Asterias
76021 ASTR 76-6
76039 ASTR OCT 76
77024 ASTR 7-77

CRUISE LOG BOOK

CRUISE
A-6-76

UNIBOOM
NANTUCKET
SOUND

PROPERTY OF: *Charles J. O'Hara*
U. S. GEOLOGICAL SURVEY
OFFICE OF MARINE GEOLOGY
WOODS HOLE, MASS. 02543
PHONE (617) 548-8700

ASTR JUN+OCT 76
76021 103511
76039
77024 July 77

37950
69863

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION	
23	07	77	0600					
			0620					
			0956				37804.3	69930.3
							37	69
			1000		LINE		378007	698300
			1015		NS-26		37788.4	68927.8
			1030					
			1100					

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							ALL SURVEY PARTY ABOARD O'HARA, FERREBEE, ESKENASY
							DEPART WOODS HOLE IN ROUTE TO EASTERN
							NANTUCKET SOUND TO COMPLETE UNIBOOM SEISMIC SURVEY
							START LINE NS-26 off C "3" TUCKERNUCK SHOAL
							START LINE NS-26 off C "3" TUCKERNUCK SHOAL
							LINE NS-26
							Shut down system - Sea amp noise - both #1 + #2
							Sea state conditions getting worse - Head back to Woods
							Hole.
							Cannot reach al Goodman

GMT DAY	MO	YR	TIME	TIME ZONE ±	SHIPS COURSE	SPD	NAVIGATION CAPE R.	DANA
26	07	77	7745					
			1248				37607.7	69885.5
			1255				37613.9	69884.9
			1300				37618.2	69884.4
			1305				37622.2	69884.2
			1309 45				37626.2	69883.8
			1315				37626.3	69885.7
			1330				37626.6	69891.4
			1332				37626.6	69891.9
			1335				37629.0	69893.0
			1340				37632.6	69894.8
			1345				37635.8	69896.5
			1348				37638.0	69897.5
			1355				37638.3	69895.4
			1358				37638.6	69894.9
			1400				37638.0	69894.3
			1415				37638.1	69889.4
			1430				37638.0	69884.5
			1434 30		slow for bell		37637.9	69883.3
			1437		resume speed		37637.9	69883.2
			1445				37638.2	69880.4
			1452				37638.3	69878.2
			1500				37640.0	69878.2
			1506		slow for bell		37649.7	69878.0
			1508		resume speed 1507		37650.9	69878.4

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

O'HARA, FERREDEE, GOODMAN

DEPART WOODS HOLE IN ROUTE TO VINEYARD SOUND
TO TEST GEAR - CHECK OUT OK - DEL NORTE HYDROPHONE
NOISY - SWITCH TO EG+G
ON ROUTE TO START LINE NS-33 NE MAN SOUND
OFF STAGE HARBOR CHATHAM
START NS-33

C/A CONTINUE NS-33

C/A Continue NS-33 BEARING 210°

C/C START NS-32
SLOW FOR GPC BELT CHANGE
RESUME SPEED

SLOW FOR BELT CHANGE 1434
RESUME SPEED 1437
SLOW FOR BELT CHANGE
RESUME LINE + SPEED

C/A CONTINUE LINE NS-32

1505 SLOWED TO CHANGE BELT
1507 RESUMED SPEED
END LINE #32 ST LINE #31

LORAN-C

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION CAPE RACE	NAVIGATION DANA
26	6	77						
			1515				37650.0	69881.0
			1526				37649.8	69885.0
			1528				37650.6	69885.3
			1530				650.1	885.8
			1545				649.7	891.8
			1600				649.8	897.5
			1615				650.4	903.2
			1620	10			650.4	905.0
			1630				658.3	904.7
			1635				662.4	905.0
			1645				661.9	902.2
			1700				662.2	897.7
			1715				662.3	893.5
			1730				662.0	888.8
			1745				661.9	884.3
			1751	30			662.4	882.4
			1800				670.1	882.8
			1806				674.3	882.5
			1816				674.2	885.4
			1824				674.1	889.9
			1841	30			686.4	890.2
			1891	30	must be wrong explain this?	→	666.4	890.2
			1901				685.8	883.7
			1915				686.1	878.9
			1927				686.0	875.0
			1930				688.7	874.8
			1940				698.2	875.0
			1945				698.4	876.8
			2000				698.3	881.7

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV	SONO	STA	
							CON'T LINE NS-31
							SLOW FOR TRAFIC
							RESUME SPEED
							C/A CONTINUE NS-31
							C/C START LINE NS-30 END NS-31
							CON'T LINE NS-30
							C/A CONTINUE LINE NS-30
							END LINE NS-30 RESUME NS-13
							END LINE NS-13 RERUN SEGMENT OF NS-12
							ON ROUTE TO NS-29
							START NS-29 END RURUN OF NS-12
							C/A Continue NS 29
							END LINE NS-29 TEMP. START NS-28
							SHUT DOWN FOR PAPER + BELT CHANGE

[redacted]

LORAN C

GMT				TIME ZONE	SHIPS		NAVIGATION		
DAY	MO	YR	TIME	±	COURSE	SPD			
			2007				37 698.0	69882.6	
			2015				37 697.9	69885.2	
			2030				6992	889.9	
			2045				6984	893.6	
			2100				698.8	898.6	
			2115				698.5	902.6	
			2130				698.2	907.1	
			2145				698.9	911.7	
			2200				6983	916.0	
			2215				6982	919.1	
			2230				698.0	923.0	
			2245				698.0	927.3	
			2300				698.3	932.3	
			2315				698.3	936.8	
			2330				698.2	941.2	
			2344 30				698.0	945.2	
			[redacted]						
			0135						

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

RESUME NS-28 BELT + PAPER CHANGE COMPLETED

END NS-28 PULL GEAR HEAD FOR NANTUCKET

ARRIVE NANTUCKET

37,814.6
69,974.1 } LORAN-C DOCKSIDE

NANTUCKET BOAT BASIN

GMT				TIME ZONE	SHIPS		NAVIGATION		
DAY	MO	YR	TIME	±	COURSE	SPD			
27	02	77							
			0605						
			0757				37686.2	69945.0	
			0800				37686.2	69944.1	
			0815				37686.0	939.6	
			0830				686.1	934.7	
			0846				686.1	929.5	
			0900				685.7	924.7	
			0915				686.2	919.7	
			0925				685.7	916.3	
			0930				682.4	916.8	
			0945				674.5	917.1	
			0946				674.1	917.0	
			1000				674.2	921.6	
			1010				674.6	926.0	
			1015	30			674.1	926.1	
			1030				674.5	932.7	
			1045				674.0	938.5	
			1100				674.1	944.5	
			1115				693.3	944.9	
			1128	30			710.3	944.5	
			1145				710.0	937.4	
			1200				710.7	930.4	
			1215				710.1	? 929.1	?
			1230				709.9	917.1	
			1245				709.8	910.7	
			1300				710.0	904.2	
			1315				709.9	897.5	

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV.	SONO.	STA.	
							NEW DAY
							underway from Nantucket Boat Basin to resume
							resume survey of Nantucket Sound - on route to
							start line NS-34 eastern end
							START LINE NS-34
							C/A CONTINUE NS 34
							C/A START LINE NS-35 END NS-34
							SLOW FOR BELT CHANGE
							RESUME COARSE + SPEED
							C/A CONT' NS-35
							END NS-35 START NS-27
							Con't line NS-27
							7 7 49

GMT DAY	GMT MO	GMT YR	GMT TIME	TIME ZONE ±	SHIPS COURSE	SHIPS SPD	NAVIGATION		
			1330				37710.0	69891.1	
			1345				709.8	884.1	
			1400				710.3	877.5	
			140630				710.0	875.0	
							.	.	
							.	.	
			151530				627.0	890.5	
			1530				642.5	890.0	
			1545				658.7	890.0	
			1600				674.4	889.8	
			1612				686.4	890.2	
			1630				686.0	898.1	
			1645				686.0	905.0	
			1656				686.2	910.0	
			1756				675.1	930.0	
			1815				690.0	930.0	
			1830				700.6	930.1	
			1845				710.8	929.9	
			1900				722.5	930.0	
			1915				735.0	930.0	
			1930				748.7	930.0	
			1945				763.2	929.9	
			2000				778.3	930.1	
			2016				794.0	929.9	
			2030				808.0	929.9	
							.	.	
							.	.	
			[redacted]				.	.	
			2145				.	.	

OPS							COMMENTS AND OBSERVATIONS
12 KHz	3.5 KHz	CSP	MAG	GRAV.	SONO.	STA.	
							Continue NS - 27
							END NS - 27
							Pull gear on route to resume line NS - 12
							RESUME NS - 12
							C/C end line NS-12 RESUME NS - 29
							END NS - 29
							START LINE NS - 26
							END NS - 26 PULL GEAR
							Nantucket Harbor 37, 814.8 69, 974.2

GMT				TIME ZONE	SHIPS		NAVIGATION	
DAY	MO	YR	TIME	±	COURSE	SPD		
28	07	77						
			0615					
			0835				37829.4	69909.9
			0895				838.8	910.1
			0900				852.6	910.2
			0914				866.7	909.8

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

O'Hara, Ferretti + Goodman

DEPART [redacted] NANTUCKET TO RESUME LINE NS-14

RESUME NS-14

END LINE NS-14

THE END

OPS							COMMENTS AND OBSERVATIONS				
12 KHz	3.5 KHz	CSP	MAG	GRAV.	SONO.	STA.		Hines	Ferrebee	Eskensasy	Goodman
							THUR JULY 21	3	0	0	0
							FRI " 22	4	3	3	0
							SAT " 23	10	10	10	0
							SUN July 24	NO GO - DOWN SYSTEM - FOUL WEATHER			
							MON " 25	SW WINDS 20-25 KTS W/ GUSTS GOODMAN TO CHECK OUT SYSTEM			
							TUE " 26	10	10	0	10
							WED July 27	8	8	0	8
							THUR " 28	4	4		4
							FRI " 29				