4.2 Operation Area

The operation area is shown in figures 1-2, 1-3, 1-4, and 1-5.

1.5 Range Users Instrumentation

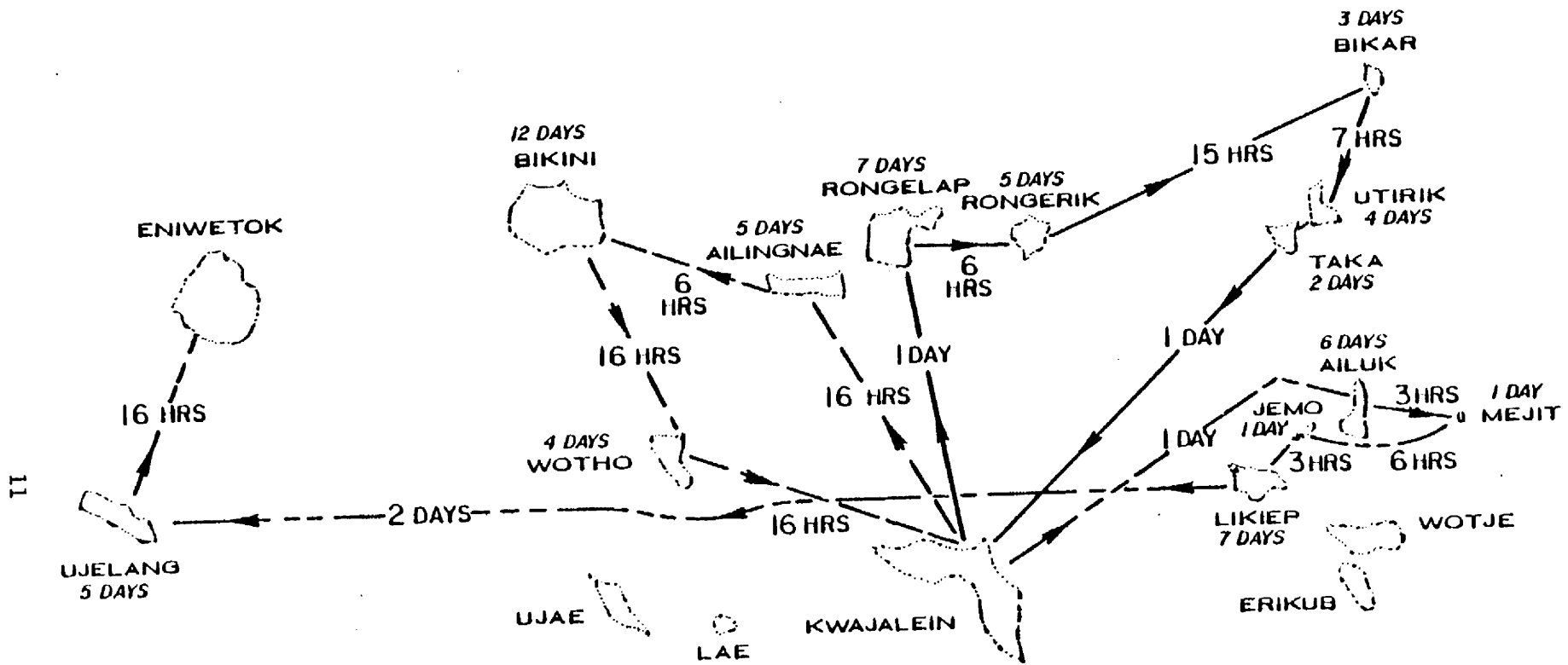
The DOE will provide all instrumentation required to conduct Phase II of the survey, including the airborne instrumentation pods to be carried aboard the helicopters.

1.6 Special Instructions

The personnel embarking in the USNS WHEELING will provide to Commander, PACMISTESTCEN, Code 3201, the following information.

- a. Name and address
- b. Employing Agency
- c. Rank/grade/title/SSN
- d. Security Clearance
- e. Name and address of next of kin

ATOLLS CONTAMINATED BY FALLOUT



NOTES: DAYS AT EACH ATOLL
INCLUDE SET-UP, PACKING, ETC.

-----	1st SERIES OF ATOLLS	23 DAYS
-----	2nd SERIES OF ATOLLS	26 DAYS
-----	3rd SERIES OF ATOLLS	26 DAYS
		<u>77 DAYS</u> INCLUDES TRAVEL

Figure 1-2

ATOLLS CONTAMINATED BY FALLOUT

FIRST SERIES OF ATOLLS 25 DAYS

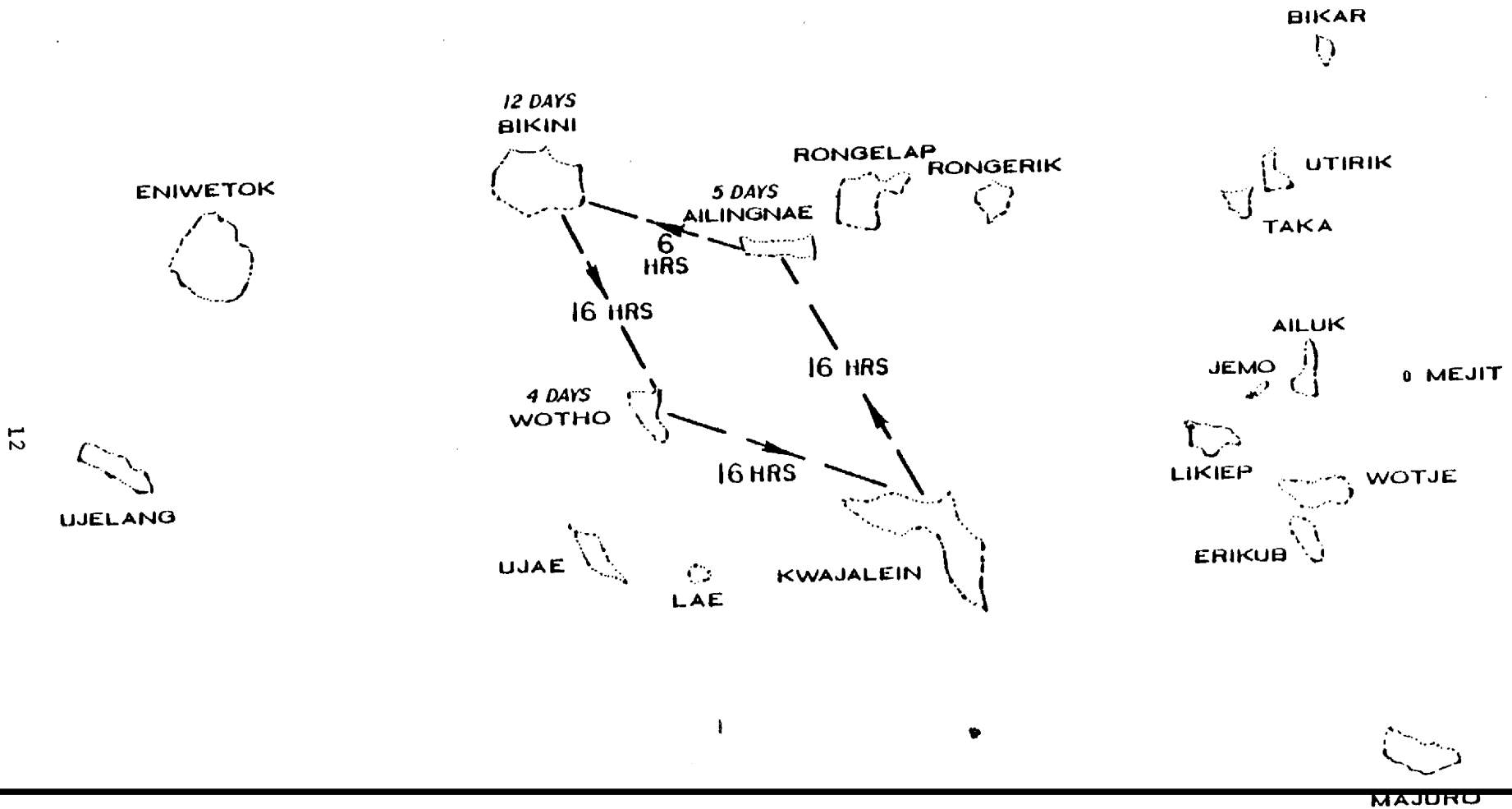


Figure 1-3

ATOLLS CONTAMINATED BY FALLOUT

SECOND SERIES OF ATOLLS 26 DAYS

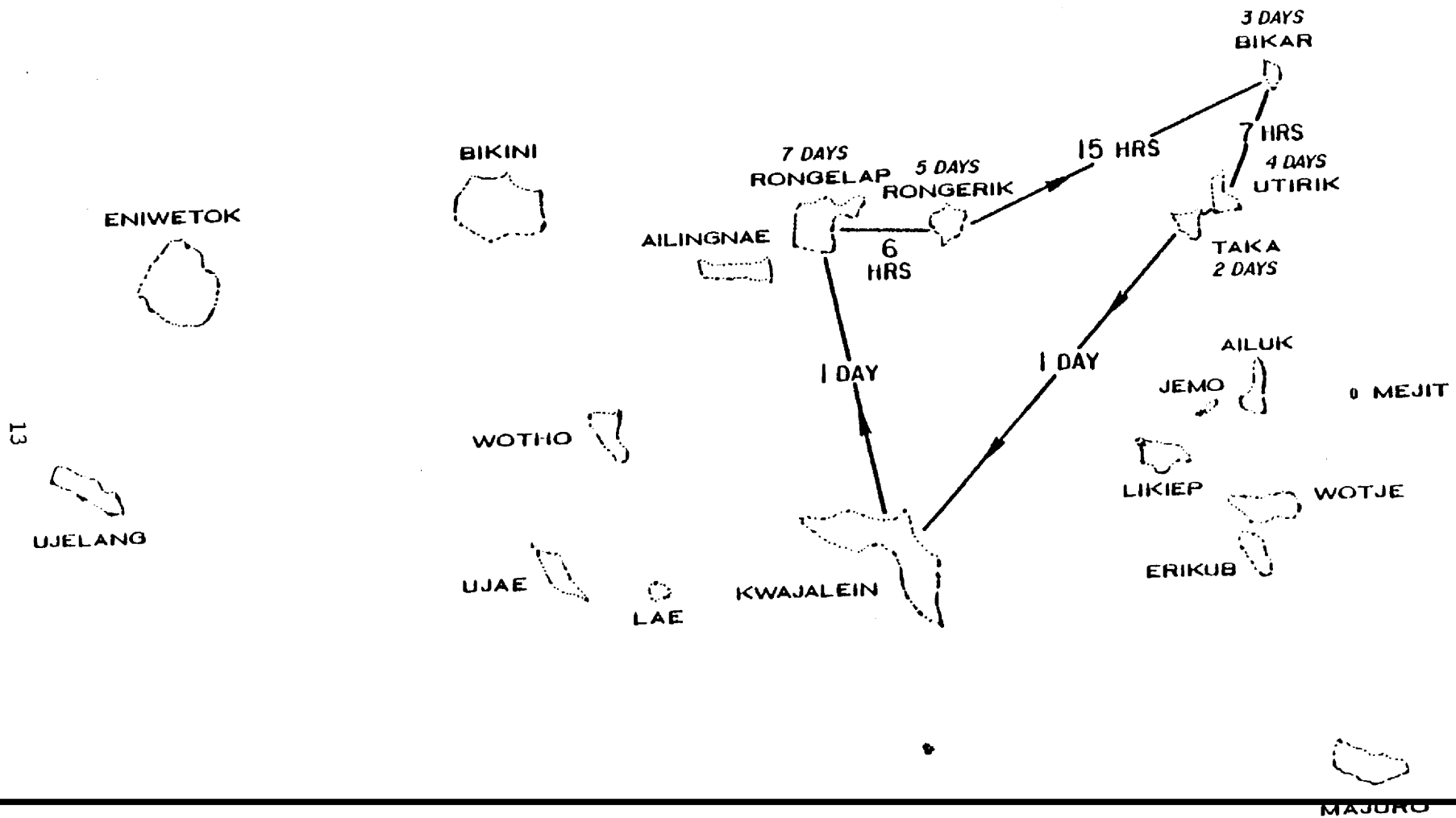


Figure 1-4

ATOLLS CONTAMINATED BY FALLOUT

THIRD SERIES OF ATOLLS 26 DAYS

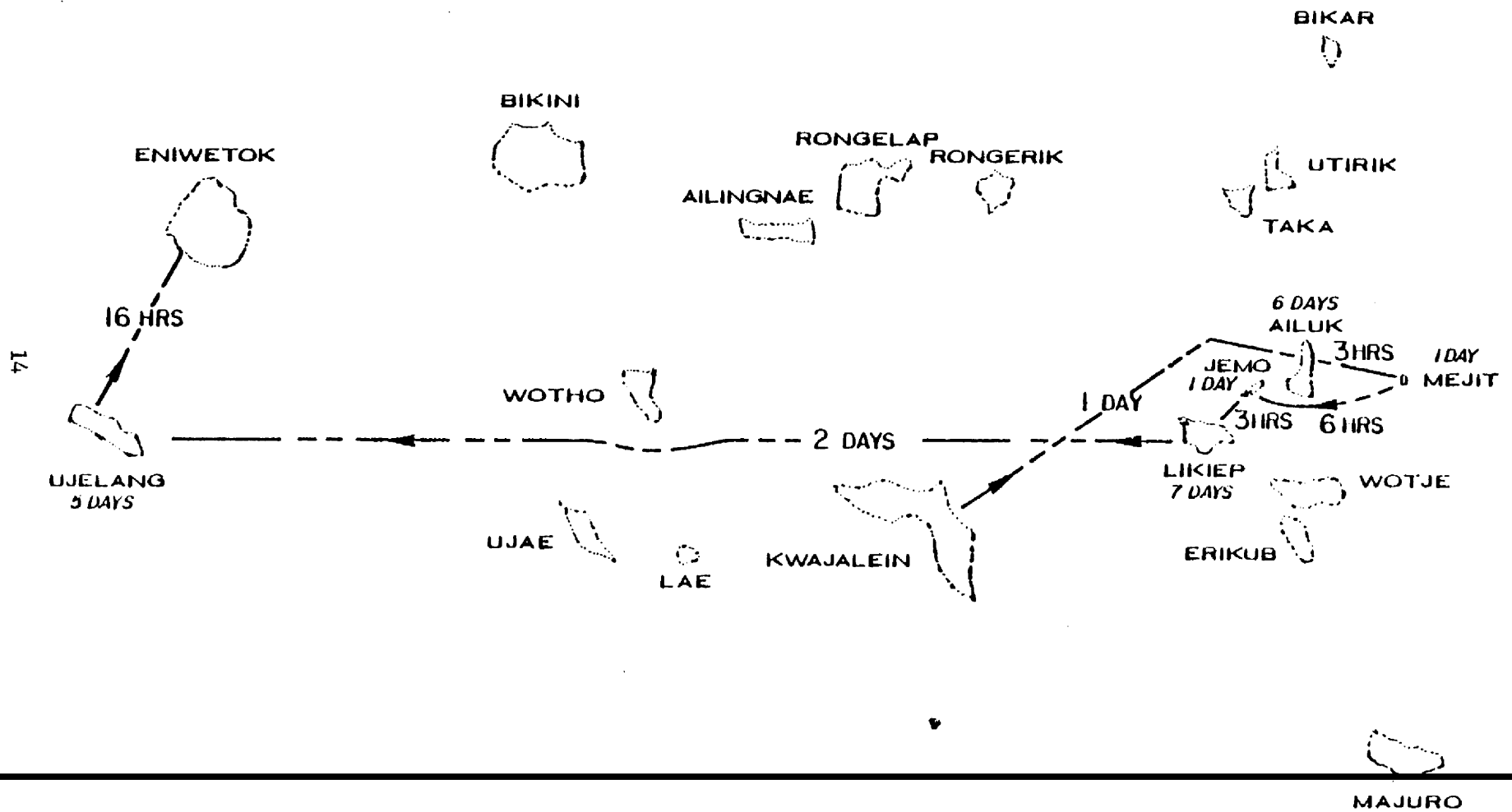


Figure 1-5

2.0 DATA INSTRUMENTATION - NR

3.0 METEOROLOGICAL

3.1 There is an HF Facsimile Recorder aboard the USNS WHEELING. Readouts are taken of Fleet Weather Broadcasts and will be provided upon request.

4.0 COMMUNICATIONS SUPPORT

4.1 Communications Plan - See Figure 4-1.

4.1.1 Communication Circuits

a. Circuits 1 and 2. UHF 273.7 MHZ and 289.8 MHZ primary and secondary voice communications helicopter/ship.

b. Circuits 3 and 4. HF-SSB AUTODIN Secure administrative teletype, and voice HI-COMM frequency assigned to ship by NAVCOMSTA.

c. Circuit 5*. HF-SSB voice to provide necessary voice coordination and phonepatch capability. Frequencies are:

- (1) H5A - 4736.5 KHZ (4735 KHZ)
- (2) H52A - 15078.5 KHZ (15077 KHZ)
- (3) H150A - 6747.5 MHZ (6746 KHZ)
- (4) H181A - 11210.5 MHZ (11209 KHZ)

Frequencies in paratheses is suppressed carrier.

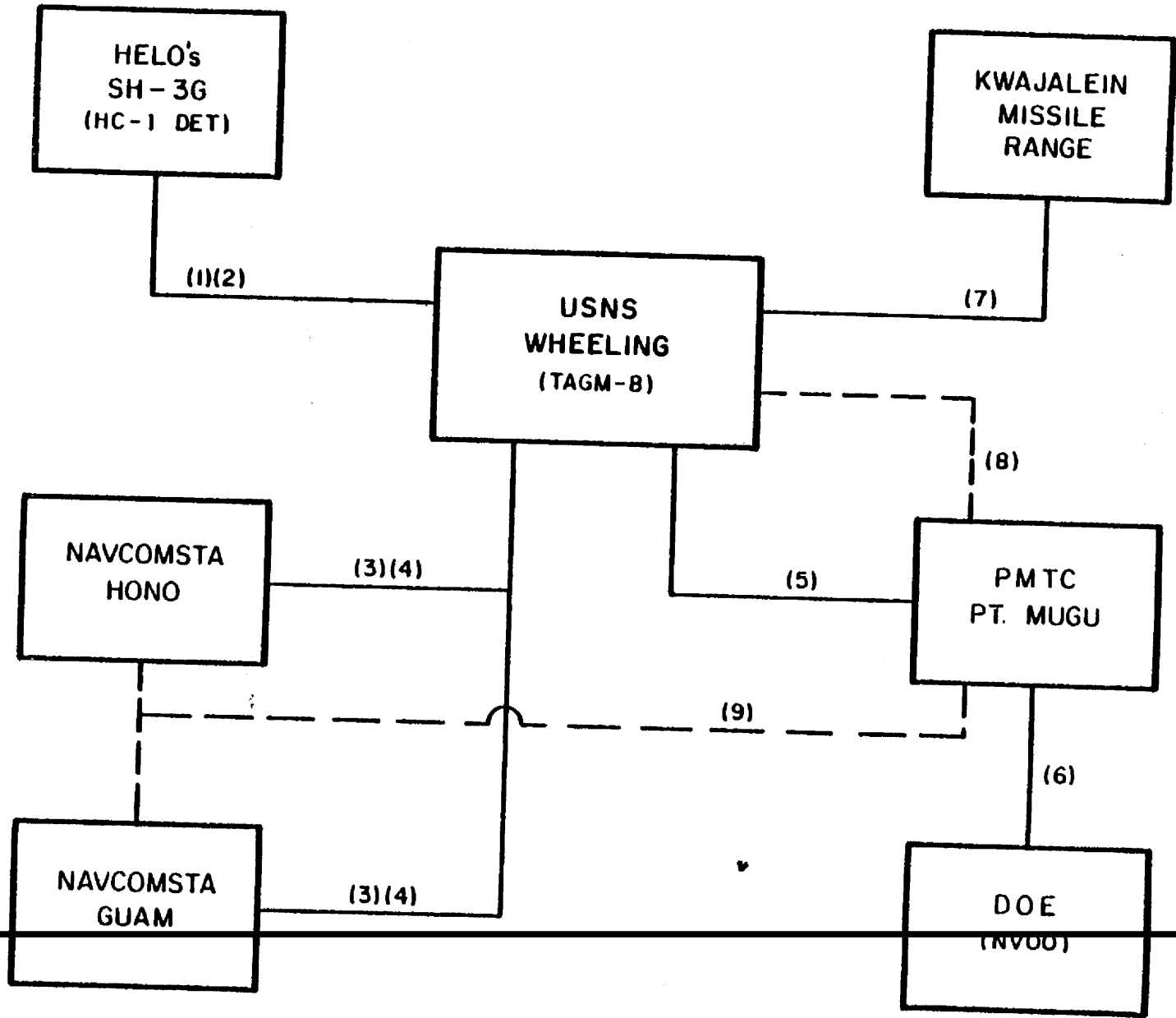
d. Circuit 6. Teletype land line.

e. Circuit 7. HF-SSB voice to Kwajalein Missile Range for voice coordination and communications with the Kwajalein Detachment of HC-1.

f. Circuit 8. Circuit 8 is the primary PACMISTESTCEN Range Control HF/SSB and is continuously monitored by PLEAD CONTROL. Frequencies are 5081.5 KHZ (5080 KHZ) and 3238.5 KHZ (3237 KHZ).

g. Circuit 9. Defense Communication Agency Circuits.

*Procedures to obtain phone patch are available from the PACMISTESTCEN Technical Representative embarked, or PACMISTESTCEN Range Operations Technical Control (805) 982-7710 (1600Z-0100Z) or Range Operations Surveillance Center (805) 982-7315 (0100Z-1600Z).



Numbers in parentheses denote circuit numbers

Figure 4.1

4.2 Call Signs

The following call signs will be used:

- PLEAD 11.
- a. PACMISTESTCEN Communications Technical Control -
 - b. PACMISTESTCEN Range Operations - PLEAD ALPHA.
 - c. PACMISTESTCEN Range Control - PLEAD CONTROL.
 - d. USNS WHEELING - ROUNDUP HOTEL.
 - e. Kwajalein Range Operations - OUTLAW KILO.
 - f. Landing Signal Officer - TBA.
 - g. Helicopter One - TBA.
 - h. Helicopter Two - TBA.

4.3 Communications Recordings

UHF/HF-SSB air-to-ground circuits will be recorded versus IRIG C timing on magnetic tape for all flight operations.

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5.0 MATERIAL AND SERVICES

5.1 Supporting services, supply support, modification, alteration and repair for embarked helicopters shall be as defined by the parent helicopter squadron commander. Emergency supply support may be requested through the LSTC.

5.2 Storage space for containers used to store radioactive materials will be provided. DOE will provide all containers and will be responsible for safeguarding and disposing of all radioactive containers/materials upon completion of the survey.

6.0 TRANSPORTATION

6.1 The DOE will be responsible for arranging/providing transportation for DOE and DOE contractor personnel.

6.2 Transportation requirements for PACMISTESTCEN and HC-1 personnel will be satisfied in accordance with existing instructions.

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7.0 RECOVERY - NA

8.0 AIR AND SEACRAFT

8.1 Non-Range Aircraft

Helicopter Support Squadron 1 (HC-1) will provide three (3) SH-3G helicopters, including flight/maintenance personnel and supplies, to satisfy the helicopter requirement for Phase II of the survey.

8.2 Seacraft

The USNS WHEELING (TAGM-8) will be utilized as the base support ship as defined in the Memorandum of Agreement.

The Boston Whaler from the USNS WHEELING will be utilized as detailed in paragraph 1.4.

9.0 DATA DISTRIBUTION - NA

10.0 FACILITIES - NA

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