Twichell/ FARNELLA Gulf of
Schwab FRNL F3-90-GM Mexico
March 25-April 8, 1990
LINE LIST & DAFE INPUT

9001

1047

Select a Survey Line

Line Name	Starting Lat	Starting Lon	Ending Lat	Ending Lon	Range nm	Bearing deg
TAMPA	27 20.379	-82 34.213	27 35.576	-82 58.486	26.4	305
trangr	27 46.438	-83 11.333	28 03.000	-82 58.700	20.0	034
grav1	28 03.000	-82 58.700	27 50.300	-83 26.000	27.3	242
grav2	27 23.500	-84 03.200	27 50.300	-83 26.200	42.4	050
grav3	27 23.500	-84 03.200	27 15.800	-84 28.700	24.0	251
slin1	27 15.756	-84 28.827	27 00.000	-85 23.000	50.8	252
slin2	27 00.000	-85 23.000	26 12.000	-86 23.000	72.0	228
slin3	26 12.000	-86 23.000	26 18.000	-86 22.500	6.0	004
slin4	26 18.000	-86 22.500	26 13.700	-86 17.000	6.5	130
slin5	26 13.700	-86 17.000	26 16.000	-86 25.500	8.0	286
tran1	26 15.847	-86 24.942	26 14.700	-86 21.900	3.0	112

F1 = Main Menu Esc = Quit Enter = Select

Line port Length 73959 m Bearing 116 deg Sensor = RHO

Select a Survey Line

Line Name	Starting Lat	Starting Lon	Ending Lat	Ending Lon	Range nm	Bearing deg
tran2	26 14.814	-86 21.868	26 14.300	-86 19.350	2.3	102
tran3	26 14.377	-86 19.296	26 16.500	-86 20.100	2.2	341
trans4	26 15.600	-86 21.100	26 14.800	-86 35.700	13.2	266
line1	26 14.800	-86 35.700	26 17.100	-86 08.300	24.7	084
lin2	26 14.500	-86 08.000	26 12.800	-86 30.000	19.9	265
zed	26 10.000	-86 30.000	26 11.700	-86 08.300	19.6	084
Line1a	26 12.824	-86 26.083	26 17.100	086 08.300	7635.6	008
lin4	26 18.400	-86 26.200	26 19.900	-86 08.700	15.8	084
s4	26 09.000	-86 10.000	26 25.000	-86 17.000	17.1	338
S5	26 23.000	-86 19.800	26 08.000	-86 14.000	15.8	160
S6	26 08.300	-86 17.800	26 21.500	-86 23.000	14.0	340

F1 = Main Menu Esc = Quit Enter = Select

Line port Length 73959 m Bearing 116 deg Sensor = RHO

FRNL
104750
F3-90-6M

Select a Survey Line

Line Name	Starting Lat	Starting Lon	Ending Lat	Ending Lon	Range nm	Bearing deg
tranS7	26 12.743	-86 19.513	26 17.600	-86 35.500	15.2	288
Deploy	26 17.064	-86 33.689	26 17.300	-86 39.000	4.8	272
Line5	26 17.200	-86 08.300	26 15.300	-86 30.000	19.6	264
Line6	26 12.800	-86 30.000	26 14.500	-86 08.000	19.9	085
tran7	26 14.492	-86 07.983	26 22.000	-86 09.000	7.5	353
Line7	26 22.000	-86 09.000	26 21.000	-86 19.100	9.1	263
line8	26 21.000	-86 19.100	26 12.000	-86 26.400	11.1	216
tran9	26 11.999	-86 26.403	26 10.400	-86 25.000	2.0	141
Line9	26 10.400	-86 25.000	26 11.500	-86 10.000	13.5	085
10-1	26 11.000	-86 15.000	26 19.200	-86 07.600	10.5	039
10-2	26 19.200	-86 07.600	26 28.500	-85 53.400	15.8	053

F1 = Main Menu Esc = Quit Enter = Select

Line port Length 73959 m Bearing 116 deg Sensor = RHO

Select a Survey Line

Line Name	Starting Lat	Starting Lon	Ending Lat	Ending Lon	Range nm	Bearing deg
10-3	26 28.500	-85 53.400	26 32.200	-85 38.900	13.5	074
10-4	26 32.200	-85 38.900	26 29.000	-85 08.100	27.8	096
lin11	26 29.000	-85 08.100	26 23.300	-85 08.500	5.7	183
lin12	26 25.400	-85 02.900	26 47.000	-85 10.000	22.5	343
line13	26 45.800	-85 12.700	26 23.900	-85 05.300	22.8	163
trspC	26 18.149	-85 07.951	26 43.970	-85 09.150	25.8	357
trspA	26 43.970	-85 09.150	26 43.870	-85 11.790	2.4	267
trspB	26 43.870	-85 11.790	26 41.800	-85 10.400	2.4	148
sp1	26 41.800	-85 10.400	26 45.090	-85 08.580	3.7	026
sp2	26 45.090	-85 08.580	26 44.440	-85 10.430	1.8	248
sp3	26 44.440	-85 10.430	26 44.980	-85 12.470	1.9	286

F1 = Main Menu Esc = Quit Enter = Select

Line port Length 73959 m Bearing 116 deg Sensor = RHO

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098 20:27:21     Line Changed to lin18
098 20:27:21     Line Bearing 276
098 20:27:22     Line Length 48258.154 (meters)

098 20:27:22     Using RHO for Navigation
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Select a Survey Line

Line Name	Starting Lat	Starting Lon	Ending Lat	Ending Lon	Range nm	Bearing deg
sp4	26 44.980	-85 12.470	26 43.030	-85 11.140	2.3	148
sp5	26 43.030	-85 11.140	26 43.010	-85 09.760	1.2	090
sp6	26 43.010	-85 09.760	26 40.870	-85 09.700	2.1	178
sp7	26 40.870	-85 09.700	26 40.870	-85 11.020	1.2	270
sp2a	26 45.336	-85 06.861	26 44.440	-85 10.430	3.3	254
line14	26 21.600	-85 04.200	26 45.500	-85 11.000	24.6	345
tran15	26 47.584	-85 11.574	26 45.600	-85 13.300	2.5	217
Line15	26 45.600	-85 13.300	26 31.900	-85 09.500	14.1	165
line16	26 31.900	-85 09.500	26 35.000	-85 40.000	27.5	276
lin17	26 37.400	-85 40.000	26 34.400	-85 10.700	26.4	096
lin18	26 36.800	-85 11.100	26 39.700	-85 40.000	26.1	276

F1 = Main Menu Esc = Quit Enter = Select

Line lin18 Length 48258 m Bearing 276 deg Sensor = RHO

Select a Survey Line

Line Name	Starting Lat	Starting Lon	Ending Lat	Ending Lon	Range nm	Bearing deg
lin17	26 37.400	-85 40.000	26 34.400	-85 10.700	26.4	096
lin18	26 36.800	-85 11.100	26 39.700	-85 40.000	26.1	276
lin19	26 42.000	-85 40.000	26 39.300	-85 13.000	24.3	096
line20	26 40.000	-85 07.800	26 48.000	-85 13.000	9.2	329
line21	26 46.700	-85 16.200	26 48.500	-85 33.000	15.1	276
line22	26 43.400	-85 30.000	26 40.900	-85 06.600	21.1	096
Line23	26 43.300	-85 06.600	26 45.700	-85 30.000	21.1	276
grav3r	27 15.800	-84 28.700	27 23.500	-84 03.300	23.9	071
grav2r	27 23.500	-84 03.200	27 50.300	-83 26.000	42.5	050
grav1r	27 50.300	-83 26.000	28 03.000	-82 58.700	27.3	062
port	27 38.205	-83 14.420	27 20.379	-82 34.210	39.9	116

F1 = Main Menu Esc = Quit Enter = Select

Line lin18 Length 48258 m Bearing 276 deg Sensor = RHO

3.5 kHz survey for western transponder net.

1) 26° 12.0' N
wp6 86° 23.0' W

Line 6

2) 26° 18.0' N
wp7 86° 22.5' W

Line 7

3) 26° 13.7' N
wp8 86° 17.0' W

Line 8

4) 26° 16.0' N
wp9 86° 25.5' W

F.8

Marks position

Transponder locations - Western Site

1) 26° 14.7'N (labelled tran1 in linefile)
86° 21.9'W

2) 26° 14.3'N tran 2
86° 19.35'W

3) 26° 16.5'N tran 3
86° 20.1'W

! - comment

SeaMARC Survey 27 March, 1990

Line 2 START 26° 14.5'N
86° 08.0'W

END 26° 12.8'N
86° 30.0'W

Line 3 START 26° 10.0'N
86° 30.0'W

END 26° 11.7'N
86° 08.3'W

27 March, 19[illegible]

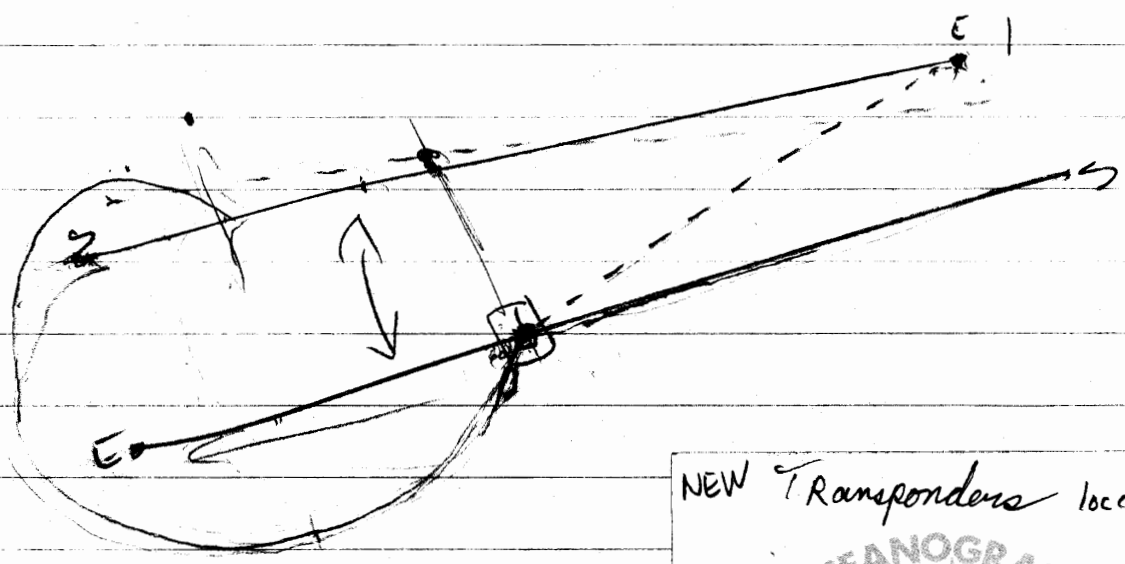
Sea Marc Line #1

1300
26 16.38
B6 15.97
80°
2.2

1) start 26° 14.8' N
86° 35.7' W

2) END 26° 17.1' N
86° 08.3' W

10° | 5 min
~4 knts.



NEW Transponders locations

A 26° 14.845 N
86° 21.656 W

B 26° 14.427 N
86° 19.179 W

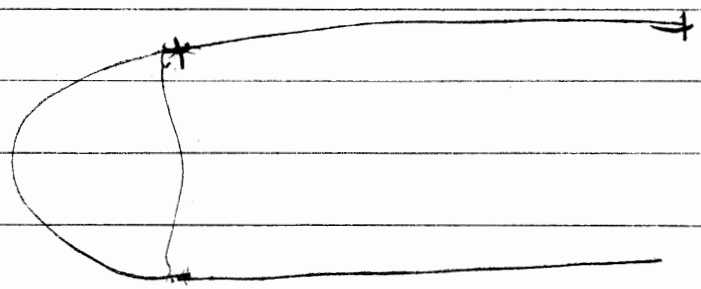
C 26° 16.638 N
86° 19.933 W

WOODS HOLE OCEANOGRAPHIC INSTITUTION 1930

SeaMARC survey 28 March, 1990

Line 3 START 26° 18.4' N
86° 26.2' W

END 26° 19.9' N
86° 08.7' W



A	26°09′	86 10′	LINE 4
B	26°25′	86 17′	
C	26°23′	86 20′	LINE 5
D	26° 08′	86° 14′	
E	~ 26°08′	~ 86° 18′	LINE 6
F	~ 26° 21′	~ 86° 23′	

(LINE 3)

~~S7~~

Sea MARC Line

Deploy SeaMARC 26° 17.6'N
86° 35.5'W

END 26° 19.9'N
86° 08.7'W

tran to S7 (LINE 3)

0145 26 13.11 N
- 86 19.77 W
to
26° 17.6 N
86° 35.5 W

LINE 5	START	26° 17.2' N	86° 08.3' W
	END	26° 15.3' N	86° 30.0' W

LINE 5	START	26° 17.2'N	86° 08.3'W
	END	26° 15.3'N	86° 30.0'W
LINE 6	START	26° 12.8'N	86° 30.0'W
	END	26° 14.5'N	86° 08.0'W

Sea MARC lines 31 March, 1990

Line 7	START	26° 22.0' N 86° 09.0' W
	END	26° 21.0' N 86° 19.1' W
Line 8	START	26° 21.0' N 86° 19.1' W
	END	26° 12.0' N 86° 26.4' W

31 March, 1990

LINE 9 START 26° 10.4' N
86° 25.0' W

END 26° 11.5' N
86° 10.0' W

Sea MARC line 31 March, 1990

LINE 10 Start	26° 11.1'N 86° 15.0'W	LINE 10-1	✓ ENTERED
#1	26° 19.2'N 86° 07.6'W	LINE 10-2	✓ ENTERED
#2	26° 28.5'N 85° 53.4'W	LINE 10-3	✓
#3	26° 32.2'N 85° 38.9'W	LINE 10-4	
#4	26° 29.0'N 85° 08.1'W		

Line 11	START	26° 29.0'N 85° 08.1'W
	END	26° 23.3'N 85° 08.5'W
LINE 12	START	26° 25.4'N 85° 02.9'W
	END	26° 47.0'N 85° 10.0'W
LINE 13	START	26° 45.8 85° 12.7
	END	26 23.9 85° 5.3

DEPLOY SEAMARC @ 26° 21.6' 85° 4.2'

HEAD TO 26° 45.5' 85° 11.0'

THIS WILL BE 1Y

Sea MARC lines 4 April, 1990

LINE 15 START 26° 45.6'N
85° 13.3'W

END 26° 31.9'N
85° 09.5'W

LINE 16 START 26° 31.9'N
85° 09.5'W

END 26° 35.0'N
85° 40.0'W

SeaMARC lines 4 April, 1990

LINE 17 START 26° 37.4'N
85° 40.0'W

END 26° 34.4'N
85° 10.7'W

LINE 18 START 26° 36.8'N
85° 11.1'W

END 26° 39.7'N
85° 40.0'W

LINE 19 START 26° 42.0'N
85° 40.0'W

END 26° 39.3'N
85° 13.0'W

LINE 20

26° 40.0'
[illegible]° 7.0'

26° 48.0'
85° 13.0'

[redacted]

LINE 21

26° 46.7′
85° 16.2′

→

26° 48.5′
85° 33.0′

LINE 21 ~~EQL~~ 85° 30' W NOT 85° 33'

Line 22 Start 26° 43.4' N
85° 30.0' W

End 26° 40.9' N
85° 06.6' W

Line 23 Start 26° 43.3' N
85° 06.6' W

End 26° 45.7' N
85° 30' W

FRNL
104750
F3-90-GM

F390GM.daf
(DAFE FILE)

084	1000		PER	KING		X	DAVID TWICHELL		F3-90GM
084	1000		PER	KING		X	WILLIAM SCHWAB		F3-90GM
084	1000		PER	GEOL		X	WILLIAM DANFORTH		F3-90GM
084	1000		PER	NAVG		X	BARRY IRWIN		F3-90GM
084	1000		PER	GEOL		X	DAVID LUBINSKI		F3-90GM
084	1000		PER	ETEC		X	THOMAS OBRIEN		F3-90GM
084	1000		PER	MTEC		X	DAVID MASON		F3-90GM
084	1000		PER	NAVG		X	LISA BADER		F3-90GM
084	1000		PER	NAVG		X	MICHAEL HAMER		F3-90GM
084	1000		PER	ETEC		X	LAWRENCE KOOKER		F3-90GM
084	1000		PER	NAVG		X	THOMAS CROOK		F3-90GM
084	1000		PER	ETEC		X	THOMAS DETTWEILLER		F3-90GM
084	1000		PER	ETEC		X	MICHAEL WILLIAMSON		F3-90GM
084	1000		PER	ETEC		X	KEVIN REDMAN		F3-90GM
084	1000		PER	ETEC		X	NICHOLAS LESNIKOWSKI		F3-90GM
084	1000		PER	ETEC		X	JOHN DEL MCDOWELL		F3-90GM
084	1000		PER	GEOL		X	NEIL KENYON, IOS		F3-90GM
084	1000		PER	CAPT		X	JOHN CANNAN, JMARR		F3-90GM
084	1000		PER	MATE		X	ALBERT FULLER, JMARR		F3-90GM
084	1000		PER	CENG		X	MICHAEL BALDWIN, JMARR		F3-90GM
			EQP	BA35			3.5 kHz bathymetry		F3-90GM
			EQP	BA45			4.5 kHz bathymetry		F3-90GM
			EQP	XBTG			Exp. Bathy. Thermograph		F3-90GM
			EQP	LORR			Loran C Rho Rho		F3-90GM
			EQP	XPDR			Benthos Transponder Nav.		F3-90GM
			EQP	LORC			Loran C		F3-90GM
			EQP	SINS			Integrated Navigation		F3-90GM
			EQP	GPSS			GPS Satellites		F3-90GM
			EQP	GRVS			Shipboard Gravity		F3-90GM
			EQP	SIDE			Seamarc Side Scan Sonar		F3-90GM
084	1845	PORT	NAV	CRUZ	X		Start of Cruise	m	F3-90GM
098	1600	PORT	NAV	CRUZ		X	End of Cruise	m	F3-90GM
084	1845	PORT	SYS	LORR		X	SYSTEM ON		F3-90G

084	1845	PORT	SYS	LORC			X	SYSTEM ON			F3-90GM
098	1600	PORT	SYS	LORC				XSYSTEM OFF			F3-90GM
084	1845	PORT	SYS	SINS			X	SYSTEM ON			F3-90GM
098	1600	PORT	SYS	SINS				XSYSTEM OFF			F3-90GM
084	1845	PORT	SYS	GRVS			X	SYSTEM ON			F3-90GM
098	1600	PORT	SYS	GRVS				XSYSTEM OFF			F3-90GM
086	1345	TRA3	DEP	XBTG	3	X		26 17.5N -86 18.6		3100m	F3-90GM
086	0449	TRA1	DEP	XPDR	A	X		DEPLOY XPDR A WEST		m	F3-90GM
086	0519	TRA2	DEP	XPDR	B	X		DEPLOY XPDR B WEST		m	F3-90GM
086	0545	TRA3	DEP	XPDR	C	X		DEPLOY XPDR C WEST		m	F3-90GM
093	0452	TRAc	DEP	XPDR	C	X		DEPLOY XPDR C EAST		m	F3-90GM
093	0547	TRAa	DEP	XPDR	A	X		DEPLOY XPDR A EAST		m	F3-90GM
093	0614	TRAb	DEP	XPDR	B	X		DEPLOY XPDR B EAST		m	F3-90GM
085	0136	GRV1	NAV	TRAK			X	SOL GRAV 1			F3-90GM
085	0215	GRV1	NAV	TRAK			X	EOL GRAV 1			F3-90GM
085	0217	GRV2	NAV	TRAK			X	SOL GRAV 2			F3-90GM
085	0644	GRV2	NAV	TRAK			X	EOL GRAV 2			F3-90GM
085	0644	GRV3	NAV	TRAK			X	SOL GRAV 3			F3-90GM
085	0849	GRV3	NAV	TRAK			X	EOL GRAV 3			F3-90GM
085	0849	S4	NAV	TRAK			X	SOL 4 (SEISMIC LINE)			F3-90GM
085	1313	S4	NAV	TRAK			X	EOL 4 (SEISMIC LINE)			F3-90GM
085	1313	S5	NAV	TRAK			X	SOL 5 (SEISMIC LINE)			F3-90GM
086	0208	S5	NAV	TRAK			X	EOL 5 (SEISMIC LINE)			F3-90GM
086	0208	S6	NAV	TRAK			X	SOL 6 (SEISMIC LINE)			F3-90GM
086	0238	S6	NAV	TRAK			X	EOL 6 (SEISMIC LINE)			F3-90GM
086	0238	S7	NAV	TRAK			X	SOL 7 (SEISMIC LINE)			F3-90GM
086	0318	S7	NAV	TRAK			X	EOL 7 (SEISMIC LINE)			F3-90GM
086	0318	S8	NAV	TRAK			X	SOL 8 (SEISMIC LINE)			F3-90GM
086	0405	S8	NAV	TRAK			X	EOL 8 (SEISMIC LINE)			F3-90GM
086	0405	TRA1	NAV	TRAK			X	SOL TRAN 1			F3-90GM
086	0450	TRA1	NAV	TRAK			X	EOL TRAN 1			F3-90GM
086	0452	TRA2	NAV	TRAK			X	SOL TRAN 2			F3-90GM
086	0519	TRA2	NAV	TRAK			X	EOL TRAN 2			F3-90GM
086	0521	TRA3	NAV	TRAK			X	SOL TRAN 3			F3-90GM
086	1525	TRA3	NAV	TRAK			X	EOL TRAN 3			F3-90GM
086	1533	1	NAV	TRAK			X	SOL 1			F3-90GM
086	2320	1	NAV	TRAK			X	EOL 1			F3-90GM
086	2321	2	NAV	TRAK			X	SOL 2			F3-90GM
087	0605	2	NAV	TRAK			X	EOL 2			F3-90GM
087	0607	1	NAV	TRAK			X	SOL 1			F3-90GM
087	0613	1	NAV	TRAK			X	EOL 1			F3-90GM
087	0613	1A	NAV	TRAK			X	SOL 1A			F3-90GM
087	0655	1A	NAV	TRAK			X	EOL 1A			F3-90GM
087	0657	1	NAV	TRAK			X	SOL 1			F3-90GM
087	1435	1	NAV	TRAK			X	EOL 1			F3-90GM
087	1436	2	NAV	TRAK			X	SOL 2			F3-90GM
088	0009	2	NAV	TRAK			X	EOL 2			F3-90GM
088	0012	3	NAV	TRAK			X	SOL 3			F3-90GM
088	0900	3	NAV	TRAK			X	EOL 3			F3-90GM
088	1000	4	NAV	TRAK			X	SOL 4			F3-90GM
088	1505	4	NAV	TRAK			X	EOL 4			F3-90GM
088	1536	5	NAV	TRAK			X	SOL 5			F3-90GM
088	1800	5	NAV	TRAK			X	EOL 5			F3-90GM
088	1804	6	NAV	TRAK			X	SOL 6			F3-90GM
088	1842	6	NAV	TRAK			X	EOL 6			F3-90GM
088	2100	4	NAV	TRAK			X	SOL 4			F3-90GM
089	0811	4	NAV	TRAK			X	EOL 4			F3-90GM
089	0932	5	NAV	TRAK			X	SOL 5			F3-90GM
089	1855	5	NAV	TRAK			X	EOL 5			F3-90GM
089	2133	6	NAV	TRAK			X	SOL 6			F3-90GM
090	0542	6	NAV	TRAK			X	EOL 6			F3-90GM
090	0707	7	NAV	TRAK			X	SOL 7			F3-90GM
090	1322	7	NAV	TRAK			X	EOL 7			F3-90GM
090	1322	8	NAV	TRAK			X	SOL 8			F3-90GM
090	2004	8	NAV	TRAK			X	EOL 8			F3-90GM

090	2055	9	NAV TRAK		X	SOL	9	F3-90GM
091	0005	9	NAV TRAK		X	EOL	9	F3-90GM
091	0005	10	NAV TRAK		X	SOL	10	F3-90GM
091	0330	10	NAV TRAK		X	EOL	10	F3-90GM
091	0330	10-2	NAV TRAK		X	SOL	10-2	F3-90GM
091	0854	10-2	NAV TRAK		X	EOL	10-2	F3-90GM
091	0854	10-3	NAV TRAK		X	SOL	10-3	F3-90GM
091	1300	10-3	NAV TRAK		X	EOL	10-3	F3-90GM
091	1350	10-4	NAV TRAK		X	SOL	10-4	F3-90GM
091	2320	10-4	NAV TRAK		X	EOL	10-4	F3-90GM
091	2320	11	NAV TRAK		X	SOL	11	F3-90GM
092	0100	11	NAV TRAK		X	EOL	11	F3-90GM
092	0330	12	NAV TRAK		X	SOL	12	F3-90GM
092	1618	12	NAV TRAK		X	EOL	12	F3-90GM
092	1711	13	NAV TRAK		X	SOL	13	F3-90GM
092	2000	13	NAV TRAK		X	EOL	13	F3-90GM
093	0025	TRPC	NAV TRAK		X	SOL	TRSP C	F3-90GM
093	0452	TRPC	NAV TRAK		X	EOL	TRSP C	F3-90GM
093	0452	TRPA	NAV TRAK		X	SOL	TRSP A	F3-90GM
093	0547	TRPA	NAV TRAK		X	EOL	TRSP A	F3-90GM
093	0547	TRPB	NAV TRAK		X	SOL	TRSP B	F3-90GM
093	0614	TRPB	NAV TRAK		X	EOL	TRSP B	F3-90GM
093	0614	SP1	NAV TRAK		X	SOL	SP1	F3-90GM
093	0730	SP1	NAV TRAK		X	EOL	SP1	F3-90GM
093	0730	SP2a	NAV TRAK		X	SOL	SP2a	F3-90GM
093	1446	SP2a	NAV TRAK		X	EOL	SP2a	F3-90GM
093	1446	14	NAV TRAK		X	SOL	14	F3-90GM
094	0428	14	NAV TRAK		X	EOL	14	F3-90GM
094	0626	15	NAV TRAK		X	SOL	15	F3-90GM
094	1042	15	NAV TRAK		X	EOL	15	F3-90GM
094	1042	16	NAV TRAK		X	SOL	16	F3-90GM
094	2207	16	NAV TRAK		X	EOL	16	F3-90GM
094	2305	17	NAV TRAK		X	SOL	17	F3-90GM
095	0815	17	NAV TRAK		X	EOL	17	F3-90GM
095	0940	18	NAV TRAK		X	SOL	18	F3-90GM
095	2224	18	NAV TRAK		X	EOL	18	F3-90GM
095	2315	19	NAV TRAK		X	SOL	19	F3-90GM
096	0925	19	NAV TRAK		X	EOL	19	F3-90GM
096	1200	20	NAV TRAK		X	SOL	20	F3-90GM
096	1634	20	NAV TRAK		X	EOL	20	F3-90GM
096	1742	21	NAV TRAK		X	SOL	21	F3-90GM
096	2254	21	NAV TRAK		X	EOL	21	F3-90GM
097	0100	22	NAV TRAK		X	SOL	22	F3-90GM
097	0616	22	NAV TRAK		X	EOL	22	F3-90GM
097	0735	23	NAV TRAK		X	SOL	23	F3-90GM
097	1546	23	NAV TRAK		X	EOL	23	F3-90GM
097	1600	24	NAV TRAK		X	SOL	24	F3-90GM
097	2100	24	NAV TRAK		X	EOL	24	F3-90GM
098	0200	GR3r	NAV TRAK		X	SOL	GRAV 3r	F3-90GM
098	0700	GR3r	NAV TRAK		X	EOL	GRAV 3r	F3-90GM
089	0315	4	MAG SIDE	1	X	VHS	TAPE	F3-90GM
089	0512	4	MAG SIDE	1	X	VHS	TAPE	F3-90GM
089	0513	4	MAG SIDE	2	X	VHS	TAPE	F3-90GM
089	0735	4	MAG SIDE	2	X	VHS	TAPE	F3-90GM
089	0736	4	MAG SIDE	3	X	VHS	TAPE	F3-90GM
089	0941	4	MAG SIDE	3	X	VHS	TAPE	F3-90GM
089	2039	5-6	MAG BA45	4	X	VHS	TAPE	F3-90GM
089	2240	5-6	MAG BA45	4	X	VHS	TAPE	F3-90GM
089	2240	6	MAG BA45	5	X	VHS	TAPE	F3-90GM
090	0041	6	MAG BA45	5	X	VHS	TAPE	F3-90GM
090	0042	6	MAG BA45	6	X	VHS	TAPE	F3-90GM
090	0249	6	MAG BA45	6	X	VHS	TAPE	F3-90GM
090	0249	6	MAG BA45	7	X	VHS	TAPE	F3-90GM
090	0451	6	MAG BA45	7	X	VHS	TAPE	F3-90GM
090	0451	6	MAG BA45	8	X	VHS	TAPE	F3-90GM
090	0702	6	MAG BA45	8	X	VHS	TAPE	F3-90GM

090	0703	TRA7	MAG	BA45	9	X	VHS	TAPE	F3-90GM
090	0908	TRA7	MAG	BA45	9	X	VHS	TAPE	F3-90GM
090	0908	7	MAG	BA45	10	X	VHS	TAPE	F3-90GM
090	1109	7	MAG	BA45	10	X	VHS	TAPE	F3-90GM
090	1109	7	MAG	BA45	11	X	VHS	TAPE	F3-90GM
090	1311	7	MAG	BA45	11	X	VHS	TAPE	F3-90GM
090	1311	7-8	MAG	BA45	12	X	VHS	TAPE	F3-90GM
090	1518	7-8	MAG	BA45	12	X	VHS	TAPE	F3-90GM
090	1520	8	MAG	BA45	13	X	VHS	TAPE	F3-90GM
090	1730	8	MAG	BA45	13	X	VHS	TAPE	F3-90GM
090	1730	8	MAG	BA45	14	X	VHS	TAPE	F3-90GM
090	1936	8	MAG	BA45	14	X	VHS	TAPE	F3-90GM
090	1936	8	MAG	BA45	15	X	VHS	TAPE	F3-90GM
090	2136	8	MAG	BA45	15	X	VHS	TAPE	F3-90GM
090	2136	9	MAG	BA45	16	X	VHS	TAPE	F3-90GM
090	2341	9	MAG	BA45	16	X	VHS	TAPE	F3-90GM
090	2341	9	MAG	BA45	17	X	VHS	TAPE	F3-90GM
091	0142	9	MAG	BA45	17	X	VHS	TAPE	F3-90GM
091	0142	10	MAG	BA45	18	X	VHS	TAPE	F3-90GM
091	0355	10	MAG	BA45	18	X	VHS	TAPE	F3-90GM
091	0355	10	MAG	BA45	19	X	VHS	TAPE	F3-90GM
091	0557	10	MAG	BA45	19	X	VHS	TAPE	F3-90GM
091	0557	10	MAG	BA45	20	X	VHS	TAPE	F3-90GM
091	0757	10	MAG	BA45	20	X	VHS	TAPE	F3-90GM
091	0757	10-2	MAG	BA45	21	X	VHS	TAPE	F3-90GM
091	0958	10-2	MAG	BA45	21	X	VHS	TAPE	F3-90GM
091	0958	10-3	MAG	BA45	22	X	VHS	TAPE	F3-90GM
091	1202	10-3	MAG	BA45	22	X	VHS	TAPE	F3-90GM
091	1202	10-3	MAG	BA45	23	X	VHS	TAPE	F3-90GM
091	1402	10-3	MAG	BA45	23	X	VHS	TAPE	F3-90GM
091	1647	10-4	MAG	BA45	24	X	VHS	TAPE	F3-90GM
091	1850	10-4	MAG	BA45	24	X	VHS	TAPE	F3-90GM
091	1916	10-4	MAG	BA45	25	X	VHS	TAPE	F3-90GM
091	2119	10-4	MAG	BA45	25	X	VHS	TAPE	F3-90GM
091	2119	10-4	MAG	BA45	26	X	VHS	TAPE	F3-90GM
091	2319	10-4	MAG	BA45	26	X	VHS	TAPE	F3-90GM
091	2319	11	MAG	BA45	27	X	VHS	TAPE	F3-90GM
092	0123	11	MAG	BA45	27	X	VHS	TAPE	F3-90GM
092	0123	11	MAG	BA45	28	X	VHS	TAPE	F3-90GM
092	0329	11	MAG	BA45	28	X	VHS	TAPE	F3-90GM
092	0330	12	MAG	BA45	29	X	VHS	TAPE	F3-90GM
092	0530	12	MAG	BA45	29	X	VHS	TAPE	F3-90GM
092	0530	12	MAG	BA45	30	X	VHS	TAPE	F3-90GM
092	0730	12	MAG	BA45	30	X	VHS	TAPE	F3-90GM
092	0730	12	MAG	BA45	31	X	VHS	TAPE	F3-90GM
092	0937	12	MAG	BA45	31	X	VHS	TAPE	F3-90GM
092	0938	12	MAG	BA45	32	X	VHS	TAPE	F3-90GM
092	1137	12	MAG	BA45	32	X	VHS	TAPE	F3-90GM
092	1137	12	MAG	BA45	33	X	VHS	TAPE	F3-90GM
092	1340	12	MAG	BA45	33	X	VHS	TAPE	F3-90GM
092	1349	12	MAG	BA45	34	X	VHS	TAPE	F3-90GM
092	1550	12	MAG	BA45	34	X	VHS	TAPE	F3-90GM
092	1703	TRAb	MAG	BA45	35	X	VHS	TAPE	F3-90GM
092	1907	TRAb	MAG	BA45	35	X	VHS	TAPE	F3-90GM
092	1922	13	MAG	BA45	36	X	VHS	TAPE	F3-90GM
092	2048	13	MAG	BA45	36	X	VHS	TAPE	F3-90GM
093	1956	14	MAG	BA45	37	X	VHS	TAPE	F3-90GM
093	2157	14	MAG	BA45	37	X	VHS	TAPE	F3-90GM
093	2157	14	MAG	BA45	38	X	VHS	TAPE	F3-90GM
094	0000	14	MAG	BA45	38	X	VHS	TAPE	F3-90GM
093	0000	14	MAG	BA45	39	X	VHS	TAPE	F3-90GM
094	0205	14	MAG	BA45	39	X	VHS	TAPE	F3-90GM
094	0205	14	MAG	BA45	40	X	VHS	TAPE	F3-90GM
094	0410	14	MAG	BA45	40	X	VHS	TAPE	F3-90GM
094	0410	14	MAG	BA45	41	X	VHS	TAPE	F3-90GM
094	0615	14	MAG	BA45	41	X	VHS	TAPE	F3-90GM

094 0736	15	MAG BA45	42	X	VHS	TAPE	F3-90GM
094 0937	15	MAG BA45	42	X	VHS	TAPE	F3-90GM
094 0937	15	MAG BA45	43	X	VHS	TAPE	F3-90GM
094 1137	15	MAG BA45	43	X	VHS	TAPE	F3-90GM
094 1137	16	MAG BA45	44	X	VHS	TAPE	F3-90GM
094 1340	16	MAG BA45	44	X	VHS	TAPE	F3-90GM
094 1340	16	MAG BA45	45	X	VHS	TAPE	F3-90GM
094 1545	16	MAG BA45	45	X	VHS	TAPE	F3-90GM
094 1605	16	MAG BA45	46	X	VHS	TAPE	F3-90GM
094 1810	16	MAG BA45	46	X	VHS	TAPE	F3-90GM
094 1810	16	MAG BA45	47	X	VHS	TAPE	F3-90GM
094 2010	16	MAG BA45	47	X	VHS	TAPE	F3-90GM
094 2010	16	MAG BA45	48	X	VHS	TAPE	F3-90GM
094 2210	16	MAG BA45	48	X	VHS	TAPE	F3-90GM
094 2311	17	MAG BA45	49	X	VHS	TAPE	F3-90GM
095 0115	17	MAG BA45	49	X	VHS	TAPE	F3-90GM
095 0115	17	MAG BA45	50	X	VHS	TAPE	F3-90GM
095 0320	17	MAG BA45	50	X	VHS	TAPE	F3-90GM
095 0330	17	MAG BA45	51	X	VHS	TAPE	F3-90GM
095 0535	17	MAG BA45	51	X	VHS	TAPE	F3-90GM
095 0535	17	MAG BA45	52	X	VHS	TAPE	F3-90GM
095 0740	17	MAG BA45	52	X	VHS	TAPE	F3-90GM
095 0755	17	MAG BA45	53	X	VHS	TAPE	F3-90GM
095 1000	17	MAG BA45	53	X	VHS	TAPE	F3-90GM
095 1029	18	MAG BA45	54	X	VHS	TAPE	F3-90GM
095 1229	18	MAG BA45	54	X	VHS	TAPE	F3-90GM
095 1229	18	MAG BA45	55	X	VHS	TAPE	F3-90GM
095 1435	18	MAG BA45	55	X	VHS	TAPE	F3-90GM
095 1451	18	MAG BA45	56	X	VHS	TAPE	F3-90GM
095 1655	18	MAG BA45	56	X	VHS	TAPE	F3-90GM
095 1702	18	MAG BA45	57	X	VHS	TAPE	F3-90GM
095 1907	18	MAG BA45	57	X	VHS	TAPE	F3-90GM
095 1907	18	MAG BA45	58	X	VHS	TAPE	F3-90GM
095 2108	18	MAG BA45	58	X	VHS	TAPE	F3-90GM
095 2108	18	MAG BA45	59	X	VHS	TAPE	F3-90GM
095 2308	18	MAG BA45	59	X	VHS	TAPE	F3-90GM
095 2308	TRA19	MAG BA45	60	X	VHS	TAPE	F3-90GM
096 0112	TRA19	MAG BA45	60	X	VHS	TAPE	F3-90GM
096 0112	19	MAG BA45	61	X	VHS	TAPE	F3-90GM
096 0317	19	MAG BA45	61	X	VHS	TAPE	F3-90GM
096 0328	19	MAG BA45	62	X	VHS	TAPE	F3-90GM
096 0531	19	MAG BA45	62	X	VHS	TAPE	F3-90GM
096 0531	19	MAG BA45	63	X	VHS	TAPE	F3-90GM
096 0743	19	MAG BA45	63	X	VHS	TAPE	F3-90GM
096 0744	19	MAG BA45	64	X	VHS	TAPE	F3-90GM
096 0945	19	MAG BA45	64	X	VHS	TAPE	F3-90GM
096 0946	TRA20	MAG BA45	65	X	VHS	TAPE	F3-90GM
096 1146	TRA20	MAG BA45	65	X	VHS	TAPE	F3-90GM
096 1146	20	MAG BA45	66	X	VHS	TAPE	F3-90GM
096 1350	20	MAG BA45	66	X	VHS	TAPE	F3-90GM
096 1513	20	MAG BA45	67	X	VHS	TAPE	F3-90GM
096 1717	20	MAG BA45	67	X	VHS	TAPE	F3-90GM
096 1717	21	MAG BA45	68	X	VHS	TAPE	F3-90GM
096 1917	21	MAG BA45	68	X	VHS	TAPE	F3-90GM
096 1917	21	MAG BA45	69	X	VHS	TAPE	F3-90GM
096 2118	21	MAG BA45	69	X	VHS	TAPE	F3-90GM
096 2118	21	MAG BA45	70	X	VHS	TAPE	F3-90GM
096 2318	21	MAG BA45	70	X	VHS	TAPE	F3-90GM
096 2318	TRA22	MAG BA45	71	X	VHS	TAPE	F3-90GM
097 0120	TRA22	MAG BA45	71	X	VHS	TAPE	F3-90GM
097 0120	22	MAG BA45	72	X	VHS	TAPE	F3-90GM
097 0325	22	MAG BA45	72	X	VHS	TAPE	F3-90GM
097 0325	22	MAG BA45	73	X	VHS	TAPE	F3-90GM
097 0525	22	MAG BA45	73	X	VHS	TAPE	F3-90GM
097 0549	22	MAG BA45	74	X	VHS	TAPE	F3-90GM
097 0750	22	MAG BA45	74	X	VHS	TAPE	F3-90GM

097	0806	23	MAG	BA45	75	X		VHS TAPE	F3-90GM
097	1006	23	MAG	BA45	75		X	VHS TAPE	F3-90GM
097	1037	23	MAG	BA45	76	X		VHS TAPE	F3-90GM
097	1239	23	MAG	BA45	76		X	VHS TAPE	F3-90GM
097	1239	23	MAG	BA45	77	X		VHS TAPE	F3-90GM
097	1435	23	MAG	BA45	77		X	VHS TAPE	F3-90GM
097	1435	23	MAG	BA45	78	X		VHS TAPE	F3-90GM
097	1638	23	MAG	BA45	78		X	VHS TAPE	F3-90GM
097	1638	TRA24	MAG	BA45	79	X		VHS TAPE	F3-90GM
097	1840	TRA24	MAG	BA45	79		X	VHS TAPE	F3-90GM
097	1928	24	MAG	BA45	80	X		VHS TAPE	F3-90GM
097	2110	24	MAG	BA45	80		X	VHS TAPE	F3-90GM
085	0336	PORT	SYS	BA35			X	SYSTEM ON	F3-90GM
086	0611	TRA4	SYS	BA35	1			XOFF FOR ACOUSTIC NAV	F3-90GM
088	0954	S4	SYS	BA35	1		X	SEAMARC ON DECK	F3-90GM
089	0053	4	SYS	BA35	1			XSTART SEAMARC LINES	F3-90GM
090	0446	6	SYS	BA35	1		X	SYSTEM ON	F3-90GM
090	1353	8	SYS	BA35	1			XSYS OFF, IN XPDR NET	F3-90GM
090	1926	8	SYS	BA35	1		X	SYSTEM ON, OUT OF NET	F3-90GM
091	0450	10	SYS	BA35	1			XSYS OFF TO CHG PAPER	F3-90GM
091	0456	10	SYS	BA35	2		X	SYSTEM ON	F3-90GM
093	0035	13	SYS	BA35	2			XSYS OFF TO CHG PAPER	F3-90GM
093	1700	14	SYS	BA35	3		X	SYSTEM ON	F3-90GM
094	0049	14	SYS	BA35	3			XSYS OFF WHILE IN NET	F3-90GM
094	0954	15	SYS	BA35	3		X	SYS ON, OUT OF NET	F3-90GM
095	1445	18	SYS	BA35	3			XPAPER JAM	F3-90GM
095	1445	18	SYS	BA35	3		X	SYSTEM ON	F3-90GM
096	1124	19	SYS	BA35	4			XSYS OFF FOR XPDR NAV	F3-90GM
096	1636	20	SYS	BA35	4		X	SYSTEM ON	F3-90GM
097	0407	22	SYS	BA35	4			XSYS OFF FOR XPDR NAV	F3-90GM
097	1007	23	SYS	BA35	4		X	SYSTEM ON	F3-90GM
098	1018		SYS	BA35	4			XSYSTEM OFF	F3-90GM
086	2340	2	SYS	BA45	1		X	SYSTEM ON	F3-90GM
088	0500		SYS	BA45	1			XOFF FOR SEAMARC REPAIRS	F3-90GM
089	0134	4	SYS	BA45	1		X	SYSTEM ON	F3-90GM
091	0430	10	SYS	BA45	1			XSYSTEM OFF	F3-90GM
091	0440	10	SYS	BA45	2		X	SYSTEM ON	F3-90GM
092	2037		SYS	BA45	2			XSYSTEM OFF	F3-90GM
093	1956		SYS	BA45	3		X	SYSTEM ON	F3-90GM
095	2226		SYS	BA45	3			XSYSTEM OFF	F3-90GM
095	2228		SYS	BA45	4		X	SYSTEM ON	F3-90GM
097	0026		SYS	BA45	4			XSYSTEM OFF	F3-90GM
097	0035		SYS	BA45	5		X	SYSTEM ON	F3-90GM
097	2200		SYS	BA45	5			XSYSTEM OFF	F3-90GM
089	1459	5	MAG	BA45	1	X		SOR 1, MASSCOMP 9 TRACK	F3-90GM
089	1622	5	MAG	BA45	1		X	EOR 1, MASSCOMP 9 TRACK	F3-90GM
089	1623	5	MAG	BA45	2	X		SOR 2, MASSCOMP 9 TRACK	F3-90GM
089	1749	5	MAG	BA45	2		X	EOR 2, MASSCOMP 9 TRACK	F3-90GM
086	2340	2	PAP	BA45	1	X		SOR 1	F3-90GM
091	0430	10	PAP	BA45	1		X	EOR 1	F3-90GM
091	0430	10	PAP	BA45	2	X		SOR 2	F3-90GM
093	1950	10	PAP	BA45	2		X	EOR 2	F3-90GM
093	1956	14	PAP	BA45	3	X		SOR 3	F3-90GM
095	2226	18	PAP	BA45	3		X	EOR 3	F3-90GM
095	2228	18	PAP	BA45	4	X		SOR 4	F3-90GM
097	0026	21	PAP	BA45	4		X	EOR 4	F3-90GM
097	0030	21	PAP	BA45	5	X		SOR 5	F3-90GM
097	2200	23	PAP	BA45	5		X	EOR 5	F3-90GM
085	0336		PAP	BA35	1	X		SOR 1	F3-90GM
091	0450	10	PAP	BA35	1		X	EOR 1	F3-90GM
091	0456	10	PAP	BA35	2	X		SOR 2	F3-90GM
093	0035		PAP	BA35	2		X	EOR 2	F3-90GM
093	1700	14	PAP	BA35	3	X		SOR 3	F3-90GM
095	2228	18	PAP	BA35	3		X	EOR 3	F3-90GM
095	2242		PAP	BA35	4	X		SOR 4	F3-90GM
098	1018		PAP	BA35	4		X	EOR 4	F3-90GM
086	1730	1	DEP	SIDE		X		DEPLOY SEAMARC	m F3-90GM
088	0426	3	DEP	SIDE		X		RECOVER SEAMARC	m F3-90GM
088	2200	3	DEP	SIDE		X		DEPLOY SEAMARC	m F3-90GM
092	2057	13	DEP	SIDE		X		RECOVER SEAMARC	m F3-90GM