

HOLMES & NARVER, INC.
ENGINEERS - CONSTRUCTORS.
JOB 942

405719

R

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION YOSH SITE Yvonne
CHIEF OF PARTY Dalton Runit Island
DESCRIBED BY M.P.C. MARKED BY Dalton Eniwetok Atoll
FIELD BOOK NO 349 PAGE 17 DATE 20 Febr. 1959 Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE FEET	DIRECTION METERS	
No reference marks set			

ELEVATION OF MARK 13.42

DETAILED DESCRIPTION OF STATION

The station mark is a flat brass plate, 2 inches by 2 1/2 inches, brazed on a 3/4 inch brass bolt. The bolt is grouted in a hole drilled in the concrete roof of Hardtack Station 1612 and the brass plate is flush with the surrounding concrete.

A 20 ft. wooden observation tower is presently in place. The observing stand is 20.04 ft. above the station mark (elevation 33.46).

See page 2 of this description for location details.

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REPOSITORY NATIONAL ARCHIVES
PACIFIC SOUTHWEST REGION

COLLECTION RG 326 ATOMIC ENERGY COMMISSION

BOX No. 199679 (#1089) A16429 326-65AG170
ENIWETOK 1959

FOLDER HORIZONTAL CONTROL HOLMES & NARVER

JIS NO. 6 82-4

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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION AITSU SITE Olive
ESTABLISHED BY H & N YEAR: 1952 Aitsu Island
RECOVERED BY F. A. Axtell YEAR: 1958 Eniwetok Atoll
FIELD BOOK NO: 342 PAGE: 28 DATE: 9/9/58 Marshall Islands

OBJECT	DISTANCES		DIRECTION	ELEVATION
	FEET	METERS		
Aitsu				10.05
Coral	----		00-00-00	----
R.M. #1	50.00		103-48-32	9.37
R.M. #2	100.02		103-48-32	9.31

BRIEF HISTORY OF STATION.

This station was established as a third order station in the control net in the Holmes & Narver 1952 Control Expansion Survey.

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM ANTON SINISCALLO TO
DEARS S. NIXON

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is an aluminum pipe capped with an aluminum cap 2" in diameter, stamped "Aitsu - H & N." It is set in concrete 4" below the ground surface.

R.M. #1 is in good condition. It is an aluminum pipe cap 2" in diameter stamped "50-RP-Aitsu." It is set in concrete 6" below the ground surface.

R.M. #2 is in good condition. It is an aluminum pipe cap 2" in diameter stamped "RM 2-Aitsu-H & N-1952." It is set in concrete 6" below the ground surface.

Both reference marks are badly corroded, but still identifiable.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
186	14	10/13/52
227	14	4/22/54

PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

STATION Aitsu

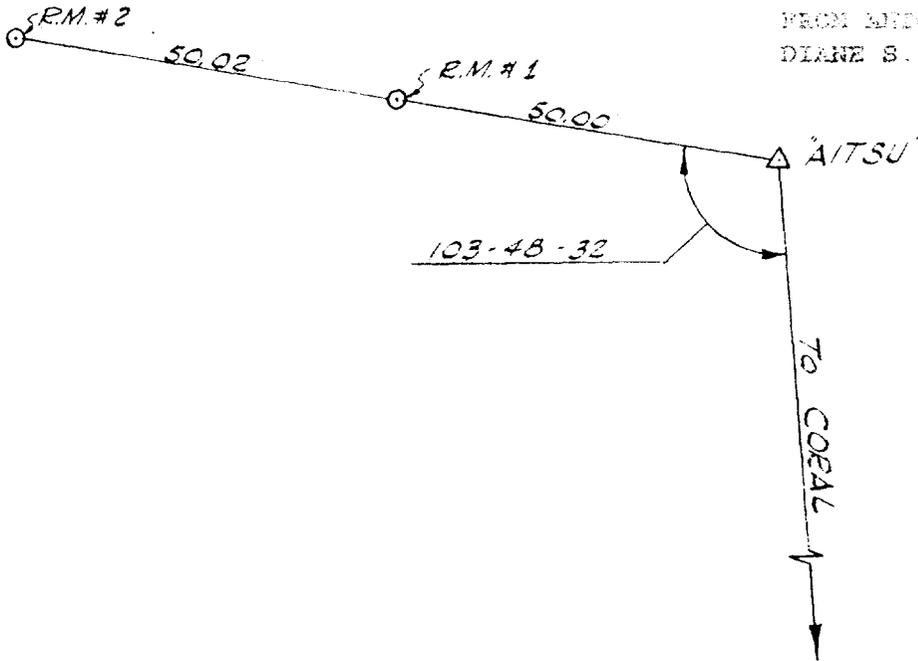
SITE Olive, Aitsu Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

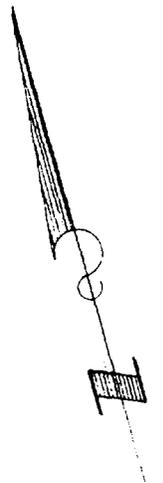
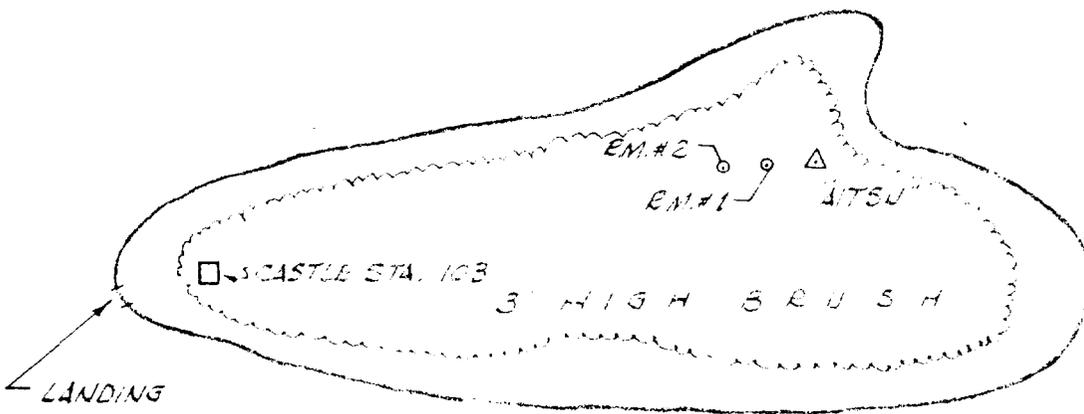
References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
296	8&9	1/8/57
342	28	9/9/58

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM MICHAEL SENEGALLI TO
DIANE S. NIXON



LOCATION SKETCH.



L A G C O N

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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION:	ALICE	SITE	Alice
ESTABLISHED BY:	H & N	YEAR	1955
RECOVERED BY:		YEAR	1958
FIELD BOOK NO:	PAGE:	DATE:	Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE		
	FEET	METERS	
Alice			39.14
R.M. #1	18.455		
R.M. #2	18.615		

BRIEF HISTORY OF STATION:

This station was established as a second order station in the 1955 Holmes & Narver Replacement and Expansion Survey.

RECLASSIFIED PER DOE
EXEMPT DATED JULY, 15, 1994
FROM EXECUTIVE ORDER 12065 TO
DECLASSIFY INFORMATION

DETAILED DESCRIPTION OF STATION:

This station was not recovered. Due to its isolated and protected location it is assumed to be undisturbed. The station mark is a lead and tack at the approximate working point of Ivy station 300, a 3 story concrete building. It is located 5 feet back from the forward edge of the station on the center axis of the station on the highest portion of the station roof.

Reference Marks #1 and #2 are lead and tacks at the two rear corners of the highest portion of the station roof.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
252	2	6/13/55

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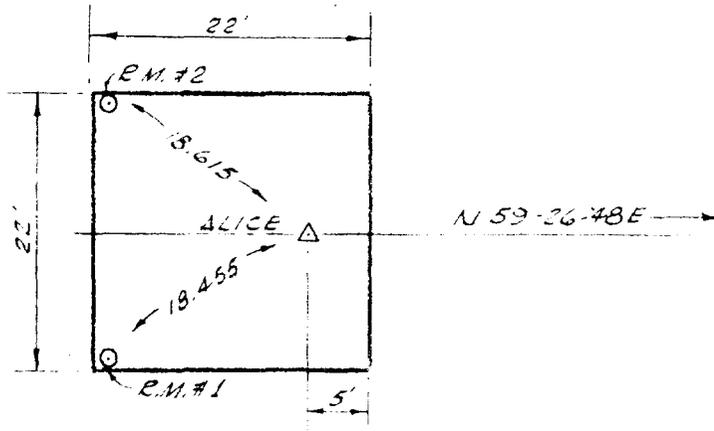
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PAGE 2 - RECOVERY NOTE - TRIANGULATION STATION

STATION ALICE SITE Alice, Bogallua Island, Eniwetok Atoll, M.I.

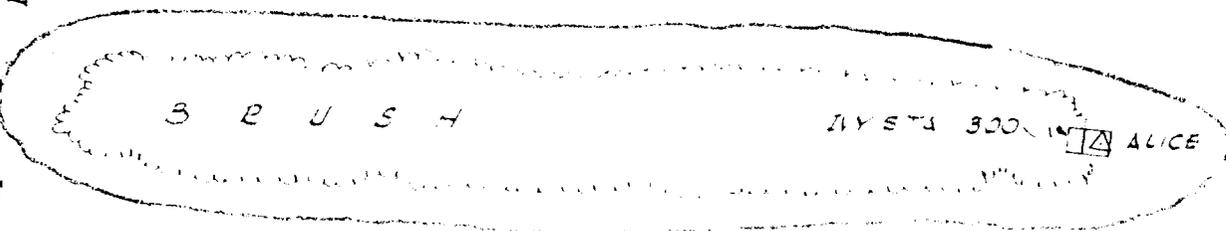
DETAILED DESCRIPTION OF STATION (CONT'D)

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM ANTON SINIGALLI TO
DEANE S. NIXON



ROOF PLAN
IVY STA. 300

LOCATION SKETCH:



NO BOAT LANDING
DUMPS & TRACKED EQUIP. ONLY

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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION	Aster (Kirinian)	SITE	Lucy
ESTABLISHED BY	USN	YEAR	1944
RECOVERED BY	F. A. Axtell	YEAR	1958
FIELD BOOK NO.	344	PAGE	3
		DATE	9/10/58
			Kirinian Island
			Eniwetok Atoll
			Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE		
	FEET	METERS	
Aster			8.60
Alice	---	---	00-00-00
R.M. #1	52.28		48-18-10
R.M. #2	102.69		48-18-10

BRIEF HISTORY OF STATION:

This station was a primary station in the USS Bowditch Survey, 1944. It shown on US Navy Hydrographic Office Chart 6033 as Beacon "M". It was a secondary station in the Holmes & Narver 1949-50 Survey. It was a third order station in the Holmes & Narver 1952 Control Expansion Survey and was called "Kirinian" to designate the island it is located upon.

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM JOHN STRICKLAND TO
OFFICE OF RECORD

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard embossed USN Survey disc, 2" in diameter. It is set in an 8"x8" concrete post 6" above the ground surface.

R.M. #1 is in good condition. It is a standard Holmes & Narver 2-5/8" embossed brass disc, unmarked except for a punch mark. It is set in concrete 6" below the ground surface.

R.M. #2 is in good condition. It is a standard Holmes & Narver 2-5/8" embossed brass disc, unmarked except for a punch mark. It is set in concrete 8" below the ground surface.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
37	7	4/12/50

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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

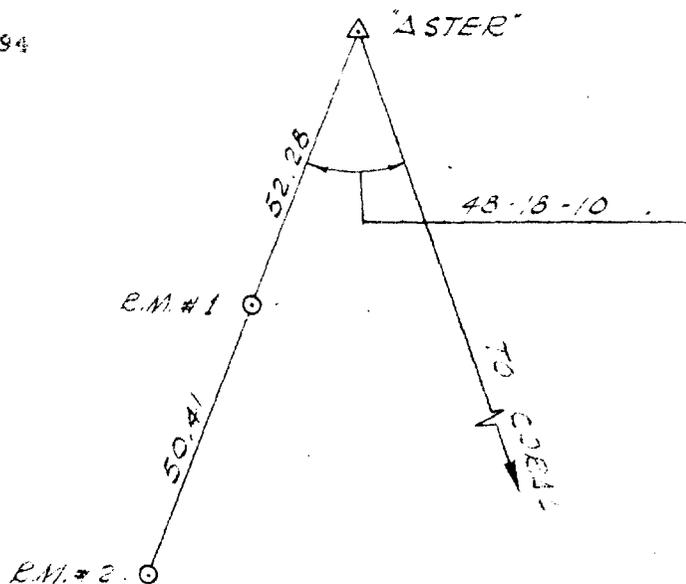
STATION: Aster (Kirinian) SITE: Lucy, Kirinian Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

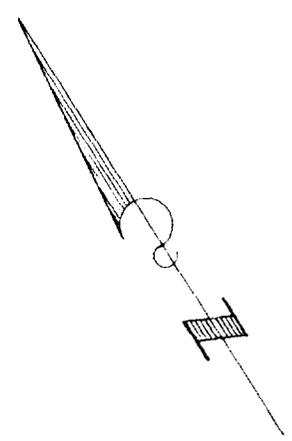
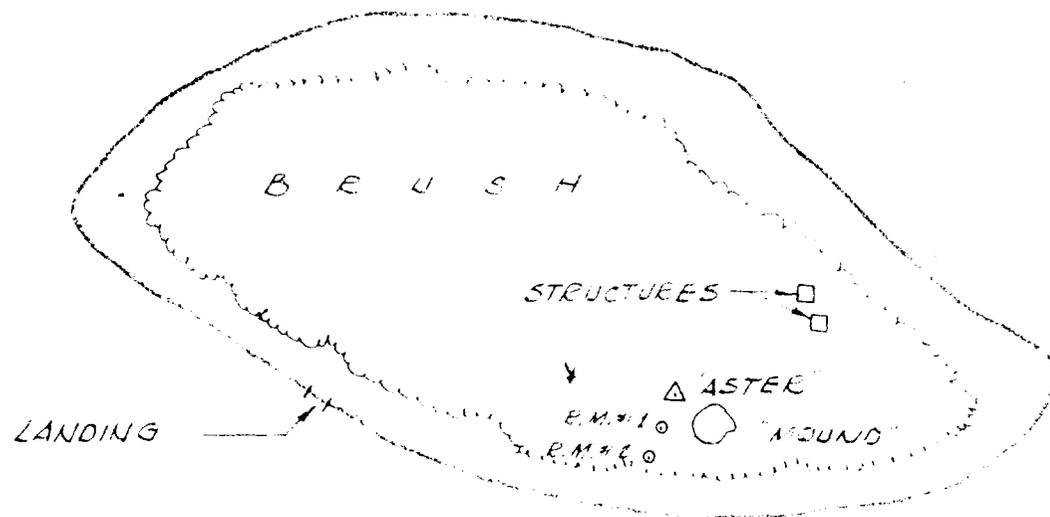
References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
142	2	6/14/51
230	3	5/8/54
296	14-16	1/10/56
344	3	9/10/58

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM DAVID BERTISCALLI TO
DILNE S. NIXON



LOCATION SKETCH:



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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION.	BOKON	SITE	Mary
ESTABLISHED BY:	H & N	YEAR:	1949
RECOVERED BY:	F. A. Axtell	YEAR:	1958
FIELD BOOK NO:	342	PAGE:	30
		DATE:	9/9/58
			Bokonaarappu Island
			Eniwetok Atoll
			Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE	DIRECTION	
	FEET	METERS	
Bokon			10.40
Coral	---		---
R.M. #1	50.02		9.75
R.M. #3	80.17		9.32
		00-00-00	
		144-26-02	
		239-55-35	

BRIEF HISTORY OF STATION:

This station has been a second order station in the following surveys:

Holmes & Narver 1949-50; Holmes & Narver 1952 Expansion.

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM EMMON SEMIGSALLI TO
DIANE S. NIXON

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard Holmes & Narver embossed brass disc 2-58" in diameter. It is stamped "Bokon". It is set in concrete flush with the ground surface.

R.M. #1 is in good condition. It is a standard embossed holmes & Narver disc, 2-58" in diameter. It is stamped RP 1 with a crossed arrow pointing toward the station mark. It is set in concrete flush with the ground surface.

R.M. #3 is in good condition. It is a cross chiseled in the center of the top of a concrete anchor block of Greenhouse Tower station 60.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
31	2	3/19/50
31	6	3/19/50
133	16	6/25/51

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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

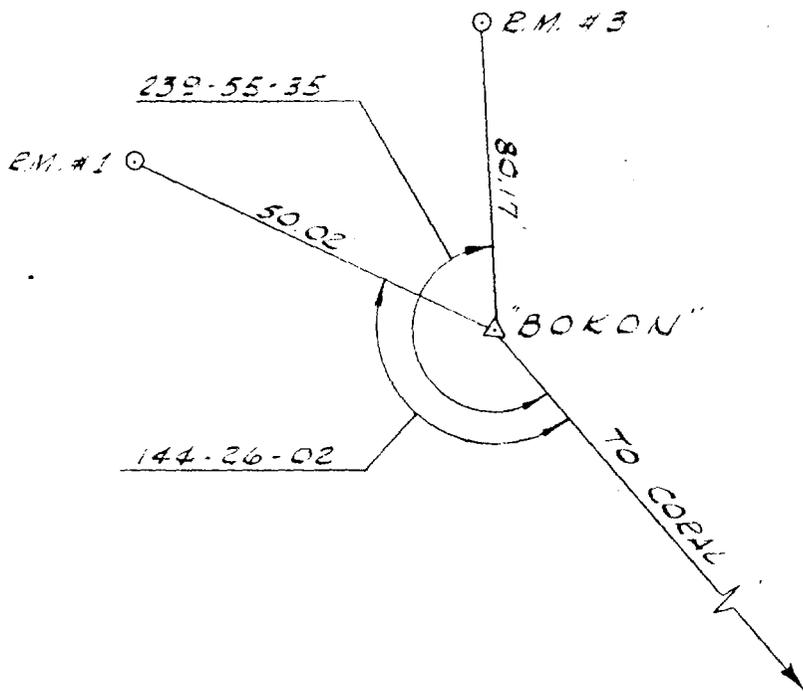
STATION. Bokon

SITE. Mary, Bokonaarappu Is, Eniwetok Atoll, M.I.

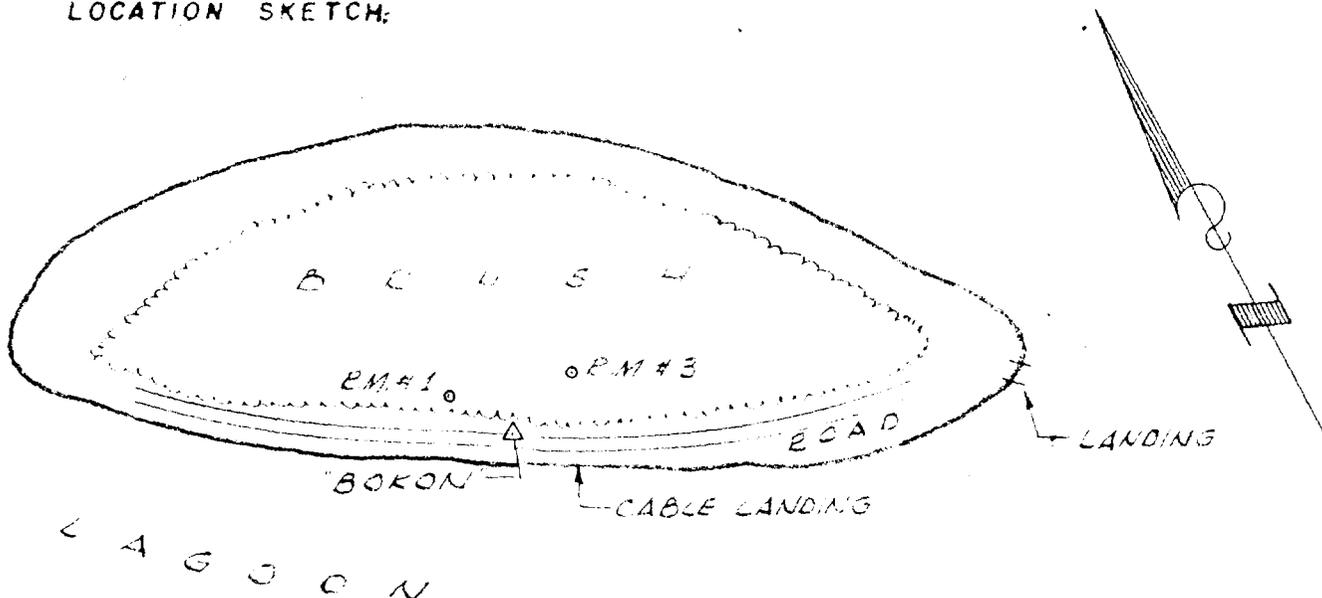
DETAILED DESCRIPTION OF STATION (CONT'D)

References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
230	21	6/3/54
296	10-11	1/8/57
342	30	9/9/58



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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION CORAL SITE OSCAR
ESTABLISHED BY JTF-7 YEAR 1947-48 Coral Head
RECOVERED BY F. A. Axtell YEAR 1958 Eniwetok Atoll
FIELD BOOK NO. 344 PAGE 8 DATE 9/12/58 Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE	DIRECTION	
	FEET	METERS	
Coral			10.20
Photo	----	----	00-00-00
R.M. #1	93.31	----	260-23-33
			5.04

BRIEF HISTORY OF STATION:

This station was established by JTF-7 on the same coral head where the USN 1944 intersection station "Reef" was located. It has been a primary station in all subsequent surveys and is the origin of coordinates (N100,000; E100,000) for the "Ivy" grid. There is a 20 foot high square steel tower permanently mounted over this station.

1959 - MON. TO OBS. STAND 27.37; OBS. STAND ELEV 32.57

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard USC & GS brass disc 3" in diameter stamped "Coral". It is set in concrete 14" below the surface of the surrounding concrete.

R.M. #1 is in good condition. It is a lead and tack in the small coral head 90' southeast of the main station structure. A piece of angle iron is imbedded in the coral head directly behind the RM on the Coral-RM #1 line.

References:

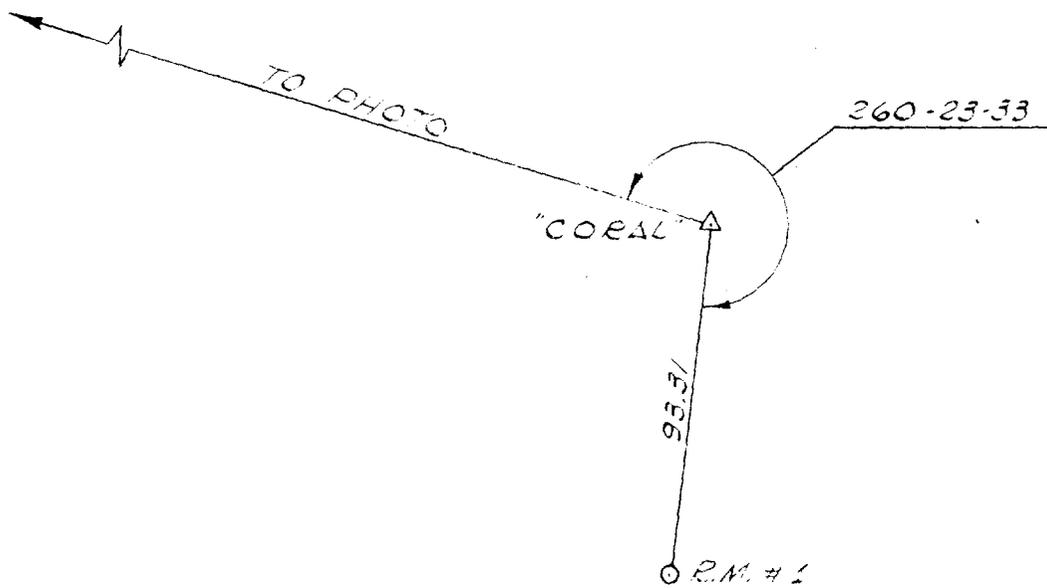
<u>Field Books</u>	<u>Page</u>	<u>Date</u>
162	3	4/3/52
229	3&4	6/20/54
280	6	3/12/56
280	15&16	8/1/56
289	30	1/31/57
344	8	9/12/58

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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

STATION Coral SITE: Oscar, Coral Head, Eniwetok Lagoon, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)



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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION	ELGIN (ENGEBI)	SITE	JANET
ESTABLISHED BY	JTF-7	YEAR	1946
RECOVERED BY	F.A. AXTELL	YEAR	1958
FIELD BOOK NO	344	PAGE	7 & 9
	346	DATE	1958
			2
			1958

ENGEBI ISLAND
ENIWETOK ATOLL
MARSHALL ISLANDS

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE	DIRECTION	
	FEET	METERS	
ELGIN			7.17'
CORAL		00-00-00	
RM #1	58.70	45-03-40	9.46'
PI #1	154.95	60-40-58.3	9.70'
RM #2	50.02	105-42-22.5	8.74'

BRIEF HISTORY OF STATION.

This station was established by JTF-7 in 1946 as one end of the timing line. It has been a primary station in the following surveys: Holmes & Narver, 1949-50; Holmes and Narver Control Expansion, 1952; Holmes and Narver Supplemental, 1955; Holmes and Narver Replacement, 1957. It has been called ENGEBI to designate the island it is located upon.

RECLASSIFIED FOR DOE
AUTHORITY DERIVED JULY, 15, 1994
FROM ISROD (CONVISOR) TO
CDR G. S. JAMES

DETAILED DESCRIPTION OF STATION.

The surface station mark has been destroyed by erosion. A standard USC & GS sub-surface mark, 30" below the ground surface was recovered in good condition while preparing to replace the surface mark.

The station mark is a standard USC & GS brass disc, 3-1/2" in diameter, stamped "ELGIN". The station mark is a crossed arrow. The disc is set in concrete 30" below the ground surface.

RM #1 is in good condition. It is a standard Holmes and Narver, 2-5/8" in dia., embossed brass disc unmarked except for a punch mark. It is set in concrete 6" below the ground surface.

RM #2 is in good condition. It is a standard Holmes and Narver, 2-5/8" dia., embossed brass disc marked only with an arrow pointing toward the station. It is set in concrete 18" below the ground surface.

PI #1 is in good condition. It is a spike embeded in a concrete block with the point protruding 1/2". The spike is rusty, but still is identifiable.

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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

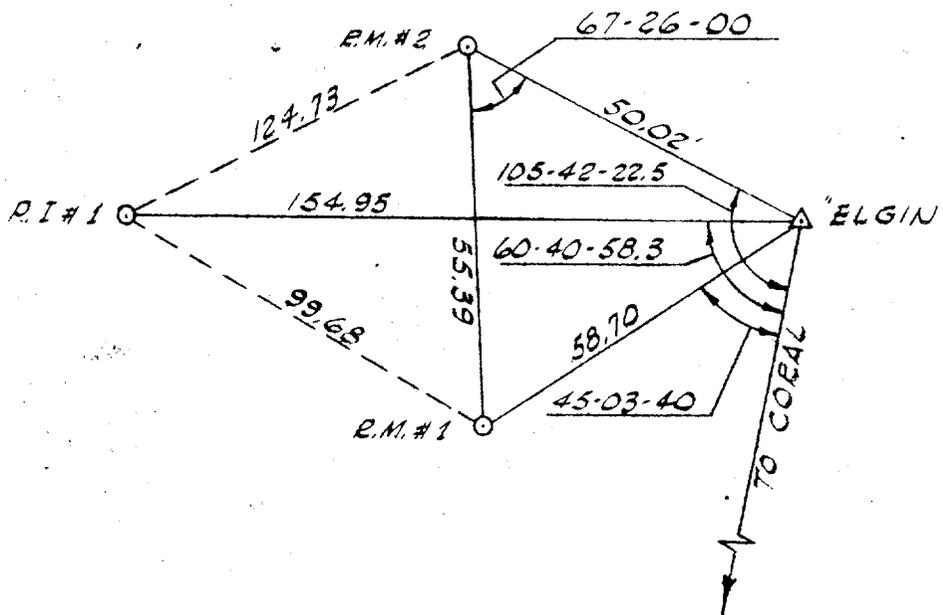
STATION ELGIN (ENGEBI) SITE JANET-ENGEBI ISLAND-ENIENETOK ATOLL-M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

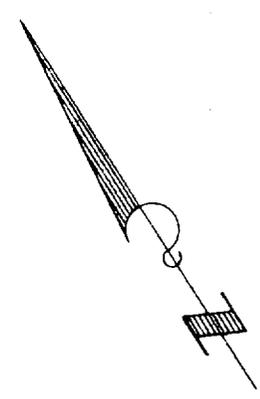
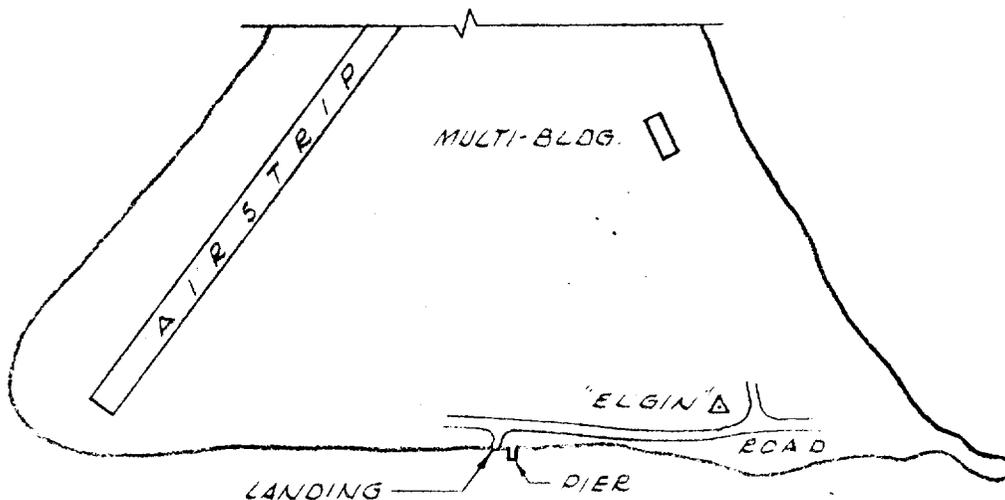
DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM AMEMB WASHINGTON TO
USNSA S. WASHINGTON

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
120	6	3- 9-51
248	29	6-11-55
296	23-25	1-14-57
344	7&9	9-13-58
346	2	10- 8-58



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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION: HENRY SITE: HENRY
ESTABLISHED BY: H & N YEAR: 1957 Mui Island
RECOVERED BY: F. A. Axtell YEAR: 1958 Eniwetok Atoll
FIELD BOOK NO: 344 PAGE: 12-13 DATE: 9/18/58 Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE	DIRECTION	
	FEET	METERS	
Henry			6.54
Rigil1 #2			----
R.M. #1	50.15		240-19-30 6.33
R.M. #2	99.79		240-19-30 6.65

BRIEF HISTORY OF STATION:

This station was established as a third order triangulation station in the Atoll Control Net by the Holmes & Narver 1957 Expansion Survey.

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard H & N brass cap stamped "Henry - H & N - 1957." It is set in concrete 1 ft below the ground surface. A 50 foot steel bilby tower in good condition is erected over this station.

P.I.'s #1 & 9 were destroyed during Operation Hardtack.

R.M. #1 & R.M. #2 were set as a part of this recovery. They are standard H & N brass discs stamped "RM 1(2) - H & N - '58." They are set in concrete 1 foot below the ground surface.

References:

<u>Field Books</u>	<u>Page</u>	<u>Date</u>
344	12-13	9/18/58

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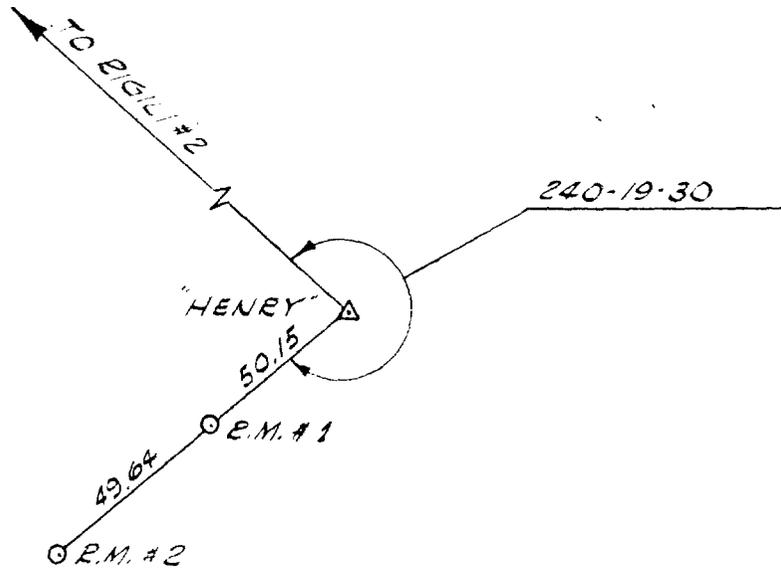
PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

STATION: HENRY

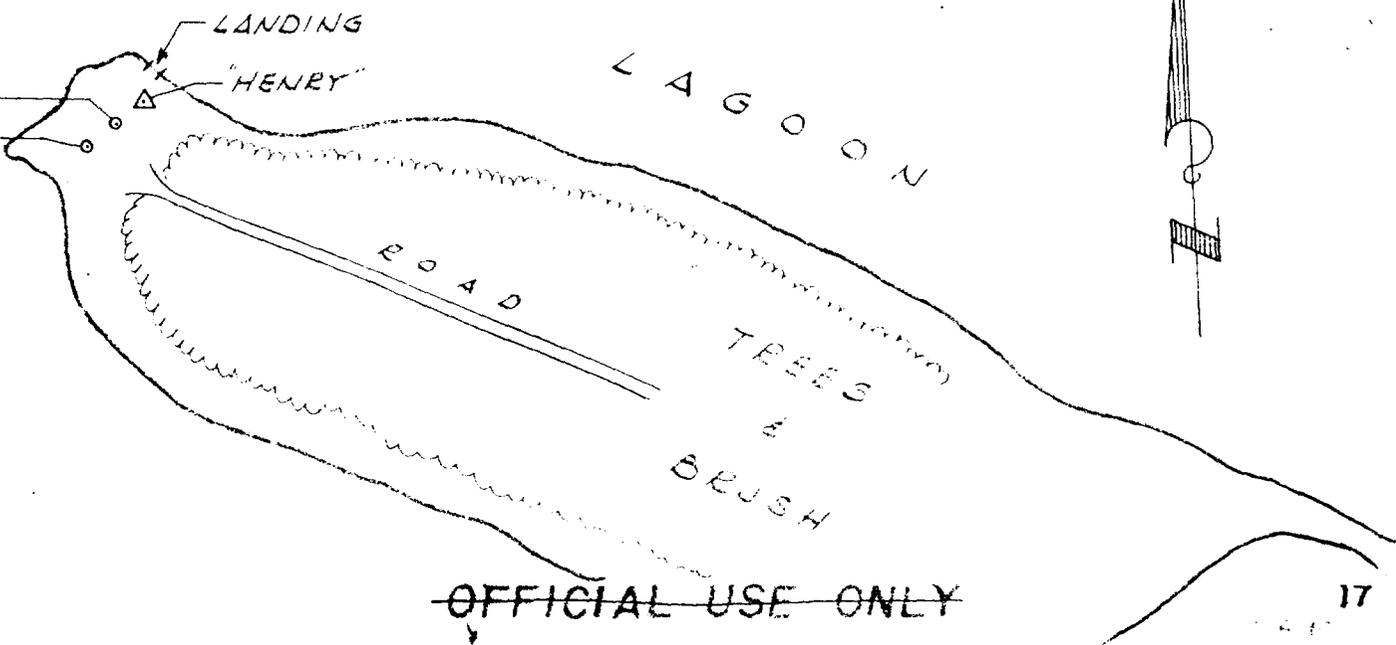
SITE: Henry, Mui Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM ANTON CINIAGALLI TO
DORNE S. NIXON



LOCATION SKETCH



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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION: ISLET SITE SAM
ESTABLISHED BY: H & N YEAR: 1949 1st Sand Spit So of Runit
RECOVERED BY: F. A. Axtell YEAR: 1958 Eniwetok Atoll
FIELD BOOK NO: 342 PAGE: 24 DATE: 9/5/58 Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE		MARKS
	DISTANCE	DIRECTION	
	FEET	METERS	
Islet			11.09
Coral			-----
R.M. #1	82.44		148-19-48 6.47
R.M. #2	119.01		193-20-22 5.69

BRIEF HISTORY OF STATION:

This station was a part of the following surveys: Holmes & Narver, 1949-50; Holmes & Narver Expansion, 1952.

EMBOSSED PER DOE
DATE RECOVERED JULY, 15, 1994
FROM AMSON SEMISCHALL TO
VANCE S. NIXON

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard embossed Holmes & Narver brass disc 2-58" in diameter stamped only with the station mark. It is set in concrete 1 foot above the ground surface.

R.M. #1 is in good condition. It is a tack driven into a triangular lead plug driven into a hole in a prominent coral ledge on the ocean reef, directly opposite the station.

R.M. #2 is in good condition. It is a transit tack driven into a circular lead plug driven into a hole in the ocean reef opposite the south end of the sand spit.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
165	30	4/19/52
230	9	5/12/54

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PAGE 2 - RECOVERY NOTE - TRIANGULATION STATION

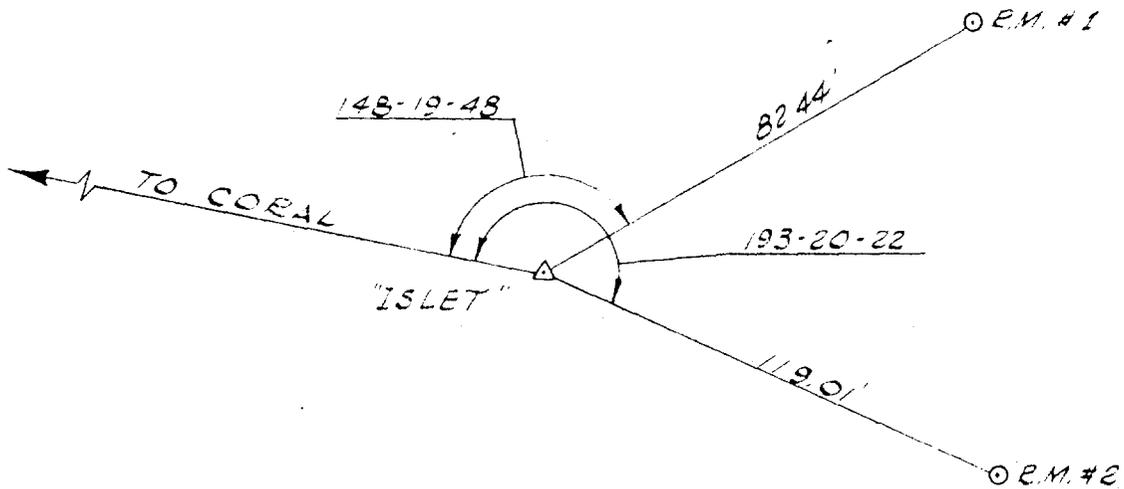
STATION ISLET

SITE Sam, 1st Sand Spit So of Runit, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

References (Cont'd):

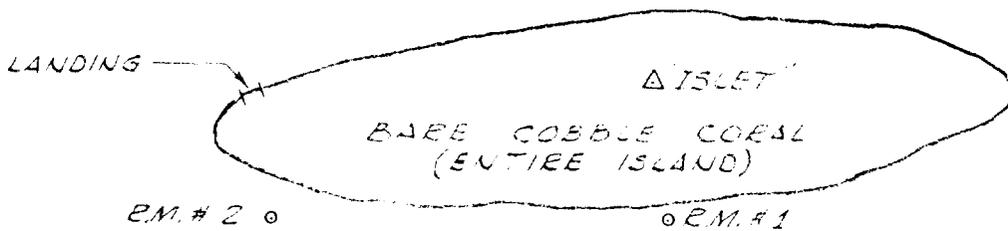
<u>Field Book</u>	<u>Page</u>	<u>Date</u>
294	27 & 28	12/31/56
342	24	9/5/58



LOCATION SKETCH:



LAGOON



DECLASSIFIED PER DOE LETTER DATED FEB, 15, 1994 FROM ANTON BERTONALI TO DEANE S. NEWMAN

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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION	IVY	SITE	Elmer
ESTABLISHED BY	H & N	YEAR	1952
RECOVERED BY		YEAR	1958
FIELD BOOK NO	PAGE:	DATE:	Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE		
	FEET	METERS	

BRIEF HISTORY OF STATION:

This station was a second order control point in the 1952 Holmes & Narver Control Expansion Survey.

DETAILED DESCRIPTION OF STATION:

This station was destroyed by construction of Building 516 during Operation Hardtack.

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JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION	JAPTAN	SITE	David
ESTABLISHED BY	H & N	YEAR	1951
RECOVERED BY	F. A. Axtell	YEAR	1958
FIELD BOOK NO.	342 PAGE 14	DATE	8/23/58
			Japtan Island Eniwetok Atoll Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE		MARKS
	DISTANCE	DIRECTION	ELEVATION
	FEET	METERS	
Japtan			8.12
Lilac		00-00-00	—
R.M. #1	45.57	101-54-05	8.20
R.M. #2	50.21	208-00-15	10.10
R.M. #3	26.46	258-20-52	8.03

BRIEF HISTORY OF STATION:

This station was established as a third order station in the Atoll Control net in the Holmes & Narver 1952 Expansion Survey.

DECLASSIFIED PER DOE
DATE 11/15/94
BY SP-6/BJG/STP/STP
Diane C. Hinde

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is an aluminum pipe capped with an aluminum cap 2-1/2" in diameter, stamped "Japtan-H & N-1954." It is set in a concrete monument flush with the ground surface in a 20 ft diameter depression in the ground.

Reference markers #1, #2 & #3 were recovered in good condition. They are standard 2-5/8" brass discs set in concrete stamped "RML (2 & 3) - H & N - '54."

R.M. #1 is 1-1/2 ft below the ground surface, R.M. #2 is flush with the ground surface and R.M. #3 is 6" below the ground surface.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
201	13-31	8/11/52-8/14/52
227	7-8	4/21/54

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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

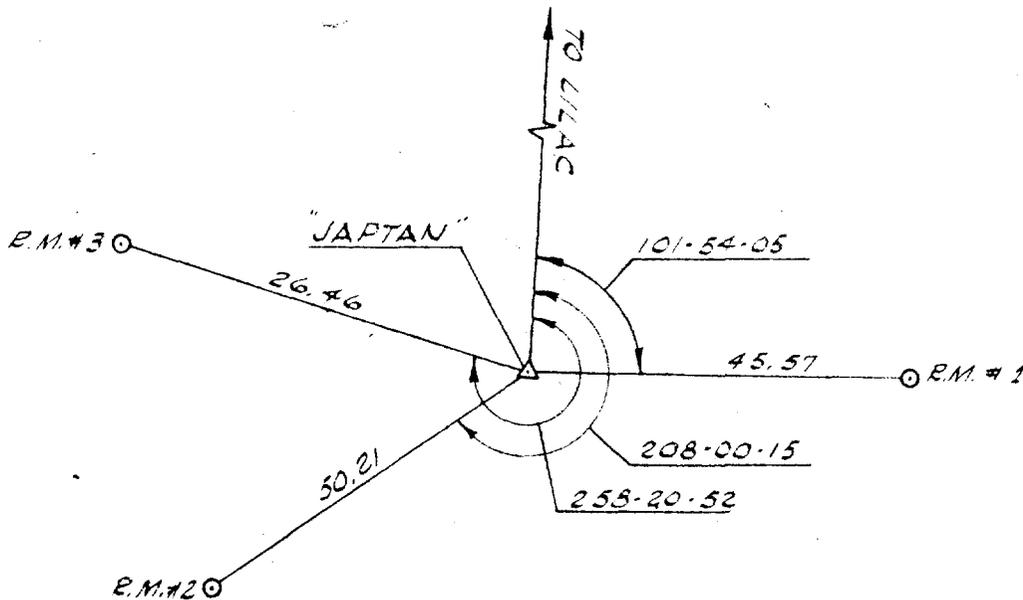
STATION JAPTAN

SITE: David, Japtan Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

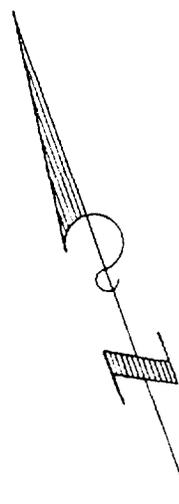
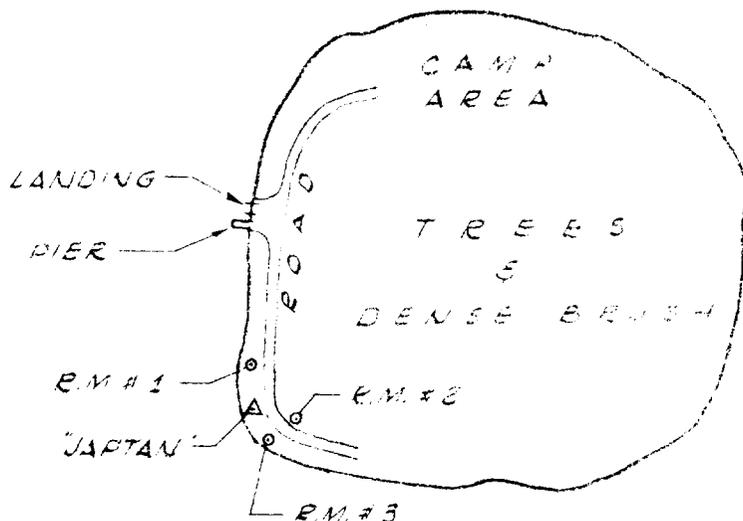
References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
263	229-30	12/8/54
342	141	8/23/58



DECLASSIFIED PER DOK
 LETTER PAPER, JULY, 15, 1994
 FROM LINDA GIMMISHALLI TO
 NEANE S. RAYON

LOCATION SKETCH:



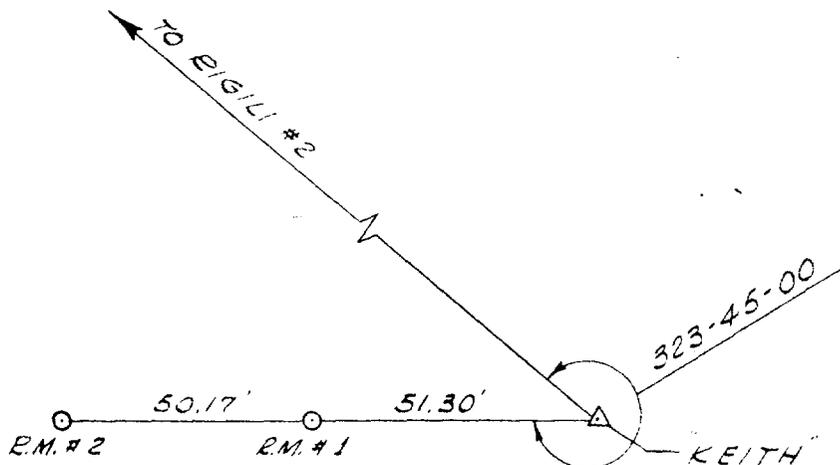
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 Pacific Southwest Region
 L A G O O N

PAGE 2-RECOVERY NOTE-TRIANGULATION STATION

STATION Keith

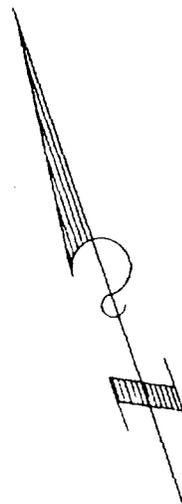
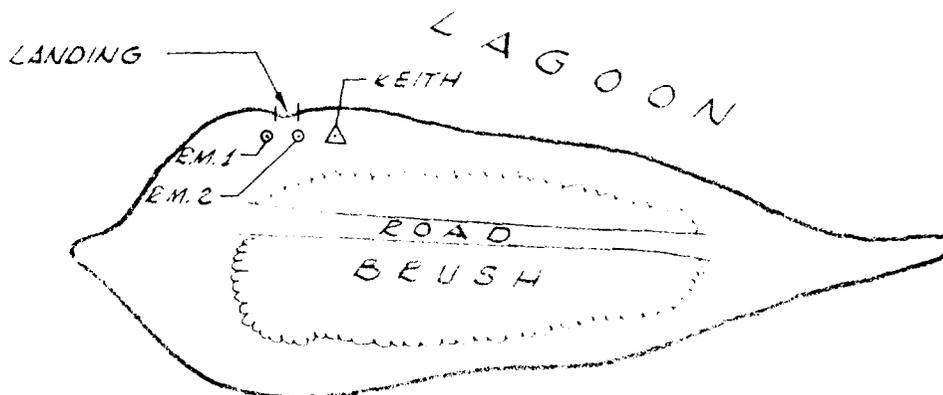
SITE: Keith, Giriinien Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)



DECLASSIFIED PER DOE
MEMORANDUM DATED JULY, 15, 1994
FROM BRIGON STANISCALLI TO
DARREN S. WENCK

LOCATION SKETCH:



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ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION.	KODAK (ANIYAANII)	SITE	Bruce
ESTABLISHED BY:	JTF-7	YEAR:	1947
RECOVERED BY:	F. A. Axtell	YEAR:	1958
FIELD BOOK NO.	342	PAGE:	22
		DATE:	9/4/58
			Eniwetok Atoll Marshall Islands

OBJECT	DISTANCE		DIRECTION	ELEVATION
	FEET	METERS		
Kodak				9.60
Coral			00-00-00	—
R.M. #1	57.40		113-03-35	10.40
R.M. #3	95.40		222-05-18	10.90

BRIEF HISTORY OF STATION:

This station has been a primary station in the following surveys: JTF-7, 1947-48; Holmes & Narver, 1949-50; Holmes & Narver 1952 Expansion. In the Holmes & Narver surveys it was called "Aniyaanii" to designate the name of the island on which it is located. The station was disturbed by construction operations in 1951 but was reestablished from its RM's using the same station marker.

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM ASST. SECRETARY TO
DEANS B. NELSON

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard USC & GS brass marker 3-1/2 " in diameter stamped "Kodak." It is set in concrete 1-1/2 feet below the ground surface.

R.M. #1 was recovered in good condition. It is a 3-1/2" USC & GS brass disc stamped "RM 1-Kodak" with a crossed arrow pointing toward the station. It is set in concrete flush with the ground.

R.M. #3 was recovered in good condition. It is a brass marker 2" in diameter stamped "RM #3-Kodak-USC & GS-1947." It is set in concrete 4" below the ground surface.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
141	30	6/7/51
165	14	4/17/52

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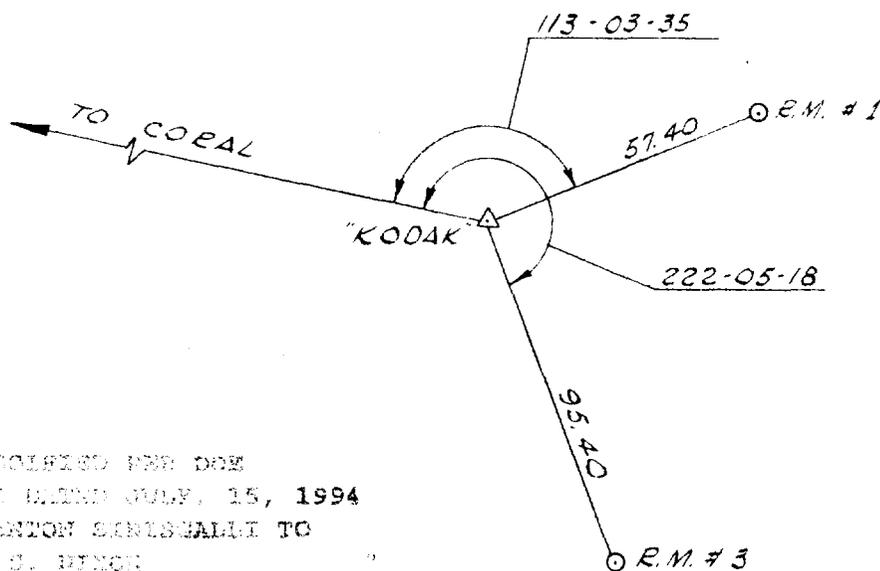
PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

STATION KODAK(Aniyaanii) SITE: Bruce, Aniyaanii Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

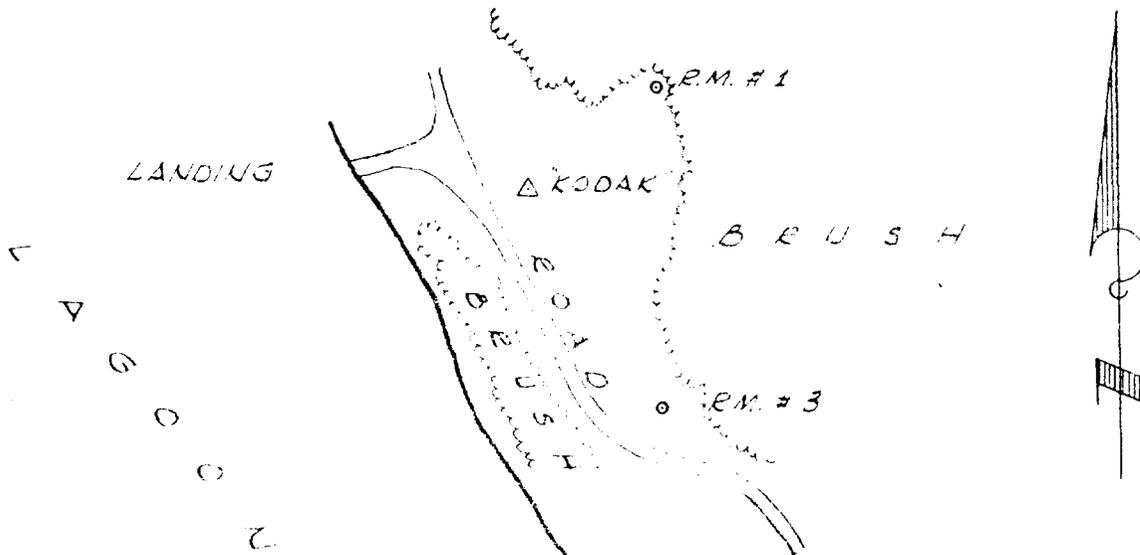
References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
227	11	4/24/54
294	22-24	12/31/56
342	22	9/4/58



DECLASSIFIED PER DOE
 LETTER DATED JULY, 15, 1994
 BY SP-1000 GMS/SEA/ML TO
 ERNEST D. BROWN

LOCATION SKETCH:



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ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION	LANTANA	SITE	Glenn
ESTABLISHED BY	USN	YEAR	1944
RECOVERED BY	F. A. Axtell	YEAR	1958
FIELD BOOK NO.	344	PAGE	11
		DATE	9/17/58
			Eniwetok Atoll
			Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE	DIRECTION	
	FEET	METERS	
Lantana			7.46
Photo		00-00-00	---
R.M. #1	74.65	119-38-10	10.66
R.M. #3	73.98	206-12-35	8.31

NOTE: Elevations differ from those on previous recovery due to a correction on the datum establishment.

BRIEF HISTORY OF STATION:

This station was a secondary station in the USS Bowditch Survey, 1944. Coordinate location of the station was computed using the 1944 geographic position computations and the station has been used as a third order station as needed. This station was included in the 1957 Holmes & Narver Expansion Survey and Third Order results of a very poor quality were obtained.

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM ANTON SENSIBLER TO
DEBRA S. WELTON

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard USN SURVEY brass disc 2" in diameter. It is set in a 10" x 15" concrete post flush with the ground surface.

R.M. #1 is in good condition. It is a standard H & N brass disc 2-5/8" in diameter stamped "RM1 - Lantana - USN - 1944." It is set in a concrete filled 5" diameter can set in the top of a concrete monument.

R.M. #2 has been destroyed by erosion.

R.M. #3 was set as a part of this recovery. It is a standard H & N brass disc 2-5/8" in diameter stamped "RM3 - H & N - 1958." It is set in concrete 6" below the ground surface.

References:

Field Book

Page

Date

223

30

4/13/54

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29

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PAGE 2 - RECOVERY NOTE - TRIANGULATION STATION

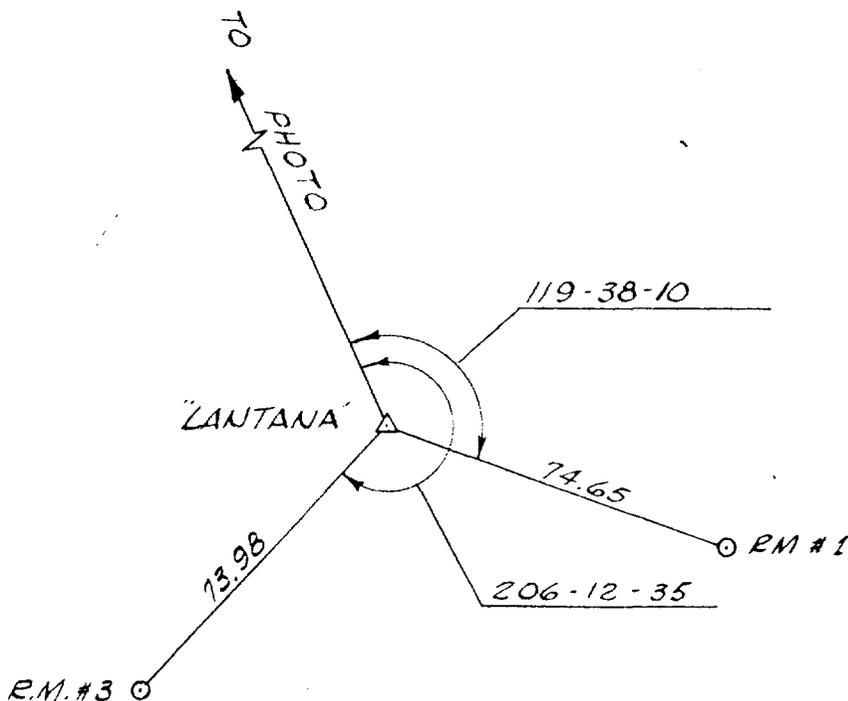
STATION LANTANA

SITE: Glenn, Igurin Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

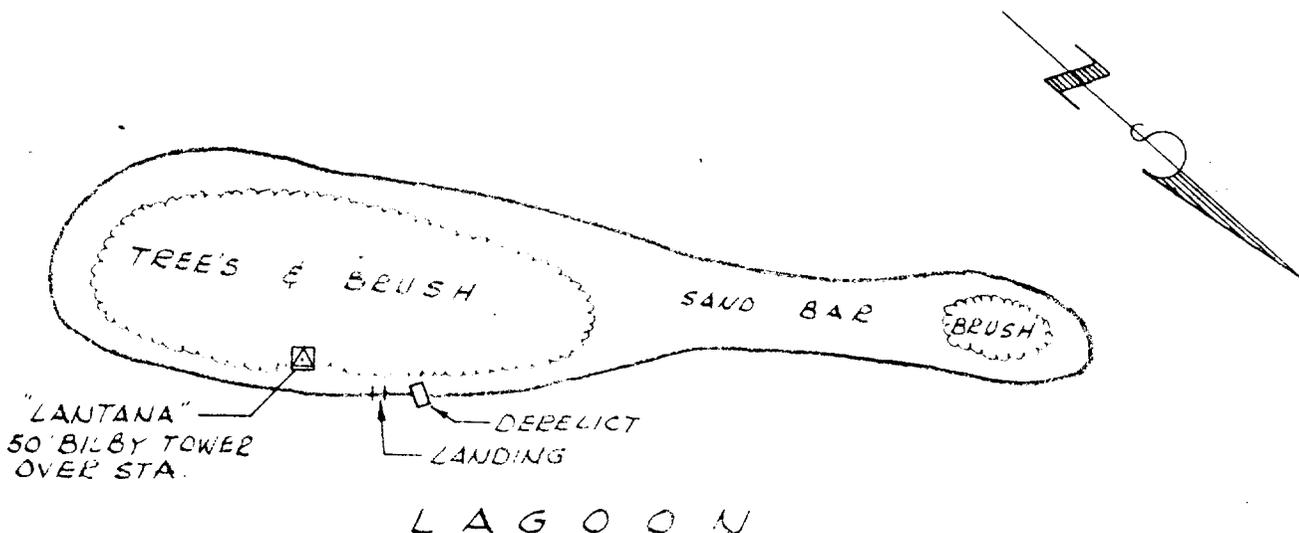
References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
296	27-29	1/26/57
344	11	9/17/58



DECLASSIFIED BY DCE
 DATE 04/10/94
 FROM AREA OF ESCALLO TO
 BLAKE S. NIKON

LOCATION SKETCH:



LAGOON

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HOLMES & NARVER, INC.
ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION	LILAC	SITE	Rex
ESTABLISHED BY	USN	YEAR: 1944	Jieroru Island
RECOVERED BY	F. A. Axtell	YEAR: 1958	Eniwetok Atoll
FIELD BOOK NO.	342	DATE: 8/23/58	Marshall Islands
	PAGE: 13		

OBJECT	DISTANCE		DIRECTION	ELEVATION
	FEET	METERS		
Lilac				20.12
Japtan			00-00-00	---
R.M. #1	80.23		111-44-15	14.24
R.M. #4	39.37		257-04-35	19.04
R.M. #5	61.70		39-32-55	18.79

BRIEF HISTORY OF STATION:

This station was a secondary station in the USS Bowditch Survey, 1944. It was included as a third order station in the Atoll Control Net in 1952. This station is shown on U.S. Navy Hydrographic Office Chart 6033 as Beacon "D."

DECLASSIFIED PER DOE
REVIEW DATED JUNE, 15, 1994
FROM ANTON SINISCALLO TO
DIANE S. NIXON

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard embossed "USN SURVEY" disc 2" in diameter. It is set in a 6"x6" concrete post flush with the ground surface.

R.M. #1 is in good condition. It is a 2-5/8" diameter flat brass disc stamped "RM 1 - H & N - 1954." It is set in concrete flush with the ground surface.

R.M.'s #4 & 5 were recovered in good condition. They are .30 caliber cartridge cases set in concrete 2" above the ground surface. R.M. #4 bears the ordnance mark "U-42-1" around its rim. R.M. #5 bears the ordnance mark "U-4-2" around its rim.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
227	10	4/24/51

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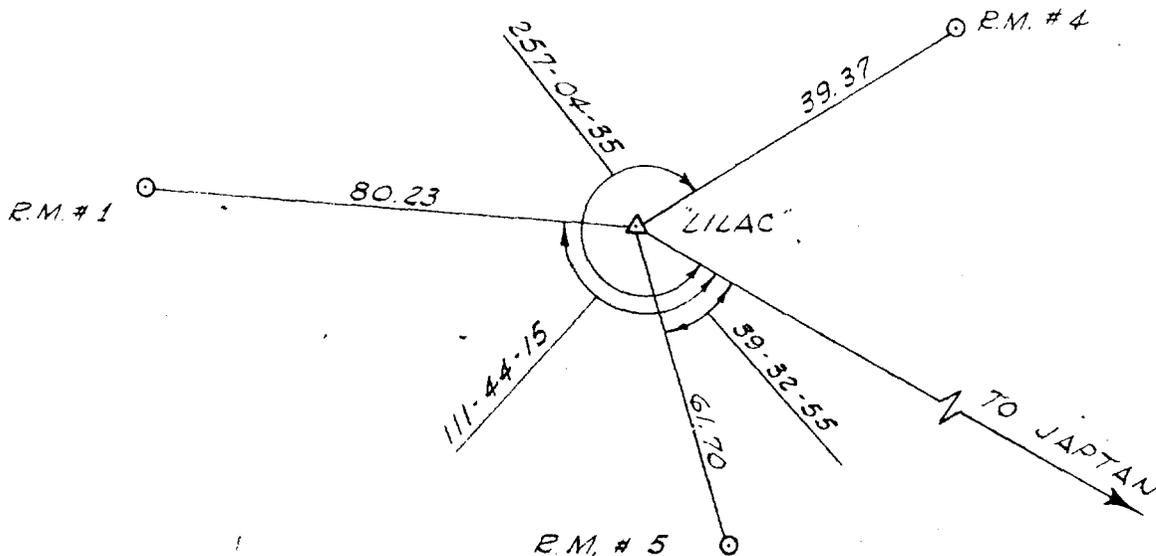
PAGE 2 - RECOVERY NOTE - TRIANGULATION STATION

STATION LILAC SITE Rex, Jieroru Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

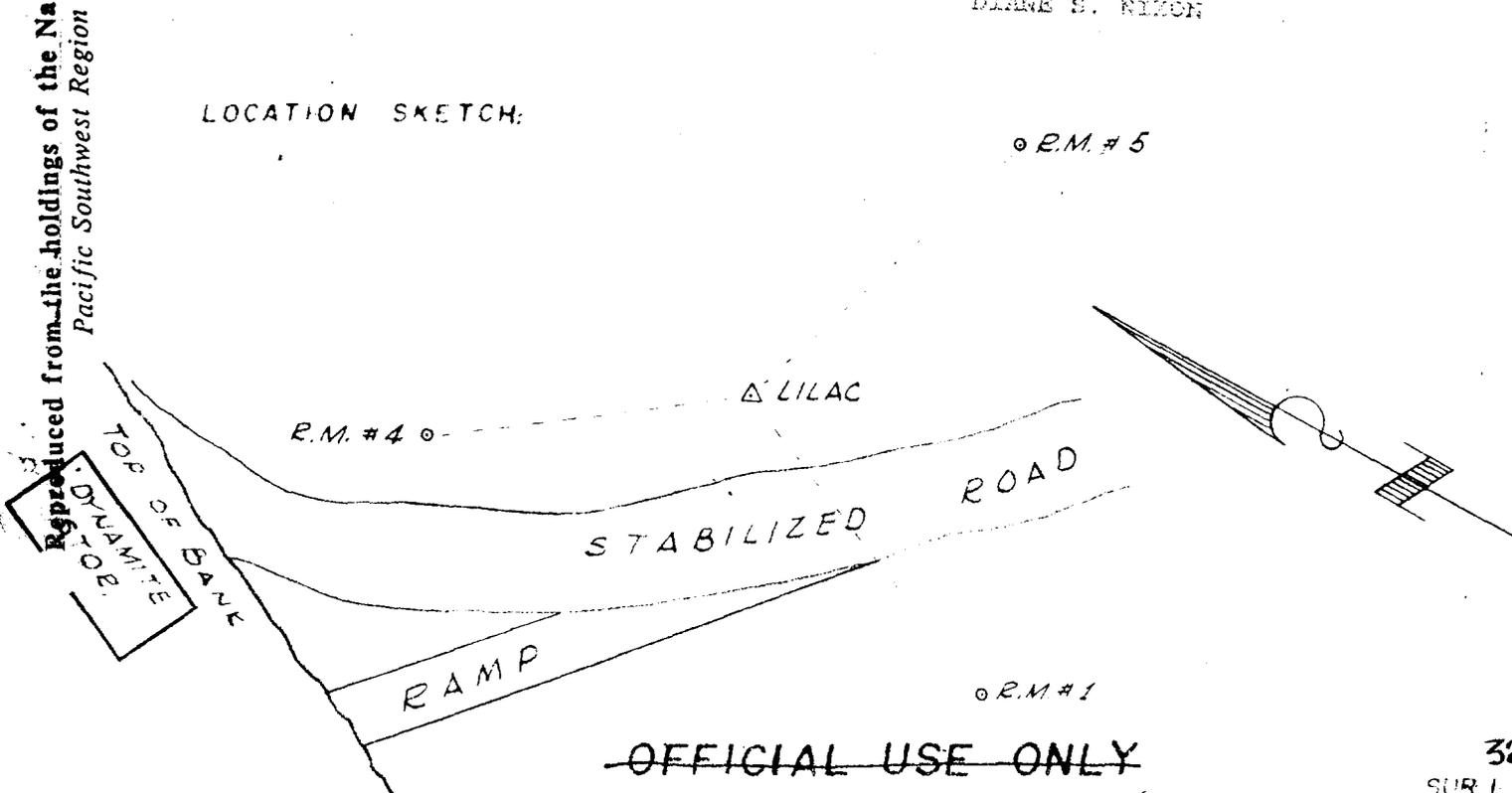
References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
294	5-7	12/12/56
342	13	8/23/58



DECLASSIFIED PER DOS
LETTER DATED JULY, 15, 1994
FROM BRITON SENECCALLY TO
DIANE S. NIXON

LOCATION SKETCH:



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HOLMES & NARVER, INC.
ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION LUCY SITE Vera
ESTABLISHED BY H & N YEAR 1951 Aaraanbiru Island
RECOVERED BY F. A. Axtell YEAR 1958 Eniwetok Atoll
FIELD BOOK NO. 342 PAGE 26 DATE 9/8/58 Marshall Islands

OBJECT	DISTANCE		DIRECTION	ELEVATION
	FEET	METERS		
Lucy				8.44
Coral			00-00-00	---
R.M. #1	142.51		239-46-00	11.61
R.M. #2	90.17		03-19-32	3.31
R.M. #3	65.85		96-55-18	2.69

BRIEF HISTORY OF STATION:

This station was established and triangulated as a part of the Operation Greenhouse "V" Zero development. It is a third order station in the Atoll Control Net.

DECLASSIFIED PER DOE
LETTER DATED JULY 15, 1994
FROM ANTON STANISWALSKI TO
DIANE S. NIXON

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard Holmes & Narver embossed brass disc, 2-5/8" in diameter stamped "Lucy" with a cross for the station mark. It is set in concrete flush with the ground surface.

R.M. #1 is in good condition. It is a cross cut in the concrete roof of Greenhouse station 75. The cross is located at the approximate center of the roof.

R.M. #2 is in good condition. It is a brass tack driven into a 1-1/2" square lead plug driven into a hole in the lagoonside reef, approximately 2 feet north of the Lucy-Coral line. The lead plug is stamped "RM 2-Lucy-H&N-1951."

R.M. #3 was recovered in good condition. It is a brass tack driven into a 1-1/2" diameter circular lead plug driven into a hole in the lagoonside reef. The lead plug is stamped "RM 3-Lucy-H&N-1951."

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PAGE 2 - RECOVERY NOTE - TRIANGULATION STATION

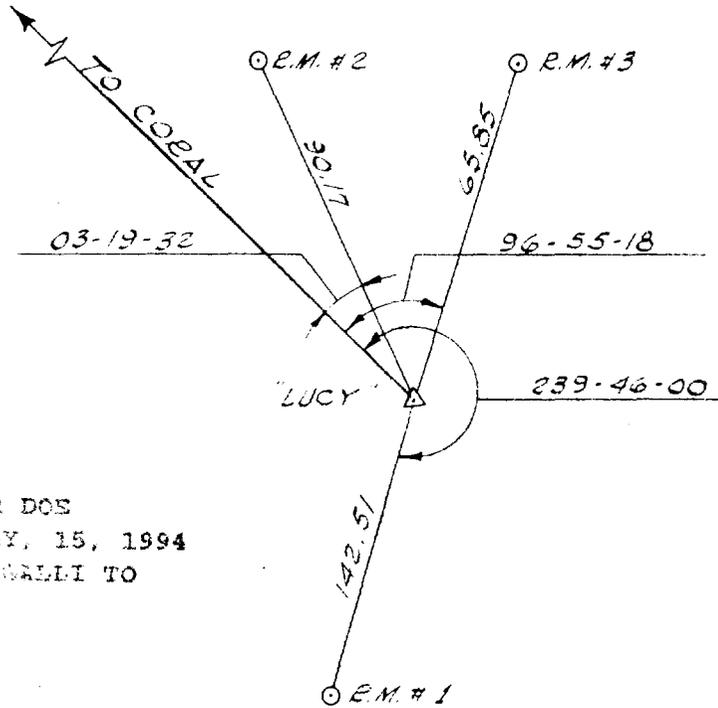
STATION LUCY

SITE: Vera, Aaraanbiru Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

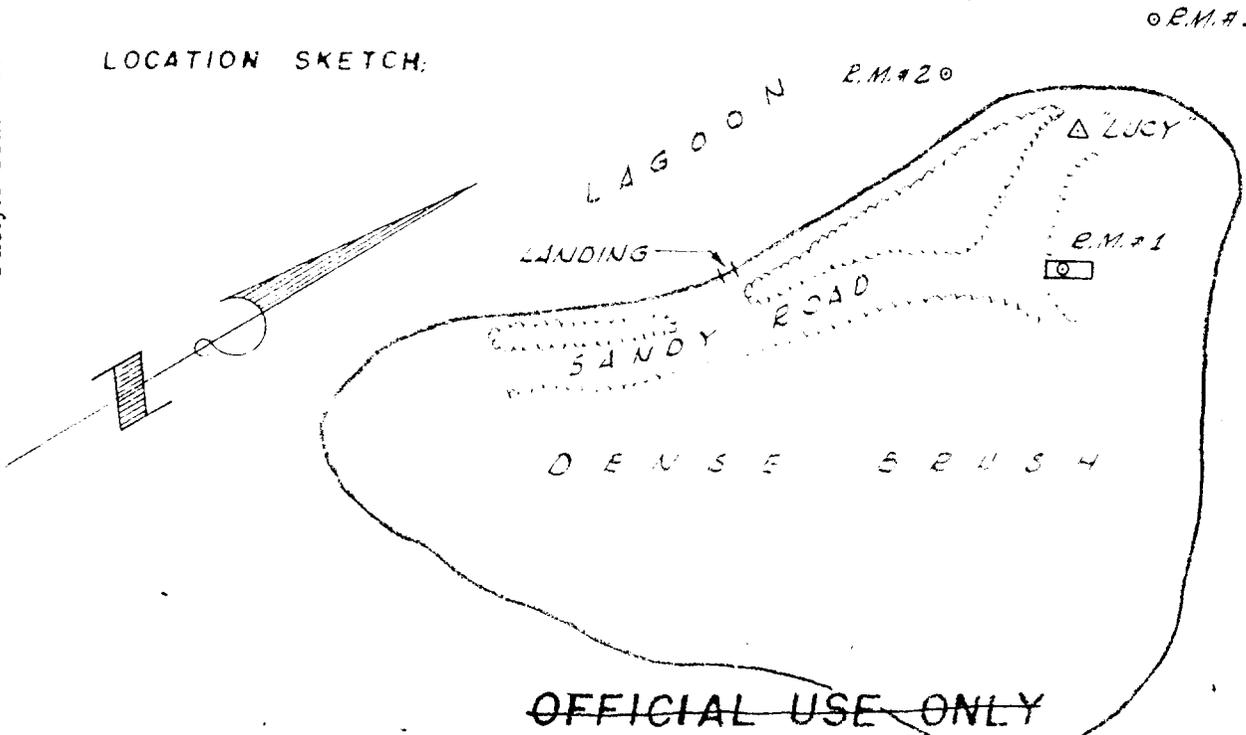
References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
52	7-30	7/18/50-7/20/50
133	17	6/25/51
215	13	12/2/53
230	4	5/8/54
296	2-4	1/4/57
342	26	9/8/58



DECLASSIFIED PER DOS
 LETTER DATED JULY, 15, 1994
 FROM JAMES DONOVAN TO
 DEANE S. HENON

LOCATION SKETCH:



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ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION. MUZIN - P.I. #1	SITE	Kata
ESTABLISHED BY: H & N	YEAR: 1950	Muzinbaarikku Island
RECOVERED BY: F. A. Axtell	YEAR: 1958	Eniwetok Atoll
FIELD BOOK NO. 344 PAGE: 4	DATE: 9/10/58	Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION	
	DISTANCE			DIRECTION
	FEET	METERS		
Muzin			6.40	
Coral			00-00-00	
R.M. #2	49.84		291-37-30	
R.M. #3	62.01		170-27-32	

BRIEF HISTORY OF STATION:

This station is a third order station in the Atoll Control Net. It was originally established as P.I. #1 of the Muzinbaarikku island traverse. It was tied in by local triangulation to the Engebi grid in the Holmes & Narver 1949-50 Survey. It was integrated in the Atoll Control Net in the Holmes & Narver 1952 Control Expansion.

DECLASSIFIED PER DOE
LITTLE BROWN JULY, 15, 1994
FROM ANTON FENTISBALLE TO
BLAKE S. CHASE

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard embossed Holmes & Narver disc 2-5/8" in diameter stamped "Muzin - P.I. #1." It is set in concrete inside a 55 gallon drum 1-1/2 feet below the top of the drum. The top of the drum is 1 foot below the ground surface.

R.M. #1 has been disturbed.

R.M. #2 is in good condition. It is a 2" diameter brass disc stamped "RM 2 - Muzin - H & N - 1950." It is set in concrete in the northeast corner of Greenhouse station 41 (an asphalt slab). The mark is 2" below the surface of the slab.

R.M. #3 is in good condition. It is a brass tack in a lead plug driven into a hole in the reef coral. The lead plug is stamped "RM 3 - Muzin - H & N - 1950."

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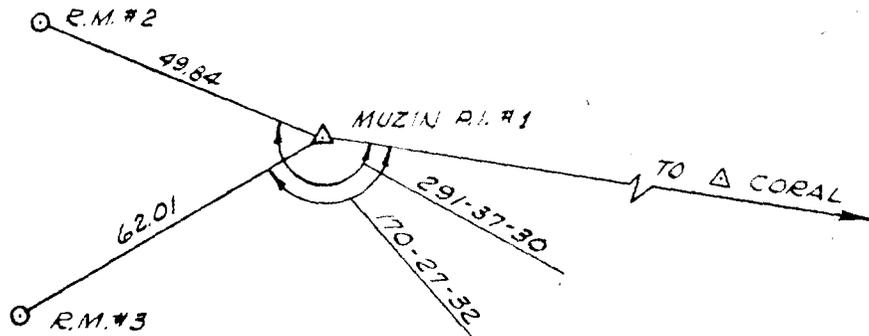
PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

STATION MUZIN - P.I. 1 SITE: Kate, Musinbaarikku Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

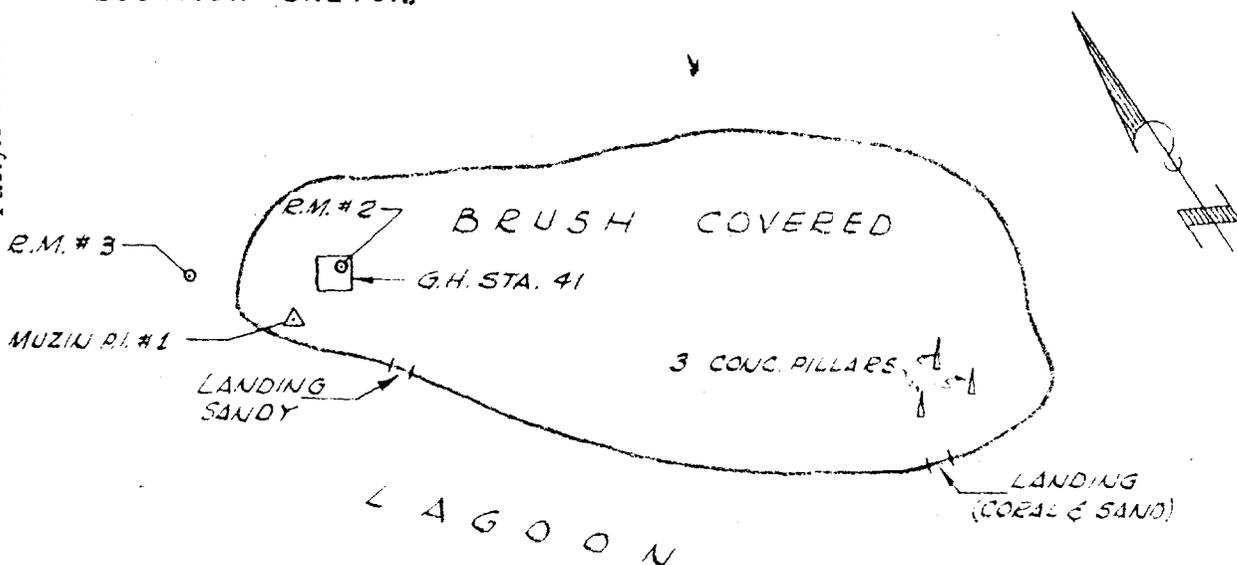
References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
28	27	1/23/50
45	7-8	5/29/50
48	8-9	6/12/50
230	20	5/26/54
296	17-19	1/11/57
344	4	9/10/58



DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM ACTION SIMILARLY TO
DOE/S. KENNEDY

LOCATION SKETCH:



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JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION	NORTH	SITE	Yvonne
ESTABLISHED BY	H & N	YEAR	1957
RECOVERED BY:		YEAR	1958
FIELD BOOK NO:	PAGE	DATE:	Eniwetok Atoll Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		
	DISTANCE		DIRECTION
	FEET	METERS	
			ELEVATION

BRIEF HISTORY OF STATION:

This station was established as a second order triangulation station in the Atoll Control Net by the Holmes & Narver 1957 Replacement Survey to replace triangulation station "Yvonne" which was disturbed during Operation Redwing.

DETAILED DESCRIPTION OF STATION:

This station was not recovered. Due to its location it is assumed that it has been destroyed.

REPRODUCED FOR SON
DATE: 11/18/1994
BY: [illegible]
FOR: [illegible]

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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION. PARRY SITE Elmer
ESTABLISHED BY: H & N YEAR: 1949-50 Parry Island
RECOVERED BY: E. A. Axtell YEAR: 1958 Eniwetok Atoll
FIELD BOOK NO. 344 PAGE: 10 DATE: 9/16/58 Marshall Island

OBJECT	DISTANCE		DIRECTION	ELEVATION
	FEET	METERS		
Parry				8.66
Japtan			00-00-00	---
R.M. #1	39.67		13-25-42	8.36
R.M. #2	53.45		100-51-30	7.82
R.M. #4	26.25		193-26-20	9.92

BRIEF HISTORY OF STATION:

This station is located at the north end of Parry Island, 25 feet north of Sta 71, a P I & S Bldg at the foot of a 300 ft tower. It is in the approximately same location as USN steel (1944) which is shown as a tower on H.O. Chart 6033. The station as it now exists was a principal station in the Holmes & Narver 1949-50 control survey. It was destroyed in 1951 and replaced from its reference marks. It was used as an azimuth mark for the island traverse orientation in the Holmes & Narver 1952 Expansion Survey.

DECLASSIFIED PER DOE
DATE: JULY 15, 1994
BY: [REDACTED] RESPONSIBLE TO
[REDACTED]

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard Holmes & Narver 2-58" in diameter brass disc stamped "Parry". It is set in concrete flush with the ground surface in a depression approximately 1/2 ft below the surrounding ground surface.

R.M. #1 is in good condition. It is a standard H & N brass disc, stamped "RM 1 - Parry - H & N - 1956." It is set in concrete 4" below the ground surface on the line between Parry and the USN light beacon on Japtan Island.

R.M. #2 is in good condition. It is a standard H & N brass disc stamped "RM 2 - Parry - H & N - 1956." It is set in concrete 4" below the ground surface nearly due east of Parry.

R.M. #3 was destroyed by the construction of Station 71.

R.M. #4 was set as a part of this recovery. It is a Lead & Tack set on the concrete slab on the north side of Station 7. It is 12" south of the north edge of the slab.

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PAGE 2 - RECOVERY NOTE - TRIANGULATION STATION

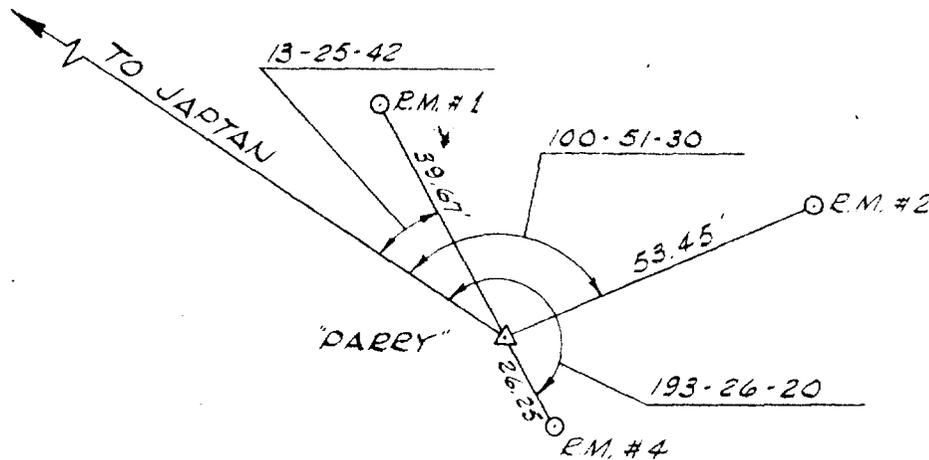
STATION: PARRY

SITE: Elmer, Parry Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

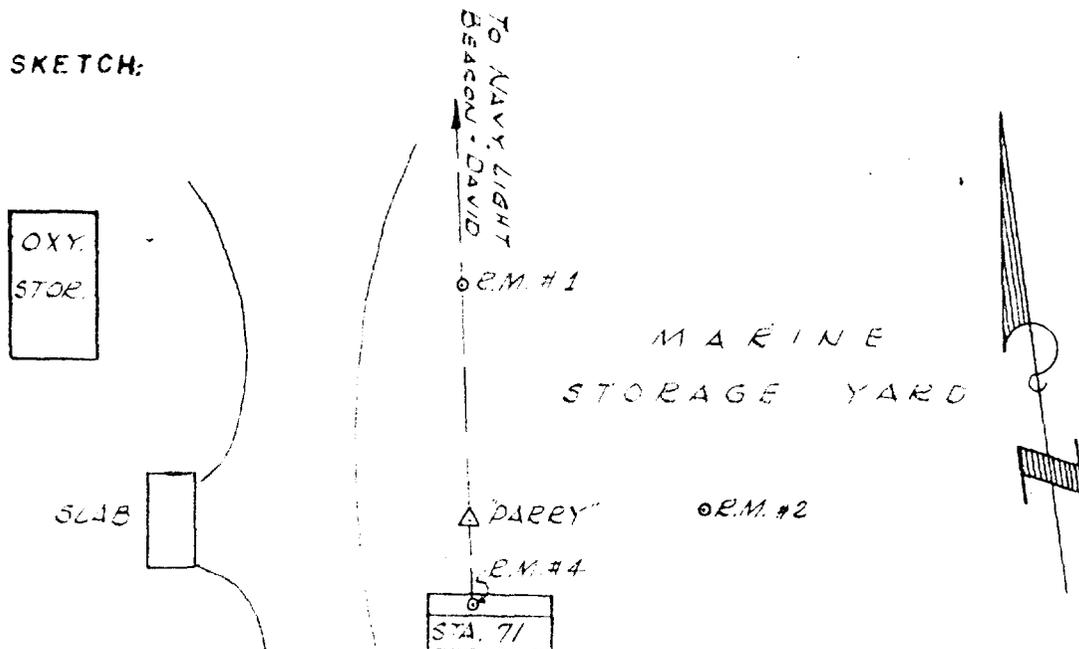
References:

<u>Field Books</u>	<u>Page</u>	<u>Date</u>
106	29	3/3/51
122	2	3/2/51
294	2--4	12/10/56
344	10	9/16/58



DESCRIPTION PER DOE
 FIELD BOOKS ONLY, 15, 1994
 FROM LINDA DEFRASCALLO TO
 DEANE S. NIXON

LOCATION SKETCH:



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ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION: PIIRAAI SITE Wilma
ESTABLISHED BY: H & N YEAR: 1949 Piiraa Island
RECOVERED BY: F. A. Axtell YEAR: 1958 Eniwetok Atoll
FIELD BOOK NO: 342 PAGE: 25 DATE: 9/6/58 Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE	DIRECTION	
	FEET	METERS	
Piiraa			8.80
Coral		00-00-00	---
R.M. #1	74.99	203-36-00	5.96
R.M. #2	74.96	290-35-25	8.68

BRIEF HISTORY OF STATION:

This station is a second order station in the Eniwetok Atoll Control Net. It has been a primary station in the following surveys: Holmes & Narver, 1949-50; Holmes & Narver 1952 Expansion; Holmes & Narver 1955 Replacement Survey; Holmes & Narver 1957 Replacement Survey.

1959 MON. TO OBS. STAND 19.84 - OBS. STAND ELEV. 28.64

DECLASSIFIED PER DOE
JULY 1994
BY SP-10/10/94
FOR THE DIRECTOR OF THE
NATIONAL ARCHIVES

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard embossed Holmes & Narver bras disc stamped "Piiraa." It is set in concrete flush with the ground surface.

R.M. #1 is in good condition. It is a standard embossed H & N disc 2-5/8" in diameter marked only with a crossed arrow. It is set in concrete 1-1/2 foot below the ground surface.

R.M. #2 is in good condition. It is identical to R.M. #1. It is set in concrete flush with the ground surface.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
133	18	6/25/51
207	23	11/13/53
230	8	5/12/54

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PAGE 2 - RECOVERY NOTE - TRIANGULATION STATION

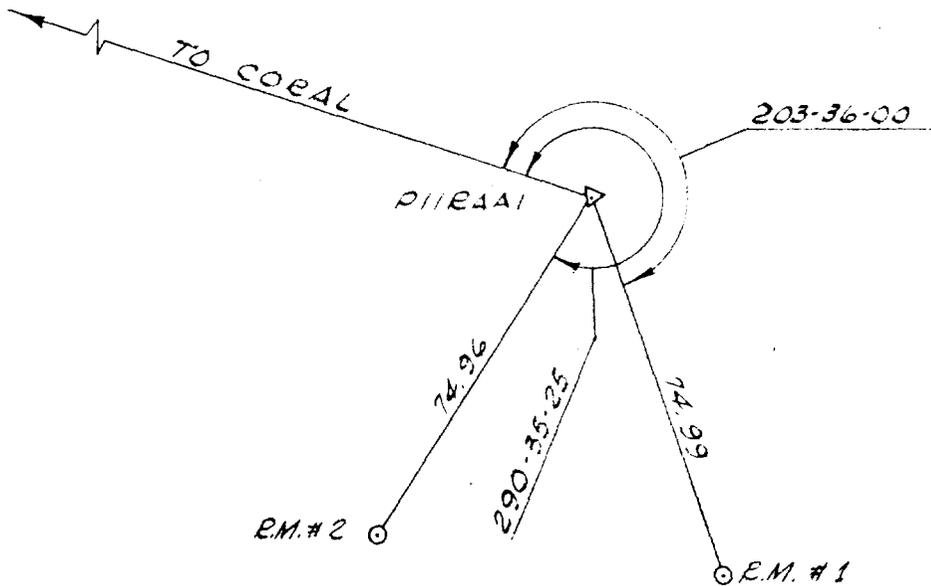
STATION PIIRAAI

SITE Wilma, Piiraa Island, Eniwetok Atoll, M.I.

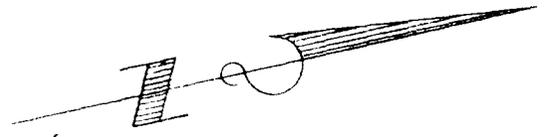
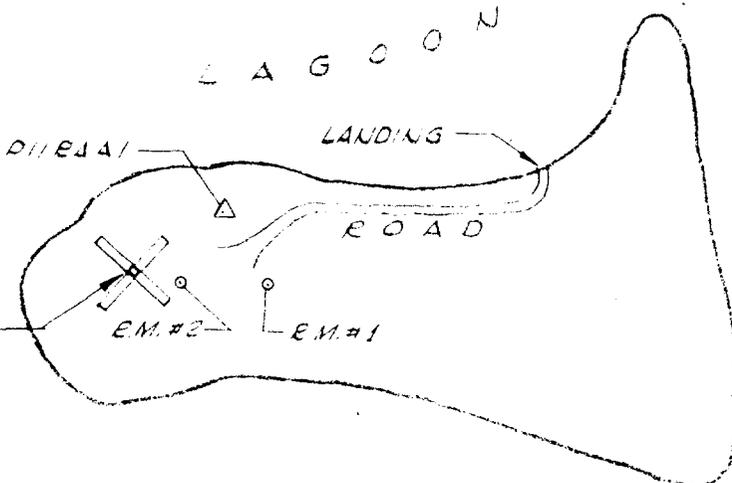
DETAILED DESCRIPTION OF STATION (CONT'D)

References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
294	29-30	1/4/57
342	25	9/6/58



LOCATION SKETCH:



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PACIFIC SOUTHWEST REGION
DATE 10/16/1994
PAGE 70

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HOLMES & NARVER, INC.
ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION: PRIVILEGE (ENIWETOK) SITE Fred
ESTABLISHED BY USN YEAR 1944 Eniwetok Island
RECOVERED BY L.H.Oakes & F.A.Axtell YEAR 1958 Eniwetok Atoll
FIELD BOOK NO. 341 PAGE: 8 DATE: 8/12/58 Marshall Islands
344 27-28 10/3/58

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE	DIRECTION	
	FEET	METERS	
Privelege			11.02
Sta 91 (Elmer)			---
R.M. #1	79.38		12.62
R.M. #2	61.42		9.45

BRIEF HISTORY OF STATION:

This station was a primary station in the following surveys: USS Bowditch, 1944; Holmes & Narver, 1949-50; Holmes & Narver Expansion, 1952. In the Holmes & Narver records, it has been called "Eniwetok" to identify the island it is located upon.

DECLASSIFIED PER DOE
LETTER DATED JULY 15, 1994
FROM ANTON SENECALE TO
DIANE S. NEXON

DETAILED DESCRIPTION OF STATION:

This station is located at the extreme northerly end of Eniwetok Island. It is approximately 35 feet north of the north face of Bldg #1.

This station was recovered in good condition. The station mark is a standard embossed USN Survey disc, 2" in diameter. It is set in an 8"x8" concrete post 9 inches below the ground surface.

Monument "Rose" was not visible due to a post on the line-of-sight. It appears however to have been disturbed by heavy equipment working in the area.

R.M. #1 was recovered in good condition. It is a tack set in a lead plug driven into a hole in the top of the concrete sea-wall. It is in the north corner of the section which is a sheet pile cap and projects 3'-1-1/2" above the greater portion of the sea wall. "RM 1" is chiseled in the concrete near the marker.

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Pacific Southwest Region

PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

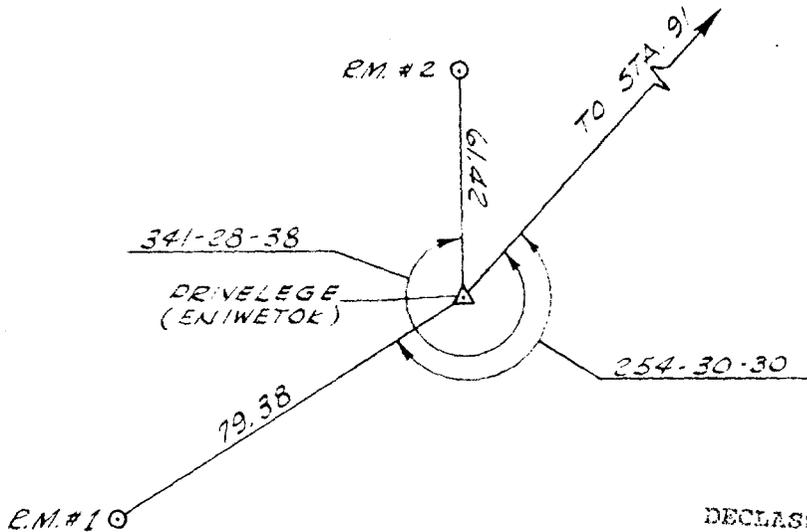
STATION PRIVELEGE(Eniwetok)SITE: Fred, Eniwetok Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D.)

R.M. #2 was set as a part of this recovery. It is a Lead and Tack driven into a hole in the top of the concrete sea-wall 24" from the north end of the sea-wall.

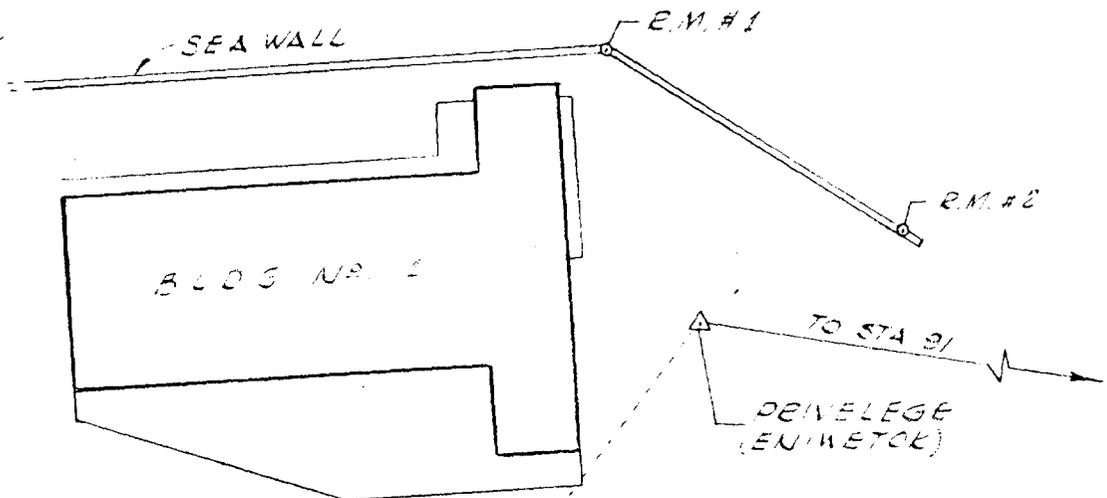
References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
174	26	7/3/52
285	23	11/28/56
341	8	8/12/58
344	27 & 28	10/3/58



DECLASSIFIED PER DOK
LETTER DATED JULY, 15, 1994
FROM ANTON SINISCALDI TO
BLAKE S. NIXON

LOCATION SKETCH:



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ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION: SALLY	SITE	Sally
ESTABLISHED BY: H & N	YEAR: 1957	Aomon Island
RECOVERED BY: F. A. Axtell	YEAR: 1958	Eniwetok Atoll
FIELD BOOK NO: 342 PAGE: 27	DATE: 9/8/58	Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE		MARKS
	DISTANCE	DIRECTION	
	FEET	METERS	
Sally			9.59
Coral			00-00-00
Buck #41	164.04		97-30-20
Buck #30	164.05		159-46-30
Buck #29	54.00		277-31-30

BRIEF HISTORY OF STATION:

This station is a second order station in the atoll control net. It was established in the Holmes & Narver 1957 Replacement Survey to replace "Aomon" which was disturbed during Operation Redwing.

DECLASSIFIED PER DOE
LETTER DATED JULY, 15, 1994
FROM AOMON BINISSALLI TO
BLANK B. LEECH

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard H & N brass cap set in a concrete filled 55 gallon drum encasing the top of a 10" H-pile, stamped "Sally - H & N - 1957." It is one foot below the ground surface.

Bucks #29, 30 and 41 are in good condition. They are 4"x4" posts set in concrete with brass tack marked aluminum strips on the top. They are stamped with the buck numbers. They are chaining bucks on the "Sally" first order traverse.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
342	27	9/8/58

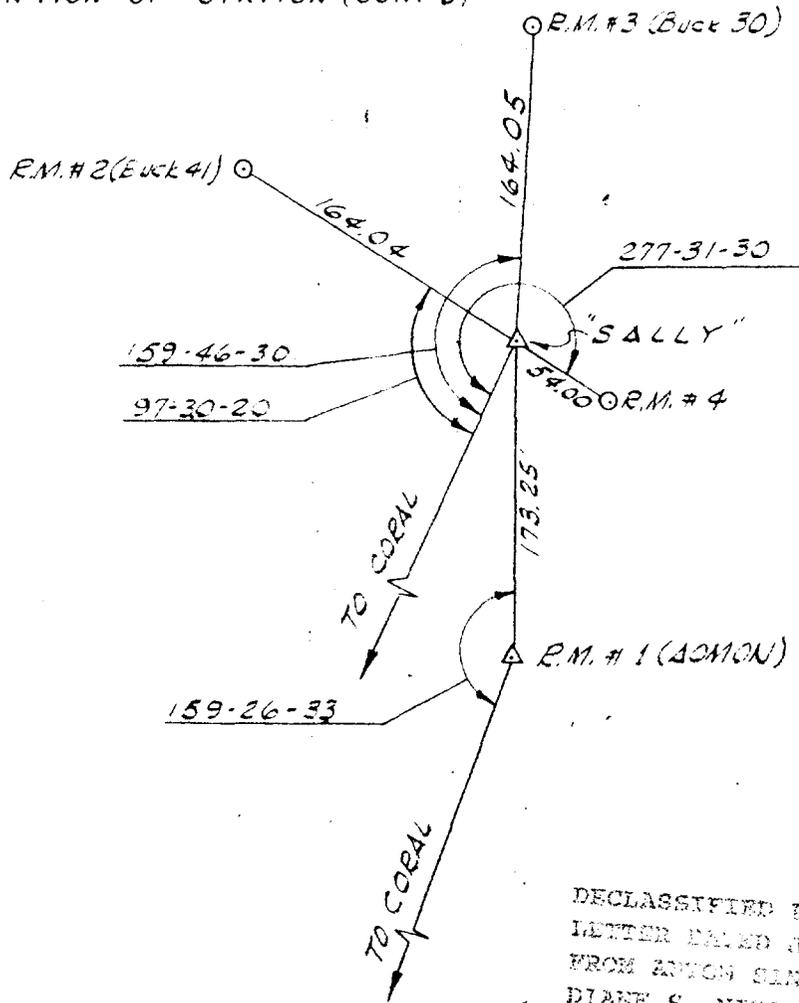
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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

STATION SALLY

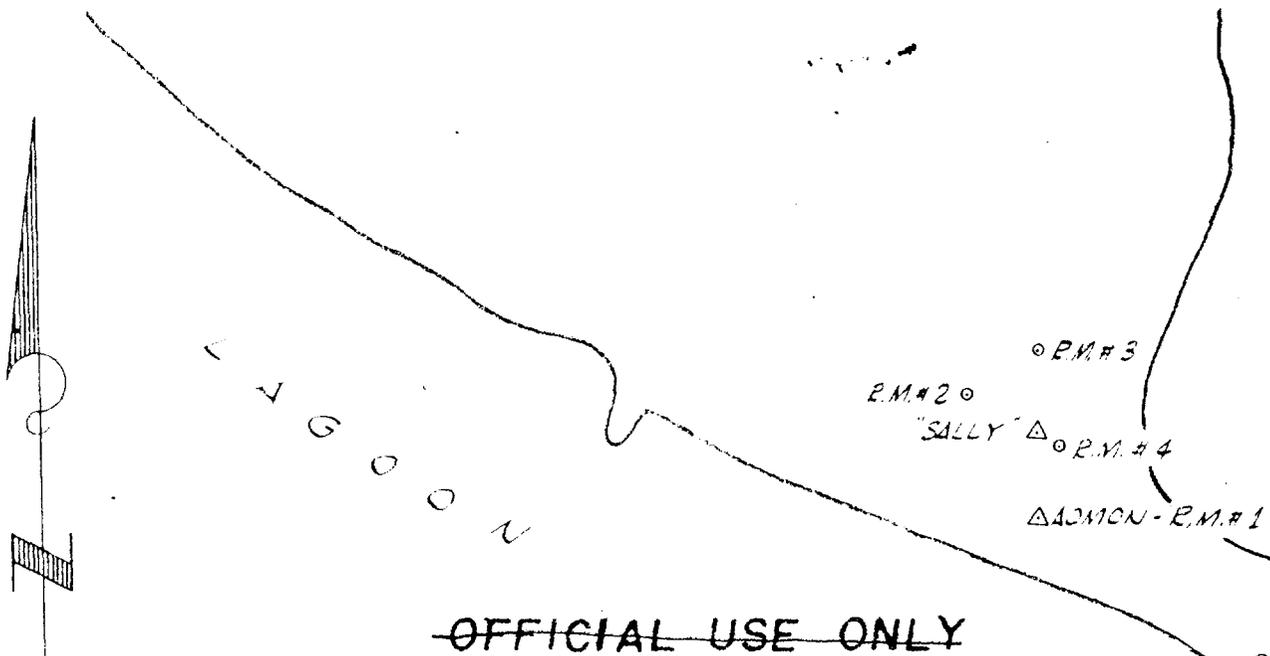
SITE: Sally, Aomon Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)



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LETTER DATED JULY, 15, 1994
FROM ANTON SINESGALLI TO
BLANE S. NIXON

LOCATION SKETCH:



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RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION	SAND	SITE	Uriah
ESTABLISHED BY	USN	YEAR	1944
RECOVERED BY	F. A. Axtell	YEAR	1958
FIELD BOOK NO.	342	DATE	9/5/58
PAGE	23		3rd Sand Spit So of Runit Eniwetok Atoll Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE MARKS		ELEVATION
	DISTANCE	DIRECTION	
	FEET	METERS	
Sand			10.81
Coral			—
R.M. #1	64.67		9.70
R.M. #2	71.46		9.46
			00-00-00
			54-06-25
			192-37-05

BRIEF HISTORY OF STATION:

This station was a primary station in the following surveys: USS Bowditch, 1944; JTF-7, 1947-48; Holmes & Narver, 1949-50; Holmes & Narver 1952 Expansion. U.S. Navy Day Beacon "G" shown on Hydrographic Office Chart 6033 was originally erected over this station, but was moved 25.7 feet lagoonward to make room for the erection of an observing platform over this station.

DECLASSIFIED PER DOE
EFFECTIVE DATE: JULY 15, 1994
FROM ANTON BENEDETTI TO
DIANE S. HIGGS

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard embossed USN-SURVEY disc 2" in diameter. It is set in concrete flush with the ground surface.

R.M. #1 is in good condition. It is a 2-58" diameter flat brass disc stamped "Sand - RM 1 - H & N - 1954." It is set in concrete 1 ft below the ground surface.

R.M. #2 is in good condition. It is a 2-58" diameter flat brass disc stamped "Sand - RM 2 - H & N - 1954." It is set in concrete 1 ft below the ground surface.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
165	30	4/19/52
172	7	6/6/52
227	15	5/6/54

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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

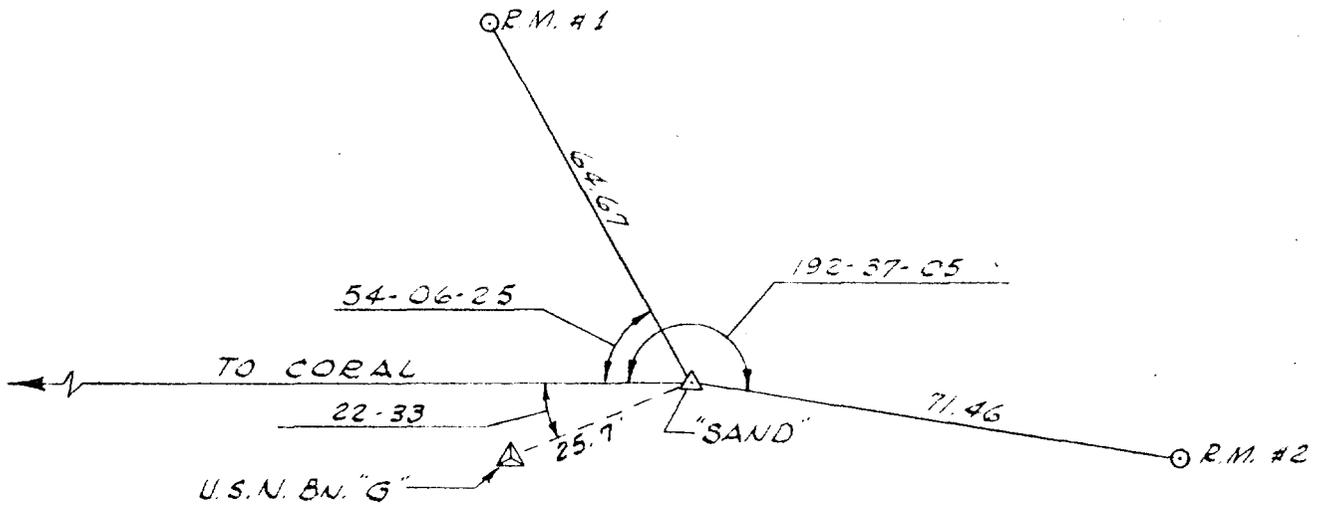
STATION SAND

SITE Uriah, 3rd Sand Spit So of Runit Is, Eniwetok Atoll, M

DETAILED DESCRIPTION OF STATION (CONT'D)

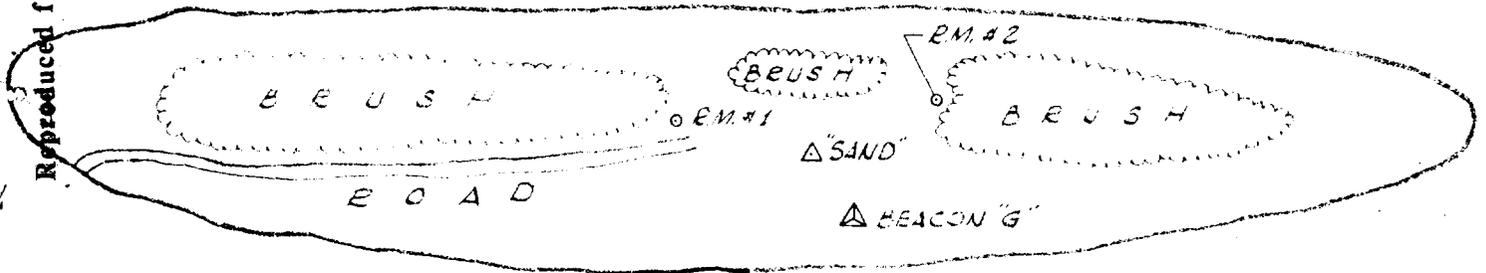
References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
294	25 & 26	12/31/56
342	23	9/5/58



DECLASSIFIED PER DOR
EXEMPT DATED JULY 15, 1994
FROM WHICH SERIALLY TO
TERRE S. NIXON

LOCATION SKETCH:



LAGOON

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ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION: RIGILI #2 SITE Leroy
ESTABLISHED BY: H & N YEAR: 1952 Rigili Island
RECOVERED BY: F. A. Axtell YEAR: 1958 Eniwetok Atoll
FIELD BOOK NO: 344 PAGE: 19 DATE: 9/20/58 Marshall Islands

OBJECT	DISTANCES AND DIRECTIONS TO REFERENCE		MARKS
	FEET	METERS	ELEVATION
Rigili #2			8.32
Photo			00-00-00
R.M. #1	---	---	Not Visible
R.M. #2	30.01		101-41-58
R.M. #3	68.35		79-59-17

BRIEF HISTORY OF STATION:

This station was a third order station in the 1949-50 Holmes & Narver Survey. It was known as 11 plus 50 and Rigili #1. It was destroyed and later replaced and retriangulated as a second order station in the Holmes & Narver 1952 Control Expansion Survey. This station was used as a second order triangulation station in the Holmes & Narver 1957 Expansion Survey.

DECLASSIFIED PER DOE
LETTER TO THE PRESIDENT, 15, 1994
FROM ANTONIO MONTESINI TO
DIANE S. HAYES

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a .50 caliber machine gun cartridge set in concrete flush with the ground surface. A 50 foot steel Bilby tower in good condition is erected over this station.

R.M. #1 is in good condition. It is a spike embedded in a concrete block 6 " below the ground surface. It is not visible from the station due to the fact that one of the Bilby tower legs is on the line.

R.M. #2 is in good condition. It is a spike embedded in a concrete block 3" below the ground surface.

R.M. #3 is in good condition. It is a brass disc 2" in diameter, stamped "RM 3 - Rigili - H & N - 1952." It is set in concrete 6" below the ground surface. It is 5-1/2 feet from the N.W. corner of a large metal radar reflector.

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PAGE 2-RECOVERY NOTE-TRIANGULATION STATION

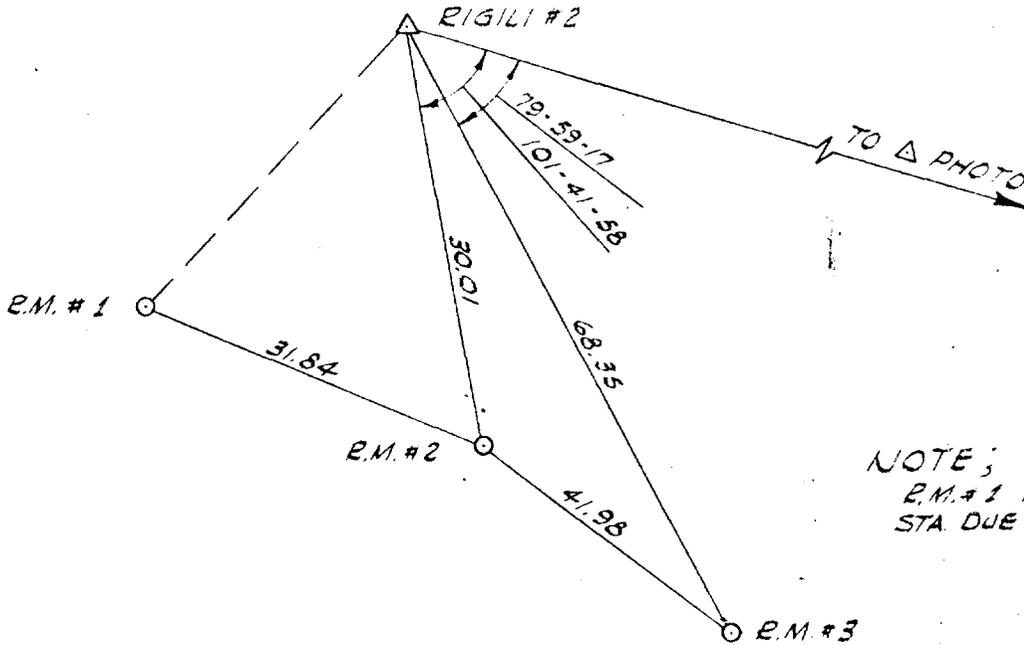
STATION Rigili #2

SITE Leroy, Rigili Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

References:

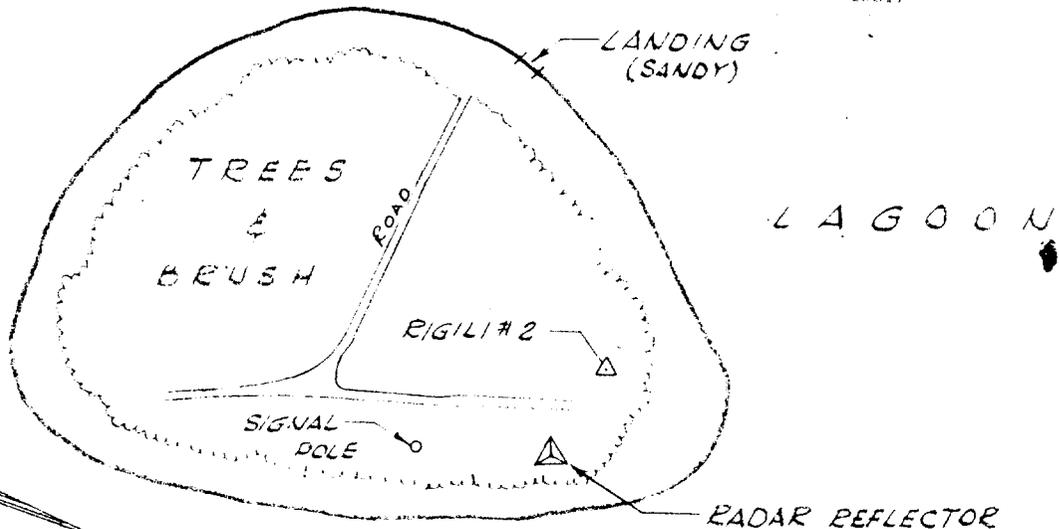
<u>Field Book</u>	<u>Page</u>	<u>Date</u>
122	4	3/5/51
159	4	2/21/54
296	20-22	1/12/57
344	19	9/20/58



NOTE;
E.M.#1 NOT VISIBLE FROM
STA. DUE TO TOWER LEG ON LINE.

UNCLASSIFIED PER DOE
EXEMPT UNDER E.O. 13526, 15, 1994
FROM AUTOMATIC DOWNGRADING TO
DUANE S. NYLON

LOCATION SKETCH:



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JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION: RUJORU #2 SITE: Pearl
ESTABLISHED BY: H & N YEAR: 1957 Rujoru Island
RECOVERED BY: F. A. Axtell YEAR: 1958 Eniwetok Atoll
FIELD BOOK NO: 344 PAGE: 20-21 DATE: 9/21/58 Marshall Islands

OBJECT	DISTANCE		DIRECTION	ELEVATION
	FEET	METERS		
Rujoru #2				10.66
Coral	---		00-00-00	---
R.M. #1	65.78		100-35-07	9.90
R.M. #2	115.53		100-35-07	9.19

BRIEF HISTORY OF STATION:

This station was established as a second order triangulation station in the Atoll Control Net by the Holmes & Narver 1957 Replacement Survey to replace "Rujoru" which was disturbed during operation Redwing. The station is located approximately 35 feet west of Rujoru.

UNCLASSIFIED PER DGE
DATE 11/15/94 BY SP-6 JAW/STW
CLASSIFIED BY SP-6 JAW/STW
DATE 03/18/98

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard H & N Brass cap, stamped "Rujoru #2 - H & N - 1957." It is set in concrete 4" below the ground surface.

R.M. #1 and R.M. #2 were set as a part of the Recovery survey.

R.M. #1 is a steel cap, 2" in diameter, stamped "RM1-H&N-1957." It is set in concrete 4" below the ground surface.

R.M. #2 is a standard Holmes & Narver brass disc stamped "RM2-H&N-1958." It is set in concrete 1 foot below the ground surface.

References:

Field Book	Page	Date
344	20-21	9/21/58

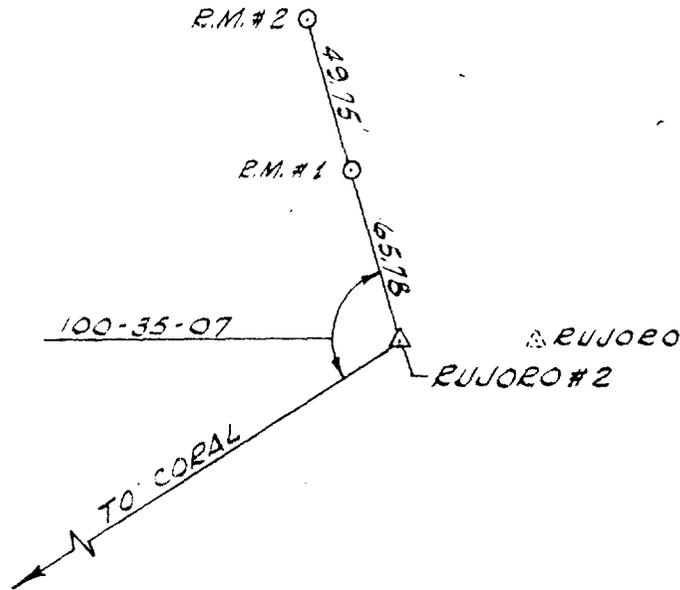
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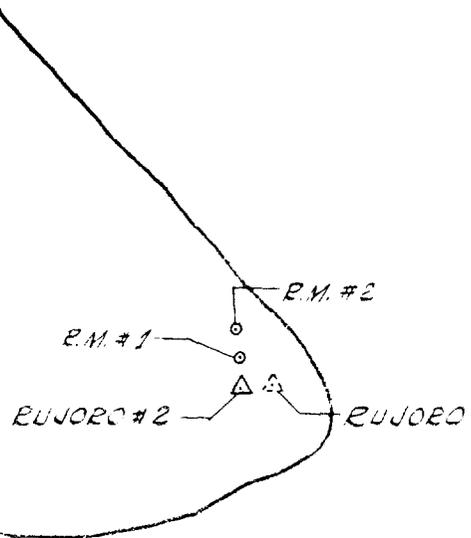
PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

STATION Rujoru #2 SITE Pearl, Rujoru Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)



LOCATION SKETCH:



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ENGINEERS - CONSTRUCTORS
JOB 942

RECOVERY NOTE - TRIANGULATION STATION

NAME OF STATION:	RUNIT	SITE:	Yvonne
ESTABLISHED BY:	JTF-7	YEAR:	1946
RECOVERED BY:	F. A. Axtell	YEAR:	1958
FIELD BOOK NO:	342 PAGE:	DATE:	8/12/58
			Runit Island
			Eniwetok Atoll
			Marshall Islands

DISTANCES AND DIRECTIONS TO REFERENCE MARKS				
OBJECT	DISTANCE		DIRECTION	ELEVATION
	FEET	METERS		
Runit				8.345
Coral			00-00-00	—
R.M. #1	61.14		127-41-30	10.16
R.M. #3	53.13		52-47-32	10.39

BRIEF HISTORY OF STATION:

This station was a primary station in the following surveys: JTF-7, 1947-48; Holmes & Narver, 1949-50; Holmes & Narver Expansion 1952; Holmes & Narver 1957 Replacement Survey.

DECLASSIFIED PER DOD
LETTTER DATED JULY 15, 1994
WHICH WAS IN ACCORDANCE WITH
EXECUTIVE ORDER 11652

MON TO OBS. STAND 20.445; OBS STAND ELEV 29.80

DETAILED DESCRIPTION OF STATION:

This station was recovered in good condition. The station mark is a standard stamped U.S.C. & G. S. brass disc, 3" in diameter, stamped "Runit." It is set in a concrete block 1 1/2 foot below the ground surface.

R.M. #1 is in good condition. It is a cross cut in the slab of latrine #76, 8.4 feet from the west edge of the slab and 7.2 feet from the north edge.

R.M. #2 has been destroyed.

R.M. #3 was set as a part of this recovery. It is a lead and tack set in the concrete slab on the east side of Station 162.01. It is 6" from the south edge of the slab and 1 foot from the east wall of Station 162.01.

References:

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
135	27	7/9/51

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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

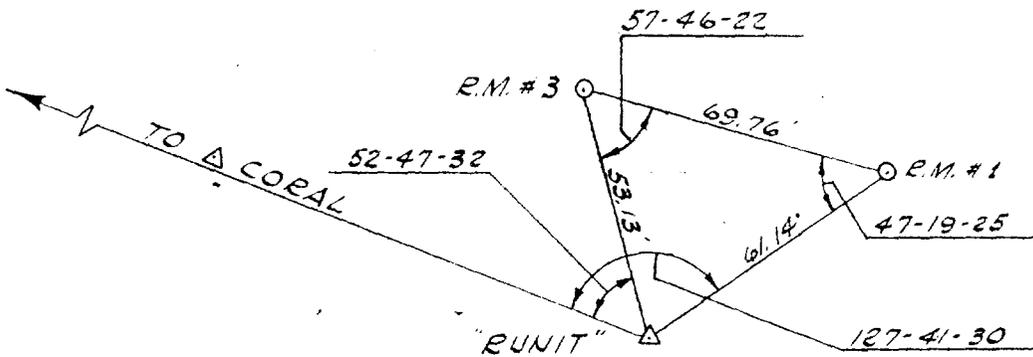
STATION RUNIT

SITE: Yvonne, Runit Island, Eniwetok Atoll, M.I.

DETAILED DESCRIPTION OF STATION (CONT'D)

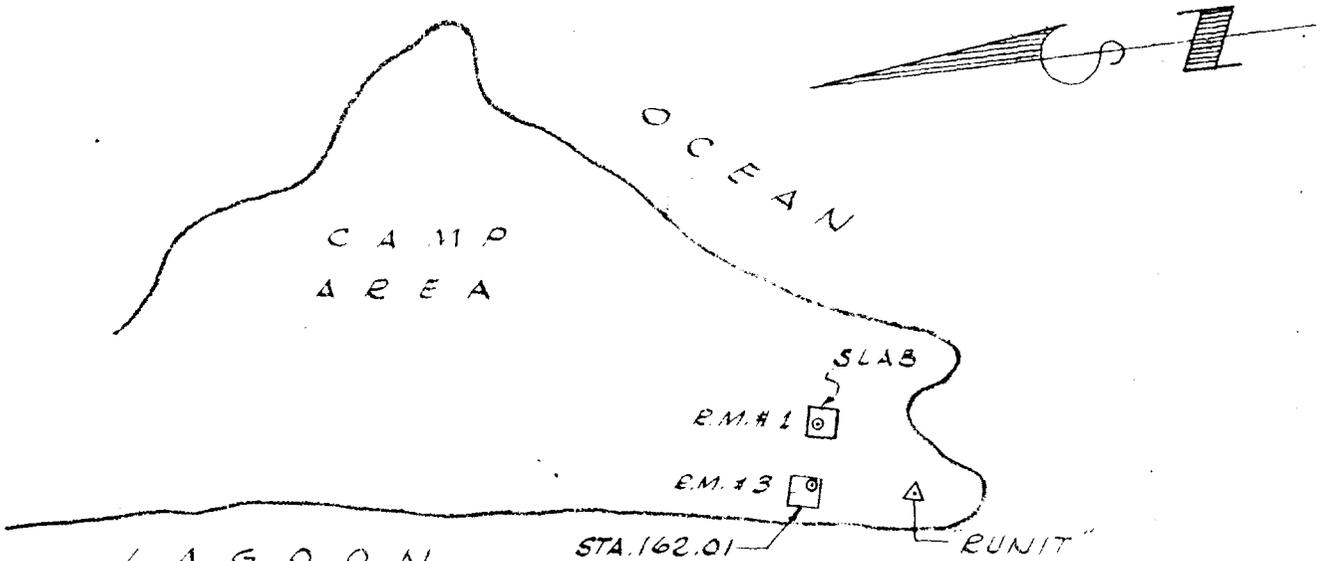
References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
230	2	5/6/54
294	12-14	12/13/56
342	9	8/12/58



REPLACEMENT PER DOE
 15 JULY, 1994
 DEPARTMENT OF COMMERCE
 BUREAU OF OCEANOGRAPHY
 BOSTON, MASSACHUSETTS

LOCATION SKETCH:



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PAGE 2-RECOVERY NOTE - TRIANGULATION STATION

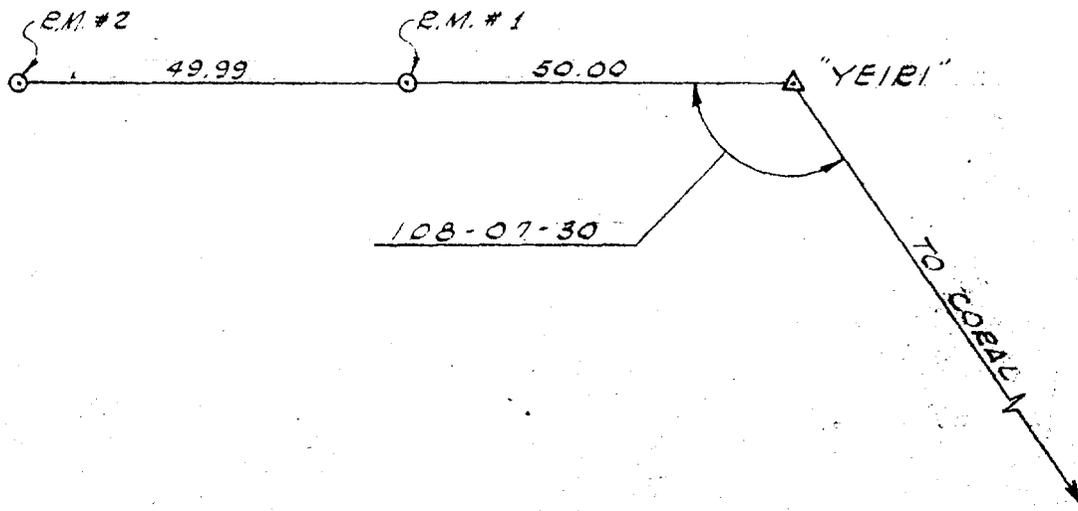
STATION Yeiri

SITE: Nancy, Yeiri Island, Eniwetok Atoll, M.I.

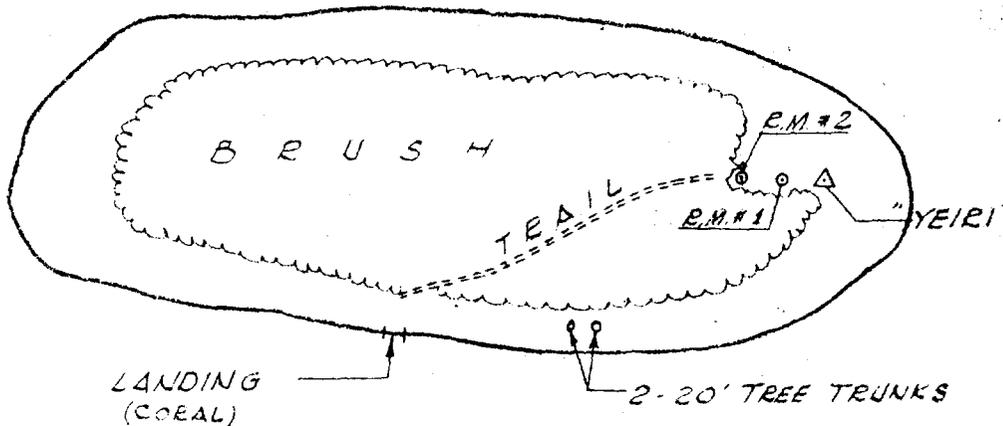
DETAILED DESCRIPTION OF STATION (CONT'D)

References (Cont'd):

<u>Field Book</u>	<u>Page</u>	<u>Date</u>
342	29	9/9/58



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