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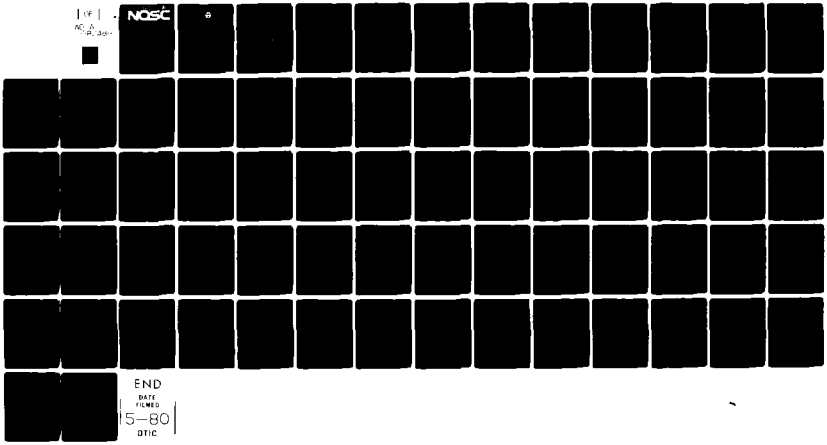

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# OMEGA JAPAN ANTENNA SYSTEM: MODIFICATION AND VALIDATION TESTS

## Volume 2: Data Sheets

JC Hanselman, Megatek Corp.

15 October 1979

Final Report

Prepared for
US Coast Guard

Approved for public release; distribution unlimited

NAVAL OCEAN SYSTEMS CENTER
SAN DIEGO, CALIFORNIA 92152

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NAVAL OCEAN SYSTEMS CENTER, SAN DIEGO, CA 92152

AN ACTIVITY OF THE NAVAL MATERIAL COMMAND

SL GUILLE, CAPT, USN
Commander

HL BLOOD
Technical Director

## ADMINISTRATIVE INFORMATION

Electronic measurements were performed on the OMEGA Japan Antenna System during the months of October and November 1978. The work was performed under NOSC Project MP01538B10 with Megatek Corporation as contractor under NOSC Contract N00123-78-C-0043, Task 014.

Volume 1 is the report proper. Volume 2 contains data sheets.

*Released by*
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Under authority of
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Radiation resistance – efficiency

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Electronic measurements were performed on the OMEGA Japan antenna system during October-November 1978. The work was performed by Megatek Corporation under contract and by NOSC under Project MP01538B10. The electrical height of the antenna is 210 metres for all frequencies. The station will be able to radiate 10 kW with antenna currents of 360 amperes at 10.2 kHz to 270 amperes at 13.6 kHz. Recommendations are made regarding the gear ratios to use with the variometers.

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CONTENTS

INTRODUCTION . . . page 1

DATA SHEET 1: APPARENT CAPACITANCE . . . (not used in this report)

DATA SHEET 2: ANTENNA SYSTEM RESISTANCE . . . (not used in this report)

DATA SHEET 3: RADIO FIELD INTENSITY - ANTENNA CURRENT . . . (not used in this report)

DATA SHEET 4: RADIO FIELD INTENSITY - SITE LOCATION . . . (not used in this report)

DATA SHEET 5: RADIO FIELD INTENSITY - MEASUREMENTS . . . DS 5-1 through DS 5-36

DATA SHEET 6: RADIO FIELD INTENSITY - CALCULATIONS . . . DS 6-1 through DS 6-28

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# INTRODUCTION

During the performance of modification and validation tests at OMEGA Japan, data and all pertinent information collected were recorded on appropriate data sheets. This information was later transcribed as necessary to data sheets designed to facilitate analysis and computation of desired operating parameters.

These data and computation sheets are presented herewith in rough form for future reference.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS PAGE 1 OF 2

OMEGA STATION: JAPAN SITE NO. C 1 DATE: 26 OCT 1978

$I_{as}$ 150 A. $K_1$ 0.98 $K_2$ 0.99 $K_3$ 1.00

LOOP HEIGHT 2 (m.) TRIPOD X HELICOPTER ____
(ABOVE: SURFACE - [redacted])

TYPE OF MEASUREMENT: HELICOPTER CAL. X BENCHMARK ____ ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1254 | 10.20 | 60.0 | | | | | |
| | 13.60 | 80.2 | | | | | |
| | 11.1/3 | 64.5 | | | | | |
| | 11.05 | 63.5 | | | | | |
| 1248 | $F_t$ 12.80 | 74.4 | | | | | |
| 1300 | 10.20 | 61.2 | | | | | |
| | 13.60 | 80.8 | | | | | |
| | 11-1/3 | 64.3 | | | | | |
| | 11.05 | 63.2 | | | | | |
| 1255 | $F_t$ 12.80 | 74.2 | | | | | |
| 1310 | 10.20 | 60.4 | | | | | |
| | 13.60 | 80.1 | | | | | |
| | 11-1/3 | 63.7 | | | | | |
| | 11.05 | 63.7 | | | | | |
| 1305 | $F_t$ 12.80 | 73.9 | | | | | |

COMMENT: CENTER OF HELO PAD. POOR NULL ≈ 10° LEFT OF TOWER.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS PAGE 2 OF 2.

OMEGA STATION: JAPAN SITE NO. C1 DATE: 26 OCT 1978

$I_{as}$ 150 A. $K_1$ 0.98 $K_2$ 0.99 $K_3$ 1.00

LOOP HEIGHT 2 (m.[redacted].) TRIPOD X HELICOPTER ____
(ABOVE: SURFACE - [redacted])

TYPE OF MEASUREMENT: HELICOPTER CAL. X BENCHMARK ____ ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1325 | 10.20 | 60.5 | | | | | |
| | 13.60 | 80.4 | | | | | |
| | 11.1/3 | 63.6 | | | | | |
| | 11.05 | 63.4 | | | | | |
| 1318 | $F_t$ 12.80 | 73.8 | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. C 1 DATE: 26 OCT 1978

$I_{as}$ 150 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.00

LOOP HEIGHT 2 (m.[redacted].) TRIPOD _____ HELICOPTER X
(ABOVE: SURFACE - [redacted])

TYPE OF MEASUREMENT: HELICOPTER CAL. X BENCHMARK ___ ROUTINE ___

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1403 | 10.20 | 56.8 | 105 | | | | |
| 1403 | 13.60 | 75.1 | | | | | |
| 1402 | 11.1/3 | 59.3 | | | | | |
| 1400 | 11.05 | 58.6 | | | | | |
| 1355 | $F_t$ 12.80 | 68.1 | | | | | |
| 1408 | 10.20 | 56.3 | | | | | |
| 1407 | 13.60 | 75.2 | | | | | |
| 1406 | 11-1/3 | 59.9 | | | | | |
| 1405 | 11.05 | 59.4 | | | | | |
| 1404 | $F_t$ 12.80 | 68.7 | | | | | |
| 1413 | 10.20 | 55.9 | | | | | |
| 1412 | 13.60 | 75.6 | | | | | |
| 1411 | 11-1/3 | 60.1 | | | | | |
| 1410 | 11.05 | 59.8 | | | | | |
| 1409 | $F_t$ 12.80 | 69.5 | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO TOWARD THE STATION.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. C 1 DATE: 26 OCT 1978

$I_{as}$ 150 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.00

LOOP HEIGHT 2 (m.) TRIPOD ____ HELICOPTER X
(ABOVE: SURFACE - ~~SEA LEVEL~~)

TYPE OF MEASUREMENT: HELICOPTER CAL. X BENCHMARK ____ ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | DME D1 | DME D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1421 | 10.20 | 56.2 | 285 | | | | |
| 1420 | 13.60 | 75.2 | | | | | |
| 1419 | 11.1/3 | 59.9 | | | | | |
| 1418 | 11.05 | 59.3 | | | | | |
| 1417 | $F_t$ 12.80 | 69.0 | | | | | |
| 1428 | 10.20 | 55.4 | | | | | |
| 1427 | 13.60 | 74.3 | | | | | |
| 1425 | 11-1/3 | 59.3 | | | | | |
| 1424 | 11.05 | 59.1 | | | | | |
| 1423 | $F_t$ 12.80 | 69.6 | | | | | |
| 1433 | 10.20 | 55.6 | | | | | |
| 1432 | 13.60 | 74.0 | | | | | |
| 1431 | 11-1/3 | 59.3 | | | | | |
| 1430 | 11.05 | 58.8 | | | | | |
| 1429 | $F_t$ 12.80 | 68.4 | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO AWAY FROM THE STATION.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. C2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 0.99 $K_3$ 1.00

LOOP HEIGHT 2 (m./~~ft.~~) TRIPOD X HELICOPTER ____
(ABOVE: SURFACE - [redacted])

TYPE OF MEASUREMENT: HELICOPTER CAL. X BENCHMARK ____ ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1338 | 10.20 | 29.3 | | | | | |
| 1337 | 13.60 | 39.6 | | | | | |
| 1336 | 11.1/3 | 32.0 | | | | | |
| 1335 | 11.05 | 31.4 | | | | | |
| 1335 | $F_t$ 12.80 | 37.2 | | | | | |
| 1343 | 10.20 | 29.3 | | | | | |
| 1342 | 13.60 | 39.5 | | | | | |
| 1341 | 11-1/3 | 32.3 | | | | | |
| 1340 | 11.05 | 31.4 | | | | | |
| 1339 | $F_t$ 12.80 | 37.5 | | | | | |
| 1347 | 10.20 | 29.4 | | | | | |
| 1346 | 13.60 | 39.7 | | | | | |
| 1345 | 11-1/3 | 32.2 | | | | | |
| 1345 | 11.05 | 31.4 | | | | | |
| 1344 | $F_t$ 12.80 | 37.4 | | | | | |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. C2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.00

LOOP HEIGHT 2 (m.[redacted].) TRIPOD ____ HELICOPTER X
(ABOVE: SURFACE - [redacted])

TYPE OF MEASUREMENT: HELICOPTER CAL. X BENCHMARK ____ ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1408 | 10.20 | 27.2 | 340 | | | | |
| 1407 | 13.60 | 36.5 | | | | | |
| 1406 | 11.1/3 | 29.6 | | | | | |
| 1405 | 11.05 | 29.0 | | | | | |
| 1404 | $F_t$ 12.80 | 34.4 | | | | | |
| 1413 | 10.20 | 27.1 | | | | | |
| 1412 | 13.60 | 36.5 | | | | | |
| 1411 | 11-1/3 | 29.5 | | | | | |
| 1410 | 11.05 | 28.9 | | | | | |
| 1409 | $F_t$ 12.80 | 34.7 | | | | | |
| 1417 | 10.20 | 27.1 | | | | | |
| 1416 | 13.60 | 36.4 | | | | | |
| 1415 | 11-1/3 | 29.7 | | | | | |
| 1415 | 11.05 | 28.9 | | | | | |
| 1414 | $F_t$ 12.80 | 34.4 | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO TOWARD THE STATION.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. C 2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.00

LOOP HEIGHT 2 (m.) TRIPOD ____ HELICOPTER X
(ABOVE: SURFACE - [redacted])

TYPE OF MEASUREMENT: HELICOPTER CAL. X BENCHMARK ____ ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1424 | 10.20 | 27.4 | 160 | | | | |
| 1423 | 13.60 | 36.4 | | | | | |
| 1422 | 11.1/3 | 29.2 | | | | | |
| 1421 | 11.05 | 29.0 | | | | | |
| 1420 | $F_t$ 12.80 | 34.5 | | | | | |
| 1428 | 10.20 | 27.1 | | | | | |
| 1427 | 13.60 | 36.4 | | | | | |
| 1426 | 11-1/3 | 29.6 | | | | | |
| 1426 | 11.05 | 28.9 | | | | | |
| 1425 | $F_t$ 12.80 | 34.6 | | | | | |
| 1433 | 10.20 | 27.3 | | | | | |
| 1432 | 13.60 | 36.6 | | | | | |
| 1430 | 11-1/3 | 29.9 | | | | | |
| 1430 | 11.05 | 29.0 | | | | | |
| 1429 | $F_t$ 12.80 | 34.6 | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO AWAY FROM THE STATION.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.00

LOOP HEIGHT 2 (m.) TRIPOD ____ HELICOPTER X
(ABOVE: SURFACE - )

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | DME D1 | DME D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1408 | 10.20 | 27.2 | 340 | | | | |
| 1407 | 13.60 | 36.5 | | | | | |
| 1406 | 11.1/3 | 29.6 | | | | | |
| 1405 | 11.05 | 29.0 | | | | | |
| 1404 | $F_t$ 12.80 | 34.4 | | | | | |
| 1413 | 10.20 | 27.1 | | | | | |
| 1412 | 13.60 | 36.5 | | | | | |
| 1411 | 11-1/3 | 29.5 | | | | | |
| 1410 | 11.05 | 28.9 | | | | | |
| 1409 | $F_t$ 12.80 | 34.7 | | | | | |
| 1417 | 10.20 | 27.1 | | | | | |
| 1416 | 13.60 | 36.4 | | | | | |
| 1415 | 11-1/3 | 29.7 | | | | | |
| 1415 | 11.05 | 28.9 | | | | | |
| 1414 | $F_t$ 12.80 | 34.4 | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO TOWARD THE STATION.
HEIGHT-GAIN MEASUREMENT.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.00

LOOP HEIGHT 2 (m.) TRIPOD ____ HELICOPTER X
(ABOVE: SURFACE - )

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1424 | 10.20 | 27.4 | 160 | | | | |
| 1423 | 13.60 | 36.4 | | | | | |
| 1422 | 11.1/3 | 29.2 | | | | | |
| 1421 | 11.05 | 29.0 | | | | | |
| 1420 | $F_t$ 12.80 | 34.5 | | | | | |
| 1428 | 10.20 | 27.1 | | | | | |
| 1427 | 13.60 | 36.4 | | | | | |
| 1426 | 11-1/3 | 29.6 | | | | | |
| 1426 | 11.05 | 28.9 | | | | | |
| 1425 | $F_t$ 12.80 | 34.6 | | | | | |
| 1433 | 10.20 | 27.3 | | | | | |
| 1432 | 13.60 | 36.6 | | | | | |
| 1430 | 11-1/3 | 29.9 | | | | | |
| 1430 | 11.05 | 29.0 | | | | | |
| 1429 | $F_t$ 12.80 | 34.6 | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO AWAY FROM THE STATION.
HEIGHT-GAIN MEASUREMENT.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2 DATE. 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.07

LOOP HEIGHT 500 (~~m~~/ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~[illegible]~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ___ BENCHMARK ___ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1443 | 10.20 | 30.4 | 340 | | | | |
| 1442 | 13.60 | 40.0 | | | | | |
| 1441 | 11.1/3 | 33.3 | | | | | |
| 1440 | 11.05 | 32.4 | | | | | |
| 1439 | $F_t$ 12.80 | 38.7 | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO TOWARD THE STATION.
HEIGHT-GAIN MEASUREMENT.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.07

LOOP HEIGHT 1,000 (/ft.) TRIPOD ____ HELICOPTER X
(ABOVE: - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1453 | 10.20 | 30.8 | 340 | | | | |
| 1452 | 13.60 | 40.9 | | | | | |
| 1451 | 11.1/3 | 33.5 | | | | | |
| 1451 | 11.05 | 32.5 | | | | | |
| 1450 | $F_t$ 12.80 | 39.0 | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO TOWARD THE STATION.
HEIGHT-GAIN MEASUREMENT.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.07

LOOP HEIGHT 1,500 (~~m~~/ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ___ BENCHMARK ___ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | DME D1 | DME D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1504 | 10.20 | 31.2 | 340 | | | | |
| 1503 | 13.60 | 40.9 | | | | | |
| 1502 | 11.1/3 | 33.6 | | | | | |
| 1501 | 11.05 | 32.6 | | | | | |
| 1500 | $F_t$ 12.80 | 38.9 | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO TOWARD THE STATION.
HEIGHT-GAIN MEASUREMENT.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 1.00 $K_3$ 1.07

LOOP HEIGHT 2,000 (~~[illegible]~~/ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~[illegible]~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1514 | 10.20 | 31.4 | 340 | | | | |
| 1513 | 13.60 | 40.9 | | | | | |
| 1512 | 11.1/3 | 33.8 | | | | | |
| 1511 | 11.05 | 33.0 | | | | | |
| 1510 | $F_t$ 12.80 | 38.9 | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |

COMMENT: LOOP SIDE (LEFT) OF HELO TOWARD THE STATION.
HEIGHT-GAIN MEASUREMENT.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. B2 DATE: 29 OCT 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 0.99 $K_3$ 1.00

LOOP HEIGHT 2 (m.) TRIPOD X HELICOPTER ____
(ABOVE: SURFACE - [redacted])

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK X ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1338 | 10.20 | 29.3 | | | | | |
| 1337 | 13.60 | 39.6 | | | | | |
| 1336 | 11.1/3 | 32.0 | | | | | |
| 1335 | 11.05 | 31.4 | | | | | |
| 1335 | $F_t$ 12.80 | 37.2 | | | | | |
| 1343 | 10.20 | 29.3 | | | | | |
| 1342 | 13.60 | 39.5 | | | | | |
| 1341 | 11-1/3 | 32.3 | | | | | |
| 1340 | 11.05 | 31.4 | | | | | |
| 1339 | $F_t$ 12.80 | 37.5 | | | | | |
| 1347 | 10.20 | 29.4 | | | | | |
| 1346 | 13.60 | 39.7 | | | | | |
| 1345 | 11-1/3 | 32.2 | | | | | |
| 1345 | 11.05 | 31.4 | | | | | |
| 1344 | $F_t$ 12.80 | 37.4 | | | | | |

COMMENT: SAME DATA AS HELD CALIBRATION

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 1-1 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (X./ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~XXXX~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1304 | 10.20 | 25.3 | 340 | 36102 | 32940 | 30.2 | 026 |
| 1303 | 13.60 | 33.5 | | 36073 | 32933 | 30.1 | 026 |
| 1302 | 11.1/3 | 27.5 | | 36062 | 32954 | 30.1 | 027 |
| 1301 | 11.05 | 27.4 | | 36063 | 32972 | 30.1 | 027 |
| 1301 | $F_t$ 12.80 | 31.7 | | 36049 | 32986 | 30.1 | 027 |
| 1308 | 10.20 | 24.9 | | 36251 | 33111 | 30.3 | 026 |
| 1307 | 13.60 | 33.8 | | 36118 | 32977 | 30.2 | 026 |
| 1306 | 11-1/3 | 27.7 | | 35989 | 32870 | 30.1 | 026 |
| 1305 | 11.05 | 27.4 | | 36005 | 32874 | 30.1 | 026 |
| 1305 | $F_t$ 12.80 | 31.5 | | 36082 | 32925 | 30.1 | 026 |
| 1312 | 10.20 | 24.9 | | 36350 | 33284 | 30.4 | 027 |
| 1311 | 13.60 | 33.1 | | 36282 | 33213 | 30.4 | 027 |
| 1310 | 11-1/3 | 27.4 | | 36252 | 33147 | 30.3 | 027 |
| 1310 | 11.05 | 26.9 | | 36215 | 33120 | 30.3 | 027 |
| 1309 | $F_t$ 12.80 | 31.4 | | 36268 | 33153 | 30.3 | 027 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 1-2 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (X/ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1325 | 10.20 | 28.8 | 340 | 32222 | 29585 | 26.4 | 028 |
| 1324 | 13.60 | 38.1 | | 32235 | 29587 | 26.4 | 028 |
| 1323 | 11.1/3 | 31.4 | | 32207 | 29564 | 26.3 | 028 |
| 1322 | 11.05 | 31.1 | | 32226 | 29529 | 26.3 | 028 |
| 1321 | $F_t$ 12.80 | 36.5 | | 32198 | 29485 | 26.3 | 028 |
| 1330 | 10.20 | 28.8 | | 32226 | 29577 | 26.4 | 028 |
| 1329 | 13.60 | 38.5 | | 32178 | 29552 | 26.3 | 028 |
| 1328 | 11-1/3 | 31.4 | | 32195 | 29573 | 26.3 | 028 |
| 1327 | 11.05 | 30.6 | | 32261 | 29632 | 26.4 | 028 |
| 1326 | $F_t$ 12.80 | 36.5 | | 32270 | 29630 | 26.4 | 028 |
| 1334 | 10.20 | 28.9 | | 32220 | 29624 | 26.4 | 028 |
| 1333 | 13.60 | 38.0 | | 32302 | 29657 | 26.4 | 028 |
| 1332 | 11-1/3 | 31.6 | | 32246 | 29618 | 26.4 | 028 |
| 1332 | 11.05 | 30.7 | | 32243 | 29610 | 26.4 | 028 |
| 1331 | $F_t$ 12.80 | 36.3 | | 32251 | 29597 | 26.4 | 028 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 1-3 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (X./ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | DME D1 | DME D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1347 | 10.20 | 35.5 | 340 | 27393 | 24204 | 21.2 | 024 |
| 1346 | 13.60 | 46.8 | | 27501 | 24281 | 21.3 | 024 |
| 1345 | 11.1/3 | 39.0 | | 27550 | 24346 | 21.4 | 024 |
| 1344 | 11.05 | 37.3 | | 27597 | 24400 | 21.4 | 024 |
| 1343 | $F_t$ 12.80 | 44.2 | | 27588 | 24412 | 21.4 | 024 |
| 1351 | 10.20 | 35.4 | | 27504 | 24436 | 21.4 | 025 |
| 1350 | 13.60 | 47.4 | | 27595 | 24484 | 21.5 | 024 |
| 1349 | 11-1/3 | 39.1 | | 27554 | 24452 | 21.4 | 024 |
| 1349 | 11.05 | 38.4 | | 27485 | 24376 | 21.4 | 024 |
| 1348 | $F_t$ 12.80 | 44.6 | | 27353 | 24241 | 21.2 | 024 |
| 1355 | 10.20 | 35.6 | | 27408 | 24436 | 21.3 | 025 |
| 1354 | 13.60 | 47.1 | | 27461 | 24461 | 21.4 | 025 |
| 1354 | 11-1/3 | 39.3 | | 27448 | 24435 | 21.3 | 025 |
| 1353 | 11.05 | 38.2 | | 27450 | 24425 | 21.3 | 025 |
| 1352 | $F_t$ 12.80 | 44.3 | | 27450 | 24421 | 21.3 | 025 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 1-4 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (~~M~~./ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1413 | 10.20 | 51.0 | 340 | 21352 | 19301 | 15.3 | 027 |
| 1412 | 13.60 | 67.2 | | 21346 | 19297 | 15.3 | 027 |
| 1411 | 11.1/3 | 56.4 | | 21378 | 19273 | 15.3 | 027 |
| 1410 | 11.05 | 55.4 | | 21365 | 19260 | 15.3 | 027 |
| 1409 | $F_t$ 12.80 | 63.3 | | 21356 | 19199 | 15.2 | 026 |
| 1417 | 10.20 | 51.2 | | 21282 | 19434 | 15.3 | 028 |
| 1416 | 13.60 | 68.1 | | 21214 | 19335 | 15.2 | 028 |
| 1415 | 11-1/3 | 57.0 | | 21251 | 19328 | 15.2 | 028 |
| 1415 | 11.05 | 55.2 | | 21292 | 19309 | 15.2 | 027 |
| 1414 | $F_t$ 12.80 | 63.4 | | 21345 | 19311 | 15.3 | 027 |
| 1420 | 10.20 | 50.6 | | 21299 | 19605 | 15.3 | 029 |
| 1419 | 13.60 | 67.7 | | 21267 | 19543 | 15.3 | 029 |
| 1418 | 11-1/3 | 56.8 | | 21249 | 19519 | 15.3 | 029 |
| 1418 | 11.05 | 55.5 | | 21284 | 19513 | 15.3 | 029 |
| 1417 | $F_t$ 12.80 | 63.7 | | 21263 | 19501 | 15.3 | 029 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2-1 DATE: 31 October 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (~~M~~./ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1153 | 10.20 | 25.7 | 030 | 31368 | 27145 | 30.2 | 077 |
| 1152 | 13.60 | 32.7 | | 31229 | 27058 | 30.1 | 077 |
| 1151 | 11.1/3 | 26.8 | | 31361 | 27189 | 30.3 | 077 |
| 1151 | 11.05 | 26.2 | | 31347 | 27143 | 30.2 | 077 |
| 1150 | $F_t$ 12.80 | 32.1 | | 31341 | 27199 | 30.3 | 077 |
| 1158 | 10.20 | 25.5 | | 31324 | 27090 | 30.2 | 077 |
| 1157 | 13.60 | 32.5 | | 31288 | 27086 | 30.2 | 077 |
| 1156 | 11-1/3 | 26.5 | | 31392 | 27157 | 30.3 | 077 |
| 1155 | 11.05 | 26.3 | | 31437 | 27206 | 30.3 | 077 |
| 1154 | $F_t$ 12.80 | 31.4 | | 31357 | 27150 | 30.2 | 077 |
| 1200 | 10.20 | 25.8 | | 31444 | 27245 | 30.3 | 077 |
| 1159 | 13.60 | 32.7 | | 31352 | 27122 | 30.2 | 077 |
| 1158 | 11-1/3 | 26.6 | | 31466 | 27232 | 30.3 | 077 |
| 1201 | 11.05 | 26.5 | | 31498 | 27326 | 30.4 | 077 |
| 1158 | $F_t$ 12.80 | 31.3 | | 31385 | 27165 | 30.3 | 077 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2-2 DATE: 31 October 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (~~m~~/ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1217 | 10.20 | 29.5 | 030 | 27248 | 22957 | 26.0 | 077 |
| 1215 | 13.60 | 38.2 | | 27178 | 22890 | 25.9 | 077 |
| 1215 | 11.1/3 | 32.0 | | 27183 | 22905 | 25.9 | 077 |
| 1214 | 11.05 | 30.8 | | 27201 | 22940 | 26.0 | 077 |
| 1213 | $F_t$ 12.80 | 36.3 | | 27197 | 22918 | 25.9 | 077 |
| 1221 | 10.20 | 28.8 | | 27457 | 23147 | 26.2 | 077 |
| 1220 | 13.60 | 38.0 | | 27446 | 23126 | 26.2 | 077 |
| 1219 | 11-1/3 | 31.8 | | 27329 | 23028 | 26.1 | 077 |
| 1218 | 11.05 | 30.7 | | 27309 | 22982 | 26.0 | 077 |
| 1217 | $F_t$ 12.80 | 36.6 | | 27304 | 22993 | 26.0 | 077 |
| 1225 | 10.20 | 29.0 | | 27557 | 23313 | 26.3 | 077 |
| 1225 | 13.60 | 37.6 | | 27531 | 23286 | 26.3 | 077 |
| 1224 | 11-1/3 | 31.5 | | 27556 | 23289 | 26.3 | 077 |
| 1223 | 11.05 | 30.5 | | 27564 | 23265 | 26.3 | 077 |
| 1222 | $F_t$ 12.80 | 36.6 | | 27459 | 23165 | 26.2 | 077 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2-3 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (~~m~~./ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1031 | 10.20 | 38.6 | 030 | 20641 | 17234 | 19.6 | 082 |
| 1030 | 13.60 | 51.5 | | 20760 | 17308 | 19.7 | 081 |
| 1030 | 11.1/3 | 42.9 | | 20766 | 17325 | 19.7 | 081 |
| 1029 | 11.05 | 41.4 | | 20799 | 17371 | 19.8 | 082 |
| 1028 | $F_t$ 12.80 | 47.0 | | 20897 | 17498 | 19.9 | 082 |
| 1035 | 10.20 | 38.2 | | 20680 | 17349 | 19.7 | 082 |
| 1034 | 13.60 | 51.7 | | 20712 | 17356 | 19.7 | 082 |
| 1033 | 11-1/3 | 43.1 | | 20692 | 17323 | 19.7 | 082 |
| 1032 | 11.05 | 42.2 | | 20663 | 17273 | 19.7 | 082 |
| 1032 | $F_t$ 12.80 | 48.2 | | 20645 | 17239 | 19.6 | 082 |
| 1039 | 10.20 | 38.2 | | 20707 | 17363 | 19.7 | 082 |
| 1038 | 13.60 | 51.7 | | 20663 | 17334 | 19.7 | 082 |
| 1038 | 11-1/3 | 43.5 | | 20611 | 17297 | 19.7 | 082 |
| 1037 | 11.05 | 41.8 | | 20596 | 17292 | 19.6 | 082 |
| 1036 | $F_t$ 12.80 | 48.0 | | 20634 | 17313 | 19.7 | 082 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 2-4 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (X./ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~GROUND~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1054 | 10.20 | 48.2 | 035 | 16868 | 13925 | 15.9 | 084 |
| 1053 | 13.60 | 64.7 | | 16912 | 13906 | 15.9 | 084 |
| 1052 | 11.1/3 | 54.2 | | 16917 | 13871 | 15.9 | 084 |
| 1051 | 11.05 | 53.3 | | 16799 | 13803 | 15.8 | 084 |
| 1050 | $F_t$ 12.80 | 61.4 | | 16767 | 13763 | 15.7 | 084 |
| 1100 | 10.20 | 47.4 | | 17047 | 14051 | 16.0 | 084 |
| 1059 | 13.60 | 63.9 | | 17017 | 14052 | 16.0 | 084 |
| 1058 | 11-1/3 | 53.6 | | 16983 | 14035 | 16.0 | 084 |
| 1056 | 11.05 | 52.3 | | 16987 | 14038 | 16.0 | 084 |
| 1055 | $F_t$ 12.80 | 59.8 | | 16966 | 14036 | 16.0 | 084 |
| 1107 | 10.20 | 47.0 | | 17291 | 14263 | 16.3 | 084 |
| 1106 | 13.60 | 63.2 | | 17074 | 14157 | 16.1 | 084 |
| 1105 | 11-1/3 | 52.5 | | 17111 | 14114 | 16.1 | 084 |
| 1103 | 11.05 | 52.9 | | 17073 | 14068 | 16.1 | 084 |
| 1102 | $F_t$ 12.80 | 59.5 | | 17117 | 14072 | 16.1 | 084 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 3-1 DATE: 31 October 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (~~X~~./ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1355 | 10.20 | 23.7 | 065 | 28460 | 32796 | 32.1 | 116 |
| 1354 | 13.60 | 30.8 | | 28457 | 32796 | 32.1 | 116 |
| 1353 | 11.1/3 | 25.3 | | 28461 | 32781 | 32.1 | 116 |
| 1352 | 11.05 | 25.2 | | 28454 | 32783 | 32.1 | 116 |
| 1351 | $F_t$ 12.80 | 29.6 | | 28430 | 32759 | 32.1 | 116 |
| 1359 | 10.20 | 23.7 | | 28654 | 32948 | 32.3 | 116 |
| 1358 | 13.60 | 31.0 | | 28634 | 32935 | 32.2 | 116 |
| 1357 | 11-1/3 | 25.3 | | 28505 | 32840 | 32.1 | 116 |
| 1356 | 11.05 | 25.2 | | 28486 | 32827 | 32.1 | 116 |
| 1355 | $F_t$ 12.80 | 29.8 | | 28492 | 32831 | 32.1 | 116 |
| 1362 | 10.20 | 23.8 | | 28951 | 33184 | 32.5 | 115 |
| 1362 | 13.60 | 30.4 | | 28921 | 33180 | 32.5 | 116 |
| 1361 | 11-1/3 | 24.9 | | 28855 | 33120 | 32.5 | 116 |
| 1360 | 11.05 | 24.9 | | 28807 | 33077 | 32.4 | 116 |
| 1359 | $F_t$ 12.80 | 29.6 | | 28658 | 32964 | 32.3 | 116 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 3-2 DATE: 31 October 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (X./ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~GROUND~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1421 | 10.20 | 32.3 | 065 | 20184 | 24325 | 23.5 | 115 |
| 1420 | 13.60 | 43.1 | | 20091 | 24270 | 23.4 | 116 |
| 1420 | 11.1/3 | 36.0 | | 19938 | 24172 | 23.3 | 116 |
| 1419 | 11.05 | 35.1 | | 19903 | 24035 | 23.2 | 115 |
| 1418 | $F_t$ 12.80 | 40.3 | | 19993 | 24050 | 23.2 | 115 |
| 1425 | 10.20 | 32.2 | | 20286 | 24375 | 23.6 | 115 |
| 1424 | 13.60 | 42.1 | | 20224 | 24339 | 23.5 | 115 |
| 1424 | 11-1/3 | 35.6 | | 20160 | 24323 | 23.5 | 115 |
| 1423 | 11.05 | 34.5 | | 20206 | 24370 | 23.5 | 115 |
| 1422 | $F_t$ 12.80 | 40.1 | | 20215 | 24370 | 23.5 | 115 |
| 1430 | 10.20 | 32.0 | | 20244 | 24286 | 23.5 | 115 |
| 1430 | 13.60 | 42.3 | | 20179 | 24238 | 23.4 | 115 |
| 1429 | 11-1/3 | 35.8 | | 20176 | 24197 | 23.4 | 115 |
| 1428 | 11.05 | 34.4 | | 20160 | 24204 | 23.4 | 115 |
| 1427 | $F_t$ 12.80 | 40.1 | | 20230 | 24273 | 23.5 | 115 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 3-3 DATE: 31 October 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (~~M~~/ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1450 | 10.20 | 34.4 | 065 | 18598 | 22613 | 21.8 | 115 |
| 1449 | 13.60 | 46.1 | | 18514 | 22605 | 21.7 | 115 |
| 1448 | 11.1/3 | 39.3 | | 18408 | 22558 | 21.7 | 115 |
| 1447 | 11.05 | 37.9 | | 18371 | 22548 | 21.6 | 116 |
| 1446 | $F_t$ 12.80 | 43.6 | | 18288 | 22494 | 21.6 | 116 |
| 1455 | 10.20 | 34.7 | | 18633 | 22676 | 21.8 | 115 |
| 1454 | 13.60 | 46.1 | | 18711 | 22694 | 21.9 | 115 |
| 1453 | 11-1/3 | 38.5 | | 18787 | 22721 | 21.9 | 114 |
| 1452 | 11.05 | 37.5 | | 18677 | 22649 | 21.8 | 115 |
| 1451 | $F_t$ 12.80 | 42.8 | | 18673 | 22659 | 21.8 | 115 |
| 1502 | 10.20 | 34.8 | | 18043 | 22447 | 21.4 | 117 |
| 1501 | 13.60 | 47.7 | | 18176 | 22489 | 21.5 | 116 |
| 1500 | 11-1/3 | 39.5 | | 18244 | 22523 | 21.6 | 116 |
| 1459 | 11.05 | 38.1 | | 18277 | 22528 | 21.6 | 116 |
| 1458 | $F_t$ 12.80 | 42.8 | | 18287 | 22573 | 21.6 | 116 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 3-4 DATE: 31 October 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 1000 (~~M~~./ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1516 | 10.20 | 49.2 | 065 | 12592 | 16885 | 15.6 | 117 |
| 1515 | 13.60 | 65.2 | | 12708 | 17108 | 15.8 | 117 |
| 1514 | 11.1/3 | 54.5 | | 12706 | 17149 | 15.8 | 118 |
| 1513 | 11.05 | 53.6 | | 12670 | 17110 | 15.7 | 118 |
| 1512 | $F_t$ 12.80 | 61.6 | | 12570 | 17093 | 15.7 | 118 |
| 1521 | 10.20 | 48.0 | | 12622 | 17357 | 15.9 | 119 |
| 1520 | 13.60 | 66.1 | | 12488 | 17278 | 15.8 | 119 |
| 1519 | 11-1/3 | 56.1 | | 12196 | 16850 | 15.4 | 119 |
| 1518 | 11.05 | 54.7 | | 12230 | 16796 | 15.3 | 118 |
| 1517 | $F_t$ 12.80 | 62.5 | | 12483 | 16860 | 15.5 | 117 |
| 1526 | 10.20 | 48.1 | | 12681 | 17376 | 15.9 | 119 |
| 1525 | 13.60 | 64.7 | | 12545 | 17353 | 15.8 | 119 |
| 1524 | 11-1/3 | 54.5 | | 12588 | 17269 | 15.8 | 119 |
| 1523 | 11.05 | 53.4 | | 12646 | 17274 | 15.8 | 118 |
| 1522 | $F_t$ 12.80 | 60.3 | | 12645 | 17308 | 15.8 | 119 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 4-1 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 2000 (X./ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1524 | 10.20 | 26.0 | 145 | 23237 | 31651 | 29.5 | 195 |
| 1523 | 13.60 | 34.1 | | 23191 | 31581 | 29.4 | 195 |
| 1522 | 11.1/3 | 28.7 | | 23151 | 31526 | 29.4 | 195 |
| 1522 | 11.05 | 28.1 | | 23061 | 31396 | 29.3 | 195 |
| 1521 | $F_t$ 12.80 | 33.0 | | 23042 | 31361 | 29.3 | 195 |
| 1528 | 10.20 | 25.8 | | 23410 | 31884 | 29.7 | 194 |
| 1527 | 13.60 | 34.2 | | 23347 | 31825 | 29.6 | 194 |
| 1526 | 11-1/3 | 28.4 | | 23381 | 31855 | 29.6 | 194 |
| 1525 | 11.05 | 27.6 | | 23347 | 31799 | 29.6 | 194 |
| 1525 | $F_t$ 12.80 | 32.7 | | 23311 | 31752 | 29.6 | 194 |
| 1533 | 10.20 | 25.6 | | 23435 | 31899 | 29.7 | 194 |
| 1531 | 13.60 | 34.2 | | 23416 | 31884 | 29.7 | 194 |
| 1530 | 11-1/3 | 28.3 | | 23465 | 31919 | 2-.7 | 194 |
| 1530 | 11.05 | 27.4 | | 23448 | 31927 | 29.7 | 194 |
| 1529 | $F_t$ 12.80 | 32.1 | | 23438 | 31918 | 29.7 | 194 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 4-2 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 2000 (X/ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1545 | 10.20 | 29.4 | 145 | 19162 | 27596 | 25.3 | 195 |
| 1544 | 13.60 | 39.5 | | 19115 | 27575 | 25.3 | 195 |
| 1543 | 11.1/3 | 33.3 | | 19054 | 27466 | 25.2 | 195 |
| 1542 | 11.05 | 32.0 | | 19174 | 27623 | 25.3 | 195 |
| 1541 | $F_t$ 12.80 | 37.2 | | 19132 | 27558 | 25.3 | 195 |
| 1552 | 10.20 | 29.2 | | 19373 | 27750 | 25.5 | 196 |
| 1551 | 13.60 | 39.5 | | 19277 | 27621 | 25.4 | 196 |
| 1550 | 11-1/3 | 33.1 | | 19230 | 27627 | 25.4 | 195 |
| 1550 | 11.05 | 32.1 | | 19157 | 27587 | 25.3 | 195 |
| 1545 | $F_t$ 12.80 | 37.3 | | 19010 | 27426 | 25.2 | 195 |
| 1556 | 10.20 | 29.3 | | 19453 | 27815 | 25.6 | 196 |
| 1555 | 13.60 | 39.1 | | 19434 | 27832 | 25.6 | 195 |
| 1554 | 11-1/3 | 32.6 | | 19410 | 27830 | 25.6 | 195 |
| 1554 | 11.05 | 31.8 | | 19374 | 27756 | 25.5 | 195 |
| 1553 | $F_t$ 12.80 | 37.0 | | 19352 | 27704 | 25.5 | 196 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 4-3 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 2500 (X/ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~XXXX~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1628 | 10.20 | 36.9 | 325 | 14033 | 22277 | 19.9 | 198 |
| 1626 | 13.60 | 49.9 | | 13931 | 21984 | 19.7 | 198 |
| 1625 | 11.1/3 | 41.2 | | 14043 | 22121 | 19.9 | 198 |
| 1624 | 11.05 | 40.1 | | 14325 | 22614 | 20.2 | 197 |
| 1622 | $F_t$ 12.80 | 46.0 | | 14467 | 22812 | 20.4 | 197 |
| 1634 | 10.20 | 37.4 | | 14051 | 22515 | 20.0 | 197 |
| 1634 | 13.60 | 50.2 | | 13971 | 22367 | 19.9 | 197 |
| 1633 | 11-1/3 | 41.6 | | 14076 | 22556 | 20.0 | 196 |
| 1632 | 11.05 | 41.3 | | 14018 | 22422 | 19.9 | 197 |
| 1629 | $F_t$ 12.80 | 47.0 | | 14044 | 22352 | 19.9 | 197 |
| 1638 | 10.20 | 37.8 | | 14000 | 22420 | 19.9 | 197 |
| 1637 | 13.60 | 50.1 | | 13977 | 22366 | 19.9 | 197 |
| 1637 | 11-1/3 | 42.9 | | 13966 | 22341 | 19.9 | 197 |
| 1636 | 11.05 | 41.9 | | 14004 | 22418 | 19.9 | 197 |
| 1635 | $F_t$ 12.80 | 47.3 | | 14018 | 22432 | 20.0 | 197 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 4-4 DATE: 1 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 2500 (X/ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~XXXX~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1647 | 10.20 | 50.7 | 325 | 9083 | 18246 | 14.9 | 195 |
| 1646 | 13.60 | 67.1 | | 9064 | 18196 | 14.9 | 196 |
| 1646 | 11.1/3 | 56.7 | | 9065 | 18160 | 14.9 | 196 |
| 1645 | 11.05 | 55.5 | | 9029 | 18174 | 14.9 | 195 |
| 1645 | $F_t$ 12.80 | 63.9 | | 8973 | 18189 | 14.8 | 195 |
| 1652 | 10.20 | 50.9 | | 9165 | 18293 | 15.0 | 195 |
| 1651 | 13.60 | 66.8 | | 9140 | 18274 | 15.0 | 195 |
| 1650 | 11-1/3 | 56.5 | | 9084 | 18124 | 14.9 | 196 |
| 1650 | 11.05 | 55.6 | | 9060 | 18134 | 14.9 | 196 |
| 1649 | $F_t$ 12.80 | 63.7 | | 9079 | 18177 | 14.9 | 196 |
| 1656 | 10.20 | 51.3 | | 9147 | 18223 | 15.0 | 196 |
| 1655 | 13.60 | 67.3 | | 9163 | 18194 | 15.0 | 196 |
| 1654 | 11-1/3 | 56.4 | | 9188 | 18269 | 15.0 | 196 |
| 1654 | 11.05 | 55.0 | | 9162 | 18250 | 15.0 | 196 |
| 1653 | $F_t$ 12.80 | 62.8 | | 9130 | 18215 | 15.0 | 196 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 6-1 DATE: 4 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 2500 (X/ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~X/PAX~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1227 | 10.20 | 25.5 | 165 | 23174 | 29525 | 29.8 | 209 |
| 1226 | 13.60 | 33.7 | 165 | 23077 | 29391 | 29.7 | 210 |
| 1225 | 11.1/3 | 27.4 | 165 | 23021 | 29300 | 29.7 | 210 |
| 1216 | 11.05 | 26.8 | 345 | 22595 | 28464 | 29.6 | 214 |
| 1215 | $F_t$ 12.80 | 32.1 | 345 | 22554 | 28478 | 29.5 | 214 |
| 1232 | 10.20 | 25.3 | 165 | 23248 | 29682 | 29.8 | 209 |
| 1231 | 13.60 | 33.6 | 165 | 23224 | 29651 | 29.8 | 209 |
| 1230 | 11-1/3 | 27.4 | 165 | 23216 | 29628 | 29.8 | 209 |
| 1229 | 11.05 | 26.8 | 165 | 23257 | 29650 | 29.9 | 209 |
| 1228 | $F_t$ 12.80 | 31.8 | 165 | 23202 | 29573 | 29.8 | 209 |
| 1236 | 10.20 | 25.1 | 165 | 23452 | 29942 | 30.0 | 208 |
| 1235 | 13.60 | 33.4 | 165 | 23448 | 29941 | 30.0 | 208 |
| 1234 | 11-1/3 | 27.5 | 165 | 23297 | 29784 | 29.8 | 208 |
| 1234 | 11.05 | 27.0 | 165 | 23166 | 19619 | 29.7 | 208 |
| 1233 | $F_t$ 12.80 | 31.7 | 165 | 23281 | 29727 | 29.8 | 208 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 6-2 DATE: 4 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 2500 (X/ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~XXXX~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1248 | 10.20 | 30.4 | 345 | 18043 | 24525 | 24.7 | 211 |
| 1247 | 13.60 | 39.7 | | 18151 | 24640 | 24.8 | 211 |
| 1247 | 11.1/3 | 33.0 | | 18135 | 24617 | 24.8 | 211 |
| 1246 | 11.05 | 31.8 | | 18077 | 24551 | 24.8 | 211 |
| 1245 | $F_t$ 12.80 | 38.0 | | 18102 | 24572 | 24.8 | 211 |
| 1252 | 10.20 | 30.6 | | 17920 | 24381 | 24.6 | 211 |
| 1251 | 13.60 | 39.8 | | 18059 | 24550 | 24.7 | 211 |
| 1250 | 11-1/3 | 33.0 | | 18135 | 24617 | 24.8 | 211 |
| 1250 | 11.05 | 31.8 | | 18129 | 24616 | 24.8 | 211 |
| 1249 | $F_t$ 12.80 | 38.0 | | 18087 | 24565 | 24.8 | 211 |
| 1257 | 10.20 | 31.4 | | 16651 | 22756 | 23.6 | 216 |
| 1255 | 13.60 | 40.3 | | 17505 | 23853 | 24.3 | 213 |
| 1254 | 11-1/3 | 33.1 | | 17913 | 24319 | 24.7 | 212 |
| 1254 | 11.05 | 31.8 | | 18072 | 24508 | 24.8 | 211 |
| 1253 | $F_t$ 12.80 | 38.3 | | 17872 | 24309 | 24.6 | 211 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 6-3 DATE: 4 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 2500 (X/ft.) TRIPOD _____ HELICOPTER X
(ABOVE: ~~SURFACE~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1312 | 10.20 | 38.0 | 345 | 12683 | 19412 | 19.4 | 213 |
| 1312 | 13.60 | 49.9 | | 12746 | 19481 | 19.5 | 213 |
| 1311 | 11.1/3 | 41.8 | | 12741 | 19501 | 19.4 | 212 |
| 1310 | 11.05 | 40.5 | | 12767 | 19539 | 19.4 | 212 |
| 1309 | $F_t$ 12.80 | 47.8 | | 12776 | 19581 | 19.4 | 212 |
| 1316 | 10.20 | 37.3 | | 12726 | 19289 | 19.6 | 214 |
| 1315 | 13.60 | 49.0 | | 12715 | 19322 | 19.5 | 214 |
| 1315 | 11-1/3 | 41.6 | | 12697 | 19285 | 19.5 | 214 |
| 1314 | 11.05 | 39.9 | | 12643 | 19299 | 19.4 | 214 |
| 1313 | $F_t$ 12.80 | 46.7 | | 12651 | 19351 | 19.4 | 213 |
| 1320 | 10.20 | 37.5 | | 12640 | 19161 | 19.5 | 215 |
| 1319 | 13.60 | 49.2 | | 12654 | 19181 | 19.5 | 215 |
| 1318 | 11-1/3 | 41.3 | | 12695 | 19235 | 19.6 | 215 |
| 1317 | 11.05 | 39.5 | | 12754 | 19304 | 19.6 | 215 |
| 1316 | $F_t$ 12.80 | 46.1 | | 12732 | 19295 | 19.3 | 214 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. 6-4 DATE: 4 November 1978

$I_{as}$ 300 A. $K_1$ 0 . 98 $K_2$ 1 . 00 $K_3$ 1 . 07

LOOP HEIGHT 2500 (X/ft.) TRIPOD ____ HELICOPTER X
(ABOVE: ~~XXXX~~ - SEA LEVEL)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1331 | 10.20 | 48.8 | 347 | 8807 | 16017 | 15.3 | 213 |
| 1330 | 13.60 | 65.1 | | 8824 | 16053 | 15.3 | 212 |
| 1330 | 11.1/3 | 54.3 | | 8818 | 16046 | 15.3 | 212 |
| 1329 | 11.05 | 52.7 | | 8774 | 15997 | 15.3 | 212 |
| 1328 | $F_t$ 12.80 | 60.9 | | 8771 | 15975 | 15.3 | 213 |
| 1334 | 10.20 | 49.0 | | 8766 | 15944 | 15.3 | 213 |
| 1334 | 13.60 | 64.9 | | 8803 | 15991 | 15.4 | 213 |
| 1333 | 11-1/3 | 54.5 | | 8806 | 16014 | 15.3 | 213 |
| 1332 | 11.05 | 52.0 | | 8905 | 16133 | 15.4 | 212 |
| 1331 | $F_t$ 12.80 | 59.8 | | 8864 | 16090 | 15.4 | 212 |
| 1339 | 10.20 | 49.3 | | 8694 | 15836 | 15.3 | 214 |
| 1338 | 13.60 | 65.3 | | 8761 | 15919 | 15.4 | 213 |
| 1337 | 11-1/3 | 54.7 | | 8699 | 15852 | 15.3 | 213 |
| 1336 | 11.05 | 52.6 | | 8830 | 15935 | 15.5 | 214 |
| 1335 | $F_t$ 12.80 | 60.3 | | 8719 | 15877 | 15.3 | 213 |

COMMENT

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. B1 DATE: 3 Nov 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 0.99 $K_3$ 1.00

LOOP HEIGHT 2 (m.[redacted].) TRIPOD X HELICOPTER ____
(ABOVE: SURFACE - [redacted] L[redacted]L)

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK X ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1546 | 10.20 | 30.1 | | | | | |
| 1543 | 13.60 | 38.2 | | | | | |
| 1541 | 11.1/3 | 31.9 | | | | | |
| 1538 | 11.05 | 31.7 | | | | | |
| 1533 | $F_t$ 12.80 | 36.4 | | | | | |
| 1552 | 10.20 | 30.2 | | | | | |
| 1551 | 13.60 | 38.2 | | | | | |
| 1549 | 11-1/3 | 32.1 | | | | | |
| 1548 | 11.05 | 31.6 | | | | | |
| 1547 | $F_t$ 12.80 | 36.6 | | | | | |
| 1559 | 10.20 | 30.3 | | | | | |
| 1558 | 13.60 | 38.0 | | | | | |
| 1556 | 11-1/3 | 31.6 | | | | | |
| 1555 | 11.05 | 31.4 | | | | | |
| 1554 | $F_t$ 12.80 | 36.7 | | | | | |

COMMENT: NULL > 40db. NO POWER LINES.
NATIONAL SCENIC POINT — NO CHANGE LIKELY.

DATA SHEET 5 (DS-5)

RADIO FIELD INTENSITY MEASUREMENTS

OMEGA STATION: JAPAN SITE NO. B1 DATE: 3 NOV 1978

$I_{as}$ 350 A. $K_1$ 0.98 $K_2$ 0.99 $K_3$ 1.00

LOOP HEIGHT 2 (m.) TRIPOD X HELICOPTER ____
(ABOVE: SURFACE - [redacted])

TYPE OF MEASUREMENT: HELICOPTER CAL. ____ BENCHMARK X ROUTINE ____

| TIME (LOCAL) | FREQUENCY (kHz) | $E_g$ (mV) | HEADING (Mag.) | D M E D1 | D2 | DIST. km. | AZ. °T. |
|---|---|---|---|---|---|---|---|
| 1620 | 10.20 | 28.8 | | | | | |
| 1618 | 13.60 | 36.1 | | | | | |
| 1612 | 11.1/3 | 30.5 | | | | | |
| 1611 | 11.05 | 32.0 | | | | | |
| 1609 | $F_t$ 12.80 | 36.3 | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |
| | 10.20 | | | | | | |
| | 13.60 | | | | | | |
| | 11-1/3 | | | | | | |
| | 11.05 | | | | | | |
| | $F_t$ 12.80 | | | | | | |

COMMENT: STATION CREW PRACTICE, NOT ON DS-6.

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 2 DATE: 29 OCT 1978

Distance: 29 . 0 km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| . | 10.20 | 350 | 27.4 | 343 | 29.3 | 28.9 | 7.8 | 191 | 0.0665 | 2.447 |
| . | | | 27.1 | | 29.0 | 28.6 | 7.7 | 189 | 0.0651 | 2.420 |
| . | | | 27.3 | | 29.2 | 28.8 | 7.8 | 190 | 0.0661 | 2.438 |
| . | 13.60 | | 36.4 | | 38.9 | 38.7 | 14.0 | 191 | 0.1187 | 3.269 |
| . | | | 36.4 | | 38.9 | 38.7 | 14.0 | 191 | 0.1187 | 3.269 |
| . | | | 36.6 | | 39.2 | 38.9 | 14.1 | 192 | 0.1201 | 3.287 |
| . | 11-1/3 | | 29.2 | | 31.2 | 30.9 | 8.9 | 184 | 0.0759 | 2.614 |
| . | | | 29.6 | | 31.7 | 31.3 | 9.2 | 186 | 0.0780 | 2.650 |
| . | | | 29.9 | | 32.0 | 31.7 | 9.4 | 188 | 0.0796 | 2.677 |
| . | 11.05 | | 29.0 | | 31.0 | 30.7 | 8.8 | 187 | 0.0748 | 2.595 |
| . | | | 28.9 | | 30.9 | 30.6 | 8.7 | 186 | 0.0743 | 2.586 |
| . | | | 29.0 | | 31.0 | 30.7 | 8.8 | 187 | 0.0748 | 2.595 |
| . | $F_t$ 12.80 | | 34.5 | | 36.9 | 36.6 | 12.5 | 192 | 0.1065 | 3.096 |
| . | | | 34.6 | | 37.0 | 36.7 | 12.6 | 193 | 0.1071 | 3.105 |
| . | | | 34.6 | | 37.0 | 36.7 | 12.6 | 193 | 0.1071 | 3.105 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

HEIGHT-GAIN, SURFACE (2 m.)
LOOP SIDE OF HELO AWAY FROM THE STATION.

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

HEIGHT-GAIN, SURFACE (2 m.)
LOOP SIDE OF HELO TOWARD THE STATION

OMEGA STATION: JAPAN SITE NUMBER: 2 DATE: 29 OCT 1978

Distance: 29 . 0 km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| . | 10.20 | 350 | 27.2 | 343 | 29.1 | 28.7 | 7.7 | 190 | 0.0656 | 2.429 |
| . | | | 27.1 | | 29.0 | 28.6 | 7.7 | 189 | 0.0651 | 2.420 |
| . | | | 27.1 | | 29.0 | 28.6 | 7.7 | 189 | 0.0651 | 2.420 |
| . | 13.60 | | 36.5 | | 39.1 | 38.8 | 14.0 | 192 | 0.1194 | 3.278 |
| . | | | 36.5 | | 39.1 | 38.8 | 14.0 | 192 | 0.1194 | 3.278 |
| . | | | 36.4 | | 38.9 | 38.7 | 14.0 | 191 | 0.1187 | 3.269 |
| . | 11-1/3 | | 29.6 | | 31.7 | 31.3 | 9.2 | 186 | 0.0780 | 2.650 |
| . | | | 29.5 | | 31.6 | 31.2 | 9.1 | 185 | 0.0775 | 2.641 |
| . | | | 29.7 | | 31.8 | 31.4 | 9.2 | 187 | 0.0786 | 2.659 |
| . | 11.05 | | 29.0 | | 31.0 | 30.7 | 8.8 | 187 | 0.0748 | 2.595 |
| . | | | 28.9 | | 30.9 | 30.6 | 8.7 | 186 | 0.0743 | 2.586 |
| . | | | 28.9 | | 30.9 | 30.6 | 8.7 | 186 | 0.0743 | 2.586 |
| . | $F_t$ 12.80 | | 34.4 | | 36.8 | 36.5 | 12.5 | 192 | 0.1059 | 3.087 |
| . | | | 34.7 | | 37.1 | 36.8 | 12.7 | 194 | 0.1077 | 3.114 |
| . | | | 34.4 | | 36.8 | 36.5 | 12.5 | 192 | 0.1059 | 3.087 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

HEIGHT-GAIN, 500 FT. ABOVE SEA LEVEL.

OMEGA STATION: JAPAN SITE NUMBER: 2 DATE: 29 OCT 1978

Distance: 29 . 0 km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| . | 10.20 | 350 | 30.4 | 343 | 32.5 | 32.1 | 9.6 | 212 | 0.0819 | 2.715 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 13.60 | | 40.0 | | 42.8 | 42.5 | 16.9 | 210 | 0.1434 | 3.592 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 11-1/3 | | 33.3 | | 35.6 | 35.3 | 11.6 | 209 | 0.0988 | 2.981 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 11.05 | | 32.4 | | 34.7 | 34.3 | 11.0 | 209 | 0.0934 | 2.899 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | $F_t$ 12.80 | | 38.7 | | 41.4 | 41.1 | 15.8 | 216 | 0.1340 | 3.472 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

HEIGHT-GAIN, 1,000 FT. ABOVE SEA LEVEL.

OMEGA STATION: JAPAN SITE NUMBER: 2 DATE: 29 OCT 1978

Distance: 29 . 0 km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| . | 10.20 | 350 | 30.8 | 343 | 33.0 | 32.5 | 9.9 | 215 | 0.0841 | 2.751 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 13.60 | | 40.9 | | 43.8 | 43.4 | 17.6 | 215 | 0.1499 | 3.673 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 11-1/3 | | 33.5 | | 35.8 | 35.5 | 11.8 | 211 | 0.0999 | 2.999 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 11.05 | | 32.5 | | 34.8 | 34.4 | 11.1 | 209 | 0.0940 | 2.908 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | $F_t$ 12.80 | | 39.0 | | 41.7 | 41.4 | 16.0 | 218 | 0.1361 | 3.499 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

HEIGHT-GAIN, 1,500 FT. ABOVE SEA LEVEL.

OMEGA STATION: JAPAN SITE NUMBER: 2 DATE: 29 OCT 1978

Distance: 29 . 0 km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| . | 10.20 | 350 | 31.2 | 343 | 33.4 | 33.0 | 10.1 | 217 | 0.0863 | 2.786 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 13.60 | | 40.9 | | 43.8 | 43.4 | 17.6 | 215 | 0.1499 | 3.673 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 11-1/3 | | 33.6 | | 36.0 | 35.6 | 11.8 | 211 | 0.1005 | 3.008 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 11.05 | | 32.6 | | 34.9 | 34.5 | 11.1 | 210 | 0.0945 | 2.917 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | $F_t$ 12.80 | | 38.9 | | 41.6 | 41.3 | 15.9 | 217 | 0.1354 | 3.490 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

HEIGHT-GAIN, 2,000 FT. ABOVE SEA LEVEL

OMEGA STATION: JAPAN SITE NUMBER: 2 DATE: 29 OCT 1978

Distance: 29 . 0 km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_q$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| . | 10.20 | 350 | 31.4 | 343 | 33.6 | 33.2 | 10.3 | 219 | 0.0874 | 2.804 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 13.60 | | 40.9 | | 43.8 | 43.4 | 17.6 | 215 | 0.1499 | 3.673 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 11-1/3 | | 33.8 | | 36.2 | 35.8 | 12.0 | 212 | 0.1017 | 3.026 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | 11.05 | | 33.0 | | 35.3 | 34.9 | 11.4 | 213 | 0.0969 | 2.953 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | $F_t$ 12.80 | | 38.9 | | 41.6 | 41.3 | 15.9 | 217 | 0.1354 | 3.490 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ BENCHMARK X ROUTINE ____

OMEGA STATION: JAPAN SITE NUMBER: B 2 DATE: 29 OCT 1978

Distance: 29 . 0 km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 0.99 (Loop Factor) $K_3$ = 1.00 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_q$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| . | 10.20 | 350 | 29.3 | 343 | 29.0 | 28.6 | 7.7 | 189 | 0.0651 | 2.421 |
| . | | | 29.3 | | 29.0 | 28.6 | 7.7 | 189 | 0.0651 | 2.421 |
| . | | | 29.4 | | 29.1 | 28.7 | 7.7 | 190 | 0.0656 | 2.429 |
| . | 13.60 | | 39.6 | | 39.2 | 38.9 | 14.2 | 193 | 0.1203 | 3.291 |
| . | | | 39.5 | | 39.1 | 38.8 | 14.1 | 192 | 0.1197 | 3.282 |
| . | | | 39.7 | | 39.3 | 39.0 | 14.2 | 193 | 0.1209 | 3.299 |
| . | 11-1/3 | | 32.0 | | 31.7 | 31.4 | 9.2 | 186 | 0.0781 | 2.651 |
| . | | | 32.3 | | 32.0 | 31.6 | 9.4 | 188 | 0.0795 | 2.676 |
| . | | | 32.2 | | 31.9 | 31.5 | 9.3 | 187 | 0.0790 | 2.667 |
| . | 11.05 | | 31.4 | | 31.1 | 30.7 | 8.8 | 187 | 0.0751 | 2.600 |
| . | | | 31.4 | | 31.1 | 30.7 | 8.8 | 187 | 0.0751 | 2.600 |
| . | | | 31.4 | | 31.1 | 30.7 | 8.8 | 187 | 0.0751 | 2.600 |
| . | $F_t$ 12.80 | | 37.2 | | 36.8 | 36.5 | 12.5 | 192 | 0.1060 | 3.088 |
| . | | | 37.5 | | 37.1 | 36.8 | 12.7 | 194 | 0.1077 | 3.113 |
| . | | | 37.4 | | 37.0 | 36.7 | 12.6 | 193 | 0.1071 | 3.105 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 1-1 DATE: 1 Nov 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_q$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30.2 | 10.20 | 300 | 25.3 | 294 | 27.1 | 26.8 | 7.3 | 214 | 0.0839 | 2.748 |
| 30.3 | | | 24.9 | | 26.6 | 26.3 | 7.1 | 212 | 0.0818 | 2.714 |
| 30.4 | | | 24.9 | | 26.6 | 26.3 | 7.1 | 212 | 0.0824 | 2.723 |
| 30.1 | 13.60 | | 33.5 | | 35.8 | 35.6 | 12.8 | 213 | 0.1476 | 3.645 |
| 30.2 | | | 33.8 | | 36.2 | 35.9 | 13.1 | 216 | 0.1513 | 3.690 |
| 30.4 | | | 33.1 | | 35.4 | 35.2 | 12.7 | 213 | 0.1471 | 3.638 |
| 30.1 | 11-1/3 | | 27.5 | | 29.4 | 29.1 | 8.5 | 209 | 0.0989 | 2.983 |
| 30.1 | | | 27.7 | | 29.6 | 29.4 | 8.7 | 211 | 0.1003 | 3.005 |
| 30.3 | | | 27.4 | | 29.3 | 29.0 | 8.6 | 210 | 0.0995 | 2.993 |
| 30.1 | 11.05 | | 27.4 | | 29.3 | 29.0 | 8.5 | 214 | 0.0981 | 2.971 |
| 30.1 | | | 27.4 | | 29.3 | 29.0 | 8.5 | 214 | 0.0981 | 2.971 |
| 30.3 | | | 26.9 | | 28.8 | 28.5 | 8.3 | 211 | 0.0958 | 2.937 |
| 30.1 | $F_t$ 12.80 | | 31.7 | | 33.9 | 33.7 | 11.4 | 214 | 0.1320 | 3.446 |
| 30.1 | | | 31.5 | | 33.7 | 33.4 | 11.3 | 213 | 0.1303 | 3.425 |
| 30.3 | | | 31.4 | | 33.6 | 33.3 | 11.3 | 214 | 0.1312 | 3.437 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 1-2 DATE: 1 Nov 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 26.4 | 10.20 | 300 | 28.8 | 294 | 30.8 | 30.3 | 7.1 | 213 | 0.0825 | 2.725 |
| 26.4 | | | 28.8 | | 30.8 | 30.3 | 7.1 | 213 | 0.0825 | 2.725 |
| 26.4 | | | 28.9 | | 30.9 | 30.4 | 7.2 | 213 | 0.0831 | 2.734 |
| 26.4 | 13.60 | | 38.1 | | 40.8 | 40.4 | 12.6 | 212 | 0.1463 | 3.629 |
| 26.3 | | | 38.5 | | 41.2 | 40.8 | 12.8 | 214 | 0.1482 | 3.653 |
| 26.4 | | | 38.0 | | 40.7 | 40.3 | 12.6 | 212 | 0.1455 | 3.619 |
| 26.3 | 11-1/3 | | 31.4 | | 33.6 | 33.2 | 8.5 | 208 | 0.0979 | 2.968 |
| 26.3 | | | 31.4 | | 33.6 | 33.2 | 8.5 | 208 | 0.0979 | 2.968 |
| 26.4 | | | 31.6 | | 33.8 | 33.4 | 8.6 | 211 | 0.0999 | 2.998 |
| 26.3 | 11.05 | | 31.1 | | 33.3 | 32.8 | 8.3 | 212 | 0.0959 | 2.937 |
| 26.4 | | | 30.6 | | 32.7 | 32.3 | 8.1 | 209 | 0.0935 | 2.901 |
| 26.4 | | | 30.7 | | 32.8 | 32.4 | 8.1 | 210 | 0.0942 | 2.911 |
| 26.3 | $F_t$ 12.80 | | 36.5 | | 39.1 | 38.7 | 11.5 | 215 | 0.1329 | 3.459 |
| 26.4 | | | 36.5 | | 39.1 | 38.7 | 11.6 | 216 | 0.1340 | 3.472 |
| 26.4 | | | 36.3 | | 38.8 | 38.5 | 11.5 | 215 | 0.1325 | 3.453 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 1-3 DATE: 1 Nov 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 21.2 | 10.20 | 300 | 35.5 | 294 | 38.0 | 37.1 | 6.9 | 209 | 0.0795 | 2.675 |
| 21.4 | | | 35.4 | | 37.9 | 37.0 | 7.0 | 210 | 0.0806 | 2.693 |
| 21.3 | | | 35.6 | | 38.1 | 37.2 | 7.0 | 210 | 0.0807 | 2.695 |
| 21.3 | 13.60 | | 46.8 | | 50.1 | 49.4 | 12.3 | 209 | 0.1424 | 3.580 |
| 21.5 | | | 47.4 | | 50.7 | 50.1 | 12.9 | 214 | 0.1489 | 3.660 |
| 21.4 | | | 47.1 | | 50.4 | 49.7 | 12.6 | 212 | 0.1456 | 3.620 |
| 21.4 | 11-1/3 | | 39.0 | | 41.7 | 40.9 | 8.5 | 209 | 0.0987 | 2.980 |
| 21.4 | | | 39.1 | | 41.8 | 41.0 | 8.6 | 210 | 0.0992 | 2.988 |
| 21.3 | | | 39.3 | | 42.1 | 41.3 | 8.6 | 210 | 0.0992 | 2.989 |
| 21.4 | 11.05 | | 37.3 | | 39.9 | 39.1 | 7.8 | 205 | 0.0901 | 2.848 |
| 21.4 | | | 38.4 | | 41.1 | 40.3 | 8.3 | 211 | 0.0955 | 2.932 |
| 21.3 | | | 38.2 | | 40.9 | 40.1 | 8.1 | 209 | 0.0936 | 2.902 |
| 21.4 | $F_t$ 12.80 | | 44.2 | | 47.3 | 46.6 | 11.0 | 211 | 0.1278 | 3.391 |
| 21.2 | | | 44.6 | | 47.7 | 47.0 | 11.0 | 211 | 0.1276 | 3.389 |
| 21.3 | | | 44.3 | | 47.4 | 46.7 | 11.0 | 210 | 0.1271 | 3.383 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 1-4 DATE: 1 Nov 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 15.3 | 10.20 | 300 | 51.0 | 294 | 54.6 | 52.2 | 7.1 | 212 | 0.0819 | 2.716 |
| 15.3 | | | 51.2 | | 54.8 | 52.4 | 7.1 | 213 | 0.0826 | 2.726 |
| 15.3 | | | 50.6 | | 54.1 | 51.8 | 7.0 | 210 | 0.0807 | 2.694 |
| 15.3 | 13.60 | | 67.2 | | 71.9 | 70.1 | 12.8 | 213 | 0.1478 | 3.647 |
| 15.2 | | | 68.1 | | 72.9 | 71.0 | 12.9 | 215 | 0.1497 | 3.671 |
| 15.3 | | | 67.7 | | 72.4 | 70.6 | 13.0 | 215 | 0.1500 | 3.674 |
| 15.3 | 11-1/3 | | 56.4 | | 60.3 | 58.2 | 8.8 | 213 | 0.1019 | 3.028 |
| 15.2 | | | 57.0 | | 61.0 | 58.8 | 8.9 | 213 | 0.1026 | 3.039 |
| 15.3 | | | 56.8 | | 60.8 | 58.6 | 8.9 | 214 | 0.1033 | 3.049 |
| 15.3 | 11.05 | | 55.4 | | 59.3 | 57.0 | 8.5 | 214 | 0.0979 | 2.969 |
| 15.2 | | | 55.2 | | 59.1 | 56.8 | 8.3 | 212 | 0.0959 | 2.937 |
| 15.3 | | | 55.5 | | 59.4 | 57.1 | 8.5 | 214 | 0.0983 | 2.974 |
| 15.2 | $F_t$ 12.80 | | 63.3 | | 67.7 | 65.8 | 11.1 | 211 | 0.1285 | 3.401 |
| 15.3 | | | 63.4 | | 67.8 | 65.9 | 11.3 | 213 | 0.1307 | 3.430 |
| 15.3 | | | 63.7 | | 68.2 | 66.2 | 11.4 | 214 | 0.1320 | 3.446 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 2-1 DATE: 31 OCT 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_q$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30.2 | 10.20 | 300 | 25.7 | 294 | 27.5 | 27.2 | 7.5 | 218 | 0.0866 | 2.791 |
| 30.2 | | | 25.5 | | 27.3 | 27.0 | 7.4 | 216 | 0.0852 | 2.770 |
| 30.3 | | | 25.8 | | 27.6 | 27.3 | 7.6 | 219 | 0.0878 | 2.812 |
| 30.1 | 13.60 | | 32.7 | | 35.0 | 34.8 | 12.2 | 208 | 0.1407 | 3.558 |
| 30.2 | | | 32.5 | | 34.8 | 34.5 | 12.1 | 208 | 0.1399 | 3.548 |
| 30.2 | | | 32.7 | | 35.0 | 34.8 | 12.2 | 209 | 0.1416 | 3.570 |
| 30.3 | 11-1/3 | | 26.8 | | 28.7 | 28.4 | 8.2 | 206 | 0.0952 | 2.927 |
| 30.3 | | | 26.5 | | 28.4 | 28.1 | 8.0 | 203 | 0.0931 | 2.894 |
| 30.3 | | | 26.6 | | 28.5 | 28.2 | 8.1 | 204 | 0.0938 | 2.905 |
| 30.2 | 11.05 | | 26.2 | | 28.0 | 27.8 | 7.8 | 205 | 0.0903 | 2.851 |
| 30.3 | | | 26.3 | | 28.1 | 27.9 | 7.9 | 207 | 0.0916 | 2.871 |
| 30.4 | | | 26.5 | | 28.4 | 28.1 | 8.1 | 209 | 0.0936 | 2.903 |
| 30.3 | $F_t$ 12.80 | | 32.1 | | 34.3 | 34.1 | 11.9 | 218 | 0.1371 | 3.513 |
| 30.2 | | | 31.4 | | 33.6 | 33.3 | 11.3 | 213 | 0.1304 | 3.425 |
| 30.3 | | | 31.3 | | 33.5 | 33.2 | 11.3 | 213 | 0.1304 | 3.426 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 2-2 DATE: 31 OCT. 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 26.0 | 10.20 | 300 | 29.5 | 294 | 31.6 | 31.1 | 7.2 | 214 | 0.0839 | 2.747 |
| 26.2 | | | 28.8 | | 30.8 | 30.3 | 7.0 | 211 | 0.0812 | 2.703 |
| 26.3 | | | 29.0 | | 31.0 | 30.5 | 7.2 | 213 | 0.0830 | 2.733 |
| 25.9 | 13.60 | | 38.2 | | 40.9 | 40.5 | 12.2 | 209 | 0.1415 | 3.568 |
| 26.2 | | | 38.0 | | 40.7 | 40.3 | 12.4 | 210 | 0.1433 | 3.591 |
| 26.3 | | | 37.6 | | 40.2 | 39.9 | 12.2 | 209 | 0.1414 | 3.567 |
| 25.9 | 11-./3 | | 32.0 | | 34.2 | 33.8 | 8.5 | 209 | 0.0985 | 2.977 |
| 26.1 | | | 31.8 | | 34.0 | 33.6 | 8.5 | 209 | 0.0988 | 2.982 |
| 26.3 | | | 31.5 | | 33.7 | 33.3 | 8.5 | 209 | 0.0985 | 2.977 |
| 26.0 | 11.05 | | 30.8 | | 33.0 | 32.5 | 7.9 | 207 | 0.0918 | 2.875 |
| 26.0 | | | 30.7 | | 32.8 | 32.4 | 7.9 | 206 | 0.0912 | 2.866 |
| 26.3 | | | 30.5 | | 32.6 | 32.2 | 8.0 | 207 | 0.0922 | 2.881 |
| 25.9 | $F_t$ 12.80 | | 36.3 | | 38.8 | 38.4 | 11.0 | 211 | 0.1274 | 3.387 |
| 26.0 | | | 36.6 | | 39.2 | 38.8 | 11.3 | 213 | 0.1306 | 3.428 |
| 26.2 | | | 36.6 | | 39.2 | 38.8 | 11.5 | 215 | 0.1326 | 3.455 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 2-3 DATE: 1 Nov. 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 19.6 | 10.20 | 300 | 38.6 | 294 | 41.3 | 40.2 | 6.9 | 209 | 0.0797 | 2.678 |
| 19.7 | | | 38.2 | | 40.9 | 39.8 | 6.8 | 208 | 0.0789 | 2.665 |
| 19.7 | | | 38.2 | | 40.9 | 39.8 | 6.8 | 208 | 0.0789 | 2.665 |
| 19.7 | 13.60 | | 51.5 | | 55.1 | 54.3 | 12.7 | 213 | 0.1468 | 3.635 |
| 19.7 | | | 51.7 | | 55.3 | 54.5 | 12.8 | 214 | 0.1480 | 3.649 |
| 19.7 | | | 51.7 | | 55.3 | 54.5 | 12.8 | 214 | 0.1480 | 3.649 |
| 19.7 | 11-1/3 | | 42.9 | | 45.9 | 44.9 | 8.7 | 211 | 0.1005 | 3.008 |
| 19.7 | | | 43.1 | | 46.1 | 45.1 | 8.8 | 212 | 0.1015 | 3.022 |
| 19.7 | | | 43.5 | | 46.5 | 45.5 | 8.9 | 214 | 0.1034 | 3.050 |
| 19.8 | 11.05 | | 41.4 | | 44.3 | 43.3 | 8.2 | 210 | 0.0944 | 2.915 |
| 19.7 | | | 42.2 | | 45.2 | 44.1 | 8.4 | 213 | 0.0970 | 2.955 |
| 19.6 | | | 41.8 | | 44.7 | 43.7 | 8.1 | 210 | 0.0942 | 2.912 |
| 19.9 | $F_t$ 12.80 | | 47.0 | | 50.3 | 49.4 | 10.8 | 208 | 0.1244 | 3.346 |
| 19.6 | | | 48.2 | | 51.6 | 50.7 | 11.0 | 210 | 0.1268 | 3.378 |
| 19.7 | | | 48.0 | | 51.4 | 50.5 | 11.0 | 210 | 0.1270 | 3.381 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 2-4 DATE: 1 Nov 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 15.9 | 10.20 | 300 | 48.2 | 294 | 51.6 | 49.5 | 6.9 | 209 | 0.0795 | 2.676 |
| 16.0 | | | 47.4 | | 50.7 | 48.7 | 6.7 | 207 | 0.0780 | 2.649 |
| 16.3 | | | 47.0 | | 50.3 | 48.3 | 6.9 | 209 | 0.0798 | 2.680 |
| 15.9 | 13.60 | | 64.7 | | 69.2 | 67.6 | 12.8 | 214 | 0.1485 | 3.656 |
| 16.0 | | | 63.9 | | 68.4 | 66.8 | 12.7 | 213 | 0.1468 | 3.635 |
| 16.1 | | | 63.2 | | 67.6 | 66.1 | 12.6 | 212 | 0.1455 | 3.618 |
| 15.9 | 11-1/3 | | 54.2 | | 58.0 | 56.1 | 8.8 | 213 | 0.1021 | 3.032 |
| 16.0 | | | 53.6 | | 57.4 | 55.5 | 8.7 | 212 | 0.1012 | 3.018 |
| 16.1 | | | 52.5 | | 56.2 | 54.3 | 8.5 | 209 | 0.0984 | 2.976 |
| 15.8 | 11.05 | | 53.3 | | 57.0 | 55.0 | 8.4 | 213 | 0.0971 | 2.956 |
| 16.0 | | | 52.3 | | 56.0 | 54.0 | 8.3 | 212 | 0.0961 | 2.940 |
| 16.1 | | | 52.9 | | 56.6 | 54.7 | 8.6 | 216 | 0.0996 | 2.994 |
| 15.7 | $F_t$ 12.80 | | 61.4 | | 65.7 | 63.9 | 11.2 | 212 | 0.1295 | 3.413 |
| 16.0 | | | 59.8 | | 64.0 | 62.3 | 11.0 | 211 | 0.1278 | 3.391 |
| 16.1 | | | 59.5 | | 63.7 | 62.0 | 11.1 | 211 | 0.1282 | 3.396 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 3-1 DATE: 31 OCT 1978

Distance: ____ . ____ km., (If constant) $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 32.1 | 10.20 | 300 | 23.7 | 294 | 25.4 | 25.1 | 7.2 | 214 | 0.0834 | 2.740 |
| 32.3 | | | 23.7 | | 25.4 | 25.1 | 7.3 | 215 | 0.0845 | 2.757 |
| 32.5 | | | 23.8 | | 25.5 | 25.2 | 7.5 | 217 | 0.0863 | 2.786 |
| 32.1 | 13.60 | | 30.8 | | 33.0 | 32.8 | 12.3 | 209 | 0.1422 | 3.577 |
| 32.2 | | | 31.0 | | 33.2 | 33.0 | 12.8 | 213 | 0.1477 | 3.646 |
| 32.5 | | | 30.4 | | 32.5 | 32.3 | 12.3 | 209 | 0.1420 | 3.575 |
| 32.1 | 11-1/3 | | 25.3 | | 27.1 | 26.8 | 8.2 | 206 | 0.0954 | 2.931 |
| 32.1 | | | 25.3 | | 27.1 | 26.8 | 8.2 | 206 | 0.0954 | 2.931 |
| 32.5 | | | 24.9 | | 26.6 | 26.4 | 8.2 | 205 | 0.0948 | 2.921 |
| 32.1 | 11.05 | | 25.2 | | 27.0 | 26.7 | 8.2 | 210 | 0.0946 | 2.918 |
| 32.1 | | | 25.2 | | 27.0 | 26.7 | 8.2 | 210 | 0.0946 | 2.918 |
| 32.4 | | | 24.9 | | 26.6 | 26.4 | 8.1 | 210 | 0.0941 | 2.910 |
| 32.1 | $F_t$ 12.80 | | 29.6 | | 31.7 | 31.5 | 11.3 | 214 | 0.1311 | 3.435 |
| 32.1 | | | 29.8 | | 31.9 | 31.7 | 11.5 | 215 | 0.1329 | 3.458 |
| 32.3 | | | 29.6 | | 31.7 | 31.5 | 11.5 | 215 | 0.1328 | 3.457 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELI[illegible]ER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 3-2 DATE: 31 OCT 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_{rd}/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 23.5 | 10.20 | 300 | 32.3 | 294 | 34.6 | 33.9 | 7.0 | 211 | 0.0816 | 2.709 |
| 23.6 | | | 32.2 | | 34.5 | 33.8 | 7.1 | 212 | 0.0818 | 2.713 |
| 23.5 | | | 32.0 | | 34.2 | 33.6 | 6.9 | 209 | 0.0801 | 2.684 |
| 23.4 | 13.60 | | 43.1 | | 46.1 | 45.6 | 12.7 | 212 | 0.1464 | 3.630 |
| 23.5 | | | 42.1 | | 45.0 | 44.6 | 12.2 | 208 | 0.1409 | 3.561 |
| 23.4 | | | 42.3 | | 45.3 | 44.8 | 12.3 | 208 | 0.1410 | 3.563 |
| 23.3 | 11-1/3 | | 36.0 | | 38.5 | 37.9 | 8.7 | 211 | 0.1003 | 3.004 |
| 23.5 | | | 35.6 | | 38.1 | 37.5 | 8.6 | 210 | 0.0998 | 2.997 |
| 23.4 | | | 35.8 | | 38.3 | 37.7 | 8.6 | 211 | 0.1000 | 3.001 |
| 23.2 | 11.05 | | 35.1 | | 37.6 | 36.9 | 8.2 | 210 | 0.0943 | 2.914 |
| 23.5 | | | 34.5 | | 36.9 | 36.3 | 8.1 | 209 | 0.0936 | 2.902 |
| 23.4 | | | 34.4 | | 36.8 | 36.2 | 8.0 | 207 | 0.0922 | 2.881 |
| 23.2 | $F_t$ 12.80 | | 40.3 | | 43.1 | 42.6 | 10.8 | 209 | 0.1254 | 3.360 |
| 23.5 | | | 40.1 | | 42.9 | 42.4 | 11.0 | 211 | 0.1275 | 3.387 |
| 23.5 | | | 40.1 | | 42.9 | 42.4 | 11.0 | 211 | 0.1275 | 3.387 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . ____ BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 3-3 DATE: 31 OCT 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 21.8 | 10.20 | 300 | 34.4 | 294 | 36.8 | 36.0 | 6.8 | 208 | 0.0791 | 2.668 |
| 21.8 | | | 34.7 | | 37.1 | 36.3 | 7.0 | 210 | 0.0805 | 2.692 |
| 21.4 | | | 34.8 | | 37.2 | 36.4 | 6.7 | 207 | 0.0779 | 2.648 |
| 21.7 | 13.60 | | 46.1 | | 49.3 | 48.7 | 12.4 | 210 | 0.1435 | 3.594 |
| 21.9 | | | 46.1 | | 49.3 | 48.7 | 12.6 | 212 | 0.1463 | 3.628 |
| 21.5 | | | 47.7 | | 51.0 | 50.4 | 13.0 | 216 | 0.1508 | 3.684 |
| 21.7 | 11-1/3 | | 39.3 | | 42.1 | 41.3 | 8.9 | 214 | 0.1031 | 3.047 |
| 21.9 | | | 38.5 | | 41.2 | 40.5 | 8.7 | 212 | 0.1009 | 3.013 |
| 21.6 | | | 39.5 | | 42.3 | 41.5 | 8.9 | 214 | 0.1032 | 3.048 |
| 21.6 | 11.05 | | 37.9 | | 40.6 | 39.8 | 8.2 | 210 | 0.0948 | 2.922 |
| 21.8 | | | 37.5 | | 40.1 | 39.4 | 8.2 | 210 | 0.0946 | 2.918 |
| 21.6 | | | 38.1 | | 40.8 | 40.0 | 8.3 | 212 | 0.0958 | 2.937 |
| 21.6 | $F_t$ 12.80 | | 43.6 | | 46.7 | 46.0 | 11.0 | 210 | 0.1268 | 3.377 |
| 21.8 | | | 42.8 | | 45.8 | 45.1 | 10.8 | 208 | 0.1245 | 3.347 |
| 21.6 | | | 42.8 | | 45.8 | 45.1 | 10.6 | 206 | 0.1221 | 3.316 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 3-4 DATE: 31 OCT 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 15.6 | 10.20 | 300 | 49.2 | 294 | 52.6 | 50.4 | 6.9 | 209 | 0.0795 | 2.676 |
| 15.9 | | | 48.0 | | 51.4 | 49.3 | 6.8 | 208 | 0.0789 | 2.665 |
| 15.9 | | | 48.1 | | 51.5 | 49.4 | 6.8 | 208 | 0.0792 | 2.670 |
| 15.8 | 13.60 | | 65.2 | | 69.8 | 68.1 | 12.9 | 214 | 0.1488 | 3.660 |
| 15.8 | | | 66.1 | | 70.7 | 69.0 | 13.2 | 217 | 0.1530 | 3.710 |
| 15.8 | | | 64.7 | | 69.2 | 67.6 | 12.7 | 213 | 0.1466 | 3.632 |
| 15.8 | 11-1/3 | | 54.5 | | 58.3 | 56.3 | 8.8 | 213 | 0.1019 | 3.028 |
| 15.4 | | | 56.1 | | 60.0 | 57.9 | 8.8 | 213 | 0.1022 | 3.033 |
| 15.8 | | | 54.5 | | 58.3 | 56.3 | 8.8 | 213 | 0.1019 | 3.028 |
| 15.7 | 11.05 | | 53.6 | | 57.4 | 55.3 | 8.4 | 213 | 0.0969 | 2.953 |
| 15.3 | | | 54.7 | | 58.5 | 56.3 | 8.3 | 211 | 0.0955 | 2.931 |
| 15.8 | | | 53.4 | | 57.1 | 55.1 | 8.4 | 213 | 0.0995 | 2.962 |
| 15.7 | $F_t$ 12.80 | | 61.6 | | 65.9 | 64.1 | 11.3 | 213 | 0.1303 | 3.424 |
| 15.5 | | | 62.5 | | 66.9 | 65.0 | 11.3 | 213 | 0.1306 | 3.428 |
| 15.8 | | | 60.3 | | 64.5 | 62.8 | 10.9 | 210 | 0.1265 | 3.375 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 4-1 DATE: 1 NOV 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_q$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 29.5 | 10.20 | 300 | 26.0 | 294 | 27.8 | 27.5 | 7.3 | 215 | 0.0845 | 2.757 |
| 29.7 | | | 25.8 | | 27.6 | 27.3 | 7.3 | 215 | 0.0843 | 2.755 |
| 29.7 | | | 25.6 | | 27.4 | 27.1 | 7.2 | 213 | 0.0830 | 2.733 |
| 29.4 | 13.60 | | 34.1 | | 36.5 | 36.2 | 12.6 | 212 | 0.1458 | 3.623 |
| 29.6 | | | 34.2 | | 36.6 | 36.3 | 12.7 | 213 | 0.1467 | 3.634 |
| 29.7 | | | 34.2 | | 36.6 | 36.3 | 12.9 | 215 | 0.1498 | 3.671 |
| 29.4 | 11-1/3 | | 28.7 | | 30.7 | 30.4 | 8.9 | 213 | 0.1027 | 3.040 |
| 29.6 | | | 28.4 | | 30.4 | 30.1 | 8.8 | 213 | 0.1019 | 3.029 |
| 29.7 | | | 28.3 | | 30.3 | 30.0 | 8.8 | 213 | 0.1019 | 3.029 |
| 29.3 | 11.05 | | 28.1 | | 30.1 | 29.7 | 8.4 | 213 | 0.0976 | 2.964 |
| 29.6 | | | 27.6 | | 29.5 | 29.2 | 8.3 | 212 | 0.0962 | 2.942 |
| 29.7 | | | 27.4 | | 29.3 | 29.0 | 8.2 | 211 | 0.0954 | 2.935 |
| 29.3 | $F_t$ 12.80 | | 33.0 | | 35.3 | 35.0 | 11.7 | 217 | 0.1354 | 3.491 |
| 29.6 | | | 32.7 | | 35.0 | 34.7 | 11.7 | 217 | 0.1357 | 3.495 |
| 29.7 | | | 32.1 | | 34.3 | 34.1 | 11.4 | 214 | 0.1317 | 3.443 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 4-2 DATE: 1 Nov 1978

Distance: ____ . ____ km., (If constant) $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 25.3 | 10.20 | 300 | 29.4 | 294 | 31.5 | 30.9 | 6.8 | 208 | 0.0787 | 2.662 |
| 25.5 | | | 29.2 | | 31.2 | 30.7 | 6.8 | 208 | 0.0789 | 2.665 |
| 25.6 | | | 29.3 | | 31.4 | 30.8 | 6.9 | 209 | 0.0801 | 2.685 |
| 25.3 | 13.60 | | 39.5 | | 42.3 | 41.9 | 12.5 | 211 | 0.1442 | 3.603 |
| 25.4 | | | 39.5 | | 42.3 | 41.9 | 12.6 | 212 | 0.1454 | 3.617 |
| 25.6 | | | 39.1 | | 41.8 | 41.4 | 12.5 | 211 | 0.1447 | 3.609 |
| 25.2 | 11-1/3 | | 33.3 | | 35.6 | 35.1 | 8.7 | 212 | 0.1008 | 3.012 |
| 25.4 | | | 33.1 | | 35.4 | 34.9 | 8.8 | 212 | 0.1012 | 3.019 |
| 25.6 | | | 32.6 | | 34.9 | 34.4 | 8.6 | 210 | 0.0998 | 2.997 |
| 25.3 | 11.05 | | 32.0 | | 34.2 | 33.8 | 8.1 | 209 | 0.0937 | 2.904 |
| 25.3 | | | 32.1 | | 34.3 | 33.9 | 8.2 | 210 | 0.0943 | 2.914 |
| 25.5 | | | 31.8 | | 34.0 | 33.5 | 8.1 | 210 | 0.0941 | 2.910 |
| 25.3 | $F_t$ 12.80 | | 37.2 | | 39.8 | 39.4 | 11.0 | 211 | 0.1276 | 3.389 |
| 25.2 | | | 37.3 | | 39.9 | 39.5 | 11.0 | 210 | 0.1272 | 3.384 |
| 25.5 | | | 37.0 | | 39.6 | 39.2 | 11.1 | 211 | 0.1283 | 3.398 |
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DATA SHEET F (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . ____ BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 4-3 DATE: 1 Nov 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 19.9 | 10.20 | 300 | 36.9 | 294 | 39.5 | 38.4 | 6.5 | 203 | 0.0752 | 2.601 |
| 20.0 | | | 37.4 | | 40.0 | 39.0 | 6.7 | 207 | 0.0781 | 2.651 |
| 19.9 | | | 37.8 | | 40.4 | 39.4 | 6.8 | 208 | 0.0789 | 2.665 |
| 19.7 | 13.60 | | 49.9 | | 53.4 | 52.6 | 11.9 | 206 | 0.1378 | 3.522 |
| 19.9 | | | 50.2 | | 53.7 | 52.9 | 12.3 | 209 | 0.1424 | 3.580 |
| 19.9 | | | 50.1 | | 53.6 | 52.8 | 12.3 | 209 | 0.1419 | 3.573 |
| 19.9 | 11-1/3 | | 41.2 | | 44.1 | 43.1 | 8.2 | 205 | 0.0947 | 2.919 |
| 20.0 | | | 41.6 | | 44.5 | 43.6 | 8.4 | 208 | 0.0975 | 2.963 |
| 19.9 | | | 42.9 | | 45.9 | 44.9 | 8.9 | 213 | 0.1027 | 3.040 |
| 20.2 | 11.05 | | 40.1 | | 42.9 | 420 | 8.0 | 208 | 0.0923 | 2.883 |
| 19.9 | | | 41.3 | | 44.2 | 43.2 | 8.2 | 211 | 0.0949 | 2.923 |
| 19.9 | | | 41.9 | | 44.8 | 43.8 | 8.4 | 214 | 0.0977 | 2.966 |
| 20.4 | $F_t$ 12.80 | | 46.0 | | 49.2 | 48.4 | 10.8 | 209 | 0.1254 | 3.360 |
| 19.9 | | | 47.0 | | 50.3 | 49.4 | 10.8 | 208 | 0.1244 | 3.346 |
| 20.0 | | | 47.3 | | 50.6 | 49.8 | 11.0 | 210 | 0.1273 | 3.385 |
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TA SHEET 6 (DS-6)

RADIO F  D INTENSITY CALCULATIONS

HELICOPTER CAL. ___ . ___ BENCHMARK ___ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 4-4 DATE: 1 NOV 1978

Distance: ___ . ___ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 14.9 | 10.20 | 300 | 50.7 | 294 | 54.2 | 51.8 | 6.6 | 205 | 0.0764 | 2.623 |
| 15.0 | | | 50.9 | | 54.5 | 52.0 | 6.8 | 207 | 0.0782 | 2.653 |
| 15.0 | | | 51.3 | | 54.9 | 52.4 | 6.9 | 209 | 0.0794 | 2.673 |
| 14.9 | 13.60 | | 67.1 | | 71.8 | 69.9 | 12.0 | 207 | 0.1394 | 3.542 |
| 15.0 | | | 66.8 | | 71.5 | 69.6 | 12.1 | 208 | 0.1401 | 3.551 |
| 15.0 | | | 67.3 | | 72.0 | 70.1 | 12.3 | 209 | 0.1422 | 3.577 |
| 14.9 | 11-1/3 | | 56.7 | | 60.7 | 58.4 | 8.4 | 208 | 0.0973 | 2.959 |
| 14.9 | | | 56.5 | | 60.5 | 58.2 | 8.3 | 207 | 0.0966 | 2.948 |
| 15.0 | | | 56.4 | | 60.3 | 58.1 | 8.4 | 208 | 0.0976 | 2.964 |
| 14.9 | 11.05 | | 55.5 | | 59.4 | 57.0 | 8.0 | 208 | 0.0928 | 2.891 |
| 14.9 | | | 55.6 | | 59.5 | 57.1 | 8.1 | 209 | 0.0932 | 2.896 |
| 15.0 | | | 55.0 | | 58.9 | 56.6 | 8.0 | 208 | 0.0925 | 2.885 |
| 14.8 | $F_t$ 12.80 | | 63.9 | | 68.4 | 66.3 | 10.7 | 207 | 0.1238 | 3.338 |
| 14.9 | | | 63.7 | | 68.2 | 66.1 | 10.8 | 208 | 0.1248 | 3.351 |
| 15.0 | | | 62.8 | | 67.2 | 65.2 | 10.6 | 207 | 0.1230 | 3.327 |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 6-1 DATE: 4 NOV 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 29.8 | 10.20 | 300 | 25.5 | 294 | 27.3 | 27.0 | 7.2 | 213 | 0.0829 | 2.732 |
| 29.8 | | | 25.3 | | 27.1 | 26.7 | 7.1 | 211 | 0.0816 | 2.711 |
| 30.0 | | | 25.1 | | 26.9 | 26.5 | 7.0 | 211 | 0.0815 | 2.708 |
| 29.7 | 13.60 | | 33.7 | | 36.1 | 35.8 | 12.6 | 212 | 0.1454 | 3.618 |
| 29.8 | | | 33.6 | | 36.0 | 35.7 | 12.6 | 212 | 0.1455 | 3.619 |
| 30.0 | | | 33.4 | | 35.7 | 35.5 | 12.6 | 212 | 0.1458 | 3.622 |
| 29.7 | 11-1/3 | | 27.4 | | 29.3 | 29.0 | 8.3 | 206 | 0.0955 | 2.932 |
| 29.8 | | | 27.4 | | 29.3 | 29.0 | 8.3 | 207 | 0.0962 | 2.942 |
| 29.8 | | | 27.5 | | 29.4 | 29.1 | 8.4 | 207 | 0.0969 | 2.953 |
| 29.6 | 11.05 | | 26.8 | | 28.7 | 28.4 | 7.8 | 206 | 0.0907 | 2.857 |
| 29.9 | | | 26.8 | | 28.7 | 28.4 | 8.0 | 208 | 0.0926 | 2.886 |
| 29.7 | | | 27.0 | | 28.9 | 28.6 | 8.0 | 208 | 0.0927 | 2.888 |
| 29.5 | $F_t$ 12.80 | | 32.1 | | 34.3 | 34.1 | 11.2 | 213 | 0.1299 | 3.419 |
| 29.8 | | | 31.8 | | 34.0 | 33.8 | 11.2 | 213 | 0.1301 | 3.422 |
| 29.8 | | | 31.7 | | 33.9 | 33.7 | 11.2 | 212 | 0.1293 | 3.411 |
| . | | | | | | | | | | |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . ____ BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 6-2 DATE: 4 Nov 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_rd/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 24.7 | 10.20 | 300 | 30.4 | 294 | 32.5 | 32.0 | 6.9 | 209 | 0.0801 | 2.685 |
| 24.6 | | | 30.6 | | 32.7 | 32.2 | 7.0 | 210 | 0.0805 | 2.691 |
| 23.6 | | | 31.4 | | 33.6 | 33.0 | 6.7 | 206 | 0.0778 | 2.645 |
| 24.8 | 13.60 | | 39.7 | | 42.5 | 42.1 | 12.1 | 208 | 0.1399 | 3.548 |
| 24.7 | | | 39.8 | | 42.6 | 42.2 | 12.1 | 207 | 0.1394 | 3.542 |
| 24.3 | | | 40.3 | | 43.1 | 42.7 | 12.0 | 206 | 0.1383 | 3.527 |
| 24.8 | 11-1/3 | | 33.0 | | 35.3 | 34.8 | 8.3 | 206 | 0.0958 | 2.936 |
| 24.8 | | | 33.0 | | 35.3 | 34.8 | 8.3 | 206 | 0.0958 | 2.936 |
| 24.7 | | | 33.1 | | 35.4 | 34.9 | 8.3 | 206 | 0.0956 | 2.933 |
| 24.8 | 11.05 | | 31.8 | | 34.0 | 33.5 | 7.7 | 204 | 0.0888 | 2.828 |
| 24.8 | | | 31.8 | | 34.0 | 33.5 | 7.7 | 204 | 0.0888 | 2.828 |
| 24.8 | | | 31.8 | | 34.0 | 33.5 | 7.7 | 204 | 0.0888 | 2.828 |
| 24.8 | $F_t$ 12.80 | | 38.0 | | 40.7 | 40.2 | 11.0 | 211 | 0.1278 | 3.392 |
| 24.8 | | | 38.0 | | 40.7 | 40.2 | 11.0 | 211 | 0.1278 | 3.392 |
| 24.6 | | | 38.3 | | 41.0 | 40.5 | 11.0 | 211 | 0.1277 | 3.390 |
| . | | | | | | | | | | |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 6-3 DATE: 4 Nov 78

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_g$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 19.4 | 10.20 | 300 | 38.0 | 294 | 40.7 | 39.5 | 6.5 | 203 | 0.0756 | 2.608 |
| 19.6 | | | 37.3 | | 39.9 | 38.8 | 6.4 | 202 | 0.0744 | 2.588 |
| 19.5 | | | 37.5 | | 40.1 | 39.0 | 6.4 | 202 | 0.0744 | 2.588 |
| 19.5 | 13.60 | | 49.9 | | 53.4 | 52.5 | 11.7 | 204 | 0.1350 | 3.485 |
| 19.5 | | | 49.0 | | 52.4 | 51.6 | 11.2 | 200 | 0.1301 | 3.422 |
| 19.5 | | | 49.2 | | 52.6 | 51.8 | 11.3 | 201 | 0.1312 | 3.436 |
| 19.4 | 11-1/3 | | 41.8 | | 44.7 | 43.7 | 8.0 | 203 | 0.0924 | 2.884 |
| 19.5 | | | 41.6 | | 44.5 | 43.5 | 8.0 | 203 | 0.0925 | 2.886 |
| 19.6 | | | 41.3 | | 44.2 | 43.2 | 8.0 | 202 | 0.0922 | 2.880 |
| 19.4 | 11.05 | | 40.5 | | 43.3 | 42.3 | 7.5 | 201 | 0.0866 | 2.791 |
| 19.4 | | | 39.9 | | 42.7 | 41.7 | 7.3 | 198 | 0.0840 | 2.750 |
| 19.6 | | | 39.5 | | 42.3 | 41.3 | 7.3 | 198 | 0.0841 | 2.752 |
| 19.4 | $F_t$ 12.80 | | 47.8 | | 51.1 | 50.2 | 10.5 | 206 | 0.1220 | 3.314 |
| 19.4 | | | 46.7 | | 50.0 | 49.1 | 10.1 | 201 | 0.1165 | 3.238 |
| 19.3 | | | 46.1 | | 49.3 | 48.4 | 9.7 | 198 | 0.1123 | 3.179 |
| . | | | | | | | | | | |
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DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ . BENCHMARK ____ ROUTINE X

OMEGA STATION: JAPAN SITE NUMBER: 6-4 DATE: 4 Nov 1978

Distance: ____ . ____ km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 1.00 (Loop Factor) $K_3$ = 1.07 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_q$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| 15.3 | 10.20 | 300 | 48.8 | 294 | 52.2 | 49.9 | 6.5 | 203 | 0.0750 | 2.598 |
| 15.3 | | | 49.0 | | 52.4 | 50.1 | 6.5 | 204 | 0.0756 | 2.609 |
| 15.3 | | | 49.3 | | 52.8 | 50.4 | 6.6 | 205 | 0.0766 | 2.625 |
| 15.3 | 13.60 | | 65.1 | | 69.7 | 67.9 | 12.0 | 207 | 0.1387 | 3.533 |
| 15.4 | | | 64.9 | | 69.4 | 67.7 | 12.1 | 208 | 0.1398 | 3.546 |
| 15.4 | | | 65.3 | | 69.9 | 68.1 | 12.2 | 209 | 0.1415 | 3.568 |
| 15.3 | 11-1/3 | | 54.3 | | 58.1 | 56.0 | 8.2 | 205 | 0.0944 | 2.915 |
| 15.3 | | | 54.5 | | 58.3 | 56.2 | 8.2 | 205 | 0.0951 | 2.926 |
| 15.3 | | | 54.7 | | 58.5 | 56.4 | 8.3 | 206 | 0.0958 | 2.937 |
| 15.3 | 11.05 | | 52.7 | | 56.4 | 54.3 | 7.7 | 203 | 0.0886 | 2.824 |
| 15.4 | | | 52.0 | | 55.6 | 53.6 | 7.6 | 202 | 0.0875 | 2.806 |
| 15.5 | | | 52.6 | | 56.3 | 54.2 | 7.8 | 206 | 0.0908 | 2.858 |
| 15.3 | $F_t$ 12.80 | | 60.9 | | 65.2 | 63.3 | 10.4 | 205 | 0.1206 | 3.295 |
| 15.4 | | | 59.8 | | 64.0 | 62.2 | 10.2 | 203 | 0.1179 | 3.257 |
| 15.3 | | | 60.3 | | 64.5 | 62.7 | 10.2 | 203 | 0.1182 | 3.262 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |

DATA SHEET 6 (DS-6)

RADIO FIELD INTENSITY CALCULATIONS

HELICOPTER CAL. ____ BENCHMARK X ROUTINE ____

OMEGA STATION: JAPAN SITE NUMBER: B 1 DATE: 3 NOV 1978

Distance: 35 . 9 km., $K_1$ = 0.98 ($I_a/I_{as}$) $K_2$ = 0.99 (Loop Factor) $K_3$ = 1.00 (Vehicle Factor)
(If constant)

| Dist. (km.) | Freq. (kHz) | $I_{as}$ (A) | $E_q$ (mV) | $I_a$ (A) | $E_m$ (mV/m) | $E_r$ (mV/m) | $P_r$ (kW) | $h_e$ (m) | $R_r$ (Ohm) | $E_r d/I_a$ (Units) |
|---|---|---|---|---|---|---|---|---|---|---|
| . | 10.20 | 350 | 30.1 | 343 | 29.8 | 29.5 | 12.5 | 241 | 0.1063 | 3.093 |
| . | | | 30.2 | | 29.9 | 29.6 | 12.6 | 242 | 0.1070 | 3.103 |
| . | | | 30.3 | | 30.0 | 29.7 | 12.7 | 243 | 0.1077 | 3.113 |
| . | 13.60 | | 38.2 | | 37.8 | 37.6 | 20.3 | 231 | 0.1724 | 3.939 |
| . | | | 38.2 | | 37.8 | 37.6 | 20.3 | 231 | 0.1724 | 3.939 |
| . | | | 38.0 | | 37.6 | 37.4 | 20.1 | 229 | 0.1706 | 3.919 |
| . | 11-1/3 | | 31.9 | | 31.6 | 31.4 | 14.1 | 231 | 0.1197 | 3.283 |
| . | | | 32.1 | | 31.8 | 31.6 | 14.3 | 232 | 0.1213 | 3.303 |
| . | | | 31.6 | | 31.3 | 31.1 | 13.8 | 228 | 0.1175 | 3.252 |
| . | 11.05 | | 31.7 | | 31.4 | 31.2 | 13.9 | 235 | 0.1182 | 3.261 |
| . | | | 31.6 | | 31.3 | 31.1 | 13.8 | 234 | 0.1174 | 3.251 |
| . | | | 31.4 | | 31.1 | 30.9 | 13.6 | 233 | 0.1159 | 3.230 |
| . | $F_t$ 12.80 | | 36.4 | | 36.0 | 35.8 | 18.4 | 233 | 0.1564 | 3.752 |
| . | | | 36.6 | | 36.2 | 36.0 | 18.6 | 235 | 0.1581 | 3.772 |
| . | | | 36.7 | | 36.3 | 36.1 | 18.7 | 235 | 0.1590 | 3.782 |
| . | | | | | | | | | | |
| . | | | | | | | | | | |