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Year 1976

TZ GMT[illegible]

LORAN LOG

Cruise I.D. 23Year 1976Leg No. 1TZ GMT

P. 2

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	2	1508								c/c 215	W
		1522								c/s 11.5 Kts	W
		1556	26	48.318	-95	18.833	15			c/c 217° avg 9.8 Kts since 1000	W
		1804								c/c 213° @ 1804	
		1804	26	30.297	-95	33.951	16				B+K
		1904								c/c 210 @ 1904	"
		1950	26	14.784	-95	45.079	17				"
		2023							c/c 30°	Slowing down to put out the streamer gun	"
		2110	26	10.930	-95	48.089	18			still slowing to release streamer gun	"
		2035								c/c 170°	"
		2130	26	08.325	-95	46.276	19				"
		2152	26	07.526	-95	44.888	20				"
		2300	26	02.299	-95	44.366	21				S&T
		2315								c/c 005°	
12	3	0000	26	2.9	-95	46.40	L			c/c 190 c/s 57 Kts	W
		0310									
		0344									
		0554	26	06.868	-95	46.959	22				B+K
		0730	26							c/c 10° ? gun	BK
		0710	26	02.215	-95	47.187	23				B+K
		0743								c/c 45° 010° gun	"
		0738	26	01.709	-95	46.788	24				"

LORAN LOG

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Cruise I.D. I. 6. 23-1Year 1976Leg No. 1TZ GMT

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
		0840								c/c 005	BK
		0830	26	06.388	-95	46.166	25				BK
		0910								c/c 010	BK
		1016	26	16.429	-95	45.485	26				SS
		1048	26	19.510	-95	43.794	27				
		1112								c/c 190°; c/s ^{SLOW} AHEAD	
		1058	26	19.729	-95	42.699	28				
		1310								c/c 235° dead slow	TSAI
		1414								c/c 30°	A
		1423								c/s dead slow	A
		1504	26	17.133	-95	47.755	29				A
		1648	26	17.675	-95	44.152	30				A
		1716	26	19.213	-95	43.255	31				A
		1908	26	24.145	-95	40.092	32				RMK
		1924	26	24.466	-95	39.846	33				RMK
		2016	26	26.577	-95	38.895	34				RMK
		2050								c/c 35°	RMK
		2055								c/c 210°	RMK
		2125								c/s ~5 Kts (800 RPM)	RMK
		2108	26	27.753	-95	39.115	35			(100 RPM)	TSAI
		2122	26	27.411	-95	38.866	36			(800 RPM)	TSAI

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Cruise I.D. I. 6. 23.Year 1976Leg No. 1TZ GMT

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	3	2202	026	23.486	-95	40.417	37				
		2231								c/s 750 RPM	
12	3	2246	26	20.172	-95	44.116	38			corrected three here	
		2345						Begin	Scismic	c/c 124°	
12	4	0622	25	54.351	-95	19.457	39			Ag	B+K
		0650	25	52.601	-95	17.040	40				B+K
12	4	0804	25	48.557	-95	11.774	41				B+K
		0826	25	46.761	-95	10.541	42				11
		0840	25	45.971	-95	08.946	43				11
		1009								c/c 120°	
12	4	1004	25	40.751	-95	02.924	44				
		1115								#3 AIR GUN OUT	
		1125								GUNS OFF	
		1131								3 GUNS WORK	
		1215								c/c 115°	
12	4	1628	25	25.836	-94	34.853	45				JW
		1812	25	22.243	-94	28.509	46				B+K
		1840	25	21.256	-94	25.500	47				B+K
		1936	25	19.456	-94	21.554	48				B+K
		2002	25	18.441	-94	19.565	49				B+K
		2028	25	17.261	-94	17.829	50				B+K

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Cruise I.D. IG-23Year 1976Leg No. 1TZ 0

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	4	2054	25	16.405	-94	16.332	51				B+K
		2118	25	15.722	-94	11.410	52			Bad fix	
		2154	25	14.112	-94	12.437	53				S/S
		2246								#1 GUN OUT, FIRING AT WILL	
		2240	25	12.092	-94	10.017	54				
		2343								SOUND BUOY #2 RECORDING	
12	5	0154								C/S 750 RPM (4.5A)	
		0650	25	03.7	-93	37				Loran reading	RMK
		0810	25	02.7	-93	29.1				Loran reading	RMK
		0900								C/C 125°	RMK
		0912	25	02.084	-93	26.297	55				B+K
		0934	25	01.485	-93	24.495	56				J+J
		1102	24	57.760	-93	18.286	57				
		1314	24	52.905	-93	08.444	58				
		1333								C/C 130°	
12	5	1458	24	48.173	-93	02.300	59				
		1724	24	40.665	-92	54.422	60				
		1756	24	38.909	-92	52.801	61				B+K
		1918	24	34.718	-92	47.392	62			~4.7 Kts	B+K
		2032	24	30.839	-92	44.020	63				B+K

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Cruise I.D. 16-23Year 1976

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Leg No. 1TZ 0

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	5	2105								c/c 120°	RMK
12	5	22382	24	25.998	-92	36.143	64				
12	5	2250	24	24.983	-92	34.614	65				
		2334								STARTING TURN 065°	c/c
		2357								STEADY ON 065°	
12	6	0319	—							c/c 075°	
		0432	24	33.722	-92	11.262	66				
		0603								dead slow	RMK
		0620								Increase speed to 4.8KTS	EAB
		0658	24	37.520	-92	01.248	67				1)
		1808	24	41.812	-91	47.765	68				
		1402	24	47.674	-91	31.204	69			avg $\bar{v} = 4.110$	
		1628								c/c 145°	
										END GT2-2; BEGIN GT2-3	FW
		1638	24	51.528	-91	21.531	70				FW
		1822	24	44.708	-91	18.310	71				B+K
		1848	24	42.676	-91	17.691	72			deleted from 4051 file. due to anomalous drift	B+K
		1913								c/c 130°	B+K
		1942	24	40.266	-91	15.115	73				B+K
		2012	24	38.986	-91	13.278	74				B+K
		2042	24	37.374	-91	09.832	75			deleted from 4051 file - anomalous drift	B+K

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Cruise I.D. IG-23Year 1976Leg No. 1TZ 0

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	6	2100								c/c 140°	B+K
		2128	24	35.574	-91	08.065	76				B+K
		2158	24	33.898	-91	06.464	77				
		2216	24	32.861	-91	05.897	78				
12	7	0026								c/c 145°	
		0542	24	06.257	-90	39.256	79				B+K
		0610								c/c 155°	B+K
		0754	23	56.556	-90	33.379	80				B+K
		0900								c/c 150°	B+K
		0916	23	50.441	-90	30.043	81				B+K
		1038	23	44.503	-90	26.731	82				
		1552	23	22.390	-90	12.451	83			$\bar{v} = 5.02 \text{ knots}$	
		1610								c/c 135°	JSW
		1644	23	18.248	-90	8.996	84				
		1700								c/c 120° (4.1)	
		1736	23	15.065	-90	04.902	85				
		1855			END OF Line GT-2-3					c/c 054°	EAB
		1856	23	10.942	-89	57.843	86				B+K
		1928	23	12.878	-89	54.214	87			c/s 5.7 @ ~1900 EUS: EVDINE RPM	B+K
		1944	23	13.506	-89	53.366	88			VIN CHANGED, WIND, CURRENT?	B+K
		2046	23	17.344	-89	48.841	89				B+K

LORAN LOG

Cruise I.D. 16-73Year 1976Leg No. 1TZ GMT

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MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	7	2228	23	21.820	-89	38.895	90				
		2250								10 ID 30-SEC REP RATE	
		2252	23	22.857	-89	36.693	91				
		2309								c/c 050°	
12	8	0015								c/c 335°	
		0025								steady on 335°	
		0200								c/c 350°	JW
		0430	23	38.704	-89	36.727	92			03 fix	JW
		0450								c/c 000°	JW
		0454	23	40.011	-89	36.989	93				
		0520	23	42.283	-89	37.048	94				
		0540								c/c 350°	
		0642	23	47.474	-89	38.033	95				B+K
		0704	23	49.128	-89	37.768	96				B+K
		0810								c/c 335°	B+K
		0800	23	52.744	-89	39.580	97				B+K
		0844	23	55.397	-89	40.951	98				B+K
		0920								c/c 330	B+K
		0948	23	59.035	-89	44.068	99				JW
		1030	24	01.678	-89	46.665	100				
12	8	1418	24	14.489	-89	57.587	101				

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LORAN LOG

Cruise I.D. IG-23

Year 1976

Leg No.

TZ GMT

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	8	1535								c/c 340° c/s 750rpm	JW
		1546	24	20.382	-90	02.44	102				
		1644	24	23.759	-90	05.064	103			c/c 350°	
		1705									
		1832	24	31.002	-90	08.594	104				B+K
		1854	24	31.706	-90	08.729	105			deleted from 4057 fix	B+K
		2016	24	37.824	-90	11.070	106				B+K
		2044	24	40.155	-90	12.196	107				
12	9	0408	25	11.205	-90	33.109	108			new 3 fix 6.67 Kts since problem with last fix no c/c 000° air guns	
		0440									
		0520								c/c 060° c/s 600rpm	JW
		0616	25	17.944	-90	35.039	109			2.8 Kts	B+K
		0732	25	19.638	-90	32.294	110				B+K
		0804	25	20.084	-90	30.949	111				B+K
		0922	25	21.970	-90	28.781	112				B+K
		1010								c/c 180°	
		1400	25	07.5	-90	32.0	(2)			Loran	
		1410								c/c 150°	
		1450	25	03.595	-90	30.438	113				
		1516								c/c 090°	
		1630								c/c 350° c/s 750	

LORAN LOG

Cruise I.D. IG-23Year 1976Leg No. 1TZ +6

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	9	1808	25	07.199	-90	34.373	114				B+K
		1904	25	10.871	-90	37.118	115				B+K
		2024								c/c 005°	
		2110	25	19.305	-90	41.932	116				B+K
		2300								C/S 700 rpm	JW
12	10	0512	25	53.516	-90	52.907	117			4.5 lcs = T	
		0808	26	06.600	-90	54.196	118			an SS03 fix	B+K
		0900								C/C 343°	B+K
		1311								C/C 335°	
		1300	26	29.4	-91	01.8	(L)				
		1430								C/S 750 rpm	JW
		1940								slowed to work on the streamer	PMK
										(Line 23 has a leak in it)	
										Dead section inboard of	
										20 hrs, leaking	
		2148	27	04.342	-91	15.531	119			SS03	
12	11	0015								C/C 240°	
		0053								STREAMER REPAIR	
		2156	27	4.152	-91	14.610	120				
		2302	27	5.445	-91	17.980	121				
		0300	27	6.7	-91	22.6	L				
		0336	27	6.812	-91	22.745	122				

LORAN LOG

Cruise I.D. _____ Year _____

Leg No. _____ TZ _____

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MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	11	0400	27	6.5	-91	23.7	L			Dead slow	
		0416	27	6.742	-91	23.338	123				
		0602	27	06.786	-91	26.157	124				EAB
		0730								Begin c/c 060° 1/2 600rpm	
		0818								ON 060° 5/6 600RPM	EAB
		0829								Slow to DEAD Slow ON 1	"
		0841								DFS ON	"
		0841								I/S to 600 RPM	"
		0844								5/6 600 RPM (~4 kts)	"
		0858	27	10.007	-91	26.853	125				"
		1300	27	18.497	-91	06.348	126				
		1408								c/c 070° c/s 750rpm	
		1446	27	22.830	-90	57.077	127				
		1608	27	26.042	-90	46.429	128				
		1634	27	26.930	-90	43.622	129				
		1752	27	29.016	-90	35.021	130				EAB
		1914	27	31.019	-90	25.799	131				R4K
		2008	27	32.621	-90	20.480	132				"
		2230								BEGIN c/c 155°	"
		2740								STEADY ON 155°	
12	12	0422	27	07.906	-89	48.865	133				JW

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Cruise I.D. IG-23Year 1976

Leg No. _____

TZ _____

g. 12

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	12	0512	27	3.180	-89	46.730	134				B+K
		0650	26	53.553	-89	42.776	135				RMK
		0706	26	51.820	-89	41.520	136				B+K
		0719								dead slow, ship passing our bow	11
		0721								c/c 145°	11
		0724								c/c 135°	11
		0730								c/c 155° I/S 6 KTS	11
		0748	26	48.559	-89	40.507	137				11
		0816	26	45.675	-89	39.820	138				11
		0834	26	43.790	-89	38.374	139				
		0934	26	37.675	-89	36.254	140				
		1350	26	13.508	-89	25.185	141				
		1414								c/c 145°	
		1524	26	05.465	-89	21.214	142				
		1538	26	04.014	-89	20.010	143			6.1 kts for 0834-1538	FW
		1704	25	57.225	-89	14.035	144				RMK
		1828	25	50.852	-89	08.524	145				B+K
		1900								c/c 160° (Accidentally went to 120° for 5 min)	11
		1858	25	48.158	-89	05.726	146				11
		2008	25	41.345	-89	03.186	147				11
		2046	25	38.044	-89	00.344	148				11

LORAN LOG

Cruise I.D. IG 23 Year 1976

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Leg No. _____ TZ _____

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
DEC	12	2202	25	31.375	-88	57.565	149				
		2230								c/c 170°	JW
		2232	25	28.789	-88	57.381	150				
12	13	⁰³⁴⁰ 0340	25	02.2	-88	53.0	(L)	-1		c/c 090° deleted from 4051 file	
		0340								c/s 500 ~3.4 kts	JW
		⁰⁴⁰⁷ 0426	25	00.230	-88	50.290	151			c/c 065°	
		0445								c/s 550 4° kts	
		0600	25	02.9	-88	45.4	LORAN	-2			RMK
		0700	25	04.5	-88	41.5	LORAN	-3			RMK
		0826	25	06.115	-88	35.845	152				EAB
		0800	25	05.5	-88	38	LORAN	-4			RMK
		0900	25	05.5	-88	34	LORAN	-5		deleted from 4051 file	
		1012	25	07.724	-88	29.077	153				
		1032	25	09.5	-88	25.70		-4		c/c 060°	FJS
		1100					LORAN				
		1203								c/c 065°	
		1200	25	11.90	-88	23.0	LORAN	-7			
		1240								TAPE TRANSPORT ON STANDS	
										c/s 750 RPM; c/c 155°	
		1256	25	11.759	-88	19.521	154				
		1400	25	05.8	-88	17.2	L	-8			

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Cruise I.D. _____ Year _____

Leg No. _____ TZ _____

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	13	1435								c/c 140 c/s 530 (3.3kts)	
		1500					(L)				
		1600	24	58.1	-88	12.1	(L)	-9		Begin GT2-G1-2	
		1530								c/c 2450 3.3 kts	
		1804	24	59.168	-88	19.056	155				B+R
		2000	24	54.8	-88	26.5	(L)	-10			
		2106								c/c 2350	
		2340								TAPE TRANSPORT ON	
		2200	24	52.25	-88	34.0	L	-11		c/c 1550 STANDBY: c/s 750 RPM	
		2300	24	50.5	-88	38.5	L	-12		deleted from 4051 file	
12	14	0000	24	47.5	-88	41.0	L	-1			
		0100	24	42.5	-88	38.8	L	-3			
		0200	24	36.3	-88	37.3	L	-4		deleted from 4051 file	
		0300	24	31.7	-88	35.0	L	-5			
		0305								c/c 3350	
		0400	24	32.8	-88	35.7	L	-7		c/c 3450	
		0415									
		0338	24	31.625	-88	33.945	156				
		0530	24	37.1	-88	37.6	L	-8		deleted from 4051 file c/c 0650 550 RPM	
		0524	24	38.113	-88	35.540	157				
		0712	24	40.833	-88	34.098	158				

LORAN LOG

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Cruise I.D. 16 23-1 Year 1976
 Leg No. TZ 0

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	14	0828	24	43.580	-88	31.418	159			deleted from 4051 hls	BXKXP
		0820								c/c 70° x 600 rpm	RMK
		1000	24	41	-88	28	L	-9	0	deleted from 4051 hls	
		1016	24	46.289	-88	27.403	160			70° x 600 RPM	
		1058								c/c 065°	
		1131								c/c 055°	
		1200	24	51	-88	21.4	L	-10			
		1227								c/c 065°	
		1300	24	54.5	-88	19.9	L	-11		c/s 650 RPM	
		1304								2 6VNS	
		1346	24	57.466	-88	16.262	161				
		1425								c/c 080°	
		1432								Steady on 080°	
		1452									
		1500	25	01.6	-88	11.6	L	-1		c/c 090° ; c/s 750 rpm	
		1600	25	03.7	-88	06.1	L	-2			
		1533								c/s 800	
		1610								c/c 180°	
		1700	25	01.4	-88	05.6	L	-3			
		1800	24	57.1	-88	05.9	L	-4			
		1834	24	55.781	-88	06.670	162				

LORAN LOG

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Cruise I.D. IG-231 Year 1976Leg No. 1 TZ 0

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	14	1900	24	53.7	-88	07	L	-5 deleted from 4051 file		c/c 220°	RMK
		2000	24	51	-88	11.5	L	-6 deleted from 4051 file			"
		2022	24	50.488	-88	13.363	163				EAB
		2040								c/c 210°	RMK
		2100	24	48.25	-88	16		-7			"
		2110								c/c 200°	"
		2221								c/c 335°	
		2240								c/s 600 RPM	
		2240								BED IN LINE UT2-61-4	
		2300	24	43	-88	23.30	L	-8-1			
4 → 12	15	0000	24	47.6	-88	25.1	L	-2		c/s 335° 600 RPM	
		0100	24	53.1	-88	25	L	-3			
		0138								c/c 325°	
		0158								c/s 550 RPM	
		0128								3.5 NOT WORKING	
		0200	24	56.1	-88	29.5	L	-4		c/c 145°	
		0241								c/c 145°	
		0320	24	57.0	-88	29.8	L	-5			
		0332								c/c 325°	
		0410	24	57.4	-88	28.0	L	-6			

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Leg No. 1 TZ

[illegible]

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Leg No. _____ TZ _____

[illegible]

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Cruise I.D. 23-1

Year 76

Leg No. 1

TZ LMT[illegible]

LORAN LOG

Cruise I.D. 27Year 76Leg No. 1TZ GMT

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	16	1225								BEGIN 672-61-7	FJS
12	16	1300	24	55.50	-88	45	L	-15			
		1316								C/S 550 RPM	
		1400	24	51.7	-88	44.2	L	-16			
		1445								C/C 1650	
		1500	24	48.2	-88	43.0	L	-17			
		1600	24	43.6	-88	41.8	L	-18			
		1655								C/C 1450	
		1700	24	41.2	-88	40.6	L	-19			
		1800	24	37.7	-88	38.4	L	-20			
		1844	24	33.735	-88	36.816	172				BTK
		1900	24	35.1	-88	36.0	L	-21			"
		2000	24	29.8	-88	34.6	L	-22			"
		1956	24	29.570	-88	34.416	173				"
		2056								C/C 135	"
		2100	24	25.3	-88	33.0	L	-23			"
		2138	24	23.335	-88	31.346	174				
		2200	24	22	-88	30.50	L	-24			
		2300	24	18.25	-88	28.5	L	-25			
12	17	0000	24	15	-88	27	L	-1			
		0100	24	11.9	-88	24.5	L	-2			

Cruise I.D. 23
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LORAN LOG

$$\frac{x}{650} = \frac{2.8}{600}$$

$$\frac{4}{x} = \frac{2.8}{600}$$

2.21

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	17	0141								BEGIN C/C 065°	
		0157								065°, BEGIN GT2-61-8	
		0200	24	9.8	-88	22.1	L	-3			
		0300	24	9.7	-88	19.9	L	-4			
		0400	24	11.7	-88	17.3	L	-5			
		0500	24	12.8	-88	14.6	L	-6		C/C 055°	
		0448	24	12.279	-88	15.939	#17	-			
		0600	24	14.8	-88	11.9	L	-7			BACK
		0700	24	15.2	-88	09.3	L	-8			"
		0800	24	16.7	-88	07.3	L	-9			"
		0825								C/S 700 rpm	BACK
		0900	24	18.0	-88	04.4	L	-10			"
		0936	24	21.506	-88	01.827	176				
		1000	24	21.5	-88	01	L	-11			
		1016								C/C 065°, C/S 650 RPM	
		1100	24	25.5	-87	57	L	-12			
		1200	24	30	-87	54	L	-13			
		1220								C/C 335°	
		1230								GT2-61-9	
		1248	24	35.969	-87	53.594	177				
		1300	24	36	-87	54	L	-14			

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MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	17	0314								C/S 600 RPM	
		1400	24	42.50	-87	57	L	-15			
		1600	24	52.5	-88	04	L	-16			
		1700	24	56.7	-88	07.7	L	-17		(5.2 KTS)	
		1822	25	02.897	-88	12.336	178				BAK
		1900	25	05	-88	14.6	L	-18		(5.1 KTS)	"
		1925								C/C 350°	"
		1934	25	08.101	-88	16.589	179				"
		2000	25	09.4	-88	17	L	-19			"
		2032	25	12.627	-88	15.691	180				"
		2100	25	14.5	-88	19.0	L	-20			"
		2115								C/C 345°	"
		2124	25	17.204	-88	19.306	181				"
		2200	25	21	-88	18.5	L	-21			
		2211								C/C 350°	FDS
		2300	25	24.2	-88	21.2	L	-22			
12	18	0500	25	55.4	-88	26.0	L	-3			
		0548								C/C 330°	
		0200	25	39.8	-88	26.5	L	-2			
		0544	25	59.608	-88	25.261	182				PAK
		0800	26	09	-88	30.2	L	-4			

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Cruise I.D. IG-23Year 1976Leg No. 1TZ GMT

MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	18	0818	26	09.652	-88	31.404	183				PMK
		1100	26	22	-88	38.5	L	-5			
		1300	26	30.50	-88	41.5	L	-L			
		1311								c/c 320°	
		1338	26	32.030	-88	43.004	184				
		1528	26	37.486	-88	47.799	185				
		1848	26	44.880	-88	58.712	186			3.4 KTS	B+K
		1930								c/s 700 RPM	
		1930								c/c 330	
		2030	26	49.945	-89	05.338	187			4.82 KTS	
		2045								c/c 340	
		2106	26	52.291	-89	07.108	188				
12	19	0000	27	04.5	-89	15	L	-1			
		0322	27	19.998	-89	21.874	189				
		0458	27	27.555	-89	25.727	190				
		0604	27	32.967	-89	27.848	191			5.54 KTS	B+K
		0704	27	37.733	-89	30.063	192				"
		0810								c/s 725 RPM	"
		0840	27	46.368	-89	33.942	193				"
		0938	27	50.714	-89	35.745	194				ST
		1200	28	02.75	-89	40.50	L	-2			

LORAN LOG

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MONTH	DAY	TIME (Z)	LAT. DEGR.	LAT. MIN.	LONG. DEGR.	LONG. MIN.	FIX NO.	ST. #1	ST. #2	COMMENTS	WATCH I.D.
12	19	1250	28	07.025	-89	43.269	195				JLT
		1436	28	16.204	-89	46.802	196				
		1530								c/s 800 rpm - 6 Kts	JSW
		1830		end line		GT 2-8				c/c 075°	JSW
		1842								S/G 075°	EAB
		1942	28	40.364	-89	49.461	197				BKR
		2130	28	44.058	-89	38.115	198				BKR
		2155								c/c 080°	
		2300	28	46	-89	29.9	L	-1			
12	20	0050	28	46.5	-89	23.5	L	-2			
12	20	0100	28	47.5	-89	17.5	L	-3			
		0230	28	49	-89	03	L	-4			
		0228	28	50.217	-89	7.735	199				
		0404	28	53.440	-89	8.978	200				
		0600	28	55	-89	06	L	-5		ON course for Galveston	EAB
		0658	28	52.479	-89	19.666	201				
		0844	28	44.433	-89	35.767	202				
		0926	28	45.654	-89	43.951	203				
		1300	28	41.25	-90	25	L	-6			
		1600	28	39.0	-91	04.5	L	-7			
		1819								9/5 slow ahead	EAB

1823

I/S 10 KTS

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