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A Compendium of Environmental Data Collected During the Southwest Florida Shallow-Water Acoustic Sea Test

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92-02781



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ABSTRACT

During 14 through 20 June 1991, an active acoustics exercise was conducted under the auspices of the Program Executive Officer of the Air, ASW, Assault and Special Mission Programs office. This exercise was located on the continental shelf, slope and in the basin between the Florida Keys and St. Petersburg, Florida. The objective of this mission is to make noise, reverberation and transmission loss measurements using fully calibrated sources, receivers, and recording devices. This data set is intended to support the validation of candidate shallow-water transmission loss and reverberation models for use in the development of next generation airborne ASW sensor systems. To adequately interpret the exercise results and to support the modeling effort, a robust suite of supporting environmental measurements were made aboard the research vessel NADC-38, owned by the Naval Air Development Center (NADC). These measurements include a depiction of the sound speed structure, bathymetry, meteorological conditions, and navigation along 11 projector tow tracks and at 3 drifting ambient noise and 4 reverberation sites. This technical note provides a brief description of the oceanographic and geological structure in the exercise area followed by a compendium of the collected data.

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ACKNOWLEDGMENTS

The tasking support provided by Mr. Earle Benson (Program Executive Officer) of the Air, ASW, Assault and Special Mission Programs office (program element 0603254N), is greatly appreciated. The authors thank Mr. J.T. Gottwald for his technical guidance during all phases of this exercise, and the officers and crew aboard the research vessel NADC-38 for their efforts which greatly enhanced the success of this mission. Mr. Joe Soileau was instrumental in the iterative process of rectifying the NADC-38 navigation.

The mention of commercial products or the use of company names does not in any way imply endorsement by the U.S. Navy or NOARL.

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A COMPENDIUM OF ENVIRONMENTAL DATA COLLECTED DURING THE SOUTHWEST FLORIDA SHALLOW-WATER ACOUSTIC SEA TEST

I. INTRODUCTION

One of the tasks of the Program Executive Officer of the Air, ASW, Assault and Special Mission Programs office is to provide the ability to extend all airborne ASW sensor systems into strategic shallow-water areas to demonstrate its capability in a Limited Intensity Conflict (LIC) scenario. A prerequisite for attaining this capability is to provide for the development and assessment of active environmental acoustic sensor prediction models that are suitable for a shallow-water environment. A primary limiting factor in sensor performance prediction in such an environment is the inability to adequately predict reverberation levels. Two candidate reverberation models are currently being produced; one by the Naval Oceanographic and Atmospheric Research Laboratory (NOARL) and another by the Naval Ocean Systems Center (NOSC).

In order to evaluate these and other candidate models, a carefully controlled field exercise was conducted in the shallow-water continental shelf area between St. Thomas, U.S.V.I. and the Puerto Rico Trench during 16 through 18 May 1991. This exercise, conducted between Key West and St. Petersburg, Florida, is the second in this series. A primary goal of these exercises was to acquire measured acoustic data using fully calibrated sources, receivers, and recording devices. Specific technical objectives of this effort included the quantification of the transmission loss as a function of range and frequency and the reverberation and ambient noise levels as a function of time and frequency.

In order to provide an unambiguous interpretation of the acoustic measurements, a detailed, robust suite of supporting environmental measurements were made aboard the Naval Air Development Center's (NADC) ship NADC-38. These measurements include a depiction of the sound speed structure, bathymetry, meteorological conditions, and navigation along 11 projector tow tracks and at 3 drifting ambient noise and 4 reverberation sites. In addition, precise navigational data was collected, rectified, and source-to-receiver geometries were derived. This technical note provides a brief description of the oceanographic and geological structure in the exercise area followed by a compendium of the collected data.

II. EXERCISE SITE DESCRIPTIONS

IIA. GENERAL

The exercise geometry was centered around four sites on the Southwest Florida shelf, slope, and adjacent basin (figure 1). Figures 2 through 5 illustrate a plot of the navigationally rectified locations of the source towpaths at each exercise site and the approximate location of each of the drifting ambient noise measurements. At all sites the reverberation measurements were conducted within 100 yd of the nominal locations of the deployed receivers. Table 1 provides an outline of the time sequence of each exercise event. The receiver positions (one horizontal and one vertical array) for Site 1 through 3 are listed

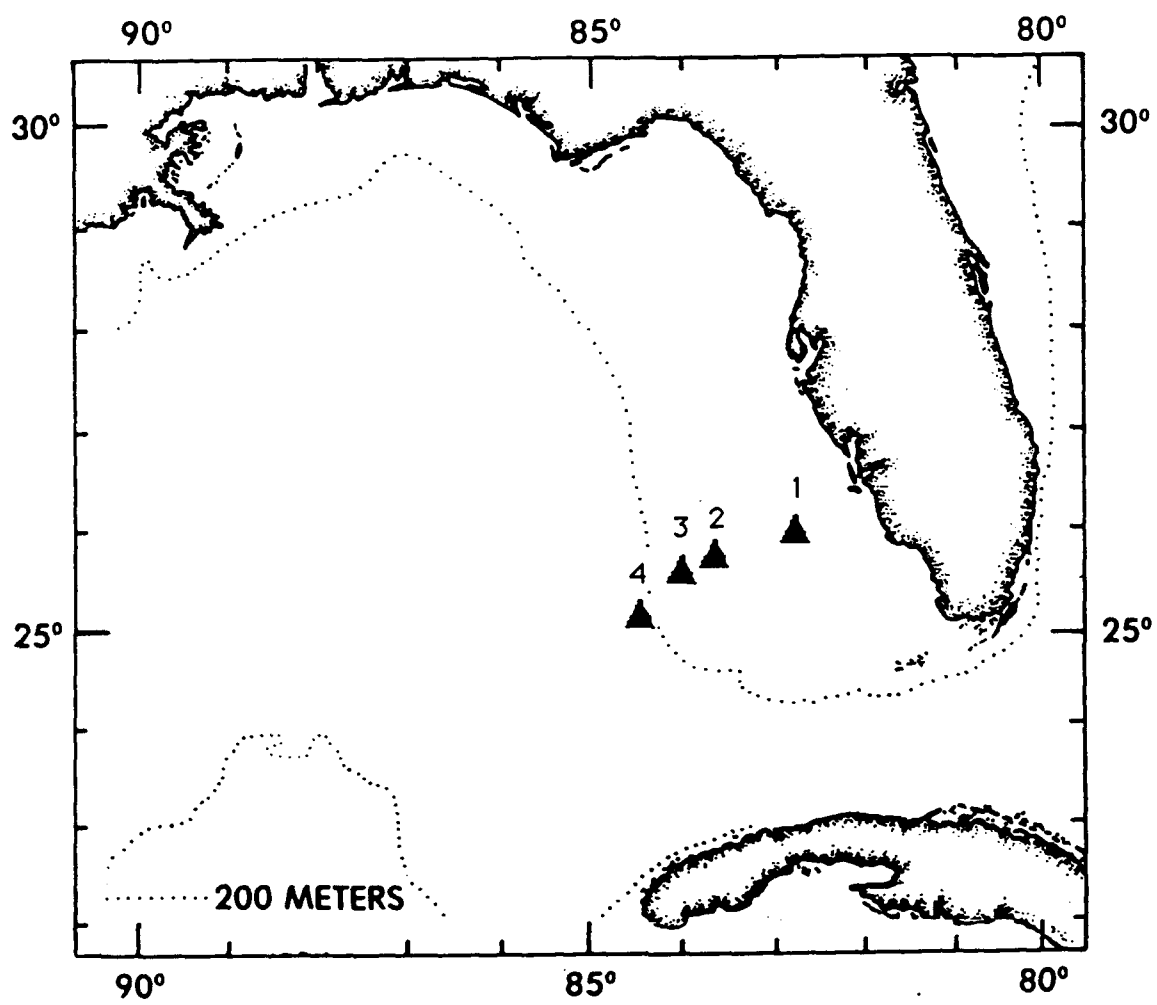


Figure 1. Location of Acoustic Data Collection Sites.

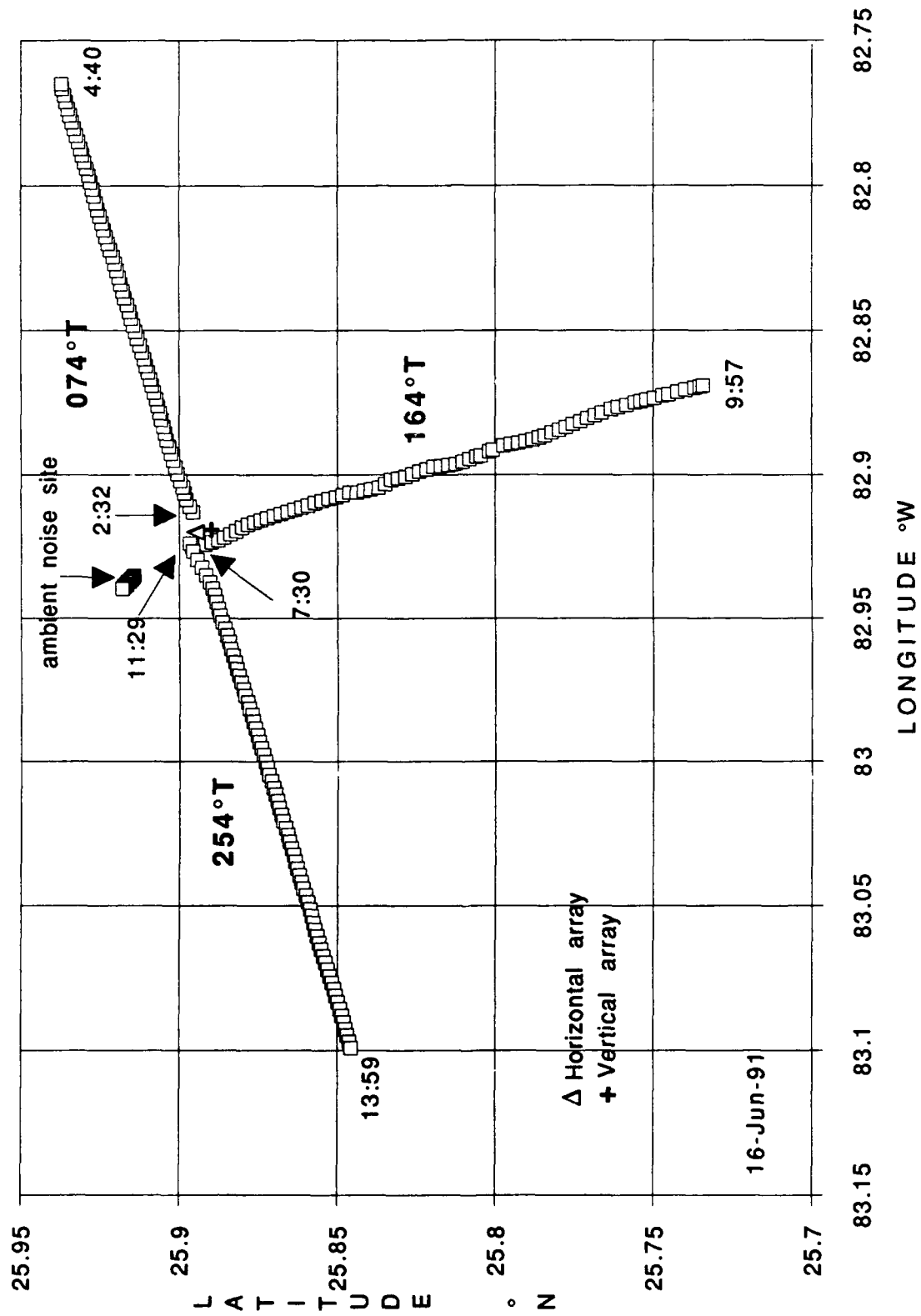


Figure 2. Acoustic Towpath Geometries and Ambient Noise Sites at Site 1.

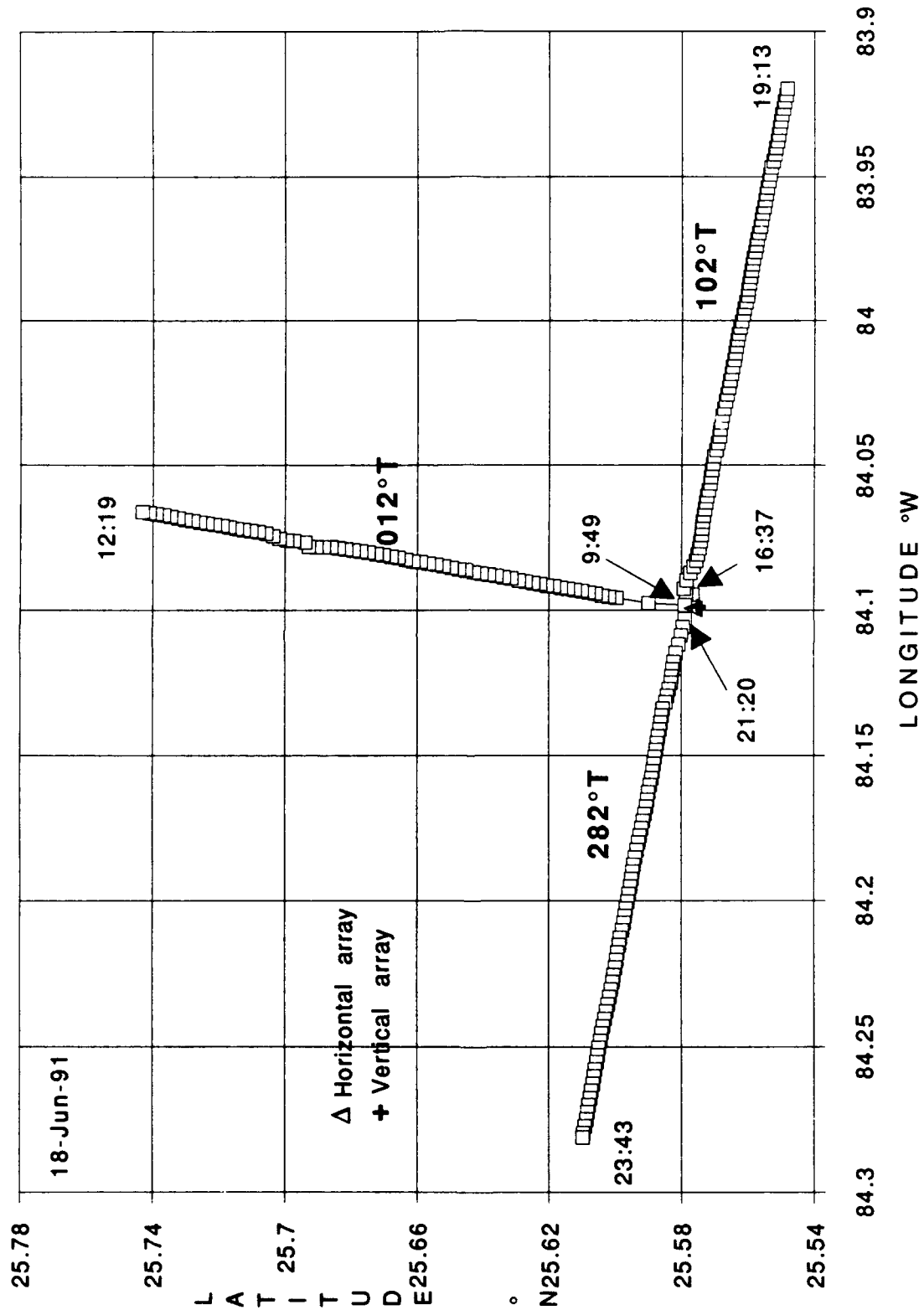


Figure 4. Acoustic Towpath Geometries and Ambient Noise Sites at Site 3.

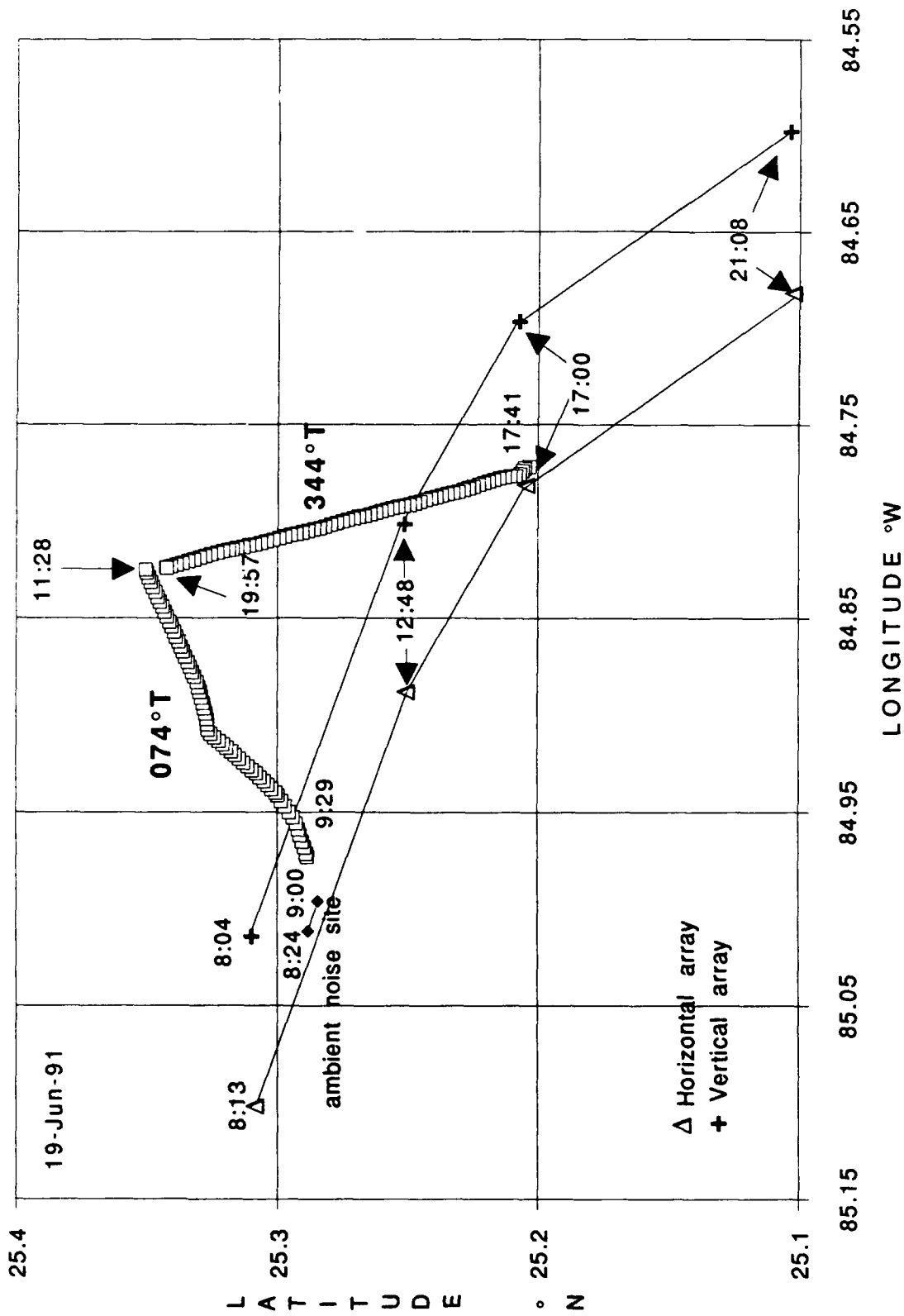


Figure 5. Acoustic Towpath Geometries and Ambient Noise Sites at Site 4.

in table 2 and were considered to be spatially stationary. Since Site 4 is located off the continental shelf and is influenced by the southeasterly flowing loop current, its position was spatially variable during the acoustic measurements. Estimated receiver positions are tabulated in appendix B.

Table 1. Time Sequence of Events

TIME (Local)	EVENT
6/15/1520-1550	Ambient noise Site 1
6/16/0100-0216	Reverberation Site 1
6/16/0232-0439	CW tow along 074°T
6/16/0725-1004	CW tow along 164°T
6/16/1129-1404	CW tow along 254°T
6/17/0016-0100	Ambient noise Site 2
6/17/0142-0238	Reverberation Site 2
6/17/0301-0700	CW tow along 000°T
6/17/1206-1441	CW tow along 270°T
6/17/1619-2222	CW tow along 090°T
6/18/0829-0934	Reverberation Site 3
6/18/0950-1225	CW tow along 012°T
6/18/1643-1915	CW tow along 102°T
6/18/2122-2344	CW tow along 282°T
6/19/0824-0900	Ambient noise Site 4
6/19/0931-1147	CW tow along 074°T
6/19/1317-1418	Reverberation Site 4
6/19/1740-1956	CW tow along 344°T

Table 2. Array positions during the Southwest Florida acoustic exercise.

SITE	ARRAY	LATITUDE	LONGITUDE
1	Horizontal	25°53.446'N	82°55.255'W
1	Vertical	25°53.667'N	82°55.301'W
2	Horizontal	25°40.873'N	83°41.602'W
2	Vertical	25°40.762'N	83°42.109'W
3	Horizontal	25°34.584'N	84°06.009'W
3	Vertical	25°34.795'N	84°06.104'W

Details concerning the array configuration, acoustic source emissions, and specific information pertinent to acoustic data collection will be the subject of later documentation.

IIB. OCEANOGRAPHIC SETTING/MEASUREMENTS

The oceanography of the Southwest Florida area can be divided into three geographic regimes: the nearshore environment, the area along the continental slope and outer shelf, and the basinal environment.

A paucity of oceanographic measurements precludes a detailed depiction of the physical processes which may precipitate significant acoustic variability, in the first two regimes. Generally, however, the nearshore environmental summer thermal structure (especially characteristic of Site 1) is highly stratified below a shallow wind-mixed layer. Since only small amounts of river runoff are

present in this area, no large variability is expected in either the temperature or salinity signatures. Generally in shelf environments, wind stress mechanisms assume a major role in causing oceanographic variability. Hence, very low winds and accompanying zero sea states were probably a major contributor to the benign conditions observed over the duration of the exercise. Tides on the shelf have a mean range of 0.3 m with maximum currents of 10 cm/second (Koblinsky and Niiler, 1980). The resulting advection of about 1 km indicates that tidal net transport is important only within a few kilometers of the coastline.

The oceanographic variability along the outer continental shelf and the slope is potentially considerably greater (NECE, Inc., 1982). In this area, which includes Site 2 and especially Site 3, the interaction of the shelf water and the Loop Current creates complex eddies and frontal systems. The most prominent of these eddies are those of the Loop Current intrusions onto the shelf. Satellite imagery indicates that the interface of these dissimilar water masses at the surface is often characterized by a series of alternating cold shelf and warm Loop Current intrusions exhibiting a southwest orientation relative to the seafloor topography of the slope. Loop Current intrusions generally have length and time scales of 200 km and 15 days, respectively. In addition, there are indications that barotropic waves propagate onto the shelf to as shallow as the 40-m isobath (Kroll and Niiler, 1976). Conjectures have been made that a series of Loop Current derived northward propagating cyclonic and anticyclonic eddy fields along the 150-m isobath are present in this area. The present historical sound speed databases do not allow the quantification of these proposed outer shelf/slope mechanisms. During the exercise, the environment at Site 3 was benign. No Loop Current or any other dynamic processes were present to precipitate meaningful acoustic variability in the sound speed field.

The basin area adjacent to the Southwest Florida shelf, the location of Site 4, is frequently influenced by the Loop Current. Figure 6 (after Brooks, 1986) shows the mean position of this relatively high salinity water mass (greater than 36.3 psu), that enters the Gulf of Mexico through the Yucatan Channel. Once in the Gulf of Mexico, this current extends northerly and easterly in a wide loop before exiting the Gulf via the Florida Strait. Temporally, this well documented feature grows in width and northerly extent and alternately shrinks as a result of shedded eddies that migrate toward the western Gulf. As evidenced by the sound speed structure and the nonstationarity of the acoustic receiving arrays, Site 4 was clearly affected by the Loop Current. Over the 18 hours during which the arrays were implanted, they drifted in a generally southeastward direction at an average rate of 94 cm/sec (1.8 kt). The sound speed variability resulting from the Loop Current influence was limited to a somewhat uniform increase in sound speed values in the upper water column with evidence of no significant gradient changes.

Both Conductivity-Temperature-Depth (CTD) and Expendable Bathythermograph (XBT) measurements were made to quantify the oceanographic variability during the exercise. CTD data was taken with an Ocean Sensors model 100 probe. This device is preprogrammable using a host computer for type of data desired (in raw counts or engineering units),

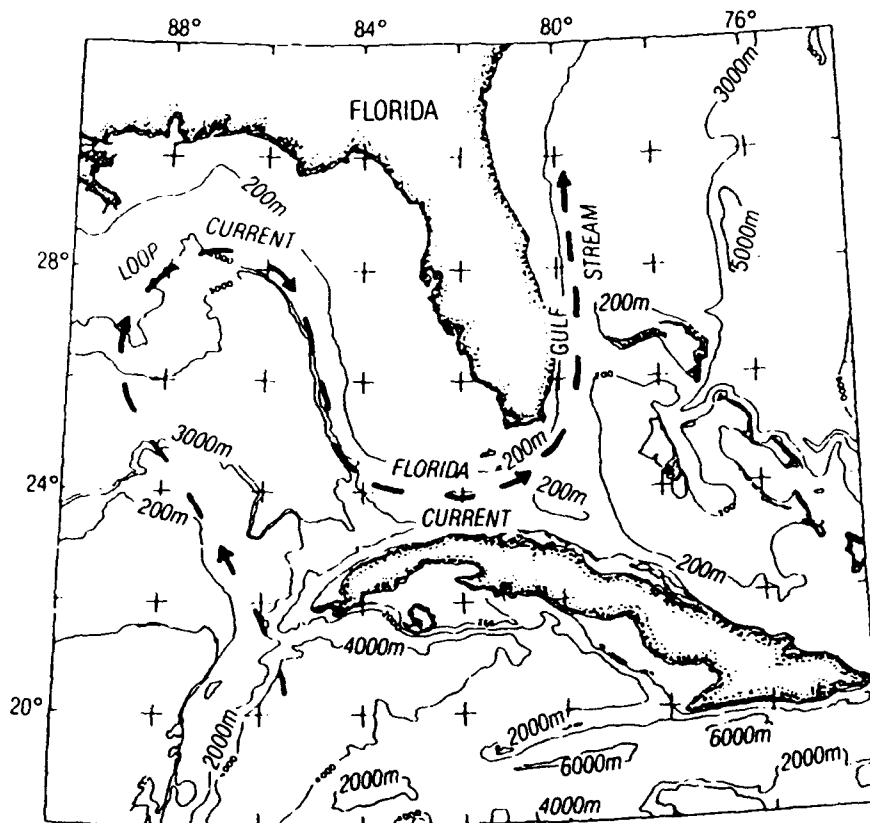


Figure 6. General Circulation Pattern in the Eastern Gulf of Mexico and the Strait of Florida (from Brooks, 1986).

sampling strategy (time series, vertical cast, sampling commencement triggered on depth, time, salinity, etc.), and data collection frequency. Sensor outputs are stored in internal RAM and uploaded to the host computer (in this case, a Macintosh SE 30) upon retrieval. After the exercise, the probe was recalibrated and the data was postprocessed to account for sensor drift. The specifications of this unit are shown in table 3.

Table 3. Ocean Sensors Model OS100 CTD Specifications

<i>Conductivity</i>
Measurement Range: 0.1 to 70 mS/cm
Accuracy: ± 0.1 mS/cm
<i>Temperature</i>
Measurement Range: -2.0 to +30°C
Accuracy: ± 0.01 °C
<i>Depth</i>
Measurement Range: 0 to 1000 m
Accuracy: ± 0.5 m
<i>Salinity</i>
Computed using Unesco 1978 equation
Measurement Range: 0 to 40 psu
Accuracy: ± 0.03 psu

XBT data was collected using Sippican Model T-10 probes that measure temperature to a depth of 200 m. Specifications are presented in table 4.

Table 4. T-10 Expendable Bathythermograph Specifications.

Depth Resolution: 60 cm
System Accuracy: 0.2 °C
Resolution: 0.1°C
Range: -2.0 - 38°C

The data from this probe was processed using a Sippican MK-IX data acquisition system and stored on a Macintosh SE-30 personal computer. This data was postprocessed using the most temporal and spatially suitable CTD salinity values entered into Wilson's (1960) sound equation to produce sound speed vs. depth profiles. Three CTD lowerings and 11 XBT probes were collected during the exercise. Table 5 contains a tabulation of those oceanographic measurements that were used to characterize the sites and acoustic propagation paths. Tabulations and plots of the data listed in table 5 are contained in appendix A.

Table 5. Oceanographic Measurements Pertinent to the Acoustic Propagation Paths.

Consec. Number	Date /time (June 91)/ (Local)	Position (N Lat/ W long)	Corrected Water Depth (m)	Location
CTD 1.2	15 /0517	25°53.96',82°55.78'	47	At Site 1
XBT 1.4	16 /0449	25°56.21',82°45.88'	40	074°T End
XBT 1.6	16 /1006	25°43.84',82°52.06'	47	164°T End
XBT 1.8	16 /1407	25°50.74',83°05.99'	55	254°T End
CTD 2.4	16 /2206	25°40.79',83°42.05'	91	At Site 2
XBT 2.3	17 /0705	25°50.89',83°42.24'	89	000°T End
XBT 2.5	17 /1446	25°40.60',83°52.79'	123	270°T End
XBT 2.7	17 /2228	25°40.93',83°30.59'	72	090°T End
CTD 3.5	18 /0438	25°34.77',84°05.72'	147	At Site 3
XBT 3.3	18 /1233	25°44.61',84°03.96'	144	012°T End
XBT 3.5	18 /1920	25°32.88',83°55.10'	125	102°T End
XBT 3.7	18 /2355	25°36.68',84°17.12'	162	282°T End
CTD 4.6	19 /2213	25°09.11',84°39.14'	3279	Site 4 End
XBT 4.1	19 /0930	25°17.38',84°58.38'	3260	074°T Start
XBT 4.2	19 /1200	25°21.34',84°48.26'	3275	074/344°T End
XBT 4.3	19 /1629	25°11.23',84°48.87'	3281	344°T Start

IIC. GEOLOGY/GEOACOUSTIC DATA

The continental shelf bordering the west coast of Florida is part of an extensive system of carbonate banks that dominates the majority of the southeastern Gulf of Mexico and the west-central Atlantic Ocean. As illustrated in figure 7, bathymetric relief across the West Florida shelf is low, broken up by occasional reef outcrops. The continental shelf extends westward to approximately 74 m in water depth. Average slope gradient changes from approximately 0.4 to 1 m/km on the shelf to approximately 6 to 9 m/km on the continental slope. Transition from shelf to upper slope takes place through a series of steps or breaks composed of either reef material or outcrops separated by areas of gentler slope and sediment accumulation (Doyle and Holmes, 1985). Westward toward the West Florida Escarpment, the gradient gradually increases. The escarpment marks a major topographic transition, with a relief in excess of 3,050 m and slopes of more than 500 m/km (Mitchum, 1978). Surficial sediments in the study area (figure 8) range from calcareous muddy sands on the shelf and slope to calcareous turbidites and distal Mississippi fan deposits at the base of the escarpment.

Structurally, the west Florida platform is constructed of approximately 10 km of Cretaceous age to Holocene age carbonates and evaporates resting on a patchwork basement of Precambrian age to Jurassic age igneous, metamorphic, and sedimentary rocks (Holmes, 1985). At frequencies above 50 Hz, relevant acoustic energy pertinent to acoustic sensors probably does not interact with sub-bottom materials more than a few hundred meters below the sediment-water interface. Therefore, the region of principal interest for this study is the Pliocene-Holocene age (5.3 mya - present) calcareous unconsolidated to semi-consolidated deposits. The lithified upper Miocene age (~5.3 mya) and

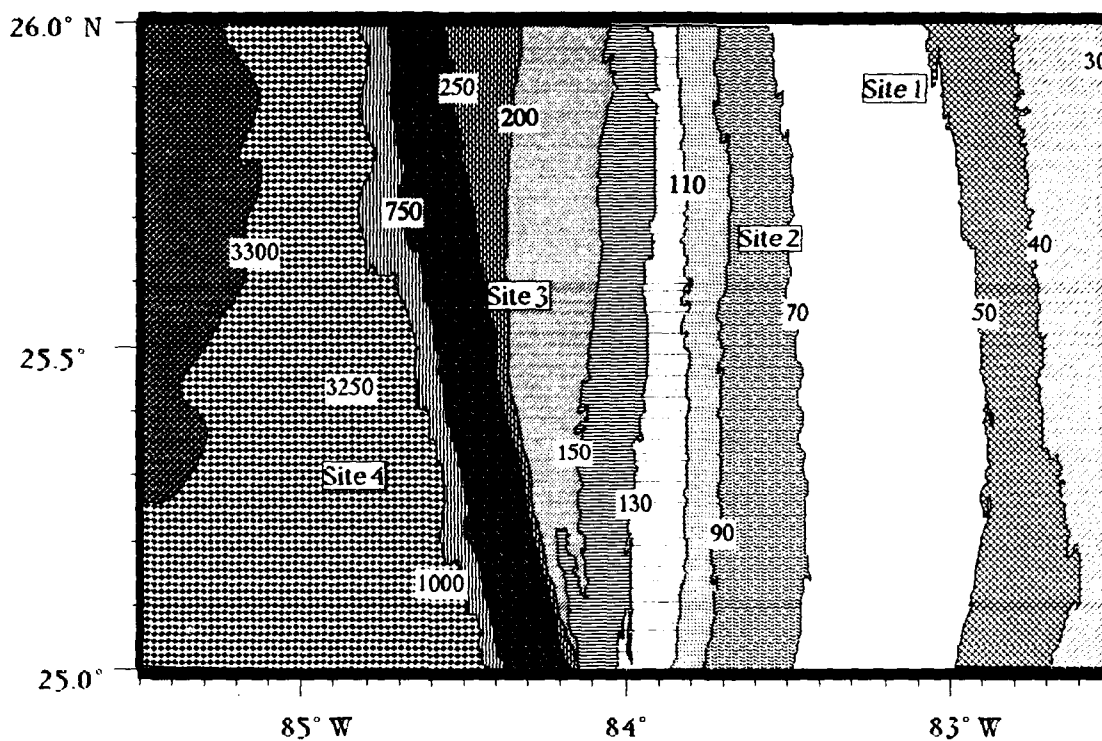


Figure 7. General bathymetry and location of test sites.

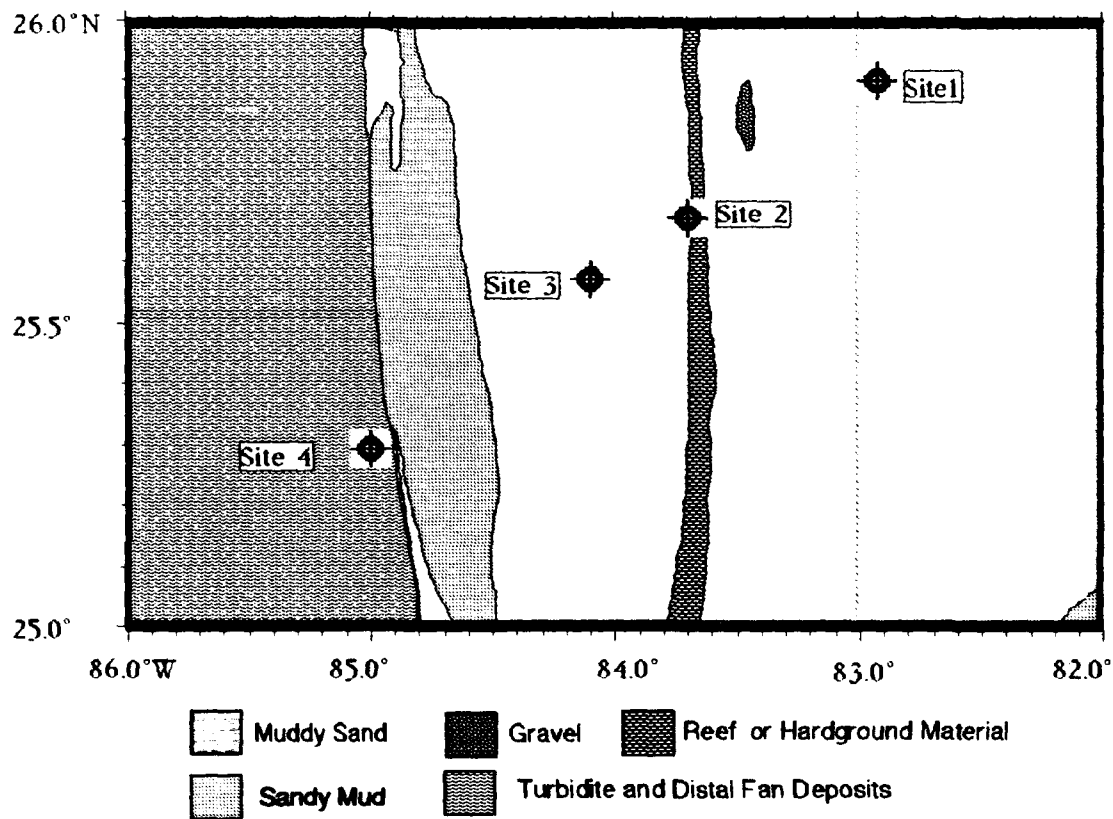


Figure 8. Surficial sediment distribution.

IID. BATHYMETRY

A AN/UQN-4 echo sounder with a 12-kHz transducer was used to collect bathymetric data. This device provides both an analog and digital readout of bathymetric sounding depths and was set to calculate two way travel time of the transducer output based on an integrated water sound speed of 1463 m/s. Depths were corrected to 1500 m/s using Matthew's tables in the Handbook of Oceanographic Tables (1966), and for vessel draft. The accuracy of the digital readout is +/- 1 digit of depth in addition to the typical system accuracy.

Figure 7 shows the relationship of the exercise sites to the regional bathymetry. Sites 1 and 2 are located on the shallow waters of the continental shelf, Site 3 is on the slope and Site 4 is at the base of the slope in the basin. An approximately 1 nmi² bathymetric site survey was taken at exercise Sites 1, 2, and 3 prior to array deployment and continuous soundings were recorded along each acoustic propagation track during the sound-source tow. Since both receiving arrays at Site 4 were free-drifting and not moored to the bottom, a bathymetric site survey was unnecessary. They were in fact moving rapidly due to the strong currents at this location. The seafloor topography at all sites and along all propagation paths were extremely invariable. Those propagation paths oriented downslope or upslope maintained a very steady slope along their entire paths. Table 9 contains a tabulation of the corrected bathymetric soundings at the beginning and the end of each radial for all four sites.

Table 9. Seafloor Depths Along the Acoustic Paths (in corrected meters).

SITE	TRACK	START DEPTH (m)	END DEPTH (m)
1	074°T	47	41
	164°T	47	47
	254°T	47	55
2	000°T	92	89
	270°T	92	122
	090°T	92	72
3	012°T	147	144
	102°T	147	125
	282°T	148	163
4	074°T	3262	3273
	344°T	3281	3271

IIIE. NAVIGATION DATA

Navigational positioning was accomplished using a Magnavox Model 4400 (MX4400) Global Positioning System (GPS) augmented with a rubidium time standard to provide fixes using only two satellite constellations. The MX 4400 is a two channel L1 C/A code GPS receiver. One channel sequences among the best set of up to four satellites forwarding data to the Kalman filter for processing. The second channel continually evaluates those satellites being used, updates the almanac and ephemeris for visible satellites, and takes initial

range measurements to newly visible satellites. Accuracy of GPS fixes is more dependent on the satellite constellation dilution of precision and signal-to-noise ratio at the time of each fix than on the type of receiver used. Under optimum conditions, the MX 4400 has a demonstrated accuracy of better than 25 m. GPS coverage during the timeframe of the exercise was nearly continuous.

GPS receiver output was logged at 2-minute intervals by HYPLOT, a commercial navigational aid package. Using HYPLOT, the courses of the acoustic propagation paths were entered into a subroutine that displays the track on a computer screen. As the vessel proceeded along the predesignated track, its position was displayed in real time thereby enabling the maintenance of a precise course. The navigational output was entered into a rectification program that calculated the speed and bearing between adjacent fixes. Very few fixes necessitated adjustment to reflect realistic courses or speeds. Occasionally, however, the HYPLOT output was incomplete and the navigation during these periods was rectified using the backup hand logged data. Rectified navigation was then entered into a program that calculated range and bearing at 2-minute intervals between the acoustic arrays and the moving source. Plots and tabulations of these source-to-receiver ranges along each acoustic propagation path are presented in appendix B.

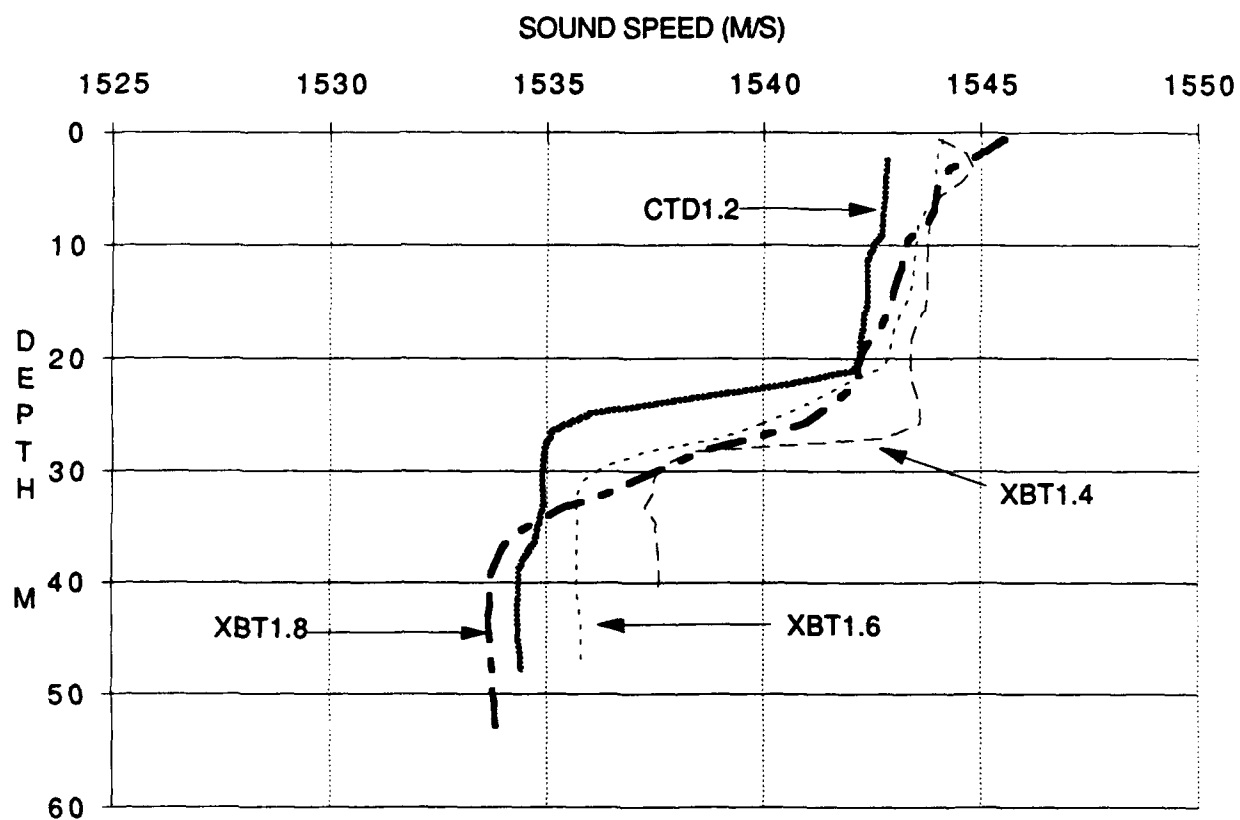
IIF. METEOROLOGY

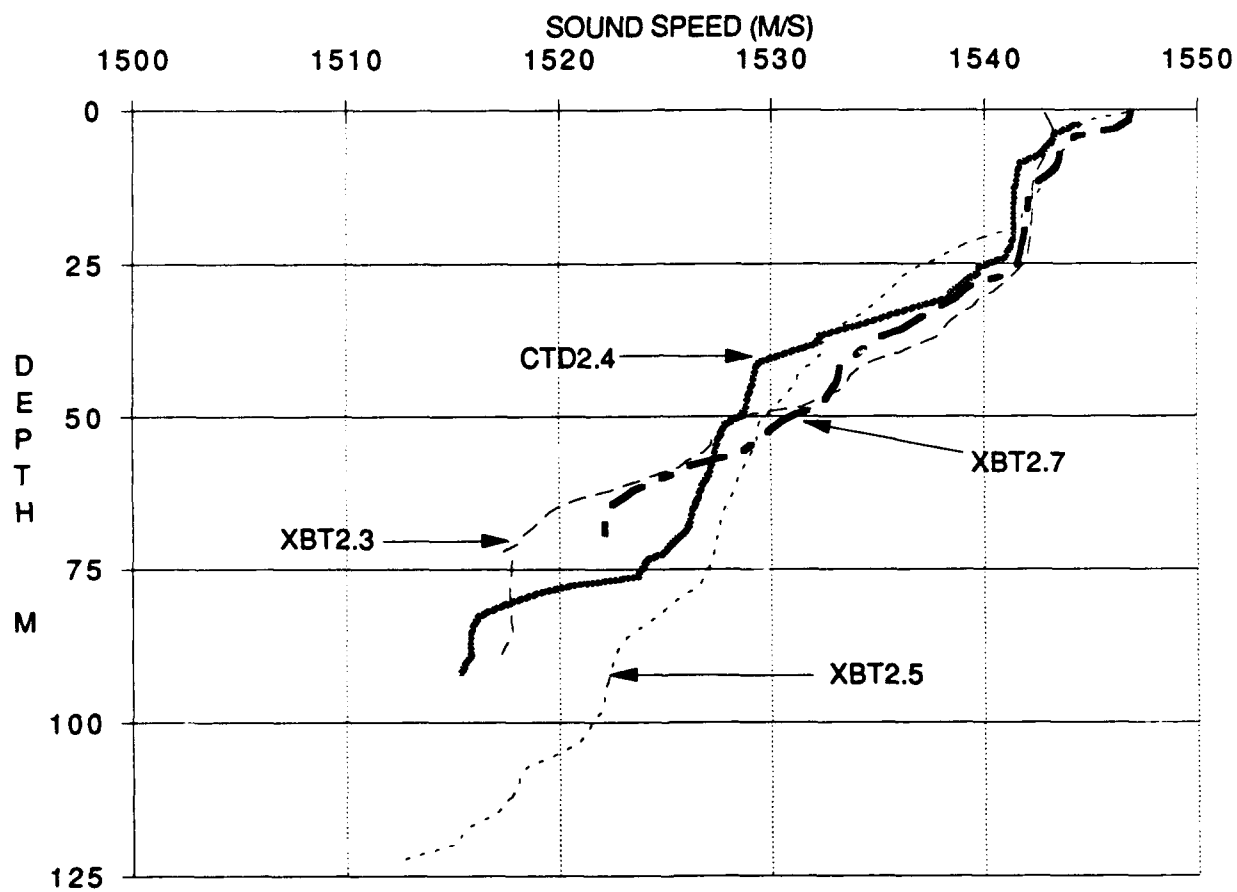
Meteorological conditions were very homogeneous throughout the acoustic measurement period. The sea surface was glassy-to-lightly rippled, reflecting a Beaufort code one. Winds ranged from calm to 5 km/hr throughout the period.

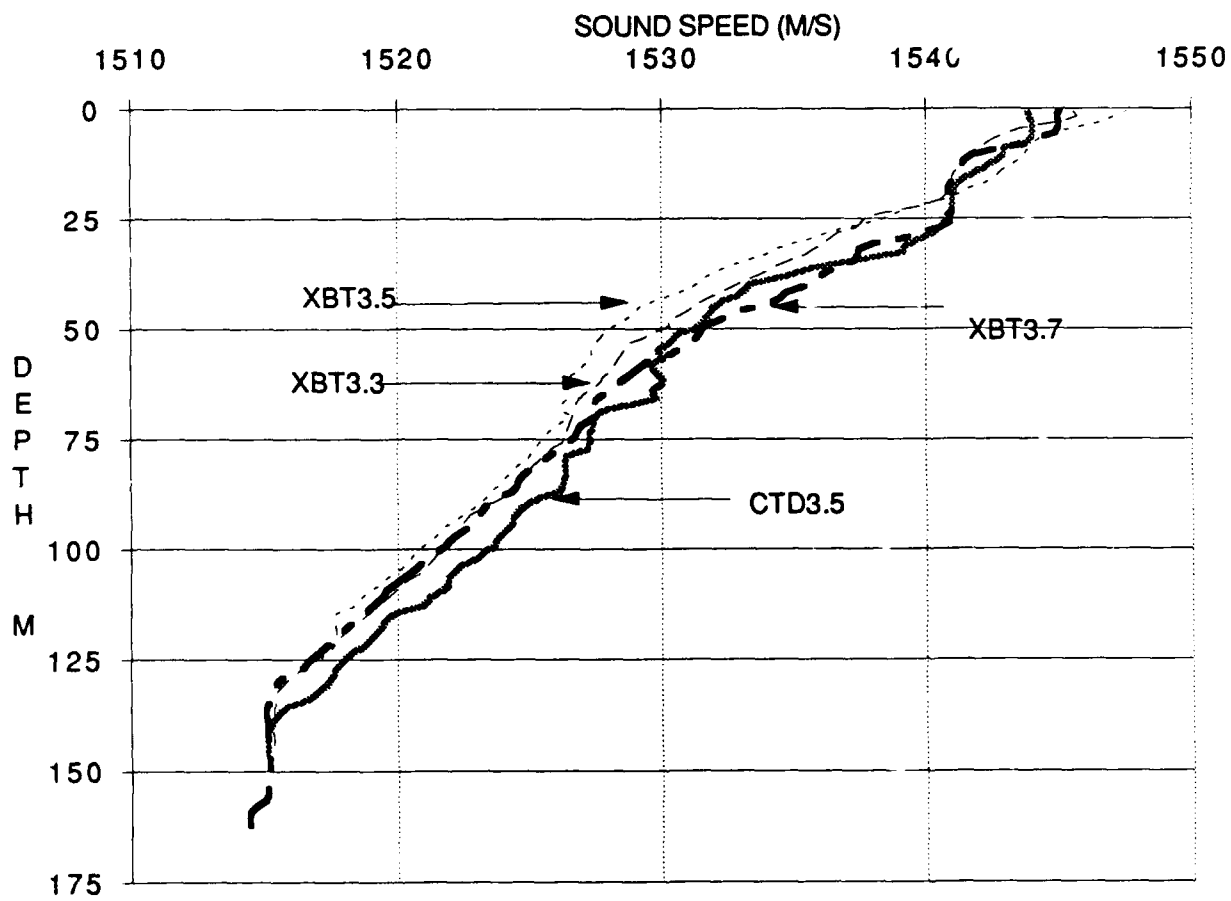
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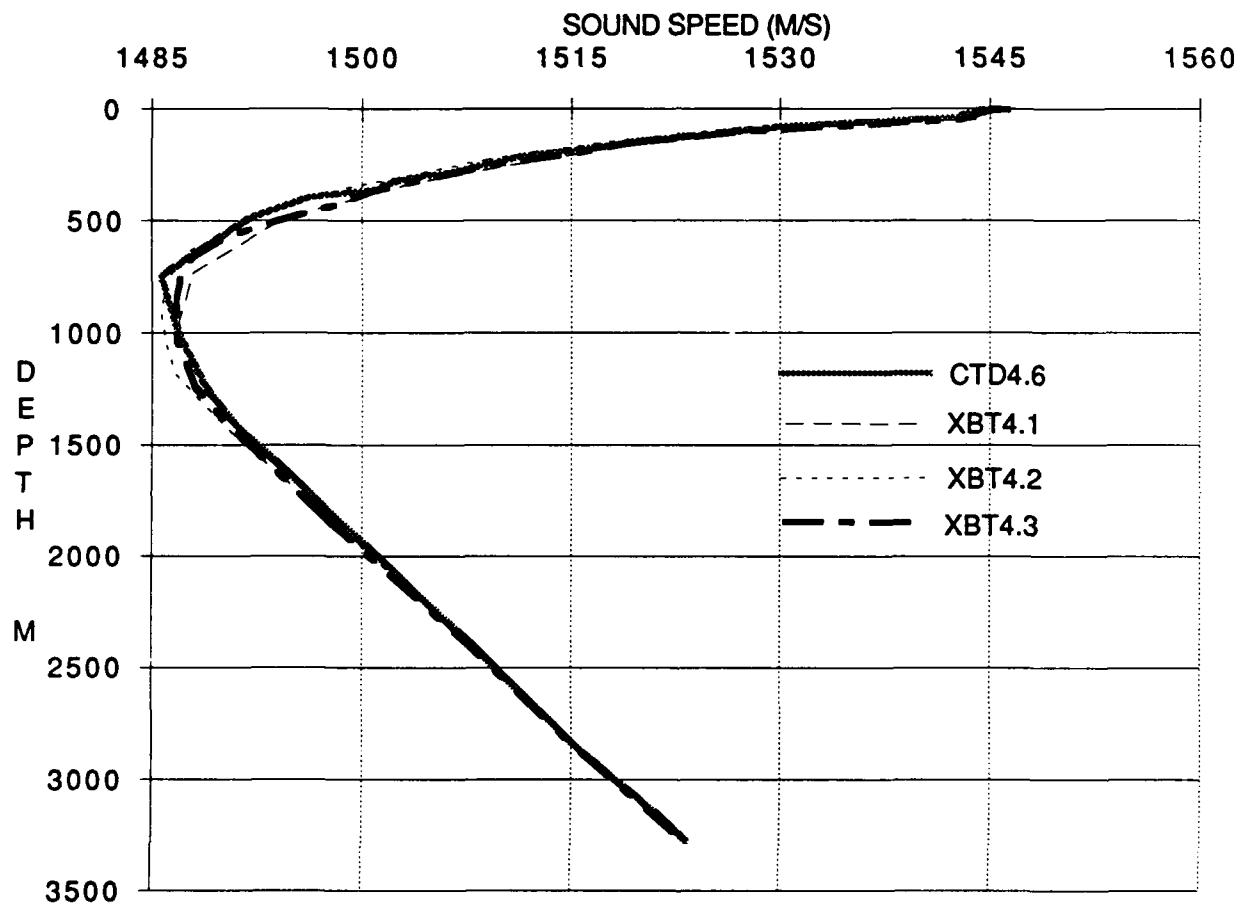
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APPENDIX A
OCEANOGRAPHIC DATA









CTD 1.2 05:17 local

6/15/91 25°53.96'N 82 55.78'W

Water Depth: 48 M, 31 points

XBT 1.4 04:49 local

6/16/91 25°56.21'N 82°45.88'N

Water Depth 40 M, 34 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
2.5	28.24	35.64	1542.86	0.6	28.80	35.63	1544.01
9.0	28.12	35.68	1542.74	1.9	29.10	35.63	1544.66
10.1	28.02	35.68	1542.55	3.2	29.16	35.65	1544.82
11.3	27.94	35.69	1542.41	4.4	29.02	35.65	1544.56
12.5	27.91	35.71	1542.40	5.7	28.77	35.66	1544.06
13.7	27.90	35.72	1542.40	6.9	28.68	35.67	1543.90
15.0	27.88	35.73	1542.39	8.2	28.63	35.67	1543.82
16.1	27.86	35.73	1542.36	9.5	28.60	35.68	1543.78
17.4	27.83	35.73	1542.32	10.7	28.58	35.69	1543.77
18.7	27.79	35.73	1542.25	12.0	28.56	35.70	1543.77
19.9	27.78	35.73	1542.24	13.2	28.54	35.72	1543.76
21.1	27.71	35.73	1542.12	14.5	28.53	35.72	1543.77
22.4	26.94	35.80	1540.53	15.7	28.50	35.73	1543.72
23.7	25.86	35.88	1538.19	17.0	28.41	35.73	1543.55
24.9	24.90	35.95	1536.05	18.3	28.34	35.73	1543.43
26.5	24.51	35.93	1535.15	19.5	28.32	35.73	1543.40
28.0	24.42	35.92	1534.95	20.8	28.31	35.73	1543.41
29.0	24.40	35.92	1534.92	22.0	28.29	35.78	1543.44
30.4	24.38	35.92	1534.90	23.3	28.29	35.85	1543.54
31.9	24.38	35.92	1534.91	24.5	28.28	35.92	1543.61
33.0	24.37	35.92	1534.92	25.8	28.26	35.94	1543.60
36.5	24.27	35.92	1534.73	27.1	27.88	35.93	1542.80
37.7	24.17	35.92	1534.51	28.3	25.91	35.92	1538.43
39.0	24.10	35.92	1534.36	29.6	25.54	35.92	1537.60
40.2	24.09	35.92	1534.35	30.8	25.48	35.92	1537.48
41.5	24.08	35.92	1534.35	32.1	25.45	35.92	1537.44
42.8	24.06	35.92	1534.32	33.3	25.45	35.74	1537.25
44.0	24.06	35.92	1534.34	34.6	25.47	35.92	1537.52
45.3	24.06	35.92	1534.36	35.9	25.47	35.92	1537.55
46.5	24.06	35.92	1534.39	37.1	25.47	35.92	1537.57
47.8	24.06	35.92	1534.41	38.4	25.47	35.92	1537.59
				39.0	25.47	35.92	1537.59
				40.2	25.47	35.92	1537.59
				40.5	25.47	35.92	1537.59

XBT 1.6 10:06 local

06/16/91 25°43.84'N 82°52.06'W

Water Depth 47 M, 37 points

XBT 1.8 14:07 local

06/16/91 25°50.74'N 83°05.99'W

Water Depth 55 M, 38 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.6	28.86	35.63	1544.13	0.6	29.54	35.63	1545.56
1.9	28.79	35.64	1544.01	1.9	29.29	35.64	1545.07
3.2	28.75	35.65	1543.96	3.2	28.91	35.65	1544.30
4.4	28.74	35.65	1543.97	4.4	28.76	35.65	1544.01
5.7	28.73	35.66	1543.97	5.7	28.73	35.66	1543.97
6.9	28.60	35.67	1543.73	6.9	28.70	35.67	1543.94
8.2	28.51	35.67	1543.56	8.2	28.60	35.67	1543.76
9.5	28.48	35.68	1543.53	9.5	28.39	35.68	1543.34
10.7	28.44	35.69	1543.47	10.7	28.32	35.69	1543.21
12.0	28.41	35.70	1543.45	12.0	28.29	35.70	1543.19
13.2	28.39	35.72	1543.44	13.2	28.22	35.72	1543.07
14.5	28.33	35.72	1543.34	14.5	28.16	35.72	1542.97
15.7	28.26	35.73	1543.21	15.7	28.13	35.73	1542.93
17.0	28.18	35.73	1543.06	17.0	28.04	35.73	1542.76
18.3	28.13	35.73	1542.97	18.3	27.91	35.73	1542.50
19.5	28.09	35.73	1542.91	19.5	27.81	35.73	1542.30
20.8	28.02	35.73	1542.79	20.8	27.75	35.73	1542.20
22.0	27.64	35.78	1542.04	22.0	27.73	35.78	1542.23
23.3	27.31	35.85	1541.41	23.3	27.51	35.85	1541.85
24.5	27.00	35.92	1540.82	24.5	27.29	35.92	1541.46
25.8	26.60	35.94	1539.97	25.8	27.05	35.94	1540.97
27.1	26.19	35.93	1539.05	27.1	26.52	35.93	1539.80
28.3	25.40	35.92	1537.26	28.3	25.96	35.92	1538.55
29.6	24.99	35.92	1536.32	29.6	25.63	35.92	1537.81
30.8	24.79	35.92	1535.87	30.8	25.31	35.92	1537.09
32.1	24.71	35.92	1535.70	32.1	25.00	35.92	1536.39
33.3	24.69	35.92	1535.68	33.3	24.57	35.92	1535.39
34.6	24.69	35.92	1535.70	34.6	24.30	35.92	1534.77
38.4	24.66	35.92	1535.69	35.9	24.06	35.92	1534.21
39.6	24.65	35.92	1535.69	37.1	23.95	35.92	1533.97
40.9	24.65	35.92	1535.71	38.4	23.88	35.92	1533.82
42.1	24.65	35.92	1535.73	39.6	23.82	35.92	1533.69
43.4	24.66	35.92	1535.77	40.9	23.80	35.92	1533.67
44.6	24.66	35.92	1535.79	43.4	23.77	35.92	1533.64
45.9	24.65	35.92	1535.79	45.9	23.79	35.92	1533.72
46.5	24.65	35.92	1535.79	50.9	23.79	35.92	1533.81
46.9	24.65	35.92	1535.79	52.2	23.78	35.92	1533.80
				54.6	23.80	35.92	1533.90

CTD 2.4 22:06 local

6/16/91 25°40.79'N 83°42.05'W , Water Depth: 92 M, 64 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
2.5	28.93	35.71	1544.40	50.1	21.79	35.73	1528.57
4.0	28.43	35.72	1543.38	51.4	21.50	35.76	1527.85
5.8	28.28	35.69	1543.06	52.7	21.42	35.78	1527.70
7.5	28.07	35.69	1542.62	53.8	21.35	35.81	1527.56
8.8	27.57	35.82	1541.70	55.1	21.28	35.83	1527.43
10.4	27.51	35.81	1541.58	56.5	21.24	35.83	1527.34
11.9	27.48	35.81	1541.54	58.0	21.18	35.83	1527.22
13.4	27.41	35.80	1541.41	59.6	21.13	35.83	1527.11
14.5	27.44	35.76	1541.44	60.9	21.02	35.82	1526.84
16.0	27.40	35.78	1541.40	62.2	20.95	35.82	1526.67
17.6	27.38	35.77	1541.39	63.6	20.90	35.83	1526.56
19.3	27.37	35.78	1541.39	65.1	20.81	35.83	1526.36
20.9	27.36	35.78	1541.40	66.6	20.75	35.84	1526.22
22.6	27.28	35.77	1541.25	67.8	20.72	35.85	1526.18
24.2	27.15	35.78	1540.99	69.1	20.62	35.85	1525.94
25.7	26.61	35.79	1539.83	70.3	20.44	35.85	1525.49
26.7	26.58	35.79	1539.77	71.5	20.32	35.85	1525.17
28.3	26.27	35.79	1539.10	72.5	20.24	35.85	1524.96
29.8	25.99	35.80	1538.51	73.5	19.97	35.83	1524.22
30.8	25.91	35.79	1538.34	74.6	19.88	35.83	1523.99
32.7	25.10	35.73	1536.41	76.4	19.78	35.83	1523.75
34.1	24.57	35.71	1535.16	77.8	18.64	35.83	1520.58
35.4	24.08	35.65	1533.94	79.1	18.08	35.83	1519.03
36.8	23.41	35.68	1532.38	80.3	17.72	35.83	1517.98
38.3	23.30	35.70	1532.14	81.6	17.38	35.83	1517.00
39.7	22.78	35.63	1530.81	82.8	17.11	35.83	1516.25
41.3	22.22	35.61	1529.38	84.1	17.01	35.83	1515.97
42.8	22.16	35.63	1529.28	85.3	16.97	35.83	1515.85
44.6	22.09	35.65	1529.15	86.5	16.95	35.83	1515.84
46.2	22.01	35.68	1528.99	87.8	16.95	35.83	1515.86
47.7	21.92	35.71	1528.84	89.0	16.95	35.83	1515.88
48.9	21.91	35.71	1528.84	92.0	16.77	35.83	1515.37

XBT 2.3 07:05 local

6/17/91 25°50.89'N 83°42.24'W, Water Depth: 89 M, 70 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.6	28.22	35.70	1542.84	47.1	23.30	35.69	1532.28
1.9	28.30	35.70	1543.04	48.4	22.95	35.71	1531.45
3.2	28.38	35.70	1543.23	49.6	22.02	35.72	1529.14
4.4	28.39	35.69	1543.26	50.9	21.71	35.75	1528.39
5.7	28.37	35.70	1543.25	52.2	21.41	35.77	1527.65
6.9	28.21	35.69	1542.92	53.4	21.24	35.80	1527.26
8.2	28.10	35.76	1542.78	54.7	21.18	35.83	1527.16
9.5	27.95	35.81	1542.53	55.9	21.03	35.83	1526.79
10.7	27.90	35.81	1542.44	57.2	20.77	35.83	1526.12
12.0	27.87	35.74	1542.32	58.4	20.59	35.83	1525.66
13.2	27.84	35.73	1542.26	59.7	20.15	35.83	1524.49
14.5	27.82	35.76	1542.28	60.9	19.81	35.82	1523.57
15.7	27.81	35.77	1542.29	62.2	19.38	35.82	1522.41
17.0	27.79	35.78	1542.27	63.4	18.89	35.83	1521.07
18.3	27.76	35.78	1542.23	64.7	18.53	35.83	1520.07
19.5	27.73	35.78	1542.19	65.9	18.31	35.84	1519.47
20.8	27.71	35.78	1542.17	67.2	18.15	35.85	1519.04
24.5	27.61	35.78	1542.01	68.4	18.03	35.85	1518.71
25.8	27.45	35.79	1541.69	69.7	17.84	35.85	1518.19
27.1	27.27	35.79	1541.32	70.9	17.77	35.85	1518.00
28.3	27.09	35.79	1540.94	72.2	17.70	35.44	1517.33
29.6	26.85	35.80	1540.44	73.4	17.68	35.83	1517.76
30.8	26.56	35.79	1539.81	74.7	17.67	35.83	1517.75
32.1	26.44	35.75	1539.51	75.9	17.66	35.83	1517.74
33.3	26.15	35.72	1538.84	77.2	17.62	35.83	1517.65
34.6	25.95	35.69	1538.37	78.4	17.62	35.83	1517.67
35.9	25.83	35.66	1538.09	79.7	17.62	35.83	1517.69
37.1	25.66	35.69	1537.74	80.9	17.61	35.83	1517.68
38.4	25.25	35.69	1536.82	82.2	17.62	35.83	1517.73
39.6	24.93	35.64	1536.03	83.4	17.61	35.83	1517.72
40.9	24.42	35.62	1534.82	84.7	17.62	35.83	1517.77
42.1	24.15	35.62	1534.19	85.9	17.62	35.83	1517.79
43.4	23.94	35.63	1533.72	86.5	17.57	35.83	1517.67
44.6	23.86	35.65	1533.56	87.8	17.49	35.83	1517.45
45.9	23.68	35.67	1533.17	89.0	17.43	35.83	1517.28

XBT 2.5 14:46 local

6/17/91 25°40.60'N 83°52.79'W , Water Depth: 123 M, 82 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.6	30.05	35.70	1546.68	62.2	21.56	35.82	1528.27
1.9	29.10	35.71	1544.74	63.4	21.48	35.83	1528.09
3.2	28.91	35.72	1544.37	64.7	21.38	35.83	1527.85
4.4	28.85	35.71	1544.27	65.9	21.32	35.84	1527.72
5.7	28.70	35.70	1543.95	73.4	21.08	35.83	1527.21
6.9	28.55	35.69	1543.65	74.7	21.02	35.83	1527.07
8.2	28.44	35.76	1543.51	75.9	20.95	35.83	1526.90
9.5	28.35	35.81	1543.39	77.2	20.87	35.83	1526.71
17.0	27.57	35.78	1541.79	78.4	20.72	35.83	1526.33
18.3	27.56	35.78	1541.79	79.7	20.48	35.83	1525.71
19.5	27.30	35.78	1541.25	80.9	20.29	35.83	1525.22
20.8	26.69	35.78	1539.92	82.2	20.15	35.83	1524.86
22.0	26.29	35.78	1539.03	83.4	19.96	35.83	1524.37
23.3	25.96	35.78	1538.30	84.7	19.74	35.83	1523.79
24.5	25.68	35.78	1537.68	85.9	19.55	35.83	1523.28
25.8	25.27	35.79	1536.77	87.2	19.43	35.83	1522.97
27.1	25.02	35.79	1536.21	88.4	19.34	35.83	1522.74
28.3	24.90	35.79	1535.94	89.7	19.27	35.83	1522.57
29.6	24.73	35.80	1535.57	93.4	19.15	35.83	1522.29
30.8	24.55	35.79	1535.16	94.7	19.10	35.83	1522.17
32.1	24.38	35.75	1534.72	95.9	19.07	35.83	1522.11
33.3	24.18	35.72	1534.23	97.2	19.05	35.83	1522.07
34.6	23.91	35.69	1533.56	98.4	18.99	35.83	1521.93
35.9	23.69	35.66	1533.02	99.6	18.89	35.83	1521.67
37.1	23.56	35.69	1532.75	100.9	18.80	35.83	1521.43
38.4	23.46	35.47	1532.29	102.1	18.72	35.83	1521.22
39.6	23.42	35.64	1532.39	103.4	18.60	35.83	1520.91
40.9	23.30	35.62	1532.09	104.6	18.34	35.83	1520.18
42.1	23.10	35.62	1531.62	105.9	18.09	35.83	1519.49
43.4	22.94	35.63	1531.26	107.1	17.74	35.83	1518.49
44.6	22.90	35.65	1531.20	108.4	17.62	35.83	1518.16
49.6	22.31	35.72	1529.88	109.6	17.59	35.83	1518.09
50.9	22.14	35.75	1529.49	110.9	17.52	35.83	1517.91
52.2	22.08	35.77	1529.39	112.1	17.45	35.83	1517.72
53.4	22.05	35.80	1529.36	113.3	17.34	35.83	1517.42
54.7	22.00	35.83	1529.29	114.6	17.22	35.83	1517.08
55.9	21.91	35.83	1529.08	115.8	17.00	35.83	1516.45
57.2	21.84	35.83	1528.93	117.1	16.75	35.83	1515.72
58.4	21.75	35.83	1528.71	118.3	16.63	35.83	1515.38
59.7	21.66	35.83	1528.50	119.6	16.58	35.83	1515.25
60.9	21.62	35.82	1528.40	122.6	15.61	35.83	1512.33

XBT 2.7 22:28 local

6/17/91 25°40.93'N 83°30.59'W, Water Depth: 72 M, 56 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.6	30.15	35.70	1546.89	35.9	24.99	35.66	1536.14
1.9	30.09	35.71	1546.79	37.1	24.56	35.69	1535.16
3.2	29.77	35.72	1546.17	38.4	24.35	35.69	1534.69
4.4	28.87	35.71	1544.31	39.6	24.15	35.64	1534.17
5.7	28.62	35.70	1543.78	40.9	23.94	35.62	1533.66
6.9	28.52	35.69	1543.58	42.1	23.77	35.62	1533.27
8.2	28.45	35.76	1543.53	43.4	23.73	35.63	1533.21
9.5	28.34	35.81	1543.37	44.6	23.67	35.65	1533.10
10.7	28.15	35.81	1542.98	45.9	23.55	35.67	1532.85
12.0	27.91	35.81	1542.48	47.1	23.43	35.69	1532.60
13.2	27.81	35.73	1542.20	48.4	23.29	35.71	1532.30
14.5	27.75	35.76	1542.12	49.6	22.87	35.72	1531.29
15.7	27.71	35.77	1542.07	50.9	22.55	35.75	1530.53
17.0	27.68	35.78	1542.03	55.9	21.75	35.83	1528.67
18.3	27.64	35.78	1541.97	57.2	21.22	35.83	1527.31
19.5	27.61	35.78	1541.93	58.4	20.70	35.83	1525.95
20.8	27.58	35.78	1541.88	59.7	20.43	35.83	1525.25
22.0	27.52	35.78	1541.77	60.9	20.13	35.82	1524.44
23.3	27.49	35.78	1541.72	62.2	19.79	35.82	1523.54
24.5	27.45	35.78	1541.66	63.4	19.60	35.83	1523.05
25.8	27.38	35.79	1541.54	64.7	19.38	35.83	1522.46
27.1	27.12	35.79	1540.99	65.9	19.29	35.84	1522.24
28.3	26.49	35.79	1539.61	67.2	19.25	35.85	1522.16
29.6	26.22	35.80	1539.03	68.4	19.24	35.85	1522.15
30.8	26.08	35.79	1538.72	69.7	19.24	35.85	1522.17
32.1	25.76	35.75	1537.96	70.9	19.25	35.85	1522.22
33.3	25.49	35.72	1537.32	71.5	19.25	35.85	1522.22
34.6	25.25	35.69	1536.75	71.7	19.25	35.85	1522.22

CTD 3.5 04:38 local

6/18/91 25°34.77'N 84°05.72'W Water Depth: 147 M, 96 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
1.0	28.75	35.57	1543.85	79.0	20.70	35.95	1526.44
2.7	28.77	35.64	1543.99	80.4	20.64	36.00	1526.35
4.1	28.78	35.64	1544.03	82.0	20.63	36.03	1526.39
5.2	28.78	35.64	1544.04	83.7	20.62	36.03	1526.38
6.5	28.75	35.63	1543.99	84.8	20.59	36.03	1526.33
7.7	28.69	35.63	1543.89	86.0	20.57	36.03	1526.28
9.2	28.23	35.65	1542.96	87.2	20.50	36.02	1526.13
10.8	28.21	35.63	1542.92	88.5	20.23	36.00	1525.39
12.8	27.97	35.61	1542.41	90.8	19.98	35.97	1524.00
14.9	27.70	35.59	1541.85	93.0	19.85	35.95	1524.38
16.7	27.42	35.60	1541.26	94.1	19.85	35.95	1524.38
18.3	27.34	35.61	1541.12	96.4	19.70	35.96	1524.02
19.5	27.29	35.62	1541.04	97.7	19.61	35.98	1523.83
21.7	27.26	35.62	1541.02	99.6	19.54	35.98	1523.65
23.0	27.24	35.62	1540.99	100.8	19.40	35.98	1523.28
24.0	27.20	35.62	1540.93	101.8	19.33	35.98	1523.12
26.0	27.08	35.63	1540.71	102.9	19.23	35.98	1522.83
27.3	26.99	35.64	1540.54	104.0	19.06	35.97	1522.39
28.4	26.88	35.66	1540.34	105.7	18.95	35.97	1522.11
30.1	26.55	35.73	1539.69	106.9	18.89	35.98	1521.96
32.8	26.24	35.79	1539.11	108.2	18.87	35.97	1521.93
34.6	25.44	35.88	1537.42	109.5	18.80	35.97	1521.72
36.4	24.75	35.84	1535.77	110.9	18.64	35.96	1521.28
38.3	24.34	35.82	1534.81	112.0	18.59	35.96	1521.15
40.0	23.76	35.83	1533.45	113.1	18.50	35.96	1520.93
42.8	23.51	35.85	1532.91	114.6	18.16	35.93	1519.94
43.9	23.24	35.90	1532.31	115.8	18.05	35.93	1519.64
45.7	23.08	35.88	1531.93	117.1	17.99	35.93	1519.48
46.7	23.05	35.90	1531.89	118.3	17.92	35.93	1519.33
48.5	22.95	35.88	1531.64	119.6	17.85	35.93	1519.15
50.3	22.81	35.88	1531.33	120.8	17.80	35.93	1518.99
51.4	22.52	35.84	1530.59	122.1	17.69	35.93	1518.72
53.3	22.42	35.84	1530.35	123.3	17.58	35.93	1518.39
55.2	22.20	35.87	1529.85	124.5	17.45	35.93	1518.06
56.9	22.23	35.97	1530.08	125.8	17.40	35.93	1517.91
58.4	22.04	35.95	1529.59	127.0	17.33	35.93	1517.72
60.1	22.10	36.01	1529.84	128.3	17.28	35.93	1517.62
61.7	22.17	36.04	1530.09	130.8	17.18	35.93	1517.37
64.3	21.99	36.04	1529.65	132.0	17.08	35.93	1517.09
66.1	22.03	36.07	1529.83	133.2	17.00	35.93	1516.84
67.3	21.68	35.99	1528.84	134.5	16.89	35.93	1516.53
68.7	21.33	35.92	1527.89	135.7	16.67	35.93	1515.89
69.9	21.19	35.90	1527.51	137.0	16.56	35.93	1515.58
71.2	21.16	35.91	1527.46	138.2	16.50	35.93	1515.45
72.6	21.12	35.92	1527.40	139.4	16.45	35.93	1515.32
74.2	21.07	35.92	1527.29	140.7	16.40	35.93	1515.16
75.8	21.04	35.99	1527.32	141.9	16.36	35.93	1515.09
77.4	20.98	35.99	1527.2	147.0	16.36	35.93	1515.16

XBT 3.3 12:33 local

6/18/91 25°44.61'N 84°03.96'W Water Depth: 144 M, 72 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.6	29.58	35.56	1545.56	49.6	22.41	35.88	1530.31
1.9	29.61	35.61	1545.70	50.9	22.18	35.86	1529.72
3.2	29.29	35.64	1545.09	52.2	22.02	35.84	1529.32
4.4	28.60	35.64	1543.65	53.4	21.80	35.85	1528.77
5.7	28.31	35.63	1543.05	59.7	21.43	35.99	1528.09
6.9	28.08	35.63	1542.57	60.9	21.30	36.03	1527.80
8.2	27.92	35.63	1542.25	62.2	21.24	36.04	1527.69
9.5	27.76	35.64	1541.94	63.4	21.15	36.04	1527.47
10.7	27.57	35.64	1541.54	64.7	20.99	36.04	1527.07
12.0	27.50	35.62	1541.39	65.9	20.90	36.06	1526.88
13.2	27.47	35.60	1541.32	75.9	20.63	35.99	1526.24
14.5	27.36	35.60	1541.09	77.2	20.49	35.99	1525.89
15.7	27.30	35.60	1540.98	78.4	20.39	35.97	1525.61
17.0	27.28	35.60	1540.97	88.4	19.71	36.00	1523.96
18.3	27.27	35.61	1540.97	89.7	19.54	35.98	1523.49
19.5	27.18	35.62	1540.81	90.9	19.45	35.97	1523.24
20.8	27.06	35.62	1540.56	92.2	19.27	35.96	1522.76
22.0	26.79	35.62	1539.99	93.4	19.20	35.95	1522.58
23.3	26.27	35.62	1538.84	94.7	19.13	35.96	1522.41
24.5	25.84	35.62	1537.88	104.6	18.58	35.97	1521.04
25.8	25.70	35.63	1537.58	105.9	18.48	35.97	1520.78
27.1	25.60	35.64	1537.38	107.1	18.34	35.98	1520.40
28.3	25.29	35.66	1536.71	108.4	18.25	35.97	1520.16
29.6	25.11	35.71	1536.37	129.5	16.71	35.93	1515.93
30.8	24.99	35.76	1536.16	130.8	16.63	35.93	1515.71
32.1	24.79	35.79	1535.74	132.0	16.55	35.93	1515.49
33.3	24.65	35.82	1535.46	133.2	16.53	35.93	1515.45
34.6	24.36	35.88	1534.87	134.5	16.52	35.93	1515.44
35.9	24.13	35.85	1534.30	135.7	16.50	35.93	1515.40
37.1	24.00	35.83	1533.99	137.0	16.48	35.93	1515.36
38.4	23.81	35.82	1533.53	138.2	16.49	35.93	1515.41
39.6	23.60	35.82	1533.04	139.4	16.48	35.93	1515.40
44.6	22.83	35.89	1531.30	140.7	16.45	35.93	1515.33
45.9	22.72	35.88	1531.04	141.9	16.45	35.93	1515.35
47.1	22.58	35.90	1530.72	143.2	16.45	35.93	1515.37
48.4	22.40	35.88	1530.26	144.2	16.44	35.93	1515.35

XBT 3.5 19:20 local

6/18/91 25°32.88'N 83°55.10'W Water Depth: 125 M, 96 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.6	30.59	35.56	1547.63	60.9	20.95	35.68	1526.48
1.9	30.27	35.61	1547.06	62.2	20.92	35.69	1526.44
3.2	30.04	35.64	1546.64	63.4	20.92	35.68	1526.45
4.4	29.53	35.64	1545.61	64.7	20.92	35.68	1526.46
5.7	29.09	35.63	1544.71	65.9	20.89	35.69	1526.42
6.9	28.86	35.63	1544.24	67.2	20.85	35.61	1526.24
8.2	28.74	35.63	1544.01	68.4	20.85	35.55	1526.18
9.5	28.64	35.64	1543.83	69.7	20.82	35.90	1526.54
10.7	28.59	35.64	1543.73	70.9	20.73	35.91	1526.32
12.0	28.46	35.62	1543.46	72.2	20.60	35.91	1526.01
13.2	28.28	35.60	1543.08	73.4	20.48	35.92	1525.71
14.5	28.15	35.60	1542.81	74.7	20.39	35.94	1525.52
15.7	28.05	35.60	1542.62	75.9	20.30	35.99	1525.35
17.0	27.86	35.60	1542.23	77.2	20.26	35.99	1525.27
18.3	27.56	35.61	1541.61	78.4	20.19	35.97	1525.07
19.5	27.38	35.62	1541.25	79.7	20.13	35.98	1524.94
20.8	27.10	35.62	1540.65	80.9	19.99	36.01	1524.61
22.0	26.71	35.62	1539.81	82.2	19.88	36.03	1524.36
23.3	26.38	35.62	1539.09	83.4	19.80	36.03	1524.16
24.5	26.20	35.62	1538.70	84.7	19.72	36.03	1523.96
25.8	25.88	35.63	1538.00	85.9	19.64	36.03	1523.76
27.1	25.45	35.64	1537.04	87.2	19.54	36.02	1523.50
28.3	25.13	35.66	1536.34	88.4	19.49	36.00	1523.36
29.6	24.81	35.71	1535.66	89.7	19.40	35.98	1523.10
30.8	24.46	35.76	1534.90	90.9	19.31	35.97	1522.85
32.1	24.18	35.79	1534.29	93.4	19.08	35.95	1522.24
33.3	24.02	35.82	1533.95	94.7	18.93	35.96	1521.84
34.6	23.69	35.88	1533.25	95.9	18.85	35.96	1521.65
35.9	23.40	35.85	1532.53	98.4	18.69	35.98	1521.25
37.1	23.23	35.83	1532.10	99.6	18.57	35.98	1520.93
38.4	23.08	35.82	1531.74	100.9	18.47	35.98	1520.68
39.6	22.95	35.82	1531.44	103.4	18.35	35.98	1520.36
40.9	22.81	35.84	1531.13	104.6	18.26	35.97	1520.12
42.1	22.60	35.84	1530.63	105.9	18.14	35.97	1519.80
43.4	22.33	35.87	1530.00	107.1	18.02	35.98	1519.48
44.6	22.03	35.89	1529.27	108.4	17.94	35.97	1519.26
45.9	21.92	35.88	1529.00	109.6	17.83	35.97	1518.96
47.1	21.85	35.90	1528.86	110.9	17.73	35.96	1518.67
48.4	21.74	35.88	1528.57	112.1	17.67	35.96	1518.52
49.6	21.57	35.88	1528.15	113.3	17.58	35.95	1518.27
50.9	21.45	35.86	1527.84	114.6	17.38	35.93	1517.67
52.2	21.39	35.84	1527.69	115.8	17.35	35.93	1517.60
53.4	21.32	35.85	1527.53	117.1	17.37	35.93	1517.68
54.7	21.23	35.87	1527.33	118.3	17.37	35.93	1517.71
55.9	21.20	35.91	1527.33	119.6	17.36	35.93	1517.71
57.2	21.16	35.97	1527.31	120.8	17.35	35.93	1517.70
58.4	21.06	35.95	1527.04	122.1	17.30	35.93	1517.57
59.7	20.99	35.99	1526.93	124.7	17.14	35.93	1517.12

XBT 3.7 19:55 local

6/18/91 25°36.68'N 84°17.12'W Water Depth: 162 M, 96 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.6	29.35	35.56	1545.08	73.4	20.90	35.92	1526.83
1.9	29.25	35.61	1544.95	74.7	20.84	35.94	1526.72
3.2	29.25	35.64	1545.01	83.4	20.02	36.03	1524.76
4.4	29.24	35.64	1545.00	84.7	19.95	36.03	1524.59
5.7	29.17	35.63	1544.88	85.9	19.92	36.03	1524.53
6.9	28.84	35.63	1544.20	87.2	19.85	36.02	1524.35
8.2	28.69	35.63	1543.90	88.4	19.64	36.00	1523.77
9.5	28.08	35.64	1542.63	89.7	19.53	35.98	1523.46
10.7	27.68	35.64	1541.78	94.7	19.25	35.96	1522.74
12.0	27.53	35.62	1541.45	95.9	19.16	35.96	1522.52
13.2	27.48	35.60	1541.34	97.2	19.04	35.97	1522.21
14.5	27.40	35.60	1541.18	98.4	18.94	35.98	1521.96
15.7	27.35	35.60	1541.09	99.6	18.88	35.98	1521.81
17.0	27.28	35.60	1540.97	100.9	18.75	35.98	1521.47
18.3	27.23	35.61	1540.89	102.1	18.63	35.98	1521.15
19.5	27.20	35.62	1540.85	103.4	18.54	35.98	1520.91
20.8	27.18	35.50	1540.70	104.6	18.46	35.97	1520.70
22.0	27.22	35.50	1540.81	105.9	18.36	35.97	1520.43
23.3	27.25	35.62	1541.03	107.1	18.25	35.98	1520.14
24.5	27.20	35.62	1540.94	108.4	18.14	35.97	1519.84
27.1	27.01	35.64	1540.58	109.6	18.05	35.97	1519.59
28.3	26.66	35.66	1539.84	110.9	18.01	35.96	1519.49
29.6	26.33	35.71	1539.17	125.8	16.96	35.93	1516.61
30.8	25.81	35.76	1538.06	127.0	16.91	35.93	1516.49
32.1	25.55	35.79	1537.52	128.3	16.71	35.93	1515.91
34.6	25.41	35.88	1537.34	129.5	16.60	35.93	1515.60
35.9	25.21	35.85	1536.86	130.8	16.53	35.93	1515.41
38.4	24.85	35.82	1536.02	133.2	16.51	35.93	1515.39
39.6	24.73	35.82	1535.76	134.5	16.45	35.93	1515.22
40.9	24.51	35.84	1535.28	135.7	16.40	35.93	1515.09
42.1	24.27	35.84	1534.73	137.0	16.39	35.93	1515.08
43.4	24.15	35.87	1534.50	138.2	16.39	35.93	1515.10
44.6	23.93	35.89	1534.01	139.4	16.39	35.93	1515.12
45.9	23.55	35.88	1533.10	140.7	16.38	35.93	1515.11
47.1	23.34	35.90	1532.61	143.2	16.38	35.93	1515.16
48.4	23.16	35.88	1532.17	144.4	16.38	35.93	1515.18
49.6	22.94	35.88	1531.64	146.9	16.38	35.93	1515.22
50.9	22.88	35.86	1531.49	148.1	16.36	35.93	1515.18
53.4	22.71	35.85	1531.09	149.4	16.36	35.93	1515.20
54.7	22.54	35.87	1530.71	150.6	16.36	35.93	1515.22
55.9	22.38	35.91	1530.38	151.8	16.35	35.93	1515.21
57.2	22.03	35.97	1529.57	153.1	16.31	35.93	1515.11
64.7	21.46	35.68	1527.88	154.3	16.30	35.93	1515.09
65.9	21.34	35.69	1527.60	156.8	16.27	35.93	1515.04
67.2	21.30	35.61	1527.43	158.0	16.16	35.93	1514.72
68.4	21.28	35.55	1527.32	159.3	16.07	35.93	1514.47
70.9	21.09	35.91	1527.28	160.5	16.05	35.93	1514.42
72.2	20.95	35.91	1526.94	162.4	16.05	35.93	1514.45

CTD 4.6 22:13 local

6/19/91 25°09.11'N 84°39.14'W Water Depth: 3279 M, 292 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
2.5	28.91	35.96	1544.61	65.8	23.93	36.00	1534.49
4.4	28.76	35.95	1544.33	67.1	23.75	36.02	1534.09
5.6	28.67	35.96	1544.17	68.4	23.61	36.05	1533.80
7.8	28.65	35.96	1544.16	69.7	23.54	36.06	1533.65
9.6	28.69	35.96	1544.28	71.0	23.40	36.04	1533.32
10.9	28.64	36.08	1544.31	72.3	23.20	36.05	1532.85
12.4	28.61	36.03	1544.22	73.5	22.98	36.05	1532.32
13.7	28.57	35.95	1544.09	74.8	22.77	36.03	1531.81
14.7	28.56	35.91	1544.02	76.1	22.59	36.02	1531.37
16.2	28.53	35.86	1543.94	77.3	22.42	36.01	1530.93
17.2	28.51	35.83	1543.87	78.7	22.19	36.01	1530.39
18.7	28.47	35.79	1543.79	80.9	21.96	36.01	1529.83
19.9	28.43	35.77	1543.69	82.4	21.89	36.03	1529.69
21.1	28.40	35.75	1543.63	84.7	21.87	36.08	1529.74
22.6	28.29	35.72	1543.39	85.8	21.83	36.10	1529.68
23.7	28.20	35.71	1543.21	86.9	21.77	36.10	1529.53
24.9	28.19	35.70	1543.18	88.1	21.68	36.11	1529.34
26.3	28.16	35.70	1543.15	89.3	21.63	36.11	1529.22
27.6	28.16	35.70	1543.17	90.4	21.59	36.11	1529.15
28.7	28.10	35.71	1543.07	91.5	21.53	36.10	1529.01
30.0	28.03	35.70	1542.92	92.5	21.49	36.10	1528.91
31.3	27.99	35.71	1542.86	93.8	21.32	36.06	1528.44
32.4	28.00	35.74	1542.95	94.8	21.08	36.03	1527.79
33.8	28.02	35.76	1543.04	95.9	20.99	36.01	1527.54
34.9	28.00	35.77	1543.03	98.3	20.74	35.98	1526.89
36.1	27.97	35.78	1542.98	100.4	20.64	36.00	1526.67
37.5	27.89	35.79	1542.85	101.5	20.63	36.01	1526.69
38.6	27.94	35.84	1543.03	102.6	20.59	36.01	1526.60
39.9	27.83	35.85	1542.81	103.8	20.57	36.01	1526.56
41.2	27.64	35.84	1542.42	106.1	20.73	36.12	1527.14
42.3	27.50	35.85	1542.13	108.2	20.35	36.04	1526.08
43.7	27.21	35.83	1541.50	110.4	20.09	35.99	1525.34
44.9	27.06	35.83	1541.20	111.6	20.23	36.09	1525.87
46.2	26.94	35.83	1540.95	113.6	20.35	36.17	1526.31
47.5	26.66	35.84	1540.34	115.8	20.09	36.13	1525.62
48.7	26.31	35.86	1539.60	117.8	19.79	36.06	1524.74
50.1	26.17	35.87	1539.33	119.7	19.50	36.03	1523.94
51.2	25.91	35.88	1538.78	121.0	19.40	36.02	1523.66
52.7	25.64	35.90	1538.19	122.7	19.26	36.01	1523.30
54.0	25.50	35.91	1537.90	123.8	19.17	36.01	1523.04
55.4	25.38	35.92	1537.66	125.8	19.06	36.00	1522.78
56.5	25.28	35.93	1537.46	127.7	19.04	36.00	1522.75
58.0	25.03	35.96	1536.93	128.7	19.02	36.00	1522.71
59.2	24.91	35.96	1536.66	130.7	18.92	36.00	1522.47
60.6	24.59	35.96	1535.93	132.6	18.84	36.00	1522.28
61.9	24.42	35.97	1535.57	134.2	18.73	35.99	1521.96
63.1	24.28	35.99	1535.27	136.0	18.65	35.97	1521.73
64.6	24.08	36.00	1534.82	137.6	18.42	35.93	1521.08

CTD 4.6 cont'

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
139.5	18.37	35.93	1520.95	207.9	15.24	35.54	1512.22
141.3	18.30	35.92	1520.79	209.0	15.20	35.54	1512.12
143.0	18.17	35.91	1520.42	210.1	15.20	35.54	1512.12
144.5	18.07	35.91	1520.16	211.3	15.12	35.52	1511.86
145.5	18.01	35.91	1519.98	212.4	15.07	35.51	1511.73
147.2	17.88	35.90	1519.64	213.5	15.03	35.51	1511.62
148.8	17.78	35.88	1519.36	214.6	14.98	35.50	1511.47
149.8	17.73	35.88	1519.21	216.2	14.90	35.49	1511.22
151.5	17.69	35.87	1519.12	217.6	14.88	35.49	1511.19
153.0	17.63	35.87	1518.97	218.7	14.88	35.49	1511.18
154.6	17.59	35.87	1518.88	219.7	14.86	35.48	1511.15
156.3	17.60	35.88	1518.95	221.0	14.83	35.48	1511.08
158.0	17.55	35.88	1518.81	222.2	14.78	35.48	1510.93
159.5	17.51	35.88	1518.74	223.2	14.77	35.48	1510.91
161.0	17.46	35.87	1518.60	224.5	14.76	35.47	1510.88
162.0	17.43	35.87	1518.53	225.8	14.72	35.47	1510.78
163.4	17.35	35.86	1518.32	227.0	14.68	35.46	1510.67
164.4	17.33	35.85	1518.25	228.2	14.65	35.46	1510.57
165.8	17.30	35.85	1518.18	229.5	14.64	35.46	1510.58
167.4	17.17	35.83	1517.82	230.8	14.63	35.46	1510.57
169.1	17.09	35.82	1517.58	231.9	14.56	35.44	1510.35
170.8	16.99	35.80	1517.30	233.1	14.52	35.44	1510.22
172.2	16.91	35.79	1517.05	234.2	14.50	35.43	1510.17
173.7	16.84	35.78	1516.88	235.3	14.47	35.43	1510.10
175.3	16.76	35.77	1516.65	236.6	14.45	35.43	1510.05
176.7	16.73	35.77	1516.56	237.6	14.41	35.42	1509.93
178.1	16.67	35.76	1516.39	239.0	14.38	35.42	1509.84
179.6	16.58	35.75	1516.13	240.3	14.37	35.42	1509.82
181.1	16.56	35.74	1516.09	241.5	14.36	35.42	1509.81
182.5	16.51	35.73	1515.97	242.8	14.34	35.42	1509.76
183.8	16.43	35.72	1515.72	243.9	14.31	35.42	1509.70
185.1	16.39	35.72	1515.60	245.3	14.29	35.41	1509.65
186.5	16.34	35.71	1515.48	246.4	14.24	35.40	1509.51
188.0	16.26	35.70	1515.25	247.5	14.20	35.40	1509.39
189.3	16.18	35.68	1515.01	248.8	14.16	35.38	1509.25
190.6	16.07	35.67	1514.68	249.9	14.10	35.38	1509.07
191.9	16.01	35.66	1514.49	251.2	14.07	35.38	1508.98
193.2	15.99	35.66	1514.45	252.5	14.05	35.37	1508.95
194.6	15.95	35.65	1514.34	253.8	14.03	35.37	1508.90
195.8	15.90	35.64	1514.21	255.0	13.99	35.36	1508.79
196.9	15.89	35.64	1514.17	256.3	13.93	35.36	1508.60
198.2	15.80	35.63	1513.90	257.6	13.90	35.35	1508.50
199.5	15.70	35.61	1513.60	258.7	13.88	35.35	1508.47
200.6	15.60	35.60	1513.30	260.0	13.86	35.34	1508.40
201.9	15.51	35.58	1513.00	261.3	13.83	35.34	1508.33
203.2	15.43	35.57	1512.78	262.5	13.82	35.33	1508.31
204.3	15.40	35.57	1512.71	263.7	13.80	35.33	1508.24
205.5	15.35	35.56	1512.55	264.9	13.77	35.33	1508.19
206.6	15.31	35.55	1512.42	266.0	13.72	35.32	1508.02

CTD 4.6 cont

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
267.3	13.70	35.32	1507.99	326.9	11.91	35.05	1502.60
268.5	13.67	35.31	1507.90	328.0	11.89	35.05	1502.52
269.5	13.66	35.31	1507.88	329.1	11.86	35.04	1502.46
270.6	13.64	35.31	1507.84	330.4	11.82	35.04	1502.33
272.2	13.61	35.30	1507.74	331.4	11.81	35.04	1502.29
273.4	13.56	35.30	1507.60	332.6	11.80	35.03	1502.29
274.5	13.52	35.29	1507.46	333.8	11.78	35.03	1502.23
275.5	13.47	35.28	1507.30	334.8	11.74	35.03	1502.10
276.7	13.44	35.28	1507.22	336.0	11.73	35.02	1502.09
277.9	13.39	35.27	1507.08	337.1	11.73	35.03	1502.08
279.0	13.37	35.27	1507.01	338.3	11.72	35.02	1502.09
280.1	13.34	35.27	1506.92	339.4	11.71	35.02	1502.07
281.5	13.31	35.26	1506.83	340.5	11.65	35.01	1501.87
282.9	13.27	35.25	1506.72	341.7	11.62	35.01	1501.78
284.5	13.24	35.25	1506.65	342.7	11.61	35.01	1501.76
285.6	13.20	35.24	1506.54	343.9	11.59	35.01	1501.69
286.7	13.17	35.24	1506.43	345.2	11.57	35.01	1501.65
287.9	13.14	35.24	1506.35	346.6	11.56	35.00	1501.62
289.0	13.11	35.23	1506.27	347.9	11.55	35.00	1501.60
290.2	13.04	35.22	1506.03	349.2	11.53	35.00	1501.57
291.3	13.00	35.21	1505.90	350.2	11.51	35.00	1501.51
292.3	12.96	35.21	1505.81	351.3	11.50	35.00	1501.49
293.4	12.94	35.21	1505.75	352.8	11.48	35.00	1501.45
294.7	12.91	35.20	1505.67	354.2	11.48	34.99	1501.45
296.1	12.84	35.20	1505.43	355.2	11.47	34.99	1501.45
297.4	12.75	35.18	1505.12	356.7	11.46	34.99	1501.44
298.6	12.70	35.17	1504.98	358.1	11.45	34.99	1501.44
299.6	12.67	35.16	1504.89	359.4	11.45	34.99	1501.43
300.6	12.64	35.16	1504.78	360.7	11.43	34.99	1501.39
301.8	12.55	35.15	1504.49	365.9	11.27	34.96	1500.88
302.8	12.52	35.14	1504.41	366.9	11.22	34.96	1500.72
303.8	12.47	35.13	1504.24	367.9	11.16	34.95	1500.51
304.9	12.45	35.13	1504.18	369.0	11.10	34.94	1500.31
305.9	12.43	35.13	1504.13	370.0	11.07	34.93	1500.21
307.0	12.43	35.13	1504.13	371.0	11.03	34.92	1500.09
308.3	12.39	35.12	1504.03	372.0	11.02	34.93	1500.05
309.6	12.34	35.11	1503.84	373.0	10.98	34.92	1499.93
310.7	12.33	35.11	1503.83	400.0	9.82	34.92	1496.19
312.1	12.31	35.11	1503.79	500.0	8.18	34.92	1491.72
313.6	12.28	35.11	1503.72	750.0	5.60	34.88	1485.68
314.9	12.23	35.10	1503.56	1000.0	4.86	34.91	1486.86
316.3	12.18	35.09	1503.39	1250.0	4.34	34.94	1488.93
317.6	12.15	35.09	1503.29	1350.0	4.24	34.95	1490.20
319.0	12.07	35.07	1503.03	1431.0	4.19	34.95	1491.35
320.4	11.99	35.06	1502.78	1906.0	4.19	35.00	1499.44
321.8	11.98	35.06	1502.77	2382.0	4.22	34.97	1507.62
323.1	11.96	35.06	1502.71	2858.0	4.15	34.93	1515.44
324.6	11.94	35.05	1502.67	3155.0	4.28	34.97	1521.16
325.7	11.94	35.05	1502.68	3279.0	4.28	34.97	1523.31

XBT 4.1 09:30 local

6/19/91 25°17.38'N 84°58.38'W Water Depth: 3260 M, 64 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.7	28.64	35.97	1544.04	1805.7	4.16	34.99	1497.60
2.1	28.83	35.96	1544.44	1806.9	4.18	34.99	1497.70
3.4	29.01	35.96	1544.84	1808.0	4.16	34.99	1497.64
4.8	28.98	35.95	1544.80	1809.2	4.18	34.99	1497.74
6.1	28.93	35.96	1544.72	1810.4	4.18	34.99	1497.76
7.5	28.91	35.96	1544.70	1811.5	4.18	34.99	1497.78
8.9	28.88	35.96	1544.66	1812.7	4.18	34.99	1497.80
10.2	28.88	36.01	1544.75	1813.8	4.18	34.99	1497.82
42.9	27.96	35.84	1543.14	1815.0	4.18	34.99	1497.84
44.3	27.89	35.83	1543.00	1816.1	4.18	34.99	1497.86
45.7	27.81	35.83	1542.85	1817.3	4.18	34.99	1497.88
47.0	27.82	35.83	1542.90	1818.4	4.16	34.99	1497.82
48.4	27.72	35.85	1542.72	1819.6	4.18	34.99	1497.92
49.8	27.58	35.86	1542.46	1820.8	4.16	34.99	1497.86
51.1	27.38	35.88	1542.06	1821.9	4.16	34.99	1497.88
52.5	27.19	35.90	1541.68	1823.1	4.16	34.99	1497.90
81.0	22.74	36.01	1531.81	1824.2	4.18	34.99	1498.00
82.4	22.60	36.03	1531.50	1825.4	4.18	34.99	1498.02
83.7	22.46	36.06	1531.20	1826.5	4.18	34.99	1498.04
85.1	22.34	36.09	1530.96	1827.7	4.18	34.99	1498.06
86.4	22.22	36.10	1530.69	1828.8	4.20	34.99	1498.16
87.8	22.08	36.10	1530.36	1830.0	4.20	34.99	1498.18
89.1	21.97	36.11	1530.10	1831.2	4.18	34.99	1498.12
178.3	17.13	35.76	1517.77	1832.3	4.20	34.99	1498.22
330.9	12.24	35.04	1503.77	1833.5	4.18	34.99	1498.16
497.3	8.86	34.92	1494.24	1834.6	4.18	34.99	1498.18
736.1	6.22	34.88	1487.94	1835.8	4.18	34.99	1498.20
952.4	5.07	34.90	1486.92	1906.0	4.18	35.00	1499.40
1220.0	4.26	34.94	1488.09	2382.0	4.21	34.97	1507.58
1561.9	4.09	34.96	1493.16	2858.0	4.14	34.93	1515.40
1803.4	4.18	34.99	1497.65	3155.0	4.27	34.97	1521.12
1804.6	4.18	34.99	1497.67	3260.0	4.27	34.97	1522.94

XBT 4.2 12:00 local

6/19/91 25°21.34N 84°48.26'W Water Depth: 3275 M, 76 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.7	29.04	35.98	1544.88	635.5	6.57	34.90	1487.69
2.1	29.02	35.97	1544.85	778.4	5.55	34.88	1485.95
3.4	29.01	35.96	1544.84	922.1	4.89	34.90	1485.67
4.8	28.97	35.95	1544.78	1045.3	4.47	34.92	1486.01
6.1	28.91	35.96	1544.68	1184.3	4.07	34.93	1486.69
7.5	28.85	35.96	1544.58	1328.8	3.99	34.95	1488.80
8.9	28.82	35.96	1544.54	1448.4	3.97	34.95	1490.73
10.2	28.79	36.01	1544.56	1449.6	3.97	34.95	1490.75
11.6	28.69	35.99	1544.34	1450.8	3.97	34.95	1490.77
13.0	28.60	35.92	1544.10	1452.0	3.97	34.95	1490.79
14.3	28.50	35.85	1543.83	1453.2	3.97	34.95	1490.81
15.7	28.36	35.79	1543.49	1454.4	3.97	34.95	1490.83
17.1	28.32	35.74	1543.37	1455.6	3.97	34.95	1490.85
18.4	28.30	35.70	1543.31	1456.8	3.97	34.95	1490.87
19.8	28.24	35.66	1543.16	1458.0	3.97	34.95	1490.89
21.2	28.21	35.63	1543.09	1459.2	3.97	34.95	1490.91
22.5	28.19	35.72	1543.17	1460.4	3.97	34.95	1490.93
23.9	28.17	35.71	1543.14	1461.6	3.97	34.95	1490.95
25.2	28.15	35.70	1543.10	1462.8	3.97	34.95	1490.97
26.6	28.13	35.70	1543.09	1464.0	3.97	34.95	1490.99
28.0	28.13	35.71	1543.11	1465.2	3.97	34.95	1491.02
29.3	28.11	35.70	1543.09	1466.4	3.97	34.95	1491.04
30.7	28.13	35.71	1543.16	1467.6	3.97	34.95	1491.06
32.1	28.13	35.73	1543.21	1468.8	3.97	34.95	1491.08
33.4	28.10	35.75	1543.19	1470.0	3.97	34.95	1491.10
34.8	28.06	35.77	1543.15	1471.2	3.97	34.95	1491.12
53.8	24.28	35.91	1535.03	1472.4	3.97	34.95	1491.14
85.1	20.91	36.09	1527.25	1473.6	3.97	34.95	1491.16
86.4	20.85	36.10	1527.12	1474.8	3.97	34.96	1491.18
87.8	20.81	36.10	1527.05	1476.0	3.97	34.96	1491.20
89.1	20.76	36.11	1526.94	1477.2	3.97	34.96	1491.22
156.8	16.97	35.88	1517.09	1478.4	3.97	34.96	1491.24
229.4	14.15	35.46	1508.99	1479.6	3.97	34.96	1491.26
356.1	10.73	34.99	1498.85	1480.8	3.97	34.96	1491.28
439.4	9.06	34.92	1494.04	1906.0	4.09	35.00	1499.02
440.7	9.07	34.92	1494.09	2382.0	4.18	34.97	1507.45
442.1	9.06	34.92	1494.08	2858.0	4.13	34.93	1515.37
443.4	9.06	34.92	1494.10	3275.0	4.27	34.97	1523.20

XBT 4.3 16:29 local

6/18/91 25°11.23'N 84°48.87'W Water Depth: 3281 M, 96 points

DEPTH (M)	TEMP °C	PSU	SPEED (M/S)	DEPTH (M)	TEMP °C	PSU	SPEED (M/S)
0.7	29.13	35.97	1545.07	1026.5	4.72	34.91	1486.73
2.1	29.39	35.96	1545.62	1249.4	4.16	34.94	1488.17
3.4	29.64	35.94	1546.14	1395.4	4.07	34.95	1490.26
4.8	29.69	35.95	1546.28	1605.7	4.03	34.97	1493.65
6.1	29.52	35.96	1545.96	1786.0	4.01	34.99	1496.64
7.5	29.19	35.96	1545.29	1787.2	4.01	34.99	1496.66
8.9	29.03	35.91	1544.93	1789.5	4.01	34.99	1496.70
10.2	28.97	35.96	1544.88	1791.8	4.01	34.99	1496.74
11.6	28.93	35.99	1544.85	1793.0	4.01	34.99	1496.76
13.0	28.90	35.92	1544.73	1794.1	4.01	34.99	1496.78
14.3	28.88	35.85	1544.64	1795.3	4.01	34.99	1496.80
15.7	28.85	35.79	1544.53	1796.5	4.01	34.99	1496.82
17.1	28.83	35.74	1544.46	1797.6	4.01	34.99	1496.84
18.4	28.81	35.80	1544.51	1799.9	4.01	34.99	1496.88
19.8	28.75	35.77	1544.37	1801.1	4.01	34.99	1496.90
21.2	28.71	35.63	1544.16	1802.3	4.01	34.99	1496.92
22.5	28.68	35.72	1544.21	1803.4	4.01	34.99	1496.94
23.9	28.63	35.71	1544.12	1804.6	4.01	34.99	1496.96
25.2	28.60	35.70	1544.07	1805.7	4.01	34.99	1496.98
28.0	28.53	35.71	1543.97	1806.9	4.01	34.99	1497.00
29.3	28.49	35.70	1543.91	1809.2	4.01	34.99	1497.04
30.7	28.46	35.71	1543.87	1810.4	4.01	34.99	1497.06
32.1	28.45	35.73	1543.89	1811.5	4.01	34.99	1497.07
33.4	28.40	35.75	1543.83	1812.7	4.01	34.99	1497.10
36.1	28.35	35.78	1543.80	1813.8	4.01	34.99	1497.11
37.5	28.33	35.79	1543.79	1815.0	4.01	34.99	1497.14
38.9	28.32	35.84	1543.85	1816.1	4.01	34.99	1497.15
40.2	28.28	35.85	1543.79	1817.3	4.01	34.99	1497.17
41.6	28.13	35.84	1543.49	1818.4	4.01	34.99	1497.19
42.9	28.02	35.84	1543.27	1819.6	4.01	34.99	1497.21
44.3	27.98	35.83	1543.19	1820.8	4.01	34.99	1497.23
47.0	27.92	35.83	1543.12	1821.9	4.01	34.99	1497.25
48.4	27.88	35.85	1543.07	1823.1	4.01	34.99	1497.27
49.8	27.77	35.86	1542.87	1824.2	4.01	34.99	1497.29
51.1	27.59	35.88	1542.52	1825.4	4.01	34.99	1497.31
108.1	20.64	36.04	1526.85	1826.5	4.01	34.99	1497.33
158.1	17.61	35.88	1519.00	1827.7	4.01	34.99	1497.35
205.2	16.15	35.56	1515.03	1828.8	4.01	34.99	1497.37
253.5	14.22	35.37	1509.50	1830.0	4.01	34.99	1497.39
317.6	12.52	35.09	1504.57	1831.2	4.01	34.99	1497.41
370.7	11.23	34.93	1500.78	1832.3	4.01	34.99	1497.43
443.4	10.02	34.92	1497.63	1833.5	4.01	34.99	1497.45
516.9	8.53	34.91	1493.32	1834.6	4.01	34.99	1497.47
582.2	7.41	34.90	1490.10	1835.8	4.01	34.99	1497.49
664.0	6.51	34.89	1487.91	1906.0	4.04	35.00	1498.80
761.8	5.89	34.88	1487.05	2382.0	4.17	34.97	1507.40
853.7	5.43	34.89	1486.73	2858.0	4.13	34.93	1515.36
936.0	5.13	34.90	1486.89	3281.0	4.27	34.97	1523.30

APPENDIX B

NAVIGATION DATA

SITE 1 074°T VERTICAL ARRAY					SITE 1 074°T HORIZONTAL ARRAY				
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
232	0.483	260.2	25.896	82.913	232	0.534	234.6	25.896	82.913
234	0.6	256.8	25.897	82.911	234	0.654	236.2	25.897	82.911
236	0.733	254.3	25.898	82.909	236	0.789	237.4	25.898	82.909
238	0.86	254.0	25.899	82.906	238	0.912	239.4	25.899	82.906
240	0.986	254.1	25.899	82.904	240	1.034	241.3	25.899	82.904
242	1.111	253.5	25.900	82.902	242	1.159	242.1	25.900	82.902
244	1.25	252.9	25.901	82.900	244	1.297	242.8	25.901	82.900
246	1.382	252.6	25.901	82.897	246	1.429	243.4	25.901	82.897
248	1.515	252.5	25.902	82.895	248	1.561	244.1	25.902	82.895
250	1.648	252.5	25.903	82.893	250	1.693	244.7	25.903	82.893
252	1.784	252.5	25.904	82.890	252	1.828	245.3	25.904	82.890
254	1.913	252.7	25.904	82.888	254	1.955	246.0	25.904	82.888
256	2.043	252.9	25.905	82.886	256	2.083	246.6	25.905	82.886
258	2.176	253.0	25.905	82.883	258	2.214	247.1	25.905	82.883
300	2.306	253.1	25.906	82.881	300	2.344	247.5	25.906	82.881
302	2.439	253.2	25.906	82.878	302	2.476	247.9	25.906	82.878
304	2.574	253.2	25.907	82.876	304	2.61	248.2	25.907	82.876
306	2.703	253.2	25.908	82.874	306	2.739	248.4	25.908	82.874
308	2.835	253.3	25.908	82.871	308	2.87	248.7	25.908	82.871
310	2.967	253.3	25.909	82.869	310	3.001	248.9	25.909	82.869
312	3.098	253.3	25.909	82.867	312	3.132	249.1	25.909	82.867
314	3.227	253.3	25.910	82.864	314	3.261	249.3	25.910	82.864
316	3.355	253.3	25.911	82.862	316	3.388	249.4	25.911	82.862
318	3.485	253.3	25.911	82.860	318	3.519	249.6	25.911	82.860
320	3.616	253.3	25.912	82.858	320	3.649	249.7	25.912	82.858
322	3.749	253.2	25.913	82.855	322	3.782	249.8	25.913	82.855
324	3.886	253.2	25.913	82.853	324	3.919	249.8	25.913	82.853
326	4.018	253.1	25.914	82.850	326	4.051	249.9	25.914	82.850
328	4.152	253.1	25.915	82.848	328	4.184	250.0	25.915	82.848
330	4.284	253.1	25.915	82.846	330	4.317	250.1	25.915	82.846
332	4.414	253.1	25.916	82.843	332	4.446	250.2	25.916	82.843
334	4.549	253.1	25.917	82.841	334	4.582	250.2	25.917	82.841
336	4.683	253.1	25.917	82.839	336	4.715	250.3	25.917	82.839
338	4.817	253.0	25.918	82.836	338	4.849	250.3	25.918	82.836
340	4.951	253.1	25.919	82.834	340	4.983	250.5	25.919	82.834
342	5.083	253.1	25.919	82.832	342	5.114	250.6	25.919	82.832
344	5.215	253.2	25.920	82.829	344	5.246	250.7	25.920	82.829
346	5.348	253.1	25.920	82.827	346	5.379	250.7	25.920	82.827
348	5.481	253.1	25.921	82.825	348	5.513	250.7	25.921	82.825
350	5.615	253.1	25.922	82.822	350	5.647	250.7	25.922	82.822
352	5.745	253.0	25.923	82.820	352	5.777	250.7	25.923	82.820
354	5.88	253.0	25.923	82.818	354	5.911	250.8	25.923	82.818
356	6.014	253.0	25.924	82.815	356	6.045	250.8	25.924	82.815
358	6.146	253.0	25.925	82.813	358	6.177	250.9	25.925	82.813
400	6.277	253.0	25.925	82.810	400	6.309	250.9	25.925	82.810
402	6.406	253.0	25.926	82.808	402	6.437	251.0	25.926	82.808
404	6.537	253.1	25.926	82.806	404	6.568	251.1	25.926	82.806
406	6.67	253.1	25.927	82.803	406	6.701	251.1	25.927	82.803
408	6.802	253.1	25.928	82.801	408	6.832	251.2	25.928	82.801
410	6.932	253.1	25.928	82.799	410	6.963	251.2	25.928	82.799
412	7.065	253.1	25.929	82.796	412	7.095	251.3	25.929	82.796
414	7.196	253.2	25.929	82.794	414	7.226	251.4	25.929	82.794
416	7.328	253.2	25.930	82.792	416	7.358	251.4	25.930	82.792
418	7.457	253.1	25.931	82.789	418	7.487	251.4	25.931	82.789
420	7.585	253.1	25.931	82.787	420	7.615	251.4	25.931	82.787
422	7.712	253.1	25.932	82.785	422	7.742	251.4	25.932	82.785
424	7.841	253.1	25.933	82.783	424	7.871	251.5	25.933	82.783
426	7.973	253.1	25.933	82.780	426	8.003	251.5	25.933	82.780
428	8.103	253.1	25.934	82.778	428	8.133	251.5	25.934	82.778
430	8.234	253.0	25.935	82.776	430	8.264	251.5	25.935	82.776
432	8.364	253.0	25.935	82.773	432	8.394	251.5	25.935	82.773
434	8.492	253.0	25.936	82.771	434	8.522	251.5	25.936	82.771
436	8.622	253.1	25.937	82.769	436	8.652	251.5	25.937	82.769
438	8.749	253.1	25.937	82.767	438	8.779	251.6	25.937	82.767
440	8.83	253.2	25.937	82.765	440	8.86	251.7	25.937	82.765

SITE 1 164°T HORIZONTAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
730	0.384	147.5	25.896	82.925	936	8.299	342.9	25.759	82.876
732	0.271	136.7	25.894	82.924	938	8.471	342.9	25.756	82.875
734	0.181	113.1	25.892	82.924	940	8.584	343.0	25.754	82.874
736	0.142	69.8	25.890	82.923	942	8.694	343.0	25.752	82.874
738	0.188	27.8	25.888	82.923	944	8.843	343.1	25.750	82.873
740	0.284	8.2	25.886	82.922	946	9.006	343.1	25.747	82.872
742	0.402	357.1	25.884	82.921	948	9.117	343.2	25.745	82.872
744	0.518	351.0	25.882	82.919	950	9.302	343.2	25.742	82.871
746	0.64	347.0	25.880	82.918	952	9.451	343.3	25.740	82.870
748	0.763	344.4	25.879	82.917	954	9.629	343.3	25.737	82.870
750	0.887	343.8	25.877	82.916	956	9.734	343.4	25.735	82.869
752	1.018	343.8	25.874	82.916					
754	1.151	343.7	25.872	82.915					
756	1.286	343.6	25.870	82.914					
758	1.422	343.5	25.868	82.913					
800	1.556	343.5	25.866	82.913					
802	1.693	343.4	25.864	82.912					
804	1.829	343.4	25.862	82.911					
806	1.966	343.3	25.859	82.910					
808	2.1	343.2	25.857	82.910					
810	2.238	343.2	25.855	82.909					
812	2.379	343.2	25.853	82.908					
814	2.515	343.5	25.851	82.908					
816	2.646	343.3	25.849	82.907					
818	2.788	343.1	25.846	82.906					
820	2.919	343.9	25.844	82.906					
822	3.054	344.2	25.842	82.906					
824	3.188	344.2	25.840	82.905					
826	3.342	344.5	25.837	82.904					
828	3.476	343.9	25.835	82.903					
830	3.612	343.3	25.833	82.902					
832	3.747	343.4	25.831	82.901					
834	3.889	343.5	25.829	82.900					
836	4.029	343.4	25.826	82.900					
838	4.17	343.3	25.824	82.899					
840	4.311	343.3	25.822	82.898					
842	4.45	343.2	25.820	82.897					
844	4.589	343.5	25.817	82.897					
846	4.727	343.9	25.815	82.897					
848	4.869	344.0	25.813	82.896					
850	5.011	344.1	25.810	82.895					
852	5.153	344.0	25.808	82.895					
854	5.29	343.8	25.806	82.894					
856	5.419	343.7	25.804	82.893					
858	5.549	343.5	25.802	82.892					
900	5.698	343.4	25.800	82.891					
902	5.847	343.2	25.797	82.890					
904	5.988	343.4	25.795	82.889					
906	6.134	343.6	25.793	82.889					
908	6.271	343.7	25.790	82.888					
910	6.411	343.7	25.788	82.888					
912	6.531	343.7	25.786	82.887					
914	6.652	343.6	25.784	82.886					
916	6.797	343.5	25.782	82.885					
918	6.942	343.4	25.780	82.884					
920	7.087	343.3	25.778	82.883					
922	7.231	343.2	25.775	82.882					
924	7.377	343.2	25.773	82.881					
926	7.522	343.1	25.771	82.880					
928	7.667	343.0	25.769	82.879					
930	7.812	342.9	25.766	82.878					
932	7.997	342.9	25.763	82.877					
934	8.135	342.8	25.761	82.876					

SITE 1 164°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
732	0.147	80.9	25.894	82.924	938	8.694	343.1	25.756	82.875
734	0.196	40.0	25.892	82.924	940	8.807	343.2	25.754	82.874
736	0.285	18.9	25.890	82.923	942	8.917	343.2	25.752	82.874
738	0.39	6.9	25.888	82.923	944	9.066	343.2	25.750	82.873
740	0.502	360.0	25.886	82.922	946	9.229	343.3	25.747	82.872
742	0.625	354.4	25.884	82.921	948	9.34	343.3	25.745	82.872
744	0.742	350.5	25.882	82.919	950	9.525	343.3	25.742	82.871
746	0.865	347.7	25.880	82.918	952	9.674	343.4	25.740	82.870
748	0.987	345.5	25.879	82.917	954	9.852	343.4	25.737	82.870
750	1.111	345.0	25.877	82.916	956	9.957	343.5	25.735	82.869
752	1.242	344.8	25.874	82.916					
754	1.374	344.7	25.872	82.915					
756	1.51	344.4	25.870	82.914					
758	1.645	344.3	25.868	82.913					
800	1.78	344.2	25.866	82.913					
802	1.916	344.1	25.864	82.912					
804	2.052	344.0	25.862	82.911					
806	2.19	343.9	25.859	82.910					
808	2.323	343.9	25.857	82.910					
810	2.461	343.8	25.855	82.909					
812	2.603	343.7	25.853	82.908					
814	2.739	344.0	25.851	82.908					
816	2.869	343.8	25.849	82.907					
818	3.011	343.6	25.846	82.906					
820	3.142	344.3	25.844	82.906					
822	3.278	344.6	25.842	82.906					
824	3.411	344.6	25.840	82.905					
826	3.565	344.8	25.837	82.904					
828	3.7	344.3	25.835	82.903					
830	3.835	343.6	25.833	82.902					
832	3.97	343.7	25.831	82.901					
834	4.112	343.8	25.829	82.900					
836	4.252	343.7	25.826	82.900					
838	4.393	343.6	25.824	82.899					
840	4.534	343.6	25.822	82.898					
842	4.674	343.5	25.820	82.897					
844	4.812	343.8	25.817	82.897					
846	4.95	344.1	25.815	82.897					
848	5.093	344.3	25.813	82.896					
850	5.235	344.3	25.810	82.895					
852	5.377	344.2	25.808	82.895					
854	5.513	344.1	25.806	82.894					
856	5.643	343.9	25.804	82.893					
858	5.772	343.7	25.802	82.892					
900	5.921	343.6	25.800	82.891					
902	6.071	343.5	25.797	82.890					
904	6.211	343.6	25.795	82.889					
906	6.357	343.8	25.793	82.889					
908	6.494	343.9	25.790	82.888					
910	6.634	343.9	25.788	82.888					
912	6.755	343.9	25.786	82.887					
914	6.875	343.8	25.784	82.886					
916	7.02	343.7	25.782	82.885					
918	7.165	343.6	25.780	82.884					
920	7.31	343.5	25.778	82.883					
922	7.455	343.4	25.775	82.882					
924	7.6	343.3	25.773	82.881					
926	7.745	343.3	25.771	82.880					
928	7.89	343.2	25.769	82.879					
930	8.035	343.1	25.766	82.878					
932	8.22	343.0	25.763	82.877					
934	8.358	343.0	25.761	82.876					
936	8.522	343.0	25.759	82.876					

SITE 1 254°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1129	0.183	144.9	25.897	82.924	1337	8.611	73.0	25.853	83.074
1131	0.27	108.1	25.896	82.926	1339	8.743	73.0	25.852	83.077
1133	0.409	90.4	25.895	82.929	1341	8.87	73.0	25.851	83.079
1135	0.566	81.5	25.893	82.932	1343	9	73.0	25.851	83.081
1137	0.729	76.5	25.892	82.935	1345	9.128	73.0	25.850	83.083
1139	0.864	74.2	25.891	82.937	1347	9.257	73.0	25.849	83.086
1141	0.999	73.3	25.890	82.939	1349	9.386	73.0	25.849	83.088
1143	1.13	73.1	25.889	82.942	1351	9.518	73.0	25.848	83.090
1145	1.264	73.3	25.888	82.944	1353	9.645	73.0	25.848	83.093
1147	1.398	73.4	25.888	82.947	1355	9.773	73.0	25.847	83.095
1149	1.531	73.6	25.887	82.949	1357	9.898	73.0	25.846	83.097
1151	1.664	73.5	25.887	82.951	1359	10.01	73.0	25.846	83.099
1153	1.794	73.0	25.886	82.953					
1155	1.926	72.9	25.885	82.956					
1157	2.06	73.1	25.884	82.958					
1159	2.193	73.1	25.884	82.961					
1201	2.326	73.1	25.883	82.963					
1203	2.457	73.1	25.883	82.965					
1205	2.59	73.2	25.882	82.968					
1207	2.721	73.3	25.881	82.970					
1209	2.853	73.3	25.881	82.972					
1211	2.988	73.2	25.880	82.975					
1213	3.117	73.2	25.879	82.977					
1215	3.248	73.1	25.879	82.979					
1217	3.374	73.1	25.878	82.981					
1219	3.502	73.0	25.877	82.984					
1221	3.635	73.1	25.877	82.986					
1223	3.767	73.1	25.876	82.988					
1225	3.9	73.1	25.876	82.991					
1227	4.032	73.1	25.875	82.993					
1229	4.158	73.1	25.874	82.995					
1231	4.291	73.1	25.874	82.998					
1233	4.421	73.1	25.873	83.000					
1235	4.55	73.1	25.872	83.002					
1237	4.678	73.1	25.872	83.005					
1239	4.808	73.1	25.871	83.007					
1241	4.94	73.0	25.870	83.009					
1243	5.069	73.0	25.870	83.011					
1245	5.201	73.0	25.869	83.014					
1247	5.331	73.0	25.869	83.016					
1249	5.462	73.0	25.868	83.018					
1251	5.591	73.1	25.867	83.021					
1253	5.725	73.0	25.867	83.023					
1255	5.859	73.0	25.866	83.025					
1257	5.989	73.0	25.865	83.028					
1259	6.12	73.0	25.865	83.030					
1301	6.25	73.0	25.864	83.032					
1303	6.383	73.0	25.863	83.035					
1305	6.517	73.1	25.863	83.037					
1307	6.645	73.1	25.862	83.039					
1309	6.778	73.1	25.862	83.042					
1311	6.909	73.0	25.861	83.044					
1313	7.045	73.0	25.860	83.047					
1315	7.176	73.0	25.860	83.049					
1317	7.312	73.0	25.859	83.051					
1319	7.446	73.0	25.858	83.054					
1321	7.576	73.1	25.858	83.056					
1323	7.704	73.1	25.857	83.058					
1325	7.83	73.1	25.857	83.060					
1327	7.961	73.1	25.856	83.063					
1329	8.093	73.1	25.855	83.065					
1331	8.22	73.1	25.855	83.067					
1333	8.351	73.0	25.854	83.070					
1335	8.482	73.0	25.853	83.072					

SITE 1 254°T HORIZONTAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1129	0.399	158.5	25.897	82.924	1337	8.589	74.5	25.853	83.074
1131	0.426	135.7	25.896	82.926	1339	8.721	74.5	25.852	83.077
1133	0.502	116.5	25.895	82.929	1341	8.847	74.4	25.851	83.079
1135	0.616	102.8	25.893	82.932	1343	8.977	74.4	25.851	83.081
1137	0.751	93.8	25.892	82.935	1345	9.105	74.4	25.850	83.083
1139	0.872	89.0	25.891	82.937	1347	9.234	74.3	25.849	83.086
1141	1	86.2	25.890	82.939	1349	9.363	74.3	25.849	83.088
1143	1.127	84.5	25.889	82.942	1351	9.495	74.3	25.848	83.090
1145	1.259	83.5	25.888	82.944	1353	9.622	74.3	25.848	83.093
1147	1.392	82.6	25.888	82.947	1355	9.75	74.3	25.847	83.095
1149	1.524	82.0	25.887	82.949	1357	9.875	74.3	25.846	83.097
1151	1.655	81.2	25.887	82.951	1359	9.988	74.3	25.846	83.099
1153	1.783	80.2	25.886	82.953					
1155	1.914	79.6	25.885	82.956					
1157	2.047	79.3	25.884	82.958					
1159	2.179	78.9	25.884	82.961					
1201	2.311	78.6	25.883	82.963					
1203	2.442	78.3	25.883	82.965					
1205	2.574	78.1	25.882	82.968					
1207	2.705	78.0	25.881	82.970					
1209	2.837	77.8	25.881	82.972					
1211	2.971	77.5	25.880	82.975					
1213	3.1	77.3	25.879	82.977					
1215	3.23	77.1	25.879	82.979					
1217	3.357	76.9	25.878	82.981					
1219	3.484	76.7	25.877	82.984					
1221	3.616	76.6	25.877	82.986					
1223	3.749	76.5	25.876	82.988					
1225	3.881	76.4	25.876	82.991					
1227	4.013	76.3	25.875	82.993					
1229	4.139	76.2	25.874	82.995					
1231	4.271	76.1	25.874	82.998					
1233	4.401	76.0	25.873	83.000					
1235	4.53	75.9	25.872	83.002					
1237	4.659	75.9	25.872	83.005					
1239	4.788	75.7	25.871	83.007					
1241	4.92	75.6	25.870	83.009					
1243	5.048	75.5	25.870	83.011					
1245	5.18	75.5	25.869	83.014					
1247	5.311	75.4	25.869	83.016					
1249	5.441	75.4	25.868	83.018					
1251	5.571	75.3	25.867	83.021					
1253	5.704	75.3	25.867	83.023					
1255	5.838	75.2	25.866	83.025					
1257	5.968	75.2	25.865	83.028					
1259	6.099	75.1	25.865	83.030					
1301	6.229	75.1	25.864	83.032					
1303	6.362	75.0	25.863	83.035					
1305	6.495	75.0	25.863	83.037					
1307	6.624	75.0	25.862	83.039					
1309	6.757	75.0	25.862	83.042					
1311	6.887	74.9	25.861	83.044					
1313	7.023	74.8	25.860	83.047					
1315	7.154	74.8	25.860	83.049					
1317	7.29	74.7	25.859	83.051					
1319	7.424	74.7	25.858	83.054					
1321	7.554	74.8	25.858	83.056					
1323	7.683	74.8	25.857	83.058					
1325	7.809	74.7	25.857	83.060					
1327	7.939	74.7	25.856	83.063					
1329	8.071	74.6	25.855	83.065					
1331	8.198	74.6	25.855	83.067					
1333	8.329	74.6	25.854	83.070					
1335	8.46	74.5	25.853	83.072					

SITE 1 AMBIENT NOISE VERTICAL ARRAY					SITE 1 REVERBERATION VERTICAL ARRAY				
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1520	1.393	148.9	25.914	82.935	100	0.293	358.3	25.890	82.922
1522	1.412	148.5	25.915	82.935	102	0.291	358.1	25.890	82.921
1524	1.437	148.2	25.915	82.936	104	0.287	357.7	25.890	82.921
1526	1.457	148.0	25.915	82.936	106	0.275	357.1	25.890	82.921
1528	1.479	147.9	25.915	82.936	108	0.267	356.3	25.890	82.921
1530	1.497	147.7	25.916	82.936	110	0.258	355.5	25.890	82.921
1532	1.515	147.6	25.916	82.937	112	0.239	354.6	25.890	82.921
1534	1.541	147.4	25.916	82.937	114	0.228	353.3	25.891	82.921
1536	1.564	147.5	25.916	82.937	116	0.218	351.3	25.891	82.921
1538	1.586	147.1	25.917	82.938	118	0.203	349.3	25.891	82.921
1540	1.607	146.6	25.917	82.938	120	0.188	346.3	25.891	82.921
1542	1.628	146.5	25.917	82.938	122	0.178	343.8	25.892	82.921
1544	1.647	146.6	25.917	82.938	124	0.168	340.3	25.892	82.921
1546	1.672	146.3	25.918	82.939	126	0.157	335.8	25.892	82.920
1548	1.693	146.1	25.918	82.939	128	0.147	331.5	25.892	82.920
1550	1.711	145.9	25.918	82.939	130	0.141	326.9	25.892	82.920
					132	0.132	321.4	25.893	82.920
SITE 1 AMBIENT NOISE HORIZONTAL ARRAY					134	0.126	314.7	25.893	82.920
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	136	0.122	308.5	25.893	82.920
1520	1.605	151.7	25.914	82.935	138	0.12	299.9	25.893	82.920
1522	1.624	151.3	25.915	82.935	140	0.121	292.8	25.894	82.920
1524	1.649	151.0	25.915	82.936	142	0.126	286.0	25.894	82.919
1526	1.668	150.8	25.915	82.936	144	0.129	279.9	25.894	82.919
1528	1.689	150.7	25.915	82.936	146	0.137	273.7	25.894	82.919
1530	1.708	150.5	25.916	82.936	148	0.147	269.3	25.894	82.919
1532	1.725	150.4	25.916	82.937	150	0.156	265.3	25.895	82.919
1534	1.751	150.1	25.916	82.937	152	0.166	261.7	25.895	82.919
1536	1.774	150.2	25.916	82.937	154	0.178	258.3	25.895	82.918
1538	1.796	149.9	25.917	82.938	156	0.19	255.0	25.895	82.918
1540	1.816	149.3	25.917	82.938	158	0.2	252.5	25.895	82.918
1542	1.836	149.2	25.917	82.938	200	0.211	250.4	25.896	82.918
1544	1.856	149.3	25.917	82.938	202	0.223	248.2	25.896	82.918
1546	1.881	149.0	25.918	82.939	204	0.234	246.6	25.896	82.918
1548	1.901	148.8	25.918	82.939	206	0.248	244.7	25.896	82.918
1550	1.919	148.5	25.918	82.939	208	0.258	243.0	25.896	82.917
					210	0.27	241.7	25.897	82.917
					212	0.281	240.5	25.897	82.917
					214	0.293	239.9	25.897	82.917
					216	0.301	238.6	25.897	82.917
					SITE 1 REVERBERATION HORIZONTAL ARRAY				
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
100	0.079	24.0	25.890	82.922	140	0.188	202.0	25.894	82.920
102	0.077	23.8	25.890	82.921	142	0.203	203.4	25.894	82.919
104	0.072	23.9	25.890	82.921	144	0.217	203.5	25.894	82.919
106	0.06	26.4	25.890	82.921	146	0.233	204.4	25.894	82.919
108	0.051	27.3	25.890	82.921	148	0.247	205.5	25.894	82.919
110	0.042	29.3	25.890	82.921	150	0.26	206.1	25.895	82.919
112	0.025	46.2	25.890	82.921	152	0.274	206.8	25.895	82.919
114	0.015	67.0	25.891	82.921	154	0.289	207.5	25.895	82.918
116	0.009	121.6	25.891	82.921	156	0.305	207.8	25.895	82.918
118	0.022	171.3	25.891	82.921	158	0.319	208.2	25.895	82.918
120	0.038	185.6	25.891	82.921	200	0.332	208.4	25.896	82.918
122	0.051	190.3	25.892	82.921	202	0.346	208.8	25.896	82.918
124	0.064	194.4	25.892	82.921	204	0.359	209.0	25.896	82.918
126	0.082	196.7	25.892	82.920	206	0.374	209.3	25.896	82.918
128	0.096	197.7	25.892	82.920	208	0.387	209.2	25.896	82.917
130	0.109	199.4	25.892	82.920	210	0.401	209.5	25.897	82.917
132	0.125	199.5	25.893	82.920	212	0.413	209.5	25.897	82.917
134	0.141	200.4	25.893	82.920	214	0.425	210.1	25.897	82.917
136	0.155	200.7	25.893	82.920	216	0.435	209.8	25.897	82.917
138	0.173	201.5	25.893	82.920					

SITE 2 000°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
304	1.13	185.2	25.698	83.700	512	4.419	179.7	25.753	83.702
306	1.264	184.5	25.700	83.700	514	4.397	179.7	25.753	83.702
308	1.399	183.5	25.703	83.700	516	4.375	179.7	25.752	83.702
310	1.535	182.8	25.705	83.700	518	4.353	179.7	25.752	83.702
312	1.621	182.5	25.706	83.701	520	4.33	179.7	25.752	83.702
314	1.755	182.0	25.709	83.701	522	4.308	179.7	25.751	83.702
316	1.966	181.6	25.712	83.701	524	4.286	179.7	25.751	83.702
318	2.104	181.5	25.714	83.701	526	4.263	179.7	25.750	83.702
320	2.24	181.3	25.717	83.701	528	4.241	179.7	25.750	83.702
322	2.376	181.1	25.719	83.701	530	4.219	179.7	25.750	83.702
324	2.511	181.0	25.721	83.701	532	4.352	179.8	25.752	83.702
326	2.65	181.0	25.724	83.701	534	4.485	179.9	25.754	83.702
328	2.786	180.9	25.726	83.701	536	4.618	180.0	25.756	83.702
330	2.921	180.8	25.728	83.701	538	4.751	180.1	25.759	83.702
332	3.06	180.7	25.730	83.701	540	4.884	180.1	25.761	83.702
334	3.199	180.7	25.733	83.701	542	5.015	180.1	25.763	83.702
336	3.339	180.6	25.735	83.701	544	5.147	180.0	25.765	83.702
338	3.479	180.5	25.737	83.701	546	5.278	180.0	25.767	83.702
340	3.619	180.5	25.740	83.701	548	5.41	179.9	25.770	83.702
342	3.757	180.5	25.742	83.701	550	5.541	179.9	25.772	83.702
344	3.897	180.4	25.744	83.701	552	5.674	179.8	25.774	83.702
346	4.033	180.4	25.747	83.701	554	5.807	179.8	25.776	83.702
348	4.171	180.3	25.749	83.701	556	5.94	179.7	25.778	83.702
350	4.308	180.2	25.751	83.701	558	6.073	179.7	25.781	83.703
352	4.444	180.1	25.753	83.702	600	6.206	179.6	25.783	83.703
354	4.581	180.0	25.756	83.702	602	6.343	179.6	25.785	83.703
356	4.718	179.9	25.758	83.702	604	6.48	179.6	25.787	83.703
358	4.853	179.9	25.760	83.702	606	6.617	179.7	25.790	83.703
400	4.988	179.8	25.763	83.702	608	6.754	179.7	25.792	83.703
402	5.123	179.8	25.765	83.702	610	6.892	179.7	25.794	83.702
404	5.179	179.8	25.766	83.702	612	7.021	179.7	25.796	83.703
406	5.156	179.8	25.765	83.702	614	7.15	179.7	25.799	83.703
408	5.134	179.8	25.765	83.702	616	7.279	179.6	25.801	83.703
410	5.112	179.8	25.765	83.702	618	7.408	179.6	25.803	83.703
412	5.089	179.8	25.764	83.702	620	7.537	179.6	25.805	83.703
414	5.067	179.8	25.764	83.702	622	7.682	179.6	25.807	83.703
416	5.045	179.8	25.763	83.702	624	7.827	179.6	25.810	83.703
418	5.023	179.8	25.763	83.702	626	7.972	179.6	25.812	83.703
420	5	179.8	25.763	83.702	628	8.117	179.5	25.815	83.703
422	4.978	179.8	25.762	83.702	630	8.262	179.5	25.817	83.703
424	4.955	179.8	25.762	83.702	632	8.382	179.5	25.819	83.703
426	4.933	179.8	25.762	83.702	634	8.502	179.5	25.821	83.703
428	4.911	179.8	25.761	83.702	636	8.623	179.5	25.823	83.703
430	4.889	179.8	25.761	83.702	638	8.743	179.5	25.825	83.703
432	4.866	179.8	25.760	83.702	640	8.863	179.5	25.827	83.703
434	4.844	179.8	25.760	83.702	642	8.997	179.4	25.829	83.703
436	4.822	179.8	25.760	83.702	644	9.13	179.4	25.832	83.703
438	4.799	179.8	25.759	83.702	646	9.262	179.4	25.834	83.704
440	4.777	179.8	25.759	83.702	648	9.395	179.4	25.836	83.704
442	4.754	179.8	25.759	83.702	650	9.529	179.4	25.838	83.704
444	4.732	179.8	25.758	83.702	652	9.662	179.4	25.840	83.704
446	4.71	179.8	25.758	83.702	654	9.796	179.4	25.843	83.704
448	4.688	179.8	25.758	83.702	656	9.93	179.3	25.845	83.704
450	4.665	179.8	25.757	83.702	658	10.064	179.3	25.847	83.704
452	4.643	179.8	25.757	83.702					
454	4.621	179.8	25.756	83.702					
456	4.598	179.8	25.756	83.702					
458	4.576	179.8	25.756	83.702					
500	4.553	179.8	25.755	83.702					
502	4.531	179.8	25.755	83.702					
504	4.509	179.7	25.755	83.702					
506	4.487	179.7	25.754	83.702					
508	4.464	179.7	25.754	83.702					
510	4.442	179.7	25.753	83.702					

SITE 2 000°T HORIZONTAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
304	1.075	160.7	25.698	83.700	510	4.357	173.7	25.753	83.702
306	1.204	162.7	25.700	83.700	512	4.335	173.7	25.753	83.702
308	1.339	163.9	25.703	83.700	514	4.313	173.6	25.753	83.702
310	1.473	164.9	25.705	83.700	516	4.291	173.6	25.752	83.702
312	1.558	165.6	25.706	83.701	518	4.268	173.6	25.752	83.702
314	1.69	166.5	25.709	83.701	520	4.246	173.5	25.752	83.702
316	1.897	167.8	25.712	83.701	522	4.224	173.5	25.751	83.702
318	2.032	168.6	25.714	83.701	524	4.202	173.5	25.751	83.702
320	2.167	169.2	25.717	83.701	526	4.179	173.4	25.750	83.702
322	2.301	169.7	25.719	83.701	528	4.157	173.4	25.750	83.702
324	2.435	170.3	25.721	83.701	530	4.135	173.4	25.750	83.702
326	2.572	170.8	25.724	83.701	532	4.267	173.6	25.752	83.702
328	2.706	171.2	25.726	83.701	534	4.399	173.9	25.754	83.702
330	2.84	171.6	25.728	83.701	536	4.53	174.2	25.756	83.702
332	2.978	171.9	25.730	83.701	538	4.662	174.4	25.759	83.702
334	3.116	172.3	25.733	83.701	540	4.794	174.7	25.761	83.702
336	3.255	172.5	25.735	83.701	542	4.925	174.8	25.763	83.702
338	3.395	172.8	25.737	83.701	544	5.056	174.8	25.765	83.702
340	3.533	173.1	25.740	83.701	546	5.188	174.9	25.767	83.702
342	3.671	173.3	25.742	83.701	548	5.319	175.0	25.770	83.702
344	3.81	173.6	25.744	83.701	550	5.45	175.1	25.772	83.702
346	3.946	173.7	25.747	83.701	552	5.583	175.1	25.774	83.702
348	4.084	173.9	25.749	83.701	554	5.716	175.2	25.776	83.702
350	4.22	174.0	25.751	83.701	556	5.849	175.2	25.778	83.702
352	4.356	174.1	25.753	83.702	558	5.982	175.3	25.781	83.703
354	4.493	174.2	25.756	83.702	600	6.115	175.3	25.783	83.703
356	4.63	174.3	25.758	83.702	602	6.252	175.4	25.785	83.703
358	4.765	174.4	25.760	83.702	604	6.389	175.5	25.787	83.703
400	4.9	174.5	25.763	83.702	606	6.525	175.6	25.790	83.703
402	5.034	174.6	25.765	83.702	608	6.662	175.7	25.792	83.703
404	5.09	174.7	25.766	83.702	610	6.798	175.8	25.794	83.702
406	5.068	174.6	25.765	83.702	612	6.927	175.9	25.796	83.703
408	5.046	174.6	25.765	83.702	614	7.056	175.9	25.799	83.703
410	5.024	174.6	25.765	83.702	616	7.185	176.0	25.801	83.703
412	5.001	174.6	25.764	83.702	618	7.314	176.0	25.803	83.703
414	4.979	174.5	25.764	83.702	620	7.443	176.1	25.805	83.703
416	4.957	174.5	25.763	83.702	622	7.588	176.1	25.807	83.703
418	4.935	174.5	25.763	83.702	624	7.733	176.2	25.810	83.703
420	4.912	174.5	25.763	83.702	626	7.878	176.2	25.812	83.703
422	4.89	174.4	25.762	83.702	628	8.023	176.3	25.815	83.703
424	4.868	174.4	25.762	83.702	630	8.168	176.3	25.817	83.703
426	4.846	174.4	25.762	83.702	632	8.288	176.3	25.819	83.703
428	4.824	174.3	25.761	83.702	634	8.408	176.4	25.821	83.703
430	4.802	174.3	25.761	83.702	636	8.529	176.4	25.823	83.703
432	4.779	174.3	25.760	83.702	638	8.649	176.4	25.825	83.703
434	4.757	174.3	25.760	83.702	640	8.769	176.5	25.827	83.703
436	4.735	174.2	25.760	83.702	642	8.902	176.5	25.829	83.703
438	4.712	174.2	25.759	83.702	644	9.036	176.5	25.832	83.703
440	4.69	174.2	25.759	83.702	646	9.167	176.6	25.834	83.704
442	4.668	174.1	25.759	83.702	648	9.301	176.6	25.836	83.704
444	4.646	174.1	25.758	83.702	650	9.434	176.6	25.838	83.704
446	4.624	174.1	25.758	83.702	652	9.568	176.6	25.840	83.704
448	4.602	174.1	25.758	83.702	654	9.701	176.6	25.843	83.704
450	4.579	174.0	25.757	83.702	656	9.835	176.7	25.845	83.704
452	4.557	174.0	25.757	83.702	658	9.969	176.7	25.847	83.704
454	4.535	174.0	25.756	83.702					
456	4.513	173.9	25.756	83.702					
458	4.49	173.9	25.756	83.702					
500	4.468	173.9	25.755	83.702					
502	4.446	173.8	25.755	83.702					
504	4.424	173.8	25.755	83.702					
506	4.402	173.8	25.754	83.702					
508	4.379	173.7	25.754	83.702					

SITE 2 270°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1210	0.257	277.3	25.679	83.697	1418	7.996	89.0	25.677	83.850
1212	0.155	264.5	25.680	83.699	1420	8.142	89.0	25.677	83.852
1214	0.074	234.7	25.680	83.701	1422	8.286	89.0	25.677	83.855
1216	0.054	123.7	25.680	83.703	1424	8.435	89.0	25.677	83.858
1218	0.142	99.9	25.680	83.704	1426	8.578	89.0	25.677	83.860
1220	0.253	97.2	25.680	83.706	1428	8.723	88.9	25.677	83.863
1222	0.381	95.0	25.680	83.709	1430	8.867	89.0	25.677	83.866
1224	0.529	93.5	25.680	83.712	1432	9.013	89.0	25.677	83.868
1226	0.682	91.8	25.680	83.714	1434	9.162	89.0	25.677	83.871
1228	0.838	90.6	25.680	83.717	1436	9.307	89.0	25.677	83.874
1230	0.979	90.3	25.679	83.720	1438	9.458	89.0	25.677	83.877
1232	1.11	90.4	25.680	83.722	1440	9.606	89.0	25.677	83.879
1234	1.226	90.6	25.680	83.724	1442	9.728	89.0	25.677	83.882
1236	1.336	90.6	25.680	83.727					
1238	1.449	90.7	25.680	83.729					
1240	1.562	90.5	25.680	83.731					
1242	1.675	89.8	25.679	83.733					
1244	1.785	89.7	25.679	83.735					
1246	1.896	89.4	25.679	83.737					
1248	2.006	89.4	25.679	83.739					
1250	2.118	89.6	25.679	83.741					
1252	2.232	89.7	25.679	83.743					
1254	2.343	89.7	25.679	83.745					
1256	2.454	89.9	25.679	83.747					
1258	2.567	89.8	25.679	83.749					
1300	2.678	89.8	25.679	83.751					
1302	2.79	89.5	25.679	83.753					
1304	2.907	89.2	25.679	83.756					
1306	3.013	89.4	25.679	83.758					
1308	3.125	89.5	25.679	83.760					
1310	3.235	89.7	25.679	83.762					
1312	3.35	89.6	25.679	83.764					
1314	3.468	89.6	25.679	83.766					
1316	3.588	89.4	25.679	83.768					
1318	3.711	89.4	25.679	83.770					
1320	3.844	89.4	25.679	83.773					
1322	3.975	89.3	25.679	83.775					
1324	4.11	89.3	25.679	83.778					
1326	4.244	89.3	25.679	83.780					
1328	4.387	89.3	25.679	83.783					
1330	4.527	89.4	25.679	83.786					
1332	4.668	89.2	25.678	83.788					
1334	4.809	89.1	25.678	83.791					
1336	4.952	89.1	25.678	83.793					
1338	5.092	89.2	25.678	83.796					
1340	5.234	89.2	25.678	83.799					
1342	5.378	89.3	25.678	83.801					
1344	5.517	89.3	25.678	83.804					
1346	5.655	89.2	25.678	83.806					
1348	5.796	89.2	25.678	83.809					
1350	5.941	89.2	25.678	83.812					
1352	6.087	89.1	25.678	83.814					
1354	6.232	89.0	25.678	83.817					
1356	6.374	89.0	25.678	83.820					
1358	6.514	89.0	25.678	83.822					
1400	6.66	89.0	25.678	83.825					
1402	6.811	89.1	25.678	83.828					
1404	6.954	89.1	25.678	83.830					
1406	7.105	89.1	25.678	83.833					
1408	7.254	89.1	25.677	83.836					
1410	7.397	89.1	25.677	83.839					
1412	7.549	89.1	25.677	83.841					
1414	7.698	89.1	25.677	83.844					
1416	7.849	89.1	25.677	83.847					

SITE 2 270°T HORIZONTAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1210	0.248	54.7	25.679	83.697	1418	8.455	88.3	25.677	83.850
1212	0.318	72.4	25.680	83.699	1420	8.601	88.3	25.677	83.852
1214	0.403	80.2	25.680	83.701	1422	8.746	88.3	25.677	83.855
1216	0.509	80.8	25.680	83.703	1424	8.894	88.3	25.677	83.858
1218	0.603	81.8	25.680	83.704	1426	9.037	88.3	25.677	83.860
1220	0.713	83.6	25.680	83.706	1428	9.183	88.3	25.677	83.863
1222	0.841	84.7	25.680	83.709	1430	9.326	88.3	25.677	83.866
1224	0.989	85.4	25.680	83.712	1432	9.472	88.3	25.677	83.868
1226	1.143	85.5	25.680	83.714	1434	9.622	88.4	25.677	83.871
1228	1.299	85.5	25.680	83.717	1436	9.767	88.4	25.677	83.874
1230	1.44	85.8	25.679	83.720	1438	9.917	88.4	25.677	83.877
1232	1.57	86.2	25.680	83.722	1440	10.065	88.4	25.677	83.879
1234	1.686	86.6	25.680	83.724	1442	10.188	88.4	25.677	83.882
1236	1.795	86.9	25.680	83.727					
1238	1.909	87.2	25.680	83.729					
1240	2.021	87.2	25.680	83.731					
1242	2.135	86.9	25.679	83.733					
1244	2.245	86.9	25.679	83.735					
1246	2.356	86.8	25.679	83.737					
1248	2.467	86.9	25.679	83.739					
1250	2.578	87.2	25.679	83.741					
1252	2.691	87.3	25.679	83.743					
1254	2.803	87.5	25.679	83.745					
1256	2.913	87.7	25.679	83.747					
1258	3.026	87.7	25.679	83.749					
1300	3.137	87.8	25.679	83.751					
1302	3.25	87.6	25.679	83.753					
1304	3.367	87.4	25.679	83.756					
1306	3.472	87.7	25.679	83.758					
1308	3.585	87.8	25.679	83.760					
1310	3.695	88.0	25.679	83.762					
1312	3.809	88.0	25.679	83.764					
1314	3.927	88.0	25.679	83.766					
1316	4.048	87.9	25.679	83.768					
1318	4.171	87.9	25.679	83.770					
1320	4.304	87.9	25.679	83.773					
1322	4.435	88.0	25.679	83.775					
1324	4.569	88.0	25.679	83.778					
1326	4.703	88.1	25.679	83.780					
1328	4.846	88.1	25.679	83.783					
1330	4.986	88.2	25.679	83.786					
1332	5.127	88.0	25.678	83.788					
1334	5.269	88.0	25.678	83.791					
1336	5.411	88.0	25.678	83.793					
1338	5.552	88.1	25.678	83.796					
1340	5.693	88.2	25.678	83.799					
1342	5.837	88.2	25.678	83.801					
1344	5.977	88.3	25.678	83.804					
1346	6.115	88.3	25.678	83.806					
1348	6.256	88.2	25.678	83.809					
1350	6.4	88.2	25.678	83.812					
1352	6.547	88.2	25.678	83.814					
1354	6.691	88.1	25.678	83.817					
1356	6.834	88.2	25.678	83.820					
1358	6.974	88.2	25.678	83.822					
1400	7.12	88.2	25.678	83.825					
1402	7.27	88.2	25.678	83.828					
1404	7.414	88.3	25.678	83.830					
1406	7.565	88.3	25.678	83.833					
1408	7.713	88.3	25.677	83.836					
1410	7.857	88.3	25.677	83.839					
1412	8.008	88.3	25.677	83.841					
1414	8.158	88.4	25.677	83.844					
1416	8.308	88.3	25.677	83.847					

SITE 2 270°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1210	0.257	277.3	25.679	83.697	1418	7.996	89.0	25.677	83.850
1212	0.155	264.5	25.680	83.699	1420	8.142	89.0	25.677	83.852
1214	0.074	234.7	25.680	83.701	1422	8.286	89.0	25.677	83.855
1216	0.054	123.7	25.680	83.703	1424	8.435	89.0	25.677	83.858
1218	0.142	99.9	25.680	83.704	1426	8.578	89.0	25.677	83.860
1220	0.253	97.2	25.680	83.706	1428	8.723	88.9	25.677	83.863
1222	0.381	95.0	25.680	83.709	1430	8.867	89.0	25.677	83.866
1224	0.529	93.5	25.680	83.712	1432	9.013	89.0	25.677	83.868
1226	0.682	91.8	25.680	83.714	1434	9.162	89.0	25.677	83.871
1228	0.838	90.6	25.680	83.717	1436	9.307	89.0	25.677	83.874
1230	0.979	90.3	25.679	83.720	1438	9.458	89.0	25.677	83.877
1232	1.11	90.4	25.680	83.722	1440	9.606	89.0	25.677	83.879
1234	1.226	90.6	25.680	83.724	1442	9.728	89.0	25.677	83.882
1236	1.336	90.6	25.680	83.727					
1238	1.449	90.7	25.680	83.729					
1240	1.562	90.5	25.680	83.731					
1242	1.675	89.8	25.679	83.733					
1244	1.785	89.7	25.679	83.735					
1246	1.896	89.4	25.679	83.737					
1248	2.006	89.4	25.679	83.739					
1250	2.118	89.6	25.679	83.741					
1252	2.232	89.7	25.679	83.743					
1254	2.343	89.7	25.679	83.745					
1256	2.454	89.9	25.679	83.747					
1258	2.567	89.8	25.679	83.749					
1300	2.678	89.8	25.679	83.751					
1302	2.79	89.5	25.679	83.753					
1304	2.907	89.2	25.679	83.756					
1306	3.013	89.4	25.679	83.758					
1308	3.125	89.5	25.679	83.760					
1310	3.235	89.7	25.679	83.762					
1312	3.35	89.6	25.679	83.764					
1314	3.468	89.6	25.679	83.766					
1316	3.588	89.4	25.679	83.768					
1318	3.711	89.4	25.679	83.770					
1320	3.844	89.4	25.679	83.773					
1322	3.975	89.3	25.679	83.775					
1324	4.11	89.3	25.679	83.778					
1326	4.244	89.3	25.679	83.780					
1328	4.387	89.3	25.679	83.783					
1330	4.527	89.4	25.679	83.786					
1332	4.668	89.2	25.678	83.788					
1334	4.809	89.1	25.678	83.791					
1336	4.952	89.1	25.678	83.793					
1338	5.092	89.2	25.678	83.796					
1340	5.234	89.2	25.678	83.799					
1342	5.378	89.3	25.678	83.801					
1344	5.517	89.3	25.678	83.804					
1346	5.655	89.2	25.678	83.806					
1348	5.796	89.2	25.678	83.809					
1350	5.941	89.2	25.678	83.812					
1352	6.087	89.1	25.678	83.814					
1354	6.232	89.0	25.678	83.817					
1356	6.374	89.0	25.678	83.820					
1358	6.514	89.0	25.678	83.822					
1400	6.66	89.0	25.678	83.825					
1402	6.811	89.1	25.678	83.828					
1404	6.954	89.1	25.678	83.830					
1406	7.105	89.1	25.678	83.833					
1408	7.254	89.1	25.677	83.836					
1410	7.397	89.1	25.677	83.839					
1412	7.549	89.1	25.677	83.841					
1414	7.698	89.1	25.677	83.844					
1416	7.849	89.1	25.677	83.847					

SITE 2 090°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1618	0.62	278.0	25.678	83.690	1826	2.774	267.1	25.682	83.651
1620	0.743	274.7	25.678	83.688	1828	2.772	267.1	25.682	83.651
1622	0.865	272.9	25.679	83.686	1830	2.768	267.1	25.682	83.651
1624	0.982	270.9	25.679	83.684	1832	2.765	267.1	25.682	83.651
1626	1.097	269.0	25.680	83.682	1834	2.762	267.1	25.682	83.651
1628	1.217	267.6	25.680	83.679	1836	2.759	267.0	25.682	83.651
1630	1.342	267.6	25.680	83.677	1838	2.757	267.0	25.682	83.651
1632	1.467	268.5	25.680	83.675	1840	2.753	267.0	25.682	83.651
1634	1.594	269.0	25.680	83.672	1842	2.751	267.0	25.682	83.651
1636	1.723	268.9	25.680	83.670	1844	2.748	266.9	25.682	83.651
1638	1.854	268.5	25.680	83.668	1846	2.745	266.9	25.682	83.651
1640	1.981	268.1	25.680	83.665	1848	2.742	266.9	25.682	83.651
1642	2.112	267.9	25.681	83.663	1850	2.739	266.9	25.682	83.651
1644	2.247	267.9	25.681	83.660	1852	2.736	266.8	25.682	83.651
1646	2.382	267.9	25.681	83.658	1854	2.733	266.8	25.682	83.651
1648	2.514	267.9	25.681	83.655	1856	2.73	266.8	25.682	83.651
1650	2.649	268.0	25.681	83.653	1858	2.727	266.8	25.682	83.651
1652	2.777	268.1	25.681	83.651	1900	2.724	266.7	25.682	83.652
1654	2.91	268.2	25.681	83.648	1902	2.722	266.7	25.682	83.652
1656	2.907	268.2	25.681	83.648	1904	2.719	266.7	25.682	83.652
1658	2.904	268.2	25.681	83.648	1906	2.715	266.7	25.682	83.652
1700	2.901	268.1	25.681	83.648	1908	2.713	266.6	25.682	83.652
1702	2.899	268.1	25.681	83.648	1910	2.71	266.6	25.682	83.652
1704	2.895	268.1	25.681	83.648	1912	2.706	266.6	25.682	83.652
1706	2.892	268.1	25.681	83.648	1914	2.704	266.6	25.682	83.652
1708	2.889	268.0	25.681	83.648	1916	2.701	266.5	25.682	83.652
1710	2.886	268.0	25.681	83.648	1918	2.698	266.5	25.682	83.652
1712	2.883	268.0	25.681	83.649	1920	2.695	266.5	25.682	83.652
1714	2.88	268.0	25.681	83.649	1922	2.692	266.5	25.682	83.652
1716	2.877	268.0	25.681	83.649	1924	2.689	266.4	25.682	83.652
1718	2.874	267.9	25.681	83.649	1926	2.686	266.4	25.682	83.652
1720	2.872	267.9	25.681	83.649	1928	2.683	266.4	25.682	83.652
1722	2.868	267.9	25.681	83.649	1930	2.68	266.4	25.682	83.652
1724	2.866	267.9	25.681	83.649	1932	2.678	266.3	25.682	83.652
1726	2.863	267.9	25.681	83.649	1934	2.674	266.3	25.682	83.652
1728	2.86	267.8	25.681	83.649	1936	2.672	266.3	25.682	83.653
1730	2.857	267.8	25.681	83.649	1938	2.669	266.3	25.682	83.653
1732	2.853	267.8	25.681	83.649	1940	2.665	266.2	25.682	83.653
1734	2.851	267.8	25.681	83.649	1942	2.663	266.2	25.682	83.653
1736	2.848	267.7	25.681	83.649	1944	2.66	266.2	25.682	83.653
1738	2.845	267.7	25.681	83.649	1946	2.657	266.2	25.682	83.653
1740	2.842	267.7	25.681	83.649	1948	2.654	266.1	25.682	83.653
1742	2.839	267.7	25.681	83.649	1950	2.651	266.1	25.682	83.653
1744	2.837	267.6	25.681	83.649	1952	2.648	266.1	25.682	83.653
1746	2.833	267.6	25.681	83.649	1954	2.645	266.0	25.682	83.653
1748	2.83	267.6	25.681	83.650	1956	2.643	266.0	25.682	83.653
1750	2.827	267.6	25.681	83.650	1958	2.639	266.0	25.682	83.653
1752	2.824	267.6	25.681	83.650	2000	2.637	266.0	25.682	83.653
1754	2.821	267.5	25.681	83.650	2002	2.634	265.9	25.682	83.653
1756	2.818	267.5	25.681	83.650	2004	2.631	265.9	25.683	83.653
1758	2.815	267.5	25.681	83.650	2006	2.628	265.9	25.683	83.653
1800	2.813	267.5	25.681	83.650	2008	2.625	265.9	25.683	83.653
1802	2.809	267.4	25.681	83.650	2010	2.622	265.8	25.683	83.653
1804	2.807	267.4	25.681	83.650	2012	2.619	265.8	25.683	83.654
1806	2.804	267.4	25.682	83.650	2014	2.616	265.8	25.683	83.654
1808	2.8	267.4	25.682	83.650	2016	2.613	265.8	25.683	83.654
1810	2.798	267.3	25.682	83.650	2018	2.61	265.7	25.683	83.654
1812	2.795	267.3	25.682	83.650	2020	2.608	265.7	25.683	83.654
1814	2.792	267.3	25.682	83.650	2022	2.604	265.7	25.683	83.654
1816	2.789	267.3	25.682	83.650	2024	2.602	265.6	25.683	83.654
1818	2.786	267.2	25.682	83.650	2026	2.528	263.0	25.685	83.655
1820	2.783	267.2	25.682	83.650	2028	2.603	261.2	25.686	83.654
1822	2.78	267.2	25.682	83.650	2030	2.734	261.5	25.686	83.652
1824	2.777	267.2	25.682	83.651	2032	2.872	263.0	25.685	83.649

SITE 2 090°T VERTICAL ARRAY (CONT'D)					SITE 2 090°T HORIZONTAL ARRAY				
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
2034	3.019	264.4	25.684	83.646	1618	0.252	321.5	25.678	83.690
2036	3.169	265.6	25.683	83.643	1620	0.332	301.2	25.678	83.688
2038	3.315	266.6	25.683	83.641	1622	0.435	290.9	25.679	83.686
2040	3.436	267.2	25.682	83.638	1624	0.539	283.5	25.679	83.684
2042	3.546	267.4	25.682	83.636	1626	0.646	278.1	25.680	83.682
2044	3.651	267.3	25.682	83.634	1628	0.761	274.5	25.680	83.679
2046	3.789	268.4	25.681	83.632	1630	0.885	273.5	25.680	83.677
2048	3.901	268.6	25.681	83.630	1632	1.012	274.1	25.680	83.675
2050	4.024	268.8	25.681	83.627	1634	1.14	274.2	25.680	83.672
2052	4.156	268.9	25.681	83.625	1636	1.268	273.5	25.680	83.670
2054	4.295	269.0	25.681	83.622	1638	1.397	272.6	25.680	83.668
2056	4.424	268.8	25.681	83.620	1640	1.524	271.7	25.680	83.665
2058	4.553	268.4	25.681	83.618	1642	1.654	271.2	25.681	83.663
2100	4.684	268.4	25.682	83.615	1644	1.788	270.9	25.681	83.660
2102	4.817	268.5	25.681	83.613	1646	1.923	270.8	25.681	83.658
2104	4.95	268.6	25.681	83.610	1648	2.055	270.5	25.681	83.655
2106	5.076	268.4	25.682	83.608	1650	2.19	270.5	25.681	83.653
2108	5.216	268.5	25.682	83.605	1652	2.318	270.5	25.681	83.651
2110	5.346	268.5	25.682	83.603	1654	2.451	270.5	25.681	83.648
2112	5.479	268.4	25.682	83.601	1656	2.449	270.4	25.681	83.648
2114	5.62	268.5	25.682	83.598	1658	2.445	270.4	25.681	83.648
2116	5.762	268.6	25.682	83.595	1700	2.442	270.4	25.681	83.648
2118	5.9	268.6	25.682	83.593	1702	2.44	270.4	25.681	83.648
2120	6.038	268.6	25.682	83.590	1704	2.437	270.3	25.681	83.648
2122	6.176	268.7	25.682	83.588	1706	2.433	270.3	25.681	83.648
2124	6.314	268.7	25.682	83.585	1708	2.43	270.3	25.681	83.648
2126	6.452	268.7	25.682	83.583	1710	2.427	270.3	25.681	83.648
2128	6.59	268.8	25.682	83.580	1712	2.425	270.3	25.681	83.649
2130	6.728	268.8	25.682	83.577	1714	2.421	270.2	25.681	83.649
2132	6.867	268.8	25.682	83.575	1716	2.418	270.2	25.681	83.649
2134	7.004	268.9	25.682	83.572	1718	2.415	270.2	25.681	83.649
2136	7.144	268.9	25.682	83.570	1720	2.413	270.2	25.681	83.649
2138	7.287	268.9	25.682	83.567	1722	2.409	270.1	25.681	83.649
2140	7.421	268.9	25.682	83.565	1724	2.407	270.1	25.681	83.649
2142	7.558	269.0	25.682	83.562	1726	2.403	270.1	25.681	83.649
2144	7.697	269.0	25.682	83.560	1728	2.401	270.1	25.681	83.649
2146	7.832	269.0	25.682	83.557	1730	2.397	270.0	25.681	83.649
2148	7.97	269.0	25.682	83.554	1732	2.394	270.0	25.681	83.649
2150	8.102	269.1	25.682	83.552	1734	2.392	270.0	25.681	83.649
2152	8.236	269.1	25.682	83.550	1736	2.389	270.0	25.681	83.649
2154	8.389	269.2	25.682	83.547	1738	2.386	269.9	25.681	83.649
2156	8.486	269.2	25.682	83.545	1740	2.382	269.9	25.681	83.649
2158	8.537	269.2	25.682	83.544	1742	2.38	269.9	25.681	83.649
2200	8.681	269.2	25.682	83.541	1744	2.377	269.9	25.681	83.649
2202	8.817	269.2	25.682	83.539	1746	2.373	269.8	25.681	83.649
2204	8.954	269.2	25.682	83.536	1748	2.37	269.8	25.681	83.650
2206	9.087	269.2	25.682	83.534	1750	2.368	269.8	25.681	83.650
2208	9.223	269.2	25.682	83.531	1752	2.364	269.8	25.681	83.650
2210	9.36	269.3	25.682	83.529	1754	2.361	269.7	25.681	83.650
2212	9.497	269.3	25.682	83.526	1756	2.359	269.7	25.681	83.650
2214	9.682	269.3	25.682	83.523	1758	2.356	269.7	25.681	83.650
2216	9.867	269.3	25.682	83.519	1800	2.353	269.7	25.681	83.650
2218	10.053	269.3	25.682	83.516	1802	2.349	269.6	25.681	83.650
2220	10.238	269.3	25.682	83.513	1804	2.347	269.6	25.681	83.650

SITE 2 090°T HORIZONTAL ARRAY(CONT'D)									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1806	2.344	269.6	25.682	83.650	2014	2.153	267.8	25.683	83.654
1808	2.34	269.6	25.682	83.650	2016	2.15	267.8	25.683	83.654
1810	2.338	269.5	25.682	83.650	2018	2.148	267.8	25.683	83.654
1812	2.335	269.5	25.682	83.650	2020	2.145	267.7	25.683	83.654
1814	2.331	269.5	25.682	83.650	2022	2.142	267.7	25.683	83.654
1816	2.329	269.5	25.682	83.650	2024	2.139	267.7	25.683	83.654
1818	2.326	269.4	25.682	83.650	2026	2.061	264.5	25.685	83.655
1820	2.323	269.4	25.682	83.650	2028	2.135	262.3	25.686	83.654
1822	2.32	269.4	25.682	83.650	2030	2.266	262.6	25.686	83.652
1824	2.317	269.4	25.682	83.651	2032	2.406	264.3	25.685	83.649
1826	2.314	269.3	25.682	83.651	2034	2.554	265.8	25.684	83.646
1828	2.311	269.3	25.682	83.651	2036	2.706	267.1	25.683	83.643
1830	2.308	269.3	25.682	83.651	2038	2.854	268.3	25.683	83.641
1832	2.305	269.2	25.682	83.651	2040	2.975	268.9	25.682	83.638
1834	2.302	269.2	25.682	83.651	2042	3.086	269.0	25.682	83.636
1836	2.299	269.2	25.682	83.651	2044	3.191	268.9	25.682	83.634
1838	2.296	269.2	25.682	83.651	2046	3.33	270.1	25.681	83.632
1840	2.293	269.2	25.682	83.651	2048	3.443	270.2	25.681	83.630
1842	2.29	269.1	25.682	83.651	2050	3.566	270.4	25.681	83.627
1844	2.287	269.1	25.682	83.651	2052	3.698	270.5	25.681	83.625
1846	2.284	269.1	25.682	83.651	2054	3.837	270.5	25.681	83.622
1848	2.281	269.0	25.682	83.651	2056	3.966	270.2	25.681	83.620
1850	2.278	269.0	25.682	83.651	2058	4.094	269.8	25.681	83.618
1852	2.275	269.0	25.682	83.651	2100	4.225	269.7	25.682	83.615
1854	2.272	269.0	25.682	83.651	2102	4.358	269.8	25.681	83.613
1856	2.269	268.9	25.682	83.651	2104	4.491	269.9	25.681	83.610
1858	2.266	268.9	25.682	83.651	2106	4.617	269.6	25.682	83.608
1900	2.263	268.9	25.682	83.652	2108	4.757	269.7	25.682	83.605
1902	2.26	268.9	25.682	83.652	2110	4.887	269.6	25.682	83.603
1904	2.258	268.8	25.682	83.652	2112	5.02	269.6	25.682	83.601
1906	2.254	268.8	25.682	83.652	2114	5.161	269.6	25.682	83.598
1908	2.251	268.8	25.682	83.652	2116	5.303	269.6	25.682	83.595
1910	2.249	268.7	25.682	83.652	2118	5.441	269.6	25.682	83.593
1912	2.245	268.7	25.682	83.652	2120	5.579	269.7	25.682	83.590
1914	2.242	268.7	25.682	83.652	2122	5.717	269.7	25.682	83.588
1916	2.239	268.7	25.682	83.652	2124	5.855	269.7	25.682	83.585
1918	2.236	268.6	25.682	83.652	2126	5.994	269.7	25.682	83.583
1920	2.233	268.6	25.682	83.652	2128	6.132	269.7	25.682	83.580
1922	2.23	268.6	25.682	83.652	2130	6.27	269.7	25.682	83.577
1924	2.228	268.5	25.682	83.652	2132	6.408	269.7	25.682	83.575
1926	2.225	268.5	25.682	83.652	2134	6.546	269.8	25.682	83.572
1928	2.222	268.5	25.682	83.652	2136	6.686	269.8	25.682	83.570
1930	2.219	268.5	25.682	83.652	2138	6.829	269.8	25.682	83.567
1932	2.216	268.4	25.682	83.652	2140	6.962	269.8	25.682	83.565
1934	2.212	268.4	25.682	83.652	2142	7.1	269.8	25.682	83.562
1936	2.21	268.4	25.682	83.653	2144	7.238	269.8	25.682	83.560
1938	2.207	268.4	25.682	83.653	2146	7.374	269.8	25.682	83.557
1940	2.204	268.3	25.682	83.653	2148	7.512	269.8	25.682	83.554
1942	2.201	268.3	25.682	83.653	2150	7.644	269.8	25.682	83.552
1944	2.198	268.3	25.682	83.653	2152	7.778	269.8	25.682	83.550
1946	2.195	268.2	25.682	83.653	2154	7.931	269.9	25.682	83.547
1948	2.192	268.2	25.682	83.653	2156	8.028	269.9	25.682	83.545
1950	2.189	268.2	25.682	83.653	2158	8.078	269.9	25.682	83.544
1952	2.186	268.2	25.682	83.653	2200	8.223	269.9	25.682	83.541
1954	2.183	268.1	25.682	83.653	2202	8.359	269.9	25.682	83.539
1956	2.18	268.1	25.682	83.653	2204	8.496	269.9	25.682	83.536
1958	2.177	268.1	25.682	83.653	2206	8.629	269.9	25.682	83.534
2000	2.174	268.0	25.682	83.653	2208	8.765	269.9	25.682	83.531
2002	2.171	268.0	25.682	83.653	2210	8.901	269.9	25.682	83.529
2004	2.168	268.0	25.683	83.653	2212	9.039	269.9	25.682	83.526
2006	2.165	267.9	25.683	83.653	2214	9.224	269.9	25.682	83.523
2008	2.163	267.9	25.683	83.653	2216	9.409	269.9	25.682	83.519
2010	2.159	267.9	25.683	83.653	2218	9.595	269.9	25.682	83.516
2012	2.157	267.9	25.683	83.654	2220	9.78	269.9	25.682	83.513

SITE 2 AMBIENT NOISE VERTICAL ARRAY					SITE 2 REVERBERATION VERTICAL ARRAY				
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
15	1.433	238.1	25.692	83.679	159	0.237	245.6	25.681	83.698
17	1.434	238.0	25.692	83.679	201	0.243	246.3	25.681	83.698
19	1.435	238.0	25.692	83.679	203	0.249	246.9	25.681	83.698
21	1.435	237.9	25.692	83.679	205	0.255	247.5	25.681	83.697
23	1.436	237.9	25.692	83.679	207	0.262	248.1	25.681	83.697
25	1.437	237.8	25.692	83.679	209	0.265	247.8	25.681	83.697
27	1.438	237.8	25.692	83.679	211	0.268	247.4	25.681	83.697
29	1.444	237.6	25.692	83.679	213	0.271	247.1	25.681	83.697
31	1.45	237.5	25.692	83.679	215	0.274	246.8	25.681	83.697
33	1.457	237.4	25.692	83.679	217	0.282	246.0	25.681	83.697
35	1.463	237.3	25.693	83.679	219	0.29	245.3	25.681	83.697
37	1.469	237.1	25.693	83.679	221	0.299	244.7	25.682	83.697
39	1.477	237.1	25.693	83.679	223	0.307	244.0	25.682	83.697
41	1.484	237.1	25.693	83.679	225	0.315	243.2	25.682	83.697
43	1.491	237.0	25.693	83.679	227	0.323	242.3	25.682	83.697
45	1.498	237.0	25.693	83.679	229	0.331	241.5	25.682	83.696
47	1.505	237.0	25.693	83.678	231	0.339	240.7	25.682	83.696
49	1.512	236.9	25.693	83.678	233	0.347	239.9	25.682	83.696
SITE 2 AMBIENT NOISE HORIZONTAL ARRAY					235	0.356	239.3	25.682	83.696
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	237	0.364	238.5	25.683	83.696
15	0.997	229.6	25.692	83.679	239	0.372	237.8	25. 93	83.696
17	0.998	229.5	25.692	83.679	SITE 2 REVERBERATION HORIZONTAL ARRAY				
19	0.999	229.4	25.692	83.679	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
21	1	229.4	25.692	83.679	159	0.242	86.9	25.681	83.698
23	1.002	229.3	25.692	83.679	201	0.235	86.8	25.681	83.698
25	1.002	229.2	25.692	83.679	203	0.228	86.7	25.681	83.698
27	1.004	229.1	25.692	83.679	205	0.222	86.6	25.681	83.697
29	1.01	229.0	25.692	83.679	207	0.215	86.5	25.681	83.697
31	1.017	228.9	25.692	83.679	209	0.212	87.1	25.681	83.697
33	1.023	228.8	25.692	83.679	211	0.21	87.9	25.681	83.697
35	1.03	228.6	25.693	83.679	213	0.207	88.5	25.681	83.697
37	1.037	228.5	25.693	83.679	215	0.205	89.2	25.681	83.697
39	1.044	228.6	25.693	83.679	217	0.199	91.1	25.681	83.697
41	1.051	228.6	25.693	83.679	219	0.194	93.0	25.681	83.697
43	1.058	228.6	25.693	83.679	221	0.188	95.1	25.682	83.697
45	1.066	228.6	25.693	83.679	223	0.183	97.4	25.682	83.697
47	1.073	228.6	25.693	83.678	225	0.178	100.1	25.682	83.697
49	1.08	228.6	25.693	83.678	227	0.176	102.8	25.682	83.697
					229	0.173	105.7	25.682	83.696
					231	0.171	108.9	25.682	83.696
					233	0.169	111.9	25.682	83.696
					235	0.167	115.1	25.682	83.696
					237	0.167	118.3	25.683	83.696
					239	0.167	121.5	25.683	83.696

SITE 3 012°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
949	0.189	287.0	25.579	84.098	1157	8.524	191.3	25.719	84.071
951	0.199	251.3	25.581	84.098	1159	8.66	191.3	25.721	84.070
953	0.268	227.1	25.583	84.098	1201	8.795	191.3	25.724	84.070
955	0.364	214.1	25.585	84.098	1203	8.929	191.2	25.726	84.070
957	0.471	206.7	25.587	84.098	1205	9.062	191.2	25.728	84.069
959	0.582	202.2	25.589	84.098	1207	9.195	191.2	25.730	84.069
1001	0.705	199.5	25.591	84.097	1209	9.328	191.2	25.732	84.068
1003	0.836	197.9	25.593	84.097	1211	9.465	191.2	25.735	84.068
1005	0.968	196.8	25.595	84.097	1213	9.594	191.3	25.737	84.067
1007	1.1	196.0	25.598	84.096	1215	9.726	191.3	25.739	84.067
1009	1.233	195.3	25.600	84.096	1217	9.857	191.2	25.741	84.066
1011	1.361	194.5	25.602	84.095	1219	9.988	191.1	25.743	84.066
1013	1.487	194.2	25.604	84.095					
1015	1.615	194.3	25.606	84.094					
1017	1.741	194.1	25.608	84.094					
1019	1.868	193.9	25.610	84.093					
1021	1.999	193.7	25.612	84.093					
1023	2.127	193.5	25.614	84.093					
1025	2.257	193.2	25.617	84.092					
1027	2.382	193.0	25.619	84.092					
1029	2.506	192.7	25.621	84.092					
1031	2.631	192.7	25.623	84.091					
1033	2.763	192.6	25.625	84.091					
1035	2.897	192.5	25.627	84.090					
1037	3.031	192.4	25.629	84.090					
1039	3.17	192.5	25.632	84.089					
1041	3.305	192.4	25.634	84.089					
1043	3.443	192.4	25.636	84.088					
1045	3.583	192.3	25.638	84.088					
1047	3.723	192.1	25.641	84.087					
1049	3.861	192.0	25.643	84.087					
1051	4.003	192.1	25.645	84.086					
1053	4.139	192.0	25.647	84.086					
1055	4.278	192.0	25.650	84.085					
1057	4.421	192.0	25.652	84.085					
1059	4.563	192.0	25.654	84.084					
1101	4.702	191.8	25.657	84.084					
1103	4.848	191.8	25.659	84.083					
1105	4.978	191.6	25.661	84.083					
1107	5.12	191.7	25.663	84.083					
1109	5.256	191.7	25.666	84.082					
1111	5.392	191.7	25.668	84.082					
1113	5.533	191.7	25.670	84.081					
1115	5.67	191.6	25.672	84.081					
1117	5.81	191.6	25.675	84.080					
1119	5.948	191.6	25.677	84.080					
1121	6.085	191.5	25.679	84.079					
1123	6.223	191.4	25.682	84.079					
1125	6.361	191.4	25.684	84.079					
1127	6.499	191.3	25.686	84.078					
1129	6.633	191.0	25.688	84.078					
1131	6.769	190.8	25.691	84.078					
1133	6.898	190.7	25.693	84.078					
1135	6.981	191.2	25.694	84.077					
1137	7.183	191.1	25.697	84.076					
1139	7.318	191.0	25.700	84.076					
1141	7.453	191.1	25.702	84.075					
1143	7.573	191.3	25.704	84.074					
1145	7.71	191.4	25.706	84.074					
1147	7.846	191.4	25.708	84.073					
1149	7.984	191.4	25.710	84.073					
1151	8.12	191.3	25.713	84.072					
1153	8.253	191.3	25.715	84.072					
1155	8.388	191.3	25.717	84.071					

SITE 3 012°T HORIZONTAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
949	0.183	211.3	25.579	84.098	1157	8.715	190.5	25.719	84.071
951	0.293	200.5	25.581	84.098	1159	8.852	190.5	25.721	84.070
953	0.409	195.7	25.583	84.098	1201	8.987	190.5	25.724	84.070
955	0.526	193.0	25.585	84.098	1203	9.12	190.4	25.726	84.070
957	0.644	191.3	25.587	84.098	1205	9.254	190.4	25.728	84.069
959	0.762	190.1	25.589	84.098	1207	9.387	190.4	25.730	84.069
1001	0.888	189.7	25.591	84.097	1209	9.519	190.5	25.732	84.068
1003	1.021	189.7	25.593	84.097	1211	9.657	190.5	25.735	84.068
1005	1.154	189.7	25.595	84.097	1213	9.786	190.5	25.737	84.067
1007	1.288	189.7	25.598	84.096	1215	9.918	190.5	25.739	84.067
1009	1.42	189.8	25.600	84.096	1217	10.048	190.5	25.741	84.066
1011	1.55	189.5	25.602	84.095	1219	10.179	190.4	25.743	84.066
1013	1.676	189.6	25.604	84.095					
1015	1.804	190.0	25.606	84.094					
1017	1.929	190.1	25.608	84.094					
1019	2.057	190.2	25.610	84.093					
1021	2.188	190.2	25.612	84.093					
1023	2.316	190.2	25.614	84.093					
1025	2.446	190.1	25.617	84.092					
1027	2.571	190.1	25.619	84.092					
1029	2.697	190.0	25.621	84.092					
1031	2.821	190.1	25.623	84.091					
1033	2.953	190.1	25.625	84.091					
1035	3.088	190.1	25.627	84.090					
1037	3.221	190.1	25.629	84.090					
1039	3.361	190.3	25.632	84.089					
1041	3.495	190.3	25.634	84.089					
1043	3.634	190.4	25.636	84.088					
1045	3.773	190.3	25.638	84.088					
1047	3.913	190.3	25.641	84.087					
1049	4.051	190.2	25.643	84.087					
1051	4.193	190.3	25.645	84.086					
1053	4.329	190.3	25.647	84.086					
1055	4.469	190.3	25.650	84.085					
1057	4.611	190.4	25.652	84.085					
1059	4.754	190.4	25.654	84.084					
1101	4.893	190.4	25.657	84.084					
1103	5.039	190.4	25.659	84.083					
1105	5.169	190.2	25.661	84.083					
1107	5.311	190.4	25.663	84.083					
1109	5.447	190.4	25.666	84.082					
1111	5.583	190.4	25.668	84.082					
1113	5.724	190.4	25.670	84.081					
1115	5.861	190.4	25.672	84.081					
1117	6.001	190.4	25.675	84.080					
1119	6.139	190.4	25.677	84.080					
1121	6.277	190.3	25.679	84.079					
1123	6.414	190.3	25.682	84.079					
1125	6.553	190.3	25.684	84.079					
1127	6.69	190.2	25.686	84.078					
1129	6.825	190.0	25.688	84.078					
1131	6.962	189.8	25.691	84.078					
1133	7.091	189.7	25.693	84.078					
1135	7.172	190.2	25.694	84.077					
1137	7.375	190.2	25.697	84.076					
1139	7.51	190.1	25.700	84.076					
1141	7.645	190.2	25.702	84.075					
1143	7.765	190.4	25.704	84.074					
1145	7.901	190.5	25.706	84.074					
1147	8.037	190.5	25.708	84.073					
1149	8.175	190.5	25.710	84.073					
1151	8.311	190.5	25.713	84.072					
1153	8.445	190.5	25.715	84.072					
1155	8.579	190.5	25.717	84.071					

SITE 3 102°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1638	0.407	289.7	25.578	84.095	1846	8.354	280.9	25.554	83.950
1640	0.444	278.0	25.579	84.094	1848	8.48	280.9	25.553	83.948
1642	0.575	276.6	25.579	84.091	1850	8.607	280.9	25.553	83.946
1644	0.727	279.6	25.578	84.088	1852	8.733	281.0	25.552	83.943
1646	0.867	282.1	25.577	84.086	1854	8.86	281.0	25.552	83.941
1648	0.99	283.8	25.576	84.084	1856	8.986	281.0	25.551	83.939
1650	1.112	284.4	25.575	84.082	1858	9.11	281.0	25.551	83.936
1652	1.234	284.5	25.575	84.080	1900	9.236	281.0	25.551	83.934
1654	1.356	284.2	25.574	84.077	1902	9.361	280.9	25.550	83.932
1656	1.478	283.8	25.574	84.075	1904	9.487	280.9	25.550	83.930
1658	1.6	283.2	25.574	84.073	1906	9.607	280.9	25.550	83.927
1700	1.722	282.6	25.574	84.071	1908	9.727	281.0	25.549	83.925
1702	1.842	282.2	25.573	84.068	1910	9.848	281.0	25.549	83.923
1704	1.964	281.9	25.573	84.066	1912	9.97	281.0	25.548	83.921
1706	2.09	281.7	25.573	84.064					
1708	2.212	281.6	25.572	84.062					
1710	2.331	281.7	25.572	84.060					
1712	2.454	281.7	25.572	84.057					
1714	2.578	281.5	25.571	84.055					
1716	2.699	281.4	25.571	84.053					
1718	2.826	281.3	25.571	84.051					
1720	2.956	281.1	25.570	84.048					
1722	3.086	281.2	25.570	84.046					
1724	3.217	281.4	25.569	84.043					
1726	3.349	281.4	25.569	84.041					
1728	3.478	281.3	25.569	84.039					
1730	3.605	281.2	25.568	84.036					
1732	3.735	281.1	25.568	84.034					
1734	3.869	281.1	25.568	84.032					
1736	4.002	281.1	25.567	84.029					
1738	4.136	281.1	25.567	84.027					
1740	4.271	281.1	25.566	84.024					
1742	4.404	281.2	25.566	84.022					
1744	4.535	281.2	25.565	84.020					
1746	4.666	281.2	25.565	84.017					
1748	4.796	281.2	25.564	84.015					
1750	4.924	281.1	25.564	84.012					
1752	5.051	281.1	25.564	84.010					
1754	5.175	281.0	25.563	84.008					
1756	5.298	281.0	25.563	84.006					
1758	5.421	281.0	25.563	84.003					
1800	5.544	281.1	25.562	84.001					
1802	5.669	281.1	25.562	83.999					
1804	5.792	281.1	25.561	83.997					
1806	5.914	281.1	25.561	83.995					
1808	6.036	281.2	25.560	83.992					
1810	6.156	281.1	25.560	83.990					
1812	6.276	281.1	25.560	83.988					
1814	6.396	281.0	25.560	83.986					
1816	6.515	281.0	25.559	83.984					
1818	6.635	281.0	25.559	83.981					
1820	6.756	281.0	25.559	83.979					
1822	6.878	281.0	25.558	83.977					
1824	7	280.9	25.558	83.975					
1826	7.12	280.9	25.557	83.973					
1828	7.24	281.0	25.557	83.970					
1830	7.362	281.0	25.557	83.968					
1832	7.485	281.0	25.556	83.966					
1834	7.608	281.0	25.556	83.964					
1836	7.731	281.0	25.555	83.961					
1838	7.856	281.0	25.555	83.959					
1840	7.981	281.0	25.555	83.957					
1842	8.106	281.0	25.554	83.955					
1844	8.231	280.9	25.554	83.952					

SITE 3 102°T HORIZONTAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
1638	0.307	256.1	25.578	84.095	1846	8.233	279.6	25.554	83.950
1640	0.384	247.1	25.579	84.094	1848	8.359	279.6	25.553	83.948
1642	0.507	253.4	25.579	84.091	1850	8.485	279.7	25.553	83.946
1644	0.638	261.8	25.578	84.088	1852	8.612	279.7	25.552	83.943
1646	0.763	267.8	25.577	84.086	1854	8.738	279.8	25.552	83.941
1648	0.877	271.6	25.576	84.084	1856	8.864	279.8	25.551	83.939
1650	0.994	273.7	25.575	84.082	1858	8.988	279.8	25.551	83.936
1652	1.113	275.0	25.575	84.080	1900	9.114	279.8	25.551	83.934
1654	1.235	275.6	25.574	84.077	1902	9.239	279.8	25.550	83.932
1656	1.358	275.9	25.574	84.075	1904	9.365	279.8	25.550	83.930
1658	1.48	276.0	25.574	84.073	1906	9.485	279.8	25.550	83.927
1700	1.603	275.9	25.574	84.071	1908	9.605	279.8	25.549	83.925
1702	1.725	275.9	25.573	84.068	1910	9.726	279.8	25.549	83.923
1704	1.846	276.0	25.573	84.066	1912	9.848	279.9	25.548	83.921
1706	1.973	276.2	25.573	84.064					
1708	2.095	276.4	25.572	84.062					
1710	2.213	276.7	25.572	84.060					
1712	2.335	277.0	25.572	84.057					
1714	2.459	277.1	25.571	84.055					
1716	2.58	277.2	25.571	84.053					
1718	2.707	277.2	25.571	84.051					
1720	2.838	277.3	25.570	84.048					
1722	2.968	277.5	25.570	84.046					
1724	3.098	277.8	25.569	84.043					
1726	3.229	278.1	25.569	84.041					
1728	3.358	278.1	25.569	84.039					
1730	3.486	278.1	25.568	84.036					
1732	3.616	278.1	25.568	84.034					
1734	3.749	278.1	25.568	84.032					
1736	3.882	278.3	25.567	84.029					
1738	4.016	278.4	25.567	84.027					
1740	4.15	278.5	25.566	84.024					
1742	4.284	278.6	25.566	84.022					
1744	4.414	278.7	25.565	84.020					
1746	4.545	278.8	25.565	84.017					
1748	4.675	278.8	25.564	84.015					
1750	4.804	278.9	25.564	84.012					
1752	4.93	278.9	25.564	84.010					
1754	5.055	278.9	25.563	84.008					
1756	5.178	278.9	25.563	84.006					
1758	5.3	278.9	25.563	84.003					
1800	5.423	279.0	25.562	84.001					
1802	5.548	279.1	25.562	83.999					
1804	5.671	279.2	25.561	83.997					
1806	5.793	279.3	25.561	83.995					
1808	5.915	279.3	25.560	83.992					
1810	6.034	279.3	25.560	83.990					
1812	6.155	279.3	25.560	83.988					
1814	6.275	279.3	25.560	83.986					
1816	6.394	279.3	25.559	83.984					
1818	6.514	279.3	25.559	83.981					
1820	6.635	279.3	25.559	83.979					
1822	6.757	279.3	25.558	83.977					
1824	6.878	279.3	25.558	83.975					
1826	6.999	279.4	25.557	83.973					
1828	7.119	279.4	25.557	83.970					
1830	7.241	279.5	25.557	83.968					
1832	7.363	279.5	25.556	83.966					
1834	7.486	279.5	25.556	83.964					
1836	7.61	279.5	25.555	83.961					
1838	7.734	279.6	25.555	83.959					
1840	7.86	279.6	25.555	83.957					
1842	7.984	279.6	25.554	83.955					
1844	8.109	279.6	25.554	83.952					

SITE 3 282°T VERTICAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
2120	0.09	49.7	25.579	84.103	2328	8.852	100.5	25.607	84.263
2122	0.219	84.5	25.580	84.106	2330	8.985	100.5	25.607	84.265
2124	0.379	93.3	25.580	84.109	2332	9.123	100.4	25.608	84.268
2126	0.544	96.7	25.581	84.112	2334	9.259	100.4	25.608	84.270
2128	0.712	99.0	25.582	84.115	2336	9.392	100.4	25.608	84.272
2130	0.877	99.6	25.582	84.118	2338	9.526	100.4	25.609	84.275
2132	1.018	99.3	25.583	84.120	2340	9.658	100.4	25.609	84.277
2134	1.148	99.1	25.583	84.123	2342	9.794	100.5	25.610	84.280
2136	1.271	98.9	25.583	84.125					
2138	1.397	99.4	25.584	84.127					
2140	1.523	99.9	25.584	84.129					
2142	1.649	100.2	25.585	84.132					
2144	1.777	100.9	25.586	84.134					
2146	1.9	100.8	25.586	84.136					
2148	2.029	100.8	25.586	84.139					
2150	2.158	100.6	25.587	84.141					
2152	2.288	100.7	25.587	84.143					
2154	2.418	100.6	25.587	84.146					
2156	2.55	100.4	25.588	84.148					
2158	2.683	100.3	25.588	84.151					
2200	2.814	100.3	25.588	84.153					
2202	2.949	100.1	25.589	84.155					
2204	3.083	100.2	25.589	84.158					
2206	3.216	100.2	25.589	84.160					
2208	3.351	100.3	25.590	84.163					
2210	3.487	100.2	25.590	84.165					
2212	3.623	100.2	25.591	84.168					
2214	3.76	100.2	25.591	84.170					
2216	3.898	100.3	25.592	84.173					
2218	4.037	100.4	25.592	84.175					
2220	4.175	100.4	25.593	84.178					
2222	4.313	100.5	25.593	84.180					
2224	4.452	100.5	25.594	84.183					
2226	4.588	100.5	25.594	84.185					
2228	4.727	100.6	25.594	84.188					
2230	4.867	100.6	25.595	84.190					
2232	5.003	100.5	25.595	84.193					
2234	5.142	100.5	25.596	84.195					
2236	5.281	100.5	25.596	84.198					
2238	5.417	100.4	25.596	84.200					
2240	5.554	100.4	25.597	84.203					
2242	5.693	100.4	25.597	84.205					
2244	5.827	100.4	25.597	84.208					
2246	5.966	100.4	25.598	84.210					
2248	6.107	100.5	25.598	84.213					
2250	6.248	100.5	25.599	84.215					
2252	6.386	100.5	25.599	84.218					
2254	6.525	100.4	25.600	84.220					
2256	6.664	100.4	25.600	84.223					
2258	6.8	100.4	25.600	84.225					
2300	6.941	100.4	25.601	84.228					
2302	7.078	100.4	25.601	84.230					
2304	7.217	100.4	25.602	84.233					
2306	7.356	100.4	25.602	84.235					
2308	7.494	100.5	25.603	84.238					
2310	7.631	100.5	25.603	84.240					
2312	7.77	100.6	25.604	84.243					
2314	7.905	100.6	25.604	84.245					
2316	8.04	100.5	25.605	84.248					
2318	8.177	100.5	25.605	84.250					
2320	8.313	100.5	25.605	84.253					
2322	8.447	100.5	25.606	84.255					
2324	8.584	100.5	25.606	84.258					
2326	8.72	100.5	25.606	84.260					

SITE 3 282°T HORIZONTAL ARRAY									
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
2120	0.217	134.8	25.579	84.103	2328	8.977	101.7	25.607	84.263
2122	0.359	122.0	25.580	84.106	2330	9.11	101.7	25.607	84.265
2124	0.519	116.7	25.580	84.109	2332	9.248	101.6	25.608	84.268
2126	0.684	113.7	25.581	84.112	2334	9.383	101.6	25.608	84.270
2128	0.852	112.3	25.582	84.115	2336	9.516	101.6	25.608	84.272
2130	1.015	110.7	25.582	84.118	2338	9.65	101.6	25.609	84.275
2132	1.153	109.0	25.583	84.120	2340	9.783	101.6	25.609	84.277
2134	1.281	107.9	25.583	84.123	2342	9.919	101.6	25.610	84.280
2136	1.402	106.9	25.583	84.125					
2138	1.528	106.7	25.584	84.127					
2140	1.655	106.6	25.584	84.129					
2142	1.781	106.4	25.585	84.132					
2144	1.911	106.7	25.586	84.134					
2146	2.032	106.2	25.586	84.136					
2148	2.161	105.9	25.586	84.139					
2150	2.289	105.5	25.587	84.141					
2152	2.419	105.2	25.587	84.143					
2154	2.549	104.9	25.587	84.146					
2156	2.679	104.6	25.588	84.148					
2158	2.811	104.3	25.588	84.151					
2200	2.942	104.0	25.588	84.153					
2202	3.077	103.7	25.589	84.155					
2204	3.211	103.6	25.589	84.158					
2206	3.343	103.5	25.589	84.160					
2208	3.478	103.4	25.590	84.163					
2210	3.614	103.2	25.590	84.165					
2212	3.749	103.1	25.591	84.168					
2214	3.887	103.0	25.591	84.170					
2216	4.025	103.0	25.592	84.173					
2218	4.163	103.0	25.592	84.175					
2220	4.302	103.0	25.593	84.178					
2222	4.44	102.9	25.593	84.180					
2224	4.579	102.9	25.594	84.183					
2226	4.715	102.9	25.594	84.185					
2228	4.854	102.8	25.594	84.188					
2230	4.993	102.8	25.595	84.190					
2232	5.13	102.7	25.595	84.193					
2234	5.268	102.6	25.596	84.195					
2236	5.407	102.5	25.596	84.198					
2238	5.543	102.4	25.596	84.200					
2240	5.68	102.3	25.597	84.203					
2242	5.818	102.3	25.597	84.205					
2244	5.952	102.2	25.597	84.208					
2246	6.091	102.2	25.598	84.210					
2248	6.233	102.2	25.598	84.213					
2250	6.373	102.2	25.599	84.215					
2252	6.512	102.2	25.599	84.218					
2254	6.65	102.1	25.600	84.220					
2256	6.789	102.0	25.600	84.223					
2258	6.926	102.0	25.600	84.225					
2300	7.066	101.9	25.601	84.228					
2302	7.202	101.9	25.601	84.230					
2304	7.341	101.9	25.602	84.233					
2306	7.481	101.9	25.602	84.235					
2308	7.619	101.9	25.603	84.238					
2310	7.757	101.9	25.603	84.240					
2312	7.896	102.0	25.604	84.243					
2314	8.03	101.9	25.604	84.245					
2316	8.165	101.9	25.605	84.248					
2318	8.302	101.9	25.605	84.250					
2320	8.438	101.8	25.605	84.253					
2322	8.572	101.8	25.606	84.255					
2324	8.709	101.8	25.606	84.258					
2326	8.845	101.7	25.606	84.260					

SITE 3 REVERBERATION VERTICAL ARRAY					SITE 3 REVERBERATION HORIZONTAL ARRAY				
TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)
808	0.402	13.1	25.573	84.103	808	0.252	44.471	25.573	84.103
810	0.404	11.8	25.573	84.103	810	0.25	42.279	25.573	84.103
812	0.408	10.5	25.573	84.103	812	0.248	40.035	25.573	84.103
814	0.411	9.1	25.573	84.103	814	0.246	37.622	25.573	84.103
816	0.415	7.8	25.573	84.103	816	0.245	35.236	25.573	84.103
818	0.419	6.5	25.573	84.103	818	0.245	32.941	25.573	84.103
820	0.423	5.3	25.573	84.102	820	0.244	30.618	25.573	84.102
822	0.428	4.0	25.573	84.102	822	0.244	28.129	25.573	84.102
824	0.432	2.8	25.573	84.102	824	0.245	25.807	25.573	84.102
826	0.436	1.6	25.573	84.102	826	0.245	23.506	25.573	84.102
828	0.442	0.5	25.573	84.102	828	0.247	21.154	25.573	84.102
830	0.446	359.4	25.572	84.102	830	0.249	18.891	25.572	84.102
832	0.452	358.2	25.572	84.101	832	0.251	16.531	25.572	84.101
834	0.457	357.2	25.572	84.101	834	0.253	14.342	25.572	84.101
836	0.462	356.1	25.572	84.101	836	0.256	12.195	25.572	84.101
838	0.469	355.1	25.572	84.101	838	0.26	10.074	25.572	84.101
840	0.474	354.1	25.572	84.101	840	0.263	8.031	25.572	84.101
842	0.48	353.1	25.572	84.101	842	0.267	5.941	25.572	84.101
844	0.486	352.1	25.572	84.101	844	0.271	4.014	25.572	84.101
846	0.492	351.2	25.572	84.100	846	0.276	2.146	25.572	84.100
848	0.499	350.3	25.572	84.100	848	0.281	0.337	25.572	84.100
850	0.505	349.4	25.572	84.100	850	0.286	358.51	25.572	84.100
852	0.512	348.6	25.572	84.100	852	0.291	356.833	25.572	84.100
854	0.519	347.7	25.571	84.100	854	0.297	355.213	25.571	84.100
856	0.525	347.2	25.571	84.100	856	0.302	354.119	25.571	84.100
858	0.532	346.6	25.571	84.099	858	0.308	353	25.571	84.099
900	0.538	346.1	25.571	84.099	900	0.314	352.059	25.571	84.099
902	0.54	345.5	25.571	84.099	902	0.316	350.905	25.571	84.099
904	0.543	344.8	25.571	84.099	904	0.318	349.69	25.571	84.099
906	0.546	344.2	25.571	84.099	906	0.321	348.641	25.571	84.099
908	0.549	343.5	25.571	84.099	908	0.323	347.368	25.571	84.099
910	0.552	342.9	25.571	84.099	910	0.325	346.348	25.571	84.099
912	0.555	342.2	25.571	84.099	912	0.328	345.209	25.571	84.099
914	0.558	341.6	25.571	84.098	914	0.331	344.155	25.571	84.098
916	0.566	341.4	25.571	84.098	916	0.339	343.723	25.571	84.098
918	0.578	341.7	25.571	84.098	918	0.351	344.078	25.571	84.098
920	0.589	341.9	25.571	84.098	920	0.362	344.324	25.571	84.098
922	0.601	342.1	25.570	84.098	922	0.374	344.573	25.570	84.098
924	0.613	342.3	25.570	84.098	924	0.386	344.87	25.570	84.098
926	0.625	342.5	25.570	84.098	926	0.398	345.092	25.570	84.098
928	0.636	342.7	25.570	84.098	928	0.41	345.281	25.570	84.098
930	0.648	342.8	25.570	84.098	930	0.422	345.479	25.570	84.098

SITE 4 074°T VERTICAL ARRAY							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
929	0.617	307.3	25.289	84.973	25.295	84.982	
931	0.692	296.0	25.290	84.970	25.295	84.981	
933	0.789	287.1	25.290	84.967	25.294	84.981	
935	0.9	280.3	25.291	84.964	25.294	84.980	
937	1.022	275.1	25.292	84.961	25.293	84.979	
939	1.15	271.0	25.293	84.957	25.293	84.979	
941	1.283	267.8	25.293	84.954	25.293	84.978	
943	1.408	263.3	25.295	84.951	25.292	84.977	
945	1.54	259.5	25.296	84.949	25.292	84.977	
947	1.678	256.3	25.298	84.946	25.291	84.976	
949	1.821	253.6	25.299	84.943	25.291	84.975	
951	1.966	251.4	25.301	84.940	25.290	84.974	
953	2.072	249.0	25.302	84.938	25.290	84.974	
955	2.184	246.8	25.304	84.936	25.290	84.973	
957	2.297	244.9	25.305	84.934	25.289	84.972	
959	2.408	243.1	25.307	84.932	25.289	84.972	
1001	2.522	241.4	25.308	84.930	25.288	84.971	
1003	2.637	239.8	25.310	84.928	25.288	84.970	
1005	2.756	238.3	25.312	84.927	25.287	84.970	
1007	2.874	237.0	25.313	84.925	25.287	84.969	
1009	2.997	235.7	25.315	84.923	25.287	84.968	
1011	3.12	234.5	25.316	84.921	25.286	84.968	
1013	3.241	233.5	25.318	84.919	25.286	84.967	
1015	3.367	232.4	25.320	84.917	25.285	84.966	
1017	3.488	231.5	25.321	84.915	25.285	84.966	
1019	3.614	230.5	25.323	84.914	25.284	84.965	
1021	3.74	229.7	25.324	84.912	25.284	84.964	
1023	3.866	228.9	25.326	84.910	25.284	84.964	
1025	3.983	228.8	25.327	84.908	25.283	84.963	
1027	4.086	229.4	25.327	84.905	25.283	84.962	
1029	4.2	230.0	25.327	84.902	25.282	84.962	
1031	4.321	230.5	25.328	84.899	25.282	84.961	
1033	4.443	230.9	25.328	84.897	25.282	84.960	
1035	4.566	231.2	25.329	84.894	25.281	84.959	
1037	4.69	231.5	25.329	84.891	25.281	84.959	
1039	4.815	231.8	25.330	84.888	25.280	84.958	
1041	4.939	232.0	25.331	84.886	25.280	84.957	
1043	5.065	232.1	25.331	84.883	25.279	84.957	
1045	5.194	232.2	25.332	84.880	25.279	84.956	
1047	5.321	232.2	25.333	84.878	25.279	84.955	
1049	5.447	232.2	25.334	84.875	25.278	84.955	
1051	5.577	232.3	25.335	84.873	25.278	84.954	
1053	5.708	232.3	25.336	84.870	25.277	84.953	
1055	5.835	232.3	25.336	84.868	25.277	84.953	
1057	5.966	232.3	25.337	84.865	25.276	84.952	
1059	6.093	232.3	25.338	84.862	25.276	84.951	
1101	6.224	232.3	25.339	84.860	25.276	84.951	
1103	6.354	232.3	25.340	84.857	25.275	84.950	
1105	6.493	232.3	25.341	84.855	25.275	84.949	
1107	6.613	232.3	25.342	84.852	25.274	84.949	
1109	6.743	232.4	25.343	84.849	25.274	84.948	
1111	6.872	232.4	25.343	84.847	25.274	84.947	
1113	7	232.4	25.344	84.844	25.273	84.947	
1115	7.129	232.4	25.345	84.842	25.273	84.946	
1117	7.256	232.4	25.346	84.839	25.272	84.945	
1119	7.383	232.3	25.347	84.837	25.272	84.944	
1121	7.513	232.4	25.348	84.834	25.271	84.944	
1123	7.639	232.4	25.349	84.832	25.271	84.943	
1125	7.764	232.4	25.350	84.829	25.271	84.942	
1127	7.887	232.4	25.350	84.827	25.270	84.942	
1129	7.956	232.3	25.351	84.825	25.270	84.941	
1131	8.058	232.2	25.352	84.823	25.269	84.940	
1133	8.143	232.2	25.352	84.821	25.269	84.940	

SITE 4 074°T VERTICAL ARRAY (CONT'D)							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
1135	8.283	232.3	25.353	84.818	25.268	84.939	
1137	8.422	232.4	25.354	84.815	25.268	84.938	
1139	8.562	232.5	25.355	84.812	25.268	84.938	
1141	8.709	232.6	25.355	84.809	25.267	84.937	
1143	8.855	232.7	25.356	84.807	25.267	84.936	
1145	8.957	232.6	25.357	84.804	25.266	84.936	
SITE 4 074°T HORIZONTAL ARRAY							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
929	0.202	335.1	25.289	84.973	25.292	84.975	
931	0.244	297.5	25.290	84.970	25.291	84.974	
933	0.352	276.9	25.290	84.967	25.291	84.973	
935	0.481	266.6	25.291	84.964	25.291	84.972	
937	0.621	260.8	25.292	84.961	25.290	84.972	
939	0.764	257.2	25.293	84.957	25.290	84.971	
941	0.909	254.7	25.293	84.954	25.289	84.970	
943	1.055	250.3	25.295	84.951	25.289	84.970	
945	1.205	247.0	25.296	84.949	25.289	84.969	
947	1.359	244.4	25.298	84.946	25.288	84.968	
949	1.515	242.4	25.299	84.943	25.288	84.968	
951	1.672	240.7	25.301	84.940	25.287	84.967	
953	1.791	238.6	25.302	84.938	25.287	84.966	
955	1.916	236.8	25.304	84.936	25.286	84.966	
957	2.04	235.2	25.305	84.934	25.286	84.965	
959	2.161	233.7	25.307	84.932	25.286	84.964	
1001	2.287	232.3	25.308	84.930	25.285	84.964	
1003	2.411	231.0	25.310	84.928	25.285	84.963	
1005	2.539	229.8	25.312	84.927	25.284	84.962	
1007	2.665	228.8	25.313	84.925	25.284	84.962	
1009	2.796	227.8	25.315	84.923	25.283	84.961	
1011	2.927	226.9	25.316	84.921	25.283	84.960	
1013	3.054	226.0	25.318	84.919	25.283	84.960	
1015	3.187	225.3	25.320	84.917	25.282	84.959	
1017	3.314	224.5	25.321	84.915	25.282	84.958	
1019	3.445	223.8	25.323	84.914	25.281	84.957	
1021	3.578	223.1	25.324	84.912	25.281	84.957	
1023	3.708	222.6	25.326	84.910	25.280	84.956	
1025	3.826	222.7	25.327	84.908	25.280	84.955	
1027	3.923	223.5	25.327	84.905	25.280	84.955	
1029	4.033	224.2	25.327	84.902	25.279	84.954	
1031	4.149	224.9	25.328	84.899	25.279	84.953	
1033	4.267	225.5	25.328	84.897	25.278	84.953	
1035	4.388	226.0	25.329	84.894	25.278	84.952	
1037	4.509	226.4	25.329	84.891	25.278	84.951	
1039	4.632	226.8	25.330	84.888	25.277	84.951	
1041	4.754	227.1	25.331	84.886	25.277	84.950	
1043	4.879	227.4	25.331	84.883	25.276	84.949	
1045	5.007	227.6	25.332	84.880	25.276	84.949	
1047	5.133	227.7	25.333	84.878	25.275	84.948	
1049	5.259	227.9	25.334	84.875	25.275	84.947	
1051	5.388	228.0	25.335	84.873	25.275	84.947	
1053	5.518	228.1	25.336	84.870	25.274	84.946	
1055	5.646	228.3	25.336	84.868	25.274	84.945	
1057	5.775	228.4	25.337	84.865	25.273	84.945	
1059	5.902	228.5	25.338	84.862	25.273	84.944	
1101	6.033	228.6	25.339	84.860	25.272	84.943	
1103	6.162	228.6	25.340	84.857	25.272	84.942	
1105	6.291	228.7	25.341	84.855	25.272	84.942	
1107	6.421	228.8	25.342	84.852	25.271	84.941	
1109	6.55	228.9	25.343	84.849	25.271	84.940	
1111	6.679	228.9	25.343	84.847	25.270	84.940	

SITE 4 074°T HORIZONTAL ARRAY (CONT'D)							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		LONG (°W)
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
1113	6.807	229.0	25.344	84.844	25.270	84.939	
1115	6.935	229.1	25.345	84.842	25.269	84.938	
1117	7.063	229.1	25.346	84.839	25.269	84.938	
1119	7.189	229.2	25.347	84.837	25.269	84.937	
1121	7.319	229.2	25.348	84.834	25.268	84.936	
1123	7.445	229.3	25.349	84.832	25.268	84.936	
1125	7.57	229.4	25.350	84.829	25.267	84.935	
1127	7.693	229.4	25.350	84.827	25.267	84.934	
1129	7.763	229.4	25.351	84.825	25.267	84.934	
1131	7.864	229.3	25.352	84.823	25.266	84.933	
1133	7.95	229.4	25.352	84.821	25.266	84.932	
1135	8.089	229.5	25.353	84.818	25.265	84.932	
1137	8.227	229.6	25.354	84.815	25.265	84.931	
1139	8.366	229.8	25.355	84.812	25.264	84.930	
1141	8.512	229.9	25.355	84.809	25.264	84.929	
1143	8.657	230.0	25.356	84.807	25.264	84.929	
1145	8.76	230.0	25.357	84.804	25.263	84.928	
SITE 4 344°T VERTICAL ARRAY							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		LONG (°W)
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
1741	0.135	269.5	25.203	84.772	25.203	84.774	
1743	0.136	204.9	25.205	84.773	25.203	84.774	
1745	0.207	160.1	25.206	84.774	25.203	84.773	
1747	0.34	143.0	25.207	84.776	25.203	84.772	
1749	0.487	142.0	25.209	84.777	25.202	84.771	
1751	0.635	146.7	25.211	84.777	25.202	84.770	
1753	0.794	148.4	25.213	84.777	25.202	84.770	
1755	0.957	148.8	25.215	84.778	25.201	84.769	
1757	1.118	148.9	25.217	84.779	25.201	84.768	
1759	1.278	148.6	25.219	84.779	25.201	84.767	
1801	1.435	148.2	25.221	84.780	25.201	84.766	
1803	1.597	147.9	25.223	84.781	25.200	84.766	
1805	1.757	147.7	25.225	84.782	25.200	84.765	
1807	1.92	147.5	25.227	84.783	25.200	84.764	
1809	2.084	147.3	25.229	84.784	25.199	84.763	
1811	2.25	147.3	25.231	84.785	25.199	84.762	
1813	2.413	147.5	25.233	84.785	25.199	84.761	
1815	2.577	147.8	25.235	84.786	25.199	84.761	
1817	2.744	148.0	25.237	84.787	25.198	84.760	
1819	2.911	148.1	25.239	84.787	25.198	84.759	
1821	3.076	148.1	25.241	84.788	25.198	84.758	
1823	3.242	148.1	25.243	84.789	25.198	84.757	
1825	3.408	148.1	25.245	84.790	25.197	84.757	
1827	3.573	148.1	25.247	84.791	25.197	84.756	
1829	3.741	148.0	25.250	84.791	25.197	84.755	
1831	3.909	148.2	25.252	84.792	25.196	84.754	
1833	4.075	148.4	25.254	84.793	25.196	84.753	
1835	4.242	148.6	25.256	84.793	25.196	84.753	
1837	4.409	148.7	25.258	84.794	25.196	84.752	
1839	4.581	148.7	25.260	84.795	25.195	84.751	
1841	4.747	148.7	25.263	84.796	25.195	84.750	
1843	4.918	148.7	25.265	84.796	25.195	84.749	
1845	5.085	148.8	25.267	84.797	25.194	84.749	
1847	5.253	148.8	25.269	84.798	25.194	84.748	
1849	5.423	148.9	25.271	84.799	25.194	84.747	
1851	5.593	148.9	25.273	84.799	25.194	84.746	
1853	5.763	148.9	25.276	84.800	25.193	84.745	
1855	5.936	148.8	25.278	84.801	25.193	84.745	
1857	6.109	148.8	25.280	84.802	25.193	84.744	
1859	6.28	148.8	25.282	84.803	25.192	84.743	
1901	6.45	148.8	25.284	84.804	25.192	84.742	

SITE 4 344°T VERTICAL ARRAY (CONT'D)							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		LONG (°W)
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
1903	6.623	148.9	25.286	84.804	25.192	84.741	
1905	6.795	148.9	25.289	84.805	25.192	84.740	
1907	6.967	149.0	25.291	84.806	25.191	84.740	
1909	7.14	149.0	25.293	84.807	25.191	84.739	
1911	7.312	149.0	25.295	84.807	25.191	84.738	
1913	7.487	149.1	25.298	84.808	25.190	84.737	
1915	7.661	149.1	25.300	84.809	25.190	84.736	
1917	7.832	149.1	25.302	84.810	25.190	84.736	
1919	8.007	149.1	25.304	84.810	25.190	84.735	
1921	8.183	149.1	25.306	84.811	25.189	84.734	
1923	8.355	149.2	25.309	84.812	25.189	84.733	
1925	8.531	149.3	25.311	84.813	25.189	84.732	
1927	8.704	149.3	25.313	84.813	25.189	84.732	
1929	8.877	149.4	25.316	84.814	25.188	84.731	
1931	9.024	149.4	25.317	84.815	25.188	84.730	
1933	9.152	149.4	25.319	84.815	25.188	84.729	
1935	9.317	149.4	25.321	84.816	25.187	84.728	
1937	9.49	149.5	25.323	84.816	25.187	84.728	
1939	9.667	149.5	25.326	84.817	25.187	84.727	
1941	9.841	149.5	25.328	84.818	25.187	84.726	
1943	10.014	149.5	25.330	84.819	25.186	84.725	
1945	10.19	149.4	25.332	84.820	25.186	84.724	
1947	10.367	149.4	25.334	84.821	25.186	84.724	
1949	10.544	149.3	25.337	84.822	25.185	84.723	
1951	10.723	149.3	25.339	84.823	25.185	84.722	
1953	10.898	149.4	25.341	84.823	25.185	84.721	
1955	11.039	149.3	25.343	84.824	25.185	84.720	
1957	11.075	149.1	25.343	84.824	25.184	84.719	
SITE 4 344°T HORIZONTAL ARRAY							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		LONG (°W)
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
1741	0.331	125.3	25.203	84.772	25.200	84.767	
1743	0.468	132.0	25.205	84.773	25.200	84.766	
1745	0.612	129.0	25.206	84.774	25.200	84.765	
1747	0.765	127.1	25.207	84.776	25.199	84.764	
1749	0.909	129.2	25.209	84.777	25.199	84.764	
1751	1.043	133.7	25.211	84.777	25.199	84.763	
1753	1.194	136.5	25.213	84.777	25.199	84.762	
1755	1.352	138.2	25.215	84.778	25.198	84.761	
1757	1.511	139.4	25.217	84.779	25.198	84.760	
1759	1.67	140.1	25.219	84.779	25.198	84.760	
1801	1.827	140.5	25.221	84.780	25.197	84.759	
1803	1.989	140.9	25.223	84.781	25.197	84.758	
1805	2.148	141.2	25.225	84.782	25.197	84.757	
1807	2.31	141.5	25.227	84.783	25.197	84.756	
1809	2.474	141.8	25.229	84.784	25.196	84.756	
1811	2.64	142.1	25.231	84.785	25.196	84.755	
1813	2.801	142.6	25.233	84.785	25.196	84.754	
1815	2.964	143.1	25.235	84.786	25.195	84.753	
1817	3.13	143.5	25.237	84.787	25.195	84.752	
1819	3.296	143.8	25.239	84.787	25.195	84.752	
1821	3.46	144.1	25.241	84.788	25.195	84.751	
1823	3.626	144.3	25.243	84.789	25.194	84.750	
1825	3.792	144.4	25.245	84.790	25.194	84.749	
1827	3.956	144.5	25.247	84.791	25.194	84.748	
1829	4.125	144.7	25.250	84.791	25.193	84.748	
1831	4.291	144.9	25.252	84.792	25.193	84.747	
1833	4.456	145.2	25.254	84.793	25.193	84.746	
1835	4.622	145.5	25.256	84.793	25.193	84.745	
1837	4.789	145.7	25.258	84.794	25.192	84.744	

SITE 4 344°T HORIZONTAL ARRAY (CONT'D)							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		LONG (°W)
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
1839	4.96	145.8	25.260	84.795	25.192	84.743	
1841	5.126	145.9	25.263	84.796	25.192	84.743	
1843	5.297	146.0	25.265	84.796	25.192	84.742	
1845	5.464	146.2	25.267	84.797	25.191	84.741	
1847	5.631	146.3	25.269	84.798	25.191	84.740	
1849	5.801	146.4	25.271	84.799	25.191	84.739	
1851	5.971	146.5	25.273	84.799	25.190	84.739	
1853	6.14	146.5	25.276	84.800	25.190	84.738	
1855	6.314	146.6	25.278	84.801	25.190	84.737	
1857	6.487	146.6	25.280	84.802	25.190	84.736	
1859	6.657	146.7	25.282	84.803	25.189	84.735	
1901	6.827	146.8	25.284	84.804	25.189	84.735	
1903	6.999	146.9	25.286	84.804	25.189	84.734	
1905	7.172	146.9	25.289	84.805	25.188	84.733	
1907	7.343	147.0	25.291	84.806	25.188	84.732	
1909	7.516	147.1	25.293	84.807	25.188	84.731	
1911	7.687	147.2	25.295	84.807	25.188	84.731	
1913	7.862	147.2	25.298	84.808	25.187	84.730	
1915	8.036	147.3	25.300	84.809	25.187	84.729	
1917	8.207	147.4	25.302	84.810	25.187	84.728	
1919	8.382	147.4	25.304	84.810	25.186	84.727	
1921	8.557	147.5	25.306	84.811	25.186	84.727	
1923	8.729	147.5	25.309	84.812	25.186	84.726	
1925	8.905	147.6	25.311	84.813	25.186	84.725	
1927	9.078	147.7	25.313	84.813	25.185	84.724	
1929	9.251	147.8	25.316	84.814	25.185	84.723	
1931	9.398	147.8	25.317	84.815	25.185	84.723	
1933	9.526	147.9	25.319	84.815	25.184	84.722	
1935	9.69	147.9	25.321	84.816	25.184	84.721	
1937	9.863	148.0	25.323	84.816	25.184	84.720	
1939	10.04	148.1	25.326	84.817	25.184	84.719	
1941	10.213	148.1	25.328	84.818	25.183	84.718	
1943	10.387	148.1	25.330	84.819	25.183	84.718	
1945	10.563	148.1	25.332	84.820	25.183	84.717	
1947	10.74	148.0	25.334	84.821	25.183	84.716	
1949	10.917	148.0	25.337	84.822	25.182	84.715	
1951	11.096	148.0	25.339	84.823	25.182	84.714	
1953	11.271	148.1	25.341	84.823	25.182	84.714	
1955	11.412	148.1	25.343	84.824	25.181	84.713	
1957	11.449	147.9	25.343	84.824	25.181	84.712	
SITE 4 AMBIENT NOISE VERTICAL ARRAY							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		LONG (°W)
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
831	1.157	11.3	25.288	85.012	25.307	85.008	
833	1.145	11.0	25.288	85.011	25.307	85.007	
835	1.133	10.5	25.288	85.010	25.306	85.006	
837	1.121	10.1	25.288	85.009	25.306	85.005	
839	1.11	9.7	25.287	85.007	25.306	85.004	
841	1.098	9.2	25.287	85.006	25.305	85.003	
843	1.085	8.8	25.287	85.005	25.305	85.002	
845	1.074	8.3	25.287	85.004	25.304	85.001	
847	1.063	7.9	25.286	85.003	25.304	85.000	
849	1.051	7.4	25.286	85.002	25.304	85.000	
851	1.039	6.9	25.286	85.001	25.303	84.999	
853	1.029	6.4	25.286	85.000	25.303	84.998	
855	1.017	5.8	25.285	84.999	25.302	84.997	
857	1.006	5.3	25.285	84.998	25.302	84.996	
859	0.995	4.8	25.285	84.997	25.301	84.995	

SITE 4 AMBIENT NOISE HORIZONTAL ARRAY							
				SOURCE		RECEIVER	
	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	LAT (N)	LONG (°W)
	831	1.136	33.8	25.288	85.012	25.304	85.000
	833	1.122	33.6	25.288	85.011	25.304	84.999
	835	1.108	33.5	25.288	85.010	25.303	84.998
	837	1.094	33.3	25.288	85.009	25.303	84.997
	839	1.08	33.2	25.287	85.007	25.302	84.997
	841	1.066	33.0	25.287	85.006	25.302	84.996
	843	1.051	32.9	25.287	85.005	25.302	84.995
	845	1.037	32.7	25.287	85.004	25.301	84.994
	847	1.023	32.5	25.286	85.003	25.301	84.993
	849	1.009	32.4	25.286	85.002	25.300	84.992
	851	0.994	32.1	25.286	85.001	25.300	84.991
	853	0.981	32.0	25.286	85.000	25.300	84.990
	855	0.967	31.8	25.285	84.999	25.299	84.989
	857	0.952	31.5	25.285	84.998	25.299	84.989
	859	0.938	31.4	25.285	84.997	25.298	84.988
SITE 4 REVERBERATION VERTICAL ARRAY							
				SOURCE		RECEIVER	
	TIME (L)	RANGE(NM)	BEARING (°T)	LAT (N)	LONG (°W)	LAT (N)	LONG (°W)
	1310	0.531	304.6	25.244	84.877	25.249	84.885
	1312	0.492	306.1	25.244	84.877	25.249	84.885
	1314	0.451	308.2	25.244	84.877	25.248	84.884
	1316	0.413	310.3	25.244	84.877	25.248	84.883
	1318	0.374	313.1	25.244	84.877	25.248	84.882
	1320	0.336	316.5	25.243	84.877	25.247	84.881
	1322	0.301	320.7	25.243	84.877	25.247	84.881
	1324	0.268	326.1	25.243	84.877	25.247	84.880
	1326	0.237	332.7	25.243	84.877	25.246	84.879
	1328	0.210	341.4	25.243	84.877	25.246	84.878
	1330	0.190	351.8	25.243	84.877	25.246	84.877
	1332	0.177	4.8	25.242	84.877	25.245	84.876
	1334	0.174	18.7	25.242	84.877	25.245	84.876
	1336	0.182	32.2	25.242	84.877	25.245	84.875
	1338	0.199	44.3	25.242	84.877	25.244	84.874
	1340	0.222	53.7	25.242	84.876	25.244	84.873
	1342	0.251	61.5	25.242	84.876	25.244	84.872
	1344	0.283	67.6	25.241	84.876	25.243	84.871
	1346	0.318	72.3	25.241	84.876	25.243	84.871
	1348	0.354	76.0	25.241	84.876	25.243	84.870
	1350	0.392	79.1	25.241	84.876	25.242	84.869
	1352	0.436	82.2	25.241	84.876	25.242	84.868
	1354	0.481	84.6	25.241	84.876	25.242	84.867
	1356	0.527	86.7	25.241	84.876	25.241	84.867
	1358	0.573	88.4	25.241	84.876	25.241	84.866
	1400	0.621	89.9	25.240	84.876	25.240	84.865
	1402	0.668	91.1	25.240	84.876	25.240	84.864
	1404	0.714	92.3	25.240	84.876	25.240	84.863
	1406	0.763	93.2	25.240	84.876	25.239	84.862
	1408	0.812	94.0	25.240	84.877	25.239	84.862
	1410	0.860	94.8	25.240	84.877	25.239	84.861
	1412	0.908	95.5	25.240	84.877	25.238	84.860
	1414	0.956	96.1	25.240	84.877	25.238	84.859
	1416	1.004	96.6	25.240	84.877	25.238	84.858
	1418	1.051	97.1	25.240	84.877	25.237	84.858
	1420	1.101	97.5	25.239	84.877	25.237	84.857
	1422	1.149	97.9	25.239	84.877	25.237	84.856

SITE 4 REVERBERATION HORIZONTAL ARRAY							
TIME (L)	RANGE(NM)	BEARING (°T)	SOURCE		RECEIVER		LONG (°W)
			LAT (N)	LONG (°W)	LAT (N)	LONG (°W)	
1310	0.115	344.0	25.244	84.877	25.246	84.878	
1312	0.1	5.0	25.244	84.877	25.246	84.877	
1314	0.102	29.6	25.244	84.877	25.245	84.876	
1316	0.119	49.7	25.244	84.877	25.245	84.876	
1318	0.147	63.7	25.244	84.877	25.245	84.875	
1320	0.182	72.7	25.243	84.877	25.244	84.874	
1322	0.219	78.6	25.243	84.877	25.244	84.873	
1324	0.258	82.9	25.243	84.877	25.244	84.872	
1326	0.298	86.1	25.243	84.877	25.243	84.871	
1328	0.338	88.5	25.243	84.877	25.243	84.871	
1330	0.379	90.4	25.243	84.877	25.243	84.870	
1332	0.421	91.9	25.242	84.877	25.242	84.869	
1334	0.462	93.1	25.242	84.877	25.242	84.868	
1336	0.504	94.2	25.242	84.877	25.241	84.867	
1338	0.546	95.0	25.242	84.877	25.241	84.866	
1340	0.588	95.7	25.242	84.876	25.241	84.866	
1342	0.63	96.4	25.242	84.876	25.240	84.865	
1344	0.672	97.0	25.241	84.876	25.240	84.864	
1346	0.715	97.5	25.241	84.876	25.240	84.863	
1348	0.756	97.9	25.241	84.876	25.239	84.862	
1350	0.799	98.3	25.241	84.876	25.239	84.862	
1352	0.847	98.9	25.241	84.876	25.239	84.861	
1354	0.896	99.3	25.241	84.876	25.238	84.860	
1356	0.945	99.7	25.241	84.876	25.238	84.859	
1358	0.994	100.1	25.241	84.876	25.238	84.858	
1400	1.044	100.4	25.240	84.876	25.237	84.857	
1402	1.092	100.7	25.240	84.876	25.237	84.857	
1404	1.141	101.0	25.240	84.876	25.237	84.856	
1406	1.19	101.3	25.240	84.876	25.236	84.855	
1408	1.241	101.5	25.240	84.877	25.236	84.854	
1410	1.289	101.7	25.240	84.877	25.236	84.853	
1412	1.338	101.9	25.240	84.877	25.235	84.852	
1414	1.387	102.1	25.240	84.877	25.235	84.852	
1416	1.436	102.3	25.240	84.877	25.235	84.851	
1418	1.484	102.4	25.240	84.877	25.234	84.850	
1420	1.534	102.6	25.239	84.877	25.234	84.849	
1422	1.583	102.7	25.239	84.877	25.233	84.848	

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125P

Naval Oceanographic Office
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Library (2)
Code TD

REPORT DOCUMENTATION PAGEForm Approved
OBM No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. Agency Use Only (Leave blank).**2. Report Date.**

December 1991

3. Report Type and Dates Covered.

Final

4. Title and Subtitle.A Compendium of Environmental Data Collected During the Southwest Florida
Shallow-Water Acoustic Sea Test**5. Funding Numbers.**

Work Unit No. 92221R

Program Element No. 0603254N

Project No. 0101

Task No. 107

Accession No. DN251051

6. Author(s).

B.R. Gomes, P.J. Bucca, and J.M. Null

7. Performing Organization Name(s) and Address(es).Naval Oceanographic and Atmospheric Research Laboratory
Ocean Acoustics and Technology Directorate
Stennis Space Center, Mississippi 39529-5004**8. Performing Organization
Report Number.**

NOARL Technical Note 208

9. Sponsoring/Monitoring Agency Name(s) and Address(es).Naval Air Systems Command
Air ASW Assault & Special Mission Programs
Washington, D.C. 20361-1264**10. Sponsoring/Monitoring Agency
Report Number.**

NOARL Technical Note 208

11. Supplementary Notes.**12a. Distribution/Availability Statement.**

Approved for public release; distribution is unlimited.

12b. Distribution Code.**13. Abstract (Maximum 200 words).**

During 14 through 20 June 1991, an active acoustics exercise was conducted under the auspices of the Program Executive Officer of the Air, ASW, Assault and Special Mission Programs office. This exercise was located on the continental shelf, slope and in the basin between the Florida Keys and St. Petersburg, Florida. The objective of this mission is to make noise, reverberation and transmission loss measurements using fully calibrated sources, receivers, and recording devices. This data set is intended to support the validation of candidate shallow-water transmission loss and reverberation models for use in the development of next generation airborne ASW sensor systems. To adequately interpret the exercise results and to support the modeling effort, a robust suite of supporting environmental measurements were made aboard the research vessel NADC-38, owned by the Naval Air Development Center (NADC). These measurements include a depiction of the sound speed structure, bathymetry, meteorological conditions, and navigation along 11 projector tow tracks and at 3 drifting ambient noise and 4 reverberation sites. This technical note provides a brief description of the oceanographic and geological structure in the exercise area followed by a compendium of the collected data.

14. Subject Terms.

Acoustics, Modeling, Oceanography

15. Number of Pages.

75

16. Price Code.**17. Security Classification
of Report.**

Unclassified

**18. Security Classification
of This Page.**

Unclassified

**19. Security Classification
of Abstract.**

Unclassified

20. Limitation of Abstract.

SAR