

LOS ALAMOS SCIENTIFIC LABORATORY
UNIVERSITY OF CALIFORNIA
MERCURY, NEVADA 89023

TO : John S. Malik, J-DOT

411097

RG 326 US ATOMIC ENERGY
P-DO COMMISSION

Location LARI

Collection ~~Research Center~~ J. Div

Folder HARDTACK I-

RAD SAFE

	JCH	<i>[initials]</i>
	RHC	<i>[initials]</i>
	FTS	<i>[initials]</i>
	RAJ	<i>[initials]</i>
	CRR	<i>[initials]</i>
	Action	

He was not issued a film badge for the period of 27 November, 1957 to 8 April, 1958 as none was necessary. During that period of time the radiation levels on Japtan Island were background only. The radiation levels on Japtan Island after 15 August, 1958 were low enough to preclude the requirement for film dosimetry under the existing FRC requirements, per AEC procedures. See TG 7.5 Rad Safe Report for Hardtack. Information with respect to the film packet is correct. "Supposedly", as used by [redacted] in his letter, is not correct. The ceresin wax and vinyl plastic holder were absolutely necessary to protect the film packet. Reference WT 1685, Operation Hardtack, Radiological Safety.

I cannot account for the excessively high exposure record shown for . A search through the exposure records of all other personnel in his particular organization (Task Group 7.2, Task Unit 0, Org. 1) shows only one individual with equal or higher exposure record, 3,578 mr. Where this one individual was located within the Atoll is not known. He could have been on Japtan with he may well have been on Eniwetok Island with the vast majority of the Task Group 7.2 personnel. The exposure records on the other members of organization show exposures of a few hundreds of mr to 2100 mr. A few have exposures below this range, a few others have exposures of 2200-2400 mr.

Japten Island was kept "clean" in so far as possible with respect to radiation. This island was used as a recreation area by many people in the Task Force. Every effort was made to retain the ecology of the island in a clean mode. No radioactive materials or sources were placed on the island; this was true, also, during those weapons testing operations conducted prior

BEST COPY AVAILABLE

PRIVACY ACT MATERIAL REMOVED

PRIVACY ACT MATERIAL REMOVED

John S. Malik
JNTS-79-83

-2-

April 17, 1979

to Hardtack. The one thing that could not be controlled was the winds, and as a result, Japtan Island was hit by fallout from the Fir event, as were Parry Island and Eniwetok Island, fired on Bikini Atoll on 12 May, 1958 (M.I. time). According to WT 1685, "fallout from the Fir event on Bikini contributed approximately 1,200 to 1,500 mr total dose to those living at Eniwetok Atoll---".

With regard to high exposure, one can speculate based on knowledge acquired during the operation. (1) On recreation, or shell-hunting trips, wearing his film badge, went into areas that were contaminated as a result of shots fired at Eniwetok where he had no business being or (2) he left his film badge in his quarters, hanging or laying against the outside wall where it received excessive exposure from the radioactive debris from the Fir fallout that was concentrated by rain water run-off from the eaves of the quarters.

One other general comment is in order before tackling the specific questions that raised. has mixed apples and oranges in his remarks about "the background intensity" or the "background" at Site Nan "began to rise". Site Nan was Enyu Island at Bikini Atoll and radiation levels there had no bearing on Japtan Island at Eniwetok Atoll, some 180 miles or more from Bikini. Further, his references to the rise in background at Site Elmer Rad Safe Center (Parry Island at Eniwetok) are of no consequence. Such incidents were not mentioned or discussed in WT 1685 for the simple reason that they were of no consequence or concern.

Now, as to questions, in order:

a. I believe that the badges were accurate within 20 percent. There were errors; see WT 1685, Chapter 5, on personnel dosimetry. On the whole, the dosimetry program was reasonably accurate and satisfactory. The program had been repeatedly blessed and approved by knowledgeable people from a variety of agencies and was never criticized as lacking in adequacy. The biggest single "hole" in the program was created by people. Many did not wear their film badge or wore it improperly. You can drive a horse to water but you can't make him drink.

COPIED/DOE
LANL RC

b. No, not unless an individual never went swimming, never took a shower, never washed in any manner. Normal clothing provided adequate protection over most of the body.

c. Doses required to produce "reversal" in the film far exceeded those that show in the dosimetry records. Film fogging, normally, will not mask a higher dose; fogging darkens the film and thus increases the dose.

d. In case, yes. The dosimetry records show continuous coverage for the period of interest.

PRIVACY ACT MATERIAL REMOVED

I don't get it

2

John S. Malik
JNTS-79-83

3-~~PRIVACY ACT MATERIAL REMOVED~~ 7, 1979

e. The dosimetry records speak for themselves. They are valid records.

f. The drinking water was safe. Enclosure 1 has no bearing on the drinking water. These measurements were made on the lagoon floor in the immediate vicinity of a shot.

g. Swimming in the lagoon was perfectly safe as far as radiation levels were concerned.

h. The FRC guidelines in effect at that time were followed.

i. There was a flat ban on eating sealife as a precautionary measure with respect to radiation. Sealife was migratory within the lagoon, and it concentrated various isotopes. That was a good rule. The ban on coconuts on Japtan Island was primarily in effect to keep people from stripping the trees and destroying the ecology of the island. With regards to the adequacy of the briefings on radiation safety provided by the Commander, Task Group 7.2, I cannot comment. Nor can I comment on how much attention the Army GIs paid to what they were told.

j. This is impossible to answer as we have found no records that tell us the names of the individuals on Japtan during the operational period. If one assumes that all personnel on Japtan were members of Task Group 7.2, Task Unit 0, Org. 1, then either the unnamed individual mentioned in paragraph 3 of this memo, or showed the highest exposure. this assumption may not be valid. As to the classification answer given to by if that be so it was a mistake. I know of no reason for classifying that information.

k. As a general safety rule, all individuals were mustered by a physical head count prior to firing. As to "stand on the beach, facing the shot area", perhaps for orientation, education or the like.

l. Not necessary. I don't know what CTG 7.2 may have instructed personnel to do immediately after the F4r fallout.

COPIED/DOE
LANL RC

m. Not necessary per FRC guidelines.

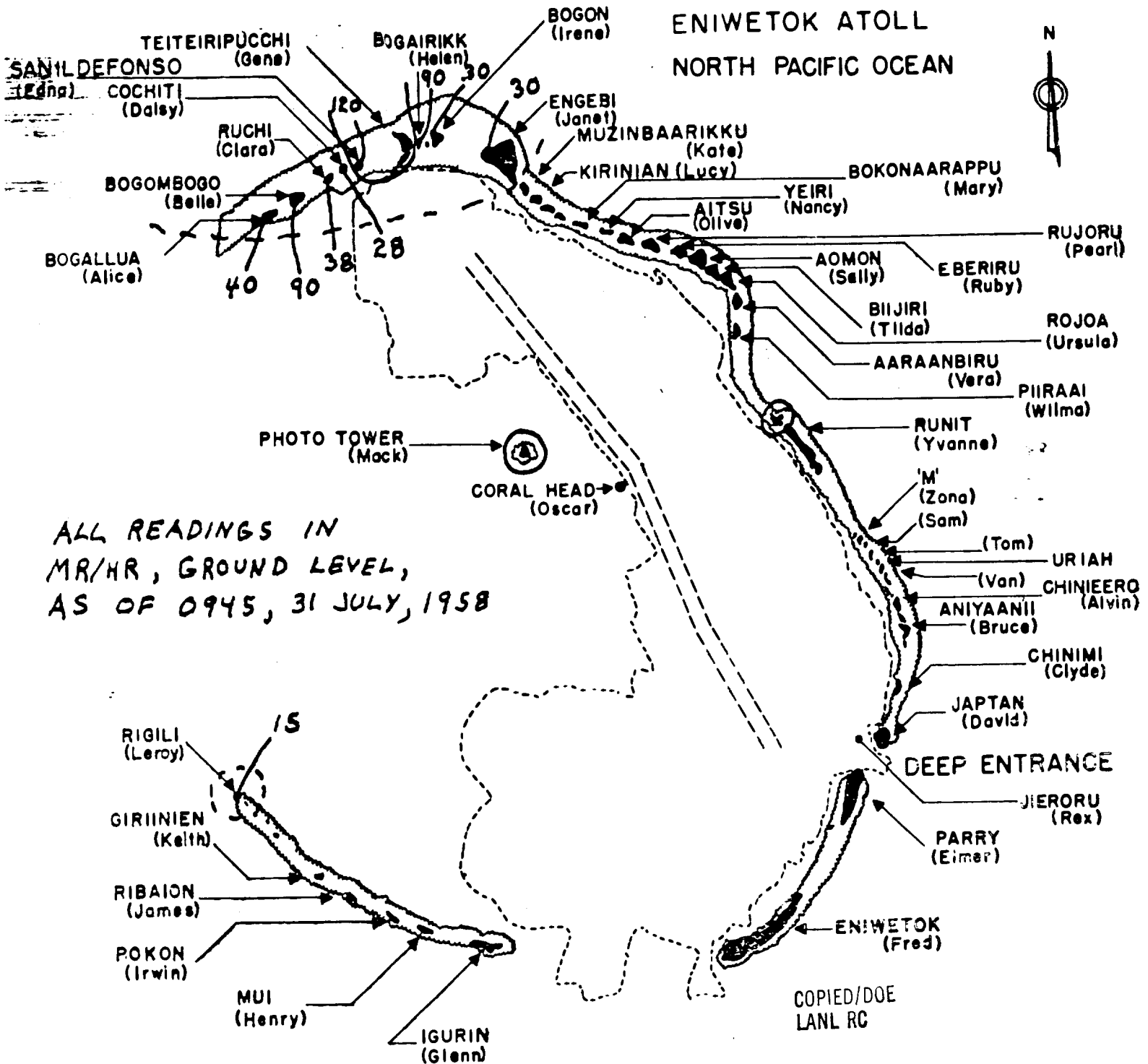
n. The answer to this question must come from the DoD.

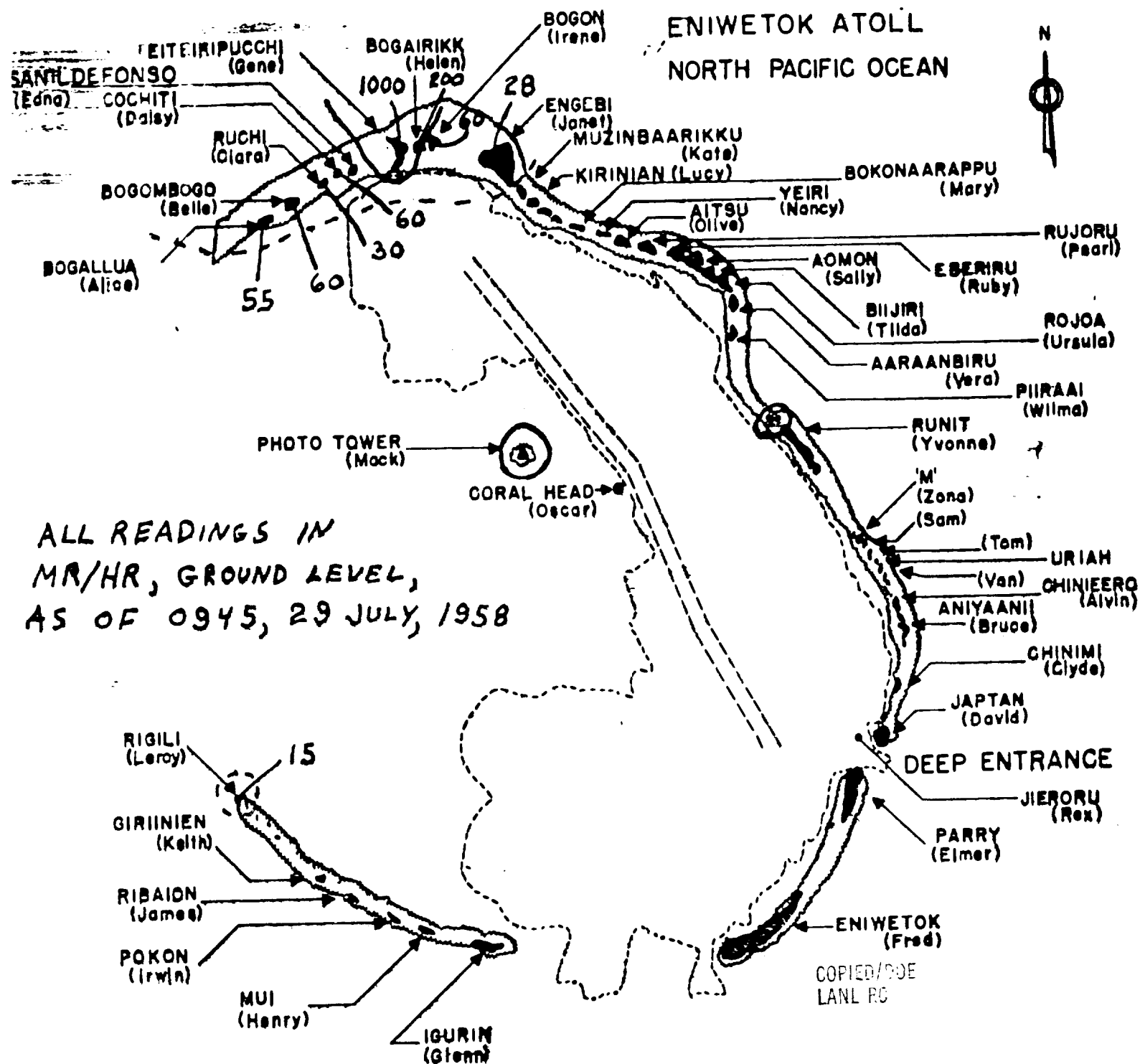
o. WT 1685, referenced above. The DNA library should have a copy. Also, the Rad Safe report from TG 7.5 (actually an H&N report), referenced above.

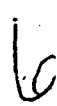
C: John C. Hopkins, J-DO/LASL, MS 670 ←
R. H. Campbell, J-DO/LASL, MS 670
G. L. Jacks, J-DO/NTS, MS 900
T. T. Scolman, J-DO/NTS, MS 900

PRIVACY ACT MATERIAL REMOVED

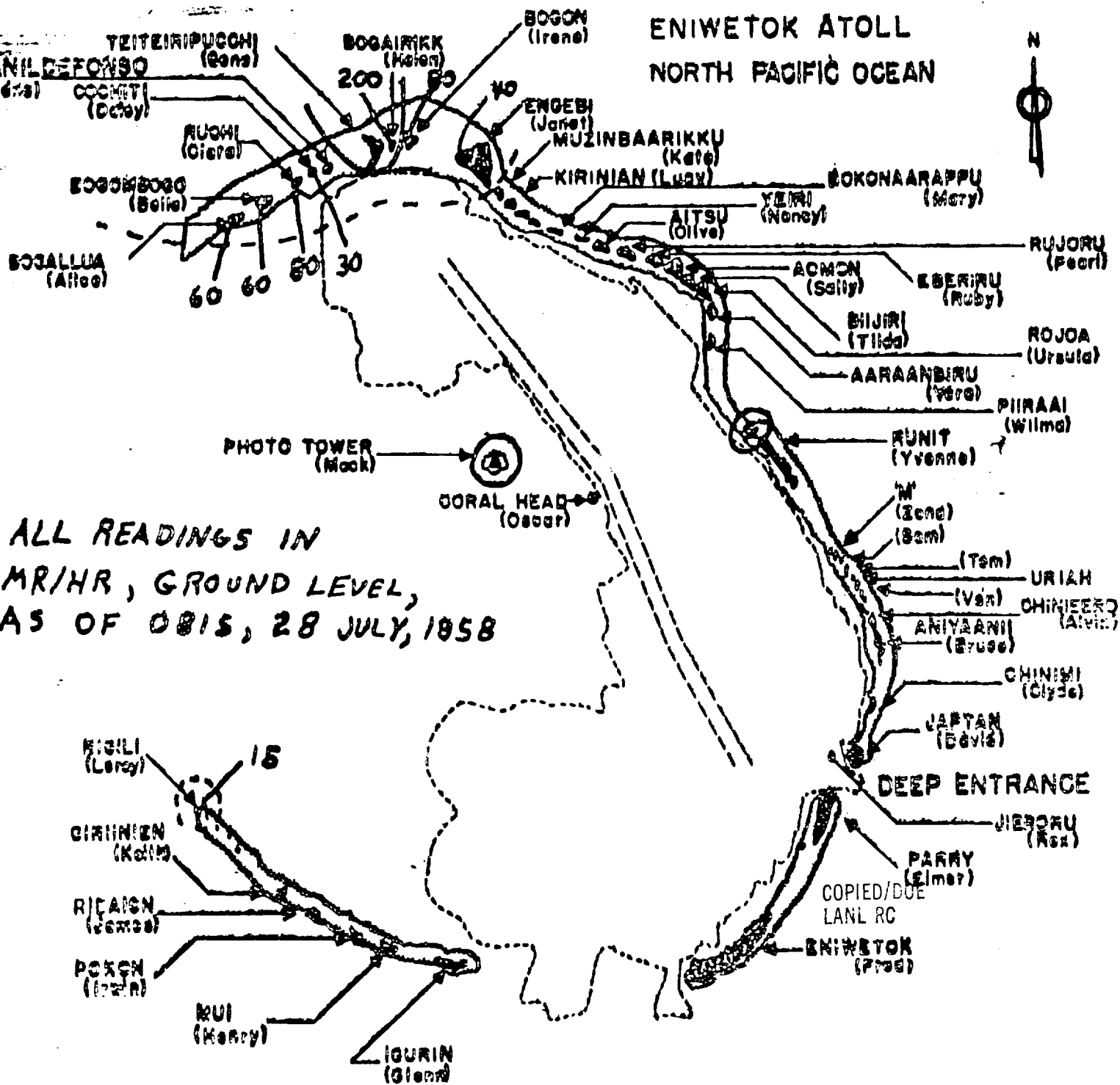
3







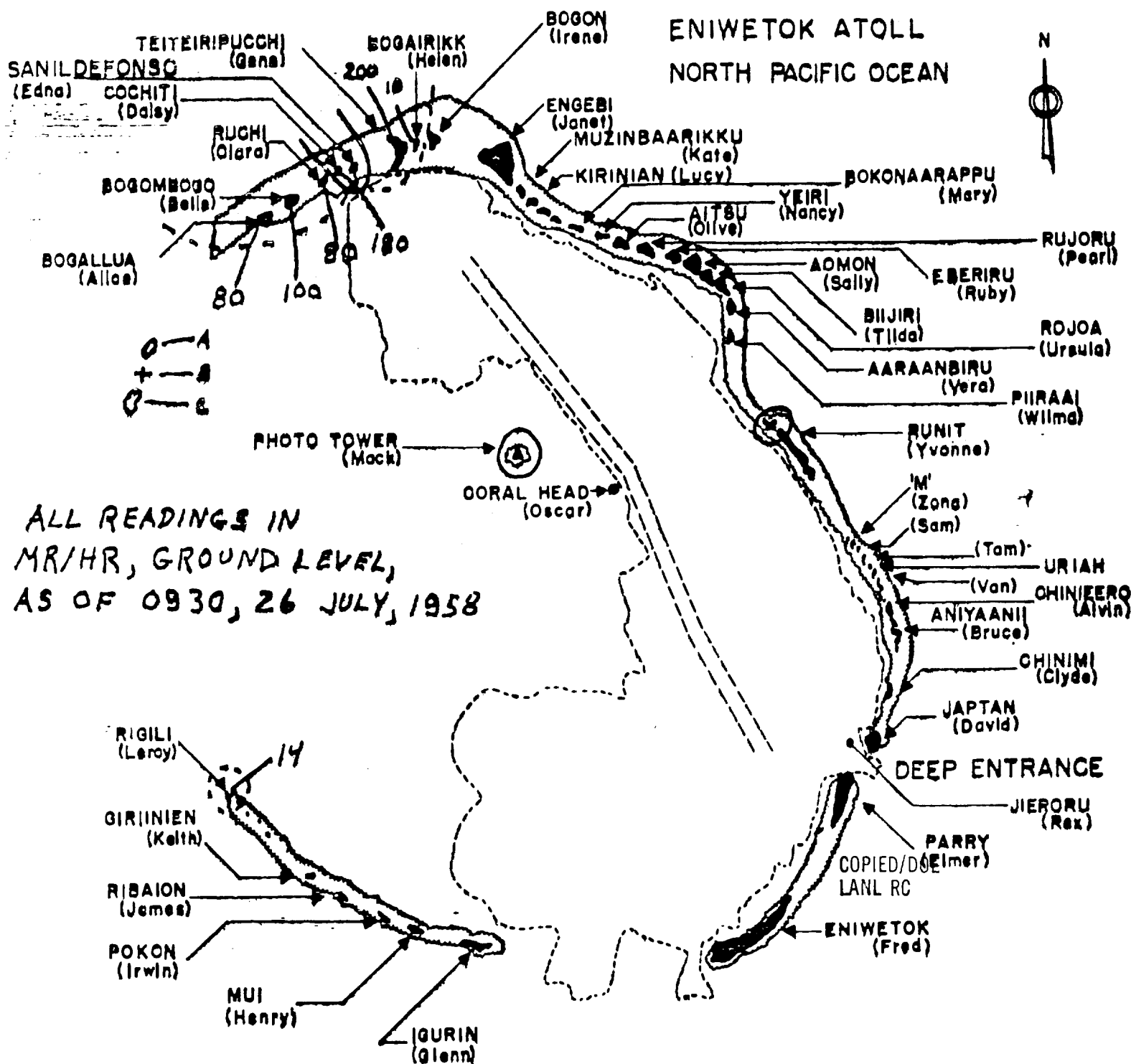
ENIWETOK ATOLL NORTH PACIFIC OCEAN

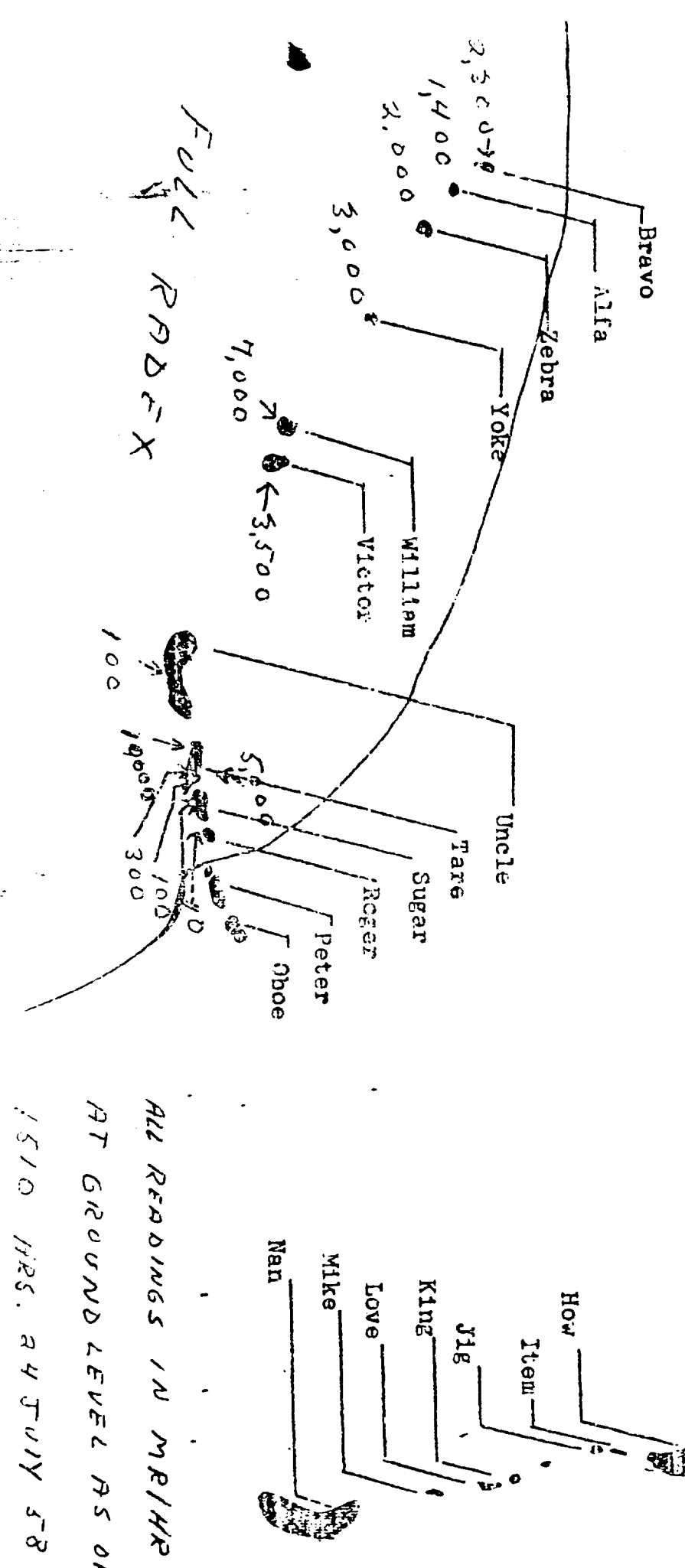
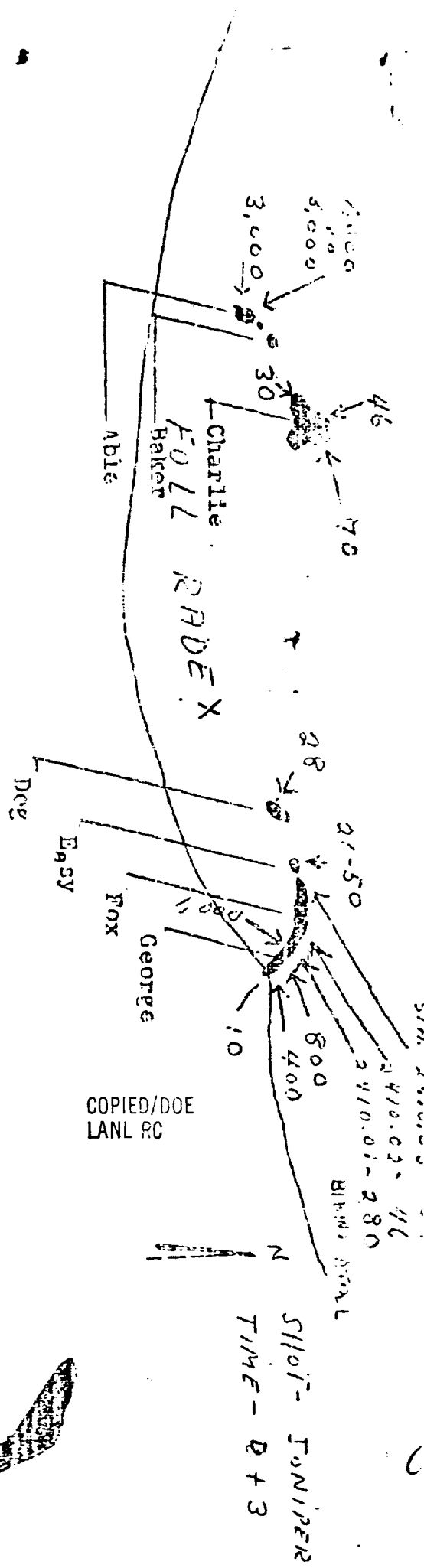


ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 0815, 28 JULY, 1958

Note: Water off lagoon side
of Janet reading 400 m/hr.

--- LIMITED RADEX
— FULL RADEX



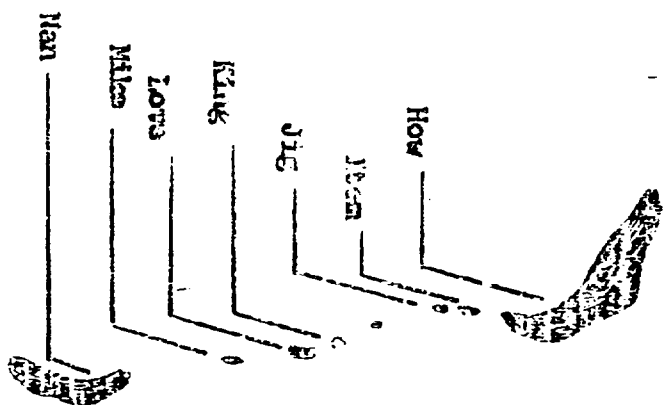


ALL READINGS IN MRLHR
AT GROUND LEVEL AS OF
1510 HRS. 24 JULY 58

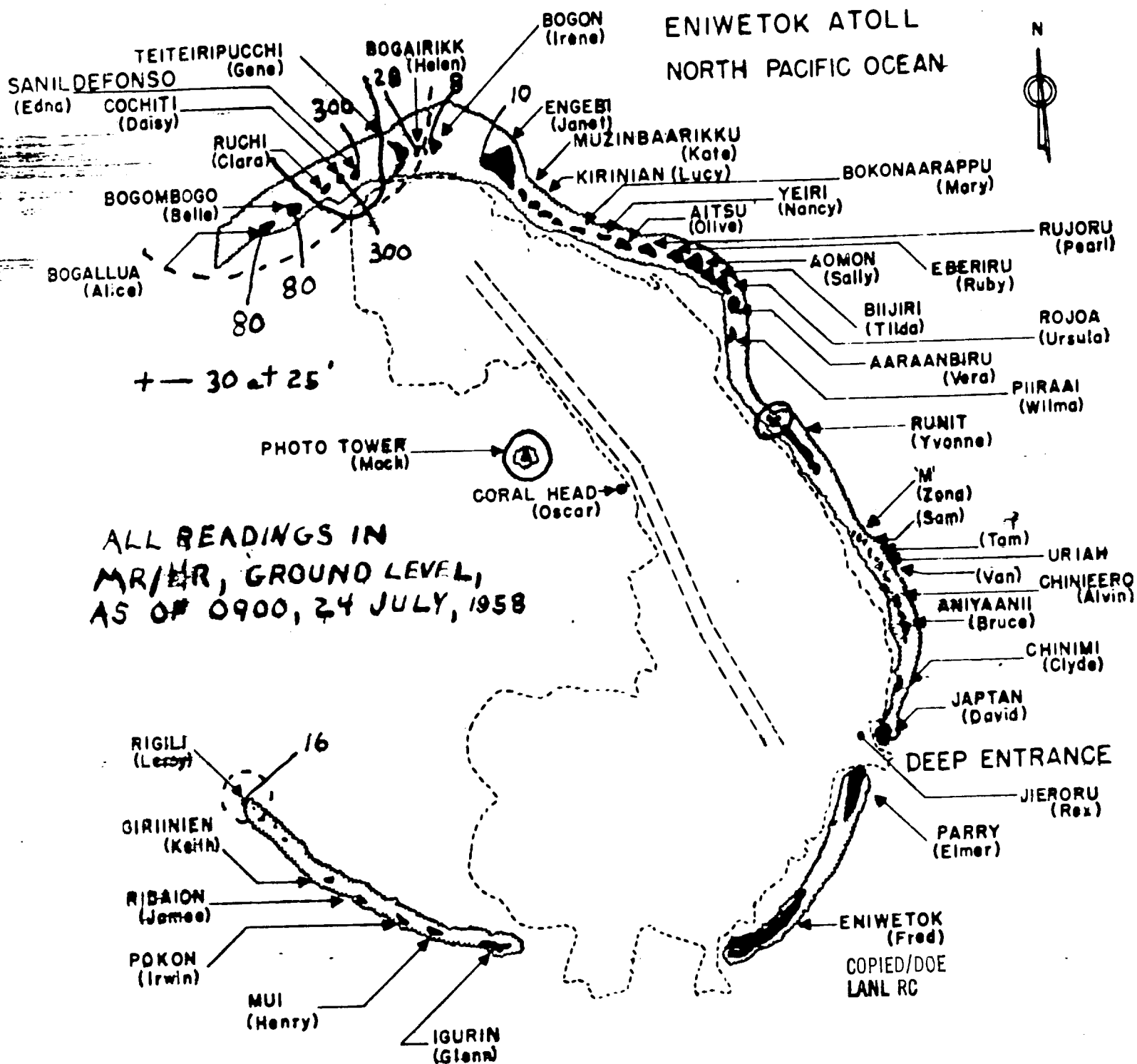


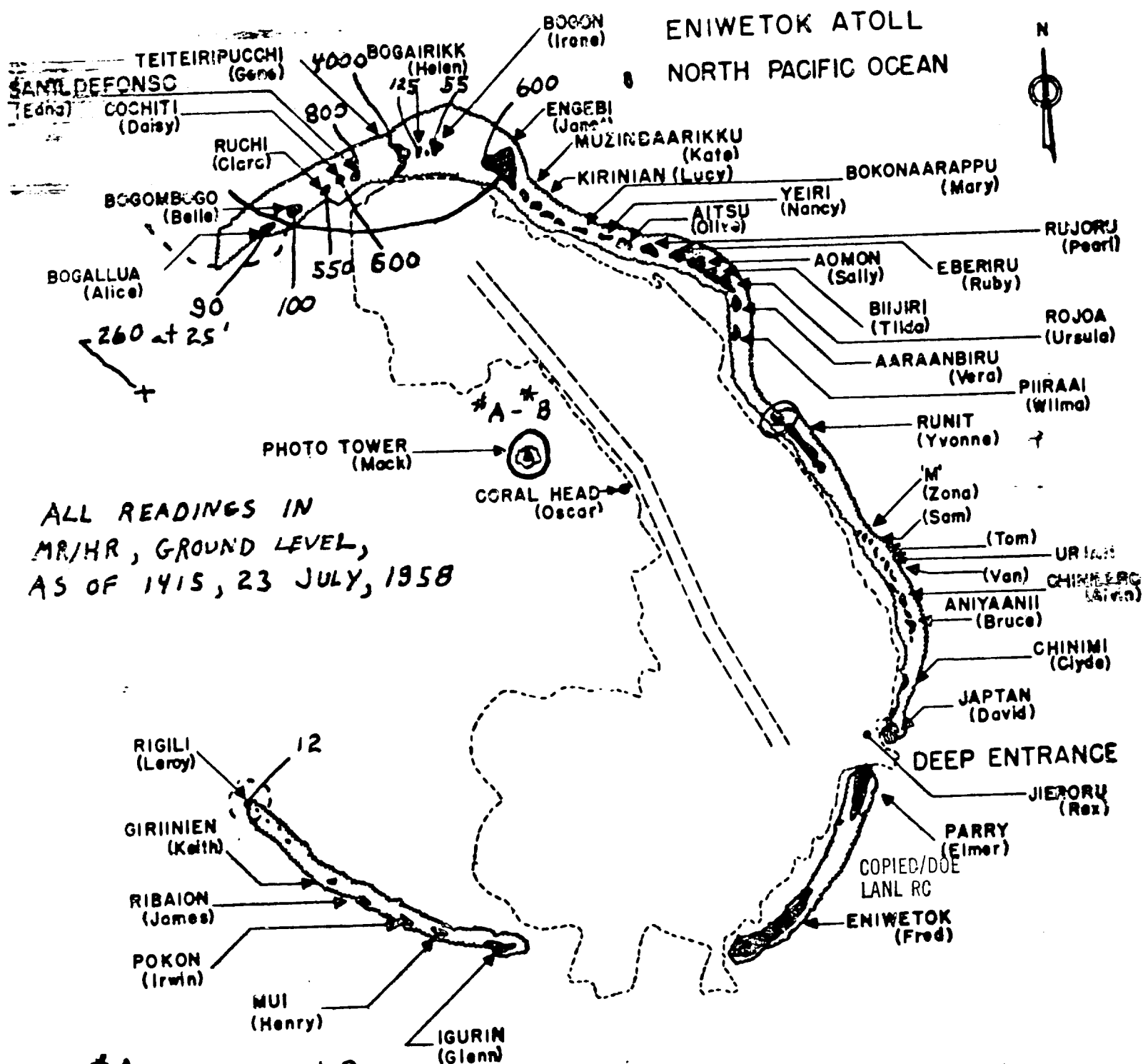
5701

b



ALL Readings In MR|HR
At Ground Level As of
0800 HRS 23 July 58





ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 1415, 23 JULY, 1958

***A**
GAMMA

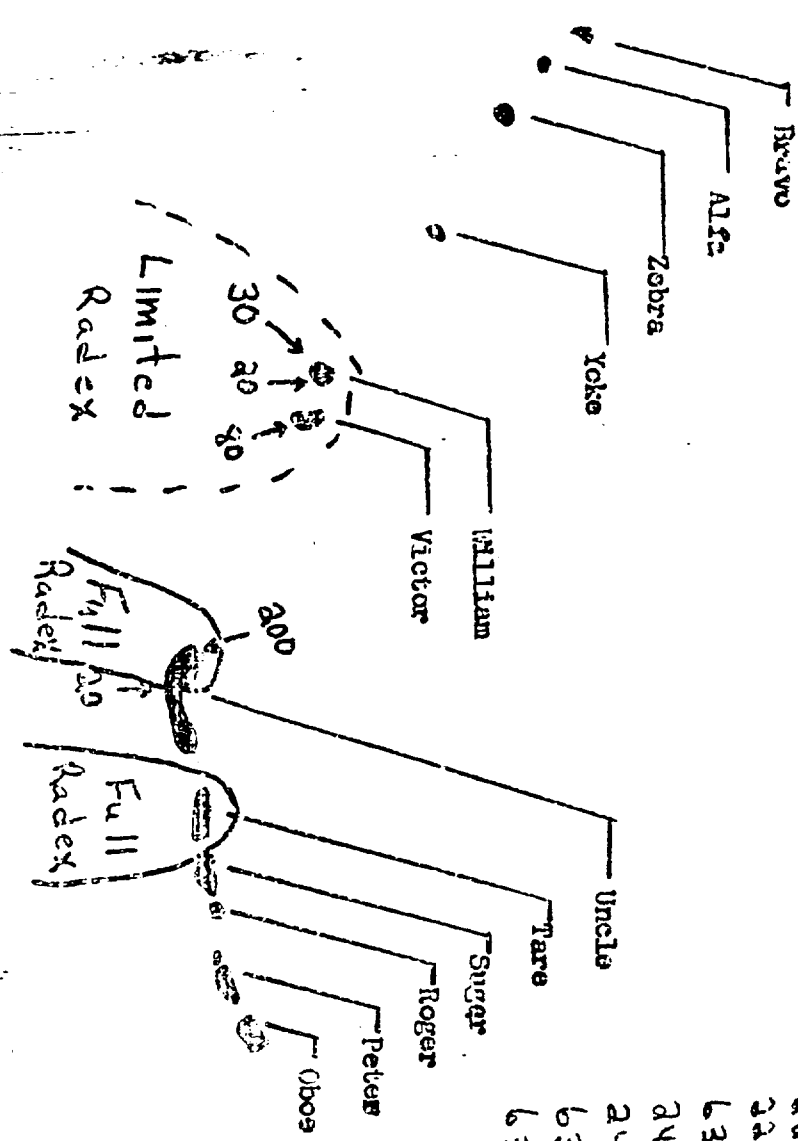
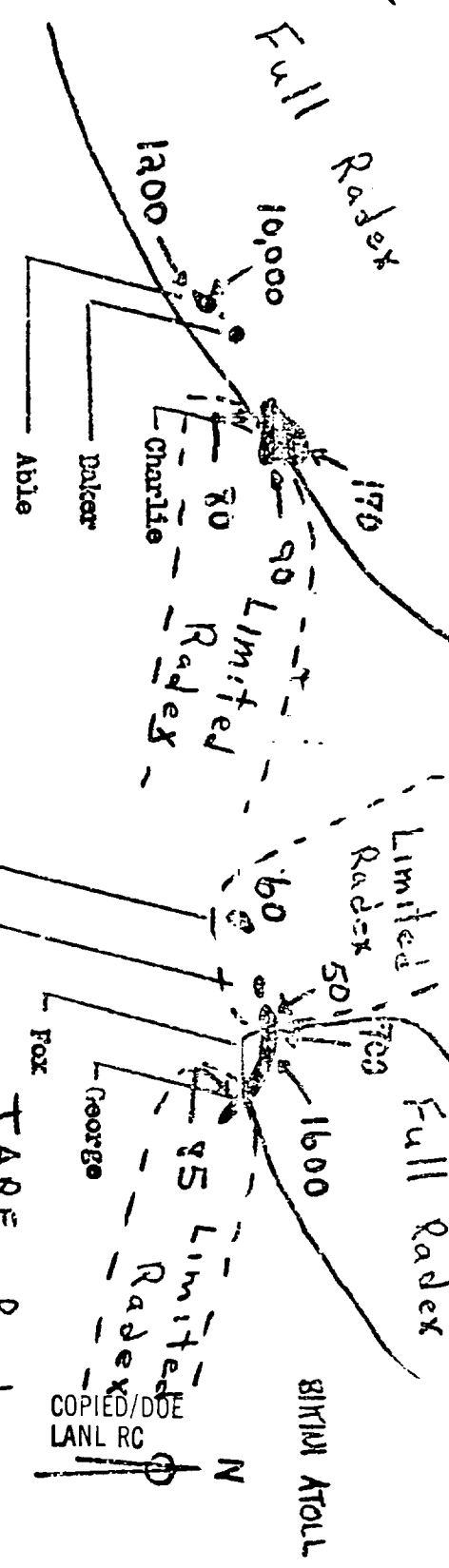
***B**
ALPHA

Room - 110 mr/hr Bottom - 750 cpm
Camera Room - 110 mr/hr Camera Room - 600 cpm
10 mr/hr Top - 300 cpm

--- LIMITED RADEX

— FULL RADEX

12

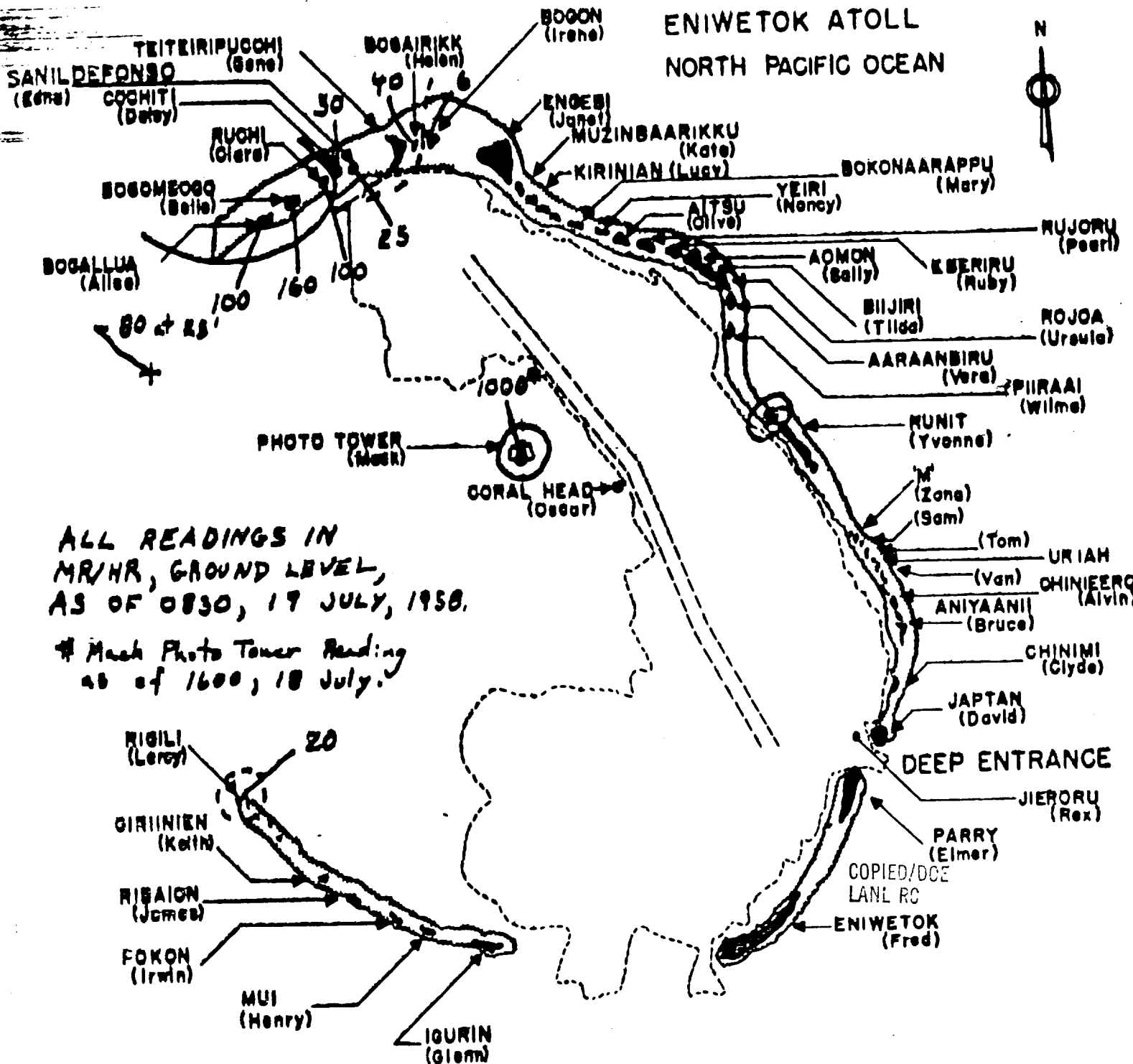


TARE Readings

2270	16	How
2210	30	
2230.01	22	
2230.02	12	
630.01	60	
2420.01	280	
2420.02	100	4000 Items
630.02	22	JLG
630.03	1	King
1630 HRS.	Love	

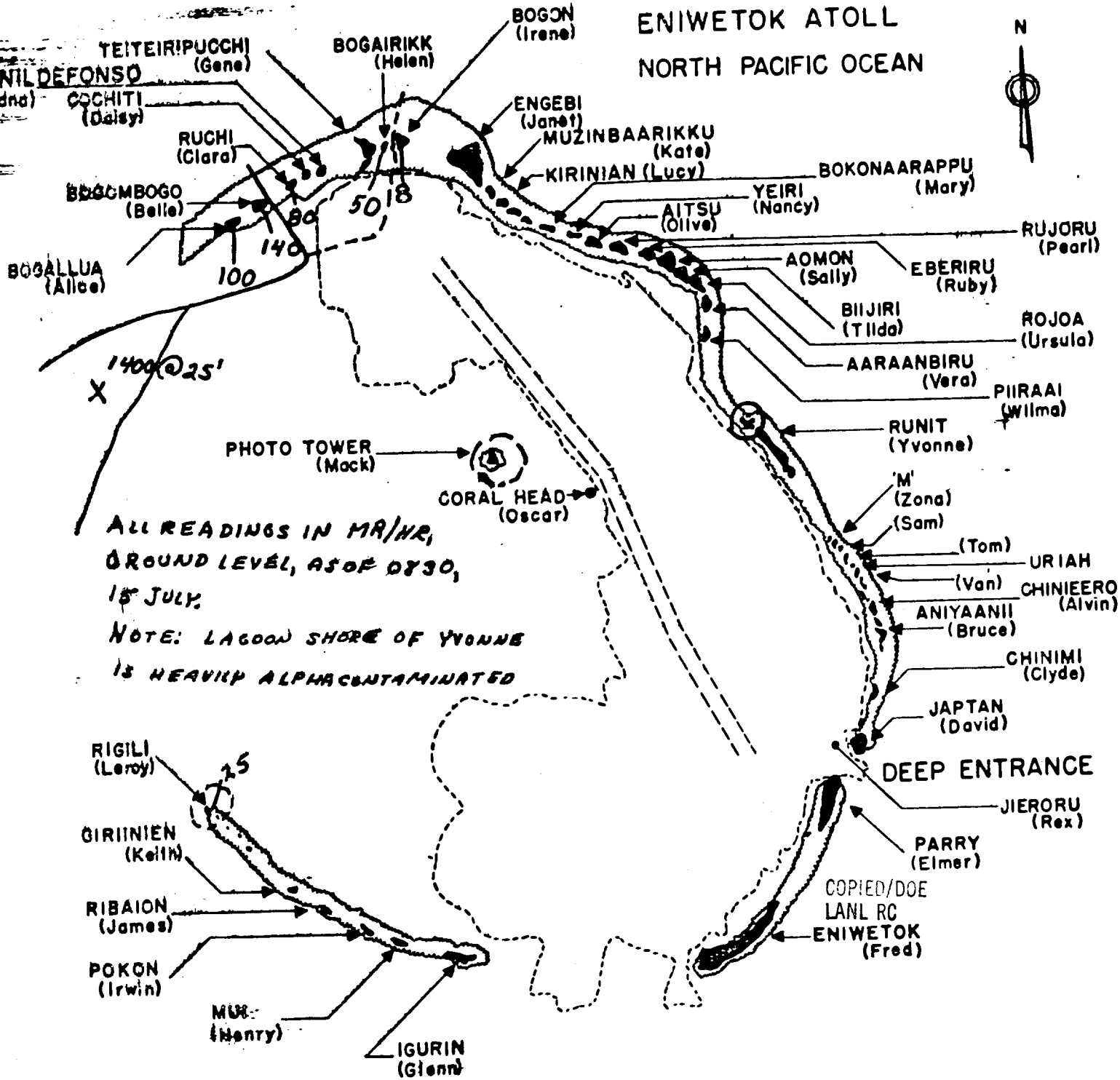
ALL Readings IN MILES
 Northern Half of Atoll
 1100 HRS 18 July 58
 Southern Half of Atoll
 0830 HRS 16 July 58

ENIWETOK ATOLL NORTH PACIFIC OCEAN

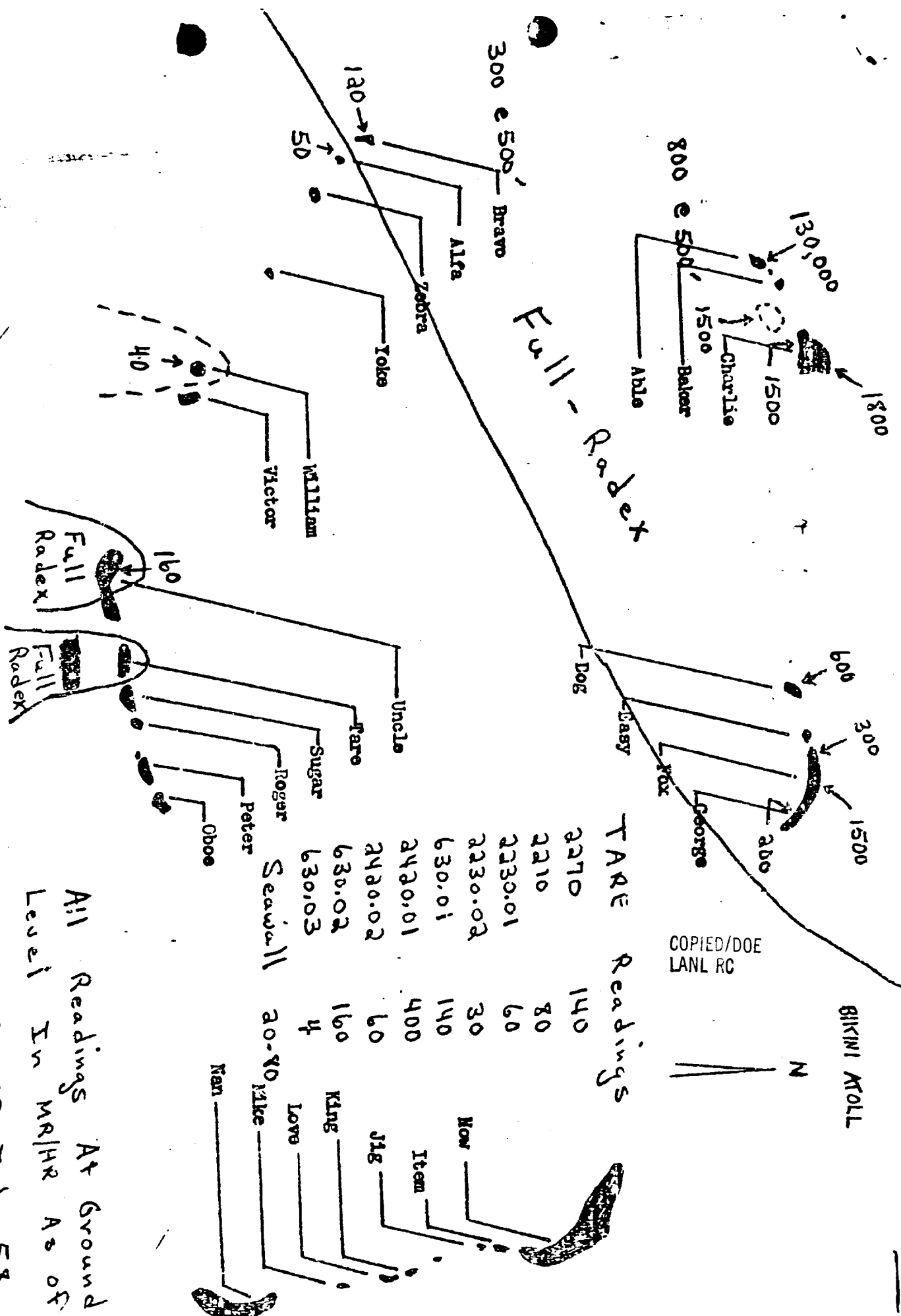


H

ENIWETOK ATOLL NORTH PACIFIC OCEAN



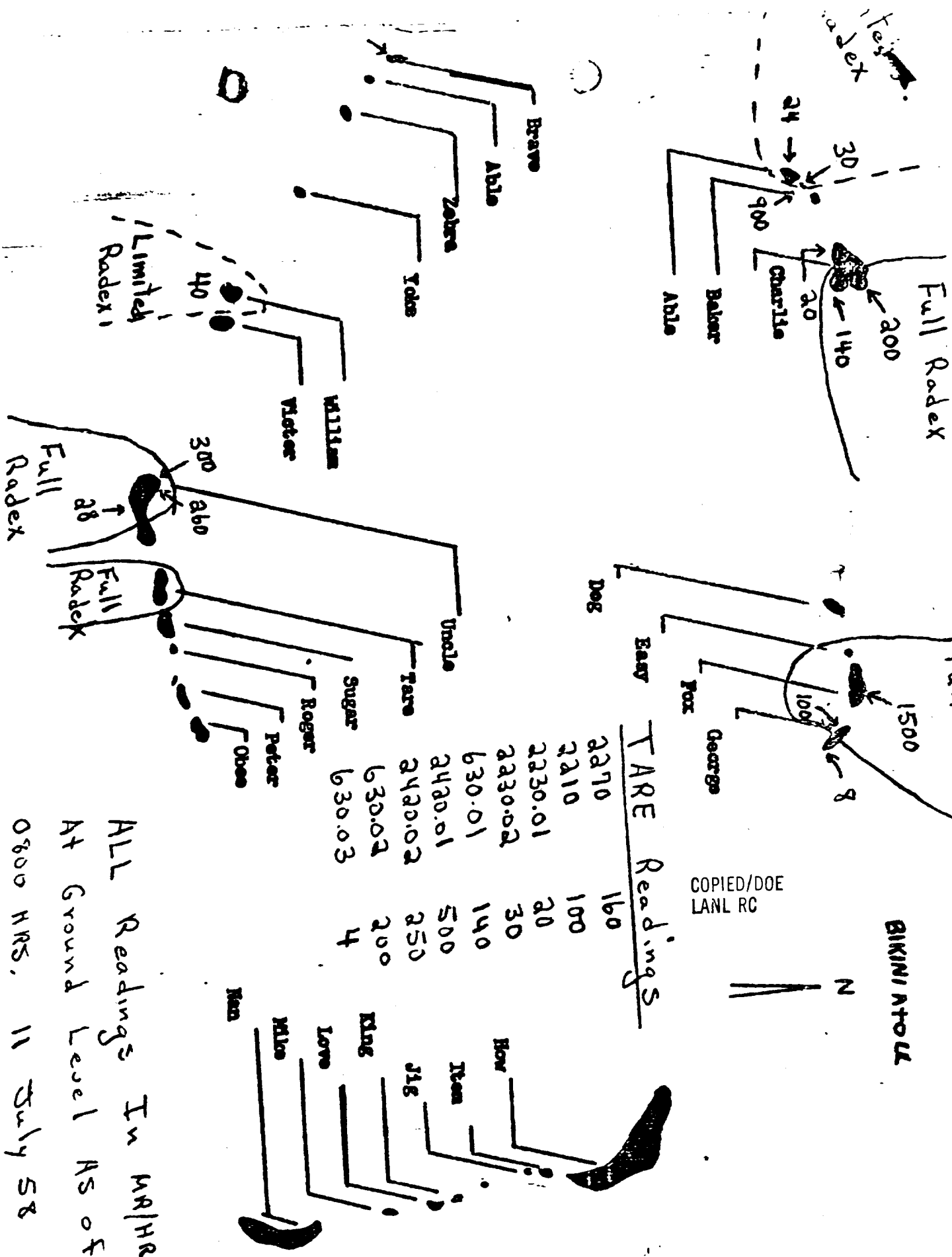
— FULL RADEX
- - - LIMITED RADEX



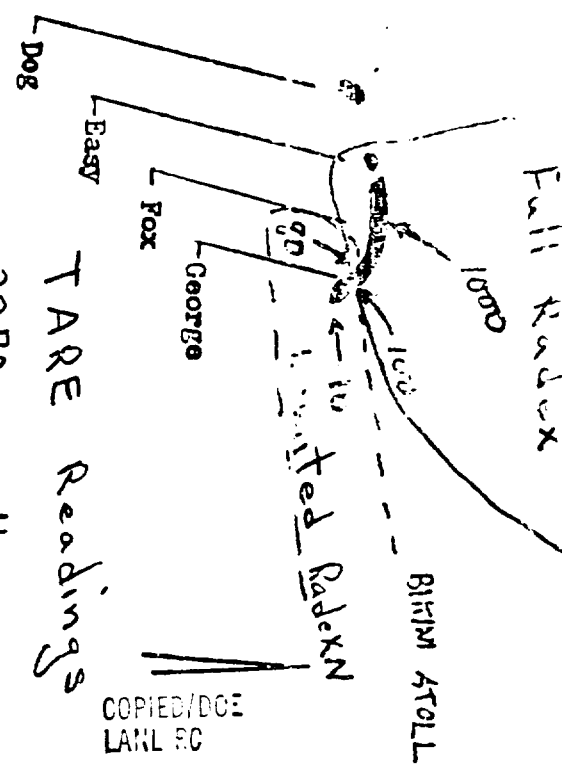
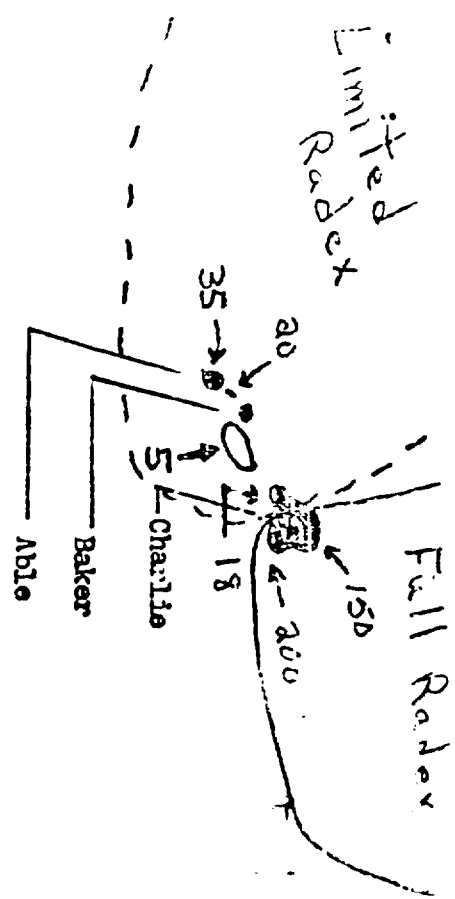
All Readings At Ground Level In M/H R As of 1500 hrs. 13 July 58

COPIED/DOE LANL RC

BIKINI ATOLL

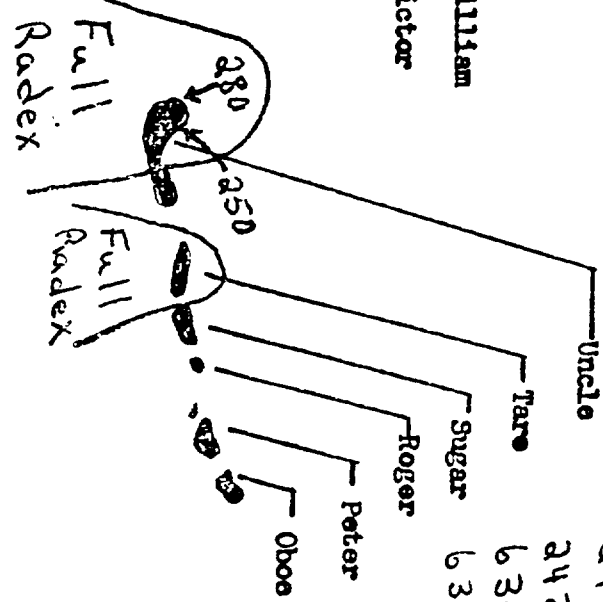
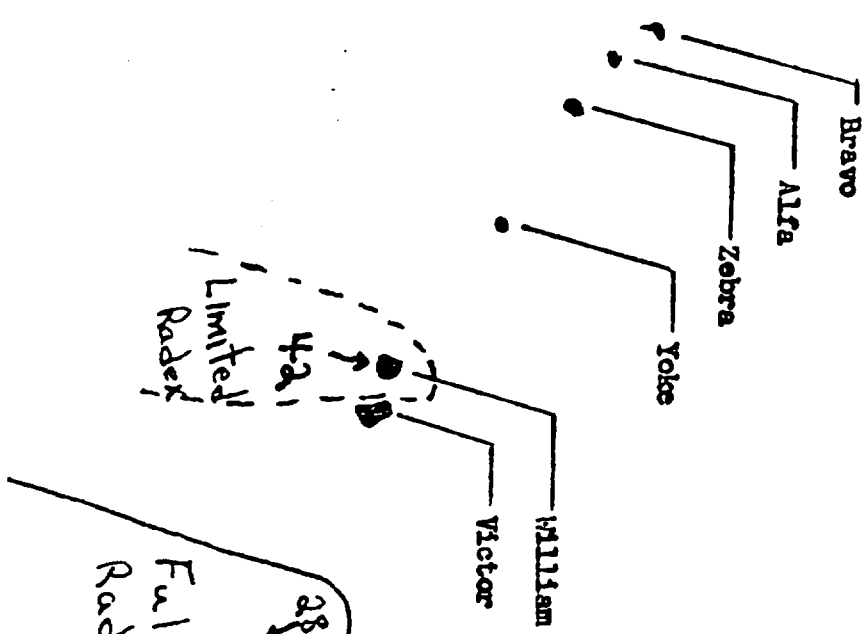
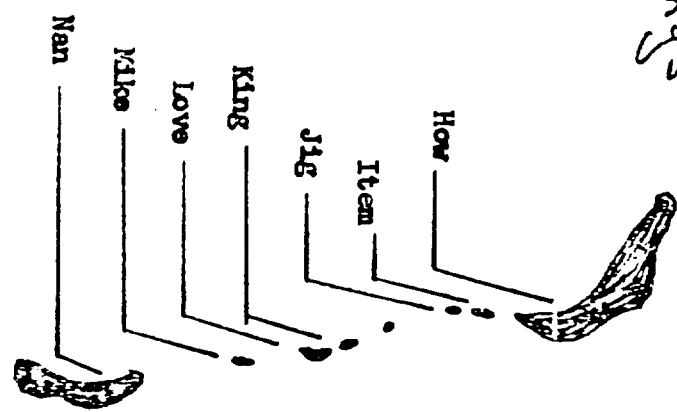


ALL Readings In M/R/HK
At Ground Level AS of
0800 HRS. 11 July 58



TARE Readings

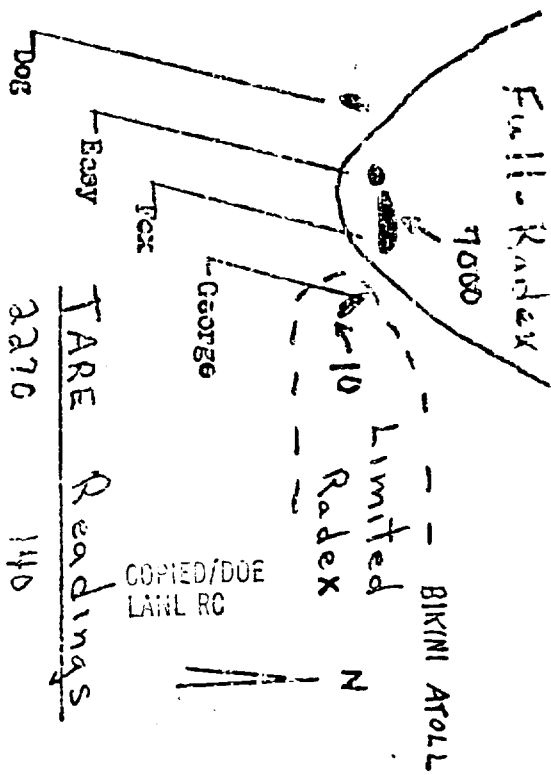
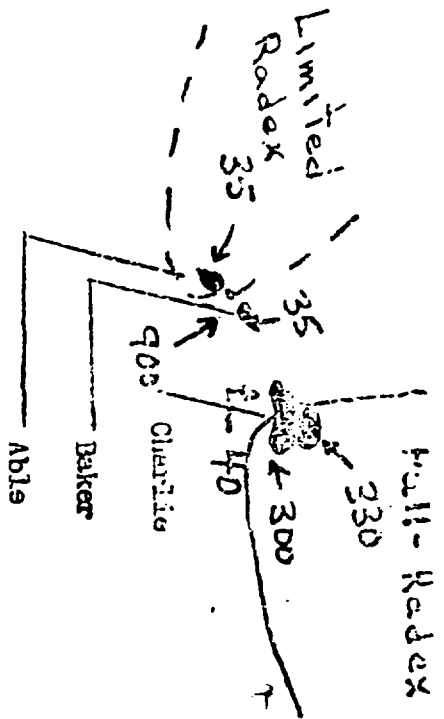
2270	160
2210	100
2230.01	120
2230.02	110
630.01	160
2420.01	600
2420.02	250
630.02	220
630.03	4



All Readings In MRA
At Ground Level As of

0800HRS 10 July 58

COPIED/DOE
LAWL EC



COPIED/DUE
LANL RC

TARE Readings

2276	140
2216	180
2230.01	150
2230.02	140
630.01	200
2420.01	600
2420.02	260
630.02	260
630.03	4

Hot Spot At Love

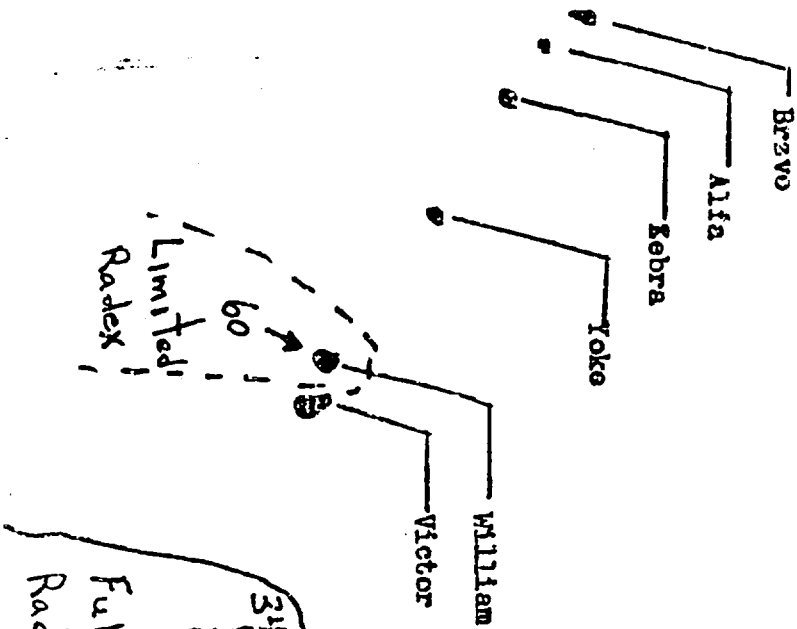
2420.01 500 Mike

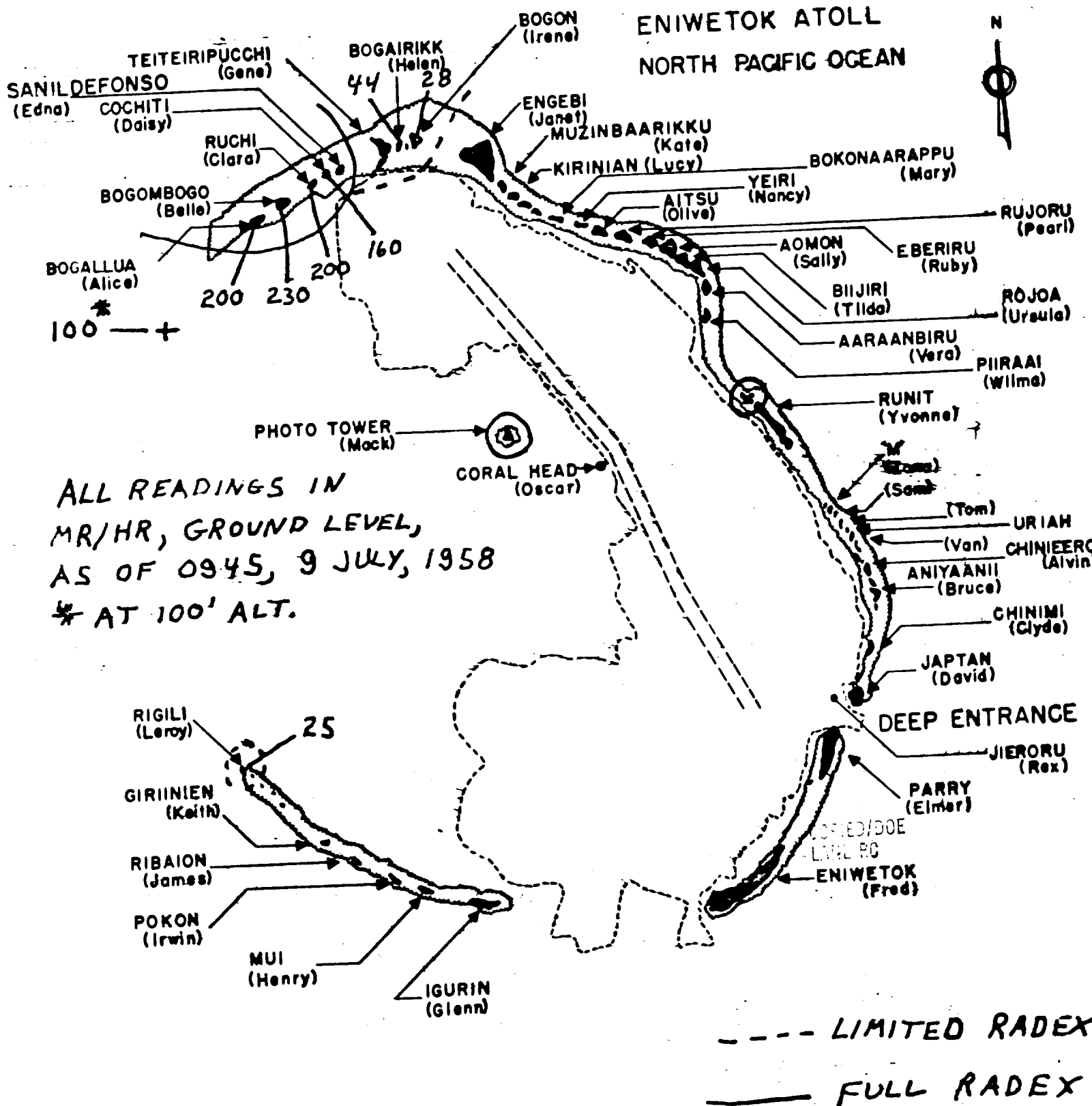
2420.02 800 Naz

Survey Triangle 20

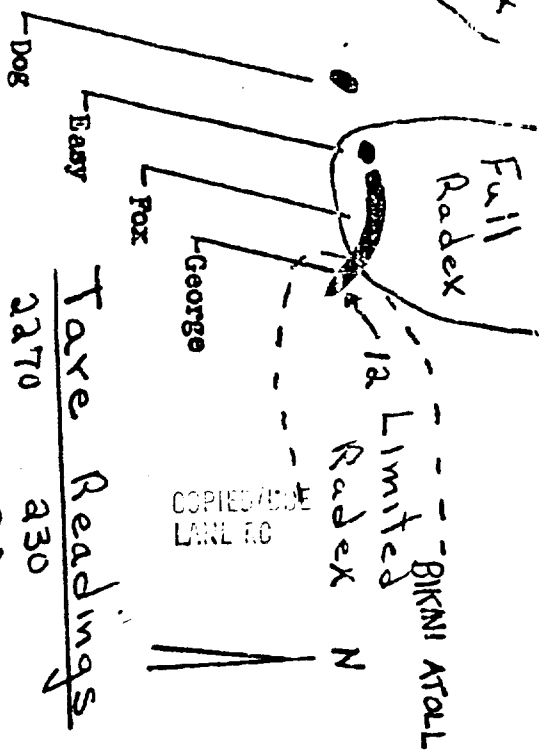
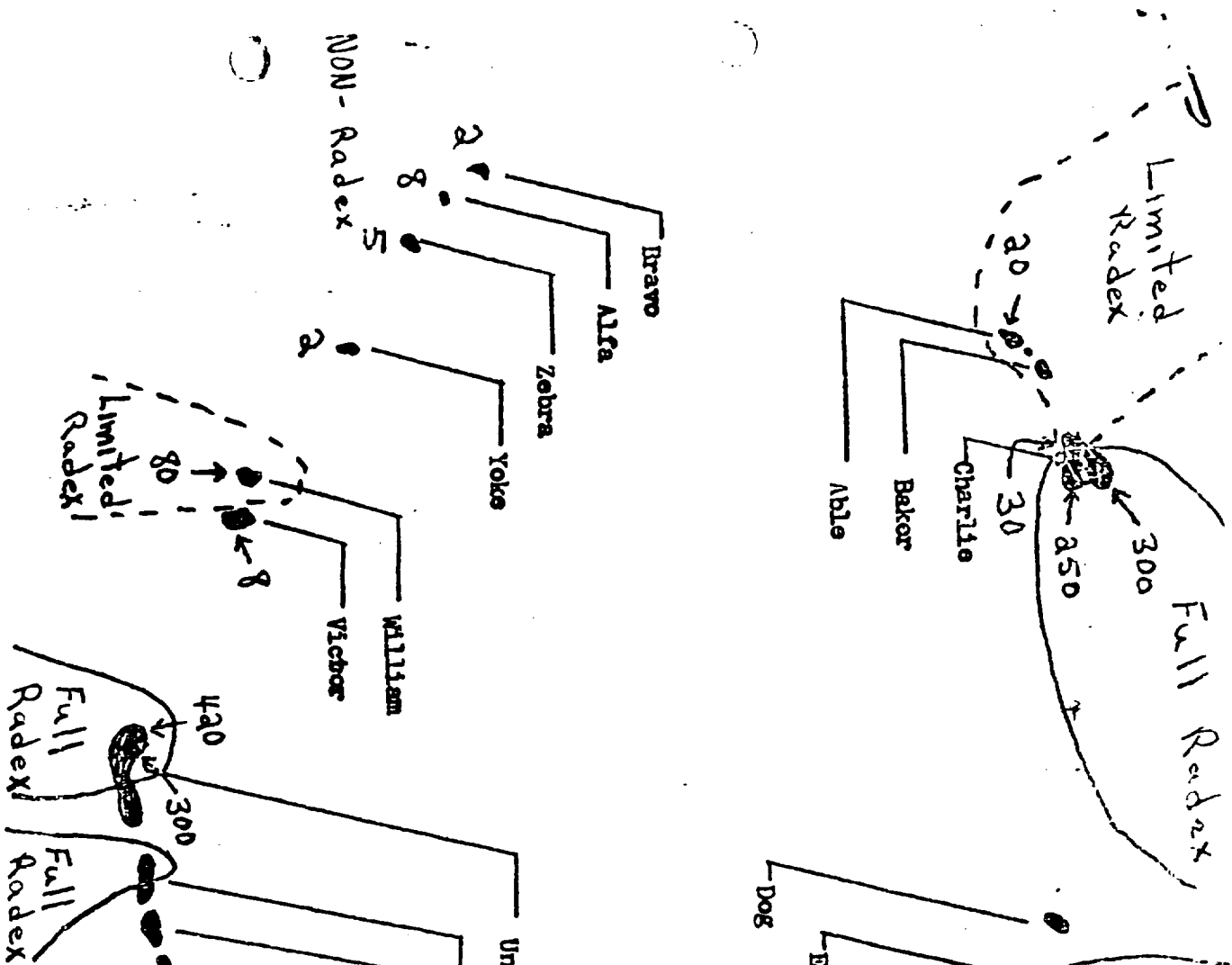
All Readings In MR/HA
At Ground Level As of

1030 HRS 9 July 58





20

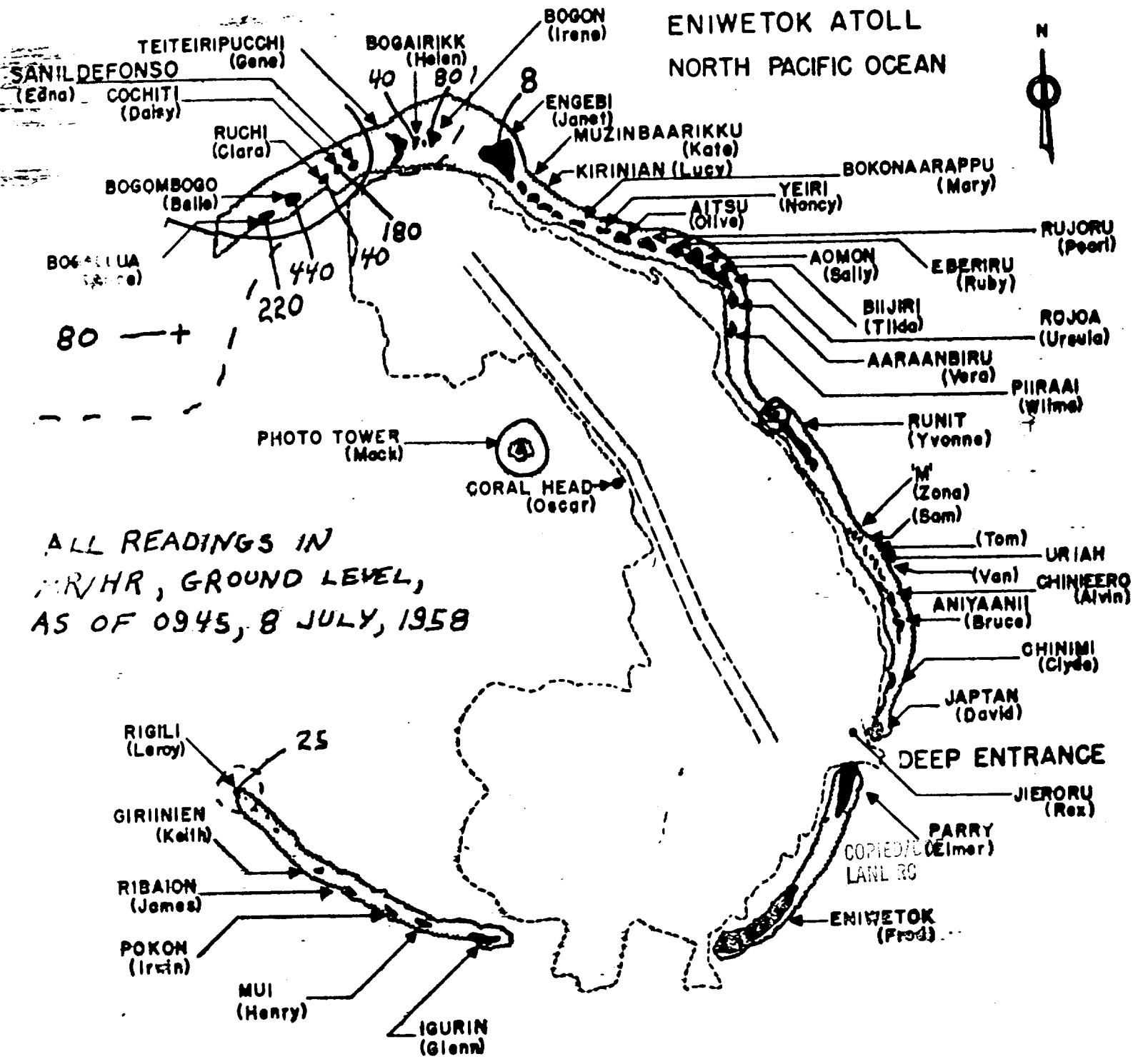


Tare Readings

2270	230
2210	200
2230.01	220
2230.02	200
630.01	260
2420.01	600
2420.02	300
630.02	300
630.03	5

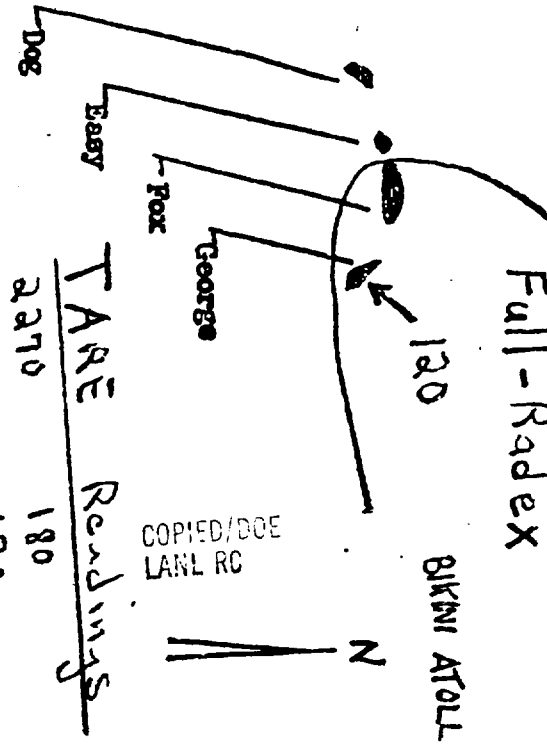
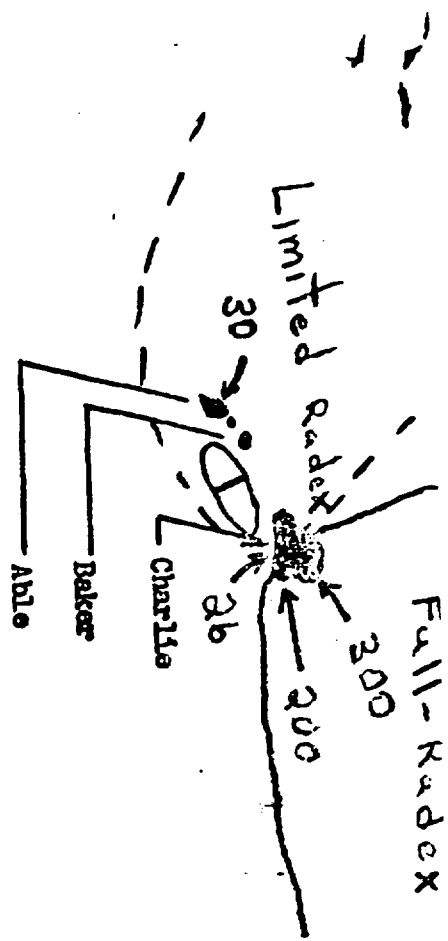
How Item King Love Mike Nan

ALL Readings In MR/HR
At Ground Level As of
0800 HRS. 8 July 58



ALL READINGS IN
M/HR, GROUND LEVEL,
AS OF 0945, 8 JULY, 1958

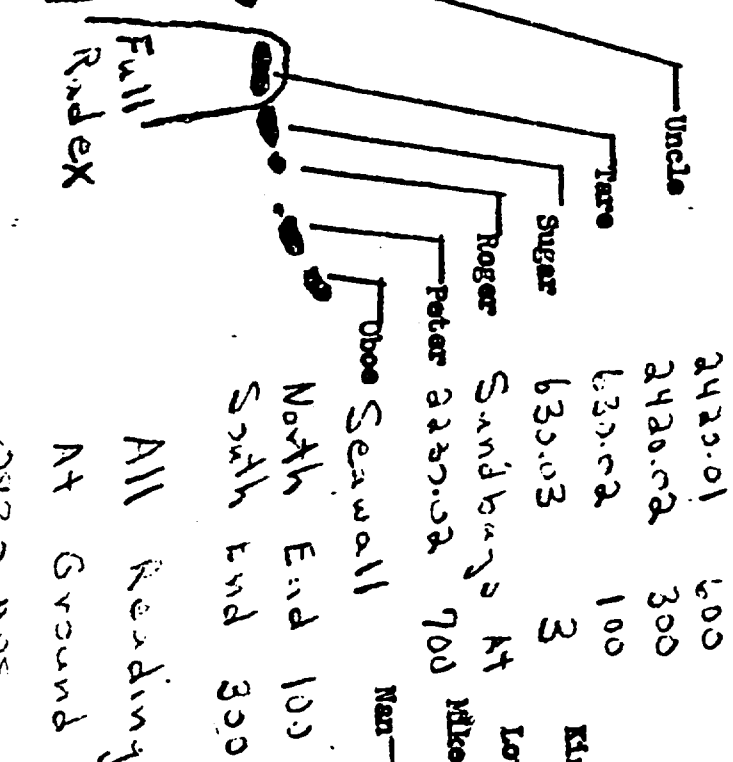
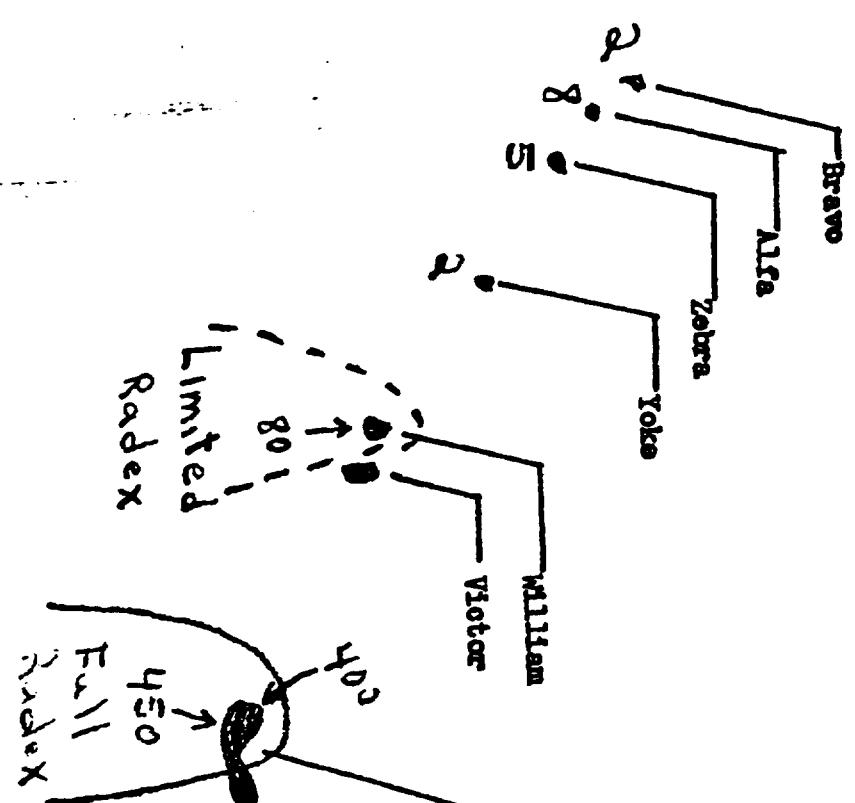
28



TARE Readings

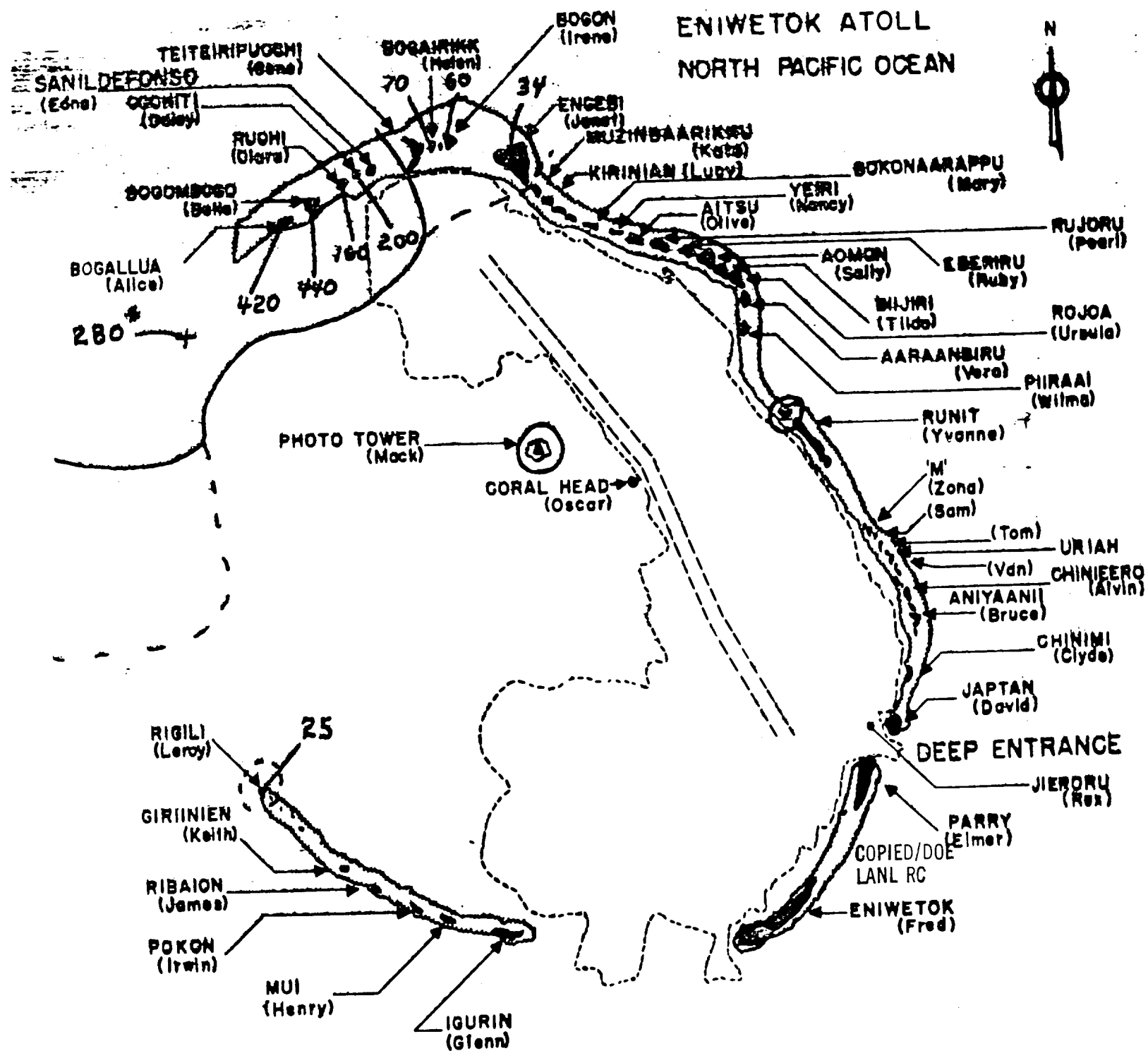
2270	180
2210	170
2230.01	140
2240.02	160
630.01	240
2420.01	600
2420.02	300
630.02	100
630.03	3

How _____
 Item _____
 King _____
 Love _____
 Mike _____
 Man _____



Roger Sandburgs At
 Peter 2220.02 700
 Oboe Seawall
 North End 100
 South End 300

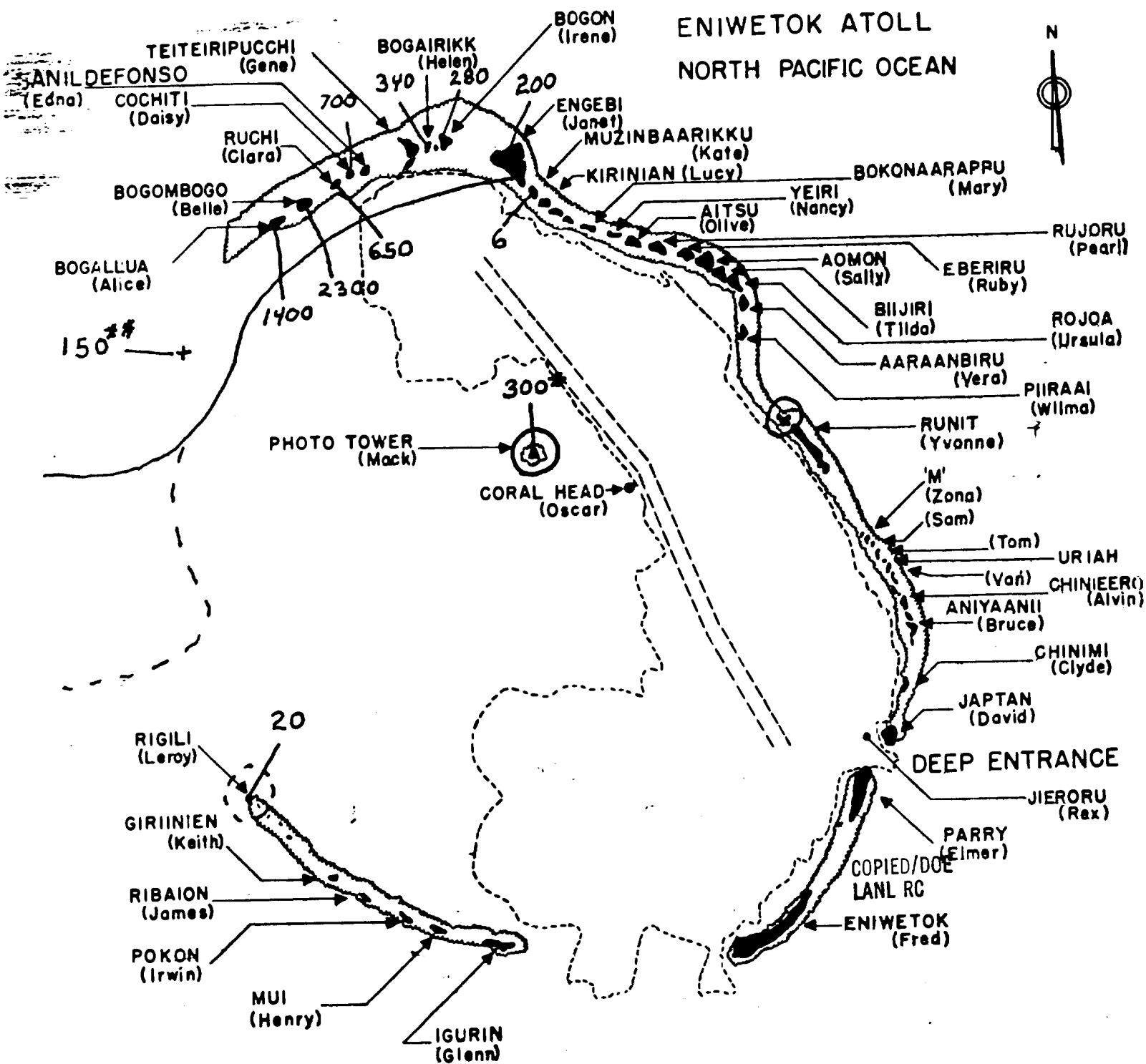
All Readings In M/R/H/R
 At Ground Level As of
 0930 hrs. 7 July 58



ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 0945, 7 JULY, 1958
* AT 100' ALT.

--- LIMITED RADEX
— FULL RADEX

2



ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 1400, 6 JULY, 1958
* 1045 HRS., 6 JULY, 1958
** AT 200' ALT.

--- LIMITED RADEX
— FULL RADEX

28

CHARL
12-28-80

20

Limbedi

630.04	1000
630.07	200
2480.01	3800
2420.05	10000

天竺國

Bakrāi
ibīle

6.5.2017

COPIED/DOE
LANL RC

TORE Readings

2

25.00.03 120

3800 Gikivi Atqul-
10000

20

മി.എ.എഫ്.

Index

375

Like

WILLIAM

ಸರ್ವಜ್ಞ

Full. Radex

by

DeK

Full
Quincy

Fall
Rudolph

Ureol

74.6

22

540

3

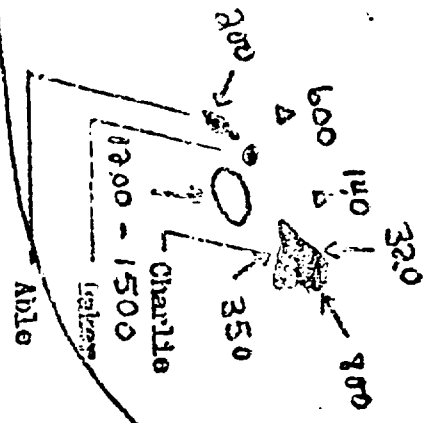
1

7

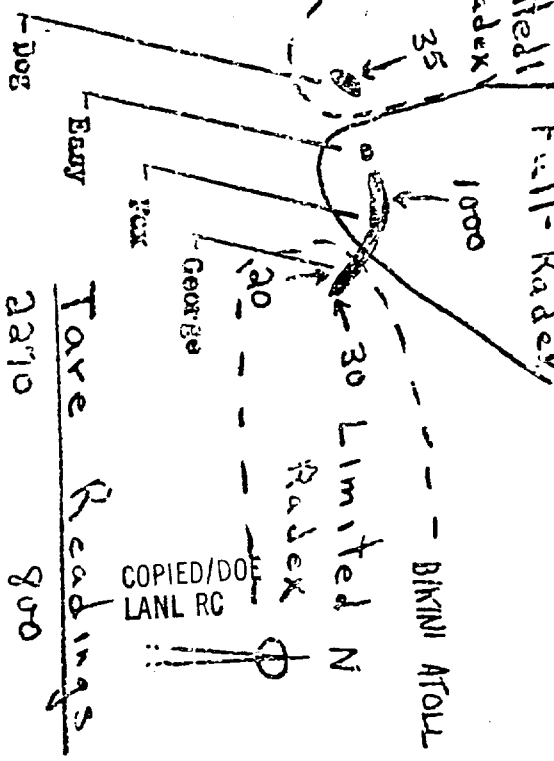
7

.

Full-Radex

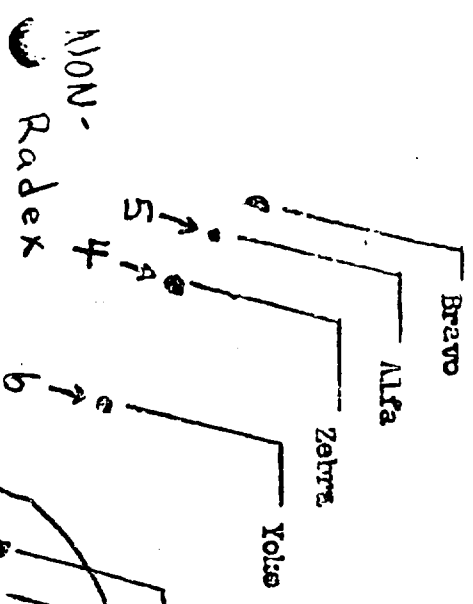


Limited Full-Radex

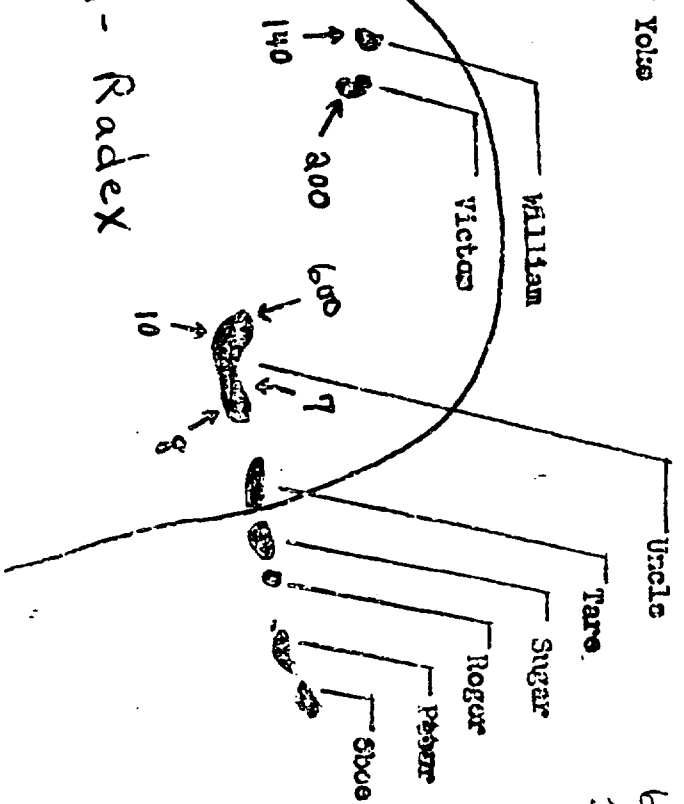


COPIED/DO
LANL RC

Tare Readings



Full-Radex



2270	800	Item
2230.01	800	
2232.02	1000	
2420.01	2800	
2420.02	600	How
630.03	4	
630.02	200	Item
2210	500	Jig
2260	2000 King	
Survey	Triangle	
40	Mike	
630.01	800	
Steve		
Rogar		
Sugar		
Tare		
Uncle		
Victor		
William		
Yoke		
Zebra		
Alfa		
Bravo		

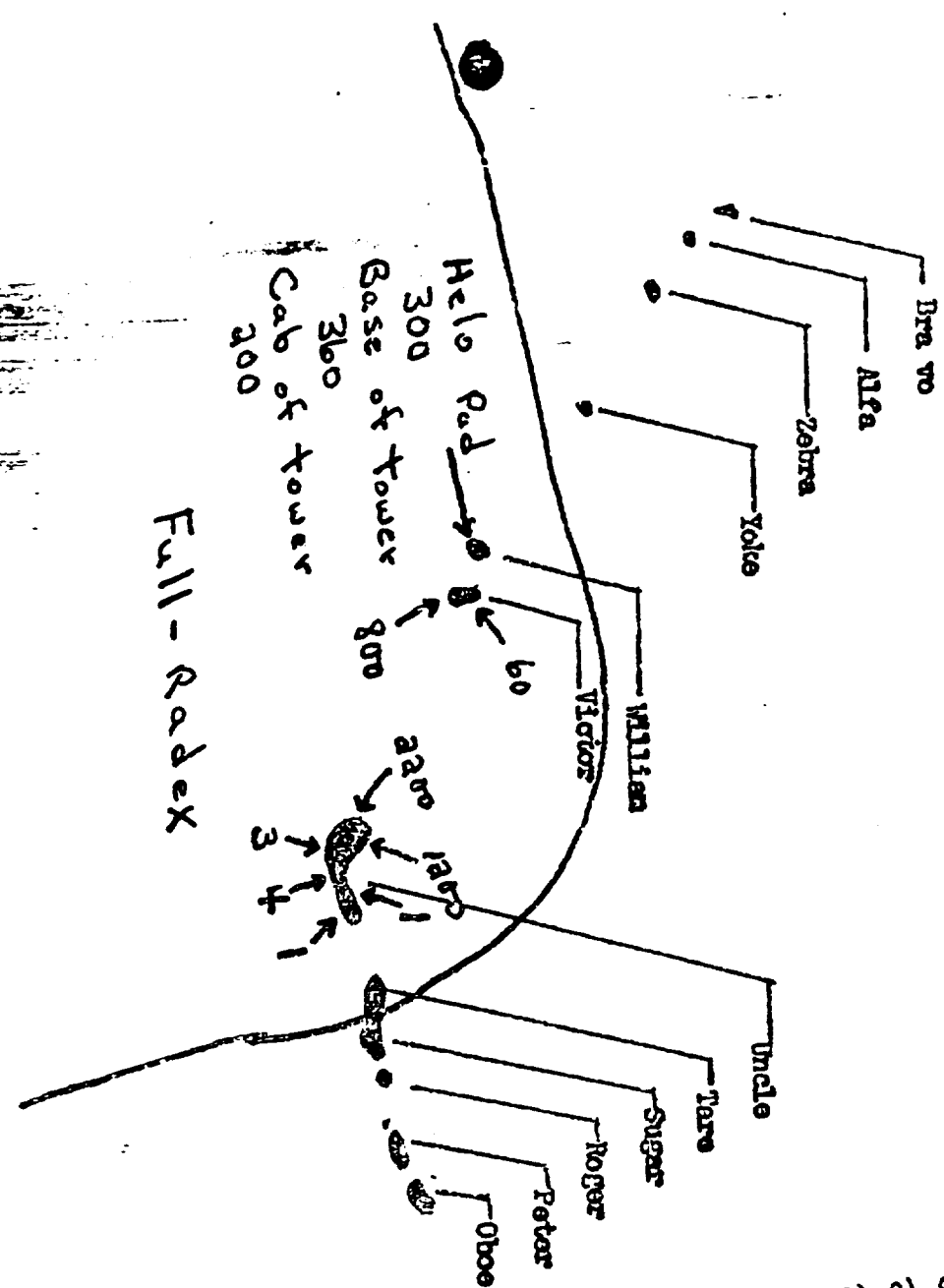
ALL Readings In Mj/m
At Ground Level as of
1440 HRS 3 July 58

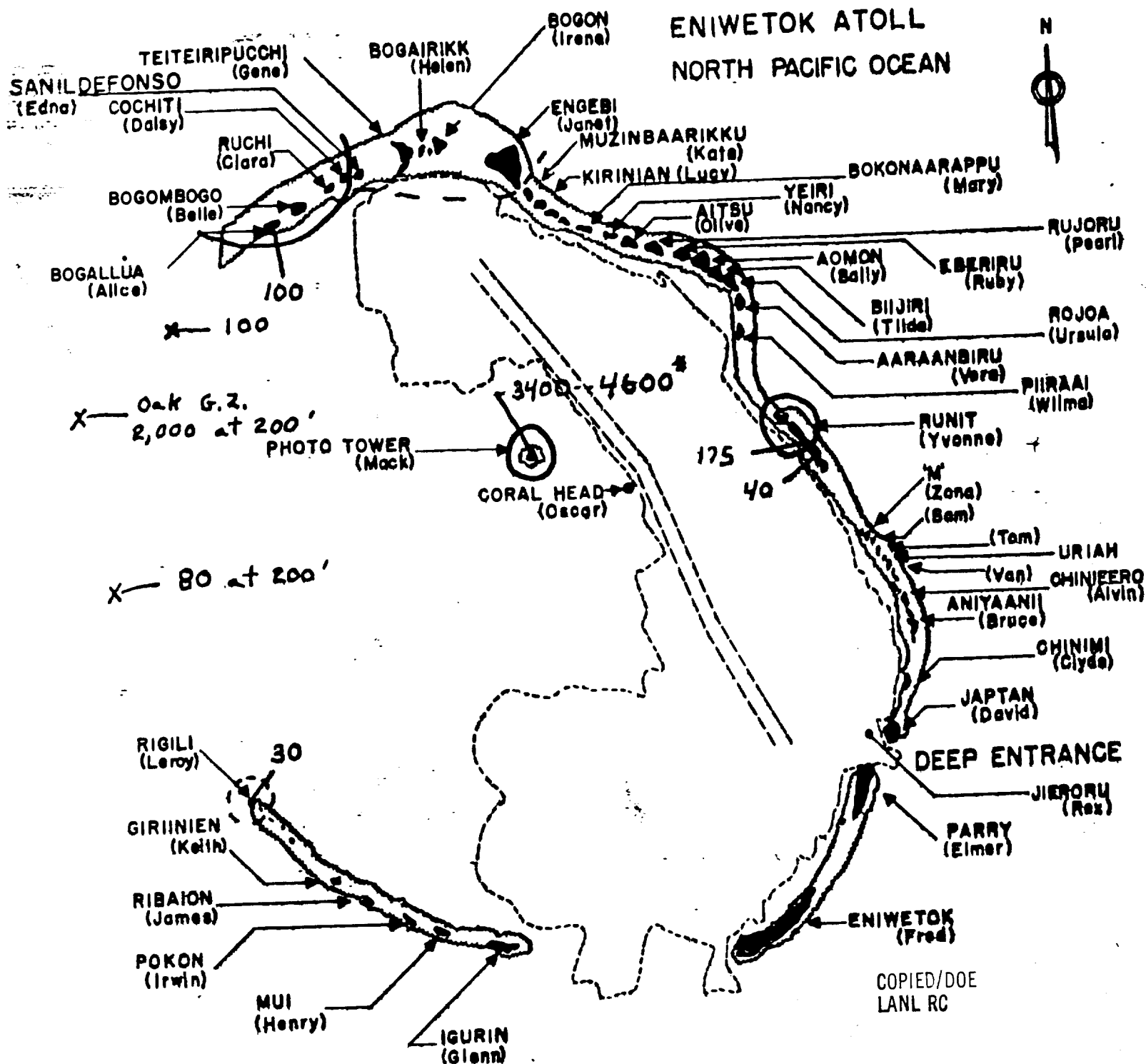


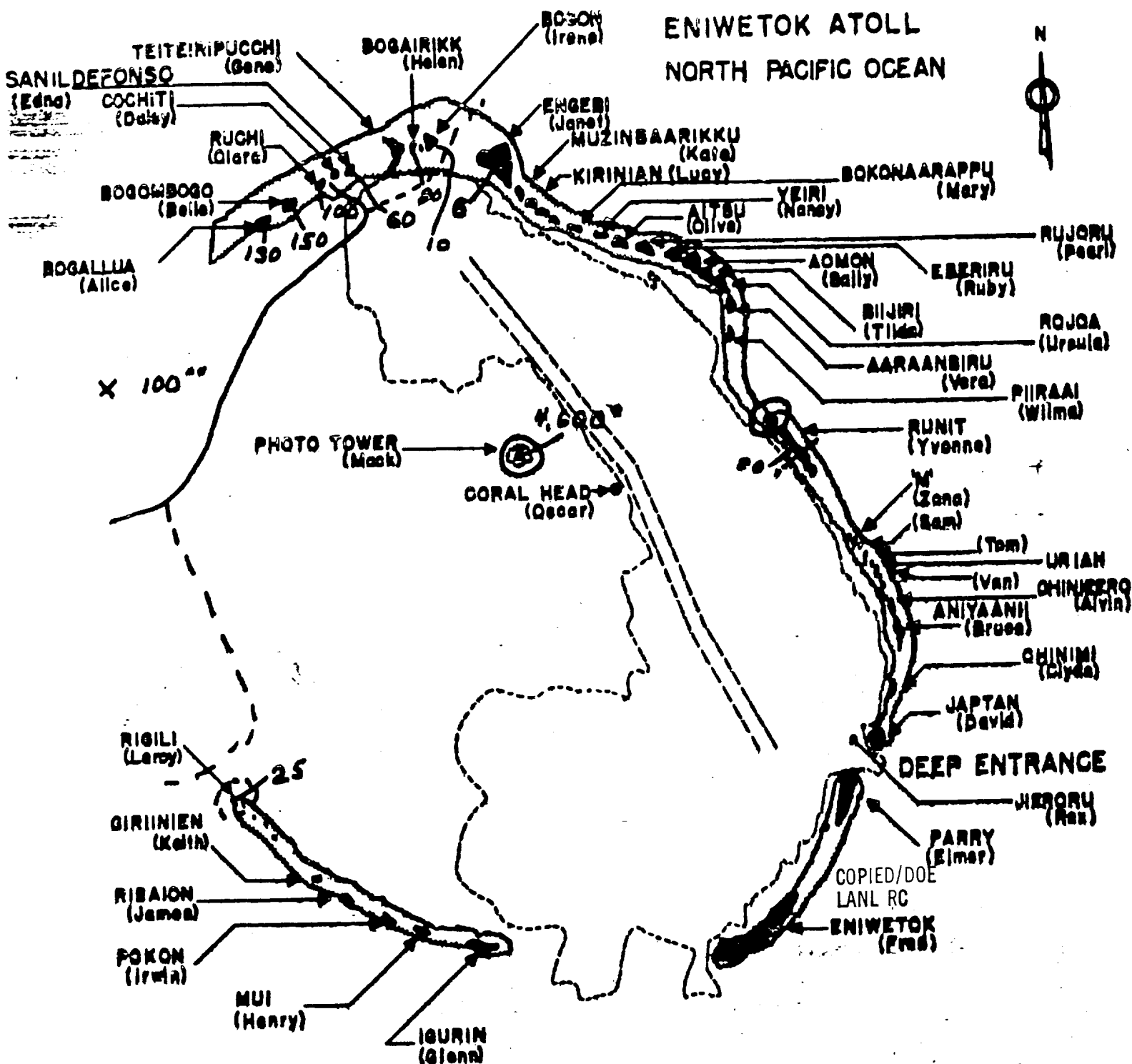
TARE Readings

and Love _____
 Melos _____
 Hen _____

Fall-Index





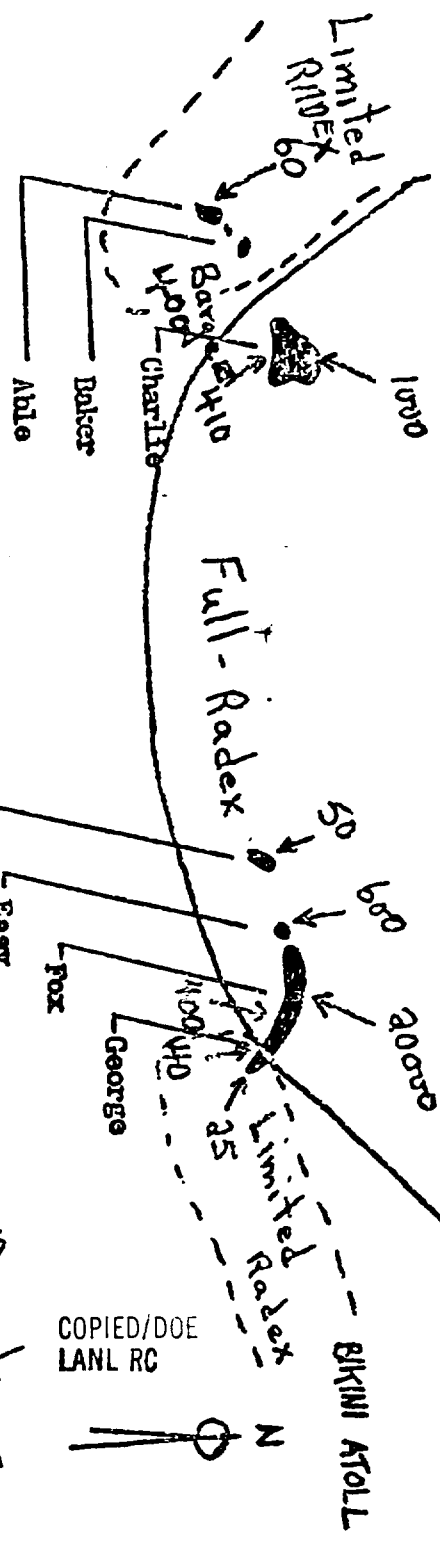


ALL READINGS IN M/INR.
GROUND LEVEL, AS OF 0815
HRS, 2 JULY 1958

* 1415 HRS 2 JULY
* * READING AT 200' ALT.

———— FULL RADAR
----- LIMITED RADAR

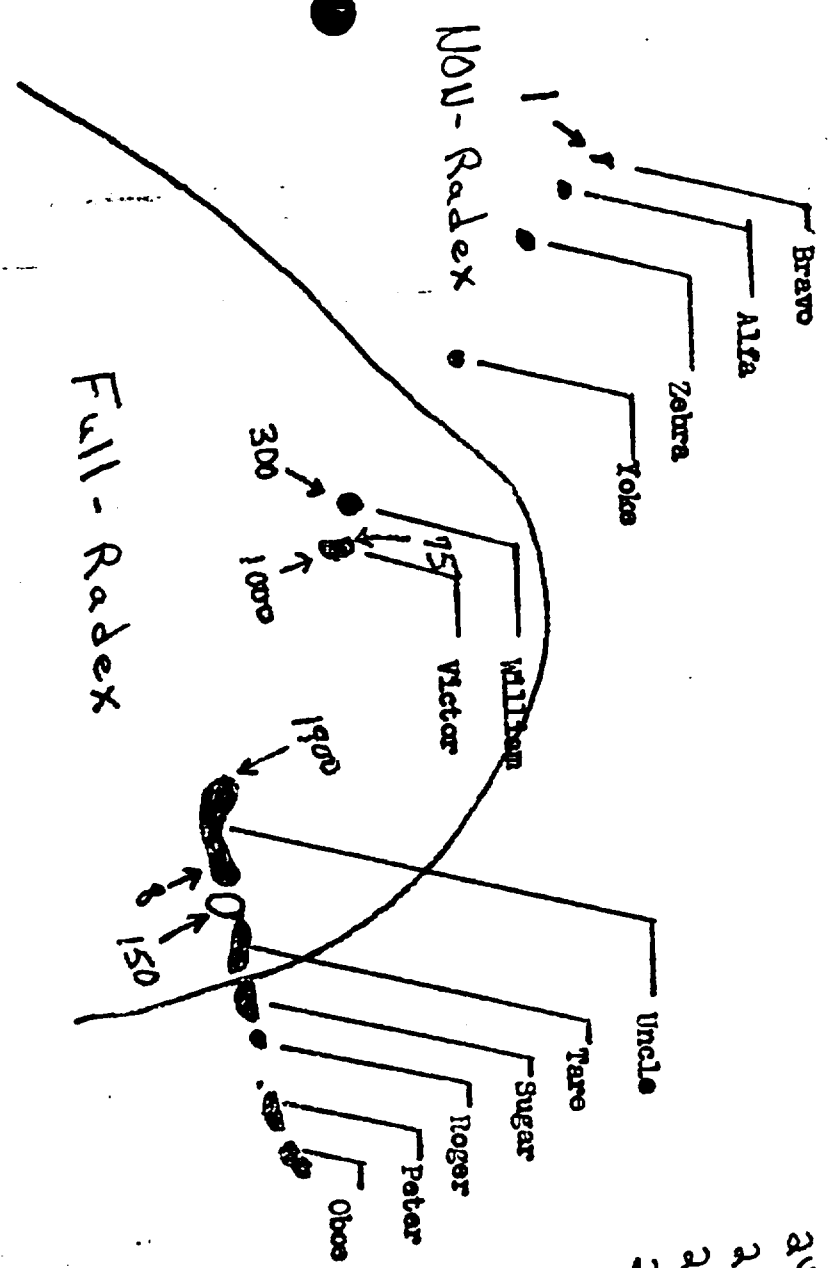
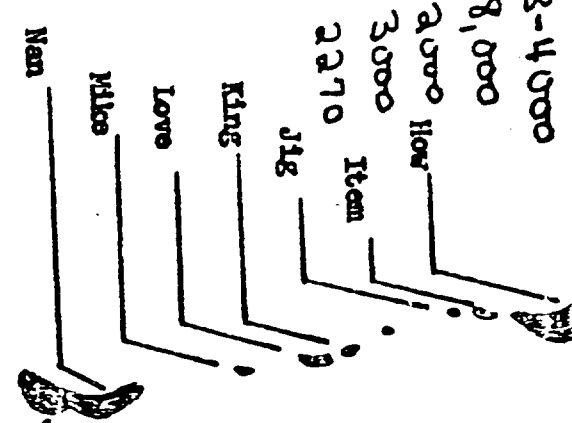
33



COPIED/DOE
LANL RC

TARE Readings

630.03	30
630.02	3-4000
2420.02	8,000
2230.02	2000 How
2230.01	3000 Item
2270	2270

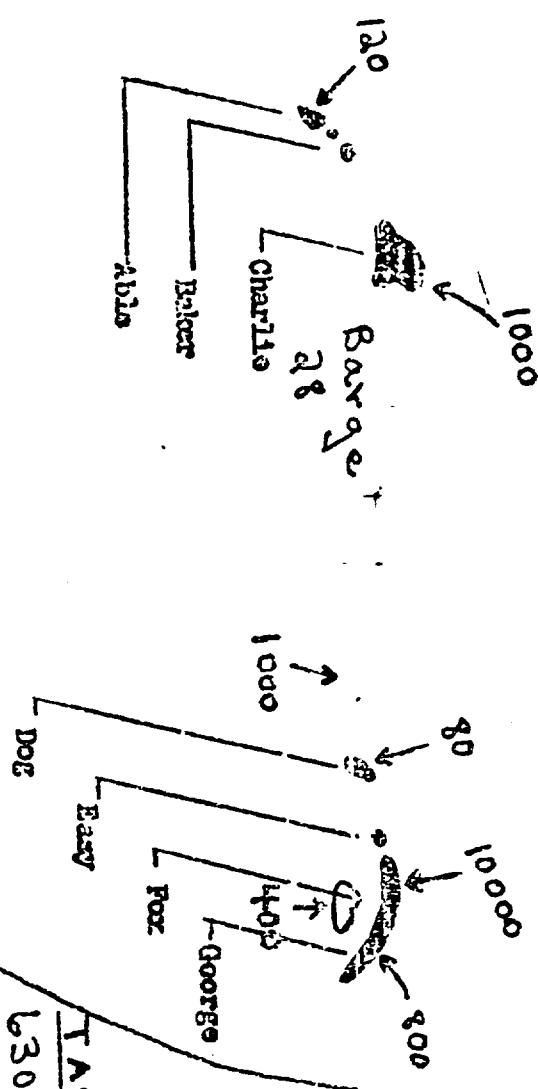


ALL Readings In MR/HA
At Ground Level As of
1400 HRS. 1 July 58

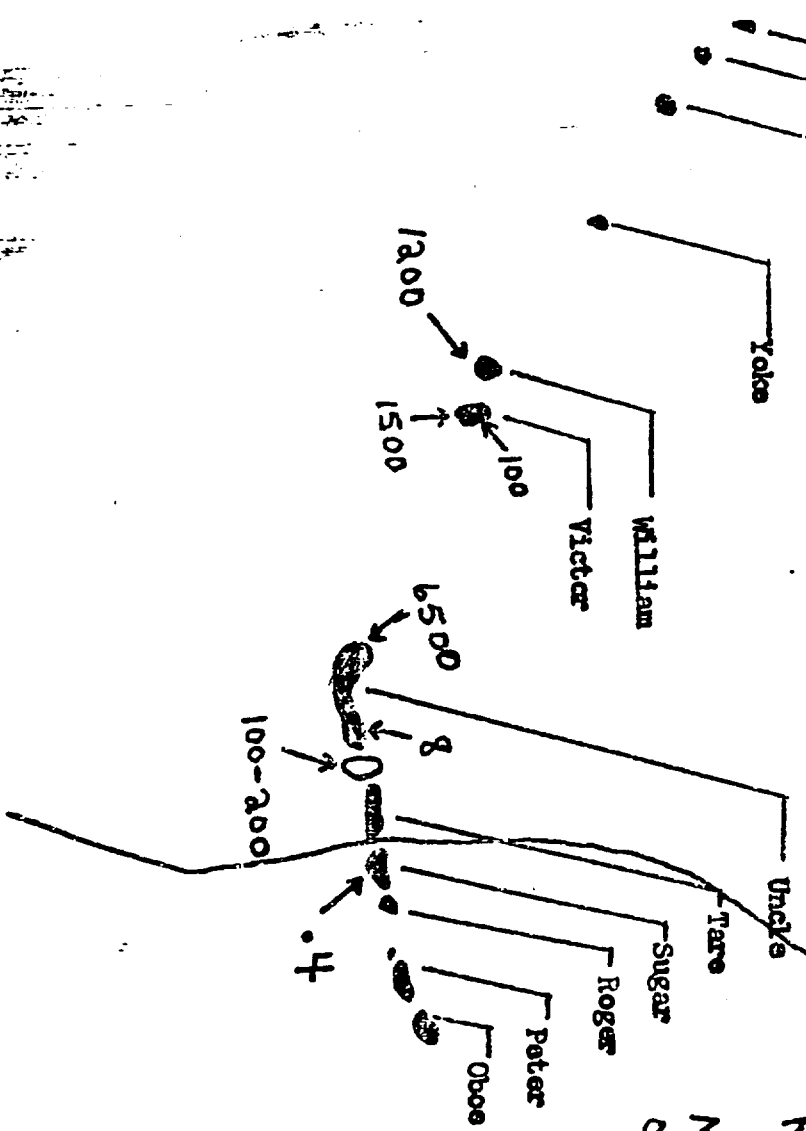
4

BIKINI ATOLL

COPIED/DOE
LANL RC



Full - Radex
Full Protective Clothing



TARE Readings

630.03	80
630.02	8000
2420.02	10000
2420.01	4500

4-5000 Haw

Reef Ocean Side Item

1000 jig

Max Reading King

12,000

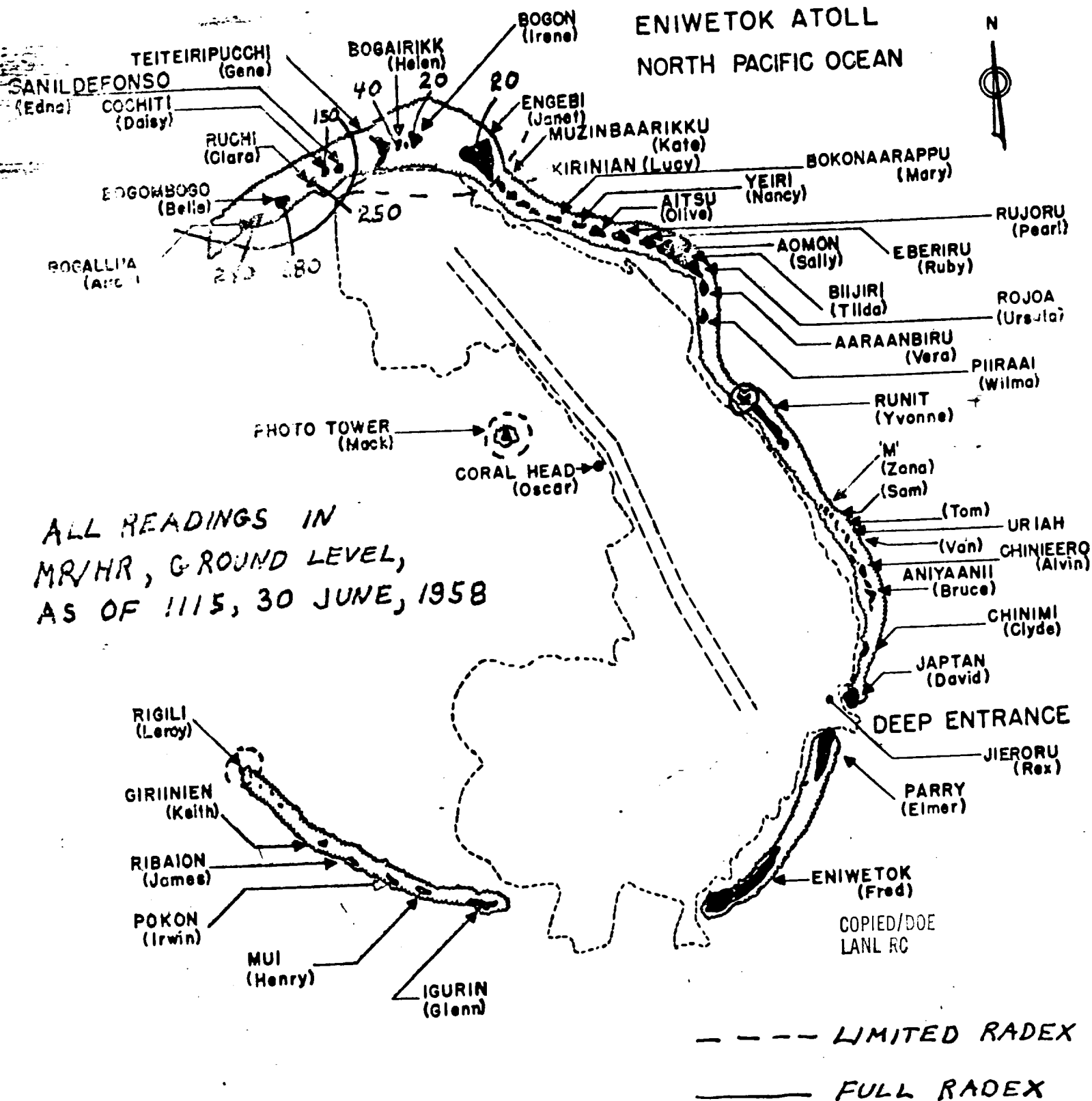
Love

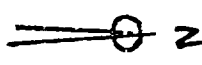
Mike

Man

ALL Readings In M/H
At Ground Level As of
1430 HRS. 30 June 58

35

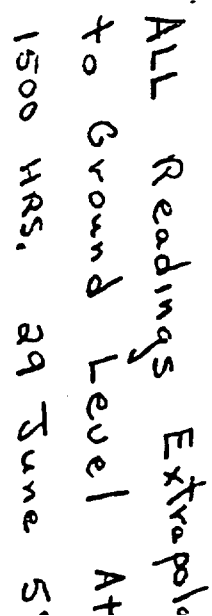


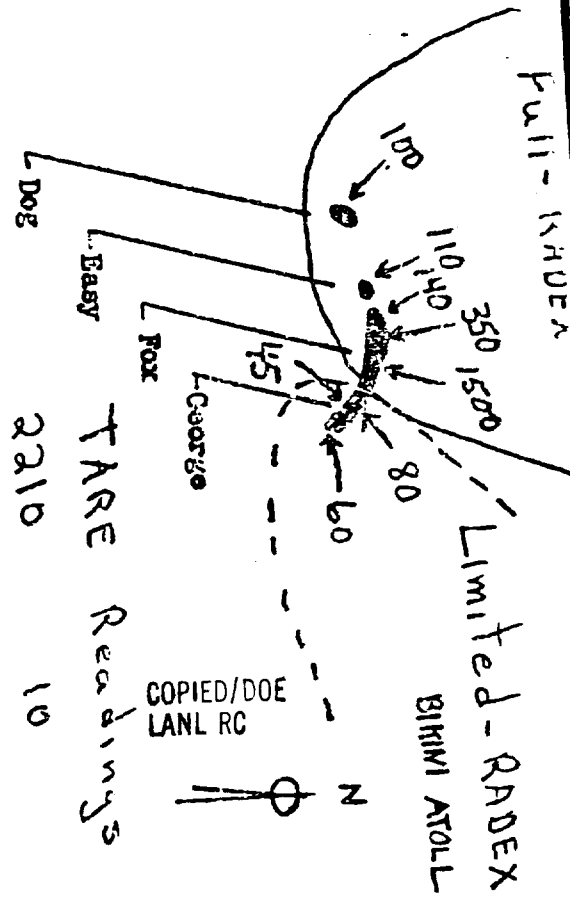
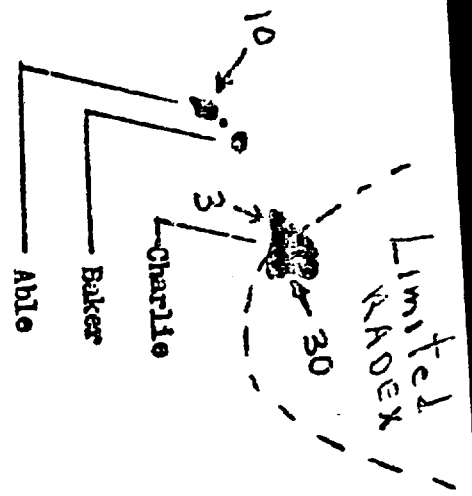


3

NON-RADEX

Now _____
Item _____
Jag _____
King _____
Love _____
Jilo _____
Jian _____





TARE Readings

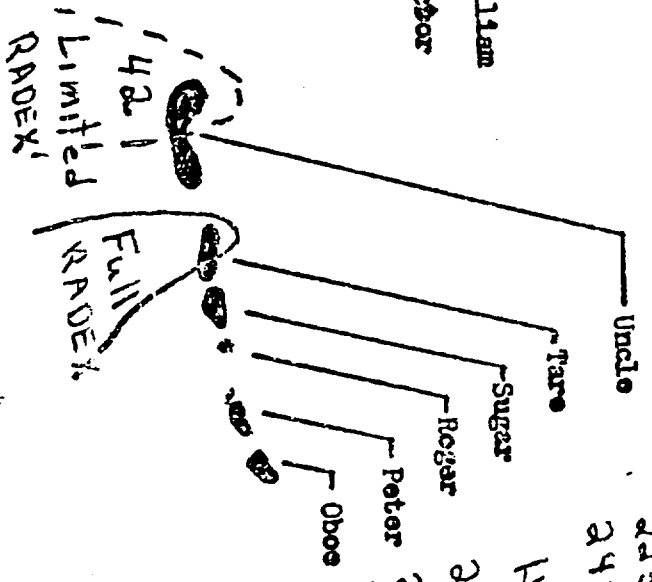
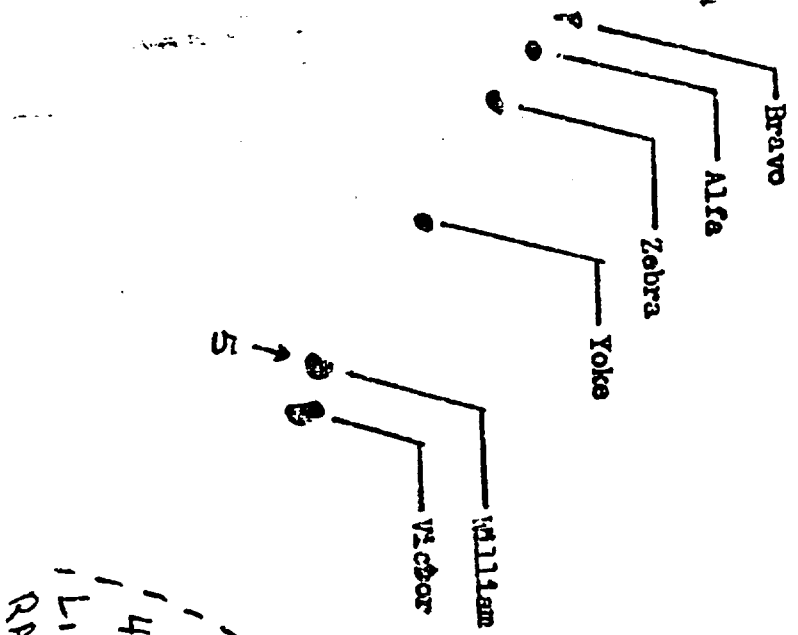
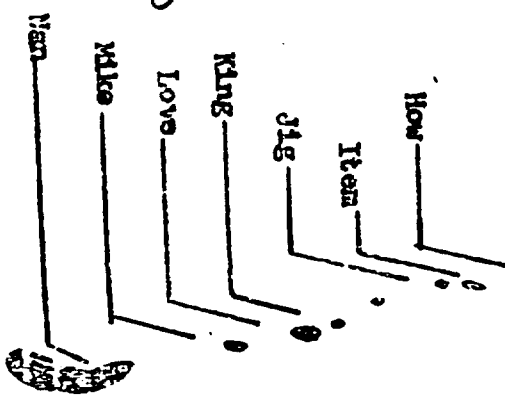
2210	10
2270	5
2230.01	10
630.02	2
2420.01	30
2230.02	8
2420.02	10

Hot Spots

2420.01 - 600

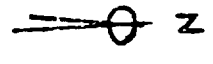
2270 - 222

2210



ALL Readings In M/H
At Ground Level As of
0930 HRS 26 June 58

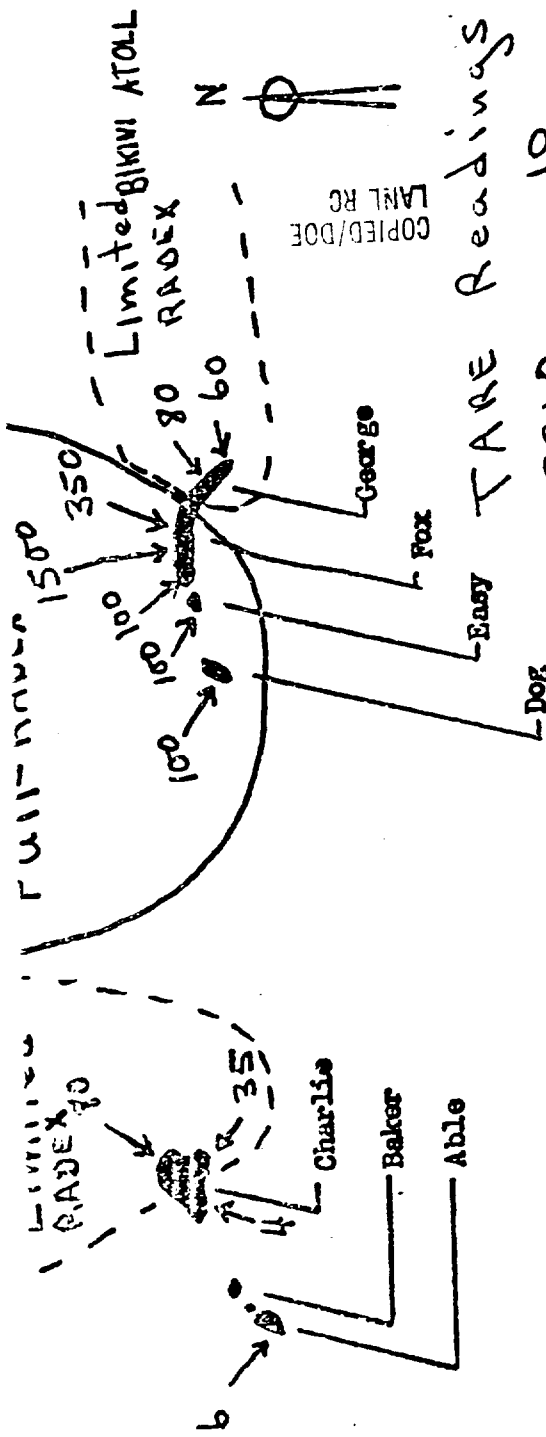
COPIED/DOE
LANL RC



BIRMI ATOLL

5

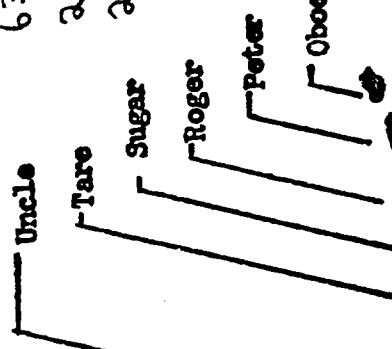
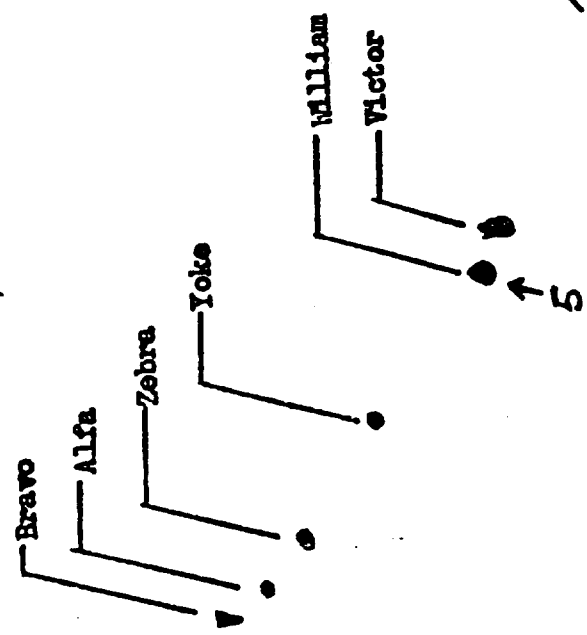
4



COPIED/DOE
LNL RC

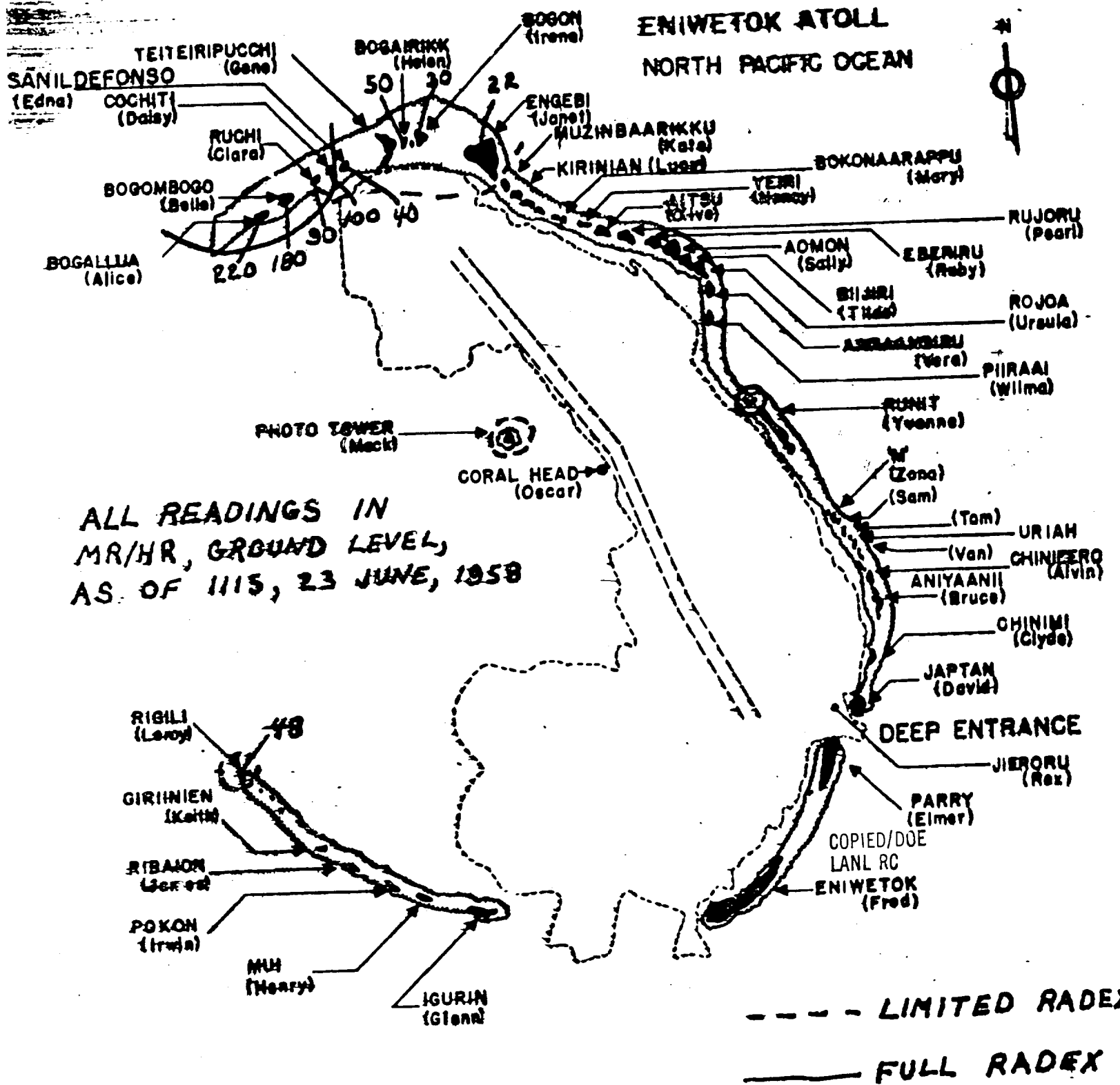
TARE Readings

2210	10	How
2270	5	Item
63001	10	Jig
2230.01	10	King
2230.02	2	Love
630.02	30	Mike
2420.01	15	Nam
2420.02		



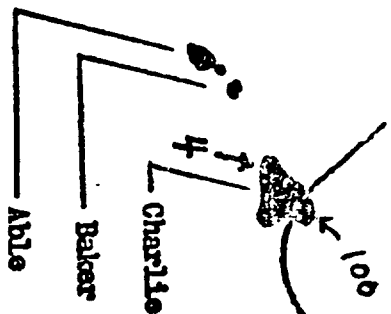
All Readings In MA
At Ground Level As
0930 HRS 23 JUNE



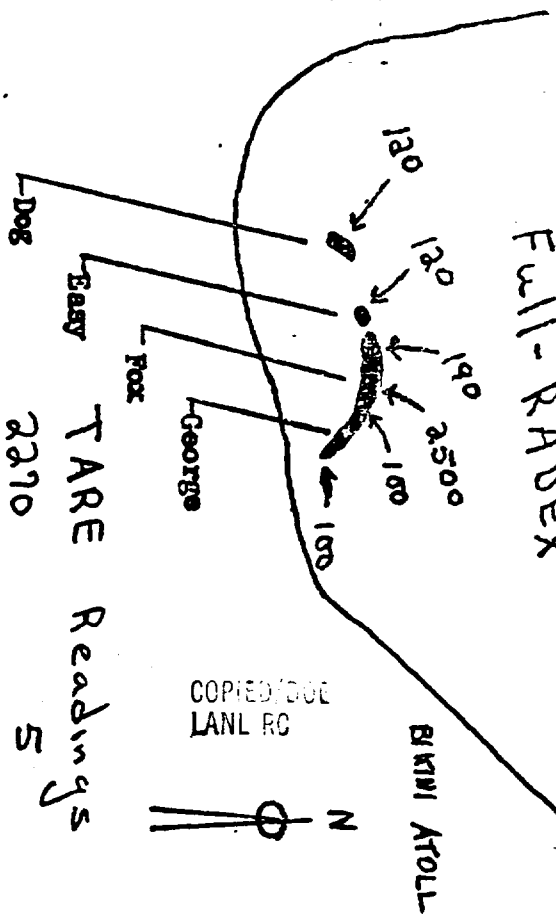


43

Full - KADEX



Full - RADEX



COPIED FOR
LANL RC



TARE Readings

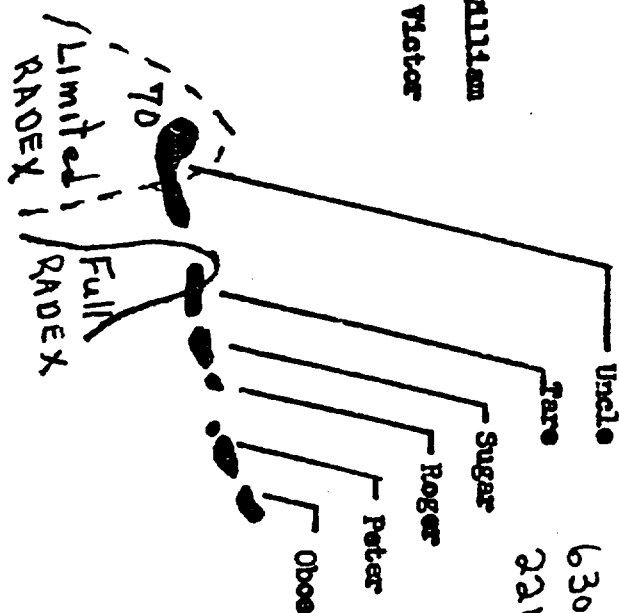
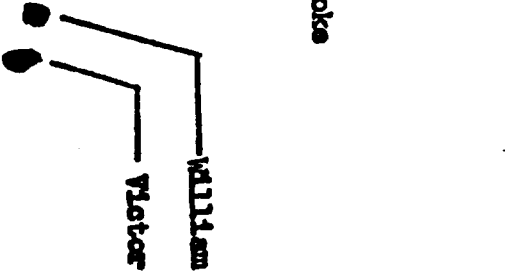
2270	5	How
2230.01	10	Item
2230.02	10	
2420.01	30	
2420.02	15	
2260	10	
630.02	4	
2210	10	

Hot Spot At Love

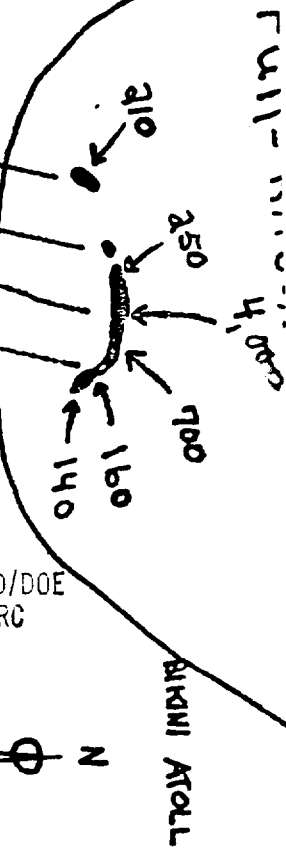
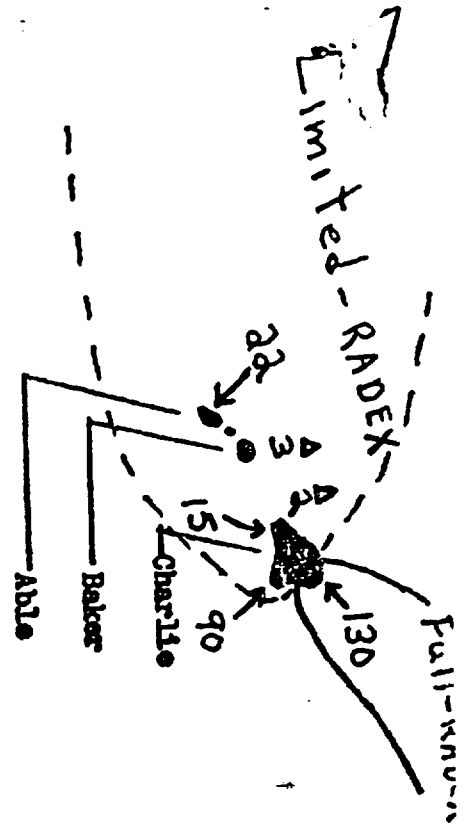
2420.01

1000 m/HR

Mean



ALL Readings In m/HR
At Ground Level As of
0815 HRS 21 June 58



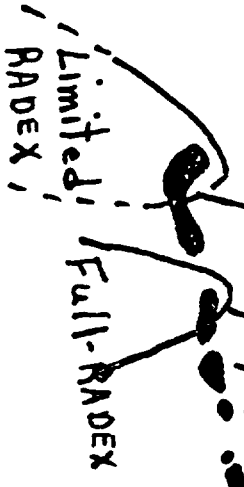
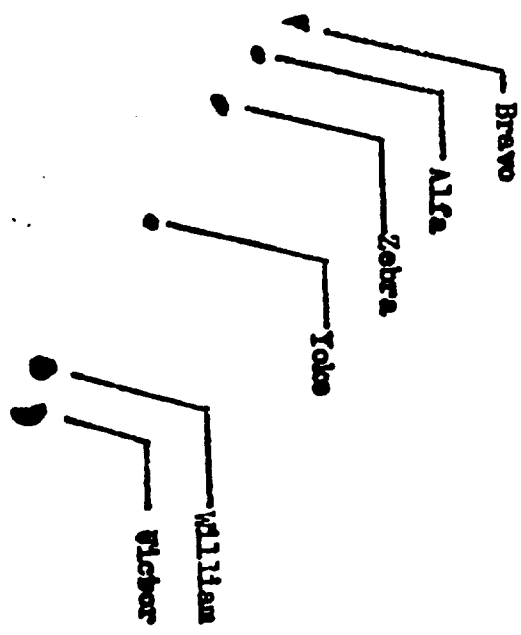
COPIED/DOE
LANL RC

TARE Readings

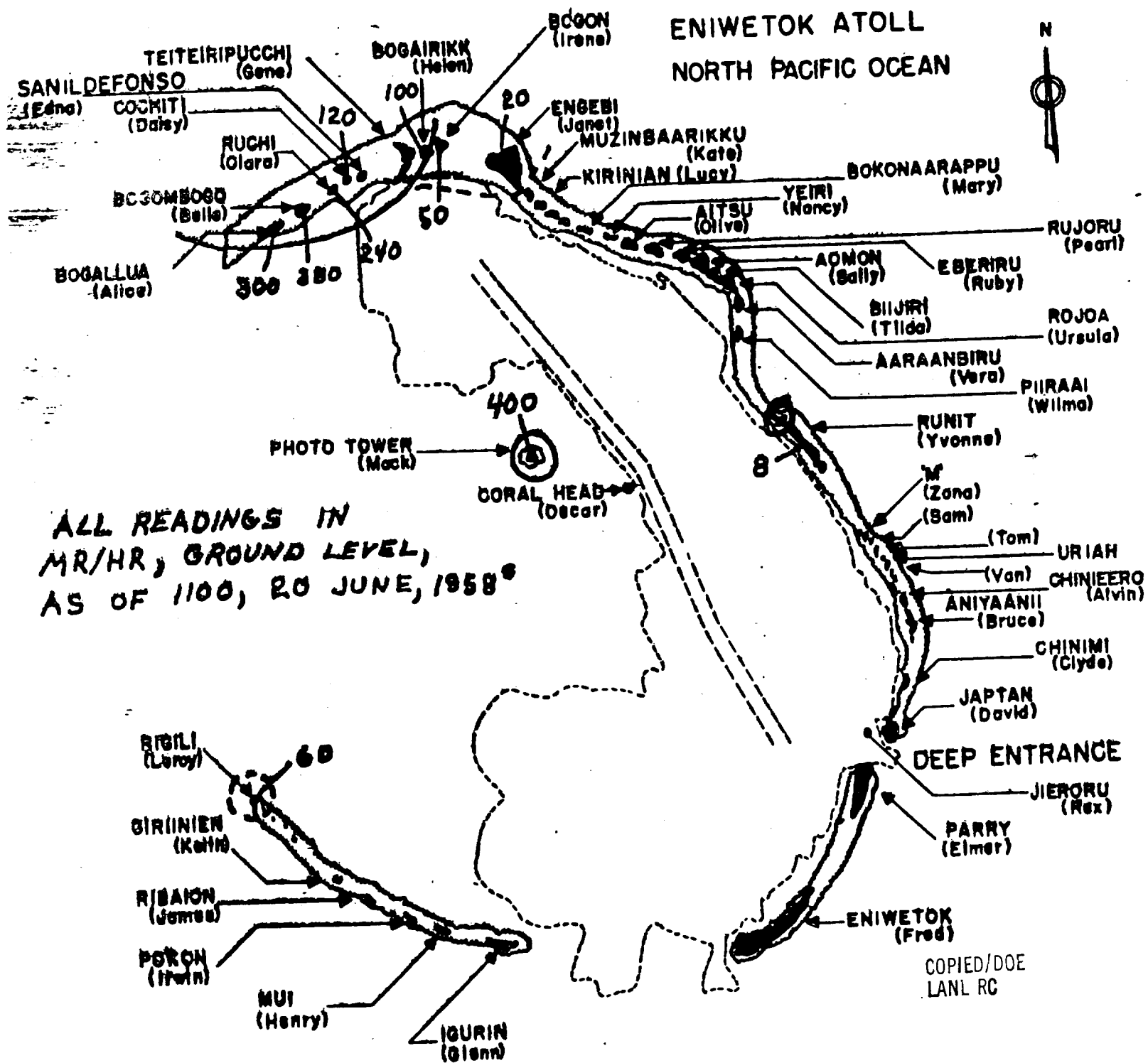
2270	5	How
2230.01	15	Item
2230.02	15	
2420.01	35	
2420.02	15	
630.01	10	
630.02	4	
2210	10	King

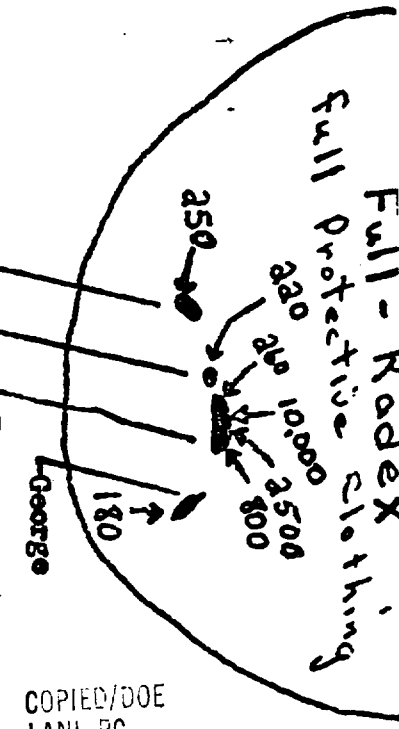
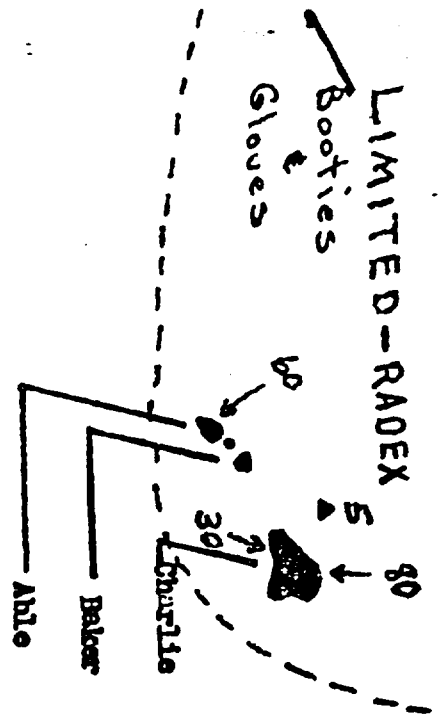
Hot Spot At Love

Uncle
Tare
Sugar
Roger
Peter 2430.01
Obao 1500 M/R/M



ALL Readings In M/R/H
As of 19 June 58
1815 HRS.

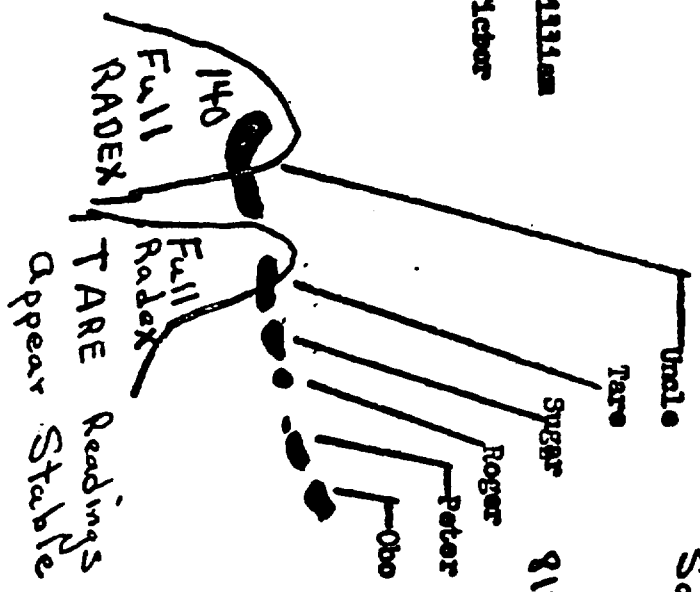
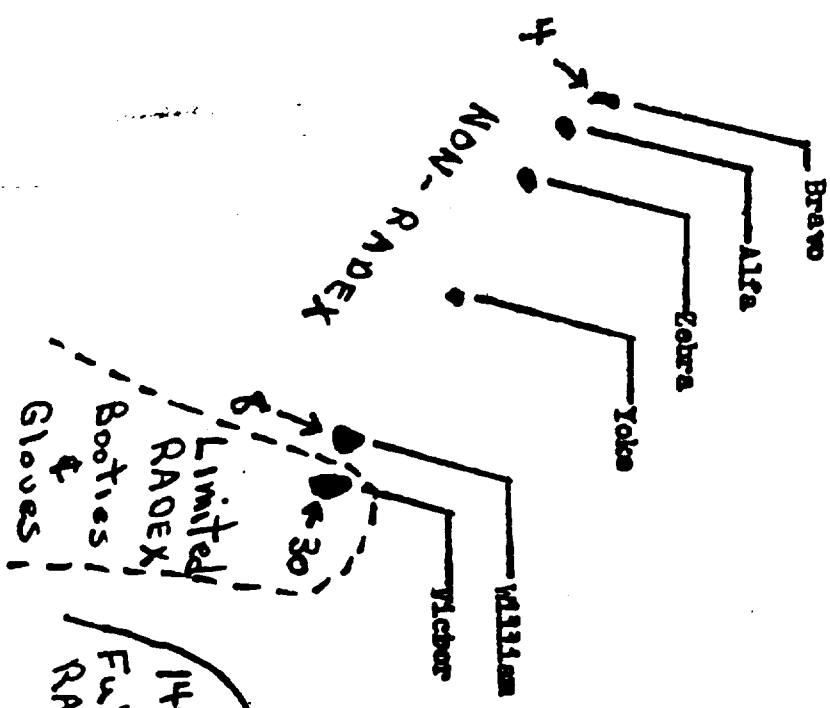




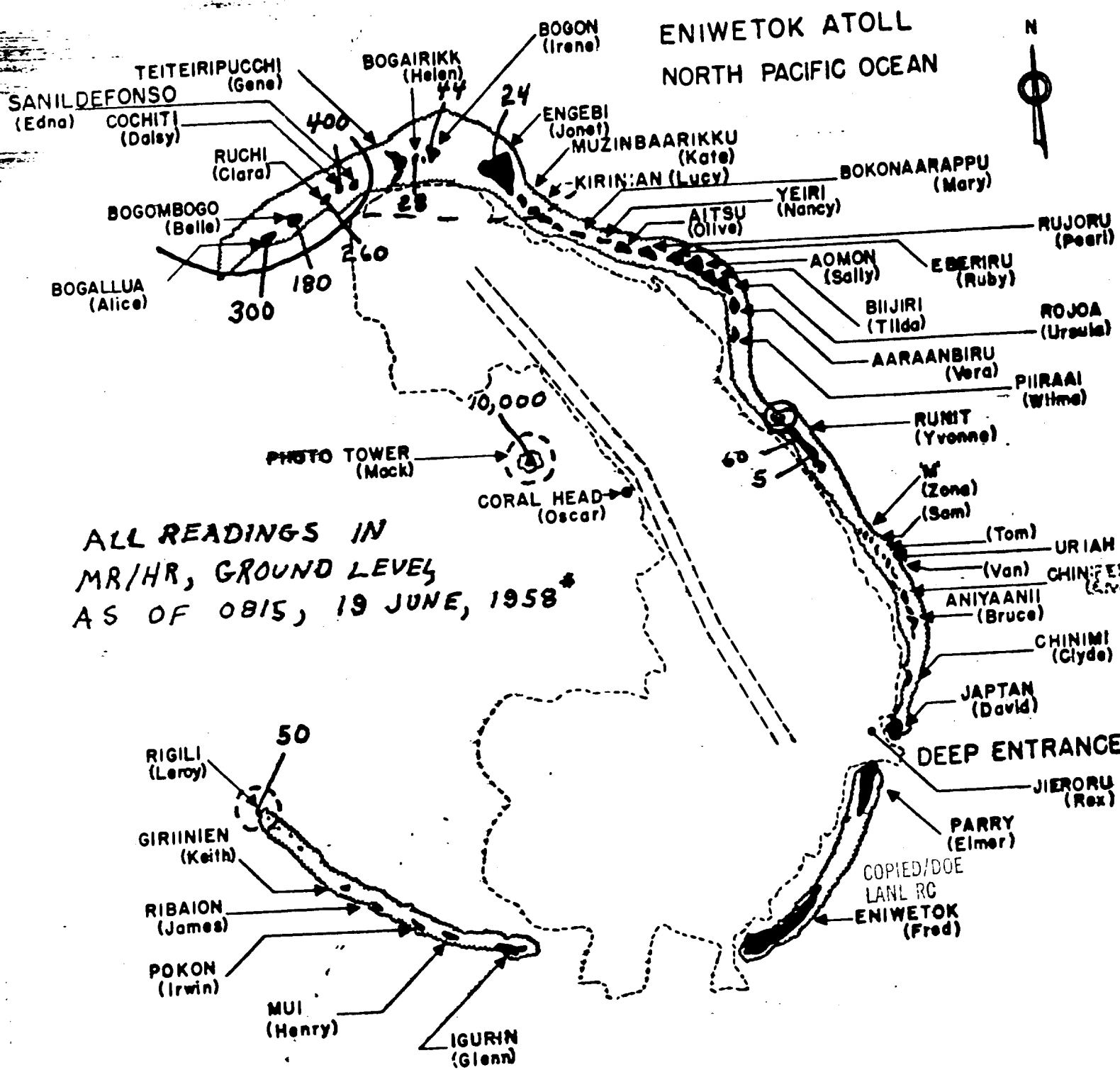
COPIED/DOE
LANL RC

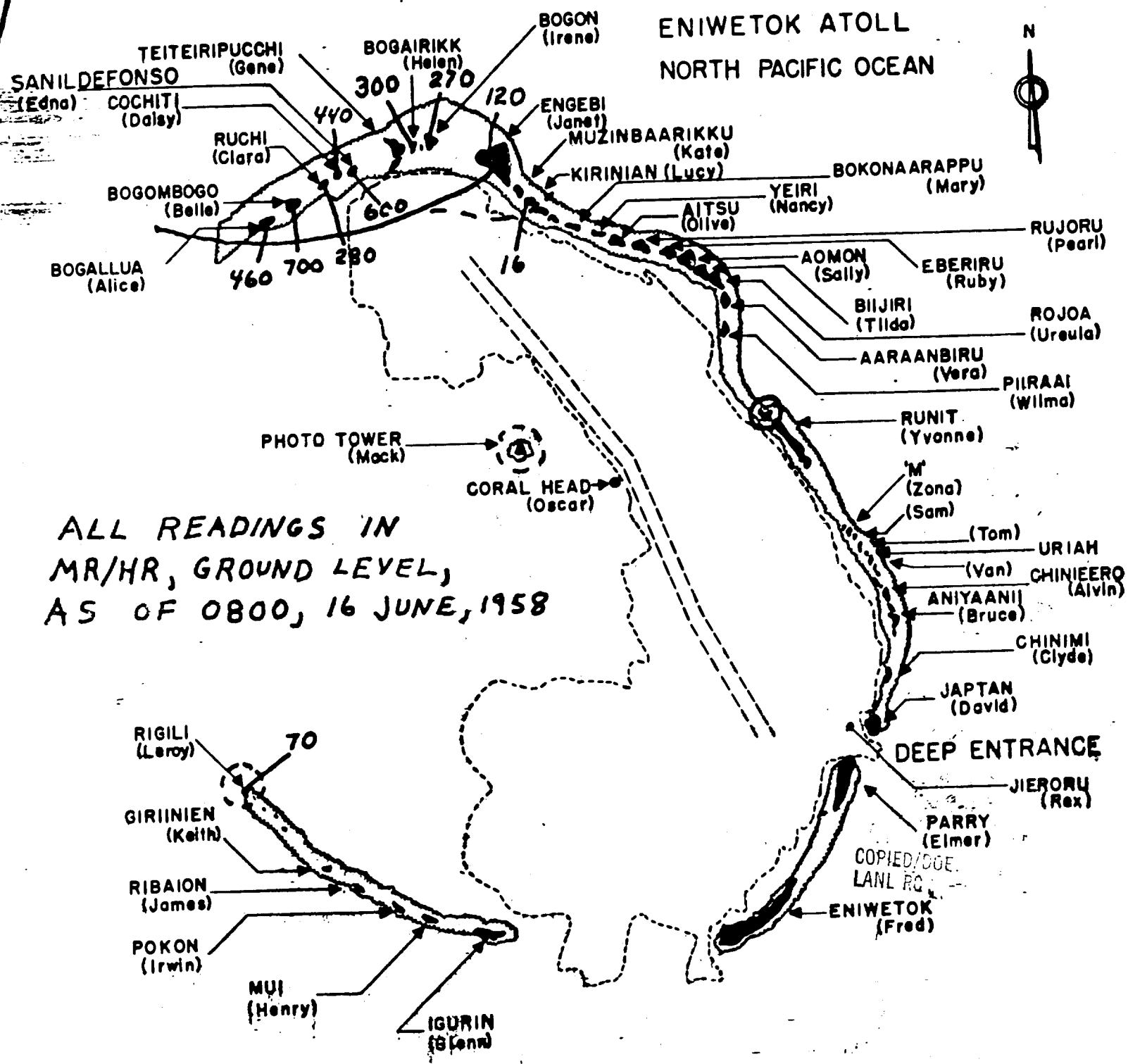
FOX Readings
Stat M/H/R.

2410.03	240	
630.05	260	
630.04	800	
2410.02	3000	How
2410.01	8000	Item
Sack #3	1732500	
" #5	1745800	
" #7	300	
Sugar	810.03	180
Uncl.		
Tare		
Roger		
Peter		
Oba		
Man		
Mike		
Love		
King		
Joe		
Item		
How		



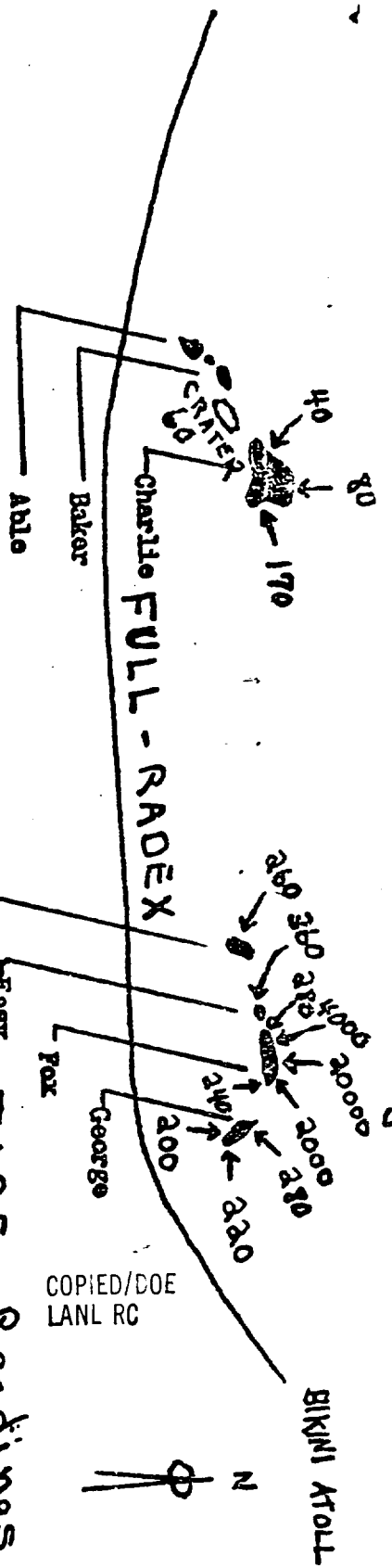
ALL Readings In M/H/R
At Ground Level As of
0815 Hrs. 18 June 58



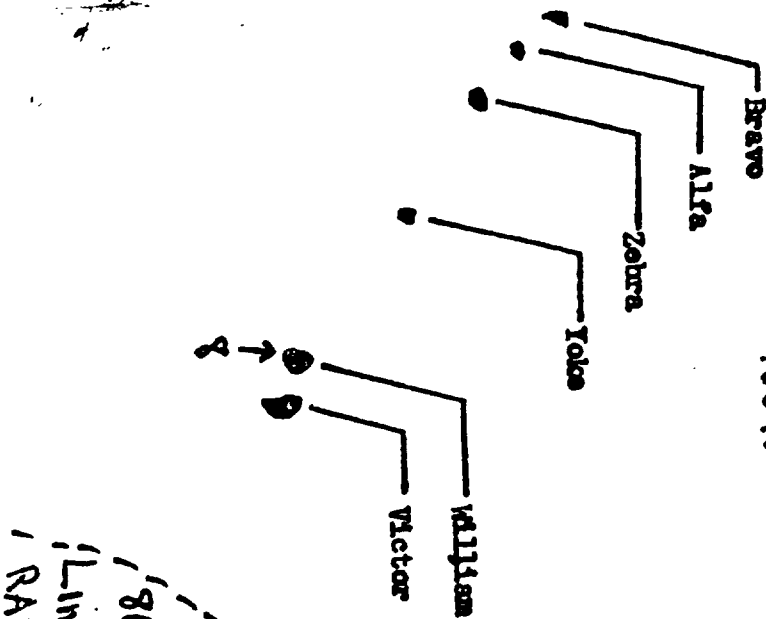


ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 0800, 16 JUNE, 1958

--- LIMITED RADEX
— FULL RADEX



NON-RADEX



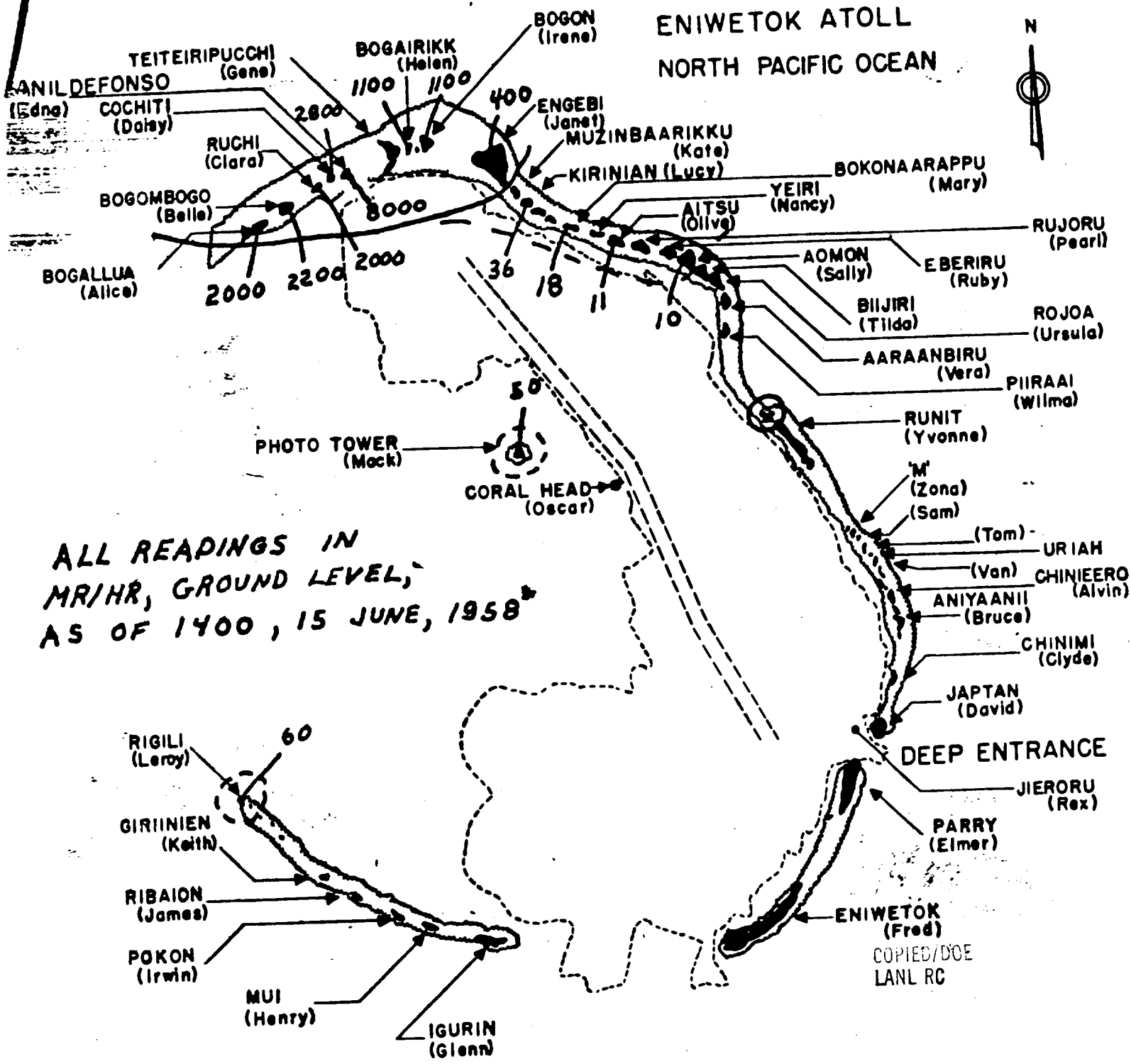
80
Limited
RADEX
FULL
RADEX

TARE Readings

2210	10	How
2270	30	Item
2230.01	20	
2230.02	14	
630.01	4	
630.02	40	
2420.01	15	
2420.02		

Hot Spot At
2420.01
1000 MR/HR
Mike
Love
King
Jig
Nan

ALL Readings In MR/HR
At Ground Level As of
1615 HRS. 16 June 58



ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 1400, 15 JUNE, 1958*

* Reading for Mack Photo
Tower as of 1000, 15 June.

Full protective Clothing

COPIED/DOE
LANL RC

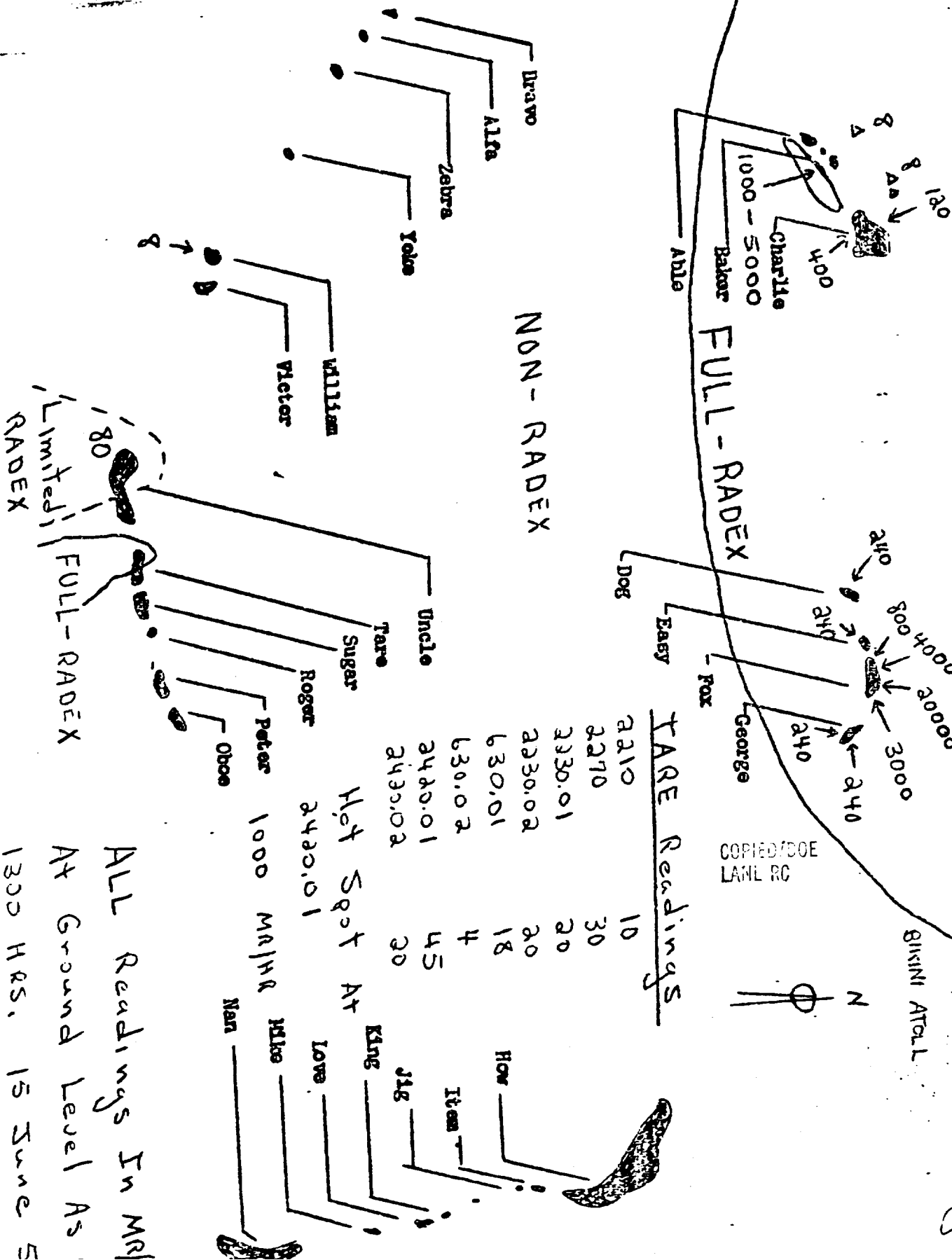
SHIN ATALL

FULL - RADEX

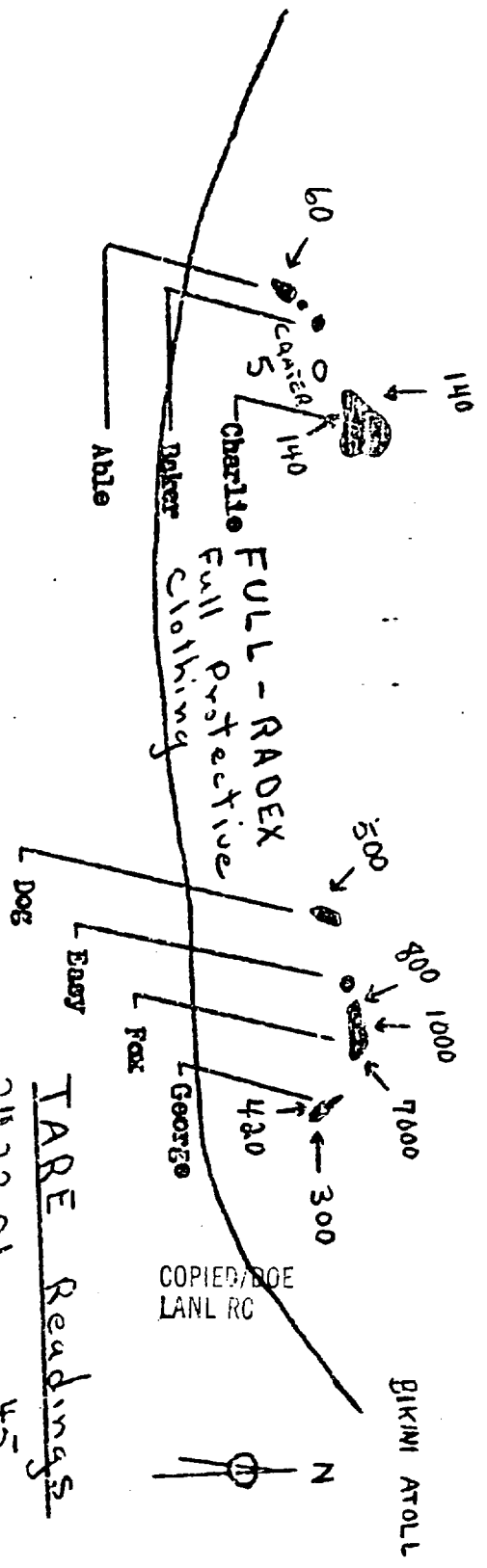
NON - RADEX

Limited!
RADEX

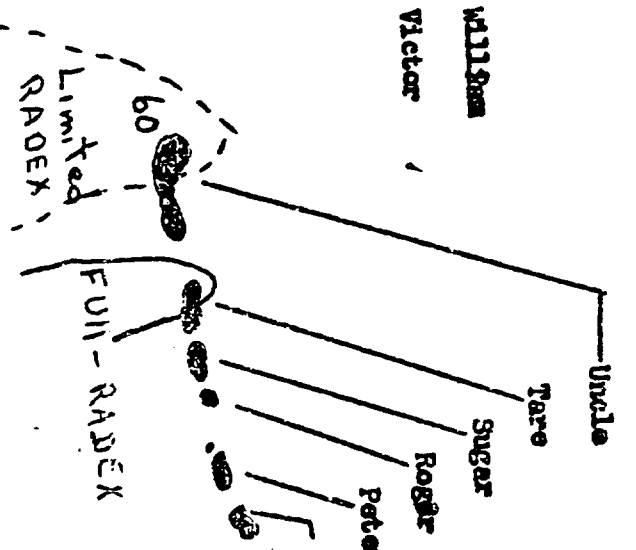
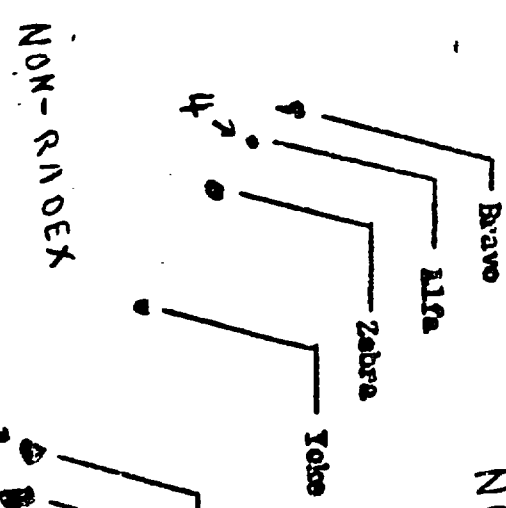
ALL Readings In MR
At Ground Level As
1300 HAS. 15 June 5



158



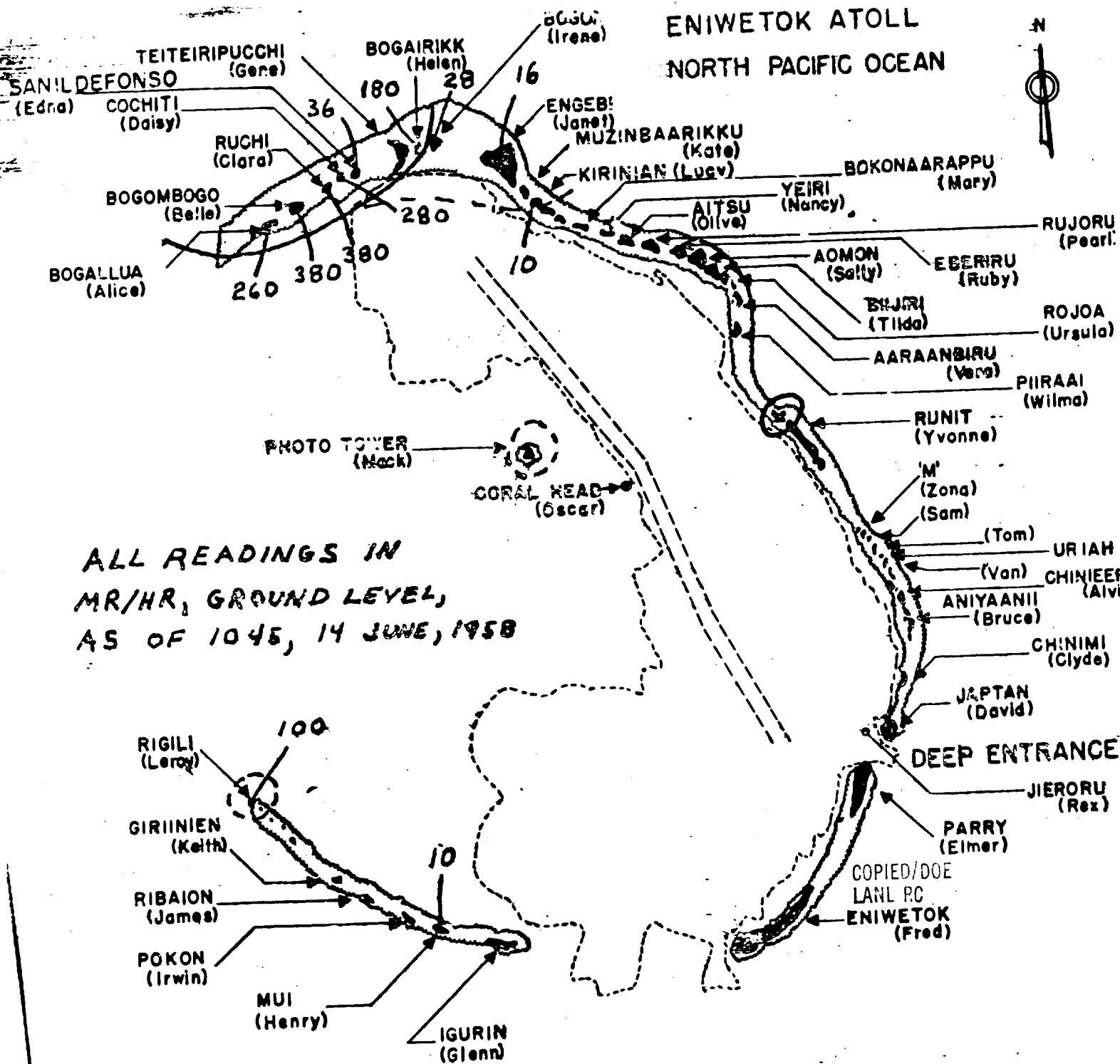
NON-RADEX



TARE Readings

2420.01	45	How
2230.02	20	Item
2230.01	20	
2270	30	
2210	16	
630.02	4	
630.01	18	
2420.02	20	
Hot Spot A4		
2420.02		
1000 MA/HR		
Mike		
Love		
King		
Joe		
Man		

ALL Readings In MR
At Ground Level AS
1515 HRS. 14 June



Full Protective Clothing

20

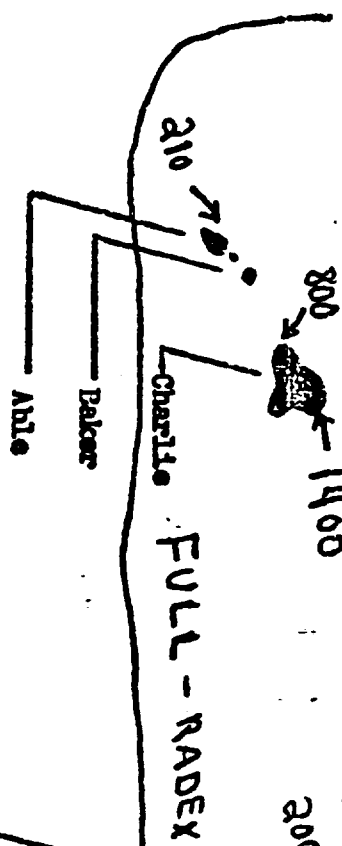
800 1400

2000 3000 2000 100,000 4,000

Bikini Atoll

COPIED/DOE
LANL RC

N



Dog
Easy
Fox
George

TARE Readings

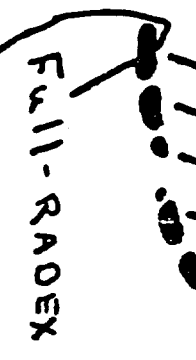
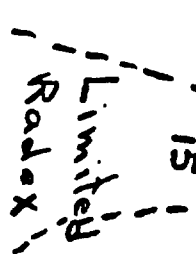
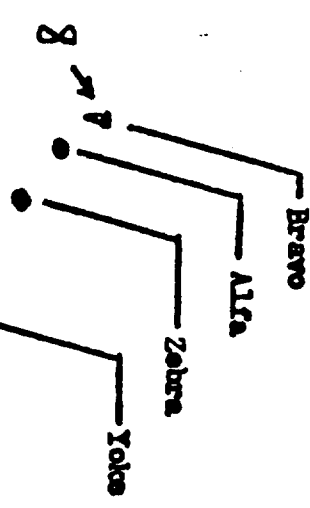
2210	16	
2270	30	
2230.01	25	
2230.02	20	
2420.01	50	How
2420.02	20	Item
630.01	22	
630.02	4	slg

Hot Spot At
2420.01

1000 MA/HQ



NON-RADEX



Boaties
&
Gloves

ALL Readings In MA/HR
At Ground Level ASOF

1615 HRS. 12 June 58

58

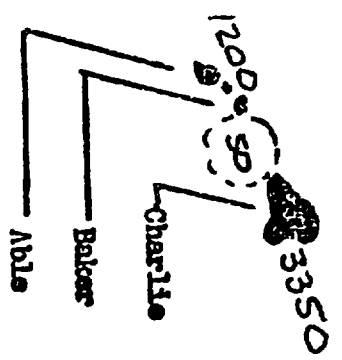
50

BIKINI ATOLL

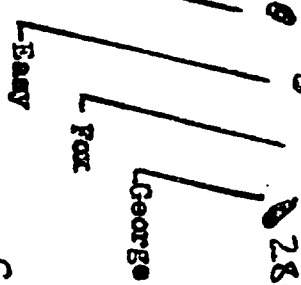
2,400,000 at 0735

2800000730

COPYEDUCOR
LANL RC

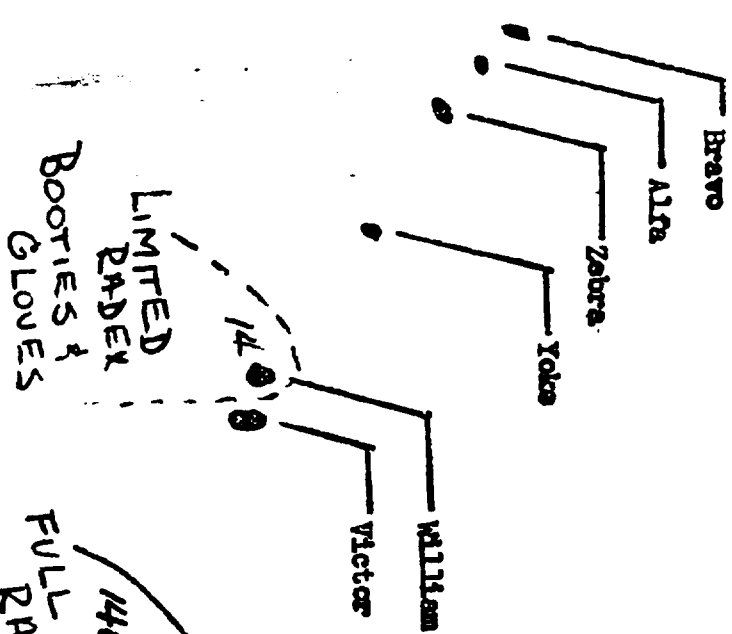
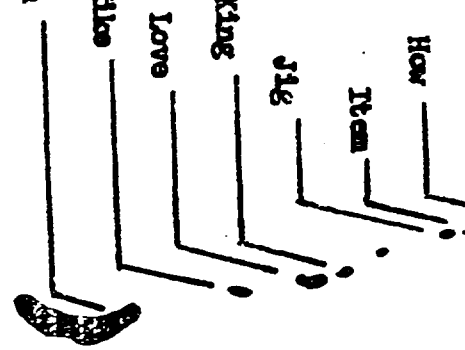


FULL RADEX NO ENTRY TOB8 FOX OR GEORGE



TARE READINGS

STAT	MR/HR
2210	20
2270	30
630.02	4
630.01	20
2230.02	20
2230.01	25
2420.02	20
2420.01	50
0000 SW TIP	4000 Nan
420.01	NW TIP 450



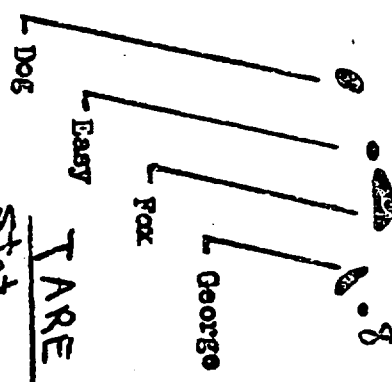
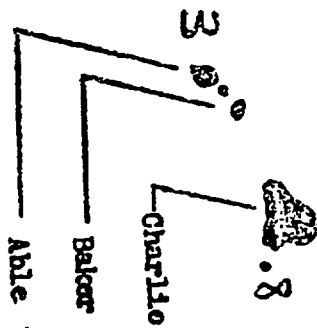
LIMITED
RADEX
BOOTIES &
GLOVES

FULL RADEX
FULL RADEX
Full Protective
Clothing

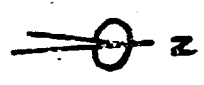
ALL READINGS IN MR/HR
AT GROUND LEVEL AS OF
1645 HRS (EXCEPT AS NOTED)

11 JUNE 1958

2

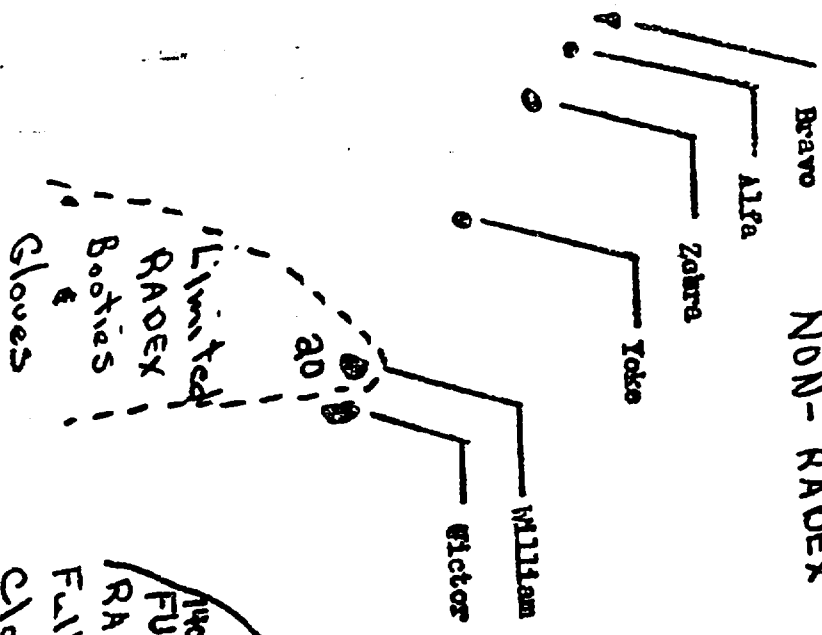


COPIED/DGE
LANL RC



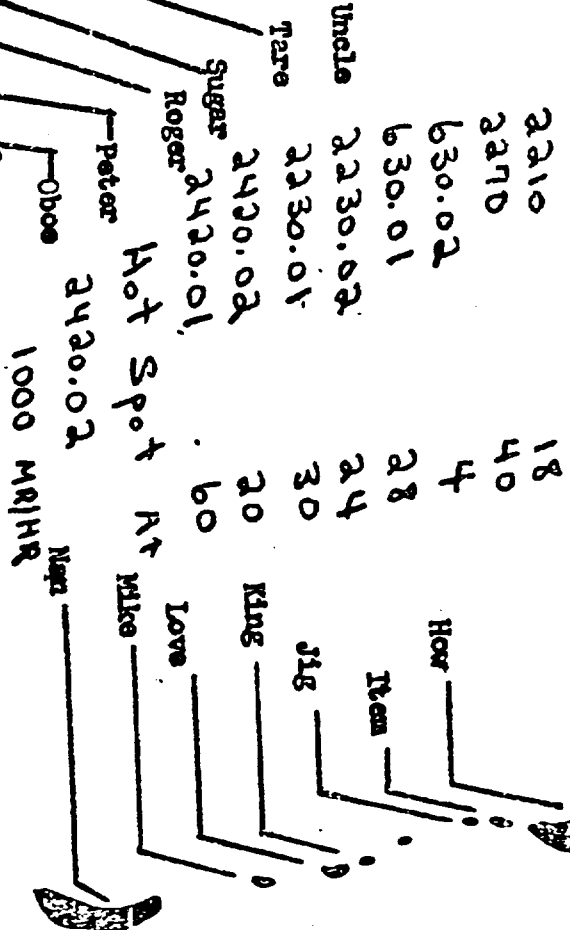
BIKINI ATOLL

NON-RADEX



Limited
RADEX
Boaties
&
Gloves

TARE Readings



Hot Spot At Mike

How
Item
Jig
King
Love

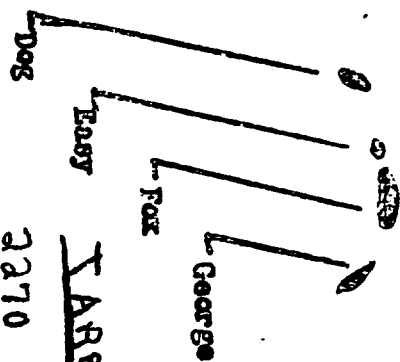
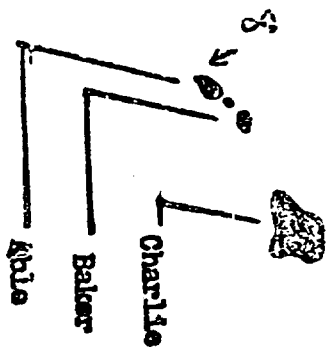
FULL
RADEX
Full protective
Clothing

ALL Readings In M/LHR
At Ground Level As of
1530 HRS. 9 June 58

62

BIRMI ATOLL

COPIED/DOE
LANL PC

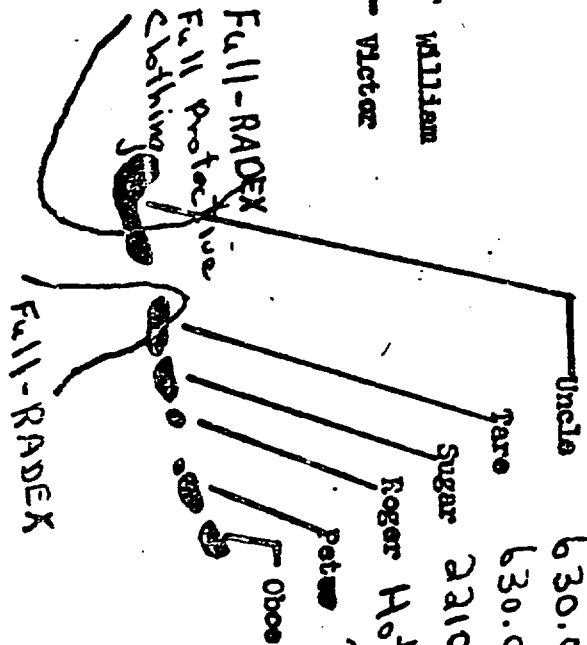


TARE Readings

NON - RADEX



Limited
RADEX
Bootties
&
Gloves



Full-RADEX
Full protective
clothing

Full-RADEX

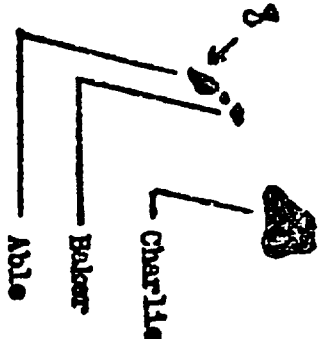
2270	36	
2230.01	30	
2230.02	26	
2420.01	60	
2420.02	20	
630.01	24	
630.02	2	
2210	18	
Roger Hot Spot	At	
Peter	2420.01	
Obce	800-900	
Uncle	Mike	
Fare	Love	
Sugar	King	
Roger Hot Spot	Joe	
Peter	Itan	
Obce	How	
Uncle	Mike	
Fare	Love	
Sugar	King	
Roger Hot Spot	Joe	
Peter	Itan	
Obce	How	

ALL Readings At Ground
Level In Major As of
1520 hrs. 7 June 58

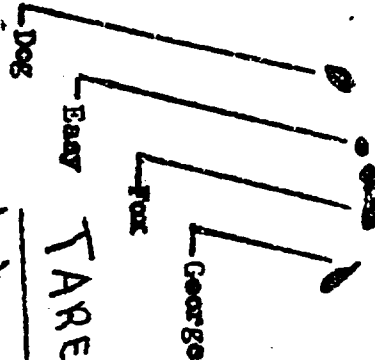
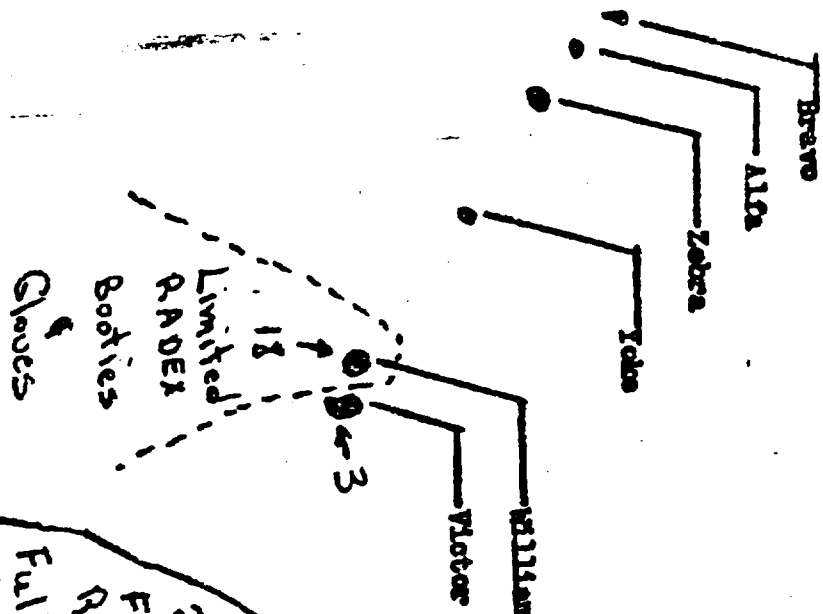
EIKIMI KOLL

COPIED/DOE
LANL RC

N



NON-RADEX

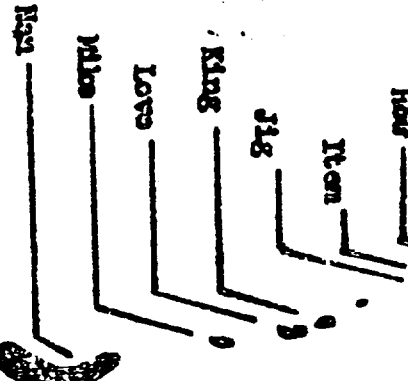


TARE Readings

Stat.

MR/HR

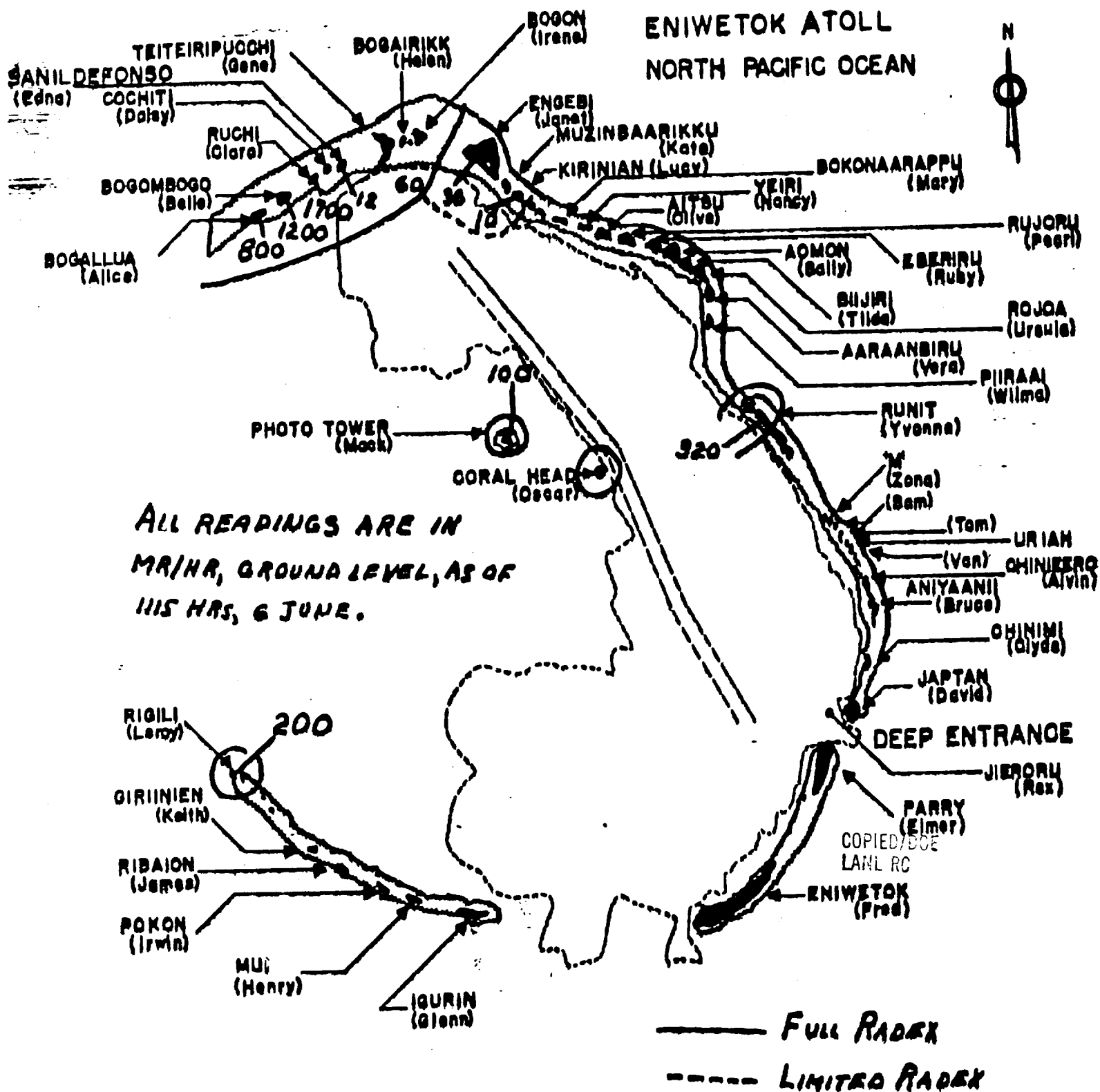
2270	20
2230.01	38
2230.02	40
2420.01	75
2260	38
2420.02	20
Tare	20
Sugar 630.02	
Roger 2210	
Peter	
Obce	



ALL Readings in MR/HR
At Ground Level As of
1530 Hrs. 6 June 58

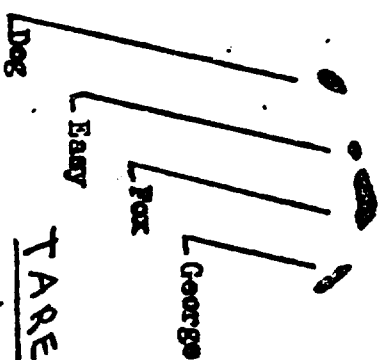
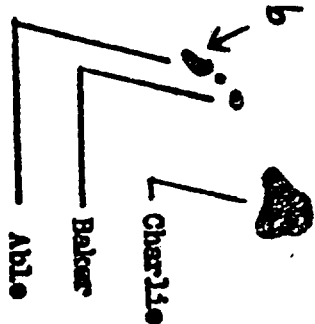
Full Protective
Clothing

220
FULL
RADEX

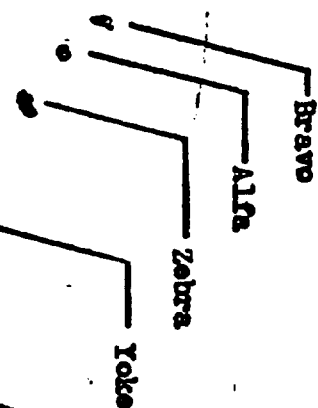


GIKWI ATOLL

COPIED/DGE
LANL SC

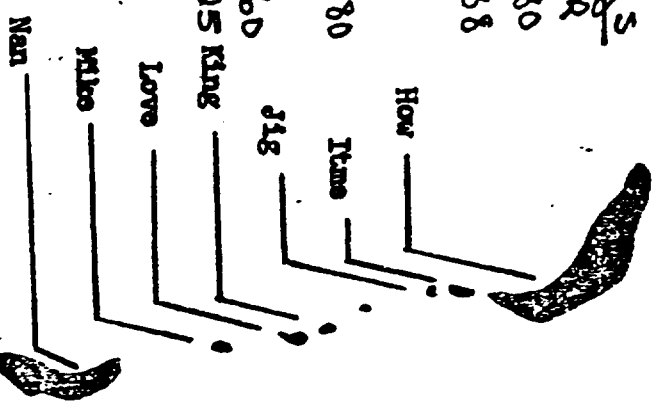


NON-RADEX



TARE Readings

Stat.	MR/HR
2420.01	60-80
630.01	24-38
630.02	10
2270	20
2230.01	20-80
2230.02	50
2420.02	25-60
2210	10-25

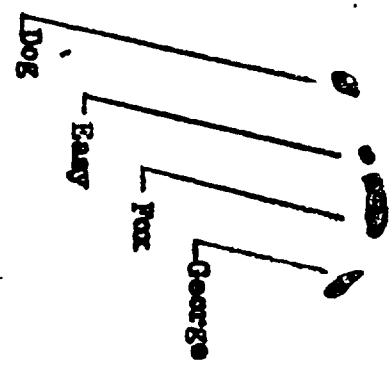
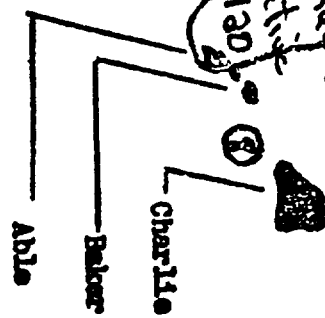


Full Protective
Clothing

FULL-RADEX

ALL Readings In MR/HR
At Ground Level As of
1530 HRS. 5 June 58

Full-Radex
Full Protective
Clothing 130

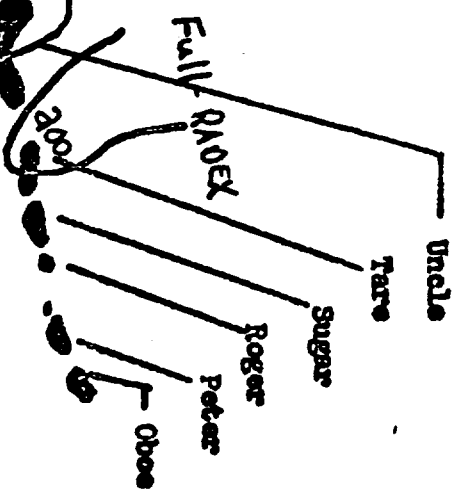
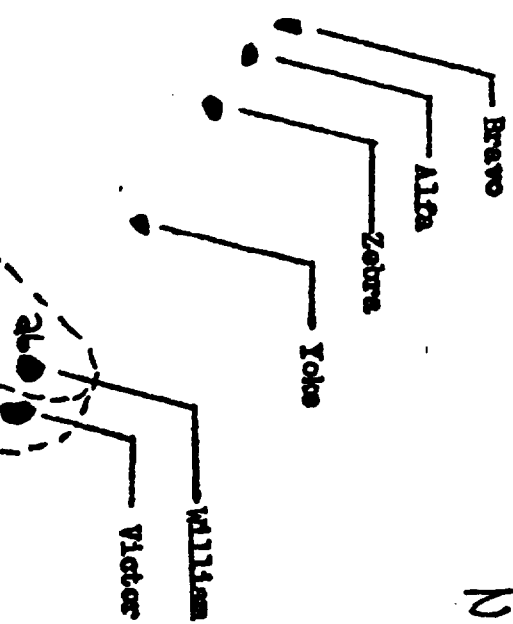


COPIES/DOE
LANL RC



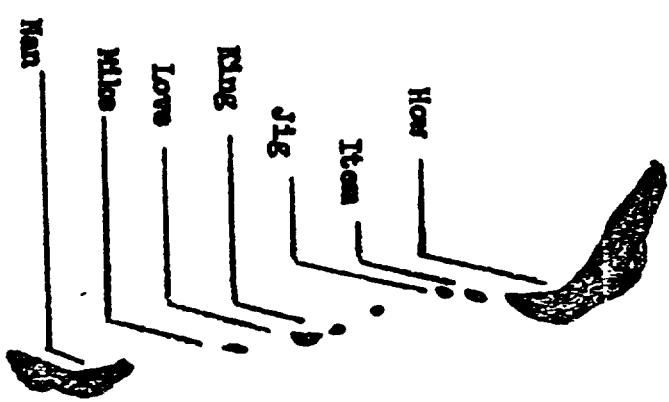
BIKINI ATOLL

NON-RADEX

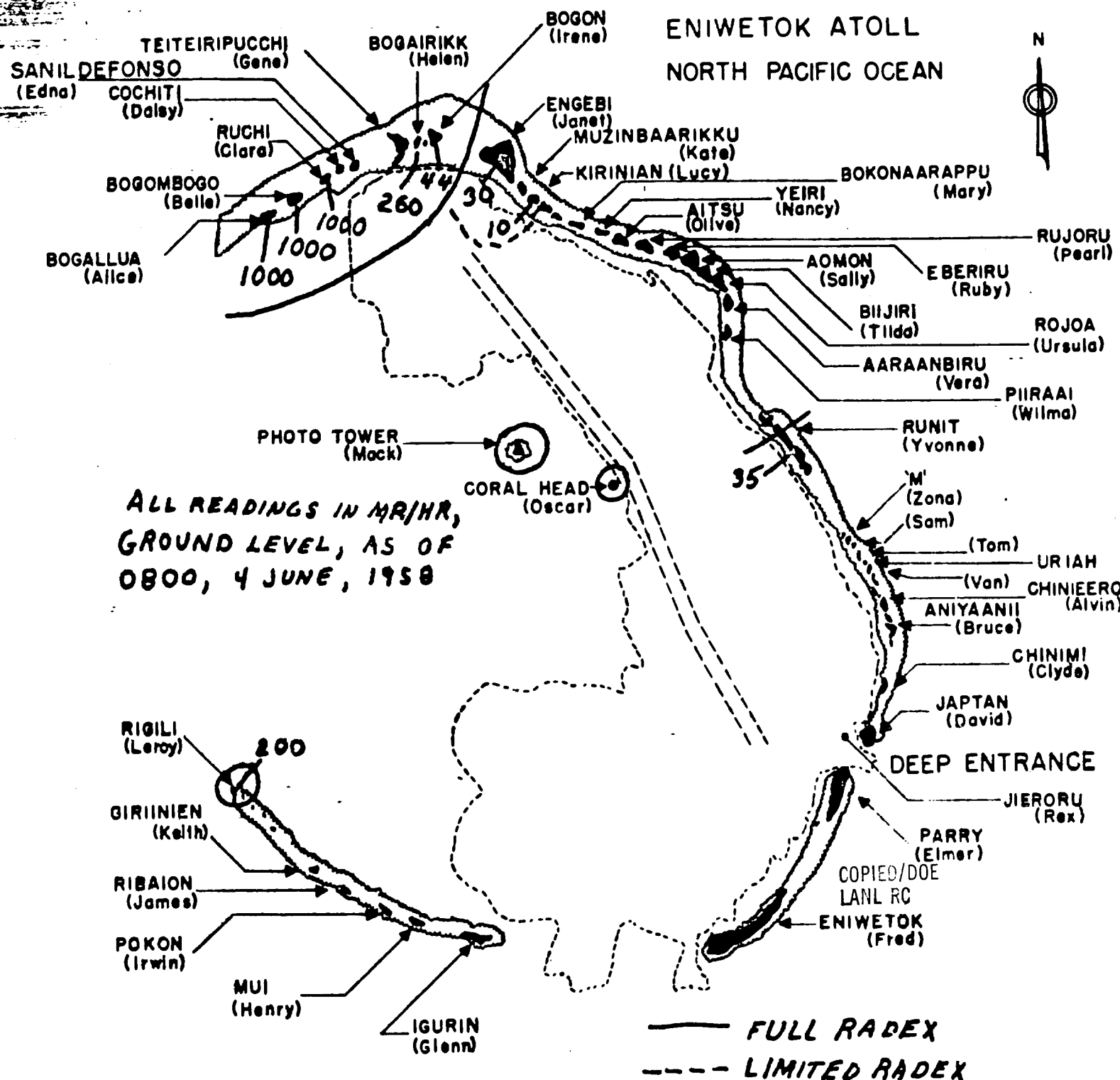


Limited
Radex
Boots
&
Gloves

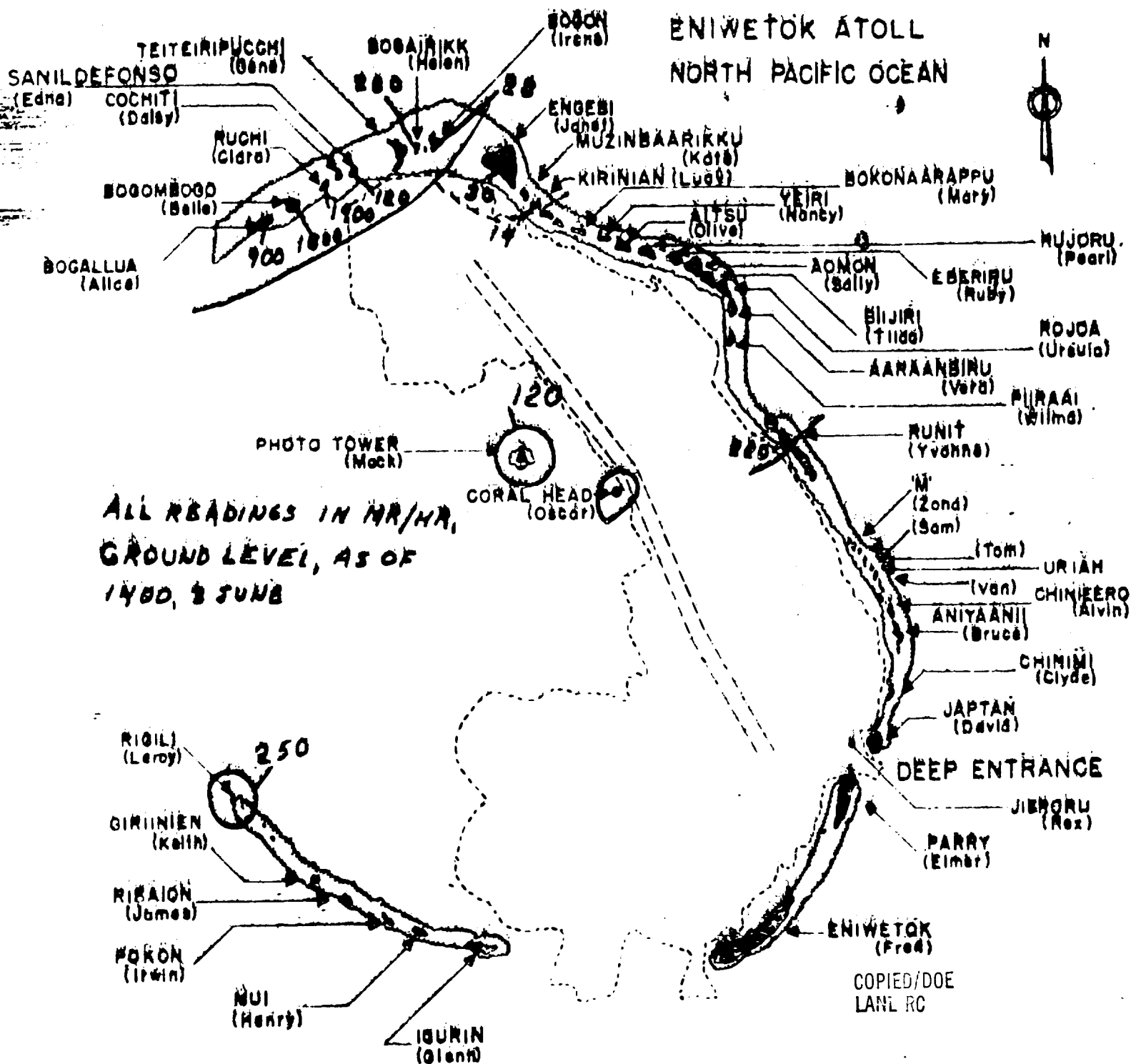
490
Full
RADEX
Full Protective
Clothing



ALL Readings At
Ground Level In MATH
AS OF 0830 HRS. 4 Jun



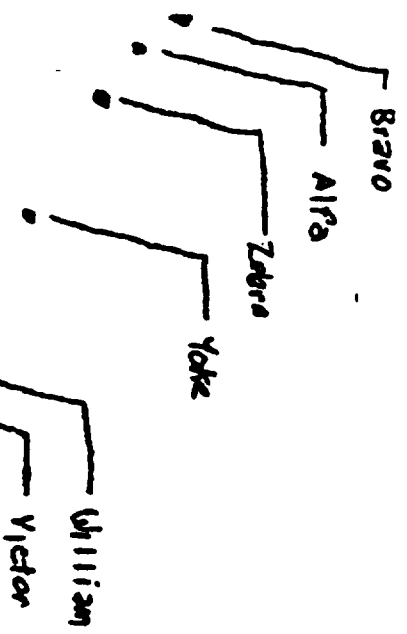
60



59

Bikini Atoll

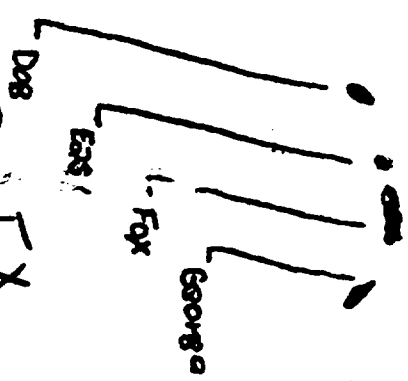
COPIED/DOE
LANL RC



Limited
Radar
+ clothes

36

NON RADIX Tape Readings



3210 16-28
630.01 16-20
2230.01 40-60
Cullent 20-30
2420.01 60-280
2270 50-80
Sugar 2420.02 12-34
Roger 630.02 0-5
Peter 2230.02 80-100 mile

Non

How
Item
dig
King
Love

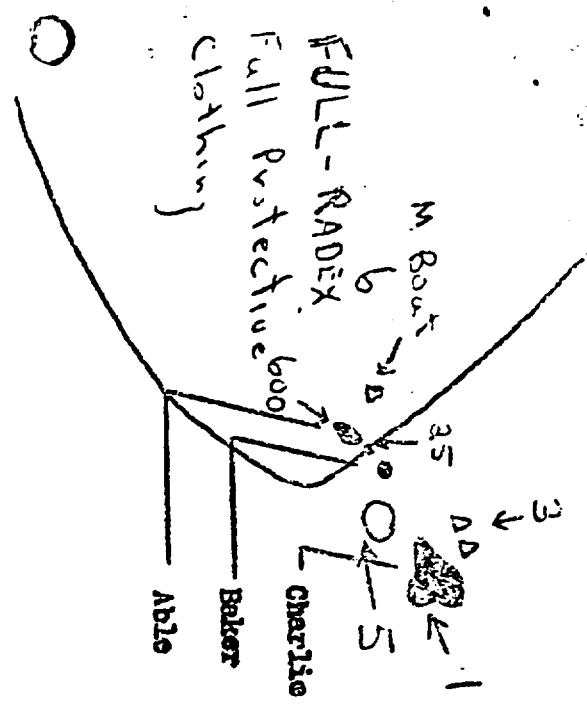
Full Radar
Full Protective
Clothing

All Readings in MR/1
At Ground level AS
0830 hrs 3 wave 58

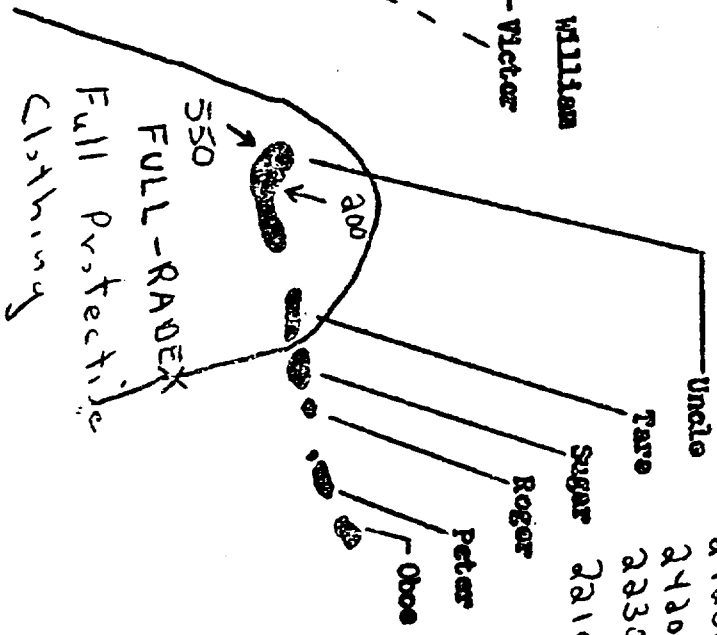
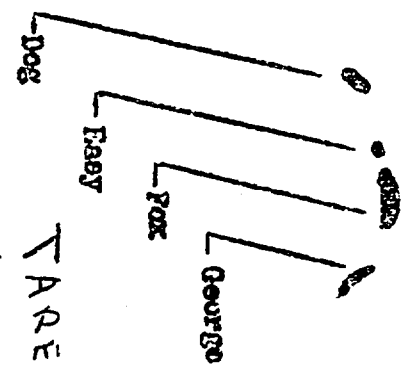
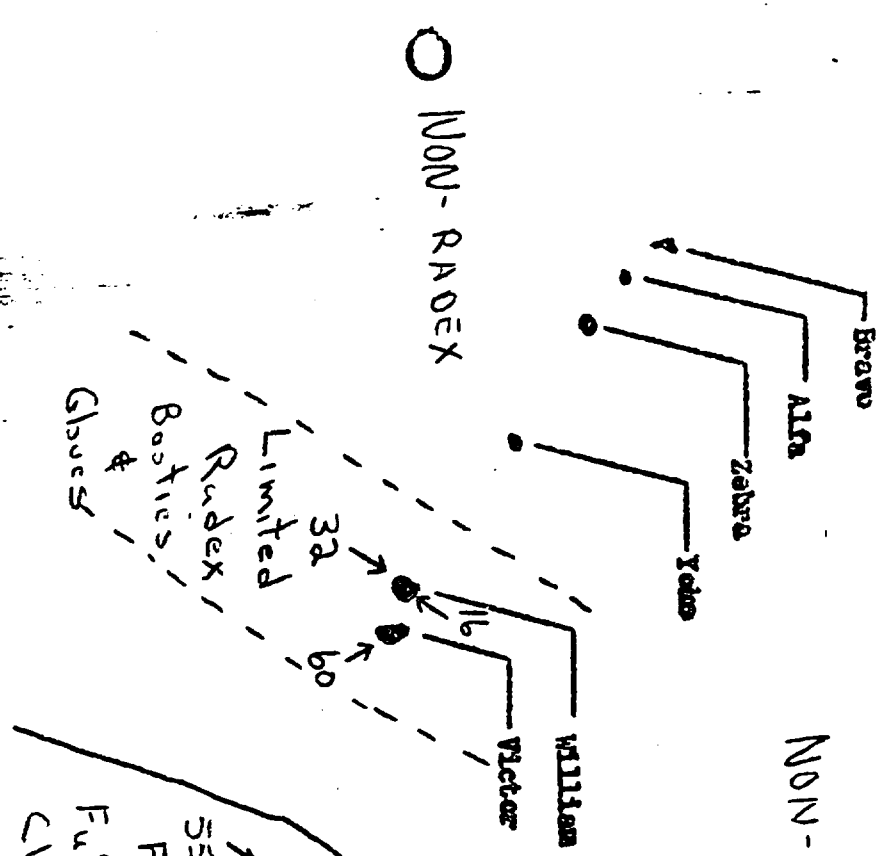
BIKINI ATOLL

COPIED/DGE
LANL RC

N



NON-RADEX



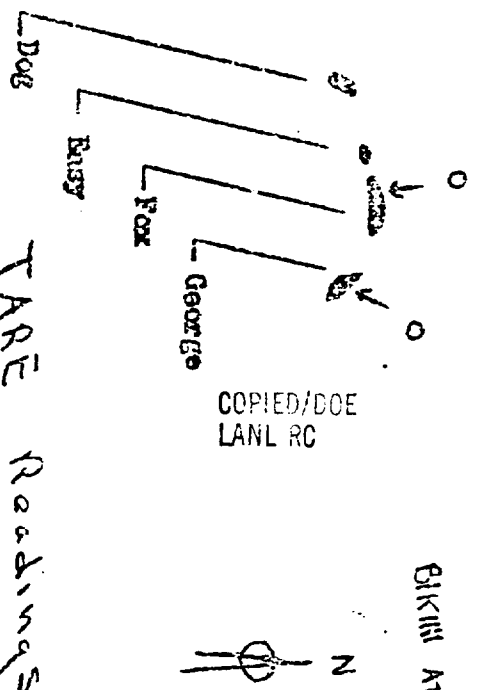
Culvert
630.02
630.01
2270
2120.01
2120.02
2230.01
2219

50
7
60
130
500
80
25
King
Love
Milo
Nan

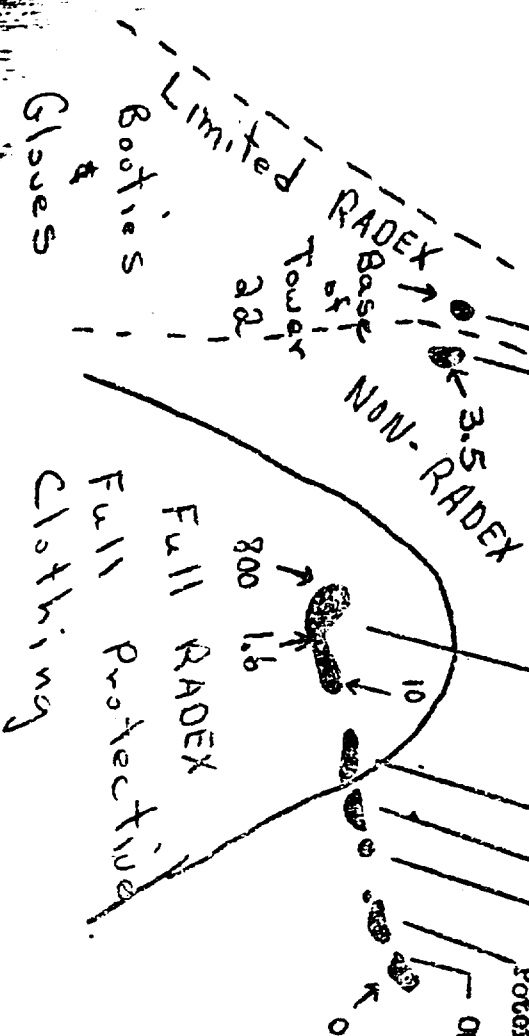
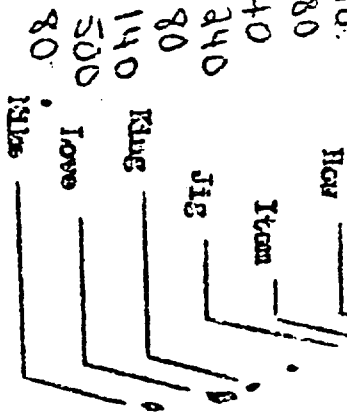
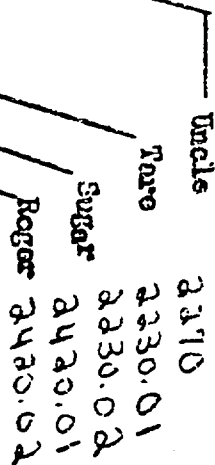
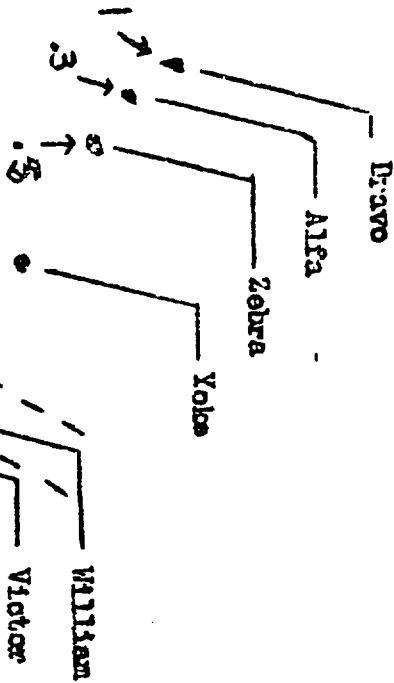
ALL Readings In M
At Ground Level As
1535 HRS. 2 June

COPIED/DOE
LANL RC

PIKINI ATOLL



LDOS	TARE	Readings
Stat		MR/HR
NON-RADEX	630.02	10
	130.01	90

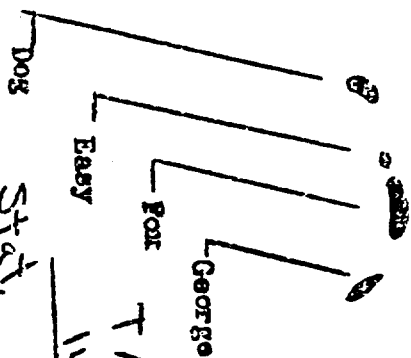
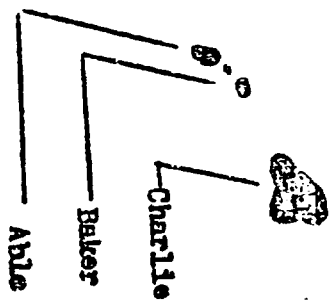


ALL Readings At
Ground Level In MR/1
As of 1545 hrs.

432

BIKINI ATOLL

COPIED/DOE
LANL RC



TARE Readings
1406 HRS. 30 MAY

Stat.

2210

630.01

2230.02

2270

2230.01

Culvert

2420.01

2420.02

Sugar 630,03

MR/HR

100

120

100-180

140

100

80

300-550

180

18

How

Item

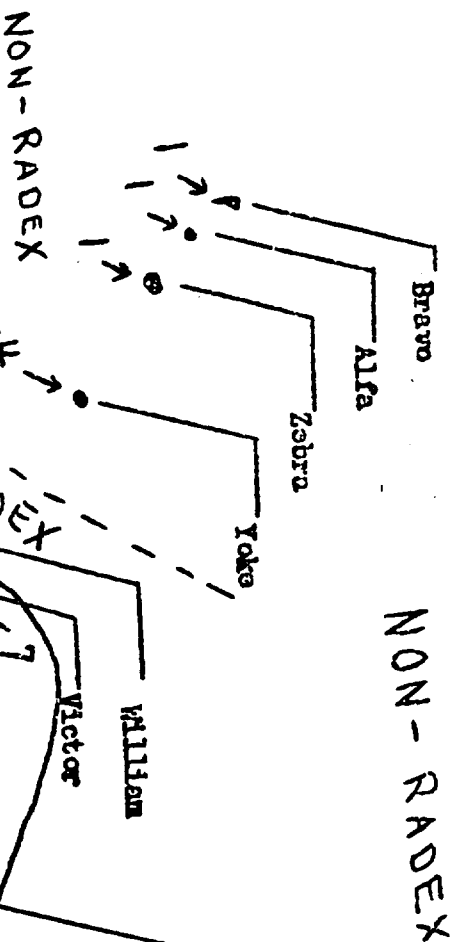
516

King

Love

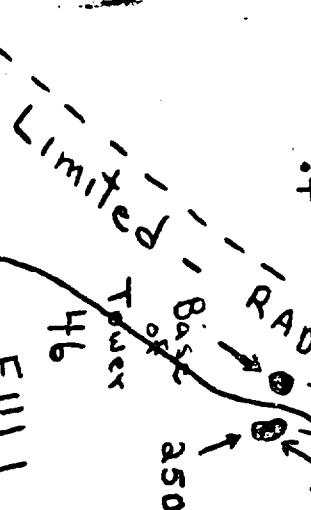
Mike

Man



NON-RADEX

NON-RADEX



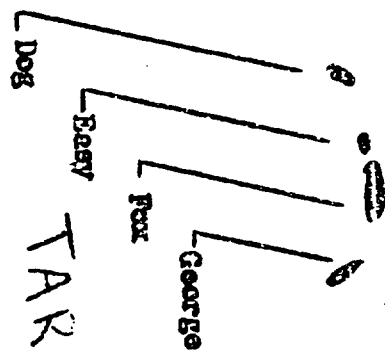
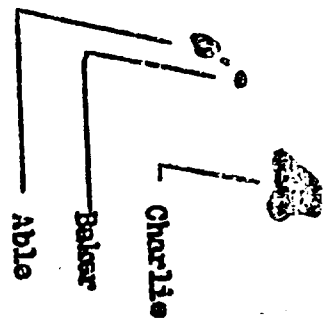
FULL-RADEX

Full Protective Clothing

Gloves Must be Worn In This Area

ALL Readings In MR/H
At Ground Level
(Island Survey)
1450 HRS 29 MAY

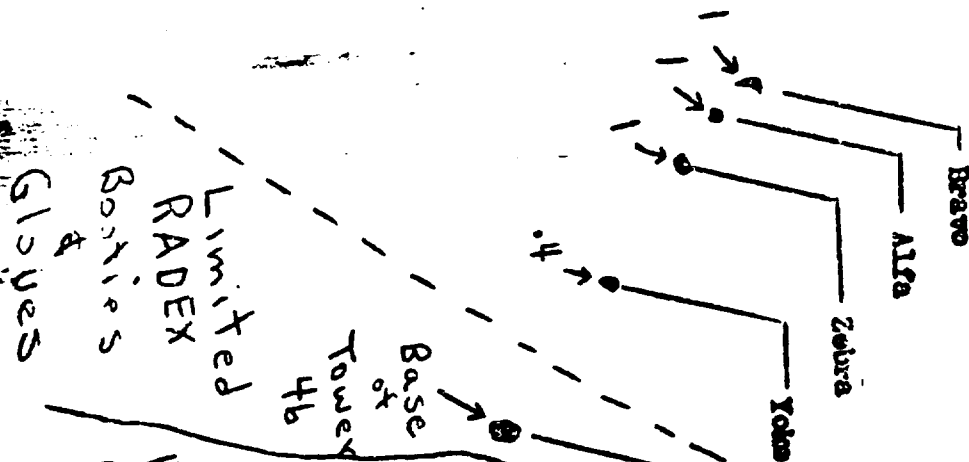
(See TARE Above)



COPIED/DOE
LANL RC

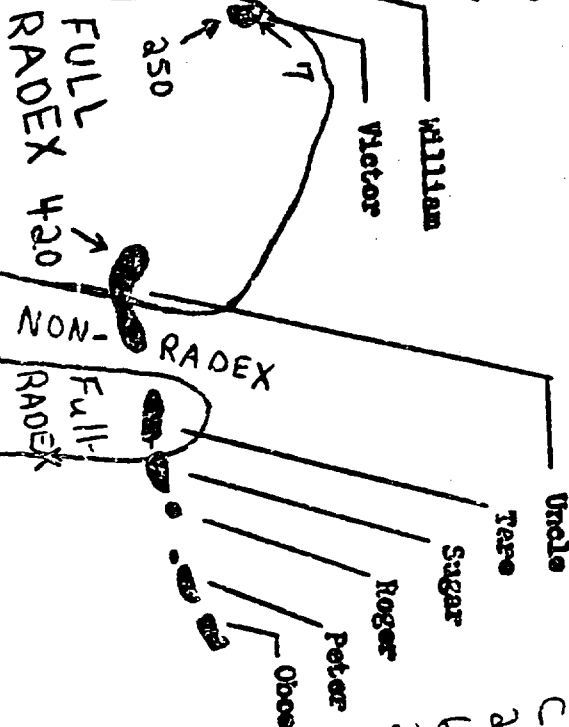
N

NON-RADEX



Limited
RADEX
Bodies
&
Gloves

Full Protective Clothing
Worn In this Area



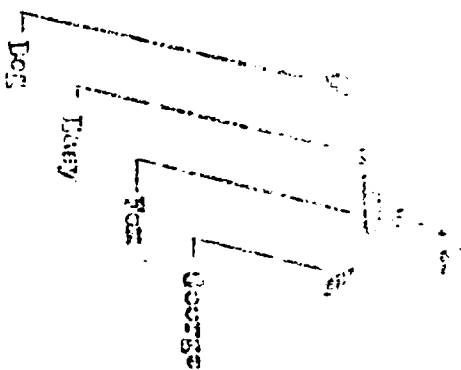
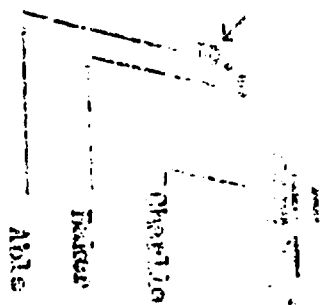
TARE Readings
Sta. 2310
630.01
2230.02
2390
2230.01
Culvert
2440.02
630.02
2420.01

80-130
80-160
100-260
300-350 Row
100-200 Item
200
150-450 Jig
30-40 King
400-1000
Love
Miko

Non

ALL Readings At
Ground Level IN M

1450 HRS. 29 MAY



COPIED/DOE
LANL RC

NON-RADEX

NON-RADEX

Limited RADEX

Tower 80

FULL-RADEX

Boaties
&
Gloves

Full protective clothing
Must be worn in this area.

ALL Readings (Except)
At Ground Level (See N)
IN MRP/RA AS OF
1440 AND 22 MAY

Item

Range

Item

Item

Item

Stat.

2270

630.01

2240.02

2230.01

2270

Calvert

2120.01

2120.02

630.02

Sugar

Roger

One

One

One

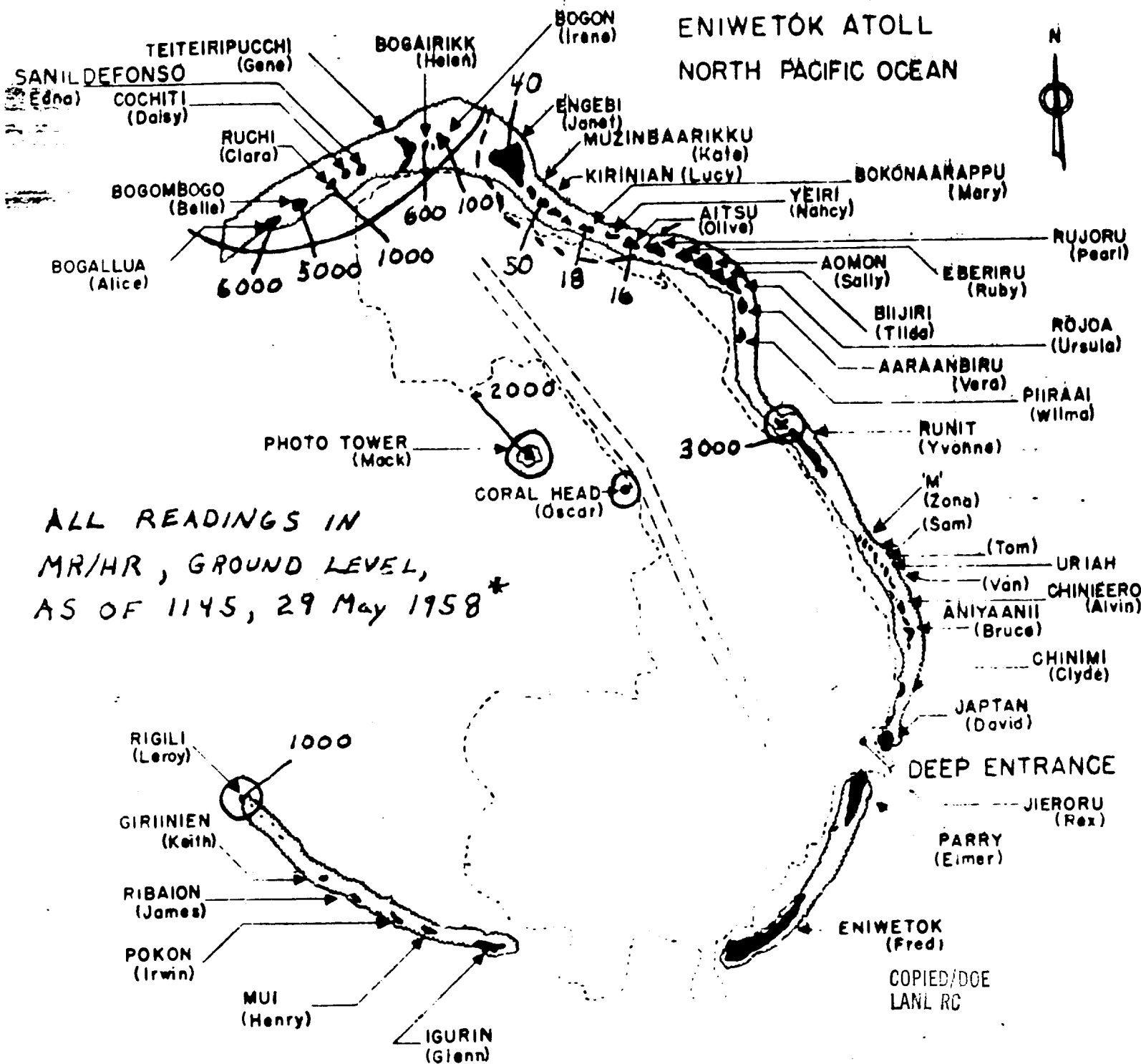
One

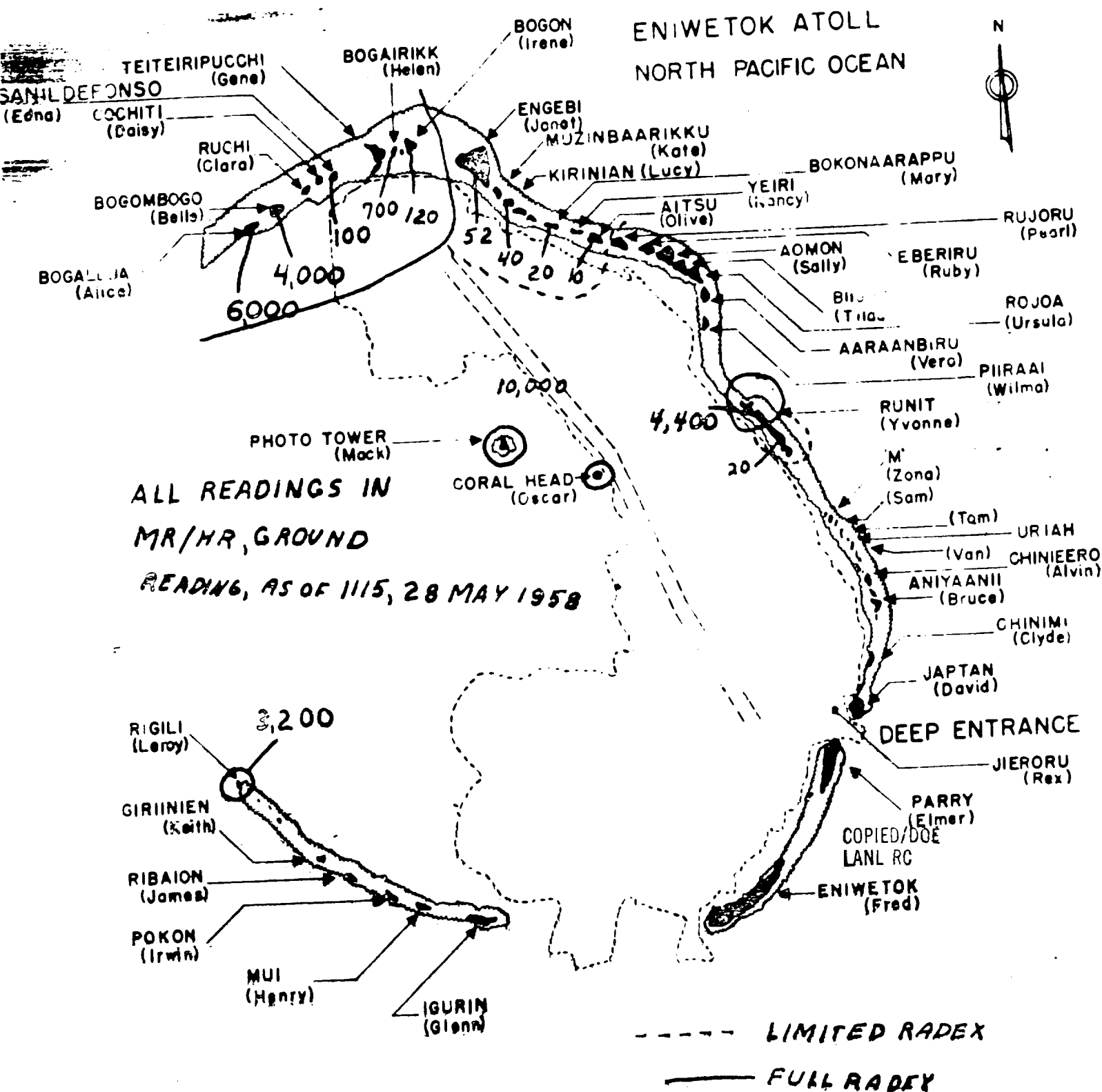
One

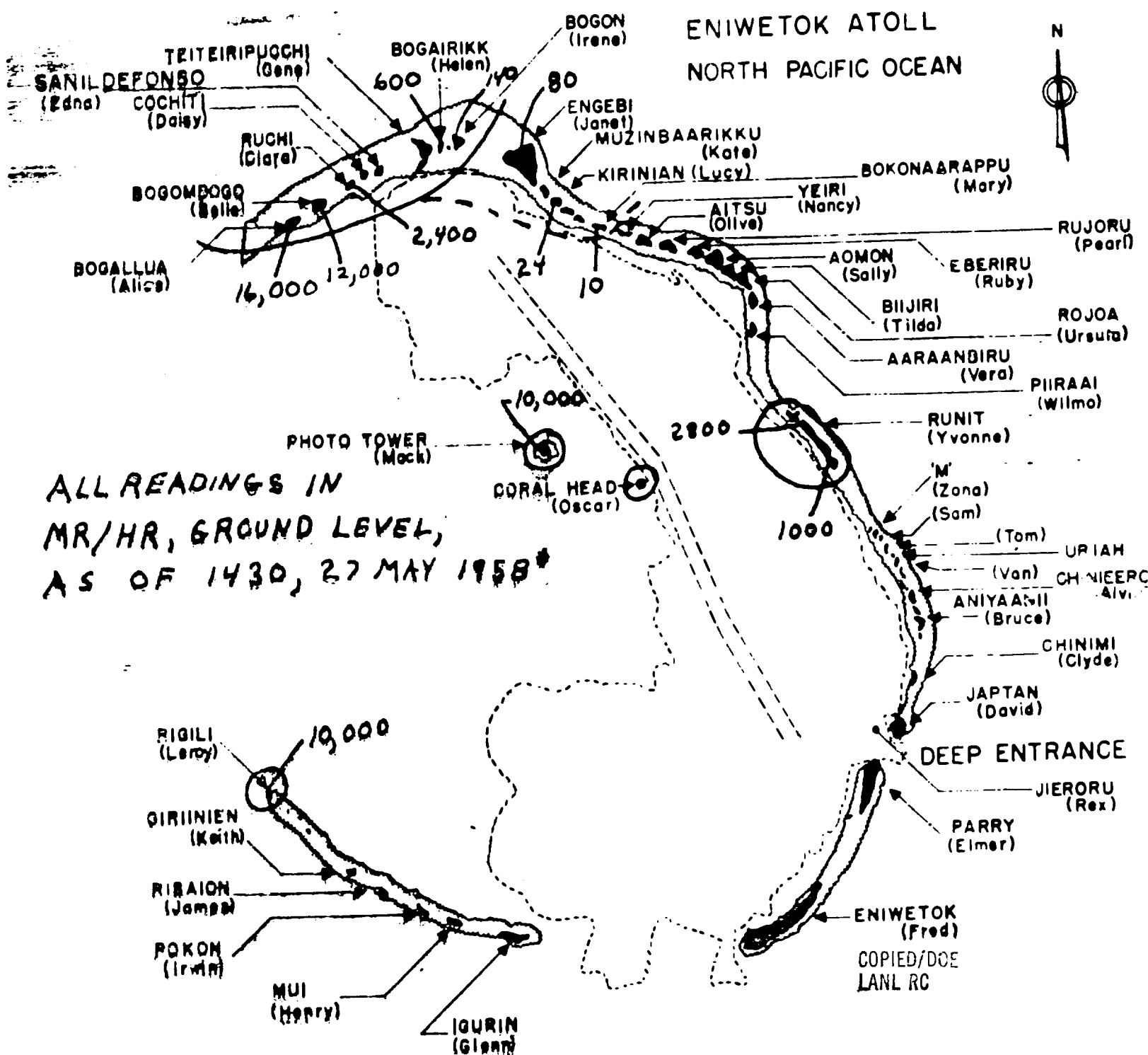
One

One

One







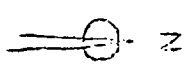
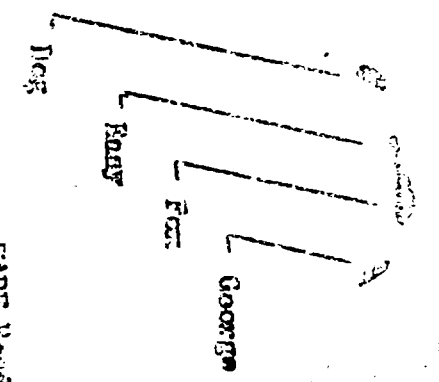
ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 1430, 27 MAY 1958*

* MACK PHOTO TOWER
AS OF 1100.
YELLOWWOOD G. Z. — 10 MR/HR.

--- LIMITED RADAR
— FULL RADAR

7

78



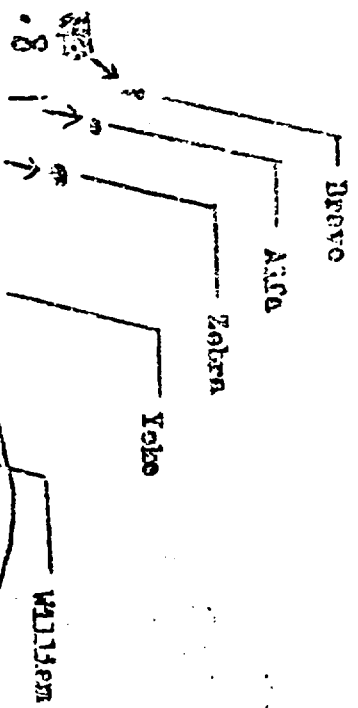
61000 1000
61000 1000

NON - RADEX

Seab. 2270

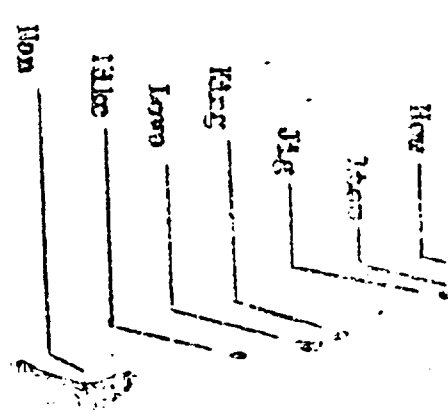
TABLE RECORDED 0015 Dec 27/1947

200 12/19



Uncle
Pete
Sugar 630.01
Roger
Potter
Oscar

300
260
500
300
6
80
280



COPIED/DOE
LANL RC

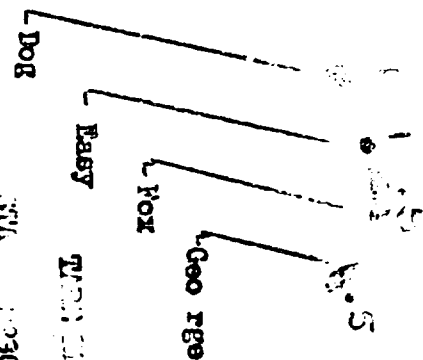
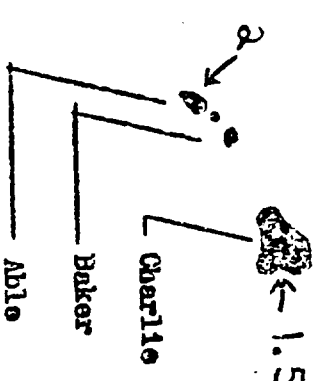
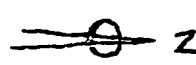
FULL - RADEX

Full Protective Clothing

Must Be Worn In This Area

ALL Read. At
Ground Level In MR/HR
AS. OF 1430 HAS AT MR.

BIKINI ATOLL

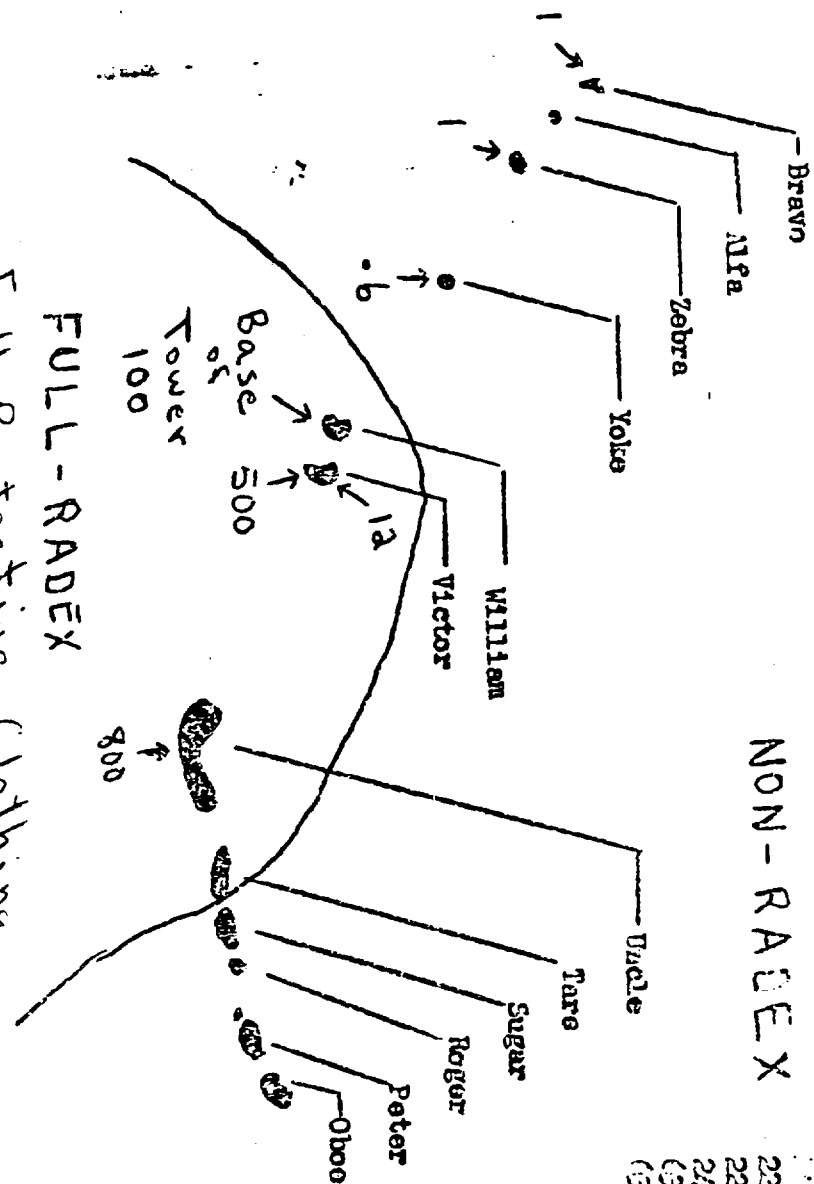
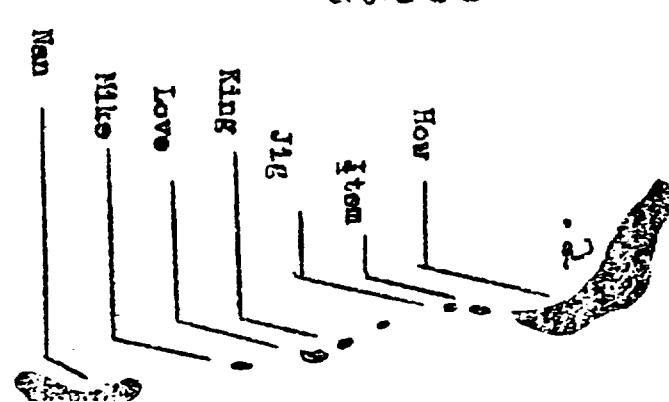


COPIED/DOE
LANL RC

NON-RADDEX

103C.01
103D.02
13C.01
120.1
2310
2270
2420.C2
130.03
130.02

400
55
420
1600
400
1900
1000
6
75



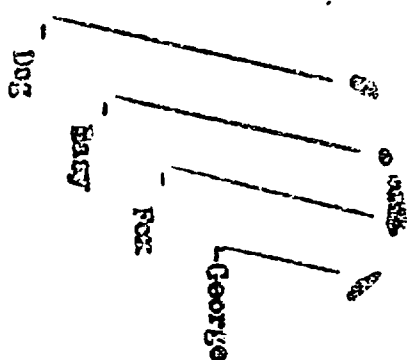
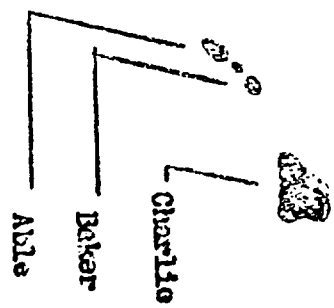
ALL Readings At Ground
Level In MR/HR AS OF
1500 HRS. 26 May

FULL-RADDEX
Full Protective Clothing
Will Be Worn In This Area

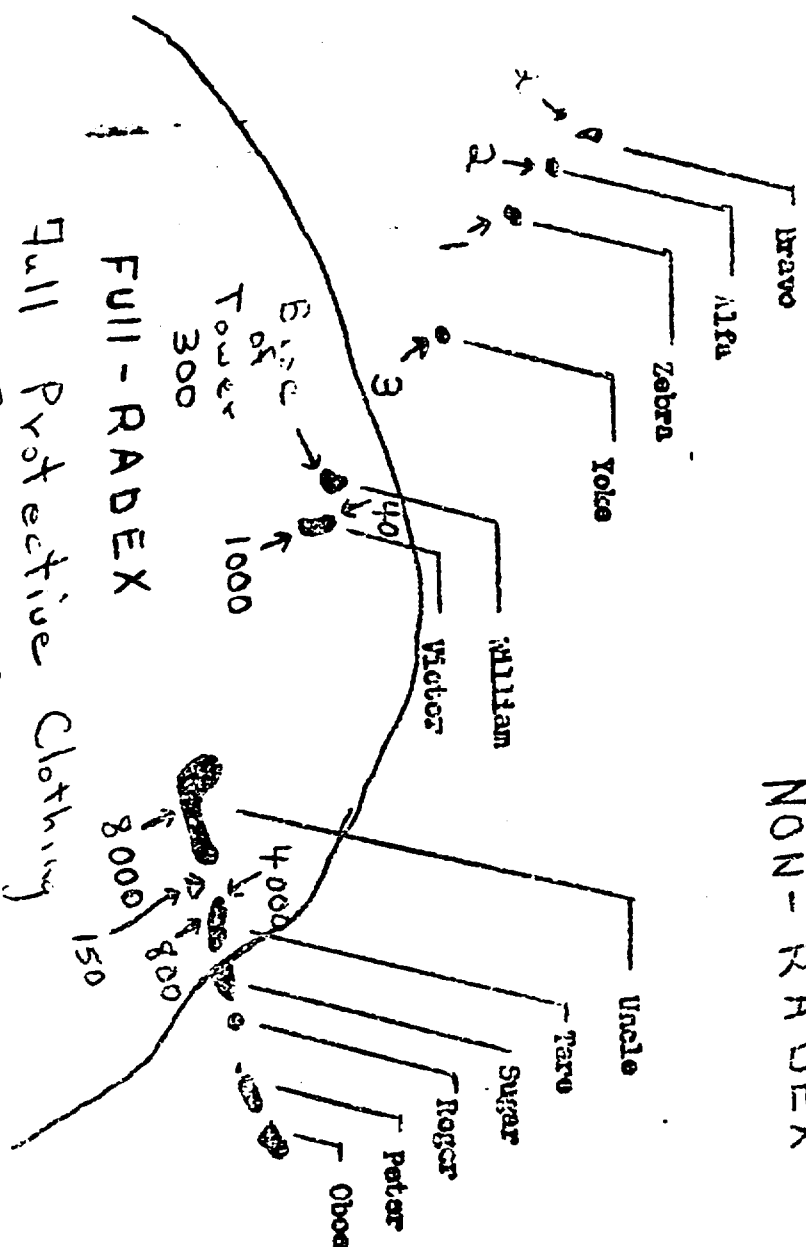
2.8



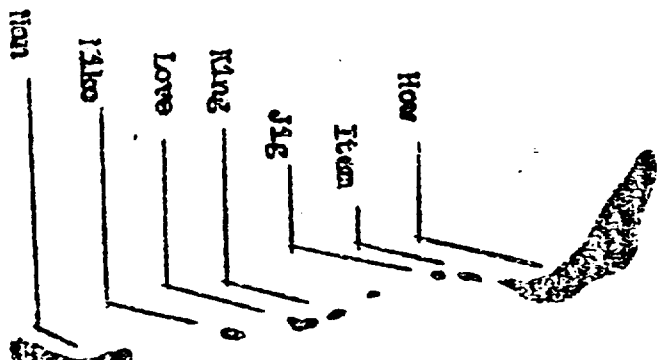
COPIED/DOE
LANL RC



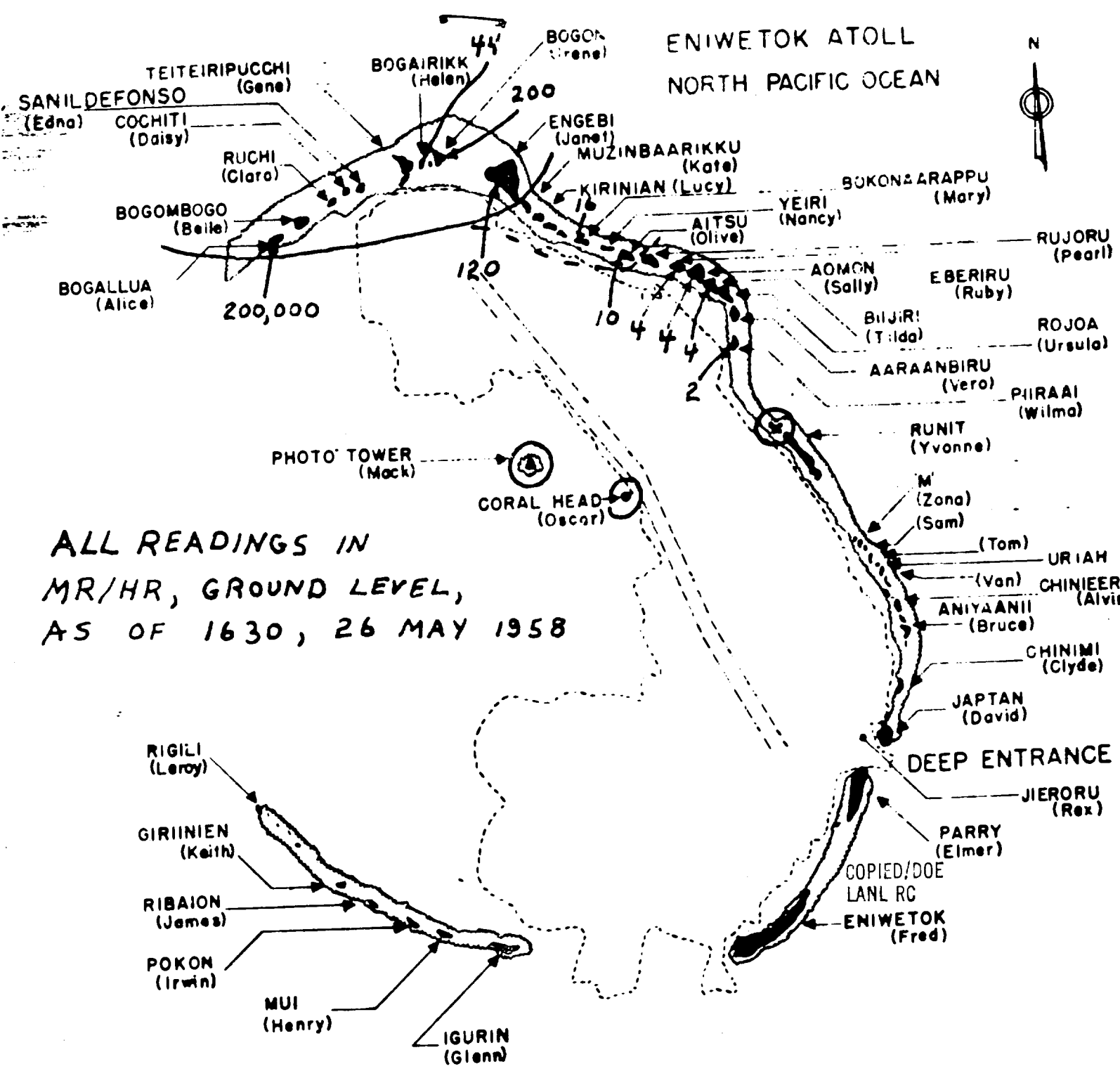
NON - RADDEX



Full Protective Clothing
Will Be Worn In
This AREA



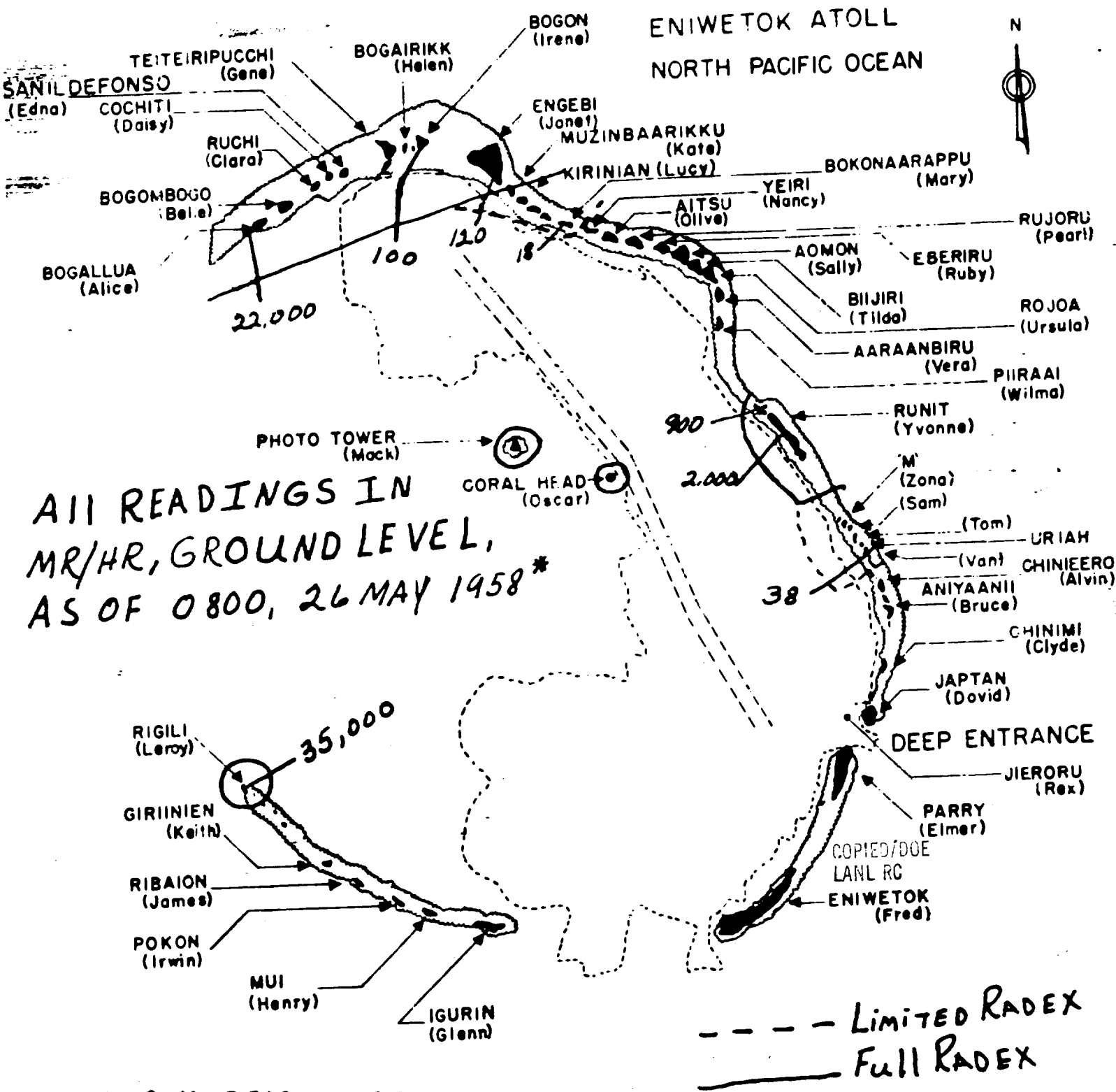
ALL Readings At
Ground Level In
MR/MR AS OF 1630 HR
24 MAY 58



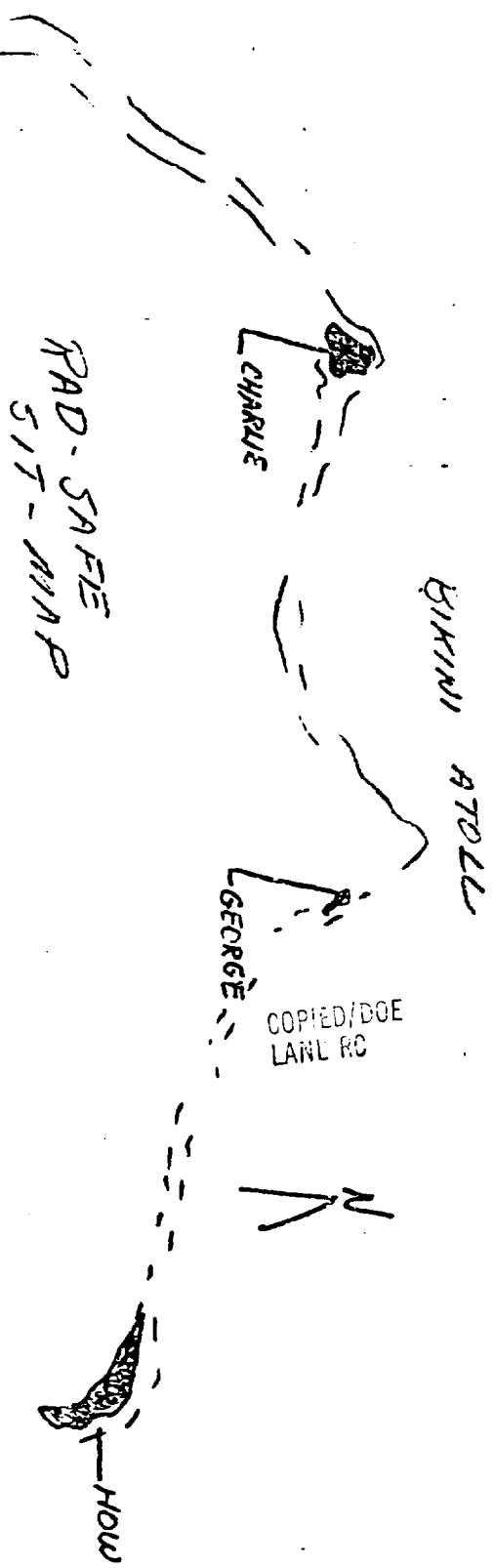
ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 1630, 26 MAY 1958

----- LIMITED RADEX
———— FULL RADEX

81



* LEROY READING AS
OF 0930.



TARE READINGS

1 2 3

STA 630.02 - 200

2210 - 1000

2270 - 2500

2230.01 - 1000

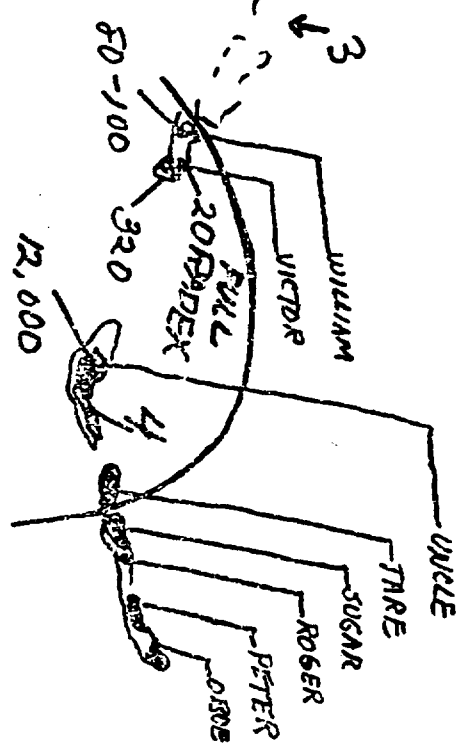
2230.02 - 1500

2420.01 - 3500

2420.02 - 500

630.03 - 9

630.01 - 1000

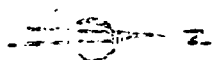


ALL READINGS IN
MR/HR AS OF
1600 25 MAY 58
(ground level)

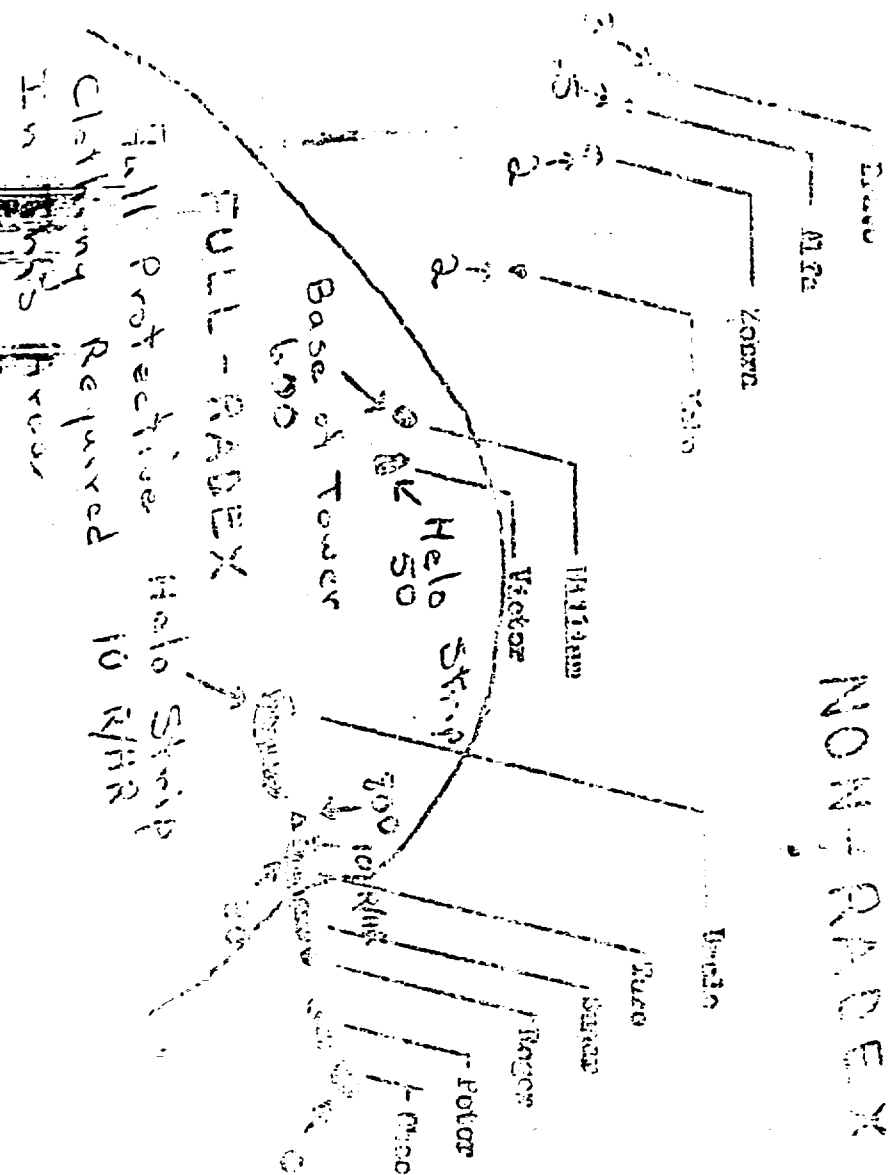
MAN



670341-131814



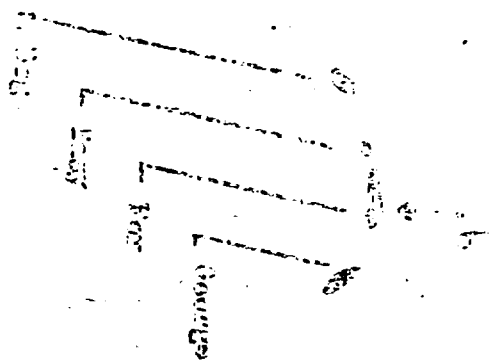
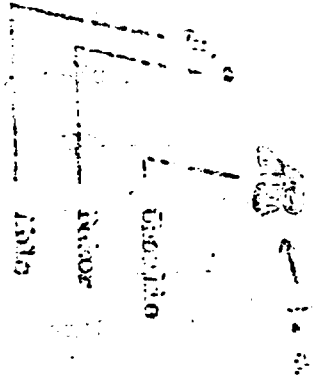
Z
O
Z
L
D
T
O
M
X

[illegible]

15 U. C. 115. 23 MAY

8

10000 27000

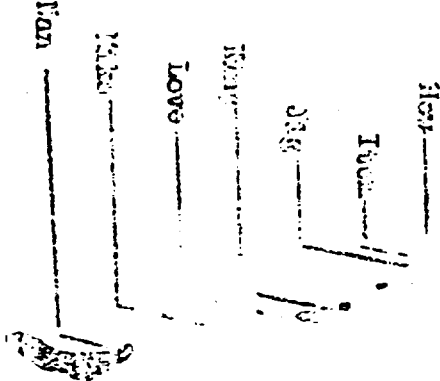


COPIED/DOE
LANL RC

Ground Motion

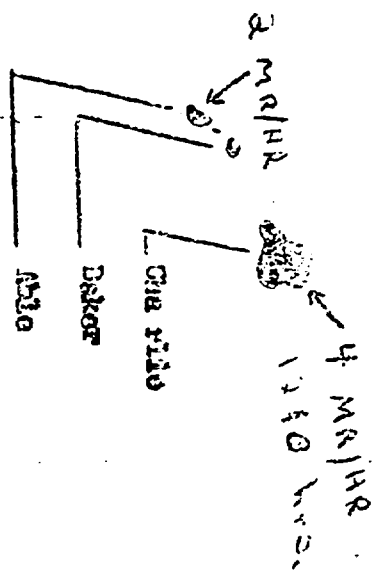
N

MON-RADEX



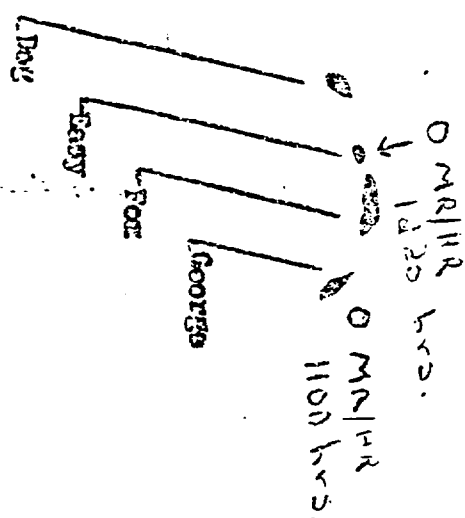
All Readings Entered
To Ground Reading
as of 1708hrs22 MAY
Readings in M/H/A

58

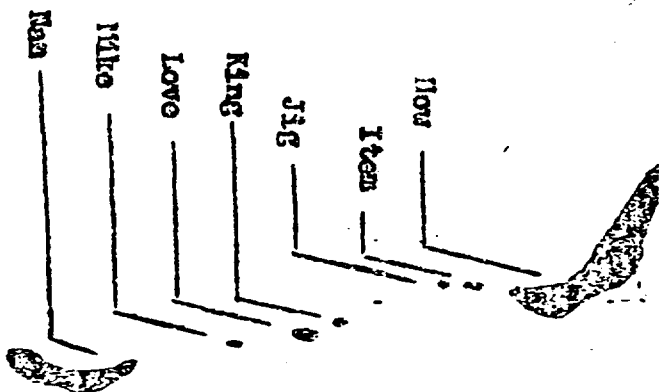
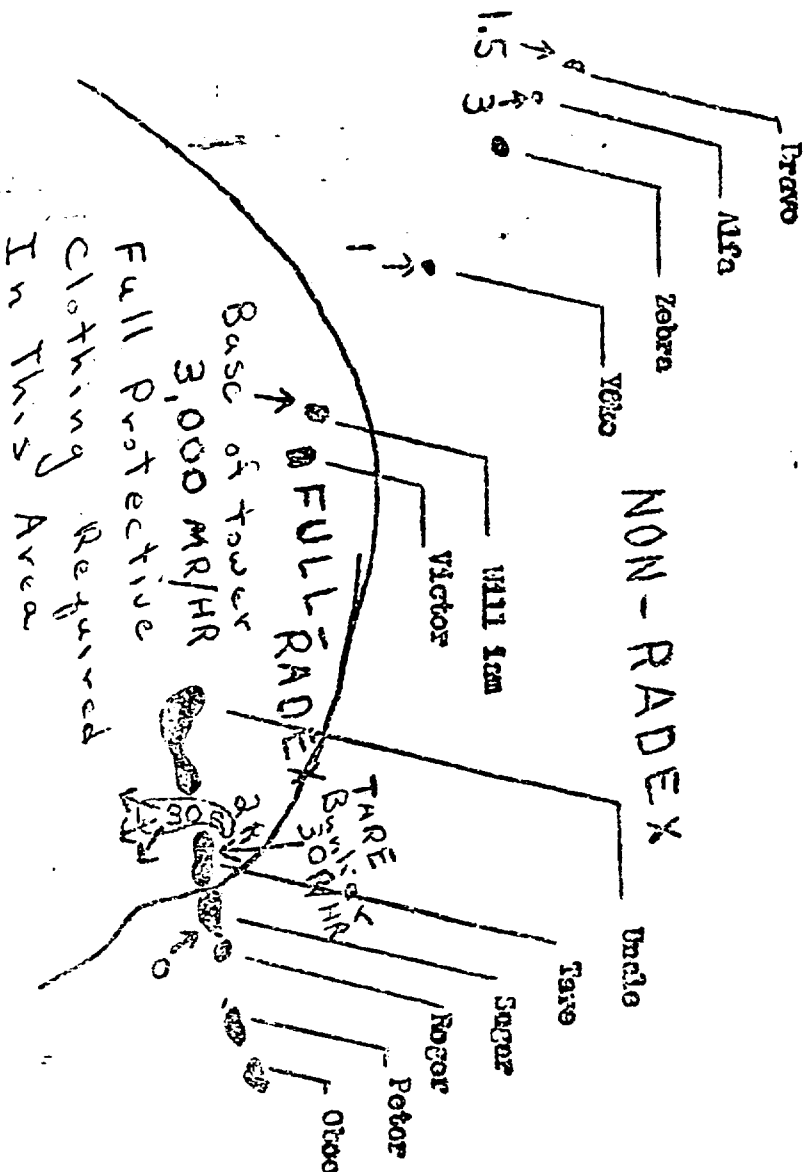


BIKINI ATOLL

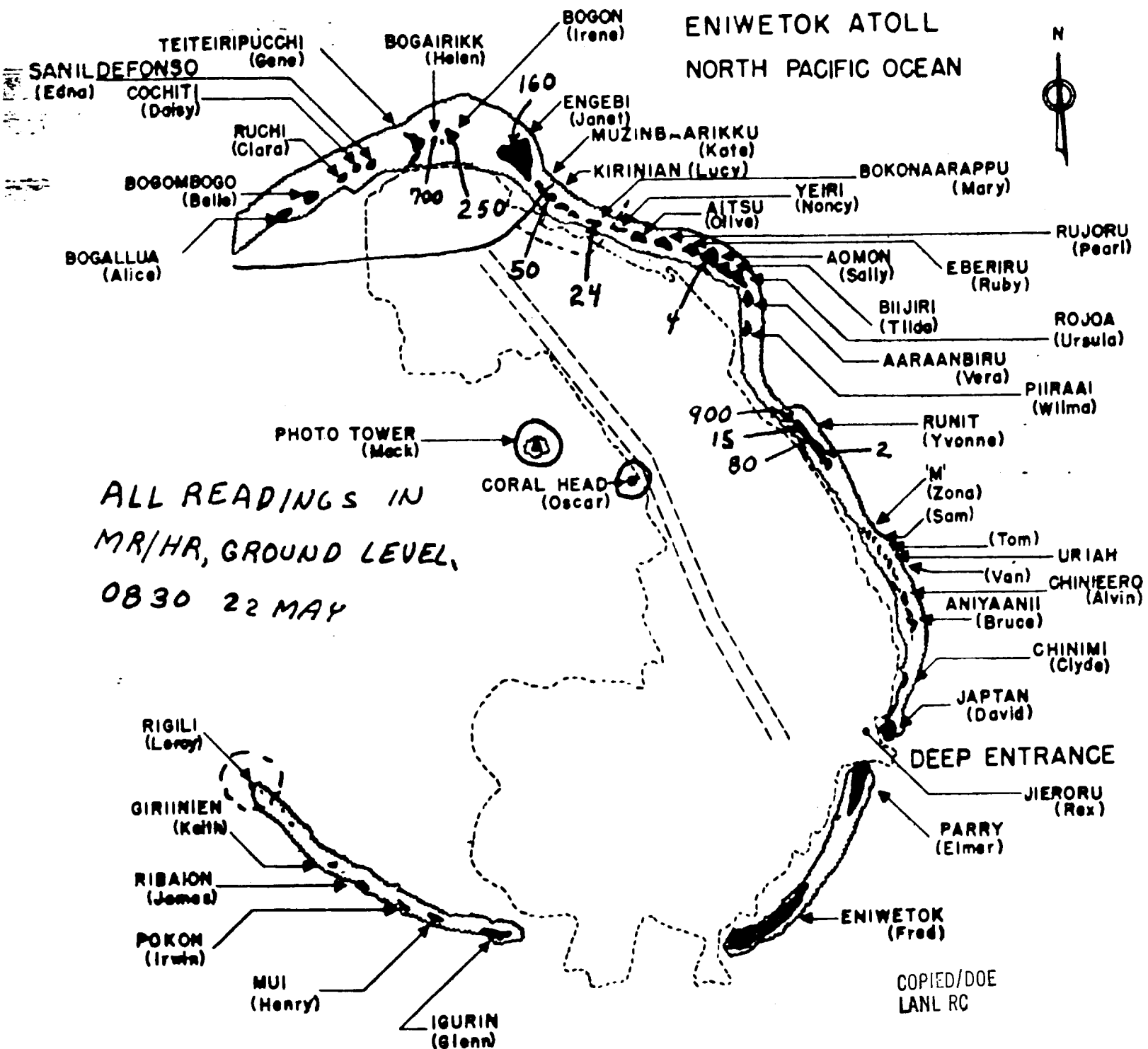
COPIED/DOE
LANL RC



NON-RADDEX



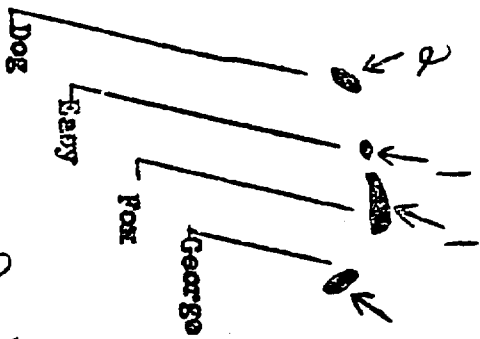
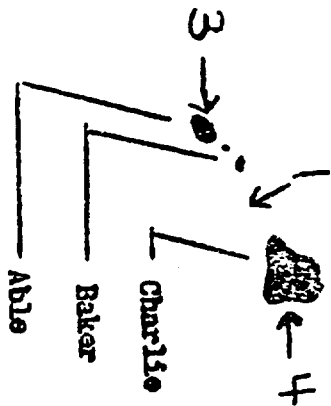
ALL Readings AT
Ground Level AS OF
1400 hrs. 22 May 58



NOTE: HOLLY G.Z. - 20 to 120 mr/hr

— FULL RADEX
--- LIMITED RADEX

8

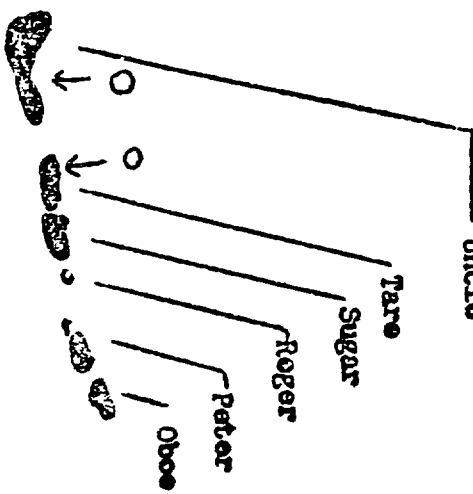
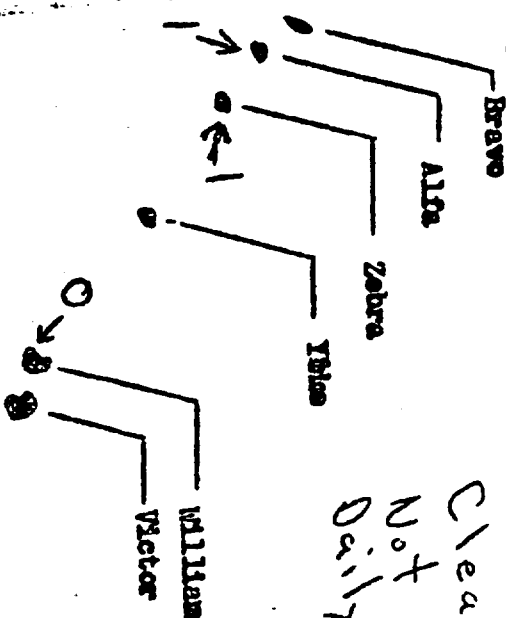


COPIED/DOE
LANL RC

BIKINI ATOLL

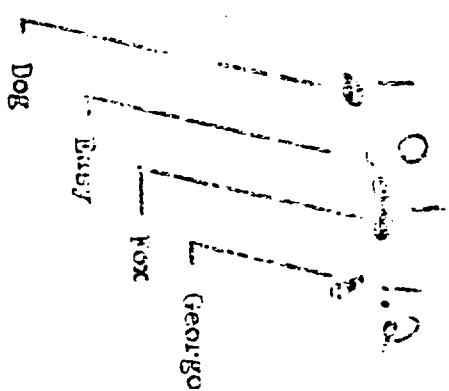
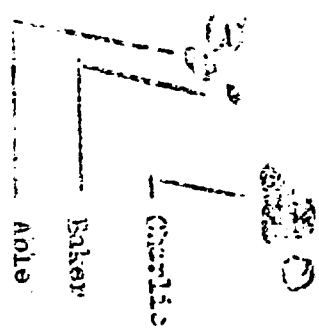


All Areas Non-Radar
Clearance Through TV-6 Rad-Safe
 Not Required. This will be last
 Daily Situation Map till Next Shift



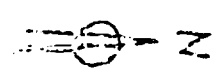
King
Love
Mike
Nam

All Readings IN
 MR/HR AT Ground
 Level AS of 1435 hrs.
 18 MAY

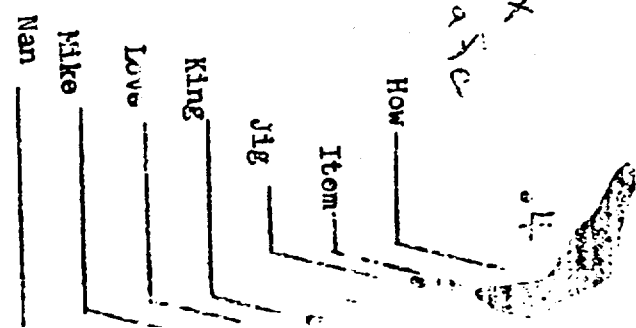
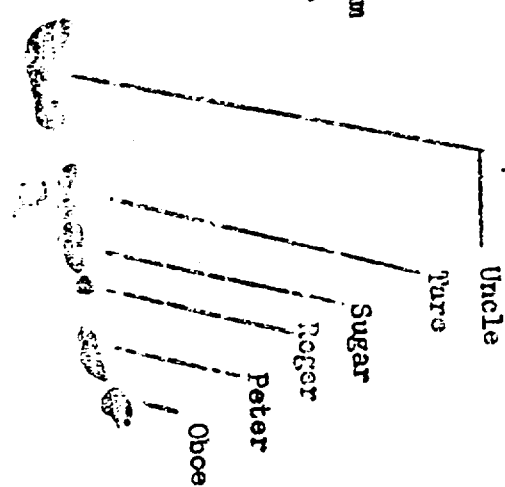
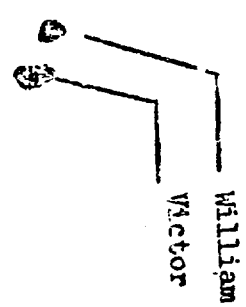
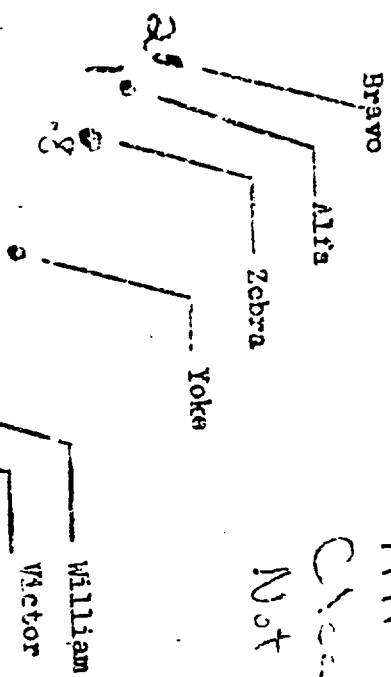


COPIED/DOE
LANL RC

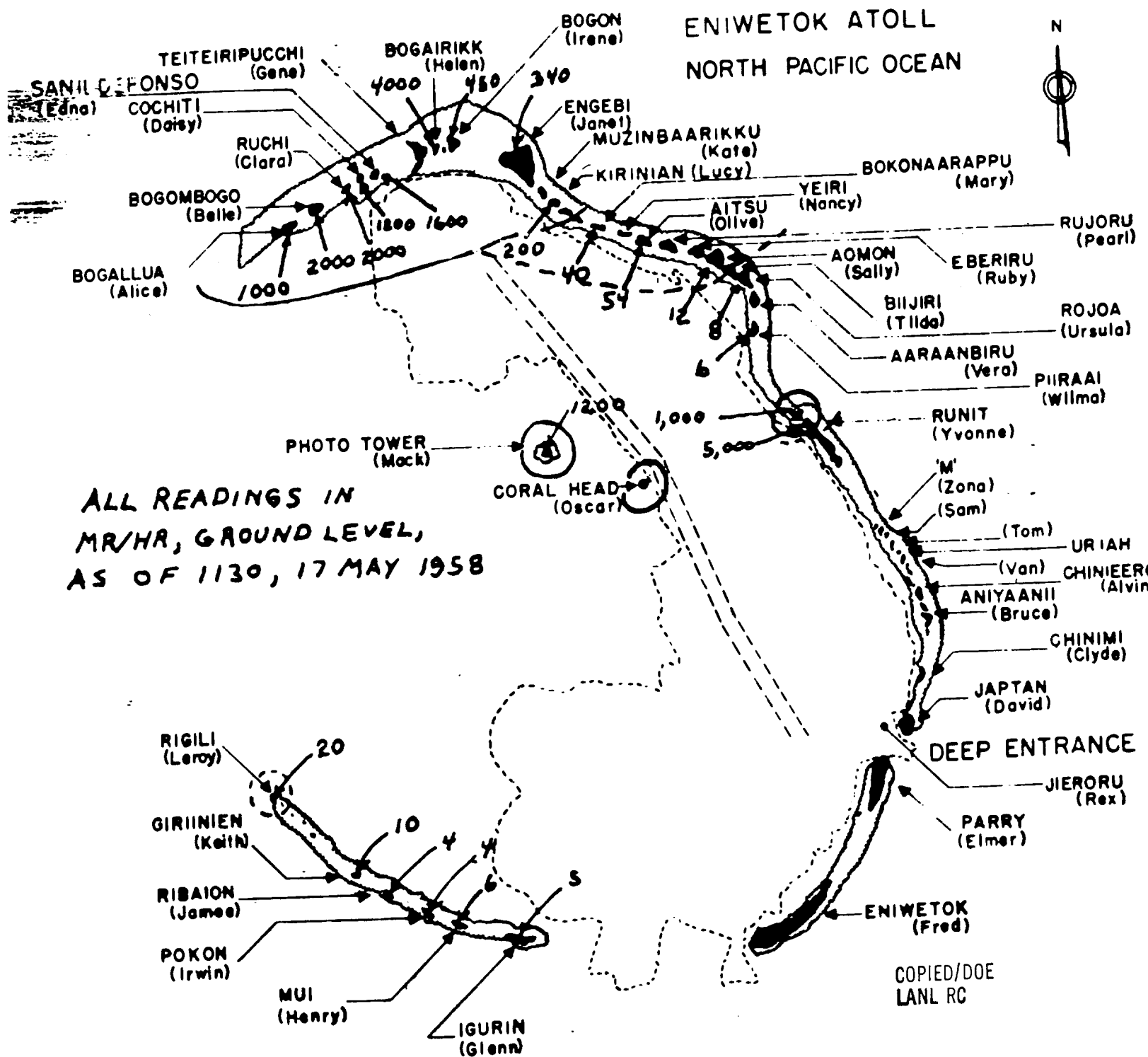
RIKNI AIOIL

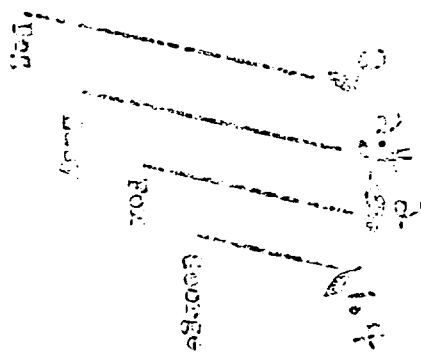
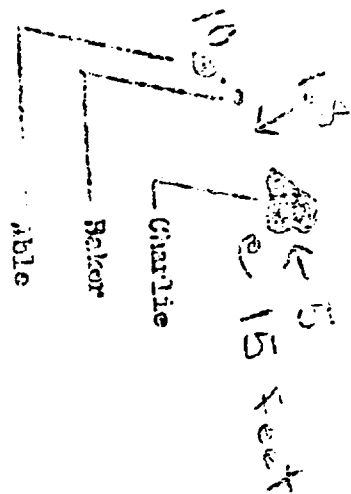


All Areas Are Non-Radex
Clearance Not Required
Rad-Safe



ALL Readings In
M/A/M/A at Ground Level
AS of 1650, 17 May



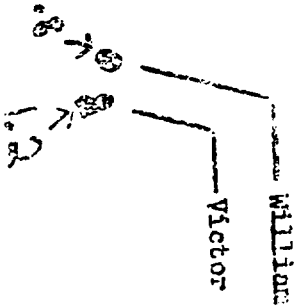
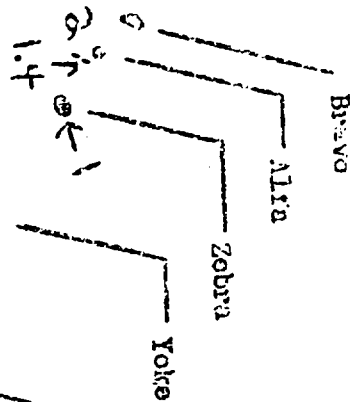


COPIED/DOE
LANL RC



MIKIMI ATOLL

92

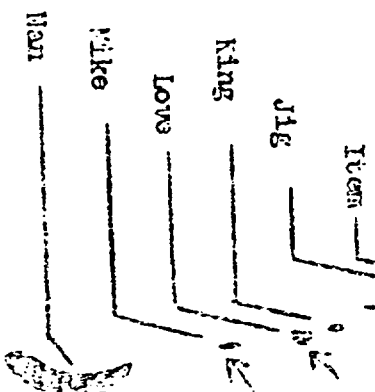
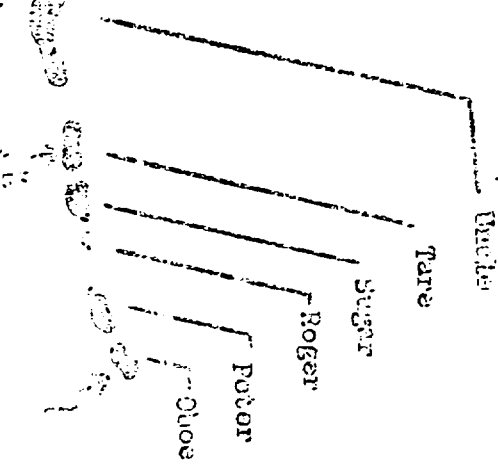


All readings
at Ground Level In

max hrs of 1645 hrs

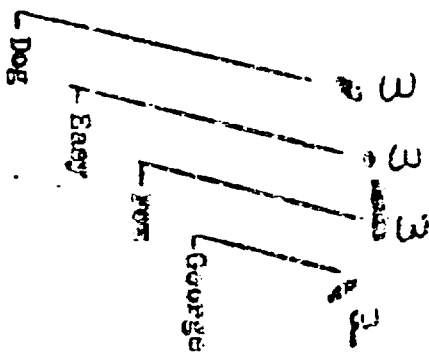
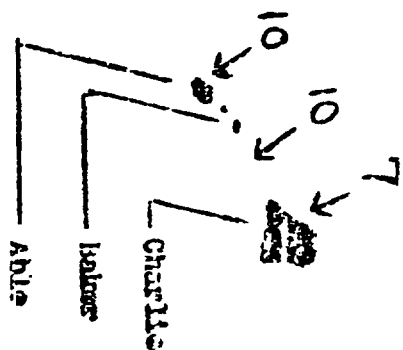
16 May 56

All reads are Non-Radex
Clearance Through Rad-Safe

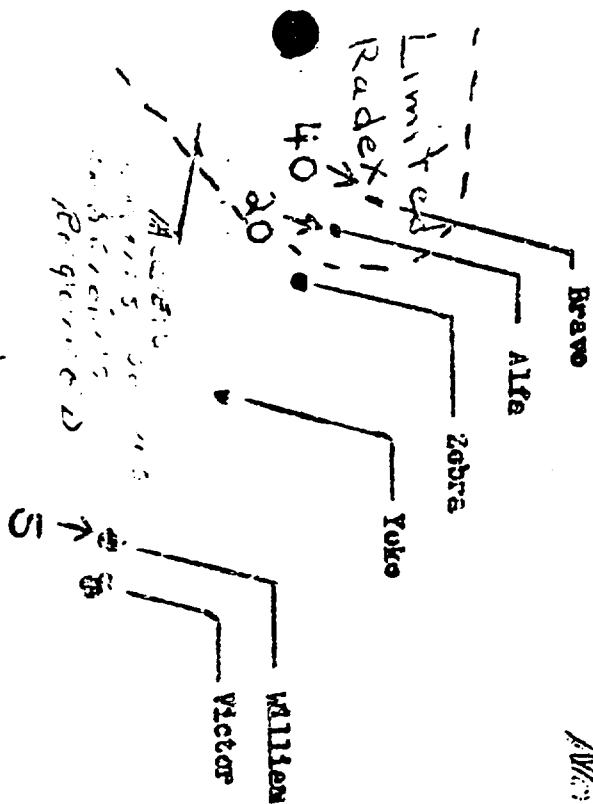


COPIED/DOE
LANL RC

BIKINI ATOLL

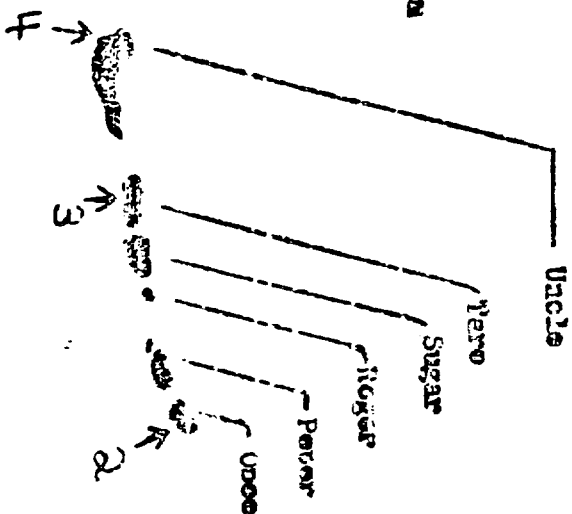


— 2 —



Miles Rendel - C. A. H. H. H. H.

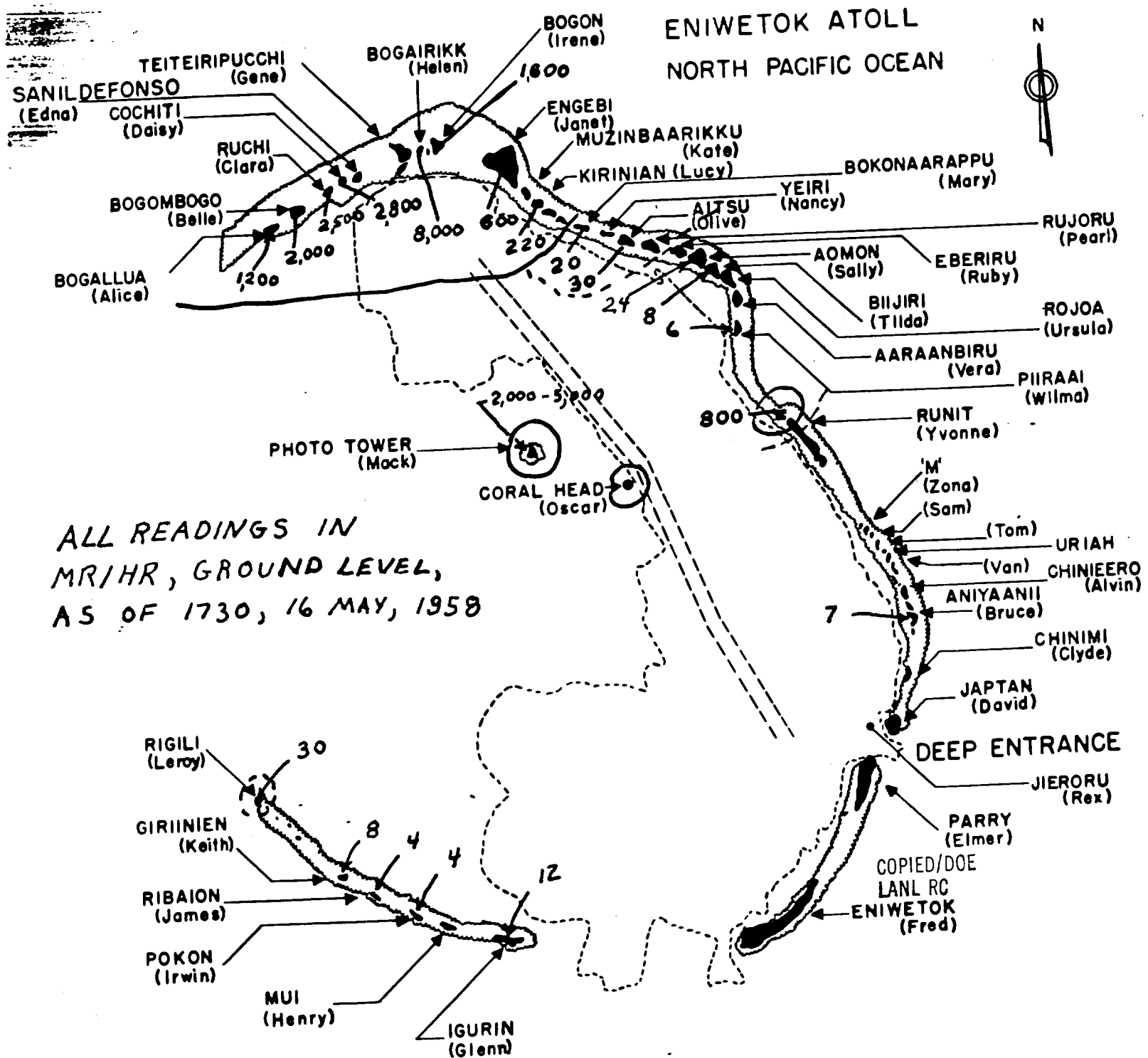
Mr. J. C. Mansfield



All readings from
MR/HQ At Ground
Level As of 1150 hrs.

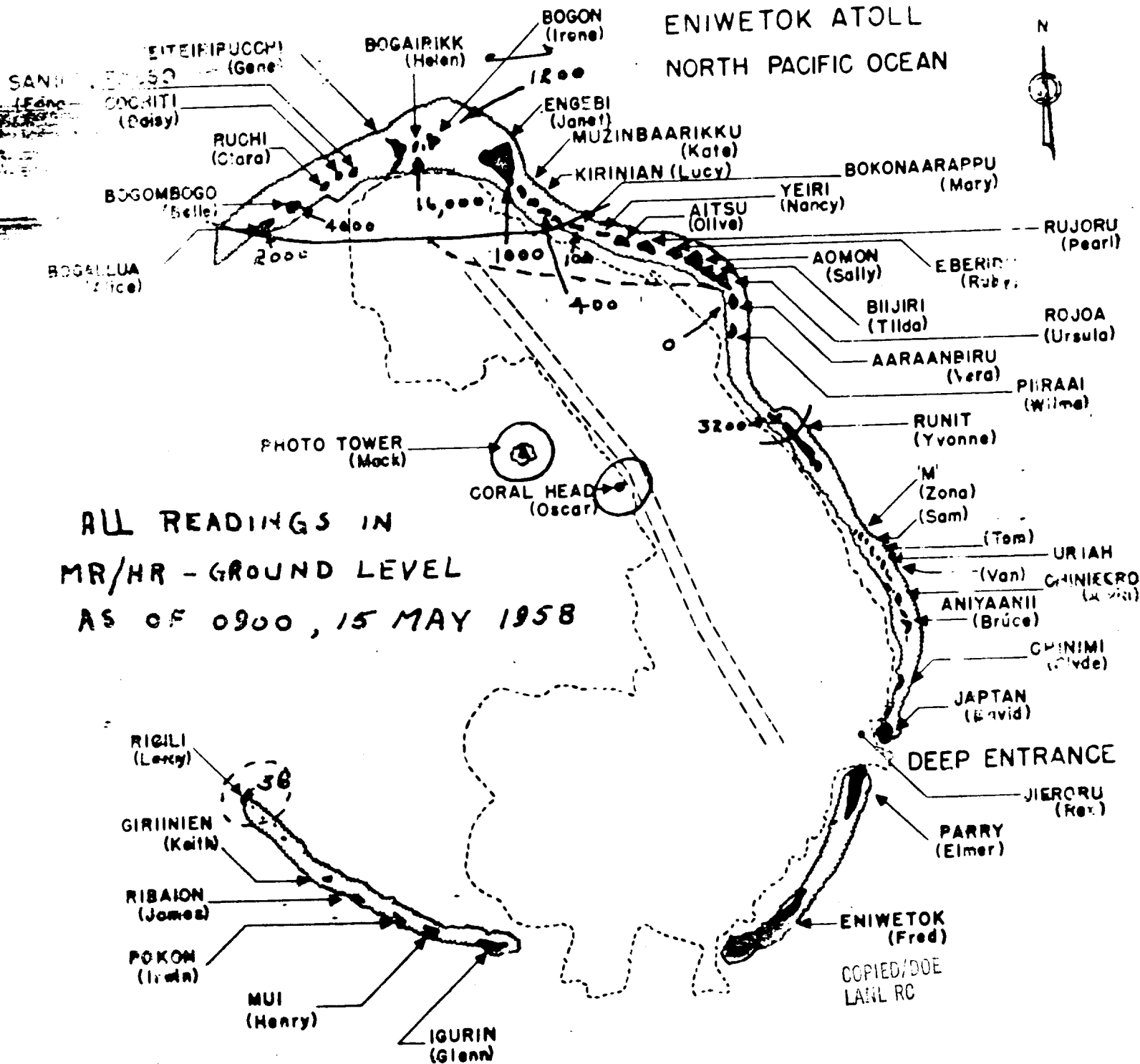
二
一
丁
三
五
六

RECEIVED
3 MAR 1960
1229 hrs
Limited Ro.
Full Radex



94

ENIWETOK ATOLL NORTH PACIFIC OCEAN



95

ALL Readings In
MR/HR at Ground Level
AS of 0800, 14 May

Limited

NON-RADEX

Radex

1000°

2
15

Charlie
Baker
Able

3
3
3
2
George
Fox
Easy
Dog

COPIED/DOE
LANL RC

BIKINI ATOLL



Bravo
Alfa
Zebra
Yoke

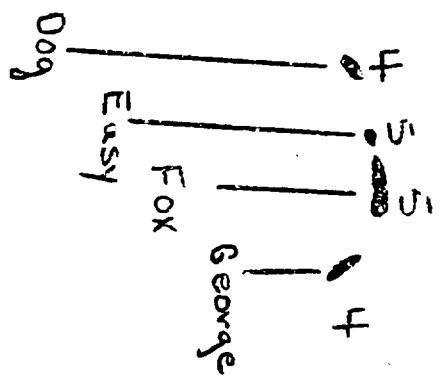
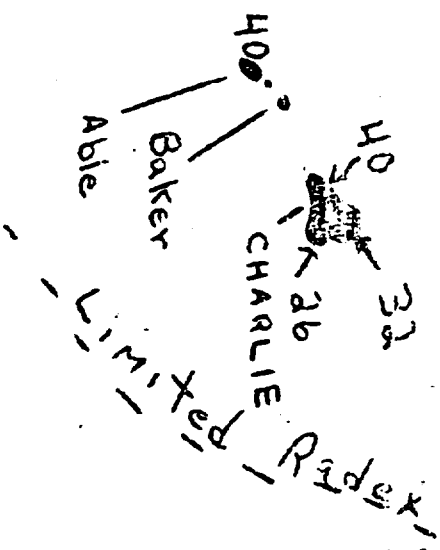
William
Victor

Uncle
Tare
Sugar
Roger
Pe ter
Obce

How
Item
Jig
King
Love
Mike
Nan
0 MR/HR
0830 hrs

Limited Radex
Full Radex

9



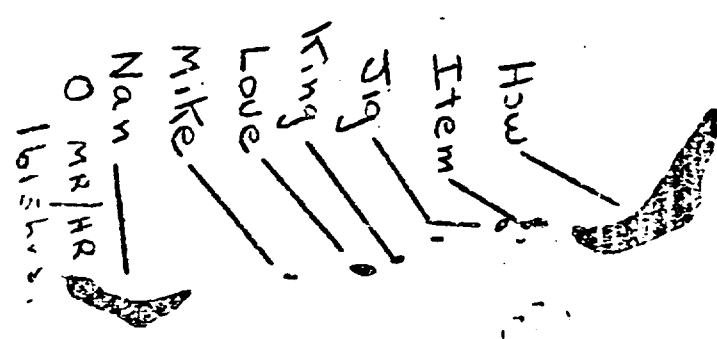
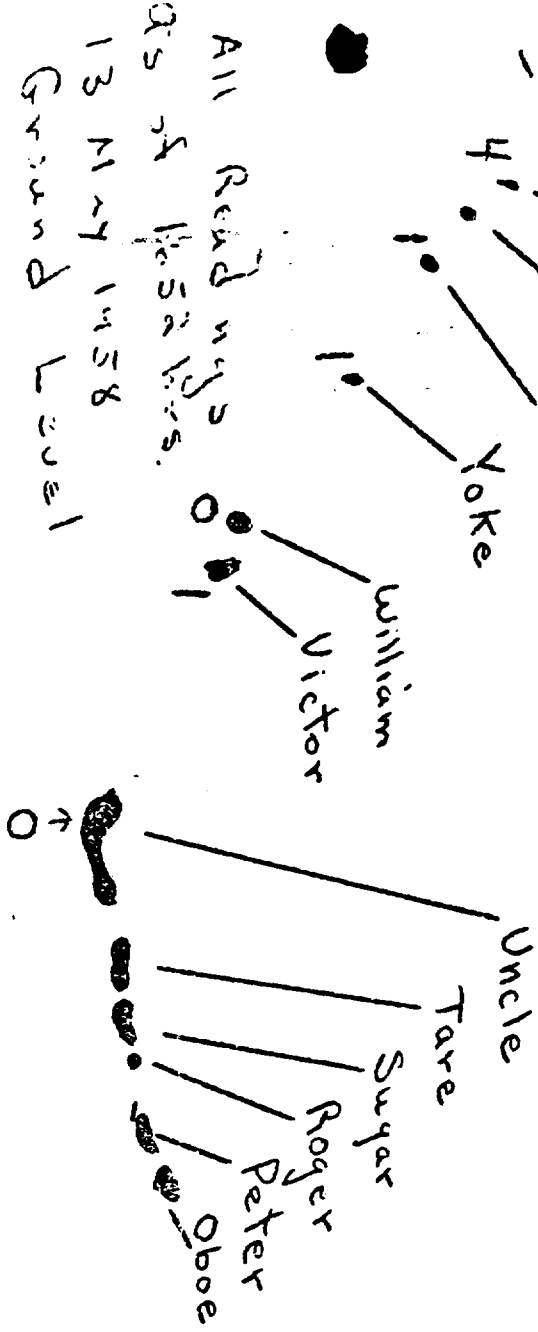
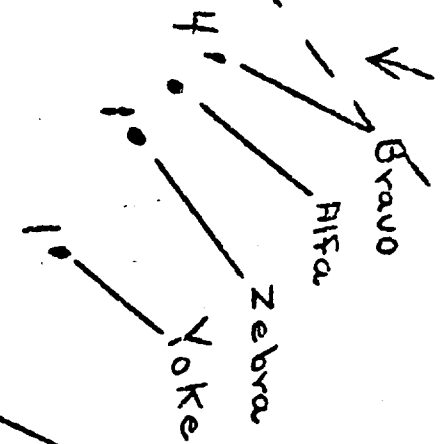
COPIED/DOE
LANL RC

BIKINI ATOLL



REEF 100-200

NON-RADER



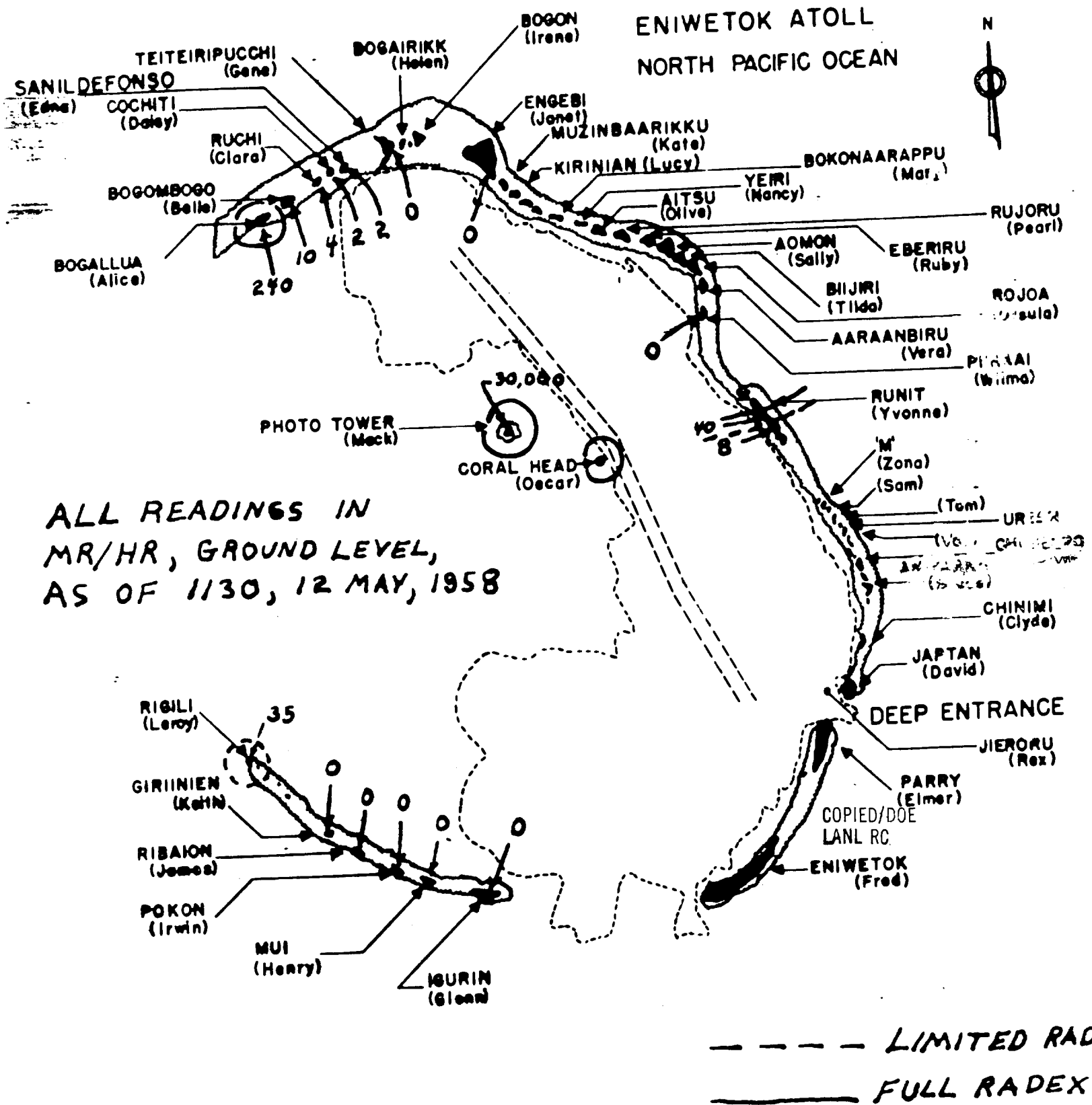
Full Rader

ALL Readings in MR/HR

2/28

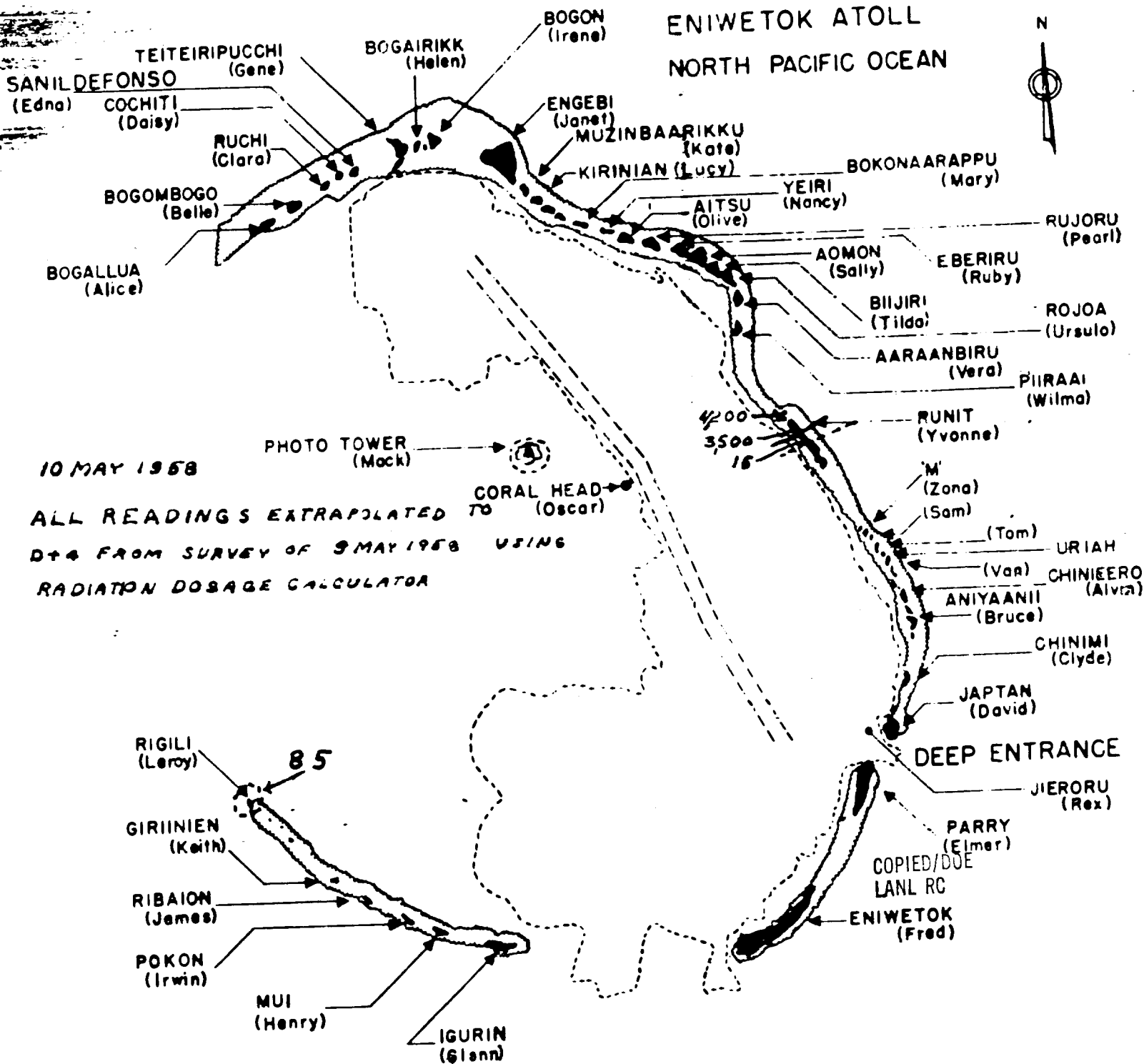
5

Dr. Wm. E. Ogle
JTF-7

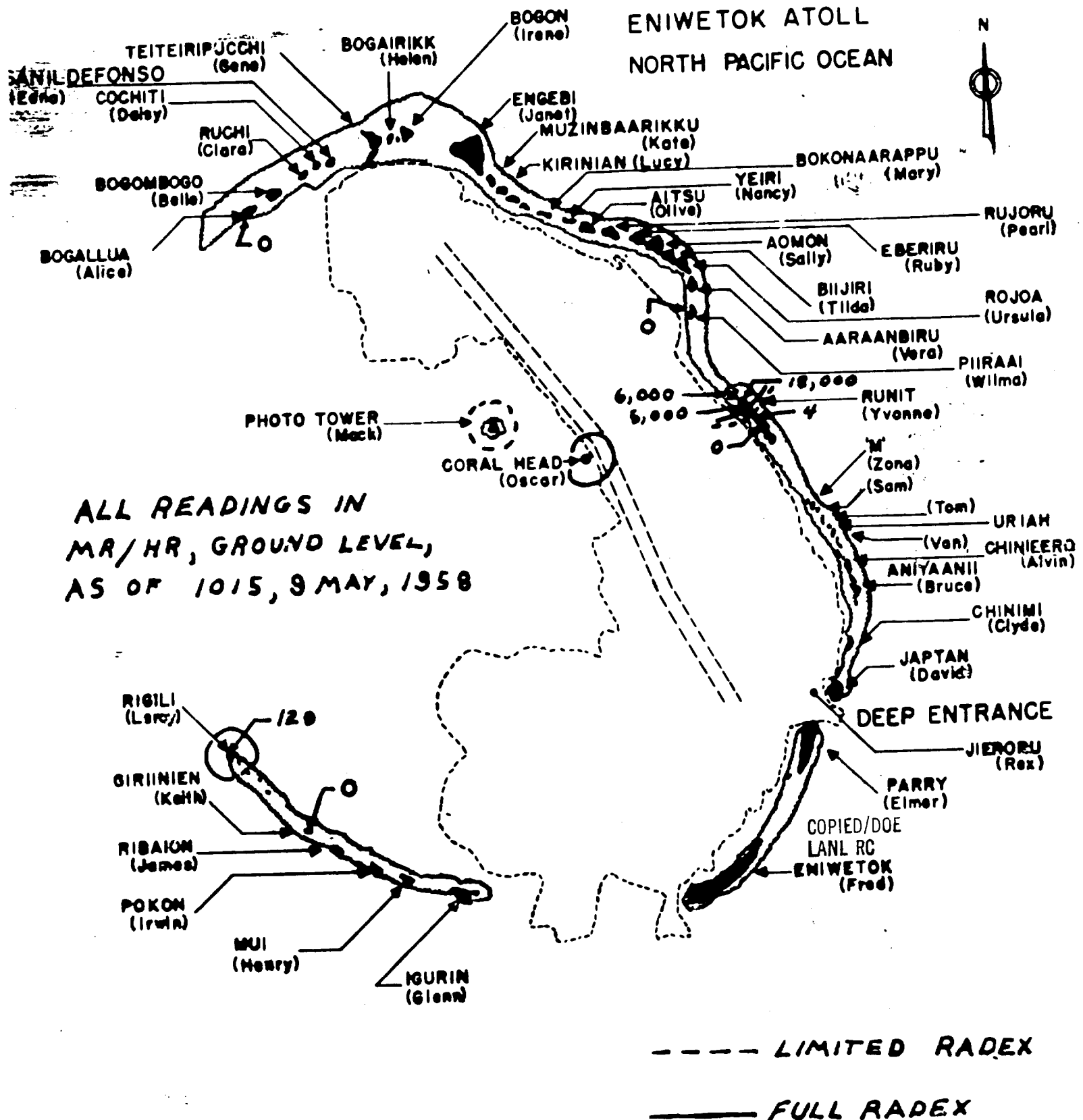


100

Dr. Wm. E. Ogle
JTF-7

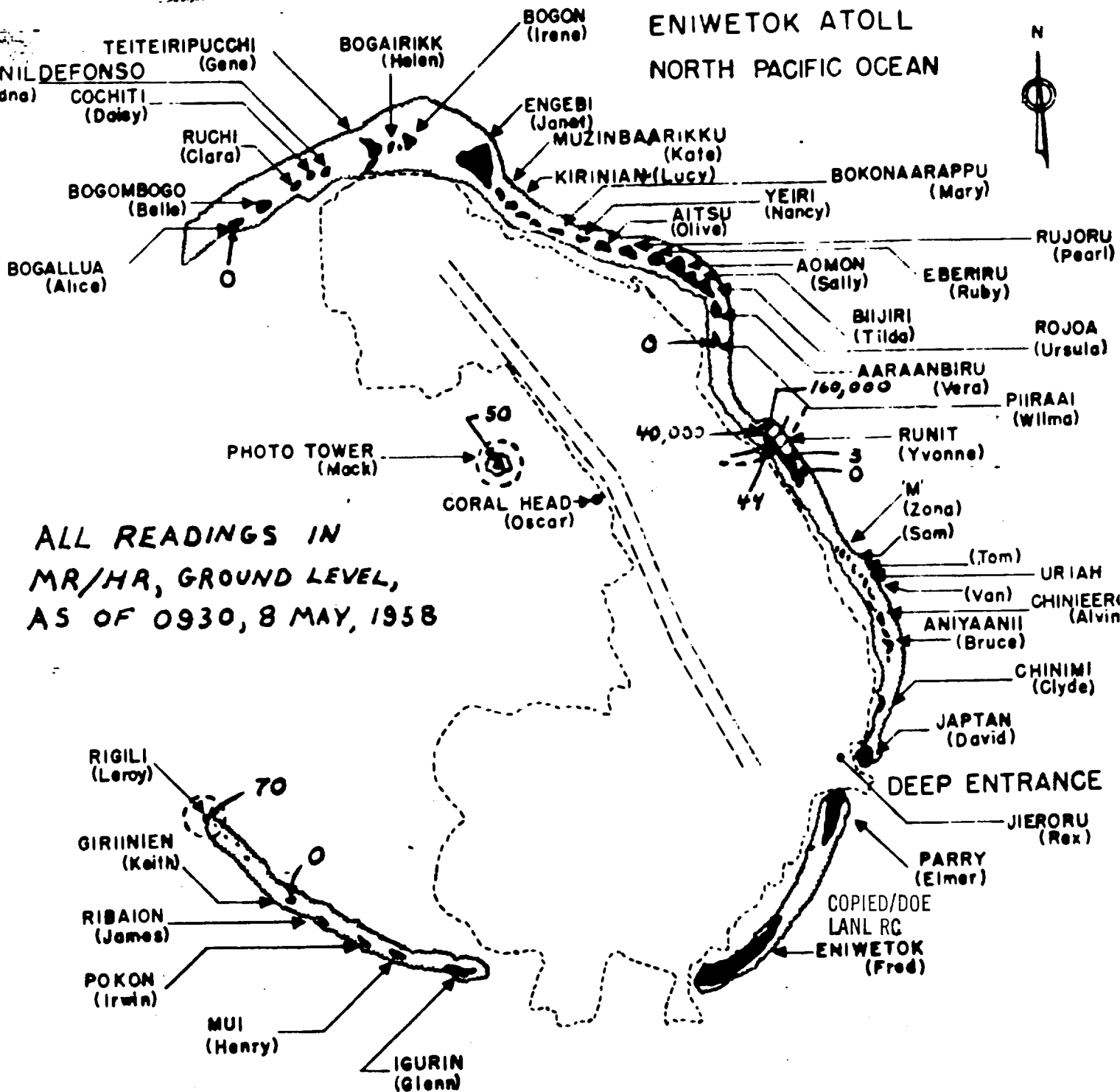


Dr. Wm. E. Cyle
JTF-7



10

Dr. Wm. E. Cagle
JTF-7

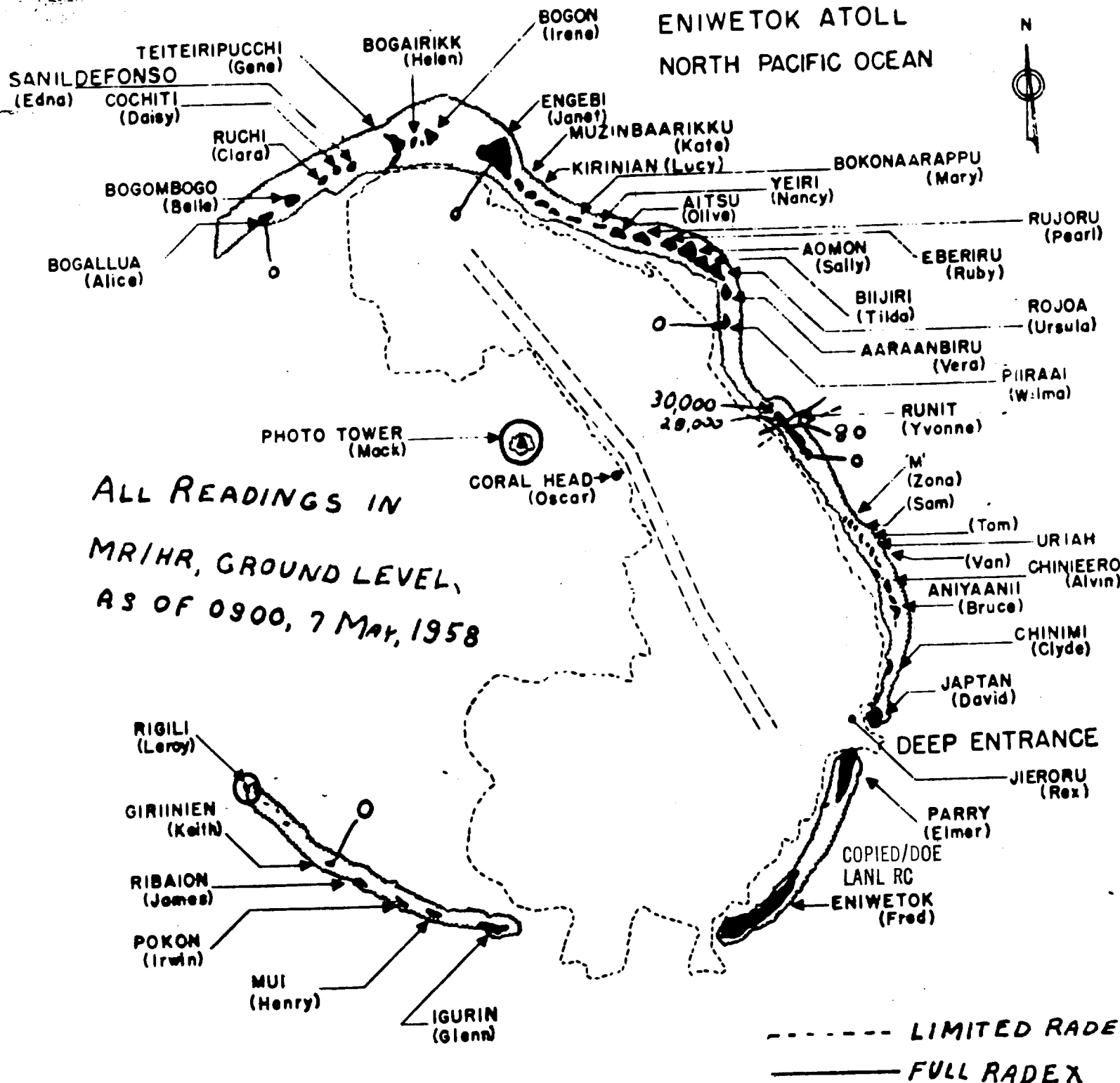


ALL READINGS IN
MR/HR, GROUND LEVEL,
AS OF 0930, 8 MAY, 1958

--- LIMITED RADEX
— FULL RADEX

10.

Dr. Wm. E. Ogle
JTF-7



100