

R/V MAURICE EWING				FROM: CRISTOBAL PANAMA			TIME ZONE +5
CRUISE & LEG # <i>ew 95-02</i>				TO: CALDERA COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/27	1006	0000.0		141	141	145	DEPARTURE C/S 160 RPM
	1030	4.69					
	1100	10.72	12.06				
	1130	16.81	12.18				
	1200	23.19	12.76	195	195	201	O/L
	1230	29.53	12.68				
	1251	34.13	—				C/S 150 RPM
	1300	35.79	12.52				L 08°22'N L 079°34'W 1240 EXIT 12 NMI LIMIT
	1319	39.85	—	220	—	225	C/L FOR TRAFFIC
	1330	41.79	12.00				
	1346	45.59	—	190	195	195	C/L
	1400	47.75	11.92				
	1430	53.78	12.06				
	1500	59.83	12.10				
	1530	65.94	12.22				
	1600	71.99	12.10				
	1630	77.96	11.94				
	1632	78.36	—	193	195	198	C/L
	1649	81.65	—				ENTER WITHIN 12 nm OF LAND
	1700	84.10	12.11				ALL DEPT.'S NOTIFIED
	1730	89.58	11.62				1755-PASS OUTSIDE 12 nm
	1800	95.41	11.66				
	1803	95.99	—	191	195	196	C/L
	1830	101.27	11.72				
	1832	101.47	—	190	195	195	C/L
	1900	107.02	11.50				
	1901	107.22	—	272	270	275	C/L
	1930	112.60	11.16				
	2000	118.11	11.02				
	2016	121.14		275	270	278	C/L
	2030	123.74	11.26				
	2100	129.34	11.2				
	2117	132.61		273	270	276	
	2130	135.08	11.54				
	2200	140.77	11.38				

R/V MAURICE EWING				FROM: CRISTOBAL, PANAMA			TIME ZONE +5
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/27	2230	146.36	11.18	271	270	274	C/C
	2300	152.16	11.6				
	2330	157.97	11.62	269	270	271	C/C
3/28	0000	163.40	10.86				
	0028	168.40	—	271	270	274	C/C
	0030	68.72	10.64				
	0044	71.52	—	275	270	277	C/C
	0100	174.02	10.60				0035 EXIT 12 L 07°05.8'N 81-04.4'W
	0113	176.43	—	273	270	274	C/C
	0130	179.41	10.78				
	0200	184.94	11.06				
	0230	190.44	11.00				
	0300	195.94	11.00	271	270	273	C/C
	0312	—	—				ENTER 12 NM L 07°06.3'N 81-34.3'W
	0330	201.54	11.20				
	0400	207.09	11.10				
	0430	212.46	10.74				
	0434	213.20	—	274	270	275	C/C
	0500	217.96	11.00				0521-EXIT 12nm L 07-06.0'N 81-58.5'W
	0530	223.41	10.90	276	270	277	C/C
	0600	228.78	10.74				
	0601	228.97	—	305	300	305	C/C
	0612	230.90	—	303	300	303	C/C
	0630	234.03	10.50				
	0700	239.35	10.64				
	0702	239.74	—	301	300	301	C/C
	0730	244.78	10.86				
	0743	247.12	—				X-ENG'S
	0800	247.95	6.34				
	0814	248.32					INST. IN WATER
	0830	248.50	0.36				
	0900	248.93	0.86				
	0914						BRING INST TO SURFACE
	0930	249.31	.76				
	1000	249.62	.62				

R/V MAURICE EWING				FROM: CRISTOBAL PANAMA			TIME ZONE +7
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/28	1018	249.89			HT		INST. ABOARD
	1030	250.13	1.02	338	338	337	C/S 50 RPM
	1100	251.52					
	1111	252.15			HT		
	1130	252.16					
	1132	252.17					INST IN WATER
	1200	252.56					
	1218						Hydrophone in H <sub>2</sub> O
	1224						Hydrophone A/D
	1300	253.21					
	1310						INSTRUMENTS A/D
	1312	253.38	0/W	300	300	—	0/W C/L C/S 150 RPM
	1328	255.47	—	305	300	303	C/L
	1330	255.88	8.57				
	1345	258.79	—				C/S 158 RPM
	1400	261.62	11.48				
	1420	265.36	—	303	300	302	C/L
	1430	267.41	11.58				
	1500	273.26	11.70				
	1530	279.12	11.72				
	1600	284.89	11.54				
	1630	290.67	11.56				
	1648	294.16	—				1/3 125 RPM PER E/R
	1653	294.99	—	300	300	299	C/L
	1700	296.17	11.00				
	1705	297.10	—				C/L 158 RPM
	1730	301.93	11.52				
	1800	307.84	11.82				
	1820	312.32	—				RETARD MESS & LOUNGE CLOCKS 20 min
	1830	313.72	11.76				
	1900	319.47	11.50				
	1930	325.30	11.66				
	1932	325.69	—	298	300	297	C/L
	2000	331.13	11.66				
	2030	336.94	11.62				

R/V MAURICE EWING

FROM: BALBOA, PANAMA

TIME ZONE +5/+6

CRUISE &amp; LEG # 95-02

TO: CALDERA, COSTA RICA

1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/28	2100	342.72	11.56				158 RPM
	2106	344.04		300	300	299	c/c
	2130	348.65	11.86				
	2200	354.41	11.52				
	2230	360.27	11.72				
	2300	366.16	11.78				
	2330	372.07	11.82				
	2340	376.28		302 300	300	300	c/c
3/29	<del>0000</del>	377.94	11.74				
	0027	383.34		300	300	298	c/c
	0030	383.82	11.76				
	0100	389.65	11.66				
	0000	389.65	11.66				
	0030	395.68	12.06				
	0100	401.68	12.00				
	0127	407.03	—	298	300	296	c/c
	0130	407.62	11.88				
	0200	413.59	11.94				
	0230	419.55	11.92				
	0300	425.54	11.98				
	0322	429.93	—	299	300	297	c/c
	0330	431.58	12.08				
	0400	437.62	12.08				
	0404	438.42	—	301	300	300	c/c
	0430	443.59	11.94				
	0500	449.49	11.80	300	300	298	c/c
	0530	455.36	11.74				
	0600	461.22	11.72				
	0616	461.38	—				150 RPM
	0630	466.99	11.54				
	0633	467.53	—	302	300	300	c/c
	0700	472.58	11.18	300	300	298	c/c
	0730	478.19	11.22				
	0731	478.33	—	299	300	297	c/c
	0734	478.94	—	305	306	302	c/c

2D+5  
2D+6

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/29	0800	483 .84	11.3	305	306	302	S-150 RPM CONT
	0830	489.57	11.34				
	0841	491.70		308	306	305	c/c
	0900	495.43	11.84				
	0930	500.98	11.1				
	1000	506.88	11.8				18.4 MI
	1012	509.28		307	306	302	c/c
	1030	512.67	11.58				17.0 MI ETA 1132
	1100	518.52	11.7				6.7 MI
	1151						LAUNCH 08521 17 09-36.426 N 086-46.052 W
	1200	526.09		056	050	055	150 RPM
	1212			<del>056</del> <sup>ML</sup>	<del>050</del> <sup>ML</sup>		H/T
	1221						LAUNCH #2
	1230			056	050	055	v/w <sup>ML</sup> 150 RPM
	1248						H/T
	1255						LAUNCH #3
	1300			056	050	055	v/w 150 RPM
	1318						H/T
	1325						LAUNCH #4
	1330			056	050	055	v/w 150 RPM
	1342						H/T
	1352						LAUNCH #5
	1354			056	050	055	v/w 150 RPM
	1412						H/T
	1416						LAUNCH #6
	1418			056	050	055	v/w 150 RPM
	1436						H/T
	1442						DROP #7
	1454			056	050	055	v/w 150 RPM
	1512						H/T
	1516						DROP #8
	1518			060	050	059	v/w 150 RPM
	1536						H/T
	1542						LAUNCH #9
	1542			061	050	060	v/w 150 RPM

R/V MAURICE EWING				FROM: BALBOA			TIME ZONE+6
CRUISE & LEG # 95-02				TO: CALDERA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/	1558	551.07					X-ENG
	1600	551.30					
	1606	551.50					H/T OBS-10
	1607.3	51.51					OBS AWAY
	1609	51.70		1/2 NEAR Q50			U/W @ 150 RPM
	1622	53.88					<del>H/T</del> X-ENG
	1628	54.30					H/T ON OBS-11
	1630	54.31					OBS 11 AWAY
	1631	54.34					U/W @ 150 RPM
	1637	55.25					X-ENG
	1643	55.67					H/T ON 12
	1644	55.69					#12 AWAY
	1646	55.69					U/W
	1653	—					X-ENG
	1658	57.05					H/T ON 13
	1701	57.08					#13 AWAY
	1702	—					U/W
	1708.5	58.00					X-ENG
	1718	58.55					H/T ON 14
	1720	58.57					#14 AWAY
	1721	58.59					U/W
	1734	59.98					H/T ON #15
	1735.5	59.98					OBS #15 AWAY
	1736	—					U/W
	1738						H/T FOR EMAIL
	1743	—					U/W
	1749.5	61.14					X-ENG
	1800	61.72					H/T ON 16
	1802	61.78					OBS #16 AWAY
	1803	61.78					U/W
	1810	62.67					X-ENG
	1816	63.11					H/T ON #17
	1818	63.15					OBS #17 AWAY
	1818	63.17					U/W
	1830	64.42					H/T ON 18

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE -16
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/29	1832	564.46					OBS #18 AWAY
	1833	64.48					U/W
	1840	65.32					X-ENG'S
	1844	65.71					H/T ON #19
	<del>1846</del>	<del>65.79</del>					<del>OBS #19 AWAY</del>
	1849	65.84					OBS #19 BACK A'ED
	1850	-					U/W TO MAN, BACK ONTO STA.
	1858	66.26					H/T ON 19
	1900	66.30					OBS #19 AWAY
	1901	66.32					U/W
	1910	67.25					X-ENG
	1914	67.60					H/T ON #20
	1917	67.66					OBS #20 AWAY
	1918	67.66		195	195	195	U/W @ 150 RPM
	1930	569.35	-				
	1948	572.50	-	189	192	189	U/W
	2000	574.89	11.08				
	2020	578.77		185	192	185	C/C
	2030	580.61	11.44				
	2042						H/T ON STA #22
	2050						OBS AWA
	2054			318	318	318	U/W FOR STA #23
	2018	587.54		315	318	312	C/C
	2130	589.40	11.22				
	2200	594.98	11.16				
	2206	596.27		312	314	309	C/C
	<del>2230</del>	<del>598.58</del>					<del>H/T ENG STOP STA #23</del>
	2212						H/T ENG. STOP STA #23
	2217						ABORT OBS LAUNCH
	2218			318	318	315	C/S 60 RPM
	2230	598.58	7.2				
	2300	600.79	4.42				
	2330	603.00	4.42				
3/30	0000	605.24	4.48				
	0030	607.51	4.54				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE + 6
CRUISE & LEG # 95-02				TO: <sup>ML</sup> ERT CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/30	0030	607.51	4.54	318	318	315	60 RPM
	0100	609.90	4.78				
	0130	612.38	4.96				
	0200	614.84	4.92				
	0230	617.34	5.00				
	0246	618.65	—	300	—	298	C/L FOR TRAFFIC
	0300	619.80	4.92				
	0330	622.22	4.84				
	0400	624.65	4.86				
	0415	625.85	—	137	132	137	C/L, C/S 90 RPM
	0427	626.87	—	120	—	120	C/L, C/S FOR TRAFFIC - 105 RPM
	0430	627.20	—				C/S 115
	0445	629.17	—	140	137	140	C/L, C/S 150
	0451	630.21	—				C/S 160 RPM
	0500	631.90	—				
	0514	634.53	—	142	138	142	C/L, C/S 55 RPM
	0520	635.08	—				C/S 70 RPM
	0522	635.21	—				STBD GUN BOOM SWUNG OUT
	0528	635.62	—				PORT GUN BOOM SWUNG OUT
	0530	635.75	—				R.A.M. LITES & SHAPES ON & UP
	0533	635.94	—				C/S 80 RPM
	0545	636.84	C/L 130°-140°	138	—	—	C/S 90 RPM, C/L AS REQ.
	0600	638.05	—				C/S 94 RPM - 20 GUN DEPLOYED
	0606	638.55	—				SLC STREAMER DEPLOYED - TOWING SHAPES UP
	0609	638.80	—				FIRST SHOT
	0613	639.12	—				C/S 96 RPM
	0630	640.55	5.05				C/S 98 RPM
	0700	643.03	4.96				C/S 100 RPM
	0730	645.72	5.38				C/S 99 RPM
	0744	646.93	—				C/S 100 RPM
	0800	648.29					C/S 101 RPM
	0830	649.92	5.26				
	0835	649.78					C/S 100 RPM
	0900	649.66	5.48				
	0917	650.36					C/S 99 RPM



R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA, RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/30	0930	656.40	5.48	130-140 V-C	138	= PGC	S - 99 RPM
	0936	657.02					C/S 98 RPM
	1000	659.05	5.3				C/S 96 RPM
	1011	659.97					C/S 93 RPM
	1017						C/S 90 RPM
	1030	661.56	5.02				
	1100	664.04	4.96	VC 135-145	138	= PGC	C/C
	1130	666.47	4.86				
	1150	668.20	-				C/S 91 RPM
	1200	668.96	4.98				
	1220						C/S 90 RPM
	1230	671.59	5.26				
	1300	674.12	5.06				
	1302	674.53					C/S 89 RPM
	1330	676.63	5.02				
	1344	77.84	-				C/S 90 RPM
	1350	78.44	-				C/S 91 RPM
	1348	TEST	LINE	ROCKET			L 09° 54.9 N    λ 085° 56.9
	1400	679.26	5.26				
	1406	679.84	-				C/S 92 RPM
	1411	80.23	-				C/S 94 RPM
	1430	682.05	5.58				
	1432	82.23	-				C/S 93 RPM
	1445	683.49	-				C/S 91 RPM
	1500	684.86	5.62				
	1512	85.94	-				C/S 90 RPM
	1530	687.54	5.36				
	1546	688.97					C/S 88 RPM
	1600	690.12	5.16				
	1609	690.88	-				C/S 86 RPM
	1617	691.52	-				C/S 84 RPM
	1630	692.55	4.86				
	1639	693.25	-				C/S 85 RPM
	1700	695.00	4.88				C/S 84 RPM
	1712	696.02					C/S 82 RPM

R/V MAURICE EWING				FROM: BALBOA			TIME ZONE $th$
CRUISE & LEG # 95-02				TO: CALDERA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/30	1715	696.25			138°		1/2 W 1/3 TMG 138° @ 82 RPM
	1723	696.85					C/S 84 RPM
	1728	697.27					LAST SHOT
	1730	697.42					1/2 10°/MIN TO PORT
	1738	699.-					1/2 10°/MIN TO PORT, 1/2 90 RPM
	1750	699.10					1/2 10°/MIN TO STARBOARD, 1/2 80 RPM
	1755	699.42	1/2 005°-010°	001	PGL 30		FINISH TURN 1/2 1/2 & 1/2 75 RPM
	1800	699.78					
	1805.5	700.19					FIRST SHOT LINE 103-101 CONNECTOR
	1830	702.01					
	1843	702.93					C/S 82 RPM
	1900	704.29					
	1904	704.61					1/2 84 RPM
	1911	705.17					1/2 82 RPM
	1917	705.67					1/2 80 RPM
	1924	706.16					1/2 82 RPM
	1927	706.42					C/S 84 RPM
	1930	706.68					
	1939	707.40					1/2 82 RPM
	2000	709.13	5.5				
	2020	710.97					C/S 81 RPM
	2030	711.46	4.66				C/S 83 RPM
	2042	712.42					C/S 85 RPM
	2045	712.65					1/2 90 RPM
	2100	714.02	5.12				
	2105						COMMENCE TURN TO PORT
	2124			250	238	255	COMPLETE TURN STRAIGHT C/S 72
	2130	716.29	4.54				
	2133	716.48		245	228		1/2 245 C/S 75
	2134	716.58		240	228		1/2 240
	2135			STERLING 15° RITHA	BASE COURSE 228 ON LINE 101		
	2200						
	2230	720.20	3.91				
	2300	722.34	4.28				C/S 78 RPM
	2330	724.48	4.28				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/31	0000	726.57	4.18	209	TO 214		78 RPM - 20 GALS + S.C.S.
	0030	728.74	4.34				
	0038	—	—				c/s 77
	0047	29.98	—				c/s 76
	0100	730.82	4.16				
	0118	32.04	—				c/s 77
	0128	32.73	—				c/s 78
	0130	732.84	4.04				
	0132	33.05	—				c/s 79
	0137	33.32	—				c/s 80
	0143	33.79	—				c/s <del>82</del> <sup>ML</sup> 81
	0147	34.10	—				c/s 80
	0154	34.60	—				c/s 78
	0200	735.00	4.32				
	0221	36.53	—				c/s 80
	0230	737.14	4.28				
	0239	37.84	—				c/s <del>82</del> <sup>ML</sup> 81
	0245	38.23	—				c/s 80
	0257	39.10	—				c/s 81
	0300	739.28	4.28				
	0330	741.46	4.36				
	0400	743.57	4.22				
	0430	745.68	4.22				c/s 83 RPM
	0440	746.43	—				c/s 84 RPM
	0444	746.46	—				c/s 83 RPM
	0448	747.03	—				c/s 82 RPM
	0500	747.94	4.52				V/s 78-82 RPM
	0530	750.11	4.34				
	0600	752.32	4.42				
	0630	754.47	4.30				
	0700	756.70	4.46				
	0730	758.93	4.46				V/s 76-80 RPM
	0800	761.11	4.26				
	0830	763.24	4.74				
	0834						COMMENCE TURN TO PORT

R/V MAURICE EWING				FROM: CRISTOBAL PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO:			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/31	0844						COMPLETE 90 STD, START 270 TO 000
	0900	765.611	4.77				
	0925			V/C	045-055 078		COMPLETE TURN V/S 85-93
	0930	768.12	5.02				
	1000	770.37	4.47				V/S 80-85 RPM
	1030	772.48	4.22				
	1100	774.57	7.27				
	1103	774.77	—				V/S 90-95 RPM
	1130	776.98	4.82				
	1140	—	—				V/S 85-90 RPM
	1200	779.09	4.22				
	1230	781.40	4.62				V/S 82-87 RPM
	1300	783.62	4.44				
	1330	785.88	4.52				V/S 80-85 RPM
	1350	87.41	—				V/S 78-83 RPM
	1400	788.09	4.42				
	1423			000			C/L
	1430			100			C/L
	1444			V/C 055-085	570 <sup>ML</sup>		C/L
	1500	792.53	4.44				
	1530	794.78	4.50				
	1600	797.02	4.48				V/L 055-070 <sup>ML</sup> V/S 76-84
	1630	799.18	4.36				
	1700	801.47	4.58				
	1730	803.63	4.32				
	1800	805.78	4.30				
	1830	807.99	4.42				
	1900	809.31	4.64				
	1930	812.49	4.36				
	1935	812.86	—	070			C/L @ 82 RPM
	1936	—		080			C/L
	1937	812.98		090			C/L
	1938	813.05		010			C/L
	1939	13.12		110			C/L
	1940	13.21		120			C/L

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
3/31	1941	813.28	-	130			4/2 & 4/1, AS BEFORE @ 82 RPM
	1942	813.36	-	140			4/2
	1943	813.44	-	150			4/2
	1944	813.51	-	160			4/2
	1945	813.58	-	170			4/2
	1946	813.67	-	180	-		4/2 & STEADY, 4/2 4 KTS 70 ± RPM
	1948	813.84	-	180	-	182	- 4/2 65 RPM
	2000	814.73					
	2020	816.09		340	340		C/S 30 RPM PROCEED TO OBS #20
	2030	816.63	3.8				
	2054	817.68	HT				HT ON OBS #20
	2100	817.89	HT				
	2130	818.38			230		U/W FOR OBS #19 C/S 120 RPM
	2142	819.72	HT				HT ON OBS #19
	2205						ON DECK
	2206	820.20		V/C	228		U/W FOR #18 C/S 120
	2224	821.72	HT				HT OBS #18
	2230	821.81					
	2300	821.97	HT				
	2320						OBS #19 ON DECK
	2324	822.47					U/W #19
	2330	823.12					
	2346						OBS #17 ON BOARD
	2348	823.89		C225			U/W OBS #16 8-120 RPM
4/01	0000	825.18					
	0006	825.38					HOVE TO - OBS #16
	0127						OBS #16 ABD
	0130	826.39		215			U/W 120 RPM
	0142	827.64					H/T OBS #15 15
	0154	827.95					OBS #15 ABD
	0200	828.00		215			U/W 60 RPM
	0230	829.79					H/T OBS #14
	0333	830.78					OBS #14 ABD
	0336	830.83		205			U/W 120 RPM
	0348	832.07					H/T OBS #13

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/01	0355	832.31		H/T			OBH ON DECK - #7413
4/1	0400	832.36	-				
	0408	832.42	-	200	206	202	4/W @ 70 RPM
	0416	832.79	-	185	199	187	4/L
	0430	834.00	-				H/T
	0520	834.91	-				OBS #12 A'BD
	0524	835.02	-	217	-		4/W @ 70 RPM
	0530	835.23	-	190	-		4/L
	0532	835.56	-				4/S
	0536	836.30	-				H/T
	0605	837.67	-				OBS #11 A'BD
	0606	837.70	-	139	-		4/W @ 120 RPM
	0630	841.37	-				
	0700	846.21	-				
	0706	847.00	-				H/T
	0738	848.03	-				OBS #21 A'BD
	0741	848.04	-	230	235	232	4/W @ 120 RPM
	0800	850.83					4/W FOR OBS STA #26
	0807	852.10		229	235	230	C/C
	0817	853.70		226	229	227	C/C
	0830	855.53	10.46	223			O/C
	0841			218	218	219	C/C
	0854						HT ON OBS STA #26
	0900	857.18					
	0942			230	230	231	PROCEED TO OBS #25 S-120 RPM
	1000	862.17					
	1001			225	230	226	C/C
	1004			227	230	228	C/C
	1012				VL		V/C APPR. STA
	1018				HT		OBS #25
	1040						LAUNCH OBS #25
	1042	866.88		318	319	318	PROCEED TO OBS 24
	1100	868.55		322	319	322	C/C 322
	1117	871.23		320	319	320	C/C
	1130	873.20	9.3				

R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE +5
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/01	1130	873.20	9.3	320	319	320	S-120 RPM
	1200	877.95	9.50				
	1206	878.61	-				H/T OBS #24
	1215	-	-	5			LAUNCH OBS #24
	1218	878.89	-	050	048	048	U/W 5/120 RPM
	1230	880.19	-				
	1300	884.31					H/T OBS #23
	1304						LAUNCH OBS #23
	1312			315		313	U/W 40 RPM
	1330	885.64	-				
	1400	886.91	2.54				
	1430	888.12	2.42				
	1500	889.52	2.80				
	1530	890.97	2.90				
	1600	892.41	2.88				
	1630	893.86	2.90				
	1700	895.35	2.92				
	1720	896.32	-				C/L 138
	1725	896.65	-				C/S 90 RPM
	1730	896.93	3.16				C/S 95 RPM
	1733	897.25	-	143	141	143	C/L C/S 105 RPM
	1757	900.41	-				C/S 70 RPM
	1800	900.69	-				
	1802	900.84	-				C/S 65 RPM
	1818	901.98					C/L 72 RPM
	1827	902.70		140	138	140	C/L C/S 80 RPM
	1830	902.93	4.48				20 GUNS & SCS DEPLOYED
	1843	903.89	/		138		C/L & C/S AS REQ. TO MAINTAIN 4. KTS
	1847	904.17	/				FIRST SHOT LINE 105
	1900	905.19	4.52				
	1930	907.56	4.74	C/L 130 140	138	PSC	C/S 84-85 RPM TM 64 KTS.
	1955	909.65		150	-		
	2000	909.90	4.68				
	2020			125			C/L RETURN TO LINE
	2030	912.31		C/L 137-14	14	PSC	RE ON LINE VL

R/V MAURICE EWING				FROM: CRISTOBAL PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
04/01	2030	912.31	4.82	V/C 137-144			V/S 85-90 RPM
	2100	914.63	4.64				
	2130	916.96	4.68				
	2200	919.30	4.68				
	2230	921.67	4.74				
	2238	922.33					C/S, V/S 80-85 RPM
	2300	924.00	4.66				
	2307	924.64					C/S, V/S 85-90 RPM
	2328	926.23					C/S V/S 80-85 RPM
	2330	926.35					
	2351	927.96					C/S V/S 85-90 RPM
4/02	0000	928.62	4.54				
	0030	930.94	4.64				
	0100	933.27	4.66				
	0130	935.62	4.82				C/L START TURN
	0138	936.35	—	215-220	V/C		FINISH C/L V/S 75-80 80-85
	0200	937.78	4.20				
	0230	939.88	4.20				
	0245	941.02	—				START C/L
	0300	941.95	4.14	V/C 310-320			0256 FINISH C/L V/S 70-75
	0330	944.00	4.10				
	0400	945.98	3.96				
	0430	947.96	3.96				
	0500	949.92	3.92				
	0530	951.87	3.90				
	0600	953.66	3.72				
	0630	955.43	3.54				
	0700	957.22	3.58				
	0730	959.02	3.60	V/C 310-320	138	= P6L	V/S
	0800	960.93	3.82				
	0837						END OF LINE
	0838			322	—	319	LAST SHOT 3-68 RPM
	0900	964.78	3.85				C/S 60 RPM
	0915						C/S 0 RPM
	0920	966.45		325	325	323	C/S 30 RPM



R/V MAURICE EWING				FROM: CRISTOBAL PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
07/02	0926	-	-	325	325	323	C/S 30 RPM
	0930	966.56	0.22				C/S 120 RPM
	0937	967.22		090	090	087	C/C
	0951	969.38		146	146	146	C/C
	1000	970.60	8.08				
	1005	971.43		149	148		C/C
	1030	975.06	4.92				
	1040	976.61					C/S 0 RPM
	1049	976.89					HYDRO IN WATER
	1056	977.07					HYDRO ON BOARD C/S 120 RPM
	1100	977.43	4.74				
	1105	978.16		152	152	152	C/C
	1114	979.90		155	152		C/C
	1200	984.01					
	1206	984.10		060		058	U/W 5/120 RPM
	1230	987.50					
	1248	989.80					H/T OBS # 23
	1336	—	—				OBS # 23 ON DECK
	1342	—	—	138	-	139	U/W 5/120 RPM
	1400	993.47	-				
	1430	998.14					
	1500	1002.84	1515	C/S	60 RPM		
	1530	1007.58	1520	C/S	165 RPM		
	1538			310°			C/C C/S 150 RPM
	1548						H/T
	1600	1011.47	/				
	1635	1012.28	/				OBS # 26 - VERTICAL STRMR A'BD
	1642	1012.35	/	215	220	215	U/W @ 120 RPM
	1700	1014.91					
	1718	1017.68					H/T
	1738	1018.45					OBS # 25 - A'BD
	1742	1018.54		255	255	255	U/W @ 150 RPM
	1800	1021.77	-				
	1830	1027.71	11.88				H/T 3nn from OBS # 1 FOR RELEASE
	1900	1029.06	-				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/2	1900	1029.06	—	1/2 ON STA. TO RECOVER OBS #1			
	2000	1031.35					
	2030	1033.97					
	2036				060		PROGRAM TO OBS #3 V/S 120
	2100	1036.62			HT		HT
	2130	1036.99					
	2141						ON SURFACE
	2200	1037.98					
	2230	1040.61					
	2300	1043.45					
4/03	0000	1045.66					
	0012						H/T - OBS #6
	0019						OBS #6 ON DECK
	0024	1047.58		050			V/W S/120 RPM
	0037						C/S 80 RPM
	0048	1050.30					H/T - OBS #7
	0059						OBS #7 ON DECK
	0106			058		058	V/W S/80 RPM
	0130	1052.96					
	<del>0136</del> 0220	1053.41					H/T STA #18
	0220						OBS #8 ON DECK
	0230	1054.30		050			V/W S/120 RPM
	0248						H/T
	0307						OBS #9 ON DECK
	0312	1057.53		058		057	V/W S/80 RPM
	0330	1059.08					
	0342	1060.18					H/T ON OBS #10
	0400	1060.68	—				
	0417	1060.89	—				OBS #10 ABD
	0418	1060.90	—	130	124	130	V/W @ 155 RPM; RAM SECURED
	0430	1062.56	—				
	0435	1063.52	—	125	124	125	9C
	0500	1068.33	11.54				
	0506	1069.48	—				PASS INSIDE 12nm <sup>~ 9:48:14</sup> <sub>~ 0850-52.5</sub>
	0530	1074.13	11.60				

R/V MAURICE EWING				FROM: BALBOA,			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA,			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/3	0530	1074.13	11.60	125	124	125	AS BEFORE AT 155 RPM
	0600	1080.94	11.62	124	124	124	1/2, 1/5 154 RPM
	0630	1085.76	11.64				
	0700	1091.48	11.44				
	0730	1097.16	11.36				
	0735	1098.	-	126	124	126	1/2
	0800	1102.98	11.64				
	0830	1108.56	11.16	122	124	122	C/C
	0900	1114.24	11.36				
	0907			065	065	065	C/C
	0925						V/C AVOID FISHING GEAR, CAPT. CALLED
	0943			052	052	052	STEADY
	1000	1125.68	11.44				
	1003			056	052	056	C/C
	1030	1130.63	7.9				
	1037			059	052	059	C/C
	1100	1138.43					
	1103	1138.45		055	050	055	C/C
	1129			050	050	050	C/C
	1130	1143.38					
	1200	1149.25	11.74				
	1225	54.26	-	230	230	231	C/C
	1230	1155.01	11.52				
	1247	1158.46	-	227	230	228	C/C
	1300	1160.80	11.88				
	1330	1166.50	11.4				
	1400	1172.21	11.42				
	1415	1175.05	-	054	054	052	C/C
	1430	1177.96	11.50				
	1432	78.48	-	057	054	055	C/C
	1441	80.23	-	044	041	042	C/C
	1500	1182.89	-				H/T OBS 53
	1544						LAUNCH OBS 53
	1548			044			V/W 3/045
	1600	84.14					

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS DEPLOYING VERTICAL STERN
4/3	1600	1184.14	—	044	—	044	1/2 WAS BEFORE AT 45 RPM
	1605	1184.40	—	044	X-ENG'S-		1/2 STREAMER DEPLOYED OVER STERN
	1630	1185.04	—				1/2 @ 65 RPM TH 1/2 KTS H <sub>2</sub> O - TO DEPLOY GUNS
	1730	1189.07	—		220		1/2 @ 1/3 76-82 - FIRST SHOT
	1800	1191.61	5.08 1/2 220-225		220	= PGC 1	1/2 1/3 78-80
	1830	1194.22	5.22				1/2 72-80 RPM
	1845	1195.56	—				START "TEARDROP" TURN TO STBD
	1900	1196.76	—				
	1924	1198.66	— 1/2 030-035	041	= PGC		FINISH TURN @ 1/3 76-82 TH 65.1 KTS
	1930	1199.30					
	2000	1201.91					
	2030	1204.56	5-3				COMMERCE TURN TO STB
	2100						
	2110		VE 220-230				COMPLETE TURN U/S 80-85
	2130	1209.41	4.85				
	2200	1211.85	4.88				U/S 85-90
	2207			VE 214-220			C/C
	2225	1214.41					COMMERCE TURN TO PORT
	2235						COMMERCE SWING TO STB
	2300	1216.87	5.02	V/C 040-050			COMPLETE TURN STRADY
	2330	1219.56	5.38				
	2350			052	052	050	C/S 90 RPM LAST SHOT
4/04	0000	1222.03					V/S 6-3 KTS
	0020						GUNS OUT OF H <sub>2</sub> O
	0027	23.39		225		227	C/C C/S 90 RPM
	0030	1223.62					
	0048	1225.31					H/T OBS #53
	0100	1225.53					OBS #53 ON BOARD
	0100						END OBS STATION + BEGIN
							STAND BY STATION)
	0400	1227.70					H/T
	0600	1228.75					H/T
	0800	1229.88					HT
	0830	1230.18					HT
	0900	1230.49					HT

R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/4	0930 <del>0930</del>	1230 .87					HT
	1000	1231.44					HT
	1030	1232.15					HT
	1100	1232.94					HT
	1130	1233.48					HT
	1200	1234.08					
	1230	1234.51					
	1300	1234.83					
	1318	1235.15	—	180	180	180	U/W 5/152 RPM
	1330	1237.14	9.95				
	1400	1243.01	11.74				
	1430	1248.91	11.80				
	1427	EXIT 12 NM LIMIT	—	L	09°	24.2' N	> 084.57.5 W
	1500	1254.77	11.72				
	1530	1260.58	11.62				1558-9L 125° PGL
	1600	1266.42	11.68	125	—	125	AS BEFORE @ 152 RPM
	1630	1272.17	—				
	1644	1275.90	—	160	160	160	9L
	1655	1276.99	—	286	286	286	9L
	1705	1278.85	—	318	318	318	9L
	1730	1283.71	—				
	1800	1289.61	11.80				
	1830	1295.18	11.14	274	274	274	9L
	1859	1300.68	—	346	346	346	9L
	1900	1300.85	11.34	346	346	346	9L
	1930	1306.43	11.16	350	350	350	9L
	1945 <del>2000</del>	1309.30	—	352	352	352	9L
	1954	1311.02	—				X-ENG & H/T ON OBS STA #27
	2000	1311.42	—				HT
	2030	1311.91					HT
	2100	1312.02					HT
	2130	1312.24					HT
	2200	1312.31					HT
	2230	1312.58					HT
	2300	1312.97					HT

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA, RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/4	2330	1313.54					HT
4/05	0000	1314.17					
	0054	SWITCH	TO	OBS	STA	#27	FROM AWAIT SCIENCE
	0100						LAUNCH OBS #27
	0106	1314.99		035			U/W 120 RPM
	0130	1318.22					
	0148						H/T
	0151						LAUNCH OBS #28
	0154	1320.40		027			U/W 9/120 RPM
	0200	1320.83					
	0236						H/T
	0239						LAUNCH OBS 31
	0242						U/W
	0248						H/T
	0257						LAUNCH OBS 32
	0300	1326.50					U/W
	0306						H/T
	0314						LAUNCH OBS 33
	0318	1327.20					U/W
	0324						H/T
	0330						LAUNCH OBS 34
	0330	1327.76					U/W
	0342						H/T
	0347						LAUNCH OBS 35
	0348	1328.40					U/W
	<del>0400</del>	<del>1344.07</del>					
	0400	1329.98	0401	LAUNCH #36			H/T AS BEFORE
	0402	1330.02					U/W
	0420	1331.32					H/T
	0431	1331.73					OBS #46 AWAY
	0432	1331.74					U/W
	0436	1332.03					H/T
	0442	1332.21					OBS #45 AWAY
	0443	1332.32					U/W
	0447	—					H/T

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/5	0453	1332.85					OBS #44 AWAY
	0454	1332.86					U/W
	0458	1333.21					H/T
	0508	1333.53					OBS #43 AWAY
	0509	1333.53					U/W
	0515	1333.97					H/T
	0519	1334.07					OBS #42 AWAY
	0520	1334.19					U/W
	0524	1334.44					H/T
	0540	1334.79					OBS #41 AWAY
	0541	1334.81					U/W
	0557	1336.90					H/T
	0605.5	1337.36					OBS #51 AWAY
	0606	1337.36					U/W
	0611	1337.68					H/T
	0618	—					OBS #52 AWAY
	0619	1337.96					U/W
	0625	—					H/T
	0637	1338.59					OBS #53 AWAY
	0638	1338.61					U/W
	0643	1338.95					H/T
	0654	1339.42					OBS #54 AWAY
	0654	1339.42					U/W
	0700	1339.85					H/T
	0706	1340.03					OBS #55 AWAY
	0706	1340.03					U/W
	0709	1340.32					H/T
	0715	1340.59					OBS #56 AWAY
	0716	1340.60					U/W
	0734	1342.90					H/T
	0742	1343.22					OBS #66 AWAY
	0743	1343.23					U/W
	0748	1344.02					H/T
	0805	1344.18					OBS #65 AWAY
	0806	1344.18					U/W

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/5	0800	1344.07	-				H/T AS BEFORE
	0805	1344.18					OBS #65 AWAY
	0806	1344.18					U/W
	0809	-					H/T
	0817	1344.77					OBS #64 AWAY
	0818	1344.79					U/W
	0821	-					H/T
	0824						OBS 63 AWAY
	0836						U/W
	0840						HT
	0851						OBS 62 AWAY
	0854						U/W
	0856						HT
	1109						OBS 61 AWAY
	0912						U/W
	0936						HT
	0954						OBS 71 AWAY
	0954	1349.48					U/W
	1000						HT
	1017						OBS 72 AWAY
	1018	1350.78					U/W
	1030						HT
	1046						OBS 73 AWAY
	1048	1351.51					U/W
	1054						H/T
	1107						OBS 74 AWAY
	1112	1352.20					U/W
	1130	1352.58					HT
	1136						HT
	1200	1352.89					
	1242						LAUNCH OBS 75
	1242	1353.33					U/W
	1248						H/T
	1256						LAUNCH OBS 76
	1300	1353.89					U/W



R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 9502				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/05	1300	1353.89	-	130		131	120 RPM
	1330	1358.17					
	1354						H/T
	1400						LAUNCH OBS 77
	1500	1362.41		253		254	V/W 5/120 RPM
	1530	1365.67	6.52				
	1540			260		262	C/C
	1600	1370.18	9.02				
	1630	1374.55	8.74				
	1634	1375.13	-	255	259	255	C/C
	1700	1378.92	-				
	1706	79.87	-				C/S 70 RPM
	1725	1381.52	-				C/S 25 RPM
	1730	1381.61	-				HEAVE TO
	1800	1381.94	-				
	1830	1382.29	-				
	1900	1382.70	-				
	1930	1383.15	-	030	030	029	4/W @ 70 RPM TMG 5 KTS
	1937	1383.52	-	025	030	024	C/C
	1944	1384.05	-				C/S 65 RPM TMG 4.7 KTS
	2000	1385.34	4.38				
	2030	1387.56	4.44	041	041		C/C
	2035			075	041		C/C
	2039	1388.31					FIRST SHOT 09-35. 390 085.02.034
	2051	1389.28					COMMENCE TURN TO STB
	2100	1389.92	4.32	125	135		COMPLETE TURN VS 80-85 RPM
	2130	1392.46	5.08	128	132		TURN-UP C/C
	2200	1394.93	4.94				
	2230	1397.56	5.26				
	2235	1398.10					C/S, VS 85-90 RPM
	2300	1400.24	5.36				
	2330	1403.05	5.62				
4/06	0000	1405.82	5.54				0015 V/S 80-85
	0030	08.43	5.22				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/06	0030	1408.43	5.22	V/L	128-135	V/S 80-85	GUNS + SCS
	0055	1410.48	—				START C/L
	0100	10.86	4.86				
	0104	1411.20	—	229		228	V/S 85-90 FINISH C/L
	0126	—	—				START TURN
	0136	13.84	—	V/L	305-310	V/S 95-100 RPM	FINISH C/L
	0200	1415.99	5.13				
	0230	1418.61	5.24	V/L	305-315	V/S 90-95	
	0300	1420.98	4.74				
	0330	1423.25	4.54				
	0338	ENTER 12 NM LIMIT				L 09° 27.9'	1084-54.9
	0400	1425.59	4.58				
	0430	1427.98	4.78				
	0500	1430.44	4.92				
	0530	1432.83	4.78				
	0532	1433.01	—				9/L 10°/MIN TO PORT
	0540.5	1433.70	—	226	229	226	FINISH TURN & STDY 9/L @ 92 RPM
	0543	1433.90	—	228	229	228	9/L
	0600	1435.40	—				
	0622	1437.52	—				9/L 10°/MIN TO PORT
	0639	1439.21	—	9/L 040-045	040	PGC-1°	FINISH TURN & 9/L 040-045 & 9/L 84-88 RPM
	0642	1439.48	—				1ST SHOT - LINE 201
	0700	1441.03	—				
	0730	1443.63	—	9/L 035-045	040.5	PGC-1°	9/L 82-88
	0800	1446.04	4.82				
	0830	1448.36	4.64				
	0900	1450.69	4.66				
	0930	1453.04	4.70				
	1000	1455.46	4.84				
	1024	—					COMMENCE TURN TO STD
	1045	—			V/L 220-225		COMPLETE TURN C/S VS 85-90 RPM
	1100	1460.66	5.2				
	1130	1463.45	5.58		V/L 217-223		C/L
	1200	1466.13	5.36				
	1230	1468.83	5.40				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE + C
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/06	1230	1468.83	5.40	217	223		85-90 RPM GUNJS + SCS
	1300	1471.59	5.52				
	1330	1474.15	5.12				
	1400	1476.78	5.26				
	1420	78.54	—				1/3 90-95 RPM
	1426	—	—				START C/L
	1450	—	—	1/2 040-050			FINISH C/L 80-85 RPM
	1500	1481.99	5.21				
	1530	1484.55	5.12				
	1600	1487.09	5.08				
	1630	1489.57	4.96				
	1700	1492.00	4.86				
	1730	1494.28	4.56				
	1800	1496.61	4.66				
	1831	1499.06	4.74				1/2 10/MIN TO JTD - 1/3 5.5 KTS
	1858	1501.33	—	1/2 215 225	220.5	PSC +20	FINISH TURN 1/2, 1/3 98-102
	1900	1501.49	—				
	1930	1504.23	5.48	1/2 220 225	220.5	PSC +20	0/2 213 @ 5.1 KTS
	2000	1506.86	5.26				C/S VS 100-105
	2030	1509.55	5.38				
	2040	1510.44					C/S VS 105-110 RPM
	<del>2100</del> 2050	1512.27					
	<del>2130</del> 2030	1514.94	5.39				
	2200	1517.71	5.54				
	2230	1520.40	5.38				
	2237						COMMENCE TURN TO STB
	2257	1522.96			1/2 030-035		COMPLETE TURN STRAY
	2300	1523.06	5.32				C/S V/S 85-90 RPM
	2305						C/S V/S 80-85 RPM
	2330	1525.48	4.84		1/2 033-039		
	2350						C/S V/S 85-90 RPM
4/07	0000	1527.82	4.68				
	0030	1530.28	4.92				
	0100	1532.66	4.76	1/2	035-045		
	0130	1535.05	4.78				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/07	0130	1535.05	4.78	V/L 035-045			V/S 85-90 <del>SSS</del> GUNJS + SCS
	0200	1537.41	4.72				
	0230	1539.71	4.60				
	0241	1540.58	—				START C/L
	0305			V/L 215-225			V/S 95-100 RPM
	0330	1544.94	5.23				
	0400	1547.66	5.42				
	0430	1550.39	5.46				
	0500	1553.24	5.70				
	0530	1556.08	5.68				
	0600	1558.88	5.60				
	0630	1561.75	5.74				
	0647	1563.30	—				ENDLINE # 215 - 1/2 TO STAD 1/6 5.5-6.0 hrs
	0706	1565.20	—				START LINE # 207 1st HOT
	0730	1567.13	—	V/L 037-040	040 <sup>5</sup>	PSC #10	V/S 82-86 RPM
	0800	1567.51	4.76				
	0830	1571.78	4.65				
	0900	1574.23	4.90				
	0930	1576.60	4.74				
	1000	1578.98	4.76				
	1030	1581.47	4.98				
	1040						C/S V/S 86-92 RPM
	1048	1583.04					COMMENCE TURN TO STB.
	1056	1583.92		125	125	—	STEADY
	1100						COMMENCE TURN TO PORT
	1108			V/L 037-043			STEADY 1/2 040
	1130	1586.89	5.42				
	1158	1589.56	—				START C/L
	1200	1589.74	5.70				
	1238	1593.29		V/L 208-219			FINISH C/L V/S 84-90 RPM
	1300	1594.94	5.20				
	1330	1597.27	5.56				V/S 90-95 RPM
	1400	1599.87	5.06				
	1430	1602.58	5.42				
	1500	1605.33	5.50				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/07	1500	1605.33	5.50	V/L 208-219			V/S 90-95 RPM / SCS + GUNS
	1530	1608.16	5.66				
	1600	1610.91	5.50				
	1630	1613.62	5.42				
	1700	1616.28	5.28				
	1730	1618.87	5.18				
	1800	1621.49	5.24				
	1830	1624.07	5.16				
	1900	1626.62	5.10				
	1930	1629.13	5.02				
	1953						END LINE # 217, COMMENCE TURN TO PORT
	2000	1632.69	5.12				
	2004						COMMENCE SWING TO STB
	2030	1639.58	5.78				
	2033			045 - 050	VC		COMPLETE TURN STEADY P/C 040
	2033						C/S V/S 88-93 RPM
	2100	1637.14	5.12				
	2130	1639.66	5.04				
	2200	1642.21	5.10				
	2230	1644.81	5.2				
	2253	1646.78					COMMENCE TURN TO PORT (S TURN)
	2300	1647.31					
	2302						COMMENCE SWING TO STB
	2310			037-040	VC		COMPLETE TURN STEADY BC 040
	2330	1649.72	4.82				
4/08	0000	1652.30	5.16				
	0030	1655.05	5.50				
	0045			V/L 040-050			
	0100	1657.75	5.40				
	0130	1660.41	5.32				
	0200	1662.97	5.12				
	0230	1665.32	4.70				
	0256	1667.47	-				START C/L
	0319	1669.40	-	V/L 215-225			FINISH C/L 85-90
	0330	1670.29	4.97	V/L 215-225			

R/V MAURICE EWING				FROM: PALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/08	0330	1670.29	4.97	✓/C 2	15-225		✓/S 85-90 RPM / GWS + SCS
	0343	71.20	-	✓/C 2	12-220		
	0400	1672.85	5.12				
	0430	1675.53	5.36				
	0500	1678.21	5.36				
	0530	1680.83	5.32				
	0600	1683.39	5.12				
	0630	1686.07	5.36				
	0657	1688.34	-				END LINE #219 - C/L TO PORT
	0720	1690.62	-				FINISH TURN - ✓/C 043-047° & ✓/S 90-94
	0728	1691.31	-				START LINE #229
	0730	1691.48	-				
	0800	1694.15	5.34				C/S, V/S 88-92 RPM
	0830	1696.72	5.14				
	0900	1699.22	5.0				
	0930	1701.70	4.96				
	1000	1704.24	5.08				
	1030	1706.79	5.10				C/S, V/S 80-85 RPM
	1100	1709.39	5.2				
	1108						COMMENCE TURN TO PORT.
	1130	1712.05	5.32		✓/C 2 15-220		COMPLETE TURN STEADY BE 220
							V/S - 85-90 RPM
	1200	1714.60	5.10				
	1230	17.09	4.98				
	1300	1719.75	5.32				
	1330	22.29	5.08				
	1400	1724.79	5.00				
	1430	27.42	5.20				
	1500	1730.03	5.22				
	1510	1730.92	-				START C/L
	1535	1733.25	-	✓/C	040-045		FINISH C/L ✓/S 085-090
	1600	1735.41	5.18				
	1630	1738.01	5.20				
	1700	1740.54	5.06				
	1730	1743.07	5.06				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/8	1730	1743.07	5.06	$\frac{1}{2}$ 045° 050°	040°	PSC -2°	$\frac{1}{2}$ 80-84 TMG LINE #231 @ $\geq 5.1$ KTS
	1800	1745.50	4.86				
	1830	1747.98	4.96				
	1900	1750.44	4.92				
	1913	1751.53	-				ENDLINE #231 - $\frac{1}{2}$ TO PORT @ 5.5 KTS
	1934	1753.45	-	$\frac{1}{2}$ 215° 220°	220.5°	PSC +2°	START LINE #223 @ $\frac{1}{2}$ 94-98
	2000	1755.80	5.36				
	2030	1758.72	5.24				
	2100	1760.96	5.08				
	2130	1763.60	5.28				
	<del>2200</del> 2200	1766.19	5.18				C/S, V/S 90-95 RPM
	2230	1768.75	5.12				
	2300	1771.29	5.08				
	2315	1772.29					COMMENCE TURN TO PORT
	2330	1773.96	5.34				
	2340	1774.87		079°	$\frac{1}{2}$ 45°		COMPLETE TURN STEADY B/C 040
	2340	L					C/S, V/S 80-85 $\frac{1}{2}$
4/09	0000	1776.47	5.02				
	0030	1778.96	4.98				
	0100	1781.41	4.90				
	0130	1783.99	5.16				
	0200	86.54	5.10				$\frac{1}{2}$ 83-88 RPM
	0230	89.10	5.12				
	0300	1791.69	5.18				
	0321						START C/C
	0330	94.31	5.24				
	0341	1795.30	-	$\frac{1}{2}$ 216°-224°			FINISH C/C $\frac{1}{2}$ 87-92 RPM
	0400	1796.89	5.18				
	0430	1799.33	4.88				
	0500	1802.95	5.24				
	0530	1804.66	5.42				
	0600	1807.31	5.30				
	0630	1809.96	5.30				
	0700	1812.58	5.24				
	0721.5	1840.35					ENDLINE #225 - $\frac{1}{2}$ TO PORT

$\frac{1}{2}$  5.5 KTS +

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/9	0744	1816.57	—				FINISH TURN
	0746	1816.76	—				START LINE #235
	0800	1817.97	4.84				
	0830	1820.56	5.18				
	0900	1823.15	5.18				
	0907						C/S, VS 85-90 RPM
	0930	1825.74	5.18				
	1000	1828.30	5.12				
	1030	1830.93	5.26				
	1100	1833.61	5.36				
	1129	1836.17					COMMENCE TURN TO PORT
	1130	1836.26					C/S 90 RPM
	1133	1836.61					C/S 95 RPM
	1146						C/S 90 RPM
	1150			✓ 219-235			COMPLETE TURN STARTING 090 V/S 88-93 RPM
	1200	1838.89	5.26				
	1230	41.36	4.94				
	1300	1843.83	4.94				
	1330	1846.35	5.04				
	1400	1848.89	5.08				
	1430	1851.41	5.04				
	1500	1853.93	5.04				
	1530	1856.45	5.04				START C/L
	1553			✓ C/L	037°	045°	FINISH C/L V/S 89-94
	1600	1859.16	5.42				
	1630	1861.86	5.40				
	1730	1867.25	5.39				
	1800	1869.87	5.24				
	1830	1872.44	5.14				
	1900	1874.92	4.96				
	1930	1877.52	5.20				
	1934 <sup>5</sup>	1877.95	—				END LINE 237 - C/L TO PORT 1/5 5.5+
	1957	1880. —	—	✓ 215- 220	220.5	215- 220	START LINE #228 - 1/5 88-92 RPM
	2000	1880.25	5.46				
	2030	1882.74	4.98				



R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/9	2030	1882.74	4.98	21	<sup>VE</sup> 5-220		88-92 RPM
	2100	1885.12	4.76				
	2130	1887.68	5.12				
	2200	1890.35	5.34				
	2230	1892.91	5.12				
	2300	1895.51	5.20				
	2330	1898.07	5.12				
	2338	1898.90					COMMENCE TURN TO PORT
	2358	1900.66	—	1/L	40-048		FINISH C/L V/S 81-86
4/10	0000	1900.73	5.32				
	0030	1903.05	4.64				
	0100	1905.46	4.82				V/S 86-91 RPM
	0130	1907.98	5.04				
	0200	1910.61	5.26				
	0230	1913.22	5.22				
	0300	1915.80	5.16				
	0330	1918.40	5.20				
	0352	—	—				C/S 65 RPM - 4 KTS
	0400	1920.87	4.94				C/S 72 RPM - 4 KTS
	0428	1922.83	—				C/L 10°/MIN TO PORT
	0447	1924.66	—				FINISH TURN
	0506	1926.38	—				C/L TO PORT TO REGAIN TRACK
	0519	1927.45	—	1/L <sup>212</sup> 218	220 <sup>5</sup>	PSC 420	C/L #226 V/S 88-92 RPM
	0529	1928.24	—				START LINE #226
	0530	1928.32	—				
	0600	1930.84	5.04				
	0630	1933.42	5.16				
	0640	1934.25	—				SHIFT TO PORT STEERING SYS.
	0700	1936.14	—			0650	C/L TO PORT FOR BUOYS
	0718	—	—				C/L 10°/MIN TO STD TO REGAIN TRACK
	0724	1938.20	—				C/L 10°/MIN TO PORT TO REGAIN TRACK
	0730	1938.65	—				C/L AS BEFORE
	0800	1941.27	5.24				
	0830	1943.88					
	0900	1946.44					

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
7/10	0900	1946.44	5.12		VC 212-218		S-88-92 RPM
	0916						COMMENCE TURN TO PORT
	0930	1949.03	5.18				
	0935	1949.61			VC 45-050		COMPLETE TURN STRADY 3/4 040
	1000	1951.73					
	1007						C.S. V/S 80-85 RPM
	1030	1954.30	5.14				
	1100	1956.81	5.02				
	1130	1959.32	5.02				
	1138	1961.93 <sup>M</sup>	5.22				V/S 85-90
	1200	1961.93	5.22				
	1230	1964.55	5.24				
	1300	1967.19	5.28				
	1320	68.97	-				START C/L
	1342	71.06	-	1/2	217-223		FINISH C/L V/S 89-94
	1400	1972.55	5.36				
	1430	1975.02	4.94	1/2	213-223		
	1500	1977.46	4.88				
	1530	1979.93	4.94				
	1600	1982.40	4.94				
	1630	1984.83	4.86				
	1700	1987.16	4.70				
	1725	1989.17	-				END LINE 224 - 1/2 TO PORT 1/5 S.S. START
	1745	1991.11	-	1/2 040 050	040.5	PGC -20	START LINE 232 - 1/5 84-88 RPM
	1800	1992.52	-				
	1830	1995.33	5.02				
	1900	1998.15	5.66				
	1930	2000.78	5.26				
	2000	2003.34	5.12				
	2030	2005.85	5.02				
	2100	2008.41	5.12				
	2125						COMMENCE TURN TO PORT
	2130	2010.92					
	2149	2012		219	VC -224		COMPLETE TURN C/SVS 88-93
	2200	2013.63					

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/10	2200	2013.63	5.42	219	VC - 224		V/S 88-93 RPM GUNDS + SCS
	2230	2016.24	5.22				
	2300	2018.71	4.94				
	2330	2021.37	5.32				
4/11	0000	2023.76	4.78				
	0030	26.29	5.06				
	0100	2028.82	5.06				
	0130	31.32	5.00				
	0131						START C/L
	0152	33.34	—	V/C	035-042		FINISH C/L V/S 81-88 RPM
	0200	2033.99	5.34				
	0230	36.55	5.12				
	0252	38.46	—	V/C	035°-045°		V/S 85-90 RPM
	0300	2039.17	5.24				
	0330	2042.03	5.72				
	0400	2044.75	5.44				
	0430	2047.44	5.38				
	0500	2050.02	5.16				
	0530	2052.65	5.26				
	0534	2053.00	—	4/212-220			E.O.L. #230-1/2 TO PORT 1/6 5.5 KTS
	0558.5	2055.29	—				START LINE #220, 1/6 98-92
	0600	2055.53	—	ALSO @ 0615 RPT SOUNDED ON 160.785 OBH SIGHTED ON F/U IRAZU			0620-1/6 180 TO ROUND BUOYS. ACK BON LINE, AS BEFORE
	0644	2059.25	—	IN POS: 09-40.8 N 084-52.5 W			
	0700	2060.62	—				
	0714	—					R. BOAT LAUNCHED & ALONGSIDE
	0719	—					OBH TECH & OBSV. BOARDS; BOAT AWAY
	0730	2063.23	5.22	V/C 212 220	220.5 +20	PGC +20	8 1/6 86-90
	0800	2065.84	5.22				
	0830	2068.42	5.16				
	0900	2070.99	5.14				
	0930	2073.54	5.10				
	0947	2075.02					COMMENCE TURN TO STD
	1000	2076.03	4.98				
	1011	2077.41			VC 043-048		COMPLETE TURN STAD B/C 040 V/S 88-93
	1020						FIRE + EMERGENCY DRILL

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/11	1030	2078.73	5.28		V/C 039-014		3-88-93 RPM
	1100	2081.37	5.28				
	1130	2083.99	5.24				
	1200	2086.58	5.18				
	1230	2089.19	5.22				
	1300	2091.79	5.20				
	1330	2094.36	5.14				
	1355	96.52	—				START C/L
	<sup>ML</sup> 1415	98.23	—	1/2	215-225°		FINISH C/L 1/2 97-96 RPM
	1430	2099.51	5.15				
	1500	2101.99	4.96				
	1530	2104.50	5.02				
	1600	2106.96	4.92				
	1630	2109.43	4.94				
	1700	2111.85	4.84				
	1730	2114.27	4.84				
	1757	2116.52	—				EOE # 218-9/2 TO STBD, 9/2 5.8 KTS
	1800	2116.81	5.08				
	1820	2118.60	—	1/2 040 1/2 045	040.5° = P/L		BOL # 208- 1/2 84-90 RPM
	1830	2119.51	—				
	1900	2122.20	—				
	1930	2124.84	5.28				
	2000	2127.44	5.20				
	2030	2130.00	5.12				
	2052						C/S, V/S 80-85 RPM
	2100	2132.48	4.96				
	2130	2134.92	4.88				
	2200	2137.37	7.90				COMMENCE TURN TO STB
	2221	2139.54			V/C 217-222		C-S V/S 85-90 RPM COMPLETE TURN STRADY BC 220
	2230	2139.96	5.18				
	2300	2142.52	5.12				
	2313						90-93 C/S V/S 80-85 RPM DP
	2330	2145.03	5.02				
4/12	0000	2147.66					
	0100	2152.96					

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/12	0130	2155.59		1/2	17-223		V/S 90-95 // SCS + GUNDS
	0202						START TURN
	0225			1/2	035-045		FINISH C/L V/S 85-90 RPM
	0300	2163.32	5.15				
	0330	2165.80	4.96				
	0400	2168.29	4.98				
	0430	2170.80	5.02				
	0500	2173.37	5.14				
	0530	2175.92	5.10				
	0600	2178.47	5.10				
	0606	2179.00	-				EOL # 206-9/2 TO STBD-9/5 5.5 + HTS
	0624	2180.84	-				BOL # 214-1/2 218-220° 1/5 86-90 RPM
	0630	2181.34	-				
	0700	2183.98	5.28				
	0730	2186.60	5.24				
	0800	2189.29	5.38				
	0830	2191.99	5.4				
	0900	2194.70	5.42				
	0930	2197.47	5.54				
	1000	2200.02	5.1				
	1006	2200.54					COMMENCE TURN TO STB. C/S 92 RPM
	1028	2202.61		1/2	043-047		COMPLETE TURN STRADY A/C 040 V/S 85-90
	1030	2202.70	5.36				
	1100	2205.29	5.18				
	1130	2207.75	4.92				
	1200	2210.17	4.84				
	1230	2212.57	4.80				
	1300	2214.94	4.74				
	1330	2217.40	4.92				
	1400	2219.88	4.96				
	1411						START C/L
	1432	2222.67	-	1/2	215-225		FINISH C/L V/S 89-94
	1530 1500 ml	2227.72	5.23				
	1600	2230.36	5.28				
	1630	2232.95	5.18				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS 20 GUNS & 50'S OUT
4/12	1630	2232.95	5.18	$\frac{1}{2}$ 215 225	220.5	PSC +2.0	$\frac{1}{4}$ W, $\frac{1}{8}$ B, $\frac{1}{4}$ L #212 & $\frac{1}{5}$ 89-94 TMG 35, 1 HTS
	1700	2235.42	4.94				
	1730	2237.94	5.04				
	1806	2240.90	-				$\frac{1}{4}$ L TO STBD 15°/MIN FOR BUOYS
	1810	—	-	275			STEADY
	1815	2241.61	-				$\frac{1}{4}$ L 10°/MIN TO STBD
	1825	2242.54	-	$\frac{1}{2}$ 040- 045	040.5	PSC -1.0	F/T, $\frac{1}{4}$ L #203 - $\frac{1}{5}$ 84-90 RPM
	1830	2242.96	-				
	1900	2245.66	5.40				
	1930	2248.32	5.32				
	2000	2250.92	5.2				
	2030	2253.46	5.08				
	2100	2255.89	4.86				
	2130	2258.32	4.86				
	2200	2260.83	5.02				COMMENCE TURN TO STB C/S 87 RPM
	2211						STRADY 140
	2218						C/C 150
	2220						C/C 160
	2227						COMMENCE TURN TO STB
	2230	2263.42	5.18				
	2245				$\frac{1}{2}$ 215-220		STRADY 220 C/S 90-95 LINE #220
	2300	2266.15	5.46				
	2313	2267.48					COMMENCE TURN TO PORT
	2330	2268.86	5.42				
	2335				$\frac{1}{2}$ 215-220		COMPLETE TURN STRADY 220 BC
4/13	0000	2271.52	5.32				
	0030	74.21	5.38				
	0042	75.29	-				START C/C
	0104	77.18	-	$\frac{1}{2}$ 038-045			FINISH C/C $\frac{1}{5}$ 085-90
	0104	2277.19	-				
	0130	79.39	5.18				
	0200	2281.96	5.14				
	0230	2284.59	5.26				
	0234	—	—				START $\frac{1}{2}$ L
	0244	2285.75	—	310	310	310	FINISH C/C $\frac{1}{5}$ 88-93

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/13	0244	2285.75	5.26	310	310	310	V/S 88-93 RPM X SCS + GUNS
	0300	87.10	5.02				
	0330	2289.67	5.14				
	0331	89.82	—				START C/C
	0358	—	—				FINISH C/C & START LINE # 242
	0400	2292.36	—	V/L 125° 130°	130.5°	PSC + 20	V/S 82-88 RPM
	0430	2294.82	4.92				
	0500	2297.36	5.08				
	0530	2300.02	5.32				
	0600	2302.54	5.04				
	0630	2305.12	5.16				
	0700	2307.84	5.44				
	0730	2310.50	5.32				
	0754						COMMENCE TURN TO STB
	0800	2313.22	5.44				
	0802			220	220	221	STEADY 220 C/S 90 RPM
	0820						COMMENCE TURN TO STB
	0828	2315.93		310	V/L 315		V/S 82-87 COMPLETE TURN STEADY P/C 310
	0830	2316.03	5.62				
	0900	2318.68	5.30				
	0930	2321.40	5.44				
	1000	2324.08					
	1003						C/S V/S 80-85 RPM
	1030	2326.77	5.38				
	1100	2329.34	5.14				
	1130	2331.91	5.14				
	1141						C/S V/S 78-83 RPM
	1200	2334.40	4.98				
	1300	39.78	5.38				1236 START C/C
	1313	—	—	V/L 127-134			FINISH C/C V/S 88-93 RPM
	1330	42.32	5.20				
	1400	2344.72	4.80				
	1430	47.08	4.72	V/L 120-130			V/S 90-95 RPM
	1500	2349.49	4.82				
	1530	2352.02	5.06				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/13	1530	2352.02	5.06	1/2	120°-130°		1/5 90-95 RPM / SCS + GUNS
	1539	52.83	-				1/5 95-100 RPM
	1600	2354.65	5.26				
	1630	2357.36	5.42				
	1700	2360.08		220	START RECOVER SCS 1 GUNS		STOP SHOOTING C/ 1/5 80 RPM
	1730	2362.86					1/5 40 RPM
	1737	2363.18					ALL GEAR ABD
	1748	2363.60		150	-		1/2 1/5 TMG 60 KTS
	1753	2363.99		120	-		1/2 1/5
	1800	2364.73	-	320	319	319°	1/2 1/5 120 RPM
	1830	2369.40	9.34				
	1900	2374.26	9.72				
	1910	2375.92	-	295	297	295	PASS INSIDE 12nm FROM LAND 1/2
	1930	2379.23					
	1940	2381.02					X-ENG'S
	1948	2381.51					H/T ON OBH STA #44
	2000	2382.10					
	2010						#44 ON BOARD
	2012			204	204		W/W 120 RPM
	2030	2383.99					
	2100	2385.38					ON DECK OAS # 35
	2106						PROCEED TO OAS #33
	2130	2384.66			HT		
	2200	2387.01					
	2206						W/W FOR OAS # 31
	2212				HT		HT OAS # 31
	2220	2387.59					OAS # 31 ON DECK
	2230	2387.67					
	2254						W/W 120 90 RPM
	2300	2388.26					
	2306				HT		OAS # 32
	2316						OAS # 32 ON DECK
	2330	2388.93			HT		
4/14	0000	2389.65					
	0021						OAS #34 ON DECK



R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/14	0024	2390.22	—				U/W
	0042						H/T
	<del>0124</del>	ML					<del>U/W NO OBS #36 ML</del>
	0142	2392.34					U/W NO OBS #36
	0200	2394.35					
	0206	95.02					H/T
	0223						OBS #46 ON DECK
	0230	2395.70					U/W
	0242	96.35					—
	0300	2398.42					H/T
	0312	98.76					U/W 0309 OBS #36 ON DECK
	0330						H/T
	0340						OBS 45 ON DECK
	0342	2401.71					U/W
	0358	2403.01		000	—		U/W
	0400	2403.10					H/T
	0426	2403.90					#43 ON DECK
	0430	2403.96					U/W 0500-H/T
	0514	2405.60					#42 ON DECK
	0518	2405.64					U/W - 0600 H/T
	0623	2410.81					OBS #51 A'BD - HYDROPHORE IN
	0630	2410.90					HYDROPH. A'BD U/W
	0642	2411.64					H/T - HYDROPH. OVER
	0658	2412.27					OBS #52 - A'BD
	0700	2412.30					U/W
	0712	2414.25					H/T
	0730	2414.69					OBS #41 A'BD & U/W
	0800	2418.28					H/T ON STA OBS #55
	0802						HYDRO IN WATER
	0804						HYDRO ON DECK
	0818						OBS #55 ON DECK
	0824	2419.05		050	050	048	U/W C/S 90 RPM FOR OBS #66
	0830	2419.29					
	0854	2421.81			HT		FOR OBS #66
	0900	2421.93					HYDROPHORE IN WATER

R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALIDERA COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
7/13	0922	2422.34					OBS #66 ON DECK
	0930	2422.40			323		W/W 9-60 RPM
	0942	2423.39			HT		OBS #63
	1000	2423.91					
	<del>1012</del> 1024			320	320		W/W 9-60 RPM
	1024				HT		
	1032						HYDROPHONE IN
	1033						HYDROPHONE OUT
	1035						OBS #61 SURFACE
	1100	2425.57					OBS #61 ON DECK
	1130	2427.88					
	1136	2428.72			HT		
	1145	2428.91					HYDROPHONE IN
	1200	2429.23					HYDROPHONE OUT
	1204	-	-				OBS #74 ON DECK
	1212	2429.45	-	220			W/W 80 RPM
	1230	31.17					
	1300	2434.28					
	1312	2435.10	-				H/T - AWAIT SCIENCE
	1500	2436.55					
	1600	2437.34					
	1808	2440.18					OBS #53 A'BD
	1824	2440.34					W/W
	1854	2441.52					H/T
	1915	2441.40					OBS #54 A'BD
	1918	2441.96					W/W
	2000	2443.62					
	2016						OBS #56 ON DECK
	2018			034	034		W/W 9-60 RPM
	2030	2444.77					
	2054				HT		HT OBS #65
	2100	2446.96					
	2106						OBS #65 ON SURFACE
	2118						OBS #65 ON DECK
	2030	2447.46			HT		OBS #64

R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE
CRUISE & LEG # 95-02				TO: CALDRA COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/13	2130	2447.46			HT		OBS #64
	2158						OBS #64 ON DECK SURFACE
	2213				HT		OBS #64 ON DECK, PROCEED TO #62
	2230	2448.18			HT		OBS #62
	2300	2448.75					
	2302						OBS #62 SURFACE
	2318						OBS #62 ON DECK
	2324			031	031	029	PROCEED TO OBS #71 3-60 RPM
	2330	2449.39					
	2354				HT		ON OBS STA #71
4/14	0000	2451.97					
	0027						OBS 71 ON DECK
	0030	2452.56					U/W
	0054	54.40					H/T
	0112						OBS 73 ON DECK
	0118						U/W
	0130	2455.46					
	0148	56.41					H/T
	0212						OBS 75 ON DECK
	0218	2456.84					U/W
	0230	57.40					H/T
	0300	57.66					
	0324						OBS 76 ON DECK
	0330	2458.48		130	130	131	U/W 120 RPM
	0347	61.26		125	130	126	C/L
	0400	2463.13					0436- H/T
	0442	2463.41	<del>0448</del>				OBS #77 A'BD
↻	0500	2467.87	-				
LATE	0448	2463.45	-	250	251	251	U/W @ 120 RPM
	0530	2472.46	9.18				
	0533	2472.96	-	253	253	254	C/L
	0540	2474.05	-				C/L 100 RPM
	0600	2476.56	8.20				
	0606	2477.29	-				C/L 90 RPM
	0630	2479.95	6.78				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
PAS DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS NO GEAR OUT
4/15	0630	2479.95	6.78	253	253	255	1/2, AS BEFORE @ 90 RPM
	0700	2483.37	6.84				
	0706	2484.08	-	200	-	-	1/2
	0715	2485.16	-	160	-		1/2
	0718	2485.53	-	090	-		1/2
	0722	2485.95	-	000	-		1/2
	0730	2486.99	-				H/T
	0750	2487.49	-				OBS #28 A'BD
	0800	2487.69		220	220	218	c/c 90 RPM
	0806	2487.72		225	225	223	c/c
	0830	2491.17	6.96				
	0848				HT		OBS STA # 27 21
	0855						OBS #27 SURFACE
	0903						OBS #27 ON DECK
	0906			106	106	106	u/w FOR WPT 100 C/S 140 RPM
	0930	2496.94					
	0934	2497.82		108	106	108	c/c
	1000	2502.44	11.0				
	1003	2503.06		106	106	106	c/c
	1030	2507.85	10.82				
	1100	2513.34	10.98				
	1130	2518.72	10.76				
	1136	2519.99	-	103	106	103	c/c
	1200	2524.16	10.88				
	1230	2529.60	10.88				
	1233	2530.03	-	093	-	094	1/2
	1245	32.20	-	105	106	107	c/c
	1300	2534.90	10.60				
	1330	40.24	10.68				
	1333	40.91	-	114	106	117	c/c
	1400	2545.75	11.02				
	1430	2551.34	11.18	106	106	108	c/c
	1500	2556.86	11.04				
	1527	62.10	-	214	214		c/c
	1530	2562.32	10.92				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS NO GEAR DEPLOYED
4/15	1600	2567.69	10.72	214	214	217	@140 RPM AS BEFORE
	1630	2573.04	10.70				
	1635	2573.94	-	220	219	222	9/16
	1652	2576.95	-				9/16 90 RPM
	1700	2577.85	-				
	1716	2579.63	-	035	034	033	9/16
	1730	2581.30	-				
	1800	2585.02	7.44				
	1807	2585.87	-	027	032	025	9/16
	1830	2587.56		023			9/16
	1900	2591.07		050	048	050	9/16
	1930	2594.65					
	1940	2595.85		044	045	044	9/16
	1954	2597.95					H/T
	2000	2597.22					
	2030	2597.43					
	2100	2597.59					
	2130	2597.76					
	2200	2598.00					
	2230	2598.22					
	2300	2598.57					
	2330	2598.85					
4/16	0000	2599.21					
	0100	2599.84					
	0200	2600.83					
	0300	2602.74					
	0400	2603.20	0.46				
	0643.4	2605.11	-				OBH #100 LAUNCHED
	0648	2605.23	-	120	123	120	4/W @ 120 RPM
	0700	2606.94	-				
	0730	2611.48	9.08				
	0800	2616.10	9.24				
	0830				HT		
	0850						LAUNCH OBS # 99
	0854			343	343		PROCEED TO OBS # 97 C/S 120 RPM

R/V MAURICE EWING				FROM: BARBOA			TIME ZONE
CRUISE & LEG # 95-02				TO: CALDERA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/16	0900			345	345	346	CIC
	0930	2626.85					
	1000	2631.44					
	1012				H		HT OBS # 97
	1022						LAUNCH # 97
	1034				201		PROCEED TO OBS # 95 8-120 RPM
	1030	2634.38					
	1031						CIC 197
	1042						HT OBS # 95
	1054						LAUNCH OBS # 95
	1100				200		PROCEED TO OBS # 93 8-90
	1114				HT		OBS # 93
	1129						LAUNCH OBS # 93
	1130				200		PROCEED OBS # 91 8-120
	1200	2643.39					
	1212						H/T
	1216						LAUNCH OBS 91
	1218						U/W
	1230	2646.59					
	1254						H/T
	1259						LAUNCH OBS 89
	1300	2650.23					U/W
	1330	2654.38					
	1336						H/T
	1343						LAUNCH OBS 87
	1348	2655.80					U/W
	1400	2657.68					
	1424						H/T
	1426						LAUNCH OBS 85
	1430	2660.99					U/W
	1500	2665.24					
	<del>1512</del> 1512						H/T
	1517						FLOAT IN WATER
	1525						LAUNCH OBS 83
	1530	2666.49					U/W

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
<del>4/16</del> 4/16	1530	2666.49		204	204	207	120 RPM
	1542	EXIT 12 NM LIMIT		L	08°	36.2°N	7084 04.3' W
	1600	2671.00					
	1602	-					H/T
	1614	-					OBS #81 AWAY
	1617	-		203	203	205	4/W @ 120 RPM
	1700	2676.47					
	1724	2682.27					H/T
	1732	2682.64					OBS #78 AWAY
	1733	2682.65			023		4/W @ 120 RPM
	1800	2686.55					
	1807	2687.67					H/T
	1817	2688.17					OBS #79 AWAY
	1819	2688.19			023		4/W @ 120 RPM
	1835	2690.51					H/T
	1840	2690.82					OBS #80 AWAY
	1841	2690.85			023		4/W @ 120
	1914	2695.95					H/T
	1919	2696.19					OBS #82 AWAY
	1920	2696.22			023		4/W
	1954						HT
	2005						LAUNCH #84
	2006				022		PROGRAM TO 86 S-120
	2030	2704.81					
	2042						HT OBS #86
	2058						LAUNCH OBS #86
	2100				019		4/W TO OBS #88
	2130	2711.36					
	2136				HT		OBS #88
	2146						LAUNCH OBS #88
	2148				019		4/W TO OBS #90 S-120
	2200	2714.54					
	2224				HT		OBS #90
	2234						LAUNCH OBS #90
	2236				019		4/W FOR OBS #92 S-120 RPM

R/V MAURICE EWING				FROM: BARBOA PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/16	2236				019		u/w FOR OBS #92 S-120 RPM
	2300	2721.86					
	2312				HT		HT OBS #92
	2323						LAUNCH OBS #92
	2324				019		u/w FOR OBS #94 S-120
	2330	2727.57					
4/17	0000	2728.21					
	0006						u/w
	0024						H/T
	0029						LAUNCH OBS 96
	0030						u/w
	0048						H/T
	0057						LAUNCH OBS 98
	0100			274		274	u/w Sp/120 RPM
	0130	2737.48	—				
	0133	37.88	—	278	279	278	c/k
	0200	2742.10	9.24				
	0230	2746.71	9.22				
	0300	2751.59	9.76				
	0324	55.54	—				c/s 50 RPM
	0329	55.88	—	303		303	c/k
	0330	2755.93	8.68		0346-96		Williamson, Port to Stbd
	0400	2757.41	—	123	123	125	
	0404	2757.60	—				4s 60 RPM
	0408	2757.84	—				4s 70 RPM
	0416	2758.45	—				4s 65 RPM
	0430	2759.44	3.68	121	123	122	4c
	0500	2761.76	4.64	123	123	125	4c - BEGIN DEPLOYING GUNS
	0509	2762.43	—	126	123	128	4c
	0520	2763.27	—	130	124	132	4c
	0530	2764.07	4.62				4s 4s TMG 5.0 KTS
	0545	2765.35	—		123		4c AS REQUIRED TMG LINE #303
	0600	2766.41	4.68	1250 1300	123	123	WP #804 303 - 1st SHOT 4s TMG 4.5 KTS
	0620	2767.92	0608	- SHOTS STOP			4s MIN. 4.0 SPS FOR GUN'S SHOTS
	0625	2768.29					4s 4s TMG 4.0 KTS



R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS 20 GUNS & SCS DEPLOYED
4/17	0630	2768 .64	1/2	1250 1300	123	P66 +20	9/4 1/2 1/2 76-80 TMG 4.0 KTS
	0656	2770 .35	-				SHIFT TO STBD STR'N 65%.
	0700	2770.64	4.00				
	0730	2772.68	4.08	120 130	123	P66 +20	1/2 74-80 TMG 4.0 KTS
	0800	2774.73	4.1				
	0830	2776.78	4.1				
	0900	2778.79	4.02				
	0930	2780.84	4.10				
	1000	2782.80	3.92				C/S VS 70-75 RPM
	1030	2784.78	3.96				
	1100	2786.75	3.94				
	1110	2787.43					C/S, VS 72-78 RPM
	1130	2788.75	4.0				
	1200	2790.79	4.08				
	1230	92.79	4.00				
	1238	93.32	-				START C/L
	1254	94.47	-	332	332	330	FINISH C/L 1/2 80-85
	1300	2794.97	4.36				
	1315	96.06	-	329	332	327	C/L
	1330	97.24	4.54				
	1400	2799.57	4.66				
	1428	2801.79	-	331	332	329	C/L
	1430	2801.89	4.64				
	1500	2804.23	4.68				
	1530	2806.58	4.70				
	1533	06.79	-	335	332	333	C/L
	1600	2808.88	4.60				
	1605	2809.26	-	334	333	332	9/4, 1/2 TMG 5.1 KTS
	1630	2811.41	5.06				
	1634	2811.75	-	332	330	330	9/4
	1646	2812.73	-				9/4 10 MIN TO STBD 1/2 TMG 4.5 KTS
	1712	2814.70	-	195 205	203	P66 +10	FINISH TURN C/L 1/2 72 RPM
	1730	2815.87	-				
	1800	2817.79	3.84				
	1830	2819.72	3.86				

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE 46
CRUISE & LEG # 95-02				TO: GALDERA, COSTA RICA			
1995 DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS 20 GUNSA SCS DEPLOYED
4/17	1830	2819.72	3.86 $\frac{1}{2}$	195-205	203	PSC +10	1574-84 TMC 4.0 KTS ALONG LINE #301
	1900	2821.68	3.92				
	1930	2823.73	4.10				
	2000	2825.70	3.94				
	2100	2829.65	3.95				
	2130	2831.67	4.04				
	2200	2833.63	3.92				
	2230	2835.63	4.0				
	2300	2837.66	4.06	205-215	VC		C/C
	2330	2839.74	4.16				
4/18	0000	2841.67	3.86				
	0030	43.68	4.02				
	0100	2845.72	4.08				
	0130	47.70	3.96				
	0200	2849.61	3.82				0213 EXIT 12 NM LIMIT
	0230	51.47	3.78				L 08° 36.2' $\lambda$ 084° 04.3'
	0300	2853.40	3.86				
	0330	2855.40	4.00				
	0400	2857.37	3.96				
	0430	2859.26	3.82				
	0500	2861.28	4.04				
	0530	2863.35	4.14				
	0600	2865.37	4.04				
	0630	2867.29	3.84				
	0700	2869.11	3.64				
	0716	2870.05	-				9/15° MIN TO PORT
	0734	2870.26	-	315			STEADY
	0736	2871.40	-				9/10° MIN TO STBD
	0745	2872.13	-	9/015° 9/025°	023		F/T-BEGIN LINE #302-1580-84
	0800	2873.36	4.25				
	0830	2875.59	4.46				
	0900	2877.86	4.57				
	0930	2880.00	4.48				
	1000	2882.14	4.28				
	1013	2883.20		012-015	VC		C/S VS 78-82 NM

R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/18	1030	2884.32	4.36		023		V/S 78-82, VC 012-015
	1100	2886.47	4.30				
	1130	2888.67	4.4				
	1135	2889.27			023		C/C, VC 015-020 PGC
	1200	2890.89	4.41				
	1230	2893.09	4.40				
	1235			ENTER 12 NM Limit			
	1300	2895.19	4.20				L 08-36.4 X 0840 4.2
	1330	2897.29	4.20				
	1400	2899.47	4.36				
	1430	2901.60	4.26				
	1500	2903.63	4.06				
	1530	2905.60	3.94				
	1600	2907.56	3.92				
	1630	2909.55	3.98				
	1700	2911.55	4.00				
	1730	2913.52	3.94				
	1800	2915.60	4.16				
	1830	2917.61	4.02				
	1900	2919.67	4.12				
	1930	2921.66	3.98	16 020° 030°	023	16 010°	16 72-78
	2000	2923.72	4.12				
	2030	2925.81	4.18				
	2100	2927.82					
	2130	2929.80	3.96				
	2136						COMMENCE TURN TO PORT LAST SHOT, C/S 72 RPM
	2150			255	255	255	COMPLETE TURN S-60 RPM
	2200	2931.58	3.56				
	2207	2932.46		203	203	203	ALL GEAR ABOARD C/C
	2230	2933.51	3.86				
	2300	2935.40	3.78	112	112	112	C/C
	2330	2937.62					
	2331	2937.77	4.44	022	022	022	C/C 022
4/19	0000	2940.20					H/T

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/19	0000	2940.20					H/T
	0008						OBS #98 ABD
	0012						U/W
	0030	2942.57					
	0042						H/T
	0110						OBS #96 ABD
	0112						U/W
	0142						H/T
	0224						U/W - OBS #94 DID NOT SURFACE
	0254						H/T
	0304						OBS #92 ON DECK
	0306						U/W
	0330	2954.87					
	0400	2957.85					
	041	2958.39					OBS #90 A'BD
	0418	2958.41					U/W
	0448	2962.82					H/T
	0506	2963.73					OBS #88 A'BD & U/W
	0524	2965.97					H/T
	0542	2966.62					OBS #89 A'BD & U/W
	0600	2969.01					
	0615	2971.34					H/T
	0638	2972.19					OBS #91 A'BD
	0639	2972.22					U/W
	0733	2980.04					H/T
	0755	2980.64					OBS #99 A'BD
	0757	2980.68					U/W
	0800	2980.03					
	0830	2985.62					
	0848	2988.94			HT		OBS #93
	0856						HYDRO IN
	0857						HYDRO OUT
	0900	2989.23					
	0909						OBS #93 ON DECK
	0912			022	022	022	U/W 5-120 RPM

R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/19	0930	2990.91			HT		OBS # 95
	0935						HYDROPHONE IN
	0936						HYDROPHONE OUT
	0937						OBS # 95 SURFACE
	0948						OBS # 95 ON DECK
	0954			022	022	022	PROCEED TO OBS # 97 S-120
	1000	2993.12					
	1013				HT		OBS # 97
	1016						HYDROPHONE IN
	1017						HYDROPHONE OUT
	1018						OBS # 97 SURFACE
	1024						OBS # 97 ON DECK
	1030	2995.17		247	247	247	U/W TO OBS 100 S-120
	1100	2999.13					
	1112	3001.14		250	250	250	C/L
	1114			252	252	252	C/L
	1130	3003.74					
	1136				HT		OBS # 100
	1200	3005.52					
	1201						OBS # 100 ON DECK
	1206	3005.63	-	243	243	243	U/W SP / 90 RPM
	1230	08.37	6.85				
	1300	3011.89	7.04				
	1302	12.15	-	241	243	242	C/L
	1330	15.33	6.86				
	1400	3018.65	6.70				
	1436						H/T OBS # 103
	1509						LAUNCH OBS # 103
	1512			117	120	117	U/W 120 RPM
	1530	3024.70					
	1600	3029.39	9.38				
	1624	3032.82	-				H/T
	1629	3032.90	-				OBS # 102 AWAY
	1630	3032.91	-	120	120	122	U/W @ 120 RPM
	1652	3036.01					INSIDE 12nm - ALL DEPTS NOTIFIED

L 08-50.473  
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R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
PPS DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS NO GEAR DEPLOYED
4/19	1700	3037.27	-	120	120	122	@ 120 RPM
	1730	3041.79	9.04				
	1735	3042.52	-	126	124	128	4L
	1758	3046.06	-				H/T
	1800	3046.25	-				-
	1803	3046.30	-				OBS # 101 - AWAY
	1804	3046.33	-	273	273	275	4/W
	1830	3049.63	-				
	1848	3052.04	-				H/T
	1924	3052.53	-				OBS # 86 ABD 4 4/W
	1942	3054.80					H/T
	2000	3055.29					
	2003						OBS # 85 ABOARD
	2018			202	202	202	4/W OBS # 84 S-60 RPM
	2025						C/S 120 RPM
	2030	3056.09					
	2048				HT		FOR OBS # 84
	2053						OBS # 84 SURFACE
	2105						OBS # 84 ON DRILL
	2106			202	202	202	4/W S-120 RPM FOR OBS # 87
	2124				HT		OBS # 83
	2130	3061.51					
	2131						HYDROPHONE IN
	2132						HYDROPHONE OUT
	2134						OBS # 83 SURFACE
	2157						OBS # 83 ON DRILL
	2200	3062.00		202	202	202	4/W FOR OBS # 82 S-60 RPM
	2230	3063.60					
	2242				HT		FOR OBS # 82
	2258						OBS # 82 SURFACE
	2300	3064.65					OBS # 82 ON DRILL
	2313						OBS # 82 ON DRILL
	2324			202	202	202	4/W FOR OBS # 81 S-120
	2330	3065.85					
	2342				HT		FOR OBS # 81

R/V MAURICE EWING				FROM: BALBOA, PANAMA			TIME ZONE +C
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/19	2347						HYDROPHONE IN
	2348						HYDROPHONE OUT
4/20	0000	3067.85					
	0019						OBS #1 <sup>81</sup> ML ON DECK
	0024	3068.34					V/W
	0030	69.02					
	0048	70.97					H/T
	0139						OBS 80 ON DECK
	0142	3072.06					V/W
	0200						H/T
	0209						OBS 79 ON DECK
	0212						V/W
	0230	3077.13					
	0248						H/T
	0305						OBS 78 ON DECK
	0306	3080.30	—	342	342	342	V/W 168 RPM
	0330	3084.51	10.53				
	0340	3086.65	—	340	342	340	C/L
	0400	3090.61	12.20				
	0430	3096.60	11.98				
	0500	3102.76	12.32				
	0530	3108.81	12.10				
	0600	3114.76	11.90				
	0603	3115.35	—	030	030	030	C/L 4.5 4. - 4.5 KTS BEGIN DEPLOY GUNS
	0609	3115.99	—	025	030	025	C/L & 1/5 TMG ≤ 4.4 KTS
	0624	3117.01	—	022	030	022	C/L
	0630	3117.34	—				ALL 20 GUNS & SCS DEPLOYED
	0653	3118.86	—				C/L 10% MIN TO STBD
	0700	3119.37	—	1/5 <sup>1150</sup> 1250	120	PGC 2°	C/L & 1/5 TMG 4.0 KTS (78-82 RPM)
	0706	3119.73	—				1ST SHOT - B.O.L. #304
	0730	3121.26	3.86				
	0800	3123.27	4.02				
	0830	3125.32	4.10				
	0900	3127.35	4.08				C/S VS 68-72 RPM
	0930	3129.36	4.03				

R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/20	1000	3131.31	3.9		<sup>VC</sup> 115-125		VS 68-72 RPM (CON'T)
	1100	3135.38	4.07				
	1130	3137.35	3.94				
	1200	3139.31	3.92				
	1230	41.22	3.82				
	1300	3143.11	3.76				
	1330	3144.92	3.62				
	1400	3146.91	3.98				
	1422	3148.12					END LINE
	1427	3148.64					<del>BOAT</del> AWAY
	1452	3150.38					GUNS + SC'S ABD
	54	50.47					BOAT A/S
	1500	3150.84					GUNS BOOMS SECURE
	1503	50.96					BOAT ABD.
	1506	3151.17					V/W C/L 200 C/S 120 RPM
	1522	3153.47		283			C/L
	1530	3154.59					
	1600	3158.94	-				H/T
	1616	3159.30					OBH #87 A'BD
	1618	3159.36		1/2	300		U/W @ 120 RPM
	1630	3160.90	-				
	1700	3165.75	9.70				
	1712	3167.60	-				HIT
	1726	3167.98	-				OBH A'BD #102
	1730	3168.20	-	1/2	300	<sup>PGC</sup> -10	U/W @ 120 RPM
	1800	3172.80	-				
	1830	3177.46	-				
	1842	3179.32	-				H/T
	1904	3179.28	-				OBH #103 A'BD
	1906	3179.31	-	325	325	325	U/W @ 75 RPM TMG 6.0 KTS
	1918	3180.42	-				C/S 80 RPM
	1930	3181.51		322	325	322	C/L, C/S 82 RPM
	2000	3184.47	5.92				
	2007	3185.05		320	325	320	C/L
	2030	3187.21	5.26				



R/V MAURICE EWING				FROM: BALBOA PANAMA			TIME ZONE +6
CRUISE & LEG # 95-02				TO: CALDERA, COSTA RICA			
DATE	TIME	PIT LOG	SPEED	PGC	TMG	PSC	REMARKS
4/20	2048	3188.94		323	325	323	c/c
	2100	3190.09	5.76				
	2128						c/s 85 RPM
	2130	3193.02	5.86				
	2200	3196.12	6.2				
	2230	3199.11	5.98				
	2300	3202.04	5.86	325	325	325	c/s 81 RPM
	2330	3204.92	5.76				
4/21	0000	3207.93	6.02				
	0023	3210.48	-				c/s 75 RPM
	0030	3211.13	6.40				
	0039	12.12	-				c/s 70 RPM
	0058	13.80	-	345			c/c
	0100	3213.97	5.68				
	0107	14.62	-	323	325	323	c/c
	0130	16.65	5.36				
	0200	3219.48	5.66				
	0230	3222.36	5.76				
	0233						c/s 65 RPM
	0253	ISLA HERRERA DUTRA LT. <del>SE</del> → @ 2.6 NM					
	0300	3225.03	5.34				
	0305			355	354	355	c/c
	0330	3227.69	5.32	351	354	351	c/s 61 RPM c/c
	0400	3230.25	5.12				
	0404	3230.59	-	346	353	345	c/c, c/s 66 RPM
	0430	3232.41	5.32	356	354	355	c/c, c/s 72 RPM
	0440	3233.83	-	359	354	358	c/c, c/s 75 RPM
	0500	3235.78	5.74	358	354	357	c/c
	0530	3238.70	5.84				
	0540	3239.58	-	345	-	344	c/c
	0600	3241.62					ARRIVAL