7901209

RV Gilliss LEG II

GS 7903-2

WESTERN GULF OF MAINE

LOGBOOK

JUNE 1-7, 1979

R.N. OIDALE

CHIEF SCIENTIST

7901209 GILS 7903-2 100491

R/V Gilliss (Leg II)

OPS: 12 KHz | 3.5 KHz | CSP | MAG | GRAV | SONO | STA

COMMENTS AND OBSERVATIONS

GS 7903-2

Western Gulf of Maine

Log Book June 1 - 7, 1979

R.N. Oldale

Chief Scientist

- R.N. Oldale
- W. Bothner
- G. Rich
- D. Egelson
- D. Eskenasy
- R. Simpson
- M. Oldale
- C. O'Hara
- K. Klitgord
- A. Goodman
- J. Larson
- B. Erwin
- R. Bowles
- V. Paskevich
- D. Mason

- J. Dodd

Airgun
Uniboom
3.5 KHz
Magnetometer
Gravimeter ?

GMT				TIME ZONE	SHIPS		NAVIGATION
DAY	MO	YR	TIME	±	COURSE	SPD	

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							42°05 70°34' 25800 (9960)
							BEARING FROM END OF CANAL TO FIRST PT 351° T
							~1000 underway from Woods Hole
							head 351° to first point below
							① 42°05 70°34 begin, bearing 90°
							~~② 42°05 70°05 0°~~ removed this point
							③ 42°09 70°05 270°
							④ 42°09 70°39 0°
							⑤ 42°13 70°39 90°
							⑥ 42°13 70°05 0°
							⑦ 42°17 70°05 270°
							⑧ 42°17 70°48 0°
							⑨ 42°30 70°48 67°
							⑩ 42°32 70°41 180°
							⑪ 42°21 70°41 90°
							⑫ 42°21 70°10 0°
							⑬ 42°25 70°10 270°
							⑭ 42°25 71°45 0°
							⑮ 42°29 71°45 90°
							⑯ 42°29 70°33 22°
							⑰ 42°38 70°29 311°
							⑱ 42°44 70°37 269°
							⑲ 42°44 70°40 347°
							⑳ 42°57 70°49 139°
							㉑ 42°30 70°13 57°
							㉒ 42°33 70°07 319°
							㉓ 43°00 70°40 54°
							OVER

GMT				TIME ZONE	SHIPS		NAVIGATION
DAY	MO	YR	TIME	±	COURSE	SPD	

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS		
							(24)	43°03	70°34	140°
							(25)	42°30	69°55	57°
							(26)	42°33	69°49	320°
							(27)	43°04	70°25	54°
							(28)	43°09	70°09	140°
							(29)	42°30	69°36	56°
							(30)	42°33	69°30	319°
							(31)	43°00	70°02	230°
							(32)	43°06	69°52	139°
							(33)	42°30	69°09	52°
							(34)	42°36	68°59	320°
							(35)	43°00	69°27	230°
							(36)	42°30	70°16	180°

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1 means 1 nm
02 means c/c

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION
1	6	79	1925				42N 4.9 70W32.9
LINE 1							
1			2120				42 5.3 70 22.25
			2145				42 5.00 70 18.67
			2149		c/c to line 2 ✓		
			2151		?		
			2156				42N 5.27 70W17.40
		✓	2200				42° 5.43 70° 16.98
			2211				
			2215				42 5.9 70 15.08
		✓	2230				42 6.5 70 13.24
			2242				
			2245				42 6.97 70 11.5
		✓	2300				42 7.5 70 9.5
			2315				42 8.1 70W 7.2
		✓	2330				42 8.7 70 5.5
LINE 2			2331				
			2338				42 9.1 70 5.0
			2350				42 9.1 70 5.9
			2356				
		✓	2400				42 9.6 70 6.81
02	06	79	0015				42 9.0 70 8.09
			0030				42 8.99 70 9.41
			0045				42 9.04 70 10.84

OPS 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
	X						1925Z ARRIVE AT PT #1 KLITGORD & O'HARA ON WATCH
							c/s deadslow ahead to stream gear
			X				1. Magnetometer - Norwegian Buoy Attached at 10m behind bottle
							2 Uniboom streamed.
							2020 3. Airgun Streamer - being deployed w/140 in^3 airgun
							c/s 5kts
							2101 40in down / changing compressor
							2111
							2130Z 40 in^3 back up
							Paper change - UNIBOOM / in 2212 Roll 2
							paper advance on maggie analog chart
							NOTE - Acutron clocks 3 min slower than ATOMIC annotated on UNIBOOM — recalibrated at 2242
							no change
							c/c to 270
							c/c completed
							Accutron 2 min fast / corrected to atomic
							change watch tschenay Simpson + Oldale
							0030 bleed air compressor

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION
02	06	79	0100				42 906 70 01231
			0115				42 903 70 01380
		✓	0130				42 901 70 01529
			0145				42 903 70 01687
		✓	0200				42 904 70 01848
			0215				42 900 70 02021
		✓	0230				42 902 70 02193
			0245				42 898 70 02362
		✓	0300				42 901 70 02533
			0315				42 885 70 02703
		✓	0330				42 899 70 02866
			0345				42 901 70 03034
			0400				42 900 70 03206
			0415				42 901 70 03380
			0430	2			42 904 70 03562
			0445				42 916 70 03742
			0454		C/C 0°		42 940 70 03920
			0500		0°		42 1007 70 03822
			0517				42° 11.47'W 70° 38.29'W
			0530		90		42 12.64 70 38.22
			0545				42 13.05 70 37.07
			0600				42 13.00 70 35.49
			0615				42 13.01 70 33.84
			0630				42 13.00 70 32.32
			0645				42 12.99 70 30.85
			0700		90°	3.9	42 13.04 70 29.40
			0715		904.5		42 13.04 70 27.90
			0730		905.0		42 13.03 70 26.37
			0745		905.0		42 13.04 70 24.77
			0800		905.0		42 .02 70 23.07

OPS						COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO STA	
						Uniboom is marking at 5 min intervals but not in synch. w/ the real quarter hours. So the times at the lines are not all correct.
						0120 - 0125 Clock survey 0130Z TIME LINES ON UNIBOOM NOW CORRECT
						turn power down on 3.5 kHz
						0230 - blue line waving on
						0454 c/c 000° cutting line short by ½ nm. to avoid shoals
X	X	X				
						COMPRESSOR BEING BLED EVERY HOUR
						0957
						~0500 ran through a patch of seaweed which gave a big pull on Mag cable & davit - float gone!?
						c/c 090° slowly Starting Line # 4 0530Z
						ALL IS WELL
						0730 3.5 kHz Down (+5V) Fuse blown AI Goodman called
						0745 3.5 kHz ON

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
02	06	79	0815		90	55	42	13.0	70	21.4
			0830		90	55	42	13.0	70	19.7
			0845				42	13.0	70	17.8
			0900		90	61	42	13.0	70	16.0
			0915		90	54	42	13.0	70	13.9
			0930		90	55	42	13.	70	12.1
			0945		90	55	42	13.	70	10.3
			1000		90		42	13.	70	8.6
			1009							
			1015		88	55	42	13.	70	6.8
Line 5			1028		0		42	12.9	70	5.1
			1035				42	13.5	70	5.0
			1045				42	14.2	70	5.0
			1100		44	46	42	15.3	70	4.8
			1115		355		42	16.5	70	4.5
Line 6			1126				42	17.2	70	4.5
			1130				42	17.2	70	5.6
			1152		268	54	42	17.0	70	7.5
			1200		270	50	42	17.	70	8.4
			1215		270.2		42	17.00	70	9.8
			1230		273	52	42	16.94	70	11.1
			1245		276	47	42	17.01	70	12.81

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							take up on UNIBOOM cable / too much strain on armored cable
							change mag tape / restart 1011
							c/c to 000°
1126							c/c to 270 — begin Line 6 1128
							Whales sighted
1201							Uniboom off - Airgun pulled to clean salad; slow
1214							Resume normal speed
1215							Uniboom back + operational
1227							3.5 down to 5 bells
1232							3.5 back up, new bell, ~~[illegible]~~
1245							3.5 in synch
1248							Switched from E6+6 streamer to high resolution Teledyne streamer see if we get better signal.
1255							Mag Signal at left edge of screen

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION
02	06	79	1300 Z		275	5.0	42° 17.01 70° 14.39
			1315				42 17.02 70 16.13
		✓	1330				42 17.02 70 17.82
			1345		277	4.7	42 17.03 70 19.54
		✓	1400				42 17.02 70 21.31
			1415				42 17.03 70 23.19
		✓	1430				42 17.04 70 25.04
			1445				42 17.03 70 26.92
			1500				42 17.04 70 28.74
			1515				42 17.04 70 30.68
			1530				42 17.05 70 32.41
			1545				42 17.05 70 34.29
			1600				42 17.03 70 36.16
			1609				42 17.04 70 37.28
			1615				42 17.05 70 38.02
			1622				42 17.07 70 38.83
			1630				42 17.05 70 39.77
			1645				42 17.14 70 41.63
			1700				42 17.09 70 43.42
			1716				42 17.04 70 45.13
			1730				42 16.97 70 46.79
			1735				42 16.98 70 47.34
LINE	7		1738	C/C			42° 16.97'N 70° 47.79'W
		✓	1800				42° 18.46 70° 47.41'
			1819				42° 20.08 70° 47.21'

OPS 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
	13	40					noise still in Uniboom, 6 t 50' mag out + see if that helps
							record shows drop here
	13	45					trigger pulled on 3.5 Hz for a minute or so.
	13	50					pull Maggie to replace buoy quickly. Maggie off
	14	35					Maggie gets ready to go. Buoy still there
							Maggie up
							Boomer off - belt + paper change
							1622 UNIBOOM BACK ON AFTER R&R
							1628z UNIBOOM OFF AGAIN - WAS VERY SQEAKY
							1632z " BACK ON
							1635 z Experimenting w. TL Changing UNIBOOM streamer
							1645 z ~~Mag~~ FIRE & BOAT DRILL
							1700z Mag off to clean plug.
							1700z Uni-Boom being brought in to shorten tow cable
							1707 Mag back on
							1712 Mag Off - snagged on a buoy?
							1716 Mag On again & off again 20-30% noise level
	17	35					Boomer back on
							End line 6, commence line #7
							1740 - Mag on deck it has spent some time on the bottom & was
							1811 - Mag Back on roughed up a bit. No spare screws available
							so we could not put spare both on. Put
							bigger float on & it does look better now

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GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD (kts)	NAVIGATION
2	6	79	1830		357	5.7	42N 21.09 70°W 47.51
			1845				42 22.45 70 47.90
			1900		057		42 23.87 70 48.01
			1915				42 25.30 70 47.97
			1930		0	5.6	42° 26.63 70° 48.00
			2000		328°	4.8	42 28.32 70° 46.55
			2016		305	5.0	42 29.51 70° 45.61
4-8			2030		90	3.9	42 30.3 70 44.7
			2045		102	5.0	42 30.35 70 43.2
			2100				
June 9			2109	C/C	180		42 30.00 70 41.00
			2111		180	3.3	42 29.91 70 41.08
			2115				42 25.65 70 41.00
			2130		180	3.3	42 28.7 70 40.9
			2145		186	4.0	42 27.8 70 40.9
			2200		180	00	42 26.9 70 41.0
			2215		180		42 26.0 70 41.0
			2228				
			2230		180		42 25.1 70 41.
			2236				
			2251		180		42 23.9 70 41.
			2300		180		42 23.4 70 41.
			2316		177	2.7	42 22.4 70 40.9
			2331		179		42 21.5 70 41.
June 10			2337		090		42 21.2 70 41.
			2345		090		42 21.1 70 40.4
3	6	79	2400		90		42 21. 70 39.
	↓		0015				42 20.99 70 37.57
			0030				42 21.02 70 36.22
			~~46~~				~~42 20.99 70 34.83~~

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

Magnetometer looking much better now with a 2-3 γ noise level

1942 Small course jog to avoid sail boat race

c/c line 8

c/c line 9 at 2107

2147 Z big mag anomaly & basement high

Note major bedrock valley

Change paper 3.5 / back on 2231

Mag tape change / one

c/c to 090 2337

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GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION			
3	6	79	0055	Z	090°		42	2103	70	3575
3	6	79	0046	Z			42	2099	70	3483
3			√0100	Z			42	2101	70	3345
			0118				42	2100	70	3174
			√0130				42	2100	70	3054
			0145				42	2096	70	2893
			√0200				42	2101	70	2731
			0215				42	2103	70	2568
			√0230				42	2100	70	2385
			0245				42	2098	70	2206
			√0300				42	2098	70	2032
			0315				42	2100	70	1859
			√0330				42	2098	70	1682
			0345				42	2100	70	1506
			√0400				42	2100	70	1329
			0415				42	21.02	70	11.46
			0426				42	21.03	70	10.21
			0428				42	21.10	70	10.00
			0430				42	21.24	70	10.02
			0445				42	22.30	70	09.93
			0500		0°	4.1	42	23.43	70	10.05
LINE	NE	11	0518		270°		42	24.78	70	10.02
			0530				42	24.92	70	10.97
			0545		270	3.7	42	24.95	70	12.59
			0600		270	5.2	42	25.03	70	13.92
			0620		270	4.3	42	25.00	70	15.72
			0622				42	24.99	70	15.95
			0630				42	24.97	70	16.60
			0645				42	25.01	70	17.82
			0700		270	3.7	42	24.97	70	19.25

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							Everything running smoothly
							Compressors bled ~ every 45 min.
							0400 O'HARA & KLITGORD ON WATCH
							0426 c/c slowly to 000° start line # 11
							0428 s/o c/000° compressors bled
							0518 c/c slowly to 270° starte line #12
							Magnetometer has a 30 nT noise level
							cleaned plug but no effect
							0530Z compressors bled
							0620Z UMBOOM RECORDER DOWN - noisy motor belt drive
							0622 Boomer EPC back on - bearings on the way out in motor

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION
03	06	79	0715		270	4.3	42 24.98 70 20.66
			0730		270	3.8	42 25.00 70 22.03
			0750		270	4.3	42 25.02 70 23.94
			0800		270	4.6	42 25.02 70 24.85
			0815		270	3.8	42 25.02 70 26.1
			0830		270	4	42 25.05 70 27.5
			0845		270	4	42 25.0 70 28.85
			0900		270	4	42 25. 70 30.1
			0915		270	3.9	42 25. 70 31.4
			0931		270	3.3	42 25. 70 33.
			0945		270	3.9	42 25.01 70 34.
			1000		270	3.6	42 25:01 70 35.3
			1015		270	4.3	42 25.02 70 36.7
			1030		270	4.1	42 25.0 70 38.1
			1045		270	5.1	42 25.0 70 39.5
			1100				70 41.
		↓	1110		270	2.6	42 25.01 70 41.69
			1115				42 25.00 70 41.82
		↓	1130		270	4.5	42 25. 70 43.7
			1139				
4	NE	13	1141		357		42 25. 70 44.8
			1145		360		42 25.1 70 45.
			1200		360		42 26.3 70 45.
			1215				42 27.35 70 45.00

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							0853 Program change UNIBOOM from RG edge to TR 3/4
							0910 Compressors bled
							1009-1011 — change UNIBOOM tape
							1012Z Recorder problems, belt change, on Uniboom
							1026Z Recorder (Uniboom) back up.
							~1040Z Maggie down to clean flag
							Change tape, 1104-1106
							Released identification bouy + pick up bouy from magic floats. Black flag on bamboo pole on Brown bouy white plastic pick up. No traps attached to pick up gear. Do not know when bouy + pick up bouy were first picked up by magic calle. Released at about 42°25' 70°41' Rud
							1129Z Program change on Uniboom to RG edge (0-100 fm)
							1139 Maggie up
							C/C 356
							1156Z Bad Tape replaced
							1159Z Tape up.
							~1130 to 1200 Uniboom recorder paper not moving now fixed !!

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GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION			
03	06	79	1230Z				42	28.1	70	44.99
Lin 14			1233	c/c to Lin 14						
			1245				42	29.02	70	43.76
			1300				42	28.9	70	42.02
			1315				42	28.99	70	40.25
			1330				42	29.00	70	38.43
			1345				42	28.98	70	36.61
			1400				42	28.99	70	34.70
Lin 15			1411	c/c	018	BOL/5	42	28.99	70	33.14
			1415				42	29.19	70	32.89
		-	1430				42	30.35	70	32.37
			~~1500~~				42	31.54	70	31.86
		-	1500				42	32.76	70	31.30
			1515				42	33.87	70	30.82
		V	1530				42	35.02	70	30.32
			1545				42	36.19	70	29.90
			1600				42	37.21	70	29.35
Lin 16			1613				42	38.10	70	29.38
			1615		316	4.7	42	38.21	70	29.45
			1630		315	5.2	42	39.16	70	30.53
			1645		316	5.4	42	40.09	70	31.84
			1700		315	5.6	42	41.00	70	32.98
			1715		315	5.4	42	41.94	70	34.26
			1730		316	5.1	42	42.89	70	35.54
			1745				42	43.87	70	36.70
			1800		268	5.6	42	44.03	70	38.52
Lin 17			1810	c/c			42	44.84	70	39.76
			1815							
			1826					45.22		40.89
			1832				42	45.70		40.57

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							c/c to line 14 090° at 1232
							1559 change programs on Uniboom - TR 3/4
							1600Z O'HARA & KLITGORD on watch
							1611Z c/c 316 BEGIN LINE #16
							Excellent Uniboom Record & Magnetometer Record
							1700Z 3.5 kHz down to change paper
							1745Z c/c 270° LINE #17
							comm change - end line 17, start line 18

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION LAT	LONG
3	6	79	1845		347	5.1	42 46.80	70 40.93
			1900		347	5.2	42 48.04	70 41.25
			1915		347	5.4	42 49.36	70 41.65
			1930		347	5.5	42 50.65	70 42.08
			1945		347	5.5	42 51.99	70 42.53
			2000		347	5.3	42 53.27	70 42.92
		c/c	2008				42 54.1	70 43.17
		log	2015		139	4.5	42 54.2	70 42.6
			2030		139	2	42 53.3	70 42.2
			2045		139	4.3	42 52.6	70 41.0
			2100		139	4.6	42 51.8	70 40.2
			2115				42 50.91	70 39.14
			2130		139	4.7	42 50.	70 38.1
			2145		139	4.5	42 49.1	70 37.0
			2200		139	4.7	42 48.3	70 36.0
			2215		139	4.7	42 47.4	70 35.0
			2230		139		42 46.5	70 33.9
			2249		137	4.4	42 45.4	70 32.5
			2300		139		42 44.7	70 31.9
			2315		139	4.8	42 43.7	70 30.8
							.	.
							.	.
			2330		139	4.6	42 42.9	70 29.8
			2345		139	4.9	42 41.9	70 28.7
4		time	2400		139		42 41.	70 27.6
			0015		139		42 40.03	70 26.54
			0030				42 39.04	70 25.36
			0045		139		42 38.04	70 24.21
			0100		139		42 37.03	70 23.01
			0115		141		42 36.00	70 21.85

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							c/c begin June 19 @ 2008
							2317 UNIBOOM SHUT DOWN TO CLEAN OFF SALAD
							2327 UNIBOOM RESTARTED → SALAD FINISHED
2400							Ethenage Olalabi Simpson on Watch 0000 June 4 1979

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GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION			
04	06	79	0130		139	5.2	42	3511	70	20.72
Line 9			0145				42	3408	70	19.61
			0200				42	3306	70	18.47
			0215				42	3200	70	17.33
			0230				42	3097	70	16.11
			0245		140		42	2988	70	14.90
			0300		145		42	2867	70	13.57
			0315		127		42	2767	70	12.39
			0330		137		42	2666	70	11.19
			0345		139		42	2562	70	9.97
			0400				42	2481	70	4.01
			0415				42°	23.75	70°	07.87
			0420				42°	23.43		07.49
EOL 19 BOL 20			0425		90°	5.1	42°	23.09	70	07.10
			0430				42°	22.98	70°	6.48
			0445				42	22.90	70	4.45
			0500		90°	6.0	42	22.98	70	2.75
			0515				42	23.02	70	00.96
EOL 20			0530		90	5.8	42	23.00	69	59.12
BOL 21			0537		320		42	23.00	69	58.17
			0545		320	4.3	42	23.38	69	58.13
			0600		320	4.7	42	24.09	69	59.30
			0615		320	3.7	42	25.00	70	00.30
			0630		320	3.7	42	25.80	70	1.28
			0700		320	4.9	42	27.61	70	3.25
			0718		320	4.4	42	28.69	70	4.58
			0730		320	5.2	42	29.38	70	5.36
			0743		320	4.6	42	30.30	70	6.36
			0745		320	4.6	42	30.44	70	6.51
			0800		320	4.9	42	31.45	70	7.36

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							0345 Slow to 2 kts for traffic
							0352 beginning to resume speed ~5 kts
							0350 Compressors bled
							Boomer down - page change Roll 3
							0425 c/c 98° END LINE 19 - Begin line #20
							0500 Compressors bled
							0537 c/c 320° END LINE #20 BEGIN LINE #21
							0600 Compressors bled
							0743 Airgun recorder down for batt change

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
4	6	79	0815		319	5	42	32.7	70	08.1
			0830		318	60	42	33.5	70	09.2
			0845		319	52	42	34.1	70	10.6
			0900		319	45	42	35.0	70	11.8
			0915		319	51	42	36.0	70	12.9
			0930		319	52	42	37.	70	14.0
			0945		319	58	42	38.09	70	15.4
			1000		319		42	39.13	70	16.4
			1015				42	40.1	70	17.8
			1030		319	46	42	41.1	70	18.8
			1045		319	46	42	42.6	70	19.9
			1100		319	45	42	42.7	70	20.8
			1115		319	43	42	43.6	70	21.7
			1130		319	46	42	44.5	70	22.8
			1145		319	46	42	45.4	70	23.8
			1200		319	51	42	46.30	70	24.90
			1215				42	47.26	70	26.01
			1230				42	48.25	70	27.17
			1245				42	49.22	70	28.33
			1300				42	50.25	70	29.45
			1315		318		42	51.28	70	30.62
			1330				42	52.30	70	31.86
			1345				42	53.38	70	33.13
			1400		319		42	54.41	70	34.35
			1416				42	55.35	70	35.56
			1430		319		42	56.35	70	36.46
			1445				42	57.28	70	37.72
			1500				42	58.14	70	38.86
			1515				42	59.20	70	39.95
			1530		319		43	00.16	70	41.11

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							bleed compressors
							Bleed compressors
							Bled comp
							1155 – PULL OUT UNI-BOOM TO CLEAN SALAD!
							1203 Uniboom back in service
							1234 3.5 down to change paper
							1236 3.5 Khz back up.
							1252 Changed tape 1257 running again
							1400 radio interference in Uniboom
							1444 maneuvers to avoid lobster pots off Cashes Shoals
							1534 c/c B.O.L.22

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GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION			
04	06	79	1534	C/C	054		43°	00.5	70°	41.5
Linezz			1545				43°	0097	70°	4058
			1600		52		43°	0177	70°	39.15
			1615		55	5.6	43	2.62	70°	37.67
			1630		140	5.5	43	3.34	70	36.12
Linezz			1645		140	4.8	43	2.67	70	35.03
			1700		139	4.7	43	1.74	70	34.00
			1715		139	4.7	43	0.84	70	32.98
			1730		140	5.1	42	59.92	70	31.88
			1745		140	5.1	42	58.98	70	30.75
			1800		140	5.2	42	58.03	70	29.58
			1815				42	57.08	70	28.50
			1830				42	56.04	70	27.39
			1845		140	6.0	42	55.06	70	26.19
			1900		140	5.7	42°	53.95	70°	24.91
			1915				42°	52.97	70	23.80
			1930		140	5.6	42	51.95	70	22.64
			1945		140	5.5	42	50.90	70	21.38
			2000		140	5.4	42	49.94	70	20.27
			2018		140	5.4	42	48.62	70	18.82
			2045		139		42	46.85	70	16.72
			2100		139	5.1	42	45.8	70	15.5
			2115				42	44.83	70	14.41
			2130		139		42	43.8	70	13.2
			2145		139		42	42.9	70	12.2
			2200		139		42	42.	70	11.2
			2215		139		42	41.05	70	10.08
			2230		139		42	40.1	70	9.07
			2249		139		42	39.02	70	7.74
			2300				42	38.3	70	7.0

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							1630z c/c END LINE #22 BEGIN LINE 23
							1642 Maggie Retied to rail - old chinese fingers had slipped
							1700 Coast Guard Cutter is paying us a visit
							1710 Preparing to be boarded by coast guard
							1800 Coast Guard inspection completed CC Personel returned to their boat
							2205 Change vm boom fagers
							2212 belt change completed

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION
04	06	79	2316		139	5.0	42 37.3 70 5.7
			2332		139	5.2	42 36.2 70 4.6
			2346		139		42 35.3 70 3.5
			2400		139	5.5	42 34.6 70 2.7
05	06	79	0015				42 33.7 70 1.23
			0030				42 32.5 70 0.02
			0045		135	6.3	42 31.9 69 58.68
			0100				42 30.7 69 57.50
			0115				42 29.1 69 56.34
			0130		141		42 27.7 69 55.17
			0145		144		42 26.8 69 54.01
			0150	C/C	051		BOL 24 42°26.5 69 53.8
			0200		48	5.0	42 26.4 69 52.74
			0215		48		42 27.3 69 51.51
			0230		57	6.1	42 28.2 69 50.29
			0245				42 29.3 69 49.05
LINE 25			0256		320		42 29.3 69 48.12
			0300		314	4.5	42 30.8 69 48.11
			0315		321	5.4	42 31.3 69 49.27
			0330		318	5.6	42 32.3 69 50.45
			0345		323	5.3	42 33.3 69 51.59
			0400		316	6.1	42 34.1 69 52.69
			0415		316	5.6	42° 35.09 69° 53.90
			0430		319	3.9	42 36.02 69 54.95
			0445		320	5.2	42 36.98 69 56.08
			0500		319	4.8	42 37.94 69 57.13
			0515		319	5.7	42 38.91 69 58.25
			0530		319	5.8	42 39.89 69 59.40
			0545		319	4.6	42 40.81 70 0.46
			0600				42 41.80 70 1.46

OPS 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
0000Z							Chenasy, Oldalot Simpson
0030							No pulse on amplifier, no airgun record
0122							Changed Tape
0127							Resumed tape
0145							Airgun resynched w/clock every 30 min. Must mark it on the hour & the half hour.
0150							Begin Line 24 c/c
							0220 - Al & John playing w/ 3.5 kHz
							0244 - Spreading on - leave on for a while
							c/c BEGIN LINE 25 at 320°
0256							
							0300Z Compressors bled
							0400Z compressors bled
							0500Z compressors bled
							0600Z compressors bled

T30

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION LATITUDE-N	LONGITUDE-W
05	06	79	0615				42° 42.59	70° 02.51
			0630		319	4.1	42 43.46	70 3.60
			0645				42° 44.96	70° 04.77
			0700		319	5.7	42 45.40	70 5.85
			0715		319	5.8	42 46.41	70 6.96
			0730		319	5.5	42 47.47	70 8.19
			0745				42 48.60	70 9.46
			0800		319	4.8	42 49.58	70 10.61
			0808					
			0817			5½	42 50.8	70 12.0
			0830		319	5°	42 51.4	70 12.8
			0845		319	4.8	42 52.4	70 14.0
			0900				42 53.5	70 15.3
			0915		319	5.0	42 54.5	70 16.4
			0930		319	5.4	42 55.4	70 17.5
			0945		319	4.6	42 56.35	70 18.6
			1000		319	5.1	42 57.3	70 19.7
			1020		319	5.1	42 58.4	70 21.0
			1030		319	5.4	42 59.1	70 21.8
			1045		319	5.1	43 00.8	70 22.9
			1100		319	5.9	43 01.1	70 24.05
			1115		319	5.8	43 2.17	70 25.44
			1130		319	5.7	43 3.14	70 26.59
			1145		319	5.6	43 4.2	70 27.8
			1200		319		43 5.1	70 29.
			1215		319	5.3	43 06.22	70 30.20
			1230				43 07.23	70 31.34
c/c to			1240			5.5	43 07.88	70 32.24
	low 26		1245				43 8.16	70 32.00
			1300				43 8.89	70 30.89

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							Continue line # 25 Western Gulf of Maine
							0700z Compressors bled
							Compressors bled 0800
							3.5 paper change
							0829z 3.5 finally up - wouldn't take up cap, finally turning it on and off revived it.
							0843z Program Uniboom change from RG (0-100 fm) edge to TR (25-125) 3/4
							0901Iz Program Uniboom change from TR (25-125) 3/4 to TR (50-150) Ctr
							0900z Grav. paper out, up at 0911z
							1010z pulled UNIBOOM to clean salad cleaned off a Pleistocene forest
							1021z UNIBOOM cleaned and running
							1025z MAGNETOMETER CHART OUT OF INK SHUT OFF TO CHANGE
							1049z MAGGIE IS RUNNING ONCE AGAIN, but sporadically down again !! → ink won't RUN !
							1120z Ink still hurtin', sporadically marking.
							1123z Program change to RG edge (0-100 fm)
							1128z Maggie recorder lookin' good.
							1149z Take-up stopped, back up
							1215 Bob + Al messing w/ Uniboom - trying another hydrophone
							1240 c/c to Line 26 - heading NE around BOONE.

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION
05	06	79	1315				43 9.71 70 29.68
			1330				43 10.47 70 28.48
			1345		484.8		43 11.23 70 27.36
	c/c to		1348				43 11.40 70 27.11
	June 27		1400				43 10.79 70 26.20
			1415				43 9.78 70 25.00
			1430		132.56		43 08.78 70 23.81
			1445		145.52		43 07.79 70 22.61
			1500				43 06.78 70 21.40
			1515		134.54		43 05.76 70 20.21
			1530		134.57		43 04.77 70 19.09
			1545		139.52		43 03.80 70 17.88
			1600		134.56		43 02.79 70 16.67
			1615		139.54		43 01.87 70 15.49
			1630		139.50		43 00.86 70 14.39
			1635				43 00.98 70 13.99
			1639				43 00.22 70 13.70
			1645		139.46		42 59.81 70 13.25
			1700				42 58.80 70 12.03
			1715		139.54		42 57.83 70 10.73
			1738		139.54		42 56.20 70 9.16
			1745		139.42		42 55.8 70 6.20
			1800		139.47		42 55.08 70 7.61
			1815		139.49		42 54.24 70 6.66
			1830		139.49		42 53.3 70 5.61
			1845				42 52.41 70 04.59
			1900		139.50		42 51.48 70 3.63
			1916		139.48		42 50.57 70 2.48
			1930		139.49		42 49.76 70 1.44

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							1447 Δ program on Uniboom from RG Edge (0-100 fm) to TR 3/4 (25-125 fm)
							1514 Δ prog. from TR 3/4 to TR CTR (50-150 fm)
							1620 - UNIBOOM RECORDER DOWN FOR R&R and PAPER CHange
							1626 - UNIBOOM BACK ON
							Boomer down - belt change
							Boomer back on
							1724 Submarine off starboard bow

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION LAT	NAVIGATION LONG.
05	06	79	1945		139	4.8	42 48.85	70 0.38
			2000		139	4.7	42 47.93	69 59.33
			2016		139		42 46.9	69 58.1
			2030		139	4.7	42 46.08	69 57.16
			2045		139	4.2	42 45.2	69 56.2
		✓	2100		139	4.3	42 44.2	69 55.0
			2115	?	(151)	4.7	42 43.1	69 53.94
		✓	2130		139		42 42.3	69 52.8
			2145		139	4.9	42 41.5	69 51.8
			2200		139	4.4	42 40.6	69 50.8
			2215		139	5.4	42 39.7	69 49.7
			2230		139	4.2	42 38.72	69 48.63
			2245		139	4.5	42 37.76	69 47.56
			2300Z		139	4.2	42 36.87	69 46.52
			2315Z		139	5.6	42 35.39	69 44.80
			2330Z		139	5.0	42 35.07	69 44.42
			2345				42 33.8	69 43.05
			2400		139		42 33.16	69 42.2
06	06	79					42 32.14	69 41.07
			0030				42 31.13	69 39.90
			0045				42 30.19	69 38.77
			0100				42 29.09	69 37.59
			0115				**42 28.07**	**69 36.38**
			0130				42 27.08	69 35.24
Mon	28		0144	C/C			42 26.12	69 34.07
			0200				42 26.64	69 32.91
			0220		137	3.5	42 27.64	69 31.57
			0230		148	4.8	42 28.11	69 30.8
			0245				42 28.85	69 29.72
			0300		157	4.9	42 29.67	69 28.69

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							Magnetometer, 3.5kHz, Uniboom, Gravity System, INS & 40 cuin airgun Operating
							2114 go to TR edge, 100-200 pm. program
							2303 Uniboom BROUGHT IN TO REMOVE SALAD
							0017 ~~AIRGUN~~ record not good, miss first arrival. Better
							0130 paper on ~~AIRGUN~~ not moving, + 1st arrival is still blank. Change ~~out~~ paper.
							0142 All set, Airgun booming again
							0144 C/C
							0204 Airgun off, belt change
							0207 Airgun testimed OK
							0237 Change paper on 3.5 kHz

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION
06	06		0300		320		42 29 94 69 28.17
			0315				42 30.52 69 28.62
			0330				42 31.51 69 29.73
			0345				42 32.57 69 30.84
			0400		328 49		42 33.47 69 31.94
			0415				42 34.44 69 33.07
			0430		320 6.0		42 35.29 69 34.08
			0445		320 5.0		42 36.16 69 35.16
			0500		320 4.6		42 37.12 69 36.12
			0515		320 5.0		42 38.05 69 37.24
			0530				42° 38.98 69 38.32
			0545				42° 39.96 69 39.38
			0600		320 6.1		42 40.97 69 40.63
			0615		320 6.0		42 42.00 69 41.83
			0630		320 4.7		42 43.05 69 42.99
			0645		320 3.9		42 44.07 69 44.17
			0700		320 5.8		42 45.10 69 45.29
			0716		320 5.7		42 46.18 69 46.68
			0730		320 5.3		42 47.69 69 47.70
			0745		320 5.0		42 48.05 69 48.71
			0800		320 5.3		42 48.98 69 49.81
06	06	79	0815		320 4.8		42 49.9 69 50.90
			0830		320 4.9		42 50.8 69 52.0
			0845		319 3.8		42 51.7 69 52.97
			0900		319		42 52.5 69 53.9
			0915		319 4.7		42 53.4 69 54.9
			0930		319 4.6		42 54.3 69 55.
			0945		319 4.3		42 55.1 69 57.
			1000		319 4.9		42 55.9 69 58.
			1015				. .

OPS: 12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	COMMENTS AND OBSERVATIONS
							0306 c/c to line 29
							0400Z O'HARA & KLITGORD on Watch
							0510Z Compressor bkd
							0600Z "
							0700Z ALL QUIET & WORKING WELL
							The weather has cleared with a beautiful moon & stars ablaze in the sky. The sea swell is slowly subsiding and it promises to be a beautiful day.
							1005 Darkroom down; change paper, up 1008

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION			
06	06	79	1045		319		42	58.7	70	01.2
			1100				42	59.6	70	02.2
			1115				43	0.7	70	03.5
			1130				43	1.6	70	4.6
			1145				43	2.5	70	5.5
			1200				43	3.6	70	6.58
			1215				43	4.23	70	7.57
			1230				43	05.07	70	08.58
			1245				43	05.97	70	09.70
			1300		321	4.8	43	06.89	70	10.76
			1315		319	4.7	43	07.85	70	11.85
			1330		316	5.3	43	08.81	70	13.01
			1345				43	9.80	70	14.14
			1400		319		43	10.81	70	15.33
			1417				43	12.05	70	16.78
			1420		318	5.7	43	12.23	70	16.99
			1430		322	5.4	43	12.94	70	17.84
			1445				43	14.00	70	19.13
			1500		325	4.9	43	15.06	70	20.36
			1515		315	5.5	43	16.13	70	21.54
			1530		317	5.6	43	17.10	70	22.77
			1545		315	5.0	43	18.11	70	23.93
o/c			1555				43	18.80	70	24.77
			1600		46	4.4	43	19.04	70	24.55
			1615		045	5.1	43	19.95	70	23.45
			1630				43	20.91	70	22.26
			1645		045		43	21.73	70	21.04
			1657		139	4.4	43	22.42	70	20.02
			1700		139	4.5	43	22.32	70	19.74

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							1013z Compressors bled
							1059z Belt changed on winbom
							3.5 kHz HT recording OK, fixed but unknown
							1657z C/L END LINE #30 begin line #31

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GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION LAT N	NAVIGATION LONG W
6	6	79	1715		139		43° 21.39	70° 18.77
			1730				43° 20.59	70° 17.76
			1745				43° 19.75	70° 16.73
			1800		139	5.0	43° 18.87	70° 15.69
			1815		139		43° 17.99	70° 14.67
			1830		139	4.8	43° 17.13	70° 13.67
			1845		139	4.8	43° 16.21	70° 12.63
			1900				43° 15.30	70° 11.53
			1915		139	4.6	43° 14.42	70° 10.37
			1930		139	5.1	43° 13.52	70° 09.31
			1945		139	4.4	43° 12.63	70° 8.27
			2000		139	3.7	43° 11.70	70° 7.27
			2015		139	4.7	43° 10.7	70° 6.02
			2030		139	4.6	43° 10.0	70° 5.2
			2045			4.5	43° 9.1	70° 4.2
			2100		139	4.2	43° 8.2	70° 3.1
			2115		139	4.9	43° 7.27	70° 1.9
			2130				43° 6.32	70° 0.07
			2145		139	5.3	43° 5.4	69° 59.8
			2200		139		43° 4.5	69° 58.8
			2216		139	5.5	43° 03.53	69° 57.62
			2230		139	4.1	43° 02.70	69° 56.64
			2245		139		43° 01.9	69° 55.6
			2300		139	5.0	43° 00.95	69° 54.58
			2316		139	4.3	42° 59.84	69° 53.30
			2334		139	5.6	42° 58.92	69° 52.19
			2347		139	4.2	42° 58.12	69° 51.29
7	6	79	0000		139	5.6	42° 57.36	69° 50.38
			0015		139	4.7	42° 56.46	69° 49.31
			0030				42° 55.50	69° 48.17

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

(X) A perfect sunny day in the Western Gulf of Maine on the R.V. GILLISS. The beach is in full swing and the volley ball tournament will probably begin shortly (X)

Big "fault" crossed at ~1800Z

1842 - 3.5kHz R&R with paper change
1845 - 3.5kHz back on

2000Z - Beach Bums on watch (relief)
2311 Z - UNIBOOM SET DOWN TO CLEAN SALAD
2317 Z - UNIBOOM RUNNING AGAIN!

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GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION
07	06	79	0045				42 42 54.57 69 47.10
			0100				42 53.64 69 46.00
			0115		137	5.7	42 52.66 69 44.94
			0130		~~229~~		42 51.70 69 43.78
			0140		229	C/C	
			0145				42 50.76 69 43.29
			0200		235	5.1	42 49.96 69 44.59
			0215		240	5.5	42 49.21 69 45.79
			0230				42 48.48 69 46.84
			0245				42 47.69 69 48.21
			0300				42 46.95 69 49.47
			0316				42 46.08 69 50.79
			0330				42 45.35 69 51.92
			0345		229	5.4	42° 44.56 69° 53.26
			0400		229	3.8	42 43.78 69 54.40
			0415				42 42.94 69 55.56
			0430		230	5.2	42 42.17 69 56.77
			0445				42 41.41 69 58.01
			0500		229	5.0	42 40.67 69 59.30
			0515		229	5.4	42 39.91 70 0.53
			0530		229	4.7	42 39.15 70 1.77
			0545		229	5.7	42 38.37 70 2.99
			0600		229	4.8	42 37.64 70 4.20
			0615		229	4.6	42 36.84 70 5.42
			0630		229	4.5	42 36.01 70 6.53
			0645		229	4.5	42 35.21 70 7.70
			0700		229	4.7	42 34.48 70 9.00
			0715		229	5.0	42 33.69 70 10.27
			0730		229	5.3	42 32.81 70 11.55
			0745		229	4.9	42 31.94 70 12.96

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

0400 z O'HARA & KLITGRD on watch

Small Sea swell but the weather looks good for the personnel exchange in Provincetown Harbor.
Clear Skies & promise of a spectacular sunrise.

A quiet watch and all is well

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GMT				TIME ZONE	SHIPS		NAVIGATION			
DAY	MO	YR	TIME	±	COURSE	SPD				
7	6	79	0800		228	5.8	42	31.05	70	14.42
			0815		228	6.3	42	30.18	70	15.81
			0830		180		42	28.9	70	16.2
			0845		180		42	27.5	70	16.2
			0900		180	5.4	42	26.08	70	16.17
			0930				42	23.4	70	15.9
			0945		180		42	21.99	70	16.011
			1000		180		42	20.56	70	16.07
			1015		180	5.9	42	19.05	70	16.14
			1030		180		42	17.66	70	16.12
			1046		180	5.1	42	16.19	70	16.14
			1100		180	5	42	15.0	70	16.15
			1116				42	13.6	70	16.04
			1130		180		42	12.5	70	16.0
			1145		180	4.9	42	11.27	70	15.93
		✓	1200		180	5	42	9.97	70	16.06
			1215		174	5.7	42	8.59	70	16.04
			1230		172	5.7	42	7.15	70	16.02
			1245		179	5.2	42	5.78	70	15.99
			1300		179	5.0	42	4.59	70	15.97
			1315		178	5.4	42	3.25	70	16.01
			1330		179	5.2	42	1.94	70	16.01
			~~EJ~~							

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							0816 C/C TO 180°
							0904Z Compressors bled
							1025Z Compressor bled
							1330 stop recorders pull gear
							1335 tapes off + stored
							1350-1400 Steaming to Pfocon.