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FINAL REPORT

OFFSHORE NAVIGATION (AUSTRALIA) PTY. LTD.

PROJECT 1201

GEOPHYSICAL SERVICE INTERNATIONAL
PARTY 2931

FOR

BASS STRAIT OIL & GAS

VICTORIA, AUSTRALIA

BASS BASIN AND GIPPSLAND BASIN SURVEYS

FEBRUARY 1981

OFFSHORE NAVIGATION
(AUSTRALIA) PTY. LTD.

A B S T R A C T

Project 1201 was a Maxiran positioned marine seismic survey for potential mineral deposits conducted in the Bass Strait, off the coast of Victoria, Australia.

The principal was Bass Strait Oil & Gas.

Geophysical Service International (GSI) was the prime contractor and geophysical operator.

Offshore Navigation (Australia) Pty. Ltd. (ONA) employed a Maxiran radiolocation system to provide horizontal control for the survey.

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APPENDIX A - Daily Operations Logs

FIGURES

1. Typical Maxiran System
2. System with Two Beacons
3. Uncertainty with Two Beacons
4. System with Three Beacons
5. Uncertainty with Three Beacons

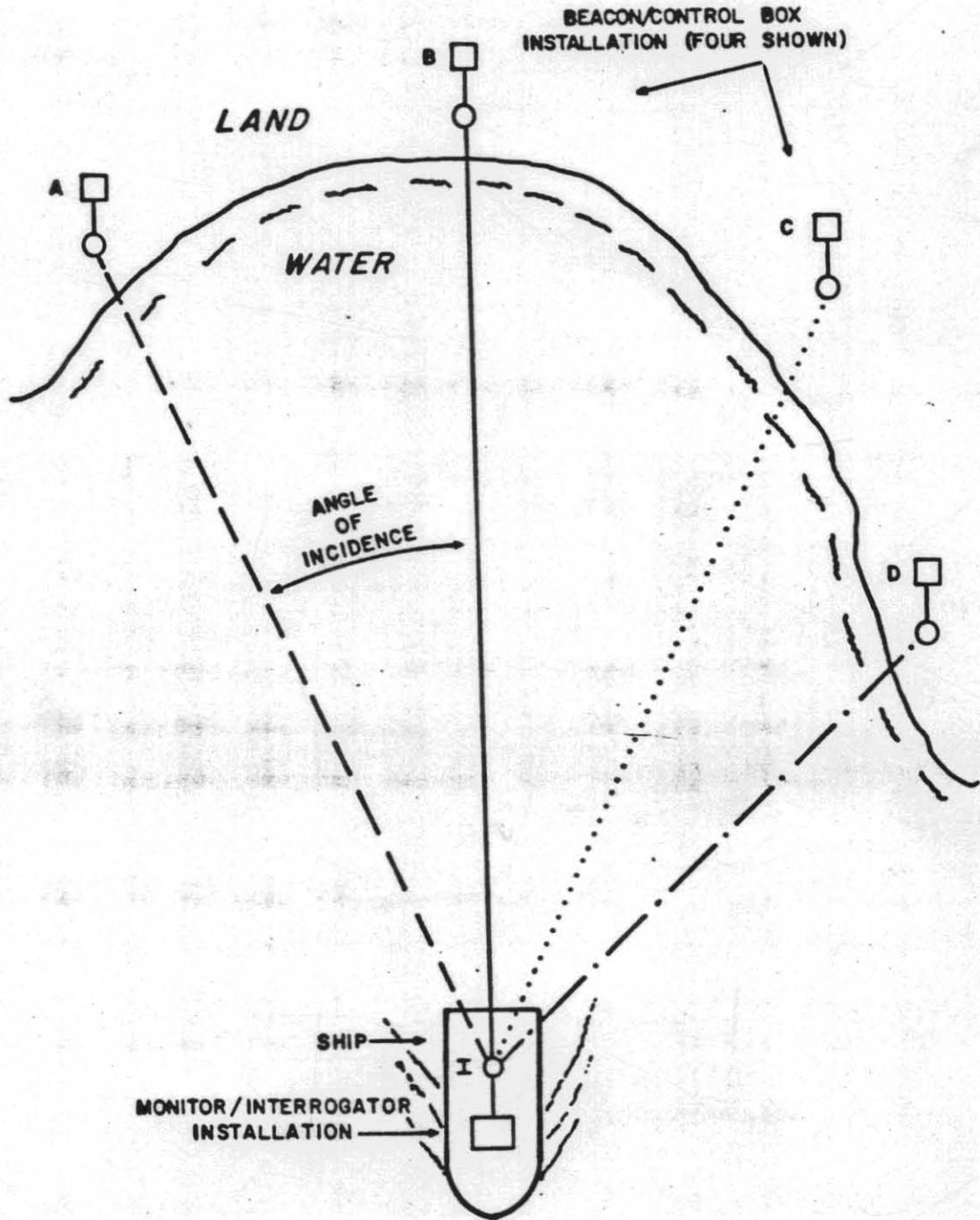
I. THE MAXIRAN RADIOPOSITIONING SYSTEM

The Maxiran Radiopositioning System is a precision electronic ranging system capable of both manual and automatic tracking of range. It is especially useful for measuring distances across bodies of water.

The use of the Maxiran requires three or more electronic installations. For the purposes of this discussion, one of these installations is assumed to be aboard a ship (see Figure 1). This installation consists of the Maxiran Monitor and Interrogator. The other installations are located on shore. Each of these installations consist of a Maxiran Beacon and a Control Box. There are two or more of the Beacon Control Box installations situated at appropriate locations on shore.

In operation, the Monitor/Interrogator installation transmits a radio signal (containing a Beacon-Select code which addresses a selected Beacon) which is picked up by all of the Beacon/Control Box installations. Each Beacon decodes the received signal and decides whether the Beacon-Select code transmitted corresponds to that Beacon. If the Beacon-Select code is correct for a Beacon, it responds by

FIGURE-I. TYPICAL MAXIRAN SYSTEM



I. THE MAXIRAN RADIOPOSITIONING SYSTEM (continued)

transmitting a radio signal reply. The Monitor measures the amount of time elapsed between the Interrogator's transmission and the received reply sent by the Beacon. Since, for all practical purposes, radio signals travel at a known speed, the time elapsed between transmission and response is a measure of the distance the radio signal travelled. The elapsed time is converted by the Monitor into distance and then displayed. By knowing the location of the land stations and the current distance from the ship to each of them, the position of the ship can be readily calculated.

For the purposes of this discussion, let us first assume that only two Beacons are being utilized. These are the Beacons marked "A" and "B" in Figure 1. Since the distance from Beacon "A" to the Interrogator (call it distance A_1), and the distance from Beacon "B" to the Interrogator (call it distance B_1) are now known (these distances are the distances displayed on the Monitor front panel), we can use some geometry to calculate the position of the ship with reference to Beacons "A" and "B".

I. THE MAXIRAN RADIOPOSITIONING SYSTEM (continued)

As illustrated in Figure 2, the distances of A1 and B1 define two intersecting circles, one with a radius of length A1 centered about Beacon "A", the other with radius of length B1 centered about Beacon "B". These two circles intersect at two points (marked I and I' in Figure 2). Obviously, the ship can only be located at one of these points. Since point I' happens to be located on land, we can safely assume that the ship is located at Point I.

There is always some uncertainty associated with the exact measurements of the Beacons. This is illustrated in Figure 3. Figure 3 illustrates an enlarged view of the intersection of the circles shown in Figure 2. If the tolerance of the measurements of Beacon "B" is plus-or-minus 5 meters, then the two solid lines in Figure 3 are 10 meters apart. The tolerance of the measurements of Beacon "A" should be the same as that of Beacon "B", but this is not always the case due to differences in geographical location. Under the above conditions, we only know that the ship is located somewhere in the shaded area of Figure 3.

FIGURE-2. SYSTEM WITH TWO BEACONS

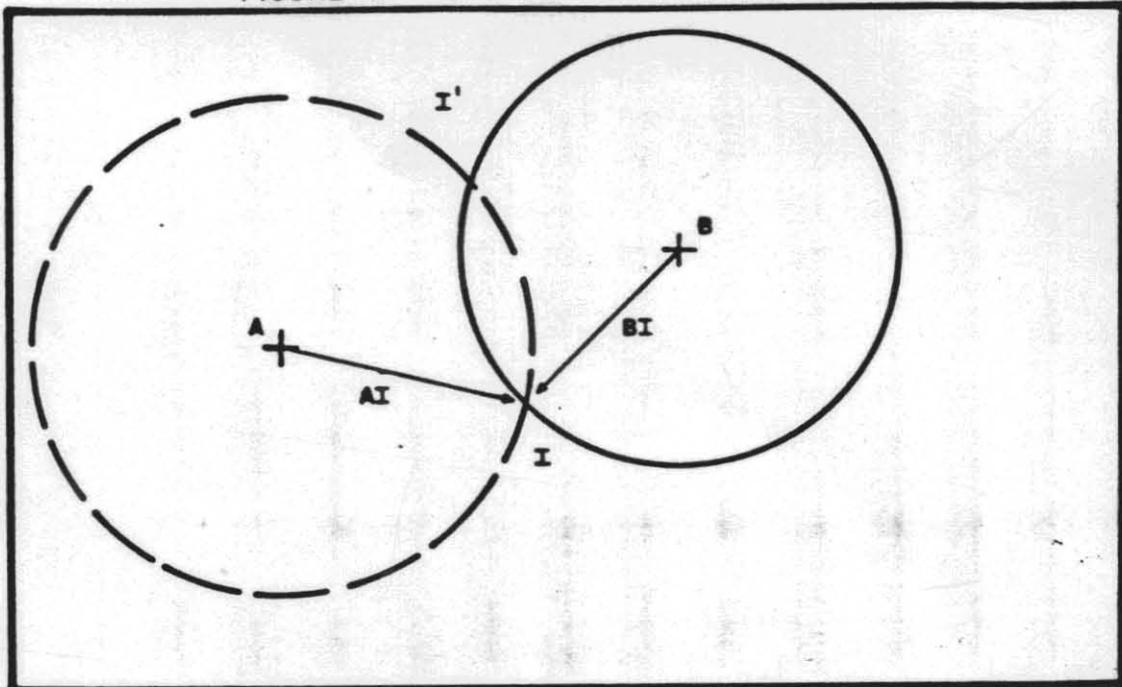
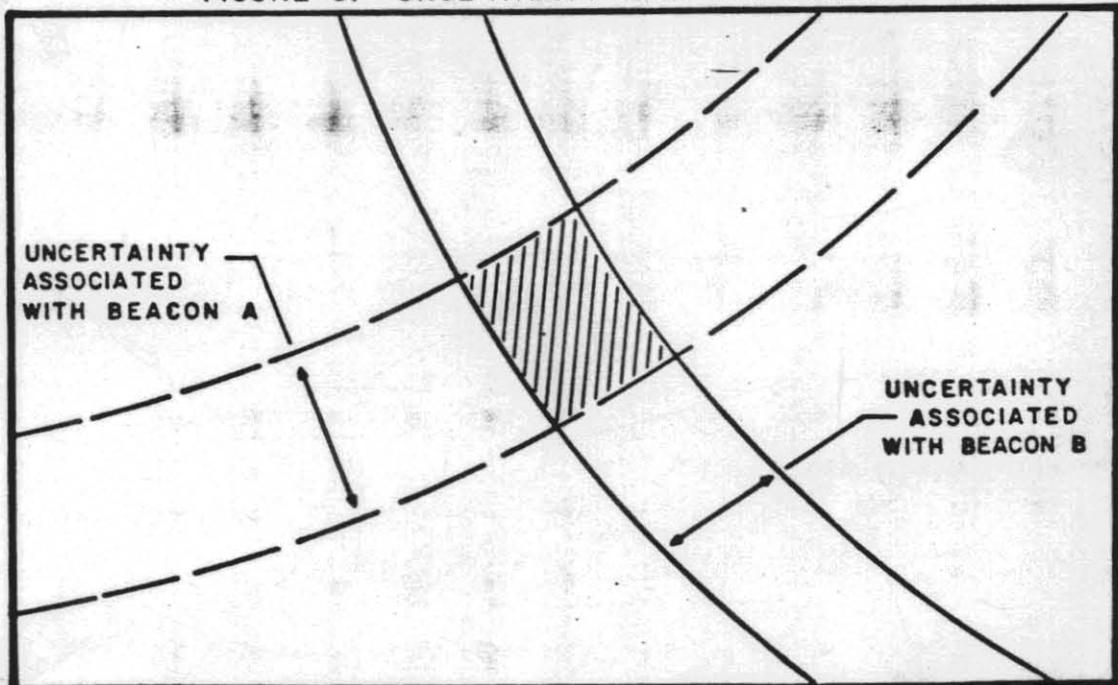


FIGURE-3. UNCERTAINTY WITH TWO BEACONS



I. THE MAXIRAN RADIOPOSITIONING SYSTEM (continued)

For the purposes of the following discussion, it is assumed that there are now three Beacons utilized. Now three circles are defined instead of the two from the discussion above. The third distance, from Beacon "C" to the Interrogator (call it distance C_1), defines a circle of radius length C_1 centered about Beacon "C". The new situation is illustrated in Figure 4. Notice that with the three circles, there is only one location where all three circles can intersect. This eliminates the ambiguity associated with using only two Beacons. Now there is no 'I' to worry about. An additional advantage of using three Beacons is illustrated in Figure 5. Now the area of uncertainty has been reduced even though the tolerance of Beacon "C"'s measurement is no better than that of the other Beacons.

As the ship moves along, one or more of the Beacons may become unusable for various reasons (out of range, too small or too great an operating angle, etc.), if additional Beacons are situated on shore, they may be interrogated as desired to greatly expand the range and usability of the system.

FIGURE-4. SYSTEM WITH THREE BEACONS

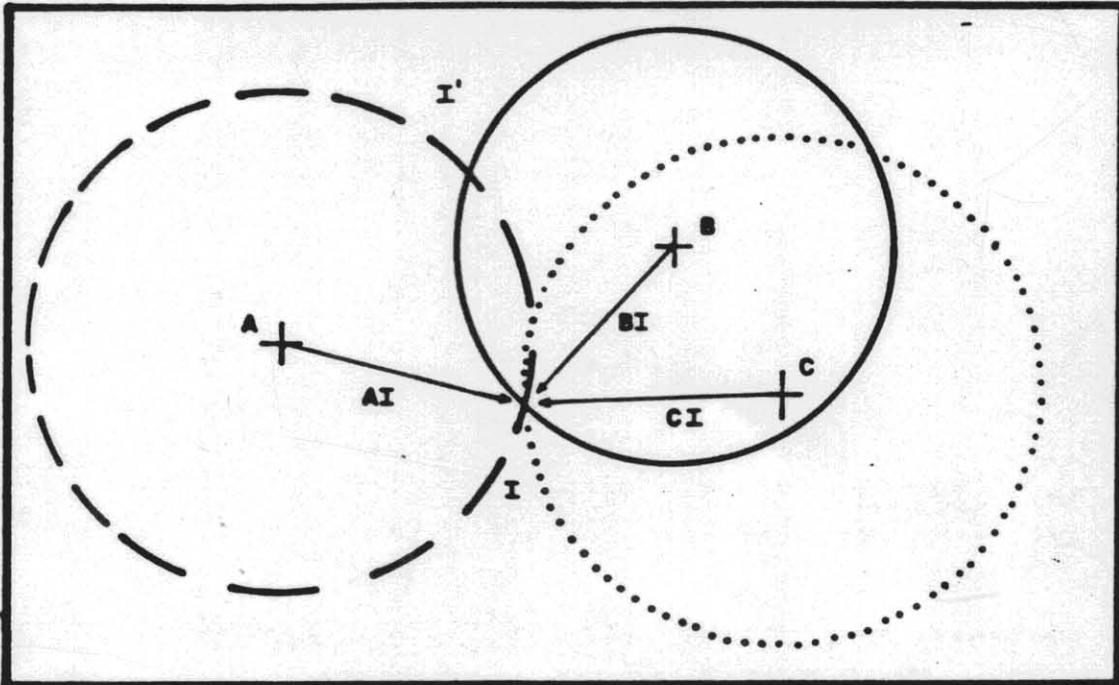
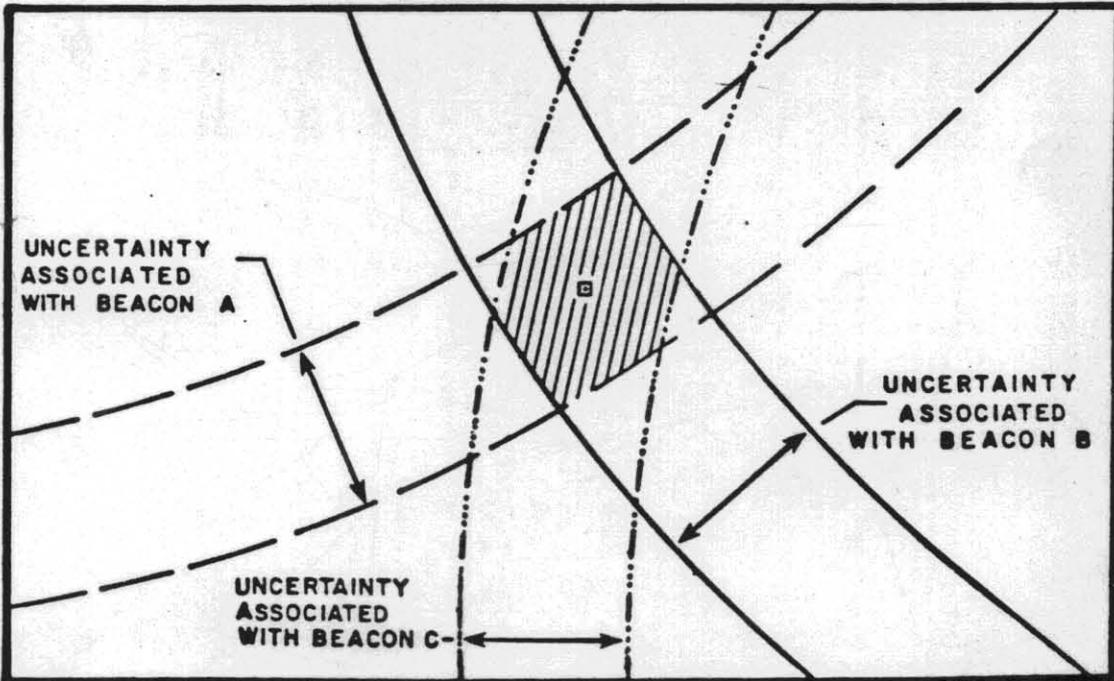


FIGURE-5. UNCERTAINTY WITH THREE BEACONS



I. THE MAXIRAN RADIOPOSITIONING SYSTEM (continued)

As many as three different Beacons may be selected at one time by the proper setting of the Monitor's Beacon-Select switches.

II. AREA OF OPERATIONS

Operations, conducted during the period covered by this report, were located off the coast of Victoria, Australia in Bass Strait. The work area extended along the coast from Cape Liptrap to Wilson's Promontory and up to approximately 200 kilometers offshore.

The ONA base of operation for this survey was established at Foster, Victoria on 3 February 1981.

III. FIELD OPERATIONS RECAP

ONA personnel and the Maxiran system was under contract to GSI prior to the commencement of this survey. The Maxiran base station equipment was in the work area for another survey. Installation of the Maxiran base station equipment on the three initial sites occupied to control this survey began 2 February 1981 and was completed 6 February 1981. The Maxiran mobile equipment had been previously installed on board the recording vessel, M/V EUGENE McDERMOTT II.

III. FIELD OPERATIONS RECAP (continued)

The M/V EUGENE McDERMOTT II departed Davenport, Victoria at 0715 hours 10 February 1981, and proceeded to the operational area. Geophysical operations in the Bass Strait Oil & Gas Bass Basin survey began at 1858 hours 10 February and was completed at 0501 hours 21 February. The Bass Strati Oil & Gas survey was discontinued at this time to conduct another survey in the area for another principal. The Bass Strait Oil & Gas survey resumed in the Gippsland Basin prospect at 1007 hours 25 February and was completed at 2153 hours 27 February 1981. See Appendix A of this report for details.

The Maxiran base stations remained erected, manned and operational on completion of this survey for another operation to be conducted under GSI control. The Maxiran mobile equipment remained installed on board the recording vessel for that operation. All ONA personnel assigned to this project were retained by GSI.

IV. GENERAL INFORMATION

- A. Maxiran frequencies used were:
- | | |
|--------------------|---------|
| Mobile Transmitter | 441 MHz |
| Base Transmitter | 429 MHz |
- B. Satisfactory radiotelephone communications between all Maxiran installations were maintained on the frequencies of 7840 and 4637.5 (SSB) kilocycles.
- C. The Maxiran field data was turned over to the GSI representative on board the M/V EUGENE McDERMOTT II on completion of the survey.
- D. Five Maxiran base station installations were provided by ONA for this survey.
- E. Five Maxiran base station sites were occupied during this operation. They were:

STATION BLACKWARRI
STATION CAPE SCHANK
STATION DEAL ISLAND

IV. GENERAL INFORMATION (continued)

STATION LIPTRAP

STATION MOUNT TAYLOR (OFFSET)

- F. The maximum range that was observed by the Maxiran system during this survey was 300 kilometers.
- G. The Maxiran mobile equipment was checked daily during this survey for a proper delay setting of 000.000 kilometers, and fixed tested with a calibration cable. The delay setting established during the Maxiran calibration check of 18 January 1981 was 5019 meters.
- H. ONA provided a Serial Printer on board the recording vessel during this survey.

V. MAPPING

Maxiran preplots of the survey were provided to the field operations by GSI. The interval between shotpoint locations was constant at 25 meters.

No final mapping was accomplished by ONI on this survey. For this survey, the Maxiran equipment was interfaced to GSI's CMS, and provided range information to the CMS. The Maxiran hard copy field data obtained by the ONA mobile operator during this survey was turned over to the GSI representative on board the M/V EUGENE McDERMOTT II on completion of the survey.

VI. MAXIRAN CALIBRATION

The Maxiran mobile equipment was removed from the recording vessel, M/V EUGENE McDERMOTT II, at Portland, Victoria on 18 January 1981 and transported to Station Picnic Hill West. The Maxiran equipment calibration was checked between 0700 and 1045 hours 18 January 1981 over the Stations Picnic Hill/Mount Warrnambool computed baseline of 105.141 kilometers.

The following pages consist of the field report pertaining to this calibration.

OFFSHORE NAVIGATION, INC.

173018

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MAXIRAN CALIBRATION REPORT

DATE: 18TH JAN 81

MOBILE STATION			BASE STATION		
LOCATION: PICNIC HILL WEST.			LOCATION: WARRNAMBOOL		
OPERATOR: TAYLOR / HENNESSY			OPERATOR: BRIDGES / Bampton		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMM 01	004	BEACON	NTL 01	029 CODE 5
INTERROGATOR	NTM 01	012 027	CONTROL BOX	NCL 02	060
AMPLIFIER	NTU 01	009	AMPLIFIER	NTU 03	033
AMPLIFIER P/S	NPU 01	009	AMPLIFIER P/S	NPU	033
PREAMP	SAU 12	108	PREAMP	SAU 12	109
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
		82'			
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
		60			
INPUT VOLTAGE		115	INPUT VOLTAGE		115
TX. FREQUENCY		441	TX. FREQUENCY		429
RX. FREQUENCY		429	RX. FREQUENCY		441
RX. GAIN SETTING		MIN	RX. GAIN SETTING		MIN
WEATHER CONDITIONS		CLEAR, FINE, WARM.	WEATHER CONDITIONS		AS MOBILE.

SERVED RANGE IN CALIBRATE: 110.162 KM

COMPUTED SLANT RANGE: 105.141 KM

MOBILE ZERO SETTING IS: 5019 KM

OBSERVED RANGE IN OPERATE: 105.141 KM TIME 07.50

SIGNED:



NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

OFFSHORE NAVIGATION, INC.

173019

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MAXIRAN CALIBRATION REPORT

DATE: 18 JAN 81

MOBILE STATION			BASE STATION		
LOCATION: PICNIC HILL WEST			LOCATION: WARRENAMBOOL		
OPERATOR: TAYLOR / HENNESSY			OPERATOR: BRIDGES / BAMPTON		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMM 01	004	BEACON	NTL 01	029 CODE 5
INTERROGATOR	NTM 01	038	CONTROL BOX	NICK 02	060
AMPLIFIER	N.T.U 01	009	AMPLIFIER	NTU 03	033
AMPLIFIER P/S	N.P.U 01	009	AMPLIFIER P/S	NPU 03	033
PREAMP	SAU 12	108	PREAMP	SAU 12	109
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	RG8U ANDREWS	82'		RG8U ANDREWS	82'
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	LPLS	60'		LPLS	30'
INPUT VOLTAGE		115	INPUT VOLTAGE		115
TX. FREQUENCY		441	TX. FREQUENCY		429
RX. FREQUENCY		429	RX. FREQUENCY		441
GAIN SETTING		MIN	RX. GAIN SETTING		MIN
WEATHER CONDITIONS		CHALK FINE	WEATHER CONDITIONS		AS. MOBILE
		WARM			

OBSERVED RANGE IN CALIBRATE: KM
 COMPUTED SLANT RANGE: 105.141 KM
 MOBILE ZERO SETTING IS: 5019 KM
 OBSERVED RANGE IN OPERATE: 105.142 KM TIME: 08:15

SIGNED:

NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

OFFSHORE NAVIGATION, INC.

173020

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MAXIRAN CALIBRATION REPORT

DATE: 18 JAN 81

MOBILE STATION			BASE STATION		
LOCATION: <u>PICNIC HILL WEST</u>			LOCATION: <u>WARRJAMBOOL</u>		
OPERATOR: <u>TAYLOR / HENNESSY</u>			OPERATOR: <u>BRIDGES / DAMPTON</u>		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	<u>N.M.D. 01</u>	<u>004</u>	BEACON	<u>NTL 01</u>	<u>082</u> CODE <u>5</u>
INTERROGATOR	<u>NTM 01</u>	<u>038</u>	CONTROL BOX	<u>NCL 02</u>	<u>060</u>
AMPLIFIER	<u>NTU 01</u>	<u>009</u>	AMPLIFIER	<u>NTU 03</u>	<u>033</u>
AMPLIFIER P/S	<u>NPU 01</u>	<u>009</u>	AMPLIFIER P/S	<u>MPU 03</u>	<u>033</u>
PREAMP	<u>STU 12</u>	<u>108</u>	PREAMP	<u>STU 12</u>	<u>109</u>
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
		<u>60</u>			
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
INPUT VOLTAGE		<u>115</u>	INPUT VOLTAGE		<u>115</u>
TX. FREQUENCY		<u>441</u>	TX. FREQUENCY		<u>429</u>
RX. FREQUENCY		<u>429</u>	RX. FREQUENCY		<u>441</u>
TX. GAIN SETTING		<u>MIN</u>	RX. GAIN SETTING		<u>MIN</u>
WEATHER CONDITIONS		<u>Clear Fine</u>	WEATHER CONDITIONS		<u>As. mobile</u>
		<u>Warm</u>			

~~up 5 mts.~~

SERVED RANGE IN CALIBRATE: KM
 COMPUTED SLANT RANGE: 105.141 KM
 MOBILE ZERO SETTING IS: 5019 KM
 OBSERVED RANGE IN OPERATE: 105.142 KM TIME: 08.35

SIGNED:

NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

OFFSHORE NAVIGATION, INC.

173021

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MAXIRAN CALIBRATION REPORT

DATE: 18 JAN 81

MOBILE STATION			BASE STATION		
LOCATION: <u>Picnic Hill West</u>			LOCATION: <u>WARRNAMBOOL</u>		
OPERATOR: <u>TAYLOR / HENNESSY</u>			OPERATOR: <u>-</u>		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	<u>Nmm 01</u>	<u>004</u>	BEACON	<u>NTL 01</u>	<u>031</u> CODE <u>3</u>
INTERROGATOR	<u>NTM 01</u>	<u>038</u>	CONTROL BOX	<u>NCL 02</u>	<u>060</u>
AMPLIFIER	<u>NTU 01</u>	<u>009</u>	AMPLIFIER	<u>NTU 03</u>	<u>033</u>
AMPLIFIER P/S	<u>NPV 01</u>	<u>009</u>	AMPLIFIER P/S	<u>NPV 03</u>	<u>033</u>
PREAMP	<u>SAU 12</u>	<u>108</u>	PREAMP	<u>SAU 12</u>	<u>109</u>
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	<u>RCAF ANDREWS</u>	<u>82'</u>		<u>RCAF ANDREWS</u>	<u>82'</u>
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	<u>LPLS</u>	<u>60'</u>		<u>LPLS</u>	<u>30'</u>
INPUT VOLTAGE		<u>115</u>	INPUT VOLTAGE		<u>115</u>
TX. FREQUENCY		<u>441</u>	TX. FREQUENCY		<u>429</u>
RX. FREQUENCY		<u>429</u>	RX. FREQUENCY		<u>441</u>
TX. GAIN SETTING		<u>MIN</u>	RX. GAIN SETTING		<u>MIN</u>
WEATHER CONDITIONS		<u>Clear. Fine</u>	WEATHER CONDITIONS		<u>As possible</u>
		<u>WARM</u>			

4.5 Smts.

OBSERVED RANGE IN CALIBRATE: KM
 COMPUTED SLANT RANGE: 105.141 KM
 MOBILE ZERO SETTING IS: 5019 KM
 OBSERVED RANGE IN OPERATE: 105.139 KM TIME: 08.50

SIGNED:

NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
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4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

OFFSHORE NAVIGATION, INC.

173022

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MAXIRAN CALIBRATION REPORT

DATE: 18 JAN 81

MOBILE STATION			BASE STATION		
LOCATION: PICNIC HILL WEST			LOCATION: WARRNAMBOOL		
OPERATOR: TAYLOR/HENNESSY			OPERATOR: BRIDGES/BAMPTON.		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMM 01	004	BEACON	NTL 01	023 CODE 3
INTERROGATOR	NTM 01	038	CONTROL BOX	NCL 02	060
AMPLIFIER	NTU 01	009	AMPLIFIER	NTU 03	033
AMPLIFIER P/S	NPU 01	009	AMPLIFIER P/S	NPU 03	033
PREAMP	SAU 12	108	PREAMP	SAU 12	109
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	RGSU ADDRESS	82		RGSU ADDRESS	82'
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	LPLS	60'		LPLS	30'
INPUT VOLTAGE		115	INPUT VOLTAGE		115
TX. FREQUENCY		424	TX. FREQUENCY		429
RX. FREQUENCY		429	RX. FREQUENCY		424
RX. GAIN SETTING		MIN	RX. GAIN SETTING		MIN
WEATHER CONDITIONS		CHALK. FINE	WEATHER CONDITIONS		H.S. MOBILE
		WARM			

CORRECTED RANGE IN CALIBRATE: KM
 COMPUTED SLANT RANGE: 105.141 KM
 MOBILE ZERO SETTING IS: 5019 KM
 OBSERVED RANGE IN OPERATE: 105.142 KM TIME: 0903

SIGNED:

NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
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3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

OFFSHORE NAVIGATION, INC.

173023

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MAXIRAN CALIBRATION REPORT

DATE: 18 JAN 81

MOBILE STATION			BASE STATION		
LOCATION: <u>PICNIC HILL WEST</u>			LOCATION: <u>WARRNAMBOOL</u>		
OPERATOR: <u>TAYLOR/HENNESSY</u>			OPERATOR: <u>BRIDGES/RAMPTON</u>		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
INITIATOR	<u>N.M.M 01</u>	<u>004</u>	BEACON	<u>NTZ 01</u>	<u>035</u> CODE <u>1</u>
INTERROGATOR	<u>NT.M 01</u>	<u>038</u>	CONTROL BOX	<u>NCL 02</u>	<u>060</u>
AMPLIFIER	<u>NTU 01</u>	<u>009</u>	AMPLIFIER	<u>NTU 03</u>	<u>033</u>
AMPLIFIER P/S	<u>NPU 01</u>	<u>009</u>	AMPLIFIER P/S	<u>NPU 03</u>	<u>033</u>
PREAMP	<u>SAU 12</u>	<u>108</u>	PREAMP	<u>SAU 12</u>	<u>109</u>
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	<u>RCSU ANDREWS</u>	<u>82'</u>		<u>RCSU ANDREWS</u>	<u>82'</u>
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	<u>LPLS</u>	<u>60'</u>		<u>LPLS</u>	<u>30'</u>
INPUT VOLTAGE		<u>115</u>	INPUT VOLTAGE		<u>115</u>
TX. FREQUENCY		<u>441</u>	TX. FREQUENCY		<u>429</u>
RX. FREQUENCY		<u>429</u>	RX. FREQUENCY		<u>441</u>
RX. GAIN SETTING		<u>MIN</u>	RX. GAIN SETTING		<u>MIN</u>
WEATHER CONDITIONS		<u>CLEAR, FINE</u> <u>WARM.</u>	WEATHER CONDITIONS		<u>As. DISCLE</u>

SERVED RANGE IN CALIBRATE: KM

COMPUTED SLANT RANGE: 105.141. KM

MOBILE ZERO SETTING IS: 5019 KM

OBSERVED RANGE IN OPERATE: 105.141. KM

TIME: 0912

SIGNED:

NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

OFFSHORE NAVIGATION, INC.

173024

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MAXIRAN CALIBRATION REPORT

DATE: 18 JAN 81

MOBILE STATION			BASE STATION		
LOCATION: <i>PICNIC HILL WEST</i>			LOCATION: <i>WARRNAMBOOL</i>		
OPERATOR: <i>TAYLOR/HENNESSY</i>			OPERATOR: <i>BRIDGES/WARRNAMBOOL</i>		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	<i>NMM 01</i>	<i>004</i>	BEACON	<i>NTL 01</i>	<i>067</i> CODE 1
INTERROGATOR	<i>NTM 01</i>	<i>038</i>	CONTROL BOX	<i>NCL 02</i>	<i>060</i>
AMPLIFIER	<i>NTU 01</i>	<i>009</i>	AMPLIFIER	<i>NTU 03</i>	<i>033</i>
AMPLIFIER P/S	<i>NPU 01</i>	<i>009</i>	AMPLIFIER P/S	<i>NPU 03</i>	<i>033</i>
PREAMP	<i>SAU 12</i>	<i>108</i>	PREAMP	<i>SAU 12</i>	<i>109</i>
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	<i>RGSU ANDREWS</i>	<i>82'</i>		<i>RGSU ANDREWS</i>	<i>82'</i>
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	<i>LPLS</i>	<i>60'</i>		<i>LPLS</i>	<i>30'</i>
INPUT VOLTAGE		<i>115</i>	INPUT VOLTAGE		<i>115</i>
TX. FREQUENCY		<i>441</i>	TX. FREQUENCY		<i>429</i>
RX. FREQUENCY		<i>429</i>	RX. FREQUENCY		<i>441</i>
TX. GAIN SETTING		<i>MIN</i>	RX. GAIN SETTING		<i>MIN</i>
WEATHER CONDITIONS		<i>CLEAR FINE</i>	WEATHER CONDITIONS		<i>H.S. WIND</i>
		<i>Warm</i>			

OBSERVED RANGE IN CALIBRATE: KM
 COMPUTED SLANT RANGE: *105.141* KM
 MOBILE ZERO SETTING IS: *5019* KM
 OBSERVED RANGE IN OPERATE: *105.142.* KM TIME: *0930*

SIGNED:

NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

OFFSHORE NAVIGATION, INC.

173025

22

MAXIRAN CALIBRATION REPORT

DATE: 18 JAN 81

MOBILE STATION			BASE STATION		
LOCATION: PICNIC HILL WEST			LOCATION: WARRNAMBOOL		
OPERATOR: TAYLOR/HENNESSY			OPERATOR: BRIDGES/BAMPTON		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMP 01	004	BEACON	NFL 01	033 CODE 2
INTERROGATOR	NTM 01	038	CONTROL BOX	NCL 02	060
AMPLIFIER	NTU 01	009	AMPLIFIER	NTU 03	033
AMPLIFIER P/S	NPU 01	009	AMPLIFIER P/S	NPU 03	033
PREAMP	SAU 12	108	PREAMP	SAU 12	109
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	RCEU ANDREWS	82'		RCEU ANDREWS	82'
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	LPLS	60'		LPLS	30'
INPUT VOLTAGE		115	INPUT VOLTAGE		115
TX. FREQUENCY		441	TX. FREQUENCY		429
RX. FREQUENCY		429	RX. FREQUENCY		441
TX. GAIN SETTING		MIN	RX. GAIN SETTING		MIN
WEATHER CONDITIONS		CLEAR, FINE WARM.	WEATHER CONDITIONS		AS MOBILE

OBSERVED RANGE IN CALIBRATE: KM
 COMPUTED SLANT RANGE: 105.141 KM
 MOBILE ZERO SETTING IS: 5019 KM
 OBSERVED RANGE IN OPERATE: 105.141 KM TIME: 10.00

SIGNED:

NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

VII. BASIC CONTROL

Coordinates of the five Maxiran base station sites occupied to control this survey were obtained from the Victorian Lands Department and ONA files.

Universal Transverse Mercator Projection
Australian National Spheroid
Zone 55
Central Meridian 147° East
AUSTRALIAN GEODETIC DATUM

STATION BLACKWARRI:

Latitude	38°24'15"08 S	N = 5,749,264 meters
Longitude	146°38'49"24 E	E = 469,179 meters
Elevation	640 meters	

STATION CAPE SCHANK:

Latitude	38°27'43"77 S	N = 5,740,804 meters
Longitude	144°54'03"42 E	E = 316,862 meters
Elevation	157 meters	

STATION DEAL ISLAND:

Latitude	39°29'41"36 S	N = 5,628,246 meters
Longitude	147°19'09"23 E	E = 527,449 meters
Elevation	304 meters	

VII. BASIC CONTROL (continued)STATION LIPTRAP:

Latitude	38°51'05".51 S	N = 5,699,175 meters
Longitude	145°57'54".92 E	E = 410,211 meters
Elevation	170 meters	

STATION MOUNT TAYLOR (OFFSET):

Latitude	37°42'26".75 S	N = 5,826,484 meters
Longitude	147°33'33".08 E	E = 549,290 meters
Elevation	473 meters	

VIII. PERSONNEL

NAME	POSITION
Bridges, H.	Party Chief
Hennessy, H.	Mobile Operator
Taylor, D.	Mobile Operator
Bampton, R.	Base Operator
Rathbone, P.	Base Operator
Wells, G.	Base Operator

IX. DISTRIBUTION

Geophysical Service International
25 Barracks Street
Perth, W.A. 6000
AUSTRALIA

Attention: Mr. Dick Miles

Four copies

Offshore Navigation, Inc.
Post Office Box 23504
Harahan, LA 70123
U.S.A.

Two copies

Offshore Navigation (Australia) Pty. Ltd.
Post Office Box 291
Cloverdale, W.A. 6105
AUSTRALIA

One copy

BASE STATION DESCRIPTIONS AND PLATES

26

STATION: BLACKWARRI

LOCATED: Station Blackwarri is located north-northeast of Yarram, Australia.

ACCESS: Take the Gippsland Highway east from Yarram for 2 miles. Turn left onto a road leading to Traallogon, and continue through Won Wron. Take the first turn on top of the hill. Follow the dirt road until a fork in the road is reached. From this fork, the station marker can be seen to the right, approximately 1,000 feet away. This is a drive-on station.

MARKER: The station marker consists of a 20-foot steel leg with a disc on top.

GENERAL: The owner of the station site property is to be paid \$10.00 each time the station site is occupied.

Transportation, laundry, gas, oil, and supplies can be obtained through Mr. Bill Vangall at Ships Inn in Yarram. Telephone number is 421, and the Inn's address is Post Office Box 120, Yarram.

A small airport, located approximately 4 miles from Yarram, can be used for charter flights for incoming and outgoing gear when needed.

ELEVATION: 640 meters

SKETCH: See next page.

AUSTRALIAN GEODETIC DATUM

GEOGRAPHICAL COORDINATES		UTM Proj., AUST. NATIONAL SPHEROID ZONE 55, C. M. 147° EAST	
Latitude	Longitude	North	East
38°24'15"08 S	146°38'49"24 E	5,749,264 meters	469,179 meters

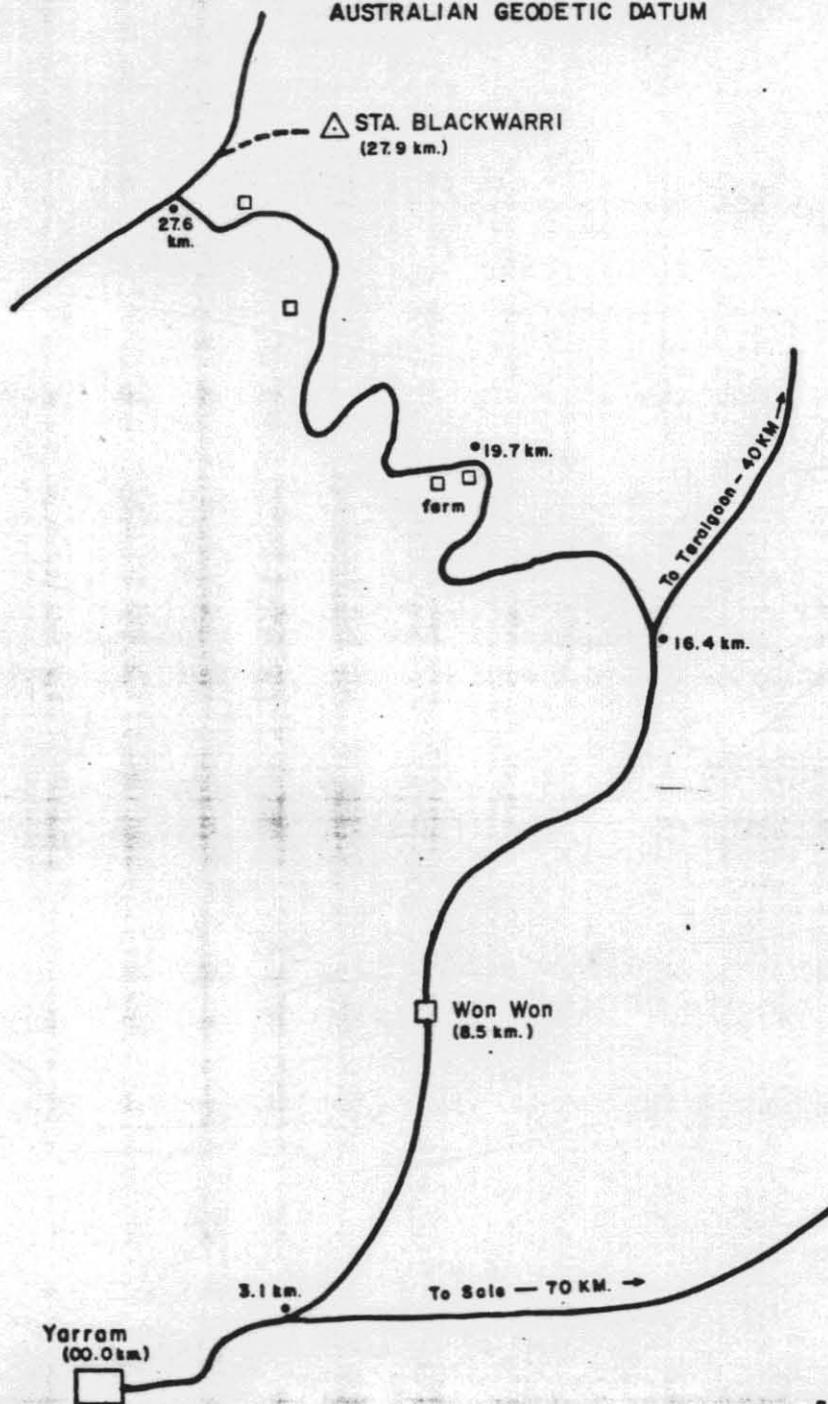
OFFSHORE NAVIGATION
(AUSTRALIA) PTY. LTD.

STA. BLACKWARRI — AUSTRALIA

LAT. 38°24'15".08 S
LONG. 146°38'49".24 E
ELEV. 640 meters

N 5,749,264 meters
E 469,179 meters

UTM PROJECTION, AUST. NATIONAL SPHEROID
ZONE 55 C.M. 147° E
AUSTRALIAN GEODETIC DATUM



8/80/1201

STATION: CAPE SCHANK

LOCATED: Station Cape Schank is located near the Cape Schank Lighthouse. The nearest town to this station is Rosebud, Victoria, Australia.

The station is located on a hill of approximately 157 meters in elevation. This hill stands well over other hills in the area. The hill and surrounding area has been divided up for development. When more buildings go up in this area, there is a good chance that this station will not be available for occupancy.

The station site is covered with thick, bushy trees. Since the station is located within the "Green Belt", permission will be required to clear any trees.

Port Phillip Bay, the coast line, and a golf course can be seen from the station site. A house, that is lived in year-round, is located near the marker.

ACCESS: From the township of Rosebud, drive on the road towards Franston (the main street of Rosebud) to the intersection of Finders Road, which is clearly marked. Finders Road will intersect with a road that leads towards Melbourne. Continue straight on Finders Road at this point. Six miles past this intersection, a sign indicating "Cape Country Club Golf Course" will be seen on the left. Continue 600 yards past this sign to a tar sealed road to the right signposted "Bernards Way". Turn right onto this road to its end, and turn left again. On making this left turn, the trig marker will be seen on your left, on top of a hill (See Sketch).

MARKER: The station is marked by a standard 12-foot quadripod constructed of 2-inch steel pipe. The quadripod is painted black, and is sitting directly over a bronze plaque inscribed "GEODETIC SURVEY, VICTORIA, TRIANGULATION STATION".

STATION: CAPE SCHANK (continued)

GENERAL: All supplies, including labor, required for a base station can be obtained in Rosebud, a 20 minutes' ride from the site. Water can be obtained from the local garages, Cape Schank Light Station, and from residents in the area (provided permission is obtained). The availability of water will depend on the rain and supply in water tanks. The water from the lighthouse is bore water, but drinkable.

The weather in this area is very unpredictable, with sudden cold changes due to its elevation and proximity to the sea.

A 50-foot tower was erected at this station during February 1981. A minimum of 40 feet of tower is required to clear surrounding obstructions. Star stakes were used to secure the tower.

The station site is on land owned by Mr. Phil White (Phone number 03-645-1111). Permission to occupy this station must be obtained from Mr. White, and the Shire of Flinders, Mr. S. Richardson (Phone number 03-986-2500)

ELEVATION: 157 meters

SKETCH: See next page.

AUSTRALIAN GEODETIC DATUM

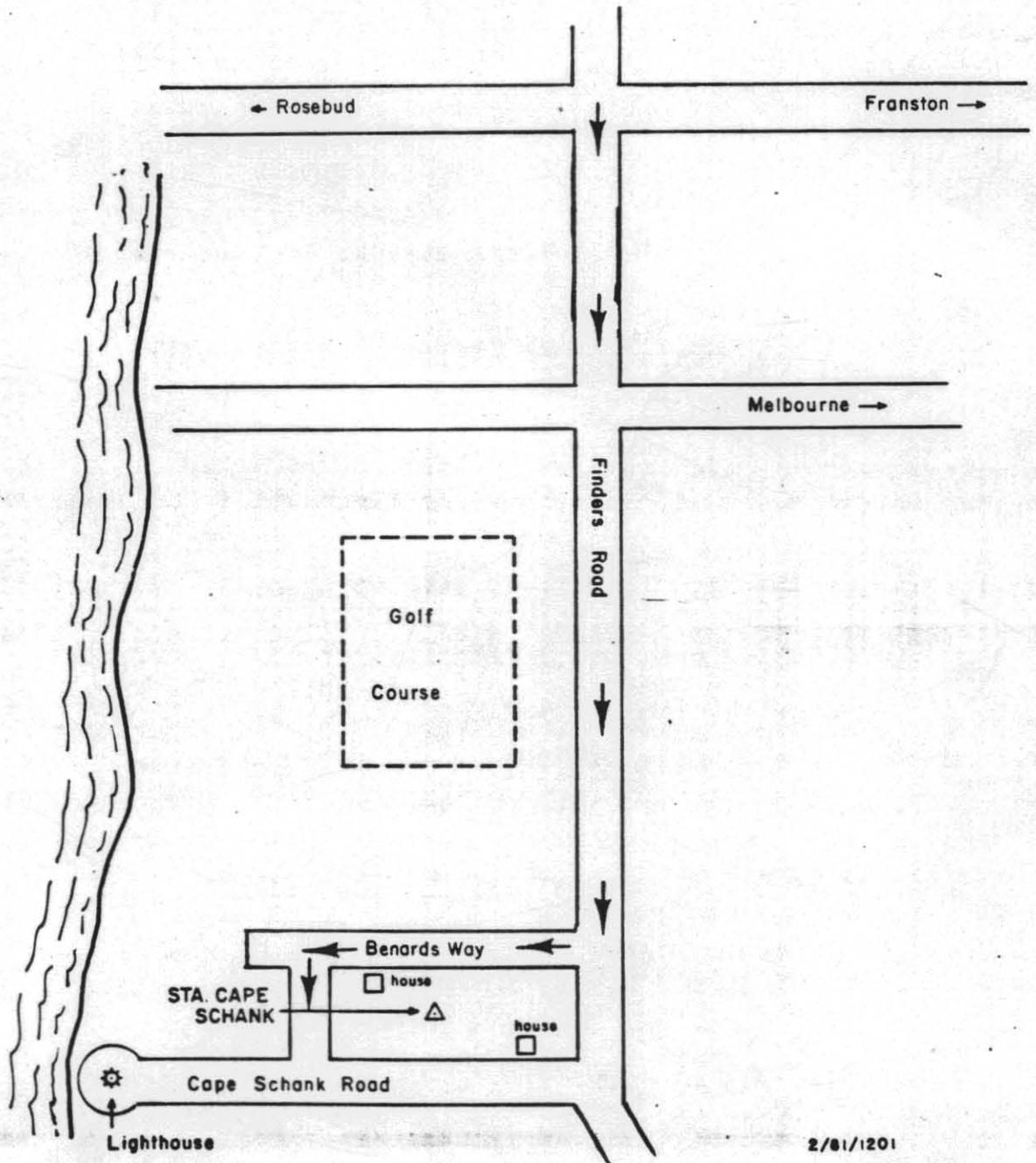
GEOGRAPHICAL COORDINATES		UTM Proj., AUST. NATIONAL SPHEROID ZONE 55, C. M. 147° EAST	
Latitude	Longitude	North	East
38°27'43".77 S	144°54'03".42 E	5,740,804 meters	316,862 meters

STA. CAPE SCHANK — AUSTRALIA

LAT. 38°27'43".77 S
LONG. 144°54'03".42 E
ELEV. 157 meters

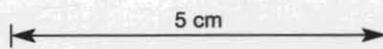
N 5,740,804 meters
E 316 862 meters

UTM PROJECTION, AUST. NATIONAL SPHEROID
ZONE 55 C.M. 147° E
AUSTRALIAN GEODETIC DATUM



2/81/1201

OFFSHORE NAVIGATION
(AUSTRALIA) PTY. LTD.



STATION: DEAL ISLAND

LOCATED: The station is located on the highest point of Deal Island, Victoria, Australia. The station marker is approximately 1250 meters at a bearing of 110° from the lighthouse. The lighthouse and station site are located on separate hills. Vegetation near the site is low scrub, which is very thick. Large rocks and boulders near and on the site make getting the equipment up to the station and setting up very awkward.

ACCESS: Deal Island is the main island in the Kent Group, located in Bass Strait, approximately 50 kilometers northwest of Flinders Island, and 90 kilometers southeast of Wilsons Promontory, on the Mainland of Australia.

Access to Deal Island is by boat or helicopter. Port Welshpool is the closest mainland port to the station. There is a pier suitable for tying up small vessels at the island. Access from the pier to the station is by the only road on the island, which passes through the yard of the lightkeeper's house, and terminates at the lighthouse. Before reaching the lighthouse, the ruins of an old house will be seen on the right. Due to the thickness of the vegetation, a path may have to be cut from this house to the station site.

Transportation on the island consists of a four-wheel drive vehicle owned by the Government and used as transportation by lighthouse personnel. The lightkeeper assisted the operator during the February 1981 occupancy of this station and transported the equipment to the station with his vehicle. As lighthouse staff changes may take place, it is recommended that availability of transportation be checked before equipment and personnel arrives on the island.

MARKER: The station is marked by a star stake set in cement. The stake protrudes 1 meter above the cement, and is painted orange.

STATION: DEAL ISLAND (continued)

The lighthouse is 250 meters from this marker at a bearing of 110° . The ruins of the old house is 150 meters at a bearing of 110° .

GENERAL: Leongatha is the largest town in the area of the station. Camping equipment can be obtained there. Food and fuel supplies can be obtained either in Leongatha, Foster, or Toora. The camp-helper was obtained from Welshpool during the February 1981 occupancy of this station. Since Welshpool isn't a very large town, labor (if required) may have to be sought elsewhere.

Drinking water was obtained from a tank behind the lighthouse engine room. A secondary water supply, which is drinkable but slightly brackish, is available at the lightkeeper's house.

The station is prone to very high gusty winds. The elevation of the station can place it in clouds for days, even during the summer months.

The station is on property owned by the Commonwealth of Australia. Permission to occupy the station was obtained from the Transportation Department, 188 Queens Street, Melbourne. (Phone 03-620131). No rent was paid for its use. The lightkeeper on Deal Island (Phone 056-808534) must be notified of the day personnel and equipment will be arriving.

The boat used to transport personnel and equipment during February 1981 is owned by Mr. Don Jacobsen, Phone Inuelock 056-741532.

A 30-foot tower was erected at this station. A minimum of 20 feet is required to give a clear vista of 360° . Star stakes were used to secure the tower.

ELEVATION: 304 meters

SKETCH: See next page.

AUSTRALIAN GEODETIC DATUM

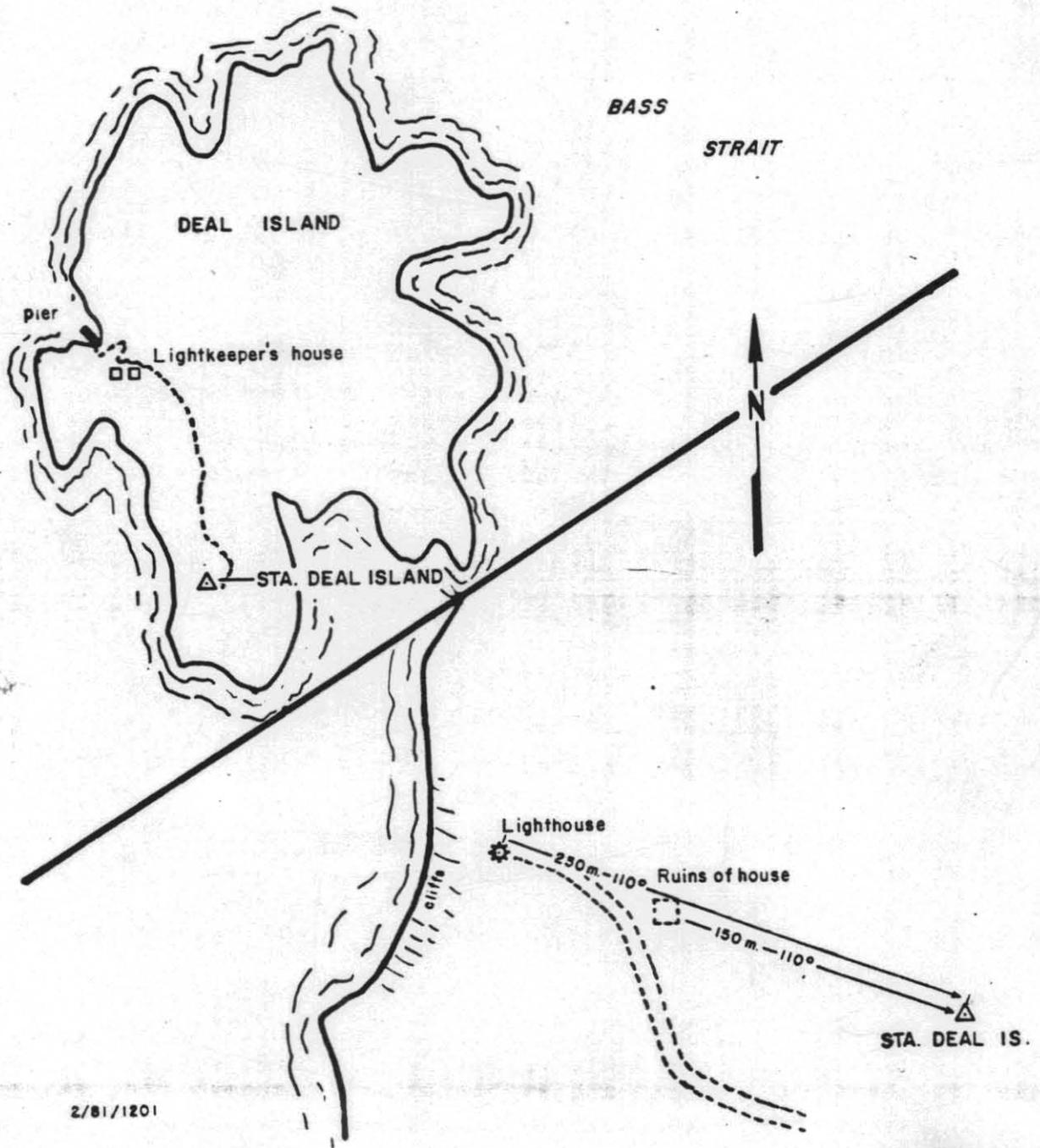
GEOGRAPHICAL COORDINATES		UTM Proj., AUST. NATIONAL SPHEROID ZONE 55, C.M. 147° EAST	
Latitude	Longitude	North	East
39°29'41"36 S	147°19'09"23 E	5,628,246 meters	527,449 meters

STA. DEAL ISLAND ————— AUSTRALIA

LAT. 39°29' 41"36 S
 LONG. 147°19' 09"23 E
 ELEV. 304 meters

N 5,628,246 meters
 E 527,449 meters

UTM PROJECTION, AUST. NATIONAL SPHEROID
 ZONE 55 C.M. 147° E
 AUSTRALIAN GEODETIC DATUM



2/81/1201

OFFSHORE NAVIGATION
 (AUSTRALIA) PTY. LTD.

5 cm

STATION: LIPTRAP

LOCATED: Station Liptrap is located approximately 15 miles from the township of Tarwin Lower, Victoria, Australia, and 5 miles north of the Cape Liptrap Lighthouse. The station site is 170 meters above sea level and surrounded on three sides by the sea. The land around the base station is undulating sand hills, covered by low mallee scrub with areas of secondary growth consisting of ferns and prickly bush. Also, some livestock grazing areas are within a mile radius. The station is located within a triangle of dirt roads, the northern side being the apex leading to the township of Tarwin Lower. The two southern apices lead to beaches, one at Cape Liptrap, and the other at Walker ville. The immediate area at the trig marker is covered by scrub 1 to 2 feet high, growing on white and yellow sand. The trig marker is approximately 200 feet east of the dirt road. The area for approximately 200 feet around the marker is reasonably flat. This station is accessible by all types of vehicles.

MARKER: The original marker, placed in 1863, was about $3/4$ mile south-southwest from the present marker, but has never been found. A second marker was placed in 1920, about 1 mile north-northeast of the present marker, but the beacon on this marker disappeared during the 1950's.

The present marker is made of a 3-foot square slab of concrete that is flush with the ground. A brass plaque, inscribed "AUST. TRIANGULATION STN., SURVEY CORPOS.", is imbedded in the concrete. A 15-foot steel quadripod, with 2-foot vanes on top, has been constructed over the marker. The quadripod and vanes are painted black.

There are no prominent features in the immediate vicinity of the marker that could be used as reference, with the exception of the roads. (See Sketch.)

STATION: LIPTRAP (continued)

GENERAL: Local labor, food, fuel, oil, and drinking water can be obtained from either the towns of Fish Creek (15 miles) or Tarwin Lowers (14 miles). If the operator has no transportation the local Lands Department will be only too willing to get water and/or supplies for the operator.

Due to the ground being sandy, garbage can be buried.

Rain and wind, mainly from the west and east, will be the main discomfort experienced on this station. It would be advisable to double tie the tents down. The station should never be left unmanned, due to heavy tourist traffic going by this site every day.

A 60-foot tower was erected at this station during February 1981. A minimum of 40 feet is required to clear surrounding obstructions. Clear vista is from 120° to 290°. Six foot steel star stakes were used to secure the tower.

ELEVATION: 170 meters

SKETCH: See next page.

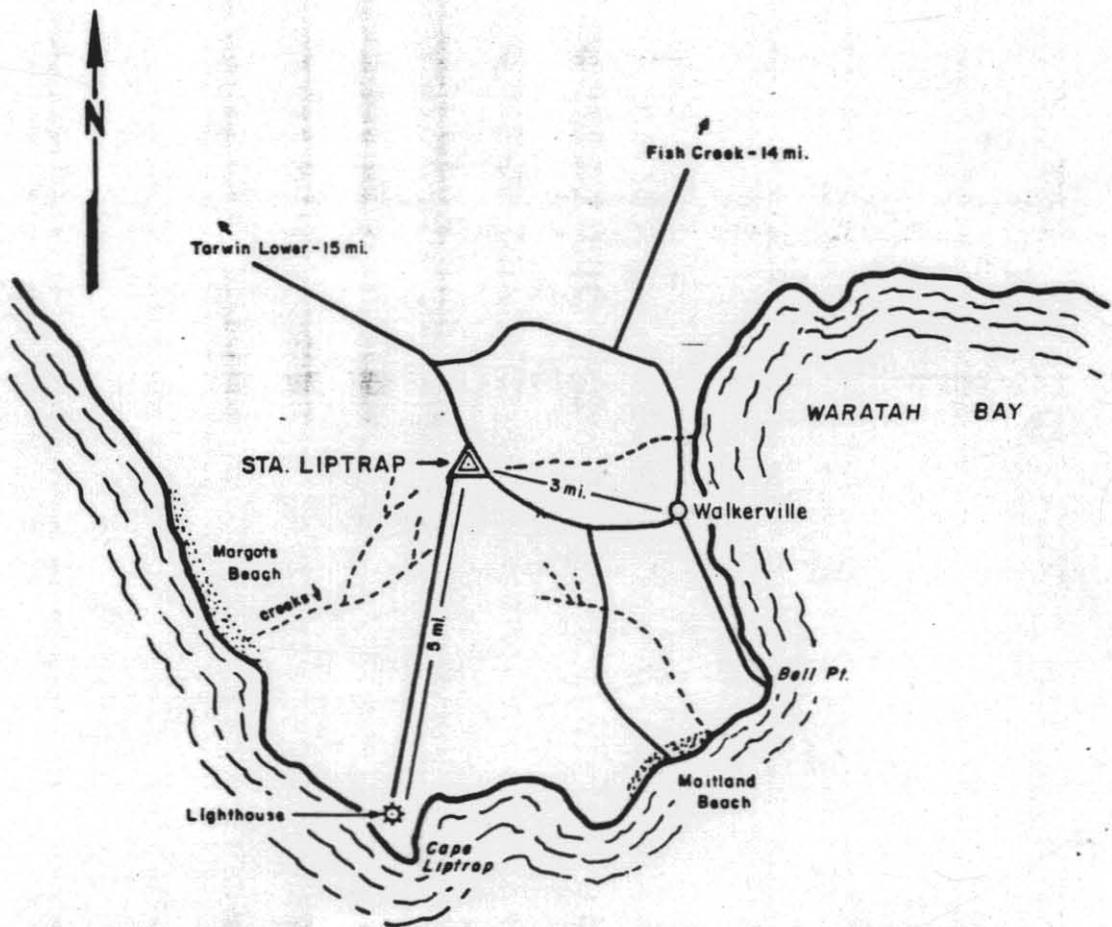
GEOGRAPHICAL COORDINATES		AUSTRALIAN GEODETIC DATUM	
		UTM Proj., AUST. NATIONAL SPHEROID	
		ZONE 55, C. M. 147° EAST	
Latitude	Longitude	North	East
38°51'05".51 S	145°57'54".92 E	5,699,175 meters	410,211 meters

STA. LIPTRAP ————— AUSTRALIA

LAT. 38°51'05".51 S
LONG. 145°57'54".92 E
ELEV. 170 meters

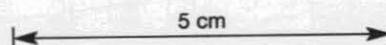
N 5,699,175 meters
E 410,211 meters

UTM PROJECTION, AUST. NATIONAL SPHEROID
ZONE 55 C.M. 147° E
AUSTRALIAN GEODETIC DATUM



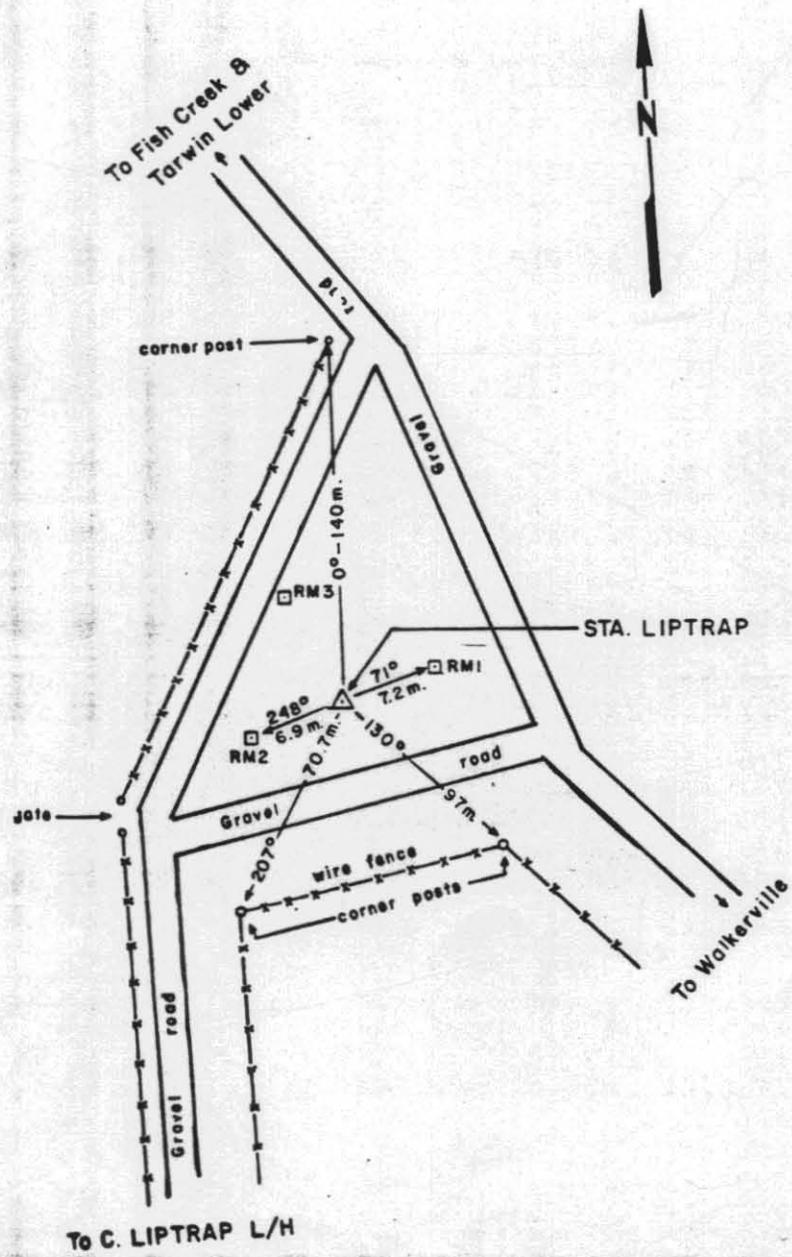
2/81/1201

OFFSHORE NAVIGATION
(AUSTRALIA) PTY. LTD.



STA. LIPTRAP — AUSTRALIA

STATION DETAILS



2/81/1201

5 cm

STATION: MOUNT TAYLOR (OFFSET)

LOCATED: Station Mount Taylor (Offset) is located near the Mount Taylor forestry lookout tower, between the towns of Bullumwaal and Bairnsdale, Victoria, Australia.

ACCESS: Turn off Bullumwaal Road, approximately 12 miles north of Bairnsdale, at the forestry camp. There is a sign here which reads "Tower". Travel through the forestry camp, and up the mountain, for approximately 1-1/2 miles until this road meets another road with a sign reading "Bairnsdale 13" and "Tower". Turn right ("Tower"), and go through the gate on the track to the left. This track is steep and leads to the fire tower.

ALTERNATE ACCESS: For vehicles without four-wheel drive, and during periods of wet roads, there is an alternate route. Approximately 8 miles from Bairnsdale, on the Bullumwaal Road, take the left fork signposted "Mt. Lookout". Follow this road for approximately 8 miles until you arrive at the gate mentioned above. This road is a wandering road, but not nearly as steep. This alternate route has slight curves, as opposed to the first access.

MARKER: The trig marker consists of a 12-foot high tripod. The tower is OFFSET 80 feet at a bearing of 270° True from this trig marker. This is due to powerlines in the area of the trig marker. The OFFSET location is marked with a square block of concrete set flush with the ground. There is a bronze plaque embedded in this marker that is inscribed "ESSO - ONI, OFFSET, ELEVATION".

GENERAL: The station site is a drive-on site. However, in periods where the road is wet, a four-wheel drive vehicle would be needed.

STATION: MOUNT TAYLOR (OFFSET) (continued) -

Food, petrol, oil, kerosene, and certain camping items are available at Bairnsdale. A Dalgety's Agent is also in Bairnsdale. Water must be carried, as none is available on the station site.

ELEVATION: 473 meters

SKETCH: See next page.

AUSTRALIAN GEODETIC DATUM

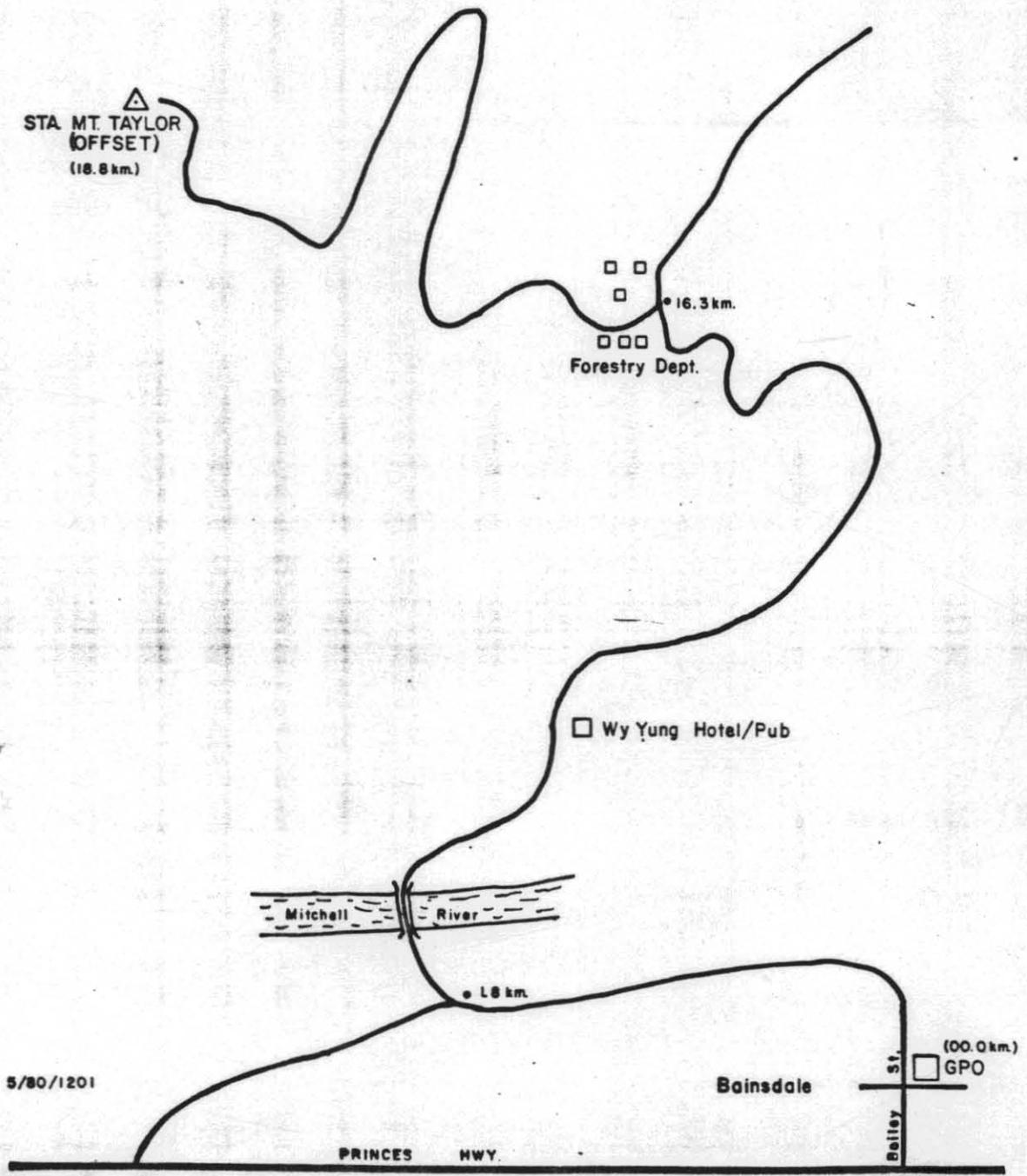
GEOGRAPHICAL COORDINATES		UTM Proj., AUST. NATIONAL SPHEROID ZONE 55, C.M. 147° EAST	
Latitude	Longitude	North	East
37°42'26".75 S	147°33'33".08 E	5,826,484 meters	549,290 meters

STA. MT. TAYLOR (OFFSET) — AUSTRALIA

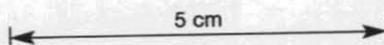
LAT. 37°42'26".75 S
LONG. 147°33'33".08 E
ELEV. 473 meters

N 5,826,484 meters
E 549,290 meters

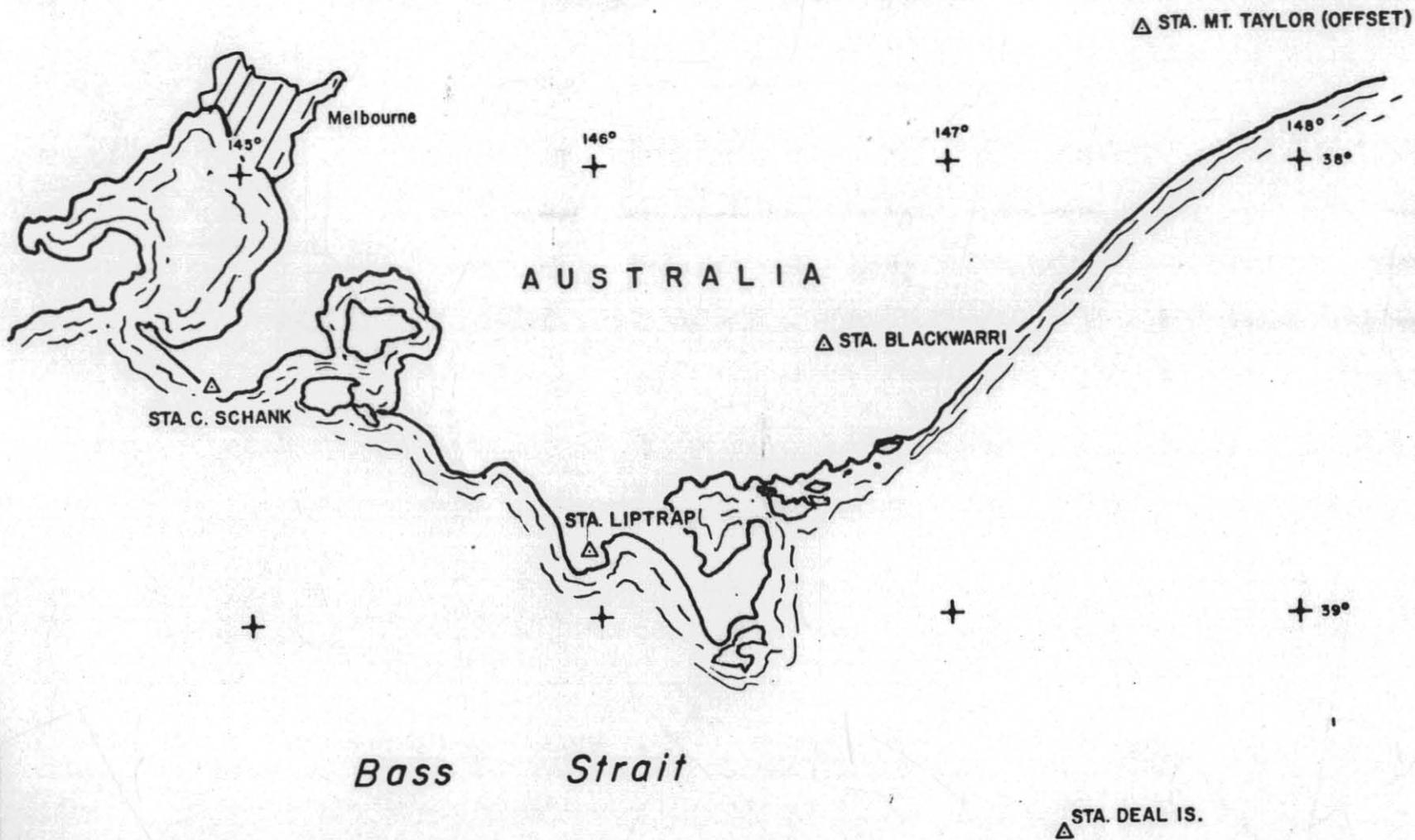
UTM PROJECTION, AUST. NATIONAL SPHEROID
ZONE 55 C.M. 147° E
AUSTRALIAN GEODETIC DATUM



OFFSHORE NAVIGATION
(AUSTRALIA) PTY. LTD.



AREA OF OPERATIONS



OFFSHORE NAVIGATION
(AUSTRALIA) PTY. LTD.

2/81/1201

173044

173045

APPENDIX A
DAILY OPERATIONS LOGS

**OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG**

173046

Project Number 1201 Date 10TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840KHZ
 Country AUSTRALIA Area/Prospect BASS BASIN Stepback Shot Point Interval 25MS

Mobile Station	FREQUENCY <u>441MHZ</u>	INTERROGATOR <u>038</u>	MONITOR <u>004</u>	AMPLIFIER <u>009</u>	-	ANTENNA SYSTEM <u>DUPLEX LP23</u>
----------------	----------------------------	----------------------------	-----------------------	-------------------------	---	--------------------------------------

BASE STATIONS						
Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
CAPE SHANK	G. WARD	429	025	070	004/011	3
LIPTRAP	R. BAMPTON	429	029	060	033	5 } 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2 }

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0700	2400	C. ORR.	SEISMIC SURVEY
O/T Requested By			Total System - Hours Operation for Client <u>17:00</u>

LOST TIME			
From	To	Hours Lost	Reason(s)
		NIL.	

Off Operations Log & Remarks
 0615 Departed Deerpont for the prospect area.
 Signals very poor due to atmospheric conditions.
 1100 - 1530 Laying & ballasting streamer.
 1550 - 1605 Test line BBS 81-14 NW FSP1 thru LSP 87.
 1858 - 1900 line BBS 81-14 DIR. NW FSP1 thru LSP 16 - line terminated.
 Poor signals causing erratic spacing of shotpoints.
 Heading for line 6 - closer to stations. Ranges over 150KMS
 don't appear possible today.
 2333 Terminated line BBS 81-6 as run in due to lack of compressors.

Mobile Operators *D. H.* Party Chief A. HENNESSY
H. R. BRIDGES.

173047

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 11TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 KHZ
 Country AUSTRALIA Area/Prospect BASS BASIN Stepback Shot Point Interval 25 MTS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	-	ANTENNA SYSTEM
	441 MHz	038	004	009		DUPLEX LPL'S

BASE STATIONS						
Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
CAPE SHANK	G. WARD	429	025	070	004/011	3
LIPTRAP	R. BAMPTON	429	029	060	033	5 } 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2 }

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.

O/T Requested By Total System - Hours Operation for Client 24:00

LOST TIME			
From	To	Hours Lost	Reason(s)
		NIL.	

Operations Log & Remarks
 0118 - 0253 Line BBS 81-6 DIR. NW FSP 1. Item LSP 621. -
 line terminated to reballast streamer. Signals still 100%
 1057 - 1528 Line BBS 81-6A DIR. NW FSP 561 Item LSP 2184 -
 line terminated - passing slips advise on call.
 1717 - 2141 Line BBS 81-6B DIR. NW FSP 2061 Item LSP 3751
 3 WAY FIXES C. SHANK LIPTRAP DEAL ISL.
 138.943 106.155 172.280
 134.431 104.376 174.718
 2400 Line change.

Mobile Operators *[Signature]*
 A. HENNESSY Party Chief H.R. BRIDGES

**OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG**

173048

Project Number 1201 Date 12TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company G.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 KHZ
 Country AUSTRALIA Area Prospect BASS BASIN Stepback _____ Shot Point Interval 25 MTS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441 MHz	038	004	009	DUPLEX LPL'S

BASE STATIONS						
Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
CAPE SHANK	C. WARD	429	025	070	004/011	3)
LIPTRAP	R. BAMPTON	429	029	060	033	5) 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2)

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0001	1300	C. ORR.	SEISMIC SURVEY & NAVIGATION.
O/T Requested By			Total System - Hours Operation for Client <u>13:00</u>

LOST TIME			
From	To	Hours Lost	Reason(s)
		NIL.	

Operations Log & Remarks
 0142 - 0157 Line BBS81-4 DIR. SE FSP1. Time LSP71 -
 Line terminated - excessive cable noise. Seas, force 8.
 0945 - 1124 Picking up cable.
 1130 Underway to Devonport because of weather - & to
 make more repairs to compressors.
 2210 Alongside dock at Devonport.

Mobile Operators *A. Hennessy* Party Chief H.R. BRIDGES.
 Form N-1A SEE INSTRUCTIONS ON REVERSE

173049

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 13TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 kHz
Country AUSTRALIA Area/Prospect BASS BASIN Stepback Shot Point Interval 25 MTS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441 MHz	038	004	009	DUPLEX LPL'S

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SHANK	C. WARD	429	025	070	004/011	3)
LIPTRAP	R. BAMPTON	429	029	060	033	5) SD19
DEAL ISLAND	P. RATHBONE	429	003	024	024	2)

OPERATING TIME

Time On	Time Off	Requested By	System Used For
			NOT IN USE.
O/T Requested By		Total System - Hours Operation for Client	

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL	

E Operations Log & Remarks

0001 - 2400 Alongside dock at Derwent for compressor repairs.
Removed both LPL antenna systems to repair storm damage.
3 way fixes at dock - signals port.
C. Shank Liptrap Deal Island
327.509 261.649 204.874
327.503 261.648 204.869.

Mobile Operators *D. King*

A. HENNESSY

Party Chief

H. R. BRIDGES

173050

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 14TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840KHZ
Country AUSTRALIA Area/Prospect BASS BASIN Stepback Shot Point Interval 25MB.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441MHZ	038	004	009	DUPLEX LPL'S

BASE STATIONS						
Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SHANK	C. WELLS	429	025	070	004/011	3)
LIPTRAP	R. DAMPTON	429	029	060	033	5) 5D19
DEAL ISLAND	P. RATHBONE	429	003	074	024	2)

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0900	2400	C. ORR	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client 15:00

LOST TIME			
From	To	Hours Lost	Reason(s)
		NIL	

Operations Log & Remarks
 1000 Departed Devonport for prospect area. Signals now good.
 3 Way fixes: Cape Shark Riptrap Deal Island
 at deck - 327.484 261.637 204.861
 311.809 246.091 193.165
 288.119 225.591 184.539
 1400-1630 Attempting to lay cable but cable reel inoperative.
 1630 Returning to Devonport for electrical repairs.
 1900-2130 Anchored off outside breakwater. Electrician aboard
 by launch with spares.
 2130-2400 Underway to prospect area.

Mobile Operators *D. P. H.*
 Party Chief A. HENNESSY H. R. BRIDGES

Form N-1A

SEE INSTRUCTIONS ON REVERSE

173051

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 15 FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company G.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 KHZ
 Country AUSTRALIA Area/Prospect BASS BASIN Stepback _____ Shot Point Interval 25 MTS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441 MHz	038	004	009	DUPLEX LPL'S

BASE STATIONS						
Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SCHANCK	C. WELLS	429	025	070	004/011	3
LIPTRAP	R. BAMPTON	429	029	060	023	5 } 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2 }

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client <u>24:00</u>

LOST TIME			
From	To	Hours Lost	Reason(s)
		NIL.	

Brief Operations Log & Remarks
 0101 - 0300 Laying & ballasting cable.
 0429 - 1559 Line BBS81-14A DIR. NW FSP1 thru LSP 4502.
 1754 - 2308 Line BBS81-12 DIR. SE FSP1 thru LSP 1871.
 2400 Line change.

Mobile Operators [Signature] Party Chief A. HENNESSY H. R. BRIDGES.

173052

**OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG**

Project Number 1201 Date 16TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 KHZ
 Country AUSTRALIA Area/Prospect BASS BASIN Stepback _____ Shot Point Interval 25MS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	-	ANTENNA SYSTEM
	441mhz	038	004	009		DUPLEX LPL's

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SCHANCK	C. WELLS	429	025	070	004/011	3
LIPTRAP	R. BAMPTON	429	029	060	033	5 } 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2 }

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client <u>24:00</u>

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

Brief Operations Log & Remarks

0.13 - 0238 Line BBS 81 - 17 DIR. SW FSP1 thru ASP 507 -
 line terminated - DFS hang up. Circle.
 0412 - 0509 Line BBS 81 - 17A DIR. SW FSP391 thru ASP 751.
 0743 - 1023 Line BBS 81 - 15 DIR. NE FSP1 thru ASP 1031.
 1217 - 1443 Line BBS 81 - 13 DIR. NE FSP1 thru ASP 951.
 1636 - 1752 Line BBS 81 - 15A DIR. SW FSP1 thru ASP 481.
 1918 - 2035 Line BBS 81 - 8 DIR. NW FSP1 thru ASP 489.
 line terminated 3/4 nm early due to compressor failure.
 2400 Line change.

Mobile Operators D. P. HENNESSY

Party Chief H. R. BRIDGES.

Form N-1A

SEE INSTRUCTIONS ON REVERSE

173053

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 17TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
Geophysical Company G.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7.840 MHz
Country AUSTRALIA Area/Prospect BASS BASIN Stepback Shot Point Interval 25 MTS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441 MHz	038	004	009	DUPLEX LPL's

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SCHANCK	G. WELLS	429	025	070	004/011	3
C. LIPTRAP	R. BAMPTON	429	029	060	033	5 } 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2 }

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client 24:00

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

Operations Log & Remarks
 0021 - 0236 Line BBS 81 - 7 DIR. NE FSP1 Item LSP 772 -
 line terminated - ship noise on records - circle.
 0409 - 0459 Line BBS 81 - 7A DIR. NE FSP 661 Item LSP 973.
 0656 - 1225 Line BBS 81 - 2 DIR. NW FSP1 Item LSP 2112.
 1447 - 1626 Line BBS 81 - 1 DIR. SW FSP1 Item LSP 597 -
 line terminated - CMS operator error.
 1645 - 2400 Circling for major compressor repairs.

Mobile Operators *[Signature]* Party Chief A. HENNESSY H.R. BRIDGES

173054

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 18TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 KHZ
Country AUSTRALIA Area/Prospect BASS BASIN Stepback Shot Point Interval 25 M.B.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441MHZ	038	004	009	DUPLEX LPL'S

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SCHANCK	C. WELLS	429	025	070	004/011	3)
C. LIPTRAP	R. BAMPTON	429	029	060	033	5) 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2)

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client 24:00

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

Brief Operations Log & Remarks

0001 - 0345 Working on the compressors.
0422 - 1008 Line BBS 81-1A DIR. SW FSP 481 Time ASP 2551.
ASP 2551 corresponds to CMS ASP 2555.
1127 - 1320 Line BBS 81-10 DIR. SE FSP 1 Time ASP 650.
1513 - 2148 Line BBS 81-3 DIR. NE FSP 1 Time ASP 2592.
2400 Line change.

Mobile Operators



A. HENNESSY

Party Chief

H. R. BRIDGES.

Form N-1A

SEE INSTRUCTIONS ON REVERSE

**OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG**

173055

Project Number 1201 Date 19TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 kHz
 Country AUSTRALIA Area/Prospect BASS BASIN Stepback _____ Shot Point Interval 25MTS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441 MHz	038	004	009	DUPLEX 1 PL'S

BASE STATIONS						
Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SCHANCK.	C. WELLS	429	025	070	004/011	3}
C. LIPTRAP.	R. BAMPTON	429	029	060	033	5} 5019
DEAL ISLAND.	P. RATHBONE	429	003	024	024	2}

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.
O/T Requested By		Total System - Hours Operation for Client	
		24:00	

LOST TIME			
From	To	Hours Lost	Reason(s)
		NIL.	

Prof Operations Log & Remarks

0008 - 0104 Line BBS81-5 DIR. SW FSP 1 thru ASP323.
 Line terminated - excessive cable noise due to swells/ships.
 0232 - 0438 Line BBS81-4 DIR. SE FSP 1 thru ASP811.
 0734 - 1555 Line BBS81-5A DIR. SW FSP 221 thru ASP3480.
 1740 Cable parted.
 1815 - 2400 Retrieving tail buoy & working on cable.

Mobile Operators *[Signature]* Party Chief A. HENNESSY
[Signature] Party Chief H. R. BRIDGES

173056

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 20TH FEB. 1981 Boat EUGENE McDERMOTT II
Geophysical Company G.S.I. Oil Company BASS STRAIT OIL & GAS
Country AUSTRALIA Area/Prospect BASS BASIN Stepback CUE MINERALS
Client Party Number 2931 Radio Frequency 7840 KHZ
Shot Point Interval 25 MS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441 MHZ	038	004	009	DUPLEX LPL'S

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SCHANCK	G. WELLS.	429	025	070	004/011	3)
C. LIPTRAP	R. BAMPTON.	429	029	060	033	5 } 5D19
DEAL ISLAND	P. RATHBONE.	429	003	024	024	2)

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client 24:00

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

Operations Log & Remarks

0001 - 1040 Repairing, laying & ballasting cable.
1245 - 1522 line BCS81-1 DIR NE FSP1 thru LSP 953.
1719 - 2025 line BCS81-3 DIR SW FSP1 thru LSP 1151 - continued as
2025 - 2400 line BBS81-9 DIR SW FSP1152 thru LSP 2435 -
SP 1152 on line BBS81-9 corresponds to plotted SP. No. 1 for this line.
Continuing on line BBS81-9 SW.

Bass Strait Oil & Gas/Cue Minerals prospects are on adjacent blocks
and same lines, as above, are shot as one but data is split at
concession boundaries.

Mobile Operators *[Signature]* Party Chief A. HENNESSY H. R. BRIDGES

173057

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 21ST FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 KHZ
Country AUSTRALIA Area/Prospect BASS BASIN Stepback CUE MINERALS. Shot Point Interval 25 MTS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441MHZ	038	004	009	DUPLEX LPL'S

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SCHANCK.	C. WELLS	429	025	070	004/011	3)
C. LIPTRAP.	R. BAMPTON	429	029	060	033	5) 5019
DEAL ISLAND.	P. RATHBONE	429	003	024	024	2)

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client 24100

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

Brief Operations Log & Remarks

0001 - 0104 Line BBS 81-9 DIR. SW FSP 2436 thru LSP 2811.
0332 - 0501 Line BBS 81-11 DIR. NE FSP 1 thru LSP 583.
This line completes the Bass Strait Oil & Gas prospect.

Mobile Operators *[Signature]* Party Chief A. HENNESSY H.R. BRIDGES.

Form N-1A

SEE INSTRUCTIONS ON REVERSE

173058

OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG

Project Number 1201 Date 25TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company G.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840 KHZ
 Country AUSTRALIA Area/Prospect GIPPSLAND BASIN Stepback Shot Point Interval 25 MTS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441 MHz	038	004	009	DUPLEX LPL's

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
C. SCHARCK	G. WELLS	429	025	070	004/011	3
BLACKWARRI	R. BAMPTON	429	029	060	033	5 } 5D19
DEAL ISLAND	P. RATHBONE	429	003	024	024	2
MT. TAYLOR	G. WARD	429	072	026	020/028	1

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client 24:00

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

E Operations Log & Remarks

0001 - 0930 Underway to Bass Strait Oil & Gas - Gippsland basin prospect.
 0407 Attempting to cut Cape Scharck - Deal Island baseline but Scharck signal very poor. Computed baseline = 238.848 kms, min reading = 238.875 kms. Only one attempt as we are running with the cable out.
 1007 - 1237 Line GBS 81-11 DIR. NE FSP1 thru LSP 922. Started line using C. Scharck & Deal Island as no contact with Mt. Taylor until 1148. Signal from Scharck poor but Mt Taylor confirmed we were within 40 meters of the line.
 1245 - 1310 3 Way fixes from both beacons on C. Scharck before securing station. For results see over.
 1305 Sta. Blackwarrri operational. over.

Mobile Operators

A. HENNESSY

Party Chief

H. R. BRIDGES.

Form N-1A

SEE INSTRUCTIONS ON REVERSE

173059

Operations Log & Remarks (con'd.)

BEACON	CAPE SCHANCK	MT. TAYLOR	DEAL ISLAND	BLACKW.
023 025	269.891	143.742	79.094	
"	270.214	144.301	78.850	
"	270.526	144.933	78.639	
031	271.202	145.990	78.187	
"	271.345	146.229	78.096	
"	271.581	146.615	77.953	
		149.328	75.165	131.458
Start of line 13		150.998	72.334	130.967

1351:1442 Line GBS81-13 DIR. SW FSP 1 Item LSP 341.

1548:1659 Line GBS81-15 DIR. SW FSP 1 Item LSP 452.

1828:1920 Line GBS81-22 DIR. NW FSP 1 Item LSP 312.

2059:2205 Line GBS81-24 DIR. SE FSP 1 Item LSP 411.

2316:2400 Line GBS81-14 DIR. NW FSP 1 Item LSP 288.

Continuing on line GBS81-14 NW.

INSTRUCTIONS

1. This form is to be filled out completely for each day that the crew, or any member thereof, is in a work status.
2. It is intended to provide a concise but complete log of one day's activity on an operating radiopositioning crew. Completeness is more important than brevity.
3. If more space is needed in order to make a complete report, use supplemental sheets.
4. In addition to providing an operational log, it also provides information required for billing purposes, particularly as it lists operating days, lost time, overtime, etc.
5. It has been specifically modified from previous forms to provide (under Operating Time) for a notation as to what the system is being used for during a specific period. This is particularly important (1) in case of overtime operations; (2) when the system is being used for other than the client's normal, day to day, operations; and (3) when the system is kept on the air but no production is being realized.
6. Under "Operating Time", the name of the client's representative requesting that the system be turned on or off or requesting overtime (O/T) operations should be noted. Notations such as "Client" or "Client Rep." are not sufficient.
7. Mobile operators should ascertain from their Party Chief if overtime charges are applicable on a particular operation (Party Chiefs are normally furnished with a copy of the applicable contract). If overtime is applicable to the operation, it should not be incurred without the client representative being fully aware of it and specifically authorizing it. In brief, if the system is not required, it should be turned off. If the client will not permit its being turned off to eliminate unnecessary overtime, that should be noted on this form, including all pertinent particulars.
8. The client, or his representative, always has the final decision as to whether the system should be turned on or off.

173060

**OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG**

Project Number 1201 Date 26TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company G.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7340KHZ
 Country AUSTRALIA Area/Prospect GIPPSLAND BASIN Stepback Shot Point Interval 25ms

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	-	ANTENNA SYSTEM
	441mhz	038	004	009		DUPLEX LPL'S

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
ISLACKWARRI	R. BAMPTON	429	029	060	033	5
MT. TAYLOR	G. WARD	429	072	026/035	020/028	1 } 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2 }

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client <u>24:00</u>

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

Operations Log & Remarks

0001 - 0052 Line GBS 81-14 DIR. NW FSP 289 THRU LSP 632.
 0235 - 0454 Line GBS 81-16 DIR. SE FSP 1 THRU LSP 880.
 0527 - 0721 Line GBS 81-18 DIR. NW FSP 1 THRU LSP 602.
 0815 - 0850 Line GBS 81-20 DIR. SE FSP 1 THRU LSP 220.
 2400 Line change & working on the cable. No signal from Mt Taylor, changed to Beacon 035. With change of beacons, 3 way fix Ref E increased
 1231 - 1601 Line GBS 81-12 DIR. NW FSP 1 THRU LSP 1482.
 1700 - 1746 Line GBS 81-10 DIR. SE FSP 1 THRU LSP 311.
 1910 - 1956 Line GBS 81-8 DIR. NW FSP 1 THRU LSP 312.
 2132 - 2343 Line GBS 81-3 DIR. SW FSP 1 THRU LSP 881.

2400 Line change.
 NOTE: LINE 10 shut using beacon 026 - Mt Taylor. No post-dit correction needed. **OVER!**

Mobile Operators [Signature] Party Chief A. HENNESSY H. R. BRIDGES.

Operations Log & Remarks (con'd.)

3 Way fixes with drage of beacon on Mt. Taylor:

R.F.E	BLACKWARRI	TAYLOR	DEAL IS.	BEKON
12.6m	95.179	138.298	62.035	035
7.1m	95.463	138.545	61.811	026
5.5m	96.043	138.945	61.500	026
11.8m	96.391	139.131	61.397	035

Not able to use beacon 026 on line as after approximately one hour of use, signal strength would drop off rapidly to an unusable level.

Beacon 035 would appear to be reading long & will calibrate at end of report & determine any correction to be used in post plotting lines where Mt Taylor used as prime station.

Line 12 all 3 stations used as prime in CMS.

" 8 " " " " " " " " " " " "

" 3 Blackwarrri & Deal Island " " " " " " " " " " " "

INSTRUCTIONS

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3. If more space is needed in order to make a complete report, use supplemental sheets.
4. In addition to providing an operational log, it also provides information required for billing purposes, particularly as it lists operating days, lost time, overtime, etc.
5. It has been specifically modified from previous forms to provide (under Operating Time) for a notation as to what the system is being used for during a specific period. This is particularly important (1) in case of overtime operations; (2) when the system is being used for other than the client's normal, day to day, operations; and (3) when the system is kept on the air but no production is being realized.
6. Under "Operating Time", the name of the client's representative requesting that the system be turned on or off or requesting overtime (O/T) operations should be noted. Notations such as "Client" or "Client Rep." are not sufficient.
7. Mobile operators should ascertain from their Party Chief if overtime charges are applicable on a particular operation (Party Chiefs are normally furnished with a copy of the applicable contract). If overtime is applicable to the operation, it should not be incurred without the client representative being fully aware of it and specifically authorizing it. In brief, if the system is not required, it should be turned off. If the client will not permit its being turned off to eliminate unnecessary overtime, that should be noted on this form, including all pertinent particulars.
8. The client, or his representative, always has the final decision as to whether the system should be turned on or off.

173062

**OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG**

Project Number 1201 Date 27th FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840KHZ
 Country AUSTRALIA Area/Prospect GIPPSLAND BASIN Stepback Shot Point Interval 25 MTS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441MHZ	038	004	009	DIPLEX LPL'S

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
BLACKWARRI	R. BAMPTON	429	029	060	033	5
MT. TAYLOR	G. WARD	429	072	035	020/028	1 } 5019
DEAL ISLAND	P. RATHBONE	429	003	024	024	2 }

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	2400	C. ORR.	SEISMIC SURVEY.
O/T Requested By			Total System - Hours Operation for Client 24:00

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

Operations Log & Remarks

0124 - 0213 Line GBS81-2 DIR. NW. FSP1 thru LSP332 MT. TAYLOR P. MAX. SP's 1-35, 153-332.
 0401 - 0517 Line GBS81-1 DIR. NE FSP1 thru LSP411 ALL LINE.
 0643 - 0903 Line GBS81-4 DIR. SE FSP1 thru LSP981 SP's 1-235.
 1032 - 1108 Line GBS81-7 DIR. NE FSP1 thru LSP432 NOT USED.
 1222 - 1356 Line GBS81-9 DIR. NE FSP1 thru LSP560 NOT USED.
 1524 - 1738 Line GBS81-5 DIR. SE FSP1 thru LSP921 NOT USED.
 2039 - 2153 Line GBS81-6 DIR. NW FSP1 thru LSP471 NOT USED.
 This completes the Bass Strait Oil/Gas prospect. 2200 Pick up guns.
 2226 - 2307 Baseline crossing. Mt. Taylor - Deal Island.
 Computed baseline 199.513KMS, min. reading 199.533.

OVER:

Mobile Operators 

A. HENNESSY

Party Chief H. R. BRIDGES

Form N-1A

SEE INSTRUCTIONS ON REVERSE

173063

Operations Log & Remarks (con'd.)

1800 Mt. Cann operational. 3 way fixes.

R. & E.	T. Blachewski	Mt. Taylor	Mt. Cann	Deal \$.
11.2m	102.599	157.659		41.933
11.8m	102.673	157.667		41.932
11.9m	103.468		213.709	41.974
10.9m	103.544		213.652	41.977
4.2m	103.963	157.732	213.353	
3.2m	104.005	157.735	213.319	
11.3m		157.743	213.240	42.022
12.8m		157.752	213.180	42.030

INSTRUCTIONS

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2. It is intended to provide a concise but complete log of one day's activity on an operating radiopositioning crew. Completeness is more important than brevity.
3. If more space is needed in order to make a complete report, use supplemental sheets.
4. In addition to providing an operational log, it also provides information required for billing purposes, particularly as it lists operating days, lost time, overtime, etc.
5. It has been specifically modified from previous forms to provide (under Operating Time) for a notation as to what the system is being used for during a specific period. This is particularly important (1) in case of overtime operations; (2) when the system is being used for other than the client's normal, day to day, operations; and (3) when the system is kept on the air but no production is being realized.
6. Under "Operating Time", the name of the client's representative requesting that the system be turned on or off or requesting overtime (O/T) operations should be noted. Notations such as "Client" or "Client Rep." are not sufficient.
7. Mobile operators should ascertain from their Party Chief if overtime charges are applicable on a particular operation (Party Chiefs are normally furnished with a copy of the applicable contract). If overtime is applicable to the operation, it should not be incurred without the client representative being fully aware of it and specifically authorizing it. In brief, if the system is not required, it should be turned off. If the client will not permit its being turned off to eliminate unnecessary overtime, that should be noted on this form, including all pertinent particulars.
8. The client, or his representative, always has the final decision as to whether the system should be turned on or off.

173064

**OFFSHORE NAVIGATION INC.
MAXIRAN DAILY OPERATIONS LOG**

Project Number 1201 Date 28TH FEB. 1981 Boat EUGENE McDERMOTT II Client Party Number 2931
 Geophysical Company C.S.I. Oil Company BASS STRAIT OIL & GAS Radio Frequency 7840KHZ
 Country AUSTRALIA Area/Prospect CIPPSLAND BASIN Stepback _____ Shot Point Interval _____

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	441MHZ	038	004	009	DUPLEX LPL'S

BASE STATIONS

Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
BLACKWARRI	R. DAMPTON	429	029	060	033	5
MT. TAYLOR	G. WARD	429	072	035	020/028	1 } 5019
DEAL ISLAND	P. RATHBONE	429	033	024	024	2 }
MT. CANN	G. WELLS	429				

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0001	0500	C. ORR.	NAVIGATION & BASELINE CROSSING.
O/T Requested By			Total System - Hours Operation for Client 5:00

LOST TIME

From	To	Hours Lost	Reason(s)
		NIL.	

E Operations Log & Remarks

0001 - 0257 Picking up cable.
 0349 - 0449 Baseline crossing - Blackwarrri - Deal Island.
 Computed baseline 134.369KMS, min reading 134.379.
 0450 - 0900 Underway to Barry's Beach terminal.
 Mobile equipment removed from vessel for calibration.

Mobile Operators  Party Chief H. R. BRIDGES