R.V. Gilliss

79013sei

JUN 7-25, 1979

CRUISE GS 7903-3

JOHN AARON - CHIEF SCIENTIST

PROVINCETOWN
TO
WOODS HOLE

79013
GILS 100371
7903-3

R.V. GILLISS JUNE 7-25, 1979

CRUISE GS-7903-3

OPS								DR. John AARON - Chief Scientist
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA		COMMENTS AND OBSERVATIONS

PROVINCE TOWN → WOODS HOLE

1620Z - supply boat brings new personal and needed replacement parts

1646Z - supply boat leaves

Scientific Party

John Aaron - chief scientist
Kim Klitaord
Dick Sylwester - Chief Tech
Jack Hampson
Dave Egelson
Kathy Scanlon
David Mason
John Larson
Berry Irwin
Jim Dodd
Val. Paskevich
Jerry McCarthy
Kurt Grove
Douthart

GMT				TIME ZONE	SHIPS		NAVIGATION			
DAY	MO	YR	TIME	±	COURSE	SPD				
8	6	79	1215	Z	121	20	41	54.63	65	52.46
								.		.
			1245				41	54.21	65	51.69
			1345				41	51.4	65	46.8
			1400				41	50.80	65	45.71
			1415				41	50.33	65	44.43
			1430				41	49.82	65	43.12
			1445				41	49.22	65	41.86
			1500				41	48.73	65	40.82
			1515				41	48.20	65	39.68
			1530				41	47.55	65	38.36
			1545				41	47.10	65	37.07
			1600				41	46.57	65	35.87
			1615				41	46.07	65	34.62
			1630				[illegible]	.	[illegible]	.
			1645				41	44.89	65	32.02
			1700				41	44.38	65	30.74
			1715				41	43.92	65	29.58
			1730				41	43.36	65	28.44
			1745				41	42.90	65	27.25
			1800				41	42.35	65	26.17
			1815				41	41.93	65	25.05
			1830				41	41.46	65	23.95
			1845				41	40.94	65	22.83
			1900	Z			41	41.42	65	21.73
			1915				41	39.89	65	20.45
			1930				41	39.35	65	19.15
			1945				41	38.74	65	17.84
			2000				41	38.12	65	16.53
			2015				41	37.48	65	15.15

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1215Z magnetometer streamed & running
							streaming mini sparker & airgun - 40cu.in.
							1240Z ~~[illegible]~~ 3.5 kHz running
							1245Z 40 cu.in. airgun on
							1640 mag off - bad signal

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION °N	°W
8	6	79	2030	Z	119	5.7	41 36.89	65 13.6
			2046	Z	222.7	4.2	41 36.09	65 13.55
			2100	Z	222.7	4.7	41 35.20	65 14.7
			2115	Z	222.7		41 34.46	65 15.69
			2130	Z	225.3	5	41 33.54	65 16.83
			2145	Z			41 32.71	65 17.88
			2200	Z			41 32.46	65 19.05
			2215	Z	304		41 33.42	65 20.90
			2230	Z				
			2245	Z	304	1.8	41 34.5	65 22.95
			2300	Z		4.5	41 34.9	65 23.60
			2315	Z		4.7	41 35.41	65 24.43
			2330	Z		4.6	41 35.86	65 25.26
			2345	Z		5.9	41 36.34	65 26.56
			0000	Z		4.7	41 37.01	65 27.86
			0015	Z			41 37.67	65 29.36
			0030	Z			41 38.34	65 30.69
			0045	Z			41 39.07	65 32.00
			0100	Z			41 39.91	65 33.43
			0145	Z			41 42.33	65 38.49
			0200	Z			41 43.22	65 40.19
			0300	Z			41 46.34	65 46.49
			0315	Z	305		41 47.01	65 47.75
			0330	Z			41 47.60	65 48.87
			0345	Z			41 48.10	65 49.90
			0400	Z			41 46.89	65 50.26
			0415				41 45.69	65 50.64
			0430				41 44.50	65 51.17
			0445				41 43.20	65 51.56
			0455				41 42.26	65 51.22

questionable

OPS (12 KHz, 3.5 KHz, CSP, MAG, GRAV, SONO, STA)	COMMENTS AND OBSERVATIONS
	2031-2033z airgun off (Sylvester) temporarily.
	2036z C/C to 222.7° EOL #1, BOL #1A
	2056 Prog. C/C to TRTRG edge for sparker and 3.5
	2138z P/C to TR 3/4 3.125 - 3.625 sec
	2143z P/C to TR ctr. 3.250 - 3.750 sec
	2152z C/C to 305° E.O.L. #1A B.O.L. #2
	2204z P/C to TR 3/4 3.125 - 3.625
	2214z P/C to TRTRG edge 3.00 - 3.50
	2221z Sparker off to clip tips
	2228z Sparker back on
	2230z P/C sparker, 3.5 to TRTRG 1/4 2.875 - 3.375
	2231z P/C airgun (3.5 off tips) to 2.01 - 4.01 sec
	2238z slowed down to switch streamer
	2318z Gems coming and being adjusted
	2326z P/C sparker/3.5 to TRTRG ctr. 2.750 - 3.250 sec
	2327 Airguns through adjustment everything up!
	2333z Airguns being readjusted by D. Sylvester!
	2338z Change of recorders for verification 3.5 kHz, Airgun down
	2346z P/C 3.5 kHz TR edge 2.5 - 3 sec
	2348z P/C sparker to TRTRG 3/4 2.625 - 3.125 sec
	0345z END LINE 2 C/C 195° on line 2a
	0450 begin Turn onto line 3 C/C 123.9°

GMT				TIME ZONE	SHIPS		NAVIGATION			
DAY	MO	YR	TIME	±	COURSE	SPD				
9	6	79	0500	Z	124	3.4	41	42.97	65	50.84
			0515				41	40.90	65	49.46
			0530				41	40.37	65	47.80
			0545				41	39.70	65	46.33
			0600				41	39.04	65	44.89
			0615				41	38.35	65	43.46
			0630				41	37.87	65	42.29
			0645							
			0700				41	36.30	65	39.71
			0715				41	35.68	65	38.41
			0730		124	5.8	41	35.04	65	37.00
			0745				41	34.43	65	35.85
			0800		124	4.4	41	33.80	65	34.74
			0815				41	33.11	65	33.65
			0900				41°	31.57	65°	30.18
			1030				41	27.83	65	23.04
			1050		225	4.6	41	26.9	65	22.44
			1100		225	4.6	41	26.40	65	23.07
			1140				41	24.47	65	25.80
			1201		304°		41	23.49	65	27.41
			1230				41	24.90	65	29.85
			1300				41	26.10	65	32.49
			1315				41	26.80	65	33.85
			1330				41	27.56	65	35.18
			1345				41	28.19	65	36.54
			1415				41	29.67	65	39.36
			1430				41	30.43	65	40.72
			1445				41	31.17	65	42.19
			1500				41	31.90	65	43.72
			1515				41	32.58	65	45.26

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION Latitude	NAVIGATION Longitude
09	06	79	1545	Z	304		41°34.1	65°48.2
			1600				41°34.9	65°49.7
			1615		304	7.2	41 35.55	65 51.11
			1630				41 36.30	65 52.47
			1645		304	6.3	41 36.95	65 53.80
			1700		304	3.7	41 37.58	65 55.07
			1715				41 38.16	65 56.24
			1730		207		41 38.66	65 57.40
			1745				41 37.71	65 58.16
			1800				41 36.71	65 58.91
			1815		207	5.5	41 35.78	65 59.58
			1830				41 34.70	66 00.26
			1833		128		41 34.37	66 00.45
			1845		128	5.0	41 33.78	65 59.58
			1900		128		41 32.98	65 58.26
			1930				41 31.42	65 55.56
			1945				41 30.59	65 54.28
			2000				41 29.84	65 52.91
			2030		129	3.7	41 28.69	65 50.57
			2045				41 28.10	65 49.38
			2100				41 27.3	65 48.50
			2130Z				41 25.85	65 46.27
			2200				41 24.55	65 44.05
			2215				41 23.89	65 42.98
			2231				41 23.27	65 41.71
			2300				41 21.92	65 39.65
			2340				41 18.56	65 36.17
10	06	79	0000				41 17.40	65 35.75
			0040				41 15.70	65 38.50
			0100				41 14.74	65 39.74

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1729 begin turn to line 4(K) c/c to 207°

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION Lat.	Long.
10	06	79	0130	Z	312		41° 14.2	65° 41.4
			0200	Z	312	3.7	41° 15.9	65° 43.9
			0230				41° 17.5	65° 46.4
			0300				41° 19.2	65° 48.8
			0400	Z	312	6.6	41 22.47	65 53.99
			0421		313	4.2	41 23.95	65 55.12
			0430		313	5.1	41 24.35	65 56.20
			0445		312	5.2	41 25.37	65 57.52
			0500		313	5.2	41 26.23	65 58.87
			0515		312	6.8	41 27.24	66 00.26
			0530		313	6.5	41 28.17	66 1.66
			0545					
			0600				41 29.87	66 04.15
			0608		232		41 30.40	66 04.77
			0615		174	8.2	41 30.18	66 5.40
			0630				41 28.93	66 05.65
			0645		137	3.9	41 27.95	66 06.15
			0700				41 27.27	66 07.36
			0715		132		41 24.47	66 8.59
			0730		132		41 23.83	66 7.35
			0745				41 23.32	66 05.91
			0800		132	3.6	41 22.62	66 4.72
			0830				41 20.83	66 02.66
			0900		132	5.8	41 19.45	66 00.26
			0915				41 18.65	65 58.94
			0945				41 16.79	65 56.95
			1000				41 15.96	65 55.28
			1030				41 15.24	65 52.30
			1100				41 11.98	65 50.17
			1130		169		41 11.84	65 47.54

OPS						COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION N	NAVIGATION W
10	06	79	1145	Z	227	4.4	41° 09.59	65° 47.11
			1200	Z	225		41° 09.16	65° 47.99
			1230	Z			41° 07.7	65 50.1
			1258	Z	312		41° 06.1	65° 52.0
			1330	Z	312		41° 07.95	65° 54.85
			1400				41° 09.8	65° 57.5
			1500				41° 13.8	66° 03.3
			1615				41° 18.44	66° 10.15
			1645				41 20.05	66 12.62
			1700				41 20.92	66 13.84
			1715				41 21.81	66 14.95
			1728	Turn			41 22.61	66 16.16
			1730		143°		41 22.67	66 16.19
			1800				41 20.68	66 14.69
			1815		143	3.8	41 19.84	66 13.79
			1830				41 18.93	66 12.89
			1845				41 18.00	66 11.89
			1900				41 16.95	66 11.02
			1915				41 16.00	66 10.07
			1930				41 15.10	66 9.13
			1945				41 14.16	66 8.18
			2000		145	5.2	41 13.16	66 7.16
			2030	Z	144.8	4.6	41 11.10	66° 05.15
			2100	Z			41 9.25	66 3.58
			2130				41 7.78	66 2.21
			2230				41 4.44	65 58.82
			2258		217.8	4.8	41° 03.07	65° 57.59
			2334				41 01.06	65° 59.28
11	06	79	0002				40 59.54	66° 00.89
			0020				40 58.50	66 01.96

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							Clear Skies - Blue Water
							Everyone is at the beach
							(but us)
							1728 begin Turn to line 9
							0020Z begin Turn to line 10

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION LAT	LONG
11	06	79	0100	Z	320		41° 00.9	66° 04.9
			0200				41° 04.9	66° 09.3
			0330				41° 11.3	66° 16.3
			0400				41 13.07	66 18.38
			0412		228		41 13.69	66 19.25
			0416		224	36	41 13.5	66 19.44
			0430				41 12.76	66 20.47
			0445		228	29	41 12.01	66 21.29
			0500				41 11.15	66 22.09
			0515				41 10.22	66 22.48
			0530		228	64	41 9.00	66 22.22
			0620				41 7.09	66 21.79
			0705				41 05.61	66 20.04
			0715				41 05.28	66 19.28
			0730				41 4.53	66 18.55
			0745		131	40	41 3.66	66 17.47
			0800				41 2.87	66 16.46
			0902		138	37	40 59.88	66 13.26
			1000				40 57.34	66 10.26
			1030				40 56.02	66 08.7
			1116Z				40 53.90	66 06.56
			1130Z				40 53.30	66 7.16
			1200Z				40 51.55	66 08.69
			1241				40 49.5	66 11.2
			1350				40 53.67	66 16.20
			1500				40 58.7	66 21.9
			1617				41 03.86	66 27.8
			1630		223	31	41 3.40	66 28.51
			1645				41 2.75	66 29.22
			1700		221		41 02.13	66 29.92

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							0412 begin line 10a
							Start line 11
							Start 11a 1116 Z
							Start 12 1241 Z
							Start line 12a

GMT				TIME ZONE	SHIPS		NAVIGATION			
DAY	MO	YR	TIME	±	COURSE	SPD				
11	06	79	1715		224	2.7	41	01.51	66	30.65
			1730				41	00.86	66	31.35
			1745				41	00.27	66	32.01
			1800		218	3.1	40	59.65	66	32.65
			1815		137		40	59.07	66	31.72
			1830				40	58.36	66	30.93
			1845		150	3.4	40	57.61	66	30.29
			1900		137	3.5	40	56.84	66	29.64
			1915		137	4.8	40	56.35	66	28.69
			1930		137		40	55.63	66	27.97
			1945		35°		40	55.03	66	27.10
			2000		35	4.9	40	56.13	66	26.06
			2030		35	5.0	40	58.33	66	24.08
			2045Z		35	6.4	40	59.54	66	22.92
			2100Z				41	0.56	66	22.00
			2210Z				41	4.8	66	18.12
			2234Z				41	6.37	66	16.72
			2300Z				41	8.07	66	15.1
			0100				41	15.5	66	08.1
			0200				41	17.71	66	03.73
			0250				41	19.5	65	59.6
			0410				41	25.55	65	54.9
			0415		39	51	41	25.83	65	54.67
			0430				41	26.83	65	53.74
			0446				41	28.07	65	52.74
			0500		C/C		41	29.23	65	52.04
			0518				41	30.83	65	51.44
			0536		183	9	41	32.10	65	50.90
			0545				41	33.49	65	50.29
			0600				41	34.83	65	49.58

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							begin Turn to line 13 (1802 Z)
							1944Z BEGIN LINE #14
							0500Z C/C 018° still Line #14

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD		NAVIGATION			
12	06	79	0615		34	38		41	35.98	65	48.58
			0630					41	37.03	65	47.58
			0645		34	3.0		41	38.28	65	46.77
			0700					41	39.36	65	45.88
			0715					41	40.45	65	44.89
			0730					41	41.47	65	43.92
			0745					41	42.46	65	42.94
			0800					41	43.47	65	42.03
			0832					41	45.44	65	40.71
			0903					41	47.54	65	40.56
			0930					41	49.44	65	39.61
			0944		123			41	50.53	65	39.31
			1003					41	49.87	65	37.91
			1024		190		S/C	41	48.98	65	36.42
			1100		192			41	46.77	65	36.85
			1132		192			41	44.62	65	37.48
			1200=					41	42.82	65	38.02
			1214		214			41	41.9	65	38.4
			1300					41	39.7	65	40.4
			1400					41	36.6	65	43.2
			1500					41	33.0	65	46.2
			1600					41	29.29	65	48.60
			1615					41	28.39	65	49.12
			1630					41	27.55	65	49.84
			1645		210			41	26.68	65	50.49
			1700					41	25.85	65	51.11
			1715		210			41	25.07	65	51.80
			1730					41	24.26	65	52.36
			1745					41	23.56	65	53.00
			1800		210			41	22.84	65	53.62

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							C/C E.O.L. 14 B.O.L. 14A
							C/C E.O.L. 14A B.O.L. 15
							1415Z 2 - 40 cu. in guns in use
							1700 - Large Canyon at ~ 5 fc Sub bottom

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION			
12	06	79	1815	Z	210	3.3	41	22.10	65	54.20
			1830				41	21.36	65	54.68
			1845		211	3.1	41	20.76	65	55.21
			1900		206	3.3	41	20.13	65	55.70
			1930				41	18.73	65	56.85
			1945		209	6.4	41	17.64	65	57.95
			2000		245	4.7	41	16.96	65	59.52
			2015		253		41	15.67	66	0.86
			2030Z				41	15.44	66	3.00
			2045Z				41	15.06	66	4.51
			2100				41	13.93	66	05.86
			2130				41	11.48	66	08.26
			2145				41	10.10	66	09.52
			2200				41	08.70	66	10.91
			2215				41	07.72	66	11.84
			2230				41	06.27	66	13.19
			2245				41	05.09	66	14.31
			2306				41	02.97	66	16.31
			2318				41	01.83	66	17.41
			2346				40	59.23	66	19.86
13	06	79	0000Z				40	58.05	66	20.95
			0015				40	57.09	66	21.81
			0030			Northstar	40	55.78	66	22.92
LINE	16		0057		125°		40	53.5	66	25.0
			0115				40	52.71	66	24.5
			0130				40	52.29	66	23.87
			0200				40	51.71	66	22.2
			0318				40	48.76	66	16.69
			0345				40	47.62	66	14.60
			0400Z				40	47.02	66	13.56

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAY	SONO	STA	

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD Knts	NAVIGATION	
13	06	79	0415	Z	125	4.2	40 46.35	66 12.47
			0430				40 45.71	66 11.31
			0445		129	4.0	40 45.19	66 10.20
			0500		125	4.2	40 44.60	66 09.05
			0515		125	6.4	40 43.71	66 7.60
			0530				40 42.72	66 5.82
			0600		125	5.7	40 41.16	66 02.70
			0615		125	5.9	40 40.27	66 1.15
			0630		125	6.3	40 39.38	65 59.56
			0645		129	6.8	40 38.50	65 57.82
			0700				40 37.59	65 56.20
			0715		125	6.8	40 36.71	65 54.53
			0730		125	6.2	40 35.73	65 52.81
			0745		125	6.1	40 34.78	65 51.13
			0800		125	5.7	40 33.91	65 49.43
			0815		125	6.7	40 33.00	65 47.61
			0836				40 32.03	65 46.11
			0900				40 30.54	65 43.10
			0915		125	5.3	40 29.73	65 41.58
			0930				40 28.94	65 40.20
			0945				40 28.08	65 38.58
			1000Z				40 27.39	65 37.30
			1015				40 26.57	65 35.76
			1036				40 25.65	65 34.10
			1100Z		126		40 24.46	65 31.42
			1115				40 23.74	65 29.82
			1130				40 22.61	65 28.66
			1145				40 21.77	65 27.08
			1200				40 20.91	65 25.55
			1215				40 20.13	65 24.03

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							Seismic Lines around New England Seamounts
							500 cu. in gun with shaper
							160 cu in gun without Shaper
							16 to 125 Hz data on to tape
							2 sec, 5 sec & 8 sec sweep recorders used

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD (Kts)		NAVIGATION	
13	06	79	1245	Z	125	6.5		40° 18.3 N	65° 20.8 W
			1300	Z				40° 17.4	65° 19.1
			1355		213			40° 14.1	65° 12.9
			1430	Z				40° 11.2	65° 15.4
			1500	Z				40 09.02	65 17.30
			1530	Z				.	.
			1600	Z		5.3	avg over 2 hr.	40 04.07	65 21.41
			1615					40 02.87	65 22.43
			1645					40 00.41	65 24.51
			1700	Z				39 59.21	65 25.63
			1715					39 57.98	65 26.62
			1730					39 56.75	65 27.55
			1800					39 54.27	65 29.69
			1815					39 53.00	65 30.76
			1830		213	5.2		39 51.81	65 31.73
			1845		213	4.7		39 50.70	65 32.70
			1900					39 49.59	65 33.65
			1915		213	5.7		39 48.47	65 34.61
			1930		213	5.5		39 47.34	65 35.56
			1945		213	5.2		39 46.17	65 36.50
			2000		213	5.1		39 45.02	65 37.50
			2018		213	5.4		39 43.48	65 38.81
			2030		213	6.3		39 42.63	65 39.42
			2045					39 41.00	65 40.52
			2100		213	5.7		39 40.21	65 41.51
			2130					39 37.72	65 43.61
			2145					39 36.45	65 44.64
			2200					39 35.39	65 45.53
			2245					39 31.80	65 48.50
			2306	Z				39 30.15	65 49.87

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5KHz	CSP	MAG	GRAV	SONO	STA	
							Start line 17 GS 7903-3
							1643 changed from 10 to 12 sec fire on airguns
							1645Z passed over small channel

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION LAT	LON
13	06	79	2315	Z	240	5.7	39 29.65	65 50.78
			2331				39 28.93	65 52.42
			2346				39 28.34	65 53.79
14	06	79	0000				39 27.80	65 55.26
			0110			avg spd 6 kts	39° 24.6	66° 02.5
			0312				39° 18.7	66° 15.9
			0330				39 17.80	66 17.86
			0400				39 16.22	66 21.21
			0415				39 15.50	66 22.97
			0430				39 14.81	66 24.68
			0445				39 14.05	66 26.38
			0500				39 13.29	66 27.98
			0515				39 12.53	66 29.58
			0530				39 11.84	66 31.25
			0545		243	5.3	39 11.06	66 32.92
			0600				39 10.35	66 34.54
			0615		239	6.4	39 09.67	66 36.27
			0630				39 8.99	66 37.93
			0645				39 8.20	66 39.59
			0700				39 7.61	66 41.07
			0715				39 7.15	66 42.84
			0730				39 6.59	66 44.56
			0745		234	6.1	39 5.84	66 46.25
			0800				39 4.95	66 47.89
			0816				39 4.18	66 49.51
			0830				39 04.54	66 49.88
			0845				39 05.46	66 48.77
			0900				39 06.21	66 47.39
			0915				39 07.28	66 46.17
			0930				39 08.18	66 46.13

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION				
14	06	79	0945		42.3	5.3kts		39	09.2	66	43.88
			1600Z					39	10.04	66	42.89
			1015Z		42.3	4.8		39	10.89	66	41.92
			1033					39	12.03	66	40.58
			1100					39	13.52	66	38.82
			1115Z					39	14.38	66	37.80
			1132					39	15.42	66	36.66
			1145					39	16.15	66	35.70
			1200					39	16.96	66	34.78
			1245Z					39	19.8	66	31.95
			1300Z					39	20.65	66	30.45
			1330Z		043	4.6		39	22.	66	28.
			1345Z					39	23.24	66	27.45
			1400Z					39	24.1	66	26.3
			1416Z					39	25.03	66	25.16
			1435Z		043	5.0	map avg.	39	26.22	66	23.80
			1500				5.5 kts	39	27.9	66	21.8
			1530					39	29.9	66	19.4
			1600					39	31.71	66	17.31
			1615		236	6.1		39	31.47	66	18.21
								39	30.65	66	19.65
			1630					39	30.65	66	19.65
			1645					39	29.81	66	21.28
			1700					39	29.01	66	22.83
			1715		236	6.0		39	38.17	66	24.41
			1730					39	27.37	66	25.95
			1745		236	6.6		39	26.52	66	27.58
			1800		236			39	25.74	66	29.14
			1815			5.5		39	24.79	66	30.96
			1830		236			39	24.18	66	32.13

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1500-1600 line 18 buried hills?
							1603 Turn to line 19
							C/C 232°
							1603 - 1700 line 19 buried?
							1815 Z C/S 5½ knots

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION				
14	06	79	1845	Z	236	5.2		39	23.42	66	33.56
			1900					39	22.66	66	35.03
									.		.
			1930		236	5.2		39	21.14		37.93
			1945					39	20.34	66	39.47
			2000		240	5.1		39	19.55	66	41.03
			2021Z					39	18.54	66	42.89
			2030Z		236	5.2		39	18.15	66	43.64
			2045Z					39	17.41	66	45.05
			2100Z					39	16.74	66	46.37
			2130Z		236			39	15.23	66	49.19
			2145Z					39	14.54	66	50.61
			2200Z		236	5.4		39	13.80	66	51.89
			2215Z					39	13.06	66	53.39
			2230Z					39	12.31	66	54.71
			2247Z					39	11.69	66	55.90
			2300Z					39	11.11	66	57.75
			2315Z					39	10.42	66	58.29
			2330Z				map avg: 5.7 knots	39	09.84	66	59.52
			2347Z					39	08.97	67	01.11
15	06	79	0004					39	08.10	67	02.71
			0020					39	07.38	67	04.10
			0100					39	05.20	67	08.20
			0120					39	04.	67	09.
			0145					39	03.08	67	12.17
			0200					39	01.75	67	14.57
			0230					39	00.28	67	17.68
	C/K		0235		284°			39	00.00	67	18.05
			0300					39	00.55	67	20.76
			0330					39	01.2	67	24.4

OPS						COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA
						c/c 2 84° start Line 20

GMT				TIME ZONE	SHIPS		NAVIGATION	
DAY	MO	YR	TIME	±	COURSE	SPD		
15	06	79	0400	Z	284	5 knts	39° 02.07	67° 27.62
			0415		285	5.2	39 02.49	67 29.15
			0430		285	5.3	39 02.84	67 30.71
			0445				39 03.13	67 32.27
			0500				39 03.31	67 34.00
			0515		292	4.9	39 3.69	67 35.58
			0530		276	4.9	39 4.16	67 37.05
			0545		285		39 04.54	67 38.59
			0600		278	6.5	39 4.92	67 40.65
			0615		288	6.0	39 5.28	67 42.47
			0630		285	5.6	39 05.66	67 44.45
			0645				39 06.07	67 46.34
			0700		285	6.0	39 06.42	67 48.22
			0715		287	5.5	39 06.87	67 50.06
			0730		285	7.0	39 07.28	67 51.89
			0745		285	5.9	39 07.69	67 53.81
			0800		285	7.0	39 08.11	67 55.88
			0815				39 08.31	67 58.37
			0837		55.2	5.9	39 09.28	67 59.95
			0900	Z			39 10.39	67 57.46
			0917	Z			39 11.40	67 55.59
			0930	Z	55	5.3	39 12.07	67 54.35
			0945				39 12.99	67 53.60
			1000	Z			39 13.84	67 51.10
			1015	Z			39 14.58	67 49.72
			1030				39 15.48	67 48.08
			1045				39 16.38	67 46.42
			1100	Z			39 17.22	67 44.86
			1115	Z			39 18.11	67 43.24
			1130	Z			39 18.87	67 41.78

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							08303 c/c 55° start line #21

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD		NAVIGATION			
			1143	Z				39°	19.59	67°	40.46
			1200	Z			mapavg	39°	20.45	67°	38.87
			1230				6.1 knts	39°	22.1	67°	35.8
			1400		055	6.1	NO LIE! →	39°	26.91	67°	26.91
			1440		055	c/spd.		39°	29.09	67°	22.88
			1500				mapavg:	39°	30.3	67°	20.6
			1530				6.0 knts.	39°	32.03	67°	17.41
			1540					39°	32.62	67°	16.24
			1603					39	34.00	67	13.57
			1615					39	34.66	67	12.32
			1630					39	35.55	67	10.67
			1645		055	6.0		39	36.47	67	9.00
			1700		c/course				37.05		7.08
			1715		081	6.3		39	37.36	67	5.01
			1730		081	6.9		39	37.62	67	02.98
			1745		081	6.2		39	37.90	67	00.95
			1800					39	38.12	66	58.75
			1816		079	6.5		39	38.37	66	56.69
			1830		81	6.3		39	38.57	66	54.83
			1845		81	6.5		39	39.38	66	52.81
			1900					39	39.07	66	50.70
			1930		076	7.6		39	39.64	66	46.09
			1945					39	39.87	66	43.90
			1949		018	7.1		39	39.95	66	43.18
			2000Z					39	40.92	66	42.47
			2030Z					39	43.69	66	41.09
			2045Z					39	45.14	66	40.97
			2100					39	46.38	66	40.46
			2130					39	49.13	66	39.45
			2145Z					39	50.41	66	38.90

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							c/spd. ↑ 0.5 Knts (to ~ 6.5 Knts)
							1400Z crossed over GILBERT CANYON
							1700Z c/c 081° Start line # 22
							1949Z c/c to 18° line 23

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
15	06	79	2200	Z	16.8	5.4	39°	51.70	66°	38.41
			2215	Z			39°	53.00	66°	37.93
			2230	Z	16.9	5.6	39°	54.23	66°	37.42
			2245	Z			39	55.56	66°	36.94
			2300	Z	16.9	5.1	39	56.82	66	36.38
			2330	Z			39	59.51	66	35.32
			2345	Z			40	00.74	66°	34.81
16	06	79	0000	Z			40	02.16	66	34.27
			0030	Z		mapaug: 5.5 Knts.	40	04.	66	33.
			0120	Z			40	09.8	66	31.3
			0200	Z			40	13.98	66	29.52
			0230	Z			40	16.9	66	28.4
			0300	Z			40	19.7	66	27.3
			0330	Z			40	22.42	66	26.24
			0400	Z			40	25.0	66	25.2
			0415	Z	015	6.0	40	26.32	66	24.65
			0430	Z			40	27.56	66	24.17
			0500	Z			40	29.12		25.12
			0545	Z			40	29.71	66	28.57
			0600				40	30.97	66	27.96
			0615		029	6.5	40	32.37	66	26.96
			0630				40	33.85	66	25.85
			0645				40	35.33	66	24.68
			0700		13	6.3	40	36.60	66	23.51
			0715		32	6.7	40	38.20	66	22.14
			0730		41	5.0	40	39.33	66	21.18
			0745		23	5.3	40	40.57	66	20.10
			0800		12	3.2	40	41.59	66	19.69
			0845		10	3.7	40	44.70	66	18.56
			0900	Z			40	45.78	66	18.18

OPS								COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA		

~~NOTE~~

~~LINE #20 ON THE RECORDS,~~

~~Seismic Tapes AND IN LOG BOOKS IS~~

~~LINE # 20, 21, 22 & 23 in Computer~~

Labels on all record, et have been changed to match computer line #'s

0540 - c/c on course for Line # 24
160 & 500 cu. in. airgun aboard

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION		
16	06	79	0930	Z			40° 46.41	66° 18.41	
			1000	Z			40 44.9	66 19.7	
			1031	Z			40 43.53	66 20.90	
			1045	Z			40 43.07	66 21.38	
			1100	Z			40 42.54	66 21.99	
			1130	Z			40 41.38	66 23.22	
			1145	Z		map avg: 3.7 knts	40 40.83	66 23.93	
			1200	Z	215		40 40.31	66 24.67	
			1230	Z	205		40 38.55	66 26.51	
		4/C	1255		231		40 36.9	66 27.9	
			1330			map avg. 5.0 knts	40 35.1	66 30.7	
			1400				40 33.5	66 33.2	
			1430			MAP AVG. 5.9 knts.	40 31.8	66 36.0	
			1500				40 29.92	66 38.96	
			1518						
			1600				40 26.20	66 44.96	
			1615		238	5.8	40 25.52	66 46.46	
			1630		240	5.8	40 24.85	66 48.15	
			1700		240	6.1	40 23.35	66 51.44	
			1715		239	5.6	40 22.61	66 53.12	
			1730		243	5.4	40 21.86	66 54.82	
			1745		?		40 21.11	66 56.57	
			1800		241	5.4	40 20.31	66 58.33	
			1815		237	6.7	40 19.58	67 00.26	
			1830				40 18.83	67 01.86	
			1845				40 18.09	67 03.47	
			1900		240	5.7	40 17.48	67 05.08	
			1916				40 16.59	67 06.90	
			1930		242	4.9	40 15.93	67 08.34	
			1945				40 15.18	67 10.07	

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1255 c/c 231°

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION	
16	06	79	2000	Z			40 14.45	67 11.66
			2017	Z			40 13.63	67 13.56
			2030	Z			40 12.78	67 14.76
			2046	Z			40 11.76	67 16.42
			2100				40 10.88	67 17.00
			2115				40 09.91	67 19.26
			2130	Z			40 08.87	67 20.75
			2200				40 07.01	67 23.5
			2215	Z			40 06.02	67 25.04
			2230	Z			40 05.01	67 26.32
			2246	Z			40 04.14	67 27.89
		4c	2300	Z			40 03.24	67 29.82
			2331	Z			40 03.39	67 32.64
			2345	Z		map avg. 4.9 knots	40 03.52	67 34.110
			0045	Z			40 04.25	40.6
			0100	Z			40° 04.5	67° 42.5
			0130	Z		c/spd	40° 04.8	67° 45.5
			0147	Z			40° 04.8	67° 46.9
			0245	Z			40° 04.9	67° 51.82
			0330	Z	269°		40° 04.9	67° 56.81
		4c	0345	Z	250°		40 04.9	67 58.4
			0400	Z			40 04.51	67 59.93
			0415	Z			40 04.11	68 01.54
			0430				40 03.64	68 03.31
			0445				40 03.16	68 04.90
			0500				40 02.67	68 06.52
			0515				40 02.24	68 08.26
			0530				40 01.79	68 09.91
			0545				40 01.36	68 11.71
			0606				40 0.86	68 13.37

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							c/c 250° still line 25

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
17	06	79	0630		248	6.9	39	59.89	68	16.94
			0645		248	6.5	39	59.39	68	18.79
			0700				39	58.85	68	20.60
			0730		243	8.8	39	57.82	68	24.33
			0745		255	6.7	39	57.28	68	26.18
			0800		248	6.2	39	56.86	68	28.00
			0817		250	5.7	39	56.26	68	29.97
			0831Z				39	55.82	68	31.63
			0900Z				39	54.84	68	34.93
			1001Z		263	8.1	39	52.86	68	33.27
			1031Z				39	55.33	68	33.44
On line			1100Z				39	54.66	68	35.5
again			1115Z				39	54.34	68	36.89
			1130Z				39	53.93	68	38.51
			1145Z		250	5.1	39	53.46	68	40.10
			1200		250	5.1	39°	52.96	68°	41.62
		c/c	1243		239	~5.1	39°	51.8	68°	45.9
			1300				39°	51.1	68°	47.6
		c/sp	1355			~6	39°	48.75	68	52.68
			1435			5.5	39°	46.89	68°	56.83
		c/c	1505		257		39°	45.42	69°	00.01
			1545		257	5.6 knots	39°	44.60	69°	04.59
		c/sp	1600			try for 6	39	44.23	69	06.41
			1615		260		39	43.95	69	08.28
			1630		255	6.3	39	43.63	69	10.19
			1645		254	7.7	39	43.26	69	12.27
			1700		263	6.5	39	42.83	69	14.22
			1715		258	6.1	39	42.57	69	16.15
			1730				39	42.25	69	18.08
			1745				39	41.91	69	19.95

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1730Z CONCORDE passing overhead

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION	
17	06	79	1800	Z	258	6.6	39 41.57	69 21.86
			1815		256	7.1	39 41.22	69 23.75
			1830		255	5.2	39 40.88	69 25.20
			1845				39 40.54	69 27.58
			1900		256	5.0	39 40.18	69 29.59
			1915				39 39.81	69 31.49
			1930		258	6.2	39 39.45	69 33.48
			1945				39 39.24	69 35.61
			2000		267	7.3	39 39.07	69 37.81
			2015				39 39.02	69 40.18
			2032				39 38.86	69 42.92
			2045				39 38.76	69 44.99
			2105				39 38.71	69 48.23
			2130Z				39 38.54	69 52.61
			2145Z				39 38.46	69 54.83
			2200Z				39 38.33	69 57.34
			2218		267		39 38.22	70 00.50
			2236				39 38.90	70 03.30
			2300Z				39 40.30	70 07.05
			2323Z				39 41.59	70 10.71
			2330Z				39 41.13	70 11.59
18	06	79	0000Z				39 39.04	70 15.11
		C/C	0022		270°			
			0030				39 37.4	70 19.1
			0100				39 37.4	70 24.5
			0130				39 37.4	70 29.1
		C/C	0154		293°		39 37.36	70 32.43
			0200		293°		39 37.56	70 33.76
			0300				39 [illegible]	70 [illegible]
			0330	0400?			39 41.39	70 45.95
			0415				39 40.37	70 52.00

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	

FAIR WEATHER IS STILL WITH US. A BIT of wind yesterday and a few scattered high clouds today but great weather for seismic profiling and beaching it.

at 1900 rock outcrops compare Sparker & 3.5 KH,

Sea state ~ 1 foot seas

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD		NAVIGATION			
18	06	79	0430	Z				39	40.05	70	53.79
			0447		266			39	39.89	70	55.78
			0457		180°		C/change	39	39.58	70	57.04
			0500					39	39.45	70	57.02
			0515		185	6.5		39	37.85	70	57.08
			0530		187	5.7		39	36.25	70	57.04
			0545		697	4.9		39	35.00	70	56.48
			0600					39	34.69	70	54.50
		C/C	0615		21	5.6		39	35.45	70	53.45
			0630		341	7.0		39	36.95	70	53.50
			0700	Z	355	6.0		39	40.12	70	53.54
			0715		000	6.0		39	41.80	70	53.60
			0745		007	6.8		39	45.80	70	55.27
			0800		18	7.3		39	47.56	70	54.37
			0830Z		000	6.2		39	51.17	70	53.51
			0845Z					39	52.80	70	53.39
			0900Z					39	54.46	70	53.50
			0918Z					39	56.77	70	53.59
			0934Z					39	58.80	70	53.53
			0945Z					39	59.99	70	53.56
			1000Z					40	02.11	70	54.24
			1047					40	07.23	70	53.99
			1101					40	08.73	70	53.96
			1115					40	10.22	70	53.81
			1130					40	11.84	70	53.53
			1147					40	13.70	70	53.46
			1200					40	14.99	70	53.45
		C/C	1206		090°			40°	15.6	70°	53.5
		C/C	1252		180°			40°	15.78	70°	46.75
			1330					40°	11.6	70°	46.8

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION	
18	06	79	1430	Z	180		40° 04.9	70° 46.9
			1500				40° 02.1	70° 46.8
			1600	Z			39° 56.5	70° 46.8
			1615	Z	185 5.2		39 39.55	70 46.88
			1630				39 39.53	70 46.80
			1645		177 5.7		39 52.53	70 46.82
			1700		180 6.0		39 51.08	70 46.83
			1715		180 57		39 49.59	70 46.89
			1730		180 53		39 48.09	70 46.89
			1745		177 6.0		39 46.55	70 46.83
			1800				39 44.96	70 46.80
			1815		180 6.6		39 43.36	70 46.83
			1830		178 5.8		39 41.78	70 46.85
			1845				39 40.39	70 46.90
			1900				39 38.92	70 46.91
			1915		180 56		39 37.40	70 46.89
			1930		177 5.9		39 36.05	70 46.86
			1945		181 6.2		39 34.47	70 46.80
			2000	Z			39 32.89	70 46.86
			2032Z				39 29.52	70 46.86
			2045Z		180		39 28.18	70 46.89
			2110Z				39 26.55	70 45.29
			2130Z				39 26.80	70 41.92
			2146Z	% 000°				
			2200Z				39 28.44	70 39.38
			2245Z				39 32.90	70 39.77
			2300Z				39 34.35	70 39.91
			2315				39 35.89	70 39.94
			2330Z				39 37.44	70 39.85
			2345Z				39 38.84	70 39.84

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							It was cloudy all morning but by late afternoon the clouds were gradually dispersing. Light wind and fairly calm seas for good seismic data.
							Sea state is 2-3' waves some white caps, but generally not bad. Records reflect some "sea-state" noise.

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
19	06	79	0000	Z			39°	40.36	70	39.83
			0100				39°	46.6	70°	39.7
			0130	Z	360	6.6	39	49.62	70	39.65
			0145	Z	10		39	51.11	70	39.57
			0200				39	52.7	70	39.7
			0230				39	55.7	70	39.8
			0300			avg. 5.5 kts	39	58.4	70	39.9
			0330				40	01.1	70	39.7
			0400				40	03.97	70	39.75
			0415				40	05.40	70	39.61
			0430				40	06.84	70	39.71
			0445		002	5.2	40	08.27	70	39.87
			0500	Z	000	5.9	40	09.57	70	39.89
			0515		000	5.8	40	10.92	70	39.90
			0530		011	4.8	40	12.20	70	39.87
			0545		000	6.3	40	13.51	70	39.72
			0600		[illegible]		40	14.78	70	39.81
			0615		329	4.6	40	15.97	70	39.79
			0630		338	5.1	40	17.11	70	39.72
			0700		113		40	18.85	70	37.49
			0715		119	6.4	40	16.46	70	35.99
			0730		121	6.8	40	15.98	70	34.60
			0741		C/C		40	15.43	70	33.38
			0745		180	7.1	40	15.26	70	33.32
			0800		165	7.3	40	13.65	70	33.46
			0818				40	11.74	70	33.44
			0830				40	10.46	70	33.21
			0845				40	08.85	70	33.08
			0900				40	07.19	70	33.26
			0916				40	05.31	70	33.209

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
19	06	79	0930	Z			40	03.76	70°	33.68
			0945	Z			40	02.18	70	34.18
			1003	Z			40	00.35	70	33.81
			1015	Z			40	59.06	70	33.71
			1030	Z			39	57.43	70	33.58
			1045	Z	180		39	55.79	70	33.44
			1100	Z			39	54.43	70	33.24
			1131	Z			39	51.21	70	33.10
			1145	Z			39	49.68	70	33.24
			1201	Z			39	47.91	70	33.23
			1230				39	44.6	70	33.3
			1300				39	41.2	70	33.2
			1330				39	38.0	70	33.2
			1400				39	34.8	70	33.2
			1430				39	31.43	70	33.34
			1500				39	28.1	70	33.2
			1509		105		39	27.3	70	33.2
			1515		118	3.2	39	26.92	70	32.92
			1600				39	26.22	70	29.58
			1615				39	25.99	70	28.47
			1630				39	26.47	70	28.12
			1645		000	3.0	39	27.17	70	28.13
			1700		000	31	39	27.91	70	28.07
			1715		000		39	28.79	70	27.96
			1730		000	5.3	39	29.79	70	27.92
			1745		000	5.1	39	30.94	70	27.96
			1800				39	31.95	70	27.75
			1815				39	33.32	70	27.98
			1830		[illegible]	[illegible]	39	34.53	70	27.96
			1845				39	35.72	70	27.96

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							0945z Sea state getting choppy, some good gusts, swells and some rain.
							1045z Sea state not too good. Waves getting larger, rolls approximately 10-15° (this is only because we are going with the waves, broadside to the waves 10-15° rolls may indicate 1kt. winds, gusting to 3kts.).
							1145z Rolls 10-20°

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION				
19	06	79	1900	Z		4.5	AVG SPEED	39	36.75	70	28.00
			1915					39	37.50	70	27.97
			1930					39	38.98	70	27.89
			1945	Z				39	40.00	70	27.90
			2000	Z				39	41.08	70	27.90
			2018	Z				39	42.51	70	27.95
			2030					39	43.28	70	27.95
			2045					39	44.45	70	27.83
			2100					39	45.61	70	27.91
			2145					39	48.85	70	27.87
			2200	Z				39	49.97	70	27.85
			2216	Z				39	51.22	70	27.87
			2230	Z				39	52.26	70	27.94
			2245	Z				39	53.45	70	27.93
			2300	Z				39	54.59	70	27.91
			2315	Z				39	55.74	70	27.88
			2330	Z				39	56.88	70	27.87
			2345	Z				39	58.14	70	27.89
			0000	Z				39	59.45	70	27.85
			0100					40	05.4	70	27.8
		C/C	0219					40	14.0	70	27.8
			0230					40	13.5	70	26.2
		C/C	0330					40°	11.0	70°	17.8
			0400					40	06.90	70	17.76
			0415		180	7.8		40	04.77	70	17.64
			0430					40	02.87	70	17.70
			0445		185	7.1		40	00.98	70	17.72
			0500		168	8.5		39	59.08	70	17.58
			0515		180	8.0		39	57.07	70	17.60
			0530		180	7.9		39	54.98	70	17.77

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							0400 : Night clear seas still "heavy" bow pounding and when running 11 to waves 10-25° rolls

GMT				TIME ZONE	SHIPS		NAVIGATION			
DAY	MO	YR	TIME	±	COURSE	SPD				
20	06	79	0545	Z	183	7.4	39	53.27	70	17.88
			0600		180	6.7	39	51.53	70	17.81
			0615		180	8.2	39	49.65	70	17.77
			0630		180	6.7	39	47.98	70	17.75
			0645		180	6.6	39	46.35	70	17.81
			0700		186		39	44.71	70	17.84
			0715		216	7.0	39	43.02	70	17.88
			0730		180	7.4	39	41.33	70	17.85
			0745		180	5.9	39	39.91	70	17.84
			0800Z		180	6.1	39	38.42	70	17.85
			0830Z				39	35.62	70	17.83
			0845Z				39	34.03	70	17.84
			0900Z				39	32.57	70	17.84
			0915Z				39	31.18	70	17.84
			0930Z				39	29.65	70	17.88
			0945Z				39	28.14	70	17.87
			1000Z				39	26.43	70	17.90
			1015Z				39	26.13	70	19.54
			1030Z				39	25.81	70	21.47
	C/C		1045Z				39	25.41	70	23.69
			1100Z				39	26.38	70	23.74
			1120Z				39	27.69	70	23.72
			1130Z				39	28.38	70	23.74
			1145Z				39	29.38	70	23.69
			1200Z				39	30.46	70	23.68
			1230				39	33.0	70	22.8
			1300				39	34.7	70	24.0
			1330				39	36.8	70	22.9
			1345				39	37.97	70	23.06
			1400				39	39.3	70	23.7

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1000z Hitting 28-30° rolls in 4-6' swells. Records
							reflect this fine aspect of the Gillies' noted seaworthiness.

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION	lat	long
20	06	79	1430	Z	000	map avg: = 5.25 Knts		39 41.8	70 23.7
			1500					39 44.6	70 23.7
			1530	Z				39 47.3	70 23.7
			1615	Z				39 49.06	70 25.70
			1630					39 49.33	70 28.78
			1645					39 49.27	70 30.93
			1700		272	5.9		39 49.34	70 32.91
			1715					39 49.64	70 34.05
			1730				?	39 49.41	70 37.08
			1745		272		Bad	39 49.41	70 37.37
			1800				Bad	39 49.42	70 37.37
			1815				?	39 49.43	70 38.08
			1830	Z	272	~~0.6~~		49.44	33.38
			1846		270	—		39 49.45	70 38.76
			1900		270			39 49.45	70 39.08
			1915					39 49.45	70 40.08
			1930					39 49.42	70 40.48
		ck	1945			E.0.433		49.36	56.62
			2000		180			39 48.14	70 57.33
			~2004z		S/C	E.0.433A		.	.
CBT			2008		09z			.	.
Good again			2030					39 47.35	70 55.17
			2045					39 47.16	70 54.40
			2100					39 47.18	70 51.49
			2133					39 47.06	70 47.91
			2145					39 47.11	70 46.80
			2200					39 47.08	70 45.21
			2217					39 46.91	70 43.39
			2250					39 46.91	70 42.03
			2245					39 46.79	70 40.17

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							Seas choppy, Sky clear, swell from NE
							boat rocking significantly alot.
							1600Z
							The Sun is shining bright and seas slowly
							calming down Bit windy but clear blue
							skies. Everyone but the poor underprivileged
							Watch is beaching it

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION	
20	06	79		+ 4	092	55		
			2300Z				39 46.73	70 38.37
			2315				39 46.65	70 36.42
			2330Z				39 46.54	70 34.45
			2345				39 46.56	70 32.55
21	06	79	0000Z				39 46.64	70 30.58
			0030				39 46.4	70 26.5
		C/C	0040					
			0115				39 46.90	70 20.45
			0130				39° 47.1	70° 18.3
		C/C	0132		090°		39 47.08	70 18.12
			0200				39 47.1	70 14.3
			0300				39 47.2	70 06.1
		C/C	0315		104°		39 47.1	70 03.8
		C/C	0345		083°		39 46.6	70 00.1
			0400				39 46.7	69 58.1
			0415				39 46.79	69 56.12
			0430		084	6.5	39 47.02	69 54.06
			0445				39 47.20	69 54.98
			0500				39 47.37	69 49.90
			0515		084	6.9	39 47.55	69 47.72
			0530		085	6.3	39 47.71	69 45.70
			0545		084	5.9	39 47.87	69 43.67
			0600		082	5.1	39 48.04	69 41.62
			0615				39 48.24	69 39.64
			0645	Z	71	6.8	39 48.74	69 35.66
			0700				39 49.19	69 33.83
			0715				39 49.80	69 31.87
			0730				39 50.32	69 29.82
			0743		C/C 085	7.1	39 50.72	69 28.16

OPS						COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA
						Z 360Z Weather and sea state real fine! except for the waves
						slight c/c from 072 - 085° on line 34

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION Lat	Long
21	06	79	0800		081	67	39 50.87	69 26.03
			0816				39 51.11	69 23.84
			0830Z				39 51.21	69 22.04
			0847Z				39 51.48	69 19.58
			0900Z				39 51.90	69 18.06
			0915Z				39 52.50	69 16.27
			0930Z				39 52.46	69 13.07
			0945Z				39 53.14	69 11.82
			1000Z				39 53.67	69 09.83
			1015Z				39 54.14	69 07.53
			1030Z				39 54.43	69 05.79
			1045Z				39 54.88	69 03.75
			1100Z				39 55.30	69 01.87
			1115Z				39 55.79	68 59.73
			1130Z				39 56.05	68 57.65
			1145Z				39 55.76	68 55.44
			1200Z				39 56.16	68 53.40
			1300		5.8 knots		39 59.1	68 46.9
			1330				39 59.9	68 42.7
			1415				40° 01.2	68° 37.4
			1430				40° 01.6	68° 35.6
			1500				40° 02.4	68 31.4
			1600				40 03.9	68 24.4
			1619				40 4.38	68 22.12
			1630		076	4.9	40 4.65	68 20.83
			1645				40 5.03	68 18.96
			1700				40 5.34	68 17.32
			1715				40 05.69	68 15.61
			1731				40 6.09	68 13.60
			1745				40 6.43	68 12.00

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							Sea state is a little wavey.

GMT				TIME ZONE	SHIPS		NAVIGATION			
DAY	MO	YR	TIME	±	COURSE	SPD				
21	06	79	1800		066	5.9	40	06.83	68	10.16
			1815	Z	063		40	07.39	68	08.54
			1830	Z	071	5.4	40	07.96	68	06.94
			1846				40	08.52	68	5.2
			1900	Z			40	09.04	68	03.88
			1915				40	09.59	68	02.31
			1930	Z			40	10.06	68	00.88
			1945	Z			40	10.57	67	59.45
			2000	Z			40	10.94	67	57.89
			2040	Z			40	11.53	67	53.33
			2100	Z			40	11.70	67	50.93
			2115	Z			40	11.94	67	49.17
			2130	Z			40	12.16	67	47.43
			2145	Z			40	12.33	67	45.57
			2200	Z			40	12.56	67	43.78
			2230	Z			40	13.01	67	40.36
			2300	Z			40	13.55	67	36.74
			2315	Z			40	14.06	67	35.53
			2330	Z			40	14.59	67	34.22
			0000	Z	5.5 knts		40	15.83	67	31.11
			0030				40	17.2	67	28.0
			0100				40	18.6	67	25.1
			0130				40	19.8	67	21.8
			0200				40	21.1	67	18.7
			0230				40	22.3	67	15.6
			0245				40	22.87	67	14.20
			0300				40	23.6	67	12.6
			0330				40	24.8	67	09.7
			0400				40	26.1	67	06.7
			0417				40	26.71	67	4.98

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							Cool, Overcast, good swell

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
22	06	79	0430		061	5.1	40	27.21	67	03.72
			0445		056	5.9	40	27.87	67	02.30
			0500		060	5.4	40	28.48	67	0.94
			0508		course change to 054°					
			0515	Z	054	3.3	40	20.05	66	59.57
			0530				40	29.66	66	58.43
			0545				40	30.31	66	57.27
			0600		049	5.0	40	31.02	66	56.11
			0615		086	3.5	40	31.76	66	54.83
			0630		074	6.1	40	32.45	66	53.55
			0645	Z			40	33.05	66	52.24
			0700	Z	067	3.0	40	33.71	66	51.09
			0715		067	3.5	40	34.46	66	49.89
			0730				40	35.17	66	48.53
			0746				40	35.96	66	46.98
			0800		047	5.7	40	36.60	66	45.88
			0815				40	37.34	66	44.55
			0830	Z	043	4.3	40	38.05	66	43.24
			0845	Z			40	38.89	66	42.12
			0900	Z			40	39.78	66	41.11
			0915	Z			40	40.59	66	40.05
			0934	Z			40	41.71	66	38.57
			1000	Z			40	43.13	66	36.78
			1015	Z			40	43.99	66	35.91
			1030	Z			40	44.89	66	34.89
			1045	Z			40	45.69	66	33.82
			1105				40	46.96	66	32.18
			1110	C/C 049°						
			1130	Z			40	48.50	66	30.03
			1145	Z			40	49.38	66	28.87

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1000z Pretty wavey and blowin' hard

GMT				TIME ZONE	SHIPS		NAVIGATION			
DAY	MO	YR	TIME	±	COURSE	SPD				
22	06	79	1200	Z	037	5.8	40	50.31	66	27.55
			1230				40	52.6	66	24.9
	C/C		1300		137		40	54.7	66	22.7
	C/C		1332		223°		40	52.1	66	19.2
			1400				40°	50.0	66°	21.5
			1430				40°	47.8	66°	24.2
			1500				40°	45.5	66°	27.0
			1530				40°	43.2	66°	30.0
			1600				40°	40.6	66°	32.9
			1615		224	7.3	40	39.41	66	34.56
			1630				40	38.21	66	36.18
			1645				40	36.94	66	37.71
			1700		022	6.8	40	35.67	66	39.24
			1715		224	7.0	40	34.41	66	40.82
			1730	Z			40	33.27	66	42.50
			1745		228	7.6	40	32.20	66	44.39
			1800				40	31.13	66	46.20
			1817				40	29.76	66	48.33
			1830		231	7.0	40	28.86	66	49.84
			1848				40	27.60	66	52.25
			1900		242	7.3	40	26.87	66	53.88
			1915				40	26.01	66	55.88
			1945		245	6.5	40	24.23	66	59.77
			2000Z				40	23.38	67	01.71
			2015Z				40	22.54	67	03.62
			2030Z				40	21.65	67	05.52
			2045Z				40	20.93	67	07.29
			2100Z				40	20.14	67	09.28
			2115Z				40	19.32	67	11.24
			2130Z				40	18.50	67	13.12

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	C&P	MAG	GRAV	SONO	STA	
							1700Z The sun is out but still a little windy with choppy seas
							2045Z little chop, variable wind, lotsa sun!

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
22	06	79	2145	+ 4	242		40°	17.66	67°	15.12
			2200Z				40	16.92	67	16.92
			2216Z				40	16.06	67	18.78
			2230Z				40	15.35	67	20.50
			2300Z				40	13.84	67	24.23
			2315Z				40	14.99	67	25.09
			2345				40	18.77	67	26.03
23	06	79	0000Z				40	20.59	67	26.56
			0030				40°	24.4	67°	27.6
	C/C		0041		297		40°	25.9	67°	27.9
			0100				40°	26.2	67°	30.0
			0138				40°	22.1	67°	29.1
			0151				40°	21.5	67°	30.8
			0200				40°	22.7	67°	31.1
			0300				40°	23.3	67°	33.2
			0320				40°	21.1	67°	32.4
			0400				40°	22.8	67°	35.0
			0415				40	24.66	67	35.44
			0430				40	26.19	67	36.44
			0448				40	28.15	67	37.67
			0500 Z				40	29.09	67	39.00
			0545 Z				40	28.65	67	44.67
			0602				40	26.11	67	44.81
			0615				40	24.66	67	45.00
			0630				40	23.	67	.
			0645				40	22.67	67	41.56
			0700		105	6.5	40	22.17	67	39.41
			0715		107	6.9	40	21.71	67	37.33
			0730		071	7.5	40	22.02	67	31.15
			0745		07	7.1	40	22.58	67	32.85

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							[illegible]

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
23	06	79	0800	Z			40	23.17	67	30.42
			0815 Z				40	23.72	67	28.20
			0830 Z				40	22.95	67	27.17
			0900 Z				40	22.28	67	30.56
			0915 Z				40	21.78	67	32.31
			0930 Z				40	21.34	67	34.48
			1000 Z				40	19.74	67	36.97
			1015 Z				40	18.36	67	36.94
			1030 Z				40	16.85	67	36.88
			1045 Z				40	15.23	67	36.70
			1100 Z				40	13.4	67	36.3
			1115 Z				40	12.24	67	36.53
			1132 Z				40	10.56	67	36.44
			1203 Z				40	09.37	67	39.10
			1230				40	09.1	67	42.8
		C/C	1141		263°		40	09.6	67	36.4
			1330				40	08.4	67	50.9
		C/C	1426		250°		40	07.7	67	58.9
			1500				40°	06.6	68°	02.9
			1600				40°	04.6	68°	10.0
			1618				40	04.02	68	12.07
			1630 Z		250	5.5	40	03.63	68	13.51
			1645 Z		248	5.7	40	03.13	68	15.43
			1700 Z		246	5.5	40	02.53	68	17.18
			1715				40	02.13	68	19.11
			1730 Z		252		40	01.78	68	20.82
			1745 Z		252	5.5	40	01.32	68	22.56
			1800				40	01.10	68	24.26
			1815		247	5.5	40	00.59	68	26.00
			1830				40	00.12	68	27.71

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAY	SONO	STA	

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
23	06	79	1900	Z	253	59	39	59.23	68	31.28
			1915		253	64	39	58.85	68	33.14
			1930		253	60	39	58.44	68	35.10
			1945		253	60	39	57.86	68	36.83
			2000				39	57.60	68	38.87
			2015				39	57.92	68	40.94
			2030Z				39	56.65	68	42.79
			2050Z				39	56.04	68	45.50
			2130Z				39	54.40	68	50.40
			2145Z				39	53.85	68	52.22
			2200Z				39	53.43	68	53.78
			2215Z				39	52.77	68	55.39
			2245Z				39	51.93	68	58.74
			2300Z				39	51.53	69	00.45
			2330Z				39	50.65	69	3.92
			2345Z				39	50.23	69	5.64
			0000Z				39	49.82	69	7.45
			0100Z				39	48.0	69	15.0
			0130				39	47.0	69	19.0
			0200				39	46.0	69	23.1
			0230				39	45.0	69	27.1
			0300				39	44.0	69	31.3
			0323				39	43.26	69	34.51
			0330				39	43.2	69	35.7
			0400				39	43.2	69	40.4
			0415				39	43.23	69	42.67
			0430		270	7.5	39	43.24	69	44.21
			0445				39	43.24	69	47.57
			0500				39	43.27	69	49.96
			0515		269	7.6	39	43.30	69	52.32

OPS							
12 KHz	3.5 KHz	CSP	MAG	GRAV	SOND	STA	COMMENTS AND OBSERVATIONS

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
24	06	79	0530		270	7.5	39	43.29	69	54.64
			0545		270	7.8	39	43.28	69	57.05
			0600	Z	270		39	43.29	69	59.36
			0616	Z	277	7.4	39	43.47	70	1.96
			0630		277	7.3	39	43.65	70	3.14
			0645		277	7.6	39	43.84	70	6.56
			0700	Z	277	7.6	39	44.04	70	8.85
			0715		265	8.9	39	44.15	70	11.33
			0730	Z	265	7.7	39	44.00	70	13.73
			0745				39	43.82	70	16.35
			0800		266	7.6	39	43.65	70	18.56
			0831Z				39	43.26	70	23.88
			0900		180	7.4	39	41.76	70	25.38
			0915Z		180	6.8	39	40.39	70	26.96
			0920Z		000	7.3				
			0930Z		000		39	41.45	70	28.02
			0945Z		000		39	43.05	70	28.01
			1001Z				39	44.74	70	27.99
			1015Z				39	46.15	70	28.08
			1030Z				39	47.53	70	28.03
			1045Z				39	48.96	70	27.95
			1100				39	50.56	70	27.99
			1115				39	51.83	70	28.04
			1130				39	53.20	70	28.02
			1145				39	54.62	70	27.96
			1200				39	55.90	70	28.02
			1300				40	01.9	70	28.1
	C/C		1318		123		40	03.7	70	28.0
	C/C		1352		180		40	01.8	70	23.8
			1440				39	56.62	70	23.71

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							e/c To 000° EoL 45B BoL

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±4	SHIPS COURSE	SHIPS SPD	NAVIGATION LAT	NAVIGATION LONG
24	06	79	1500	Z	180	6.5 Knts	39° 54.4 N	70° 23.7 W
			1600				39° 47.9	70° 23.8
			1622		180		39 45.50	70 23.66
			1630				39 44.67	70 23.66
			1645		184	6.3	39 43.04	70 23.75
			1700	Z			39 41.40	70 23.75
			1715		090		39 40.39	70 22.84
			1730		090		39 40.38	70 20.71
			1745	Z	090	6.3	39 40.41	70 18.63
			1800	Z			39 41.62	70 18.00
			1815				39 43.37	70 17.95
			1830	Z	000	6.5	39 44.97	70 17.99
			1845	Z	358	6.8	39 46.72	70 18.01
			1900		000	7.0	39 48.35	70 17.98
			1915		000	6.5	39 50.09	70 17.98
			1930				39 51.73	70 17.96
			1945				39 53.42	70 18.00
			2000				39 55.14	70 18.01
			2015				39 57.06	70 18.01
			2100	Z			40 02.05	70 17.99
			2110	END OF FILE LINE				
			2145	Z			40 07.48	70 17.83
			2200	Z			40 09.10	70 17.85

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1708 E.o.l. 47 S.o.l. 47A