

DEPARTMENT OF
TRANSPORTATION
U.S. COAST GUARD
CG-3883 (REV. 5-67)

CLASSIFICATION STAMP AS REQUIRED

U. S. COAST GUARD
RAPIDRAFT LETTER

ORIGINATOR - Use for routine correspondence not requiring action, review, or comment by officers in the chain of command. Send original and blue copy to addressee. Retain yellow copy for file.

ADDRESSEE - Reply hereon, returning original to originator. Retain blue copy for file.

DO NOT MAIL IN WINDOW ENVELOPE WHEN CLASSIFIED

COMMANDER
U. S. COAST GUARD SECTION
BOX E, USNS
FPO SAN FRANCISCO 96652

(One box must be checked)

- ☒ AIR MAIL
☐ REGULAR MAIL
☐ CERTIFIED MAIL
☐ SPECIAL DELIVERY
☐ REGISTERED MAIL

STAFF SYMBOL AND FILE NO.

eee
10550/PHILSEC

DATE

12 April 1971

PREPARE BY HAND
OR TYPEWRITER

(Fold)

Subj: Loran A Engineering Rate Data

Forwarded for your information and distribution.

M. J. Fontaine
M. J. FONTAINE
By direction

Encl: (1) Rate Data Sheets for PHILSEC

Reply (if required)

SENDER'S
MAILING
ADDRESS

COMMANDER (eee)
14TH COAST GUARD DISTRICT
677 ALA MOANA
HONOLULU, HAWAII 96813

DOWNGRADING DECLASSIFICATION STAMP AS REQUIRED

CLASSIFICATION STAMP AS REQUIRED

PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 1L6

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	NAVLO PT	15 42 22.010N	-119 53 45.350E
SLAVE	TALAMPULAN	12 7 54.690N	-119 50 31.420E
MONITOR	TARUMPITAO	9 2 57.500N	-117 37 44.300E

CLARK 1866 SPHERIOD
VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	180 51 0.419
	SLAVE TO MASTER	0 50 13.746
	MASTER TO MONITOR	198 45 55.296
	MONITOR TO MASTER	18 16 42.744
	SLAVE TO MONITOR	215 35 54.209
	MONITOR TO SLAVE	35 11 29.225

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	312.0 FEET AT 115.00 DEGREES TRUE
SLAVE	310.0 FEET AT 210.00 DEGREES TRUE
MONITOR	660.0 FEET AT 88.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	1319.7808	213.54 N. MILES
MASTER TO MONITOR (TA')	2591.3440	419.28 N. MILES
SLAVE TO MONITOR (TB')	1395.6120	225.81 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.44711
AT SLAVE (GAFS)	0.03996

MONITOR CORRECTION FACTOR

FROM MASTER	-0.23263
FROM SLAVE	-0.40573

CODING DELAY (CD)	1000.0000
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2B + CD	3639.5617
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MASTER BASELINE EXTENSION TIME DELAY (2B + CD')	3639.5218
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MASTER TIME DELAY (2B + CD' - GAFM)	3639.0747
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SLAVE BASELINE EXTENSION TIME DELAY (CD')	999.9600
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MONITOR TIME DELAY (B + CD' - TA + TB)	1123.8357
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PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 1L7

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	TARUMPITAO	9 2 57.500N	-117 37 44.300E
SLAVE	TALAMPULAN	12 7 54.690N	-119 50 31.420E
MONITOR	NAVLO PT	15 42 22.010N	-119 53 45.350E

CLARK 1866 SPHERIOD
VELOCITY OF PROPAGATION = 299.686000

BEARINGS		
MASTER TO SLAVE	35 11 29.225	
SLAVE TO MASTER	215 35 54.209	
MASTER TO MONITOR	18 16 42.744	
MONITOR TO MASTER	198 45 55.296	
SLAVE TO MONITOR	0 50 13.746	
MONITOR TO SLAVE	180 51 0.419	

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	660.0 FEET AT 88.00 DEGREES TRUE
SLAVE	310.0 FEET AT 210.00 DEGREES TRUE
MONITOR	312.0 FEET AT 115.00 DEGREES TRUE

BASELINE LENGTHS (CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	1395.6120	225.81 N. MILES
MASTER TO MONITOR (TA')	2591.3440	419.28 N. MILES
SLAVE TO MONITOR (TB')	1319.7808	213.54 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	1.07695
AT SLAVE (GAFS)	0.62903

MONITOR CORRECTION FACTOR

FROM MASTER	-0.03445
FROM SLAVE	-0.12981

CODING DELAY (CD)	1000.0000
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2B + CD	3791.2240
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MASTER BASELINE EXTENSION TIME DELAY (2B + CD')	3790.5950
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MASTER TIME DELAY (2B + CD' - GAFM)	3789.5180
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SLAVE BASELINE EXTENSION TIME DELAY (CD')	999.3709
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MONITOR TIME DELAY (B + CD' - TA + TB)	1123.3244
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PROGRAM EEE09

ENGINEERING RATE DATA

2 NOV 1970

RATE 2H3

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	CATANDUANES	13 58 35.310N	-124 18 52.730E
SLAVE	BATAAN	20 22 15.480N	-121 58 10.810E
MONITOR	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

ARINGS	MASTER TO SLAVE	340 54 59.303
	SLAVE TO MASTER	160 13 22.436
	MASTER TO MONITOR	5 28 32.093
	MONITOR TO MASTER	185 50 56.052
	SLAVE TO MONITOR	35 48 30.323
	MONITOR TO SLAVE	217 8 20.804

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	545.0 FEET AT 182.00 DEGREES TRUE
SLAVE	935.0 FEET AT 177.00 DEGREES TRUE
MONITOR	596.0 FEET AT 41.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	2504.0008	405.14 N. MILES
MASTER TO MONITOR (TA')	3991.6002	645.84 N. MILES
SLAVE TO MONITOR (TB')	2002.1668	323.95 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.03710
AT SLAVE (GAFS)	1.86130

MONITOR CORRECTION FACTOR

FROM MASTER	0.49559
FROM SLAVE	0.60475

CODING DELAY (CD) 1000.0000

2B + CD 6008.0016

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 6006.1403

MASTER TIME DELAY (2B + CD' - GAFM) 6006.1032

SLAVE BASELINE EXTENSION TIME DELAY (CD') 998.1387

MONITOR TIME DELAY (B + CD' - TA + TB) 1512.8153

2 NOV 1970

RATE 2H4

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E
SLAVE	BATAAN	20 22 15.480N	-121 58 10.810E
MONITOR	CATANDUANES	13 58 35.310N	-124 18 52.730E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	217 8 20.804
	SLAVE TO MASTER	35 48 30.323
	MASTER TO MONITOR	185 50 56.052
	MONITOR TO MASTER	5 28 32.093
	SLAVE TO MONITOR	160 13 22.436
	MONITOR TO SLAVE	340 54 59.303

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	596.0 FEET AT 41.00 DEGREES TRUE
SLAVE	935.0 FEET AT 177.00 DEGREES TRUE
MONITOR	545.0 FEET AT 182.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	2002.1668	323.95 N. MILES
MASTER TO MONITOR (TA')	3991.6002	645.84 N. MILES
SLAVE TO MONITOR (TB')	2504.0008	405.14 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.00137
AT SLAVE (GAFS)	0.20991

MONITOR CORRECTION FACTOR

FROM MASTER	0.55324
FROM SLAVE	0.51715

CODING DELAY (CD) 1000.0000

2B + CD 5004.3336

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 5004.1237

MASTER TIME DELAY (2B + CD' - GAFM) 5004.1223

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.7900

MONITOR TIME DELAY (B + CD' - TA + TB) 1514.3214

PROGRAM FEED9

ENGINEERING RATE DATA

2 NOV 1970

RATE 2H5

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	MIYAKO JIMA	24 43 44.17N	-125 26 10.320E
SLAVE	GESASHI	26 36 16.910N	-128 9 5.310E
MONITOR	BATAAN	20 22 15.480N	-121 58 10.810E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	SLAVE TO MASTER	MASTER TO MONITOR	MONITOR TO MASTER	SLAVE TO MONITOR	MONITOR TO SLAVE
	52 6 3.341	233 16 38.469	217 8 20.804	35 48 30.323	223 43 26.974	41 15 16.866

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	596.0 FEET AT 41.00 DEGREES TRUE
SLAVE	930.0 FEET AT 11.00 DEGREES TRUE
MONITOR	935.0 FEET AT 177.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	1143.8737	185.08 N. MILES
MASTER TO MONITOR (TA')	2002.1668	323.95 N. MILES
SLAVE TO MONITOR (TB')	3121.2120	505.01 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	1.20091
AT SLAVE (GAFS)	0.24600

MONITOR CORRECTION FACTOR

FROM MASTER	0.74097
FROM SLAVE	0.68106

CODING DELAY (CD) 1000.0000

2B + CD 3287.7474

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 3287.5014

MASTER TIME DELAY (2B + CD' - GAFM) 3286.3005

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.7539

MONITOR TIME DELAY (B + CD' - TA + TB) 3262.6130

PROGRAM EEE09

ENGINEERING RATE DATA

2 NOV 1970

RATE 2H3

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	CATANDUAES	13 58 35.310N	-124 18 52.730E
SLAVE	BATAAN	20 22 15.480N	-121 58 10.810E
MONITOR	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	340 54 59.303
	SLAVE TO MASTER	160 13 22.446
	MASTER TO MONITOR	5 28 32.093
	MONITOR TO MASTER	185 50 56.052
	SLAVE TO MONITOR	35 48 30.323
	MONITOR TO SLAVE	217 8 20.804

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	545.0 FEET AT 182.00 DEGREES TRUE
SLAVE	935.0 FEET AT 177.00 DEGREES TRUE
MONITOR	596.0 FEET AT 41.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	2504.0008	405.14 N. MILES
MASTER TO MONITOR (TA')	3991.6002	645.84 N. MILES
SLAVE TO MONITOR (TB')	2002.1668	323.95 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.03710
AT SLAVE (GAFS)	1.86130

MONITOR CORRECTION FACTOR

FROM MASTER	0.49559
FROM SLAVE	0.60475

CODING DELAY (CD) 1000.0000

2B + CD 6008.0016

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 6006.1403

MASTER TIME DELAY (2B + CD' - GAFM) 5006.1032

SLAVE BASELINE EXTENSION TIME DELAY (CD') 998.1387

MONITOR TIME DELAY (B + CD' - TA + TB) 1512.8153

PROGRAM FEE09

ENGINEERING RATE DATA

2 NOV 1970

RATE 2H4

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E
SLAVE	BATAAN	20 22 15.480N	-121 58 10.810E
MONITOR	CATANDUANES	13 58 35.310N	-124 18 52.730E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	217 8 20.804
	SLAVE TO MASTER	35 48 30.320
	MASTER TO MONITOR	185 50 56.052
	MONITOR TO MASTER	5 28 32.093
	SLAVE TO MONITOR	160 13 22.436
	MONITOR TO SLAVE	340 54 59.303

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	596.0 FEET AT 41.00 DEGREES TRUE
SLAVE	935.0 FEET AT 177.00 DEGREES TRUE
MONITOR	545.0 FEET AT 182.00 DEGREES TRUE

BASELINE LENGTHS (CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	2002.1668	323.95 N. MILES
MASTER TO MONITOR (TA')	3991.5002	645.84 N. MILES
SLAVE TO MONITOR (TB')	2504.0008	405.14 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.00137
AT SLAVE (GAFS)	0.20991

MONITOR CORRECTION FACTOR

FROM MASTER	0.5324
FROM SLAVE	0.51715

CODING DELAY (CD) 1000.0000

2B + CD 5004.3336

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 5004.1237

MASTER TIME DELAY (2B + CD' - GAFM) 5004.1223

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.7900

MONITOR TIME DELAY (B + CD' - TA + TB) 1514.3214

PROGRAM FEEC9

ENGINEERING RATE DATA

2 NOV 1970

RATE 2HS

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E
SLAVE	GESASHI	26 36 15.910N	-128 9 5.510E
MONITOR	BATAAN	20 22 15.480N	-121 58 10.810E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	52 6 3.3.1
	SLAVE TO MASTER	233 16 38.469
	MASTER TO MONITOR	217 8 20.804
	MONITOR TO MASTER	35 48 30.323
	SLAVE TO MONITOR	223 43 26.974
	MONITOR TO SLAVE	41 15 16.836

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	596.0 FEET AT 41.00 DEGREES TRUE
SLAVE	930.0 FEET AT 11.00 DEGREES TRUE
MONITOR	935.0 FEET AT 177.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	1143.3737	185.08 N. MILES
MASTER TO MONITOR (TA')	2002.1668	323.95 N. MILES
SLAVE TO MONITOR (TB')	3121.2120	505.01 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	1.20091
AT SLAVE (GAFS)	0.24600

MONITOR CORRECTION FACTOR

FROM MASTER	0.74097
FROM SLAVE	0.68106

CODING DELAY (CD) 1000.000

2B + CD 3287.7474

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 3287.5014

MASTER TIME DELAY (2B + CD' - GAFM) 3285.3005

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.7537

MONITOR TIME DELAY (B + CD' - TA + TB) 3262.6130

PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 2H6

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	IWO JIMA	24 48 18.800N	-141 19 37.100E
SLAVE	GESASHI	--CLASSIFIED--	
MONITOR	MIYAKO JIMA	--CLASSIFIED--	

BESSEL SPHEROID TOKYO DATUM
VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	281 23 9.174
	SLAVE TO MASTER	95 39 4.285
	MASTER TO MONITOR	273 1 52.499
	MONITOR TO MASTER	86 20 23.778
	SLAVE TO MONITOR	233 16 41.772
	MONITOR TO SLAVE	52 6 7.206

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	866.0 FEET AT 143.00 DEGREES TRUE
SLAVE	930.0 FEET AT 11.00 DEGREES TRUE
MONITOR	596.0 FEET AT 41.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	4459.4215	721.53 N. MILES
MASTER TO MONITOR (TA')	5359.2944	867.13 N. MILES
SLAVE TO MONITOR (TB')	1143.7635	185.06 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.22226
AT SLAVE (GAFS)	1.03396

MONITOR CORRECTION FACTOR

FROM MASTER	-0.42604
FROM SLAVE	-0.59478

CODING DELAY (CD)	500.0000
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2B + CD	9418.8430
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MASTER BASELINE EXTENSION TIME DELAY (2B + CD')	9417.8091
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MASTER TIME DELAY (2B + CD' - GAFM)	9417.5868
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SLAVE BASELINE EXTENSION TIME DELAY (CL')	498.9660
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MONITOR TIME DELAY (B + CD' - TA + TB)	742.6879
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PROGRAM EEE09

ENGINEERING RATE DATA

2 NOV 1970

RATE 2H3

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	CATANDUAES	13 58 35.310N	-124 18 52.730E
SLAVE	BATAAN	20 22 15.480N	-121 58 10.810E
MONITOR	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.586000

BEARINGS	MASTER TO SLAVE	340 54 59.303
	SLAVE TO MASTER	160 13 22.496
	MASTER TO MONITOR	5 28 32.093
	MONITOR TO MASTER	185 50 56.092
	SLAVE TO MONITOR	35 48 30.323
	MONITOR TO SLAVE	217 8 20.604

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	545.0 FEET AT 182.00 DEGREES TRUE
SLAVE	935.0 FEET AT 177.00 DEGREES TRUE
MONITOR	596.0 FEET AT 41.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	2504.0008	405.14 N. MILES
MASTER TO MONITOR (TA')	3991.6002	645.84 N. MILES
SLAVE TO MONITOR (TB')	2002.668	323.95 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.03710
AT SLAVE (GAFS)	1.86130

MONITOR CORRECTION FACTOR

FROM MASTER	0.49559
FROM SLAVE	0.60475

CODING DELAY (CD) 1000.0000

2B + CD 6008.0016

MASTER BASELINE EXTENSION TIME DELAY (2B + CD')

6006.1403

MASTER TIME DELAY (2B + CD' - GAFM)

6006.1032

SLAVE BASELINE EXTENSION TIME DELAY (CD')

998.1387

MONITOR TIME DELAY (B + CD' - TA + TB)

1512.8153

PROGRAM EEE09

ENGINEERING RATE DATA

2 NOV 1970

RATE 2H4

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E
SLAVE	BATAAN	20 22 15.480N	-121 58 10.810E
MONITOR	CATANDUANES	13 58 35.310N	-124 18 52.730E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

LINKS	MASTER TO SLAVE	217 8 20.804
	SLAVE TO MASTER	35 48 30.323
	MASTER TO MONITOR	185 50 56.052
	MONITOR TO MASTER	5 28 32.093
	SLAVE TO MONITOR	160 13 22.436
	MONITOR TO SLAVE	340 54 59.303

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	596.0 FEET AT 41.00 DEGREES TRUE
SLAVE	935.0 FEET AT 177.00 DEGREES TRUE
MONITOR	545.0 FEET AT 182.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	2002.1668	323.95 N. MILES
MASTER TO MONITOR (TA')	3991.6002	645.84 N. MILES
SLAVE TO MONITOR (TB')	2504.0008	405.14 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.00137
AT SLAVE (GAFS)	0.20991

MONITOR CORRECTION FACTOR

FROM MASTER	0.55324
FROM SLAVE	0.51715

CODING DELAY (CD)

1000.0000

2B + CD

5004.3336

MASTER BASELINE EXTENSION TIME DELAY (2B + CD')

5004.1237

MASTER TIME DELAY (2B + CD' - GAFM)

5004.1223

SLAVE BASELINE EXTENSION TIME DELAY (CD')

999.7900

MONITOR TIME DELAY (B + CD' - TA + TB)

1514.3214

PROGRAM: EEE09

ENGINEERING RATE DATA

2 NOV 1970

RATE 2HS

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E
SLAVE	GESASHI	26 36 16.910N	-128 9 5.310E
MONITOR	BATAAN	20 22 15.480N	-121 58 10.810E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	52 6 3.341
	SLAVE TO MASTER	233 16 38.469
	MASTER TO MONITOR	217 8 20.804
	MONITOR TO MASTER	35 48 30.323
	SLAVE TO MONITOR	223 43 26.974
	MONITOR TO SLAVE	41 15 16.866

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	596.0 FEET AT 41.00 DEGREES TRUE
SLAVE	930.0 FEET AT 11.00 DEGREES TRUE
MONITOR	935.0 FEET AT 177.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	1143.8737	185.08 N. MILES
MASTER TO MONITOR (TA')	2002.1668	323.95 N. MILES
SLAVE TO MONITOR (TB')	3121.2120	505.01 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	1.20091
AT SLAVE (GAFS)	0.24600

MONITOR CORRECTION FACTOR

FROM MASTER	0.74097
FROM SLAVE	0.68106

CODING DELAY (CD) 1000.0000

2B + CD 3287.7474

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 3287.5014

MASTER TIME DELAY (2B + CD' - GAFM) 3289.6005

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.7539

MONITOR TIME DELAY (B + CD' - TA + TB) 3262.6130

PROGRAM SEEC9

ENGINEERING RATE DATA

2 NOV 1970

RATE 2H3

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	CATANDUANES	13 58 35.310N	-124 18 52.730E
SLAVE	BATAAN	20 22 15.480N	-121 58 10.810E
MONITOR	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	340 54 59.303
	SLAVE TO MASTER	160 13 22.436
	MASTER TO MONITOR	5 28 32.093
	MONITOR TO MASTER	185 50 56.052
	SLAVE TO MONITOR	35 48 30.323
	MONITOR TO SLAVE	217 8 20.804

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	545.0 FEET AT 182.00 DEGREES TRUE
SLAVE	935.0 FEET AT 177.00 DEGREES TRUE
MONITOR	596.0 FEET AT 41.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	2504.0008	405.14 N. MILES
MASTER TO MONITOR (TA')	3991.6002	645.84 N. MILES
SLAVE TO MONITOR (TB')	2002.1668	323.95 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.03710
AT SLAVE (GAFS)	1.86130

MONITOR CORRECTION FACTOR

FROM MASTER	0.49559
FROM SLAVE	0.60475

CODING DELAY (CD)	1000.0000
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2B + CD	6008.0016
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MASTER BASELINE EXTENSION TIME DELAY (2B + CD')	6006.1403
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MASTER TIME DELAY (2B + CD' - GAFM)	6006.1032
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SLAVE BASELINE EXTENSION TIME DELAY (CD')	998.1387
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MONITOR TIME DELAY (B + CD' - TA + TB)	1512.8153
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PROGRAM EEE09

ENGINEERING RATE DATA

2 NOV 1970

RATE 2H4

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	MIYAKO JIMA	24 43 44.170N	-125 26 10.320E
SLAVE	BATAAN	20 22 15.480N	-121 58 10.810E
MONITOR	CATANDUANES	13 58 35.310N	-124 18 52.730E

FISCHER SPHEROID

VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	217 8 20.804
SLAVE TO MASTER	35 48 30.323	
MASTER TO MONITOR	185 50 56.052	
MONITOR TO MASTER	5 28 32.093	
SLAVE TO MONITOR	160 13 22.436	
MONITOR TO SLAVE	340 54 59.303	

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	596.0 FEET AT 41.00 DEGREES TRUE
SLAVE	935.0 FEET AT 177.00 DEGREES TRUE
MONITOR	545.0 FEET AT 182.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	2002.1668	323.95 N. MILES
MASTER TO MONITOR (TA')	3991.6002	645.84 N. MILES
SLAVE TO MONITOR (TB')	2504.0008	405.14 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.00137
AT SLAVE (GAFS)	0.20991

MONITOR CORRECTION FACTOR

FROM MASTER	0.55324
FROM SLAVE	0.51715

CODING DELAY (CD) 1000.0000

2B + CD 5004.3336

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 5004.1237

MASTER TIME DELAY (2B + CD' - GAFM) 5004.1223

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.7900

MONITOR TIME DELAY (B + CD' - TA + TB) 1514.3214

PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 1L6

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	NAVLO RT	15 42 22.010N	-119 53 45.350E
SLAVE	TALAMPULAN	12 7 54.690N	-119 50 31.420E
MONITOR	TARUMPITAO	9 2 57.500N	-117 37 44.300E

CLARK 1866 SPHERIOD
VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	180 51 0.419
	SLAVE TO MASTER	0 50 13.746
	MASTER TO MONITOR	198 45 55.296
	MONITOR TO MASTER	18 16 42.744
	SLAVE TO MONITOR	215 35 54.209
	MONITOR TO SLAVE	35 11 29.225

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	312.0 FEET AT 115.00 DEGREES TRUE
SLAVE	310.0 FEET AT 210.00 DEGREES TRUE
MONITOR	660.0 FEET AT 88.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	1319.7808	213.54 N. MILES
MASTER TO MONITOR (TA')	2591.3440	419.28 N. MILES
SLAVE TO MONITOR (TB')	1395.6120	225.81 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.44711
AT SLAVE (GAFS)	0.03996

MONITOR CORRECTION FACTOR

FROM MASTER	-0.23263
FROM SLAVE	-0.40573

CODING DELAY (CD) 1000.0000

2B + CD 3639.5617

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 3639.5218

MASTER TIME DELAY (2B + CD' - GAFM) 3639.0747

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.9600

MONITOR TIME DELAY (B + CD' - TA + TB) 1123.8357

PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 1L7

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	TARUMPITAO	9 2 57.500N	-117 37 44.300E
SLAVE	TALAMPULAN	12 7 54.690N	-119 50 31.420E
MONITOR	NAVLO PT	15 42 22.010N	-119 53 45.350E

CLARK 1866 SPHERIOD
VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	35 11 29.225
	SLAVE TO MASTER	215 35 54.209
	MASTER TO MONITOR	18 16 42.744
	MONITOR TO MASTER	198 45 55.296
	SLAVE TO MONITOR	0 50 13.746
	MONITOR TO SLAVE	180 51 0.419

RECEIVING ANTENNA LOCATION (FROM TRANSMITTING ANTENNA)

MASTER	660.0 FEET AT 88.00 DEGREES TRUE
SLAVE	310.0 FEET AT 210.00 DEGREES TRUE
MONITOR	312.0 FEET AT 115.00 DEGREES TRUE

BASELINE LENGTHS(CORRECTED FOR SEAWATER)

MASTER TO SLAVE (B)	1395.6120	225.81 N. MILES
MASTER TO MONITOR (TA')	2591.3440	419.28 N. MILES
SLAVE TO MONITOR (TB')	1319.7808	213.54 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	1.07695
AT SLAVE (GAFS)	0.62903

MONITOR CORRECTION FACTOR

FROM MASTER	-0.03445
FROM SLAVE	-0.12981

CODING DELAY (CD) 1000.0000

2B + CD 3791.2240

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 3790.5950

MASTER TIME DELAY (2B + CD' - GAFM) 3789.5180

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.3709

MONITOR TIME DELAY (B + CD' - TA + TB) 1123.3244

PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 1L6

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	NAVLO PT	15 42 22.010N	-119 53 45.350E
SLAVE	TALAMPULAN	12 7 54.690N	-119 50 31.420E
MONITOR	TARUMPITAO	9 2 57.500N	-117 37 44.300E

CLARK 1866 SPHERIOD
VELOCITY OF PROPAGATION = 299.686000

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GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	0.44711
AT SLAVE (GAFS)	0.03996

MONITOR CORRECTION FACTOR

FROM MASTER	-0.23263
FROM SLAVE	-0.40573

CODING DELAY (CD) 1000.0000

2B + CD 3639.5617

MASTER BASELINE EXTENSION TIME DELAY (2B + CD') 3639.5218

MASTER TIME DELAY (2B + CD' - GAFM) 3639.0747

SLAVE BASELINE EXTENSION TIME DELAY (CD') 999.9600

MONITOR TIME DELAY (B + CD' - TA + TB) 1123.8357

PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 1L7

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	TARUMPITAO	9 2 57.500N	-117 37 44.300E
SLAVE	TALAMPULAN	12 7 54.690N	-119 50 31.420E
MONITOR	NAVLO PT	15 42 22.010N	-119 53 45.350E

CLARK 1866 SPHERIOD
VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	35 11 29.225
	SLAVE TO MASTER	215 35 54.209
	MASTER TO MONITOR	18 16 42.744
	MONITOR TO MASTER	198 45 55.296
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	MONITOR TO SLAVE	180 51 0.419

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MASTER TO MONITOR (TA')	2591.3440	419.28 N. MILES
SLAVE TO MONITOR (TB')	1319.7808	213.54 N. MILES

GEOMETRIC ANTENNA FACTOR (GAF)

AT MASTER (GAFM)	1.07695
AT SLAVE (GAFS)	0.62903

MONITOR CORRECTION FACTOR

FROM MASTER	-0.03445
FROM SLAVE	-0.12981

CODING DELAY (CD) 1000.0000

2B + CD 3791.2240

MASTER BASELINE EXTENSION TIME DELAY (2B + CD')

3790.5950

MASTER TIME DELAY (2B + CD' - GAFM)

3789.5180

SLAVE BASELINE EXTENSION TIME DELAY (CD')

999.3709

MONITOR TIME DELAY (B + CD' - TA + TB)

1123.3244

PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 1L6

FUNCTION	STATION	LATITUDE	LONGITUDE
MASTER	NAVLO PT	15 42 22.010N	-119 53 45.350E
SLAVE	TALAMPULAN	12 7 54.690N	-119 50 31.420E
MONITOR	TARUMPITAO	9 2 57.500N	-117 37 44.300E

CLARK 1866 SPHERIOD
VELOCITY OF PROPAGATION = 299.686000

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AT MASTER (GAFM)	0.44711
AT SLAVE (GAFS)	0.03996

MONITOR CORRECTION FACTOR

FROM MASTER	-0.23263
FROM SLAVE	-0.40573

CODING DELAY (CD)	1000.0000
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2B + CD	3639.5617
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MASTER BASELINE EXTENSION TIME DELAY (2B + CD')	3639.5218
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MASTER TIME DELAY (2B + CD' - GAFM)	3639.0747
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SLAVE BASELINE EXTENSION TIME DELAY (CD')	999.9600
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MONITOR TIME DELAY (B + CD' - TA + TB)	1123.8357
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PROGRAM EEE09

ENGINEERING RATE DATA

8 OCT 1970

RATE 1L7

FUNCTION	STATION	LATITUDE	LONGITUDE
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CLARK 1866 SPHERIOD
VELOCITY OF PROPAGATION = 299.686000

BEARINGS	MASTER TO SLAVE	35 11 29.225
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MONITOR CORRECTION FACTOR

FROM MASTER	-0.03445
FROM SLAVE	-0.12981

CODING DELAY (CD)	1000.0000
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2B + CD	3791.2240
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MASTER BASELINE EXTENSION TIME DELAY (2B + CD')	3790.5950
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MASTER TIME DELAY (2B + CD' - GAFM)	3789.5180
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SLAVE BASELINE EXTENSION TIME DELAY (CD')	999.3709
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MONITOR TIME DELAY (B + CD' - TA + TB)	1123.3244
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