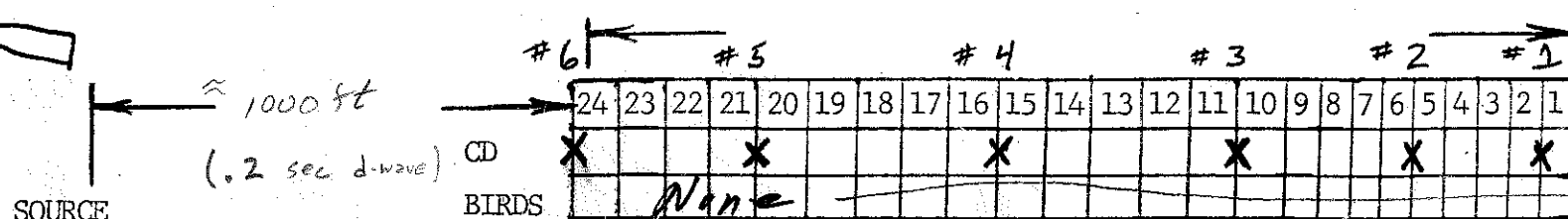


CRUISE IG 19-2	LINE PCO	AREA-PROJECT Gulf of Mexico Panama City		DATE 14 June '76
SYSTEM DFS 10,000		BEGIN - TIME - DATE		END - TIME - DATE
LAT.				
LONG.				
TAPE INFO:		record length -		
TAPE SPEED -- 22.5 ips		pack density -		
SPL. RATE -- 4 ms.				
RECORD FILTERS		HI-cut - 70 Hz		
SOURCE Mob. 1 (Bolt) Air Guns 4 guns (intermittently)		LO-cut - out		
		Slope - 24 dB/oct		
		Notch		
REMARKS		nominal 12 CDP 30 sec cycle @ 6 kts. 1st 35 shots HI-cut 52 Hz 24 dB/oct.		
GEOPHONES 300 ft sections				



CRUISE		LINE	AREA - PROJECT													DATE			
Iq 19-2		PCP	Gulf of Mexico - Panama City													14 June 76			
TIME	REEL	Decim SHOT PT. NO.	Oct-1 RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FH)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0453	1	0001	1	42	55	58	39	42	27	70	12	120	2.5	10	12	30	1410	START (4 GUNS)	
0512	1	0039	47	52	64	64	40	46	27	"	"	"	"	"	"	"	1402	SAT. 7 DOPPLERS	DKS
0531	1	0078															1394	3 GUNS OPERATING	
0550	1																	#93 SAT FIX	
0553	1	120	171															RE/RP	
0606	1	146	223															LAST SHOT	WV
0607	2	149	225	55	67	69	45	45	29									FIRST / RC/RP (FIRST SHOT ON TAPE #2)	
0608	2	152	227							70	12	126	2.5	10	12	30	1380	FIRST SHOT AFTER RC/RP	WV
0622	2	181	264										2.2				1375	CHANGE TRIP DELAY	DKS
0642	2	217	331	60	74	76	45	45	28								1368	MONITOR	
0659	2	254	375														1358	#94 SAT FIX DOPPLER #2	
0713	2	281	430															LAST SHOT REEL #2	
0719	3	284	433	58	74	72	44	47	30	70	12	120	2.2	10	12	30		FIRST REC/RELP	OK
0715	3	286	435															FIRST SHOT AFTER RC/RP	
0724	3	303	456	62	76	74	46	46	28				2.0	10	12	30	1347	ADJUST TRIP DELAY	WV
0735	3	325	504															#95 SAT FIX DOPPLER #29	
0745	3	346	531															#96 " " " #5	DKS
0805	3	384	577															ONE AIR GUN OF THREE OCCASIONALLY INTERMITTENT	
0813	3	401	620															#97 SAT FIX DOPPLER #22	
0818	3	410	631	65	85	84	53	52	33	70	12	120	2.0	10	12	30	1309	LAST RECORD TAPE #3	
0819	4	413	634															FIRST RC/RP (STARTED #4 TAPE IN MIDDLE OF CYCLE)	
0820	4	415	635														1309	FIRST SHOT AFTER RC/RP (POSSIBLY MIDDLE OF CYCLE)	
0833	4	441	666															RC/RP	
		443																TAPE DIDN'T ADVANCE IN THIS INTERVAL	OK
0843	4	461	723															THIS RECORD MAYBE ONLY PARTIAL / THERE	
0843		462	724															FIRST GOOD RECORD AFTER SCREWUP ABOVE	
0849	4	473	737															SAT FIX #98 DOPPLER #1	

OK
Tape
Bad
#167
#170

OK

OK

OK

CRUISE		LINE		AREA - PROJECT													DATE		
JG-19-2		PCØ		Gulf of Mexico - Panama City													14 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0855	4	483	751							70	12	120	2.0	10	12	30	1292	RC/RP near	DKE
0857	4	486	753															next record after RC/RP	
0909	4	512	1005															PLAYED OUT ON CAMERA	
0925	4	545	1045															RC/RP	
0931	4	556	1061															last shot	El2
0932	5	560	1065															RC/RP - first shot	El2
0933	5	562	1066															CONTINUE	El2
0936	5	567	1073															RC/RP	El2
0937	5	569	1074															RC/RP	El2
0938	5	571	1075															CONTINUE	El2
0949	5	592	1122	57	73	71	46	46	29	70	12	120	2.0	10	12	30	1260	RC/RP digital problem	
0952	5	598	1125															continue	
0954		602	1131															RC/RP	
1010		635	1150															continuing	
1011		637	1153															RC/RP no TB	
1012		639	1156															RC/RP	
																		testing	
																		data looks OK.	
1025	665	665	1211																

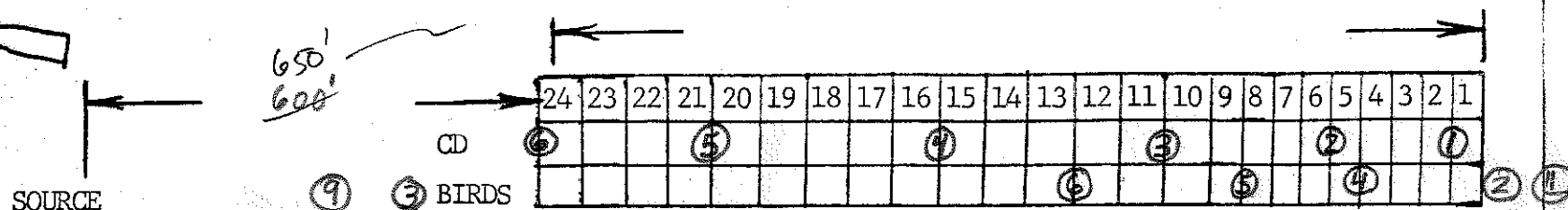
passed
probs
with
DAS
RC/RP
N.G.

El2
on
type
OK
MVA

2
16
7
-
26
639
665

CRUISE IG 19-2	LINE PCBI	AREA-PROJECT Gulf of Mexico - Panama City		DATE 16 June '76
SYSTEM DFS 10,000		BEGIN - TIME - DATE		END - TIME - DATE
		LAT.		
		LONG.		
		TAPE INFO:		record length - 6 sec
		TAPE SPEED -- 22.5 ips		pack density -
SOURCE Bolt Air Guns - 4		SPL. RATE -- 4 ms.		
		RECORD FILTERS		HI-cut - 70
		LO-cut - out		Slope - 24
GEOPHONES acceleration canceling		SLOPE -		Notch out
		REMARKS		
		<p>Removed 1-front stretch section (only 1 now in cable)</p> <p>Offset to front of 1st live section measured 600'</p> <p>12 CDP nominal - 30 sec rep rate @ 6 kts.</p> <p>note: D-wave calculations indicate 700' to 1st live section. 700'</p> <p>All birds return OK at end of all lines on 21 VI 76 21 VI 76</p>		

each section ~ 92 m.
live



CRUISE		LINE		AREA - PROJECT										DATE					
19-2		PC 131		Gulf of Mexico - Panama City, Fla.										16 June 76					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITIALS OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0033	190007	1	1	33	39	51	45	49	-	60	15	120	0	6	12	30	26 fms	4 guns ^{1st shot} on line #7	
0035		5	5															No Time Break/60H	
0054		44	54															RC/RP	
0055		45	55															continue	
0058		52	64															sat sync	
0100		54	66	33	39	53	50	57	-	60	15	120	0	6	12	30	25 fms	4 guns 2-3 msec spread	
0115		85	125															C/C 090°	BA
0130		114	162	32	38	51	48	57	-								24 fms		R.N.
0156		166	246															C/C 100°	R.N.
0200		174	256	31	37	52	49	54	-								26 fms		R.N.
0213		200	307															Last shot Reel 19007	RN
		201	311															missed shot	RN
0214		202	312															missed shot	RN
0214	190008	203	313															RC/RP	RN
0215	190008	204	314															New Reel, First shot after Reel RP	RN
0227		229	345															Gun #1 mis-fired	R.N.
0230		234	352	32	37	51	50	60	-								28 fms		R.N.
0240		255	377															C/C 090°	R.N.
0244		263	407															Sat. Nav. Sync.	R.N.
0253		279	427															all guns mis-fired (Fired early)	R.N.
0253		281	431															gun #1 misfired.	R.N.
0300		294	446	31	37	51	49	58	-								30 fms		R.N.
0312		318	476															C/C 080°	R.N.
0315		325	505															#5 occasional misfire	MMH
0329		352	540	32	36	52	47	53	-								29 fms		R.N.
0339		372	564															Sat. Nav. Sync.	R.N.
342		379	572															C/C 060°	R.N.

CRUISE I.G. 19-2		LINE P.C. B1		AREA - PROJECT Gulf of Mexico - Panama City, Fla.												DATE 16 June 76			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0356	19008	406	626							60	15	120	0	6	12	30		c/s to 850 rpm	R.N.
0359		411	633															Last record on Reel 19008	R.N.
0400		412	634	31	37	51	47	55	-								29 fm.	missed record	R.N.
0400		413	635															missed record	R.N.
0401	19009	414	636															RC/RP (trace #3) dead	R.N.
0401		415	637															Second Shot, Reel 19009	R.N.
0402		418	642															continue	R.N.
0421		456	710															Sat. Nav. SYNC, D212	R.N.
0436		474	732	30	36	52	48	55	-								31 fm.		R.N.
0440		494	746															c/c 0700	R.N.
0500		534	1026	30	37	53	47	56	-									unable to repair DFB to regain trace #3 at this time	R.N.
0508		548	1044															RC/RP	DKS
0530		596	1124	30	35	49	47	56	-									sat. fix synch (#138)	
0541		617	1151															LAST REC. REEL 19009	KV.
0542	19010	620	1153															FIRST RC/RP REEL 19009	
0543		621	1154	30	35	50	49	56	-	60	15	120	.01	6	12	30	37	First shot after RC/RP	
0544																		c/c 090°	
0554		644	1203															sat. fix synch (#139)	DKS.
0600		657	1220	30	35	52	46	55	-									Streamer depths	
0603																		c/c 100°	
0612																		c/c 080°	
0630		716	1313	28	35	50	47	55	-									Streamer depths	
0645		745	1350															S.P. / Time correlation	
0701		778	1411	30	35	52	48	58	-	60	15	120	.01	6	12	30	126	check - ok	KV
0710		796	1433															c/s 800 rpm	KV
0713		802	1441															sat. fix synch	
0721		818	1461											8				change record length to 8 sec	KV

trace probably dead somewhere
in reel # 19 (noticed ~ 20 min earlier)

CRUISE IG 19-2		LINE P.C. B-1		AREA - PROJECT NEG MEX - PANAMA CITY, FLORIDA												DATE 16 JUNE 76			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0724	19040	0824	1467															LAST SHOT THIS REEL	DKS
0726	190011	0827	1471															RC/RP FIRST RECORD (RECORDED - DIDNT REWIND)	
0727		0828	1472															MISSED S.P. (NO CAMERA REC ON REPLAY)	
0727		0829	1473															RECORD (AS USUAL)	
0730		0835	1501							60	15	120	.01	8	12	30	131	RC/RP	
731		0836	1502	27	34	53	51	62										(RECORD AS USUAL)	
0738																		C/C 085"	W
0739		0852	1622															C/S 750 turns	
0746		0868	1592															C/C 067	W
0753		0880	1556															LOCK INTO SAT FIX #142 6 dopplers	W
0818		0933	1643															RC/RP (DIDNT FIND RECORD ON REWIND)	DIRECT CAMERA RECORD ONLY
		934																MISSED SHOT POINTS	
		937																W/ ABOVE CONFUSION	
0822		0938	1644															RECORD AS USUAL	
0835		0965	1677															C/C 065	W
0846		0986	1724															LAST RECORD THIS REEL	DKS
0847	190012	0989																ATTEMPTED RC/RP - DID NOT STOP RECORDING - SWITCH BACK TO RECORD	MODE
		0991	1727															GUNS NOT FIRING	
		0992	1727															(NO OUTPUT FROM CYCLE TIMER TO GUN FIRING CKT.)	
0859		?	1731															GUNS RESUME FIRING	
																		W/ SOME FIDDLING -	
																		TEMPORARILY TRIGGER FROM	
																		DFS TO GET THING	
																		GOING - THEN BACK TO	
																		NORMAL	

SAT FIX #142
AT 0750, RECORDED
Sat 906 AT 0806.
Rec 1610

CRUISE JG-19-2		LINE P.C. B-1		AREA-PROJECT NE G MEX. - PANAMA CITY												DATE 16 JUNE 1978			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITIALS OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0900	190012	1001	1734															S.P. No. WAS RESET TO THIS MANUALLY ← FIRST GOOD RECORD AFTER DKS	
0911		1025	1765	27	34	53	56	63	-	60	15	120	.01	8	12	30	122	ABOVE CONFUSION - RESUME	
0917		1034	1777														119	RC/RP WV	
		1036	missed															Shot 1036 missed	
0918		1037	2006															First shot after RC/RP WV	
0930		1061	2030	27	35	54	51	61	-	60	15	120	.01	8	12	30	115	Recording as usual streamer depths Ela	
1000		1121	2124	27	34	52	50	61	-	60	15	120	.01	8	12	30	109	streamer depths Ela	
1012		1146	2155															Last shot Reel 190012 Ela	
1014	190013	1149	2156															RC/RP First shot Reel 190013 Ela	
1015		1150	2157															continue Ela	
1030		1181	2216	26	34	54	52	62	-	60	15	120	.01	8	12	30	102	streamer depths Ela	
1043		1207	2250															Sat. Nav. fix Ela	
1100		1241	2312	27	35	53	50	60	-	60	15	120	.01	8	12	30	95	streamer depths Ela	
1130	190013	1303	2410															short record last shot	
1135	190014	1311	2411															RC/RP First shot	
1136		1313	2412															continue	
1137		1315	2414															record & check	
1151		1342	2447															tape heads not moving	
1153		1346	2453															no record	
1156		1352	2461															tape heads not moving	
1200		1361	2472															no record	
1201		1365	2476															good record	
																		good record	
1216		1394	2533	29	34	50	47	57	-									record & check	
1230		1420	2565	28	35	53	49	60	-	60	15	120	.01	8	12	30	76	time check	
1242		1445	2616															MMW.	
1252		1464	2641															Sat. NAV. SYNC. R.N.	
1300		1480	2661	28	36	56	54	64	-									R.N.	

RECORDING
TO WORK

CRUISE		LINE		AREA - PROJECT										DATE					
IG 19-2		P.C. B-1		N.E Gulf of Mex. — Panama City, Fla.										16 June '76					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	UNITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1303	190014	1488	2671							60	15	120	.01	8	12	30		1st shot on 14	MMAH
		1489																Missed Shot	
		1490																"	
		1491																"	
		1492																"	
	190015	1493																No Should be first record five in the hole # 15	
		1494																DPS / Guns both	
		1495																not firing	
		1496																Airgun	
		1497																Manually started outage	
		1498																No fire	
		1499																Manually started	
1309		1500																No shot	
		1501																"	
		1502																	
		1503																	
131109		1504																	
		1505																	
		1506																	
		1507																	
		1508																	
		1509																	
		1510																	
131422		1511																1st DPS fire OK.	
		1512	2676															"	
131510		1513																"	
		1515	2701															Type Transport stopped	
1316		1516	2702															OK	

CRUISE IG 19-2		LINE PCB1		AREA - PROJECT N.E. Gulf of Mexico - Panama City Fla.										DATE 16 June 76					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1317	190015	1518	2704							60	15	120	101	8	12	30		Type Transport Bed.	
		1519	2705															" (No Record)	MH
1318		1520	2706															Record OK	
1319		1523	2710															Gunn #2 didn't fire	N.N.
1320		1524	2711															"	
1320		1525	2712															" good record	
		1526	2713															"	
		1527	2714															"	
		1528	2715															" no record	
		1529																No record.	
		1530																No record	
		1531	2721															No record.	
		1532	2722															good record.	
1326		1534	2724															No record	
		1535	2725															No record	
		1536	2726															No record	
		1537	2727															No record	
		1538	2730															No record	
1328		1539	2731															No record.	
1328		1540	2732															No record	
1329		1541	2733															No record	
1329		1542	2734															No record.	
1330		1543	2735	30	35	54	53	64	-								64 fms.		
1330		1544	2736																
1331		1545	2737																
1331		1546	2740																
1332	190015	1547	2741																

Transport not running

indicator says not firing, but OK

CRUISE IG 19-2		LINE P.C. B-1		AREA - PROJECT N.E. Gulf of Mex - Panama City, Fla.													DATE 16 June '76		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITIALS OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1332	190015	1548	2742							60	15	120	.01	8	12	30		no record	R.N.
1333		1549	2743															"	
1333		1550	2744															"	
1334		1551	2745															"	
1334		1552	2746															"	
1335		1553	2747															"	
1335		1554	2750															"	
1336		1555	2751															"	
1336		1556	2752															"	
1337		1557	2753															"	
1337		1558	2754															"	
1338		1559	2755															"	
1338		1560	2756															Good Record	R.N.
1339		1561	2757															"	
1341		1565	2763															Poor record	R.N.
1341		1566	2764															good record	R.N.
		1567	2765															no time break	R.N.
1344		1572	2771															good record	R.N.
1351		1585	3006															RC/RP Attempt	R.N.
		1586	3007															transport problem	R.N.
1352		1588	3011															RC/RP	R.N.
		1589	3012															Good record	R.N.
1400		1604	3031	30	35	50	49	60	-								60 fms.		R.N.
1408		1619	3050															C/C 075°	R.N.
1410	190015	1623	3054																M.H.
1412		1627	3060																
1430		1663	3123	31	34	50	47	57	-	60	15	120	.01	8	12	30	52 fms		
1441		1685	3152															Sat. Nav. sync! 4 D (7 min. ago)	R.N.

Tape transport
being repairedprobably bad
records

CRUISE		LINE		AREA - PROJECT										DATE					
I.G. 19-2		P.C. B-1		M.E. Gulf of Mex - Panama City, Fla.										16 June 76					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FK)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
										60	15	120	.01	8	12	30			
1446	190015	1695	3164																MAN
	↓	1696	3165																
1447	190015	1697	3166															last good record #15	
		1698																Missed shot	
		1699																"	
		1700	3171															"	
		1701																"	
1449	190016	1702	3173															1 st Good shot #16	
1451		1705	3176															RC/RP	
		1708																Possibly NG.	
		1709																(NG) Tape Transport Didn't Run	
1453		1710	3203															NG Write's short Record.	
		1711																NG then stops.	
		1712																N.G. - May be	
		1713																NG multiple records in	
1455		1714	3215															here,	
		1715																N.G. Record	
		1716																"	
		1717																"	
		1718																"	
		1719																"	
1458		1720	3234															"	MAN
1459		1721		31	36	54	51	60	-									"	
1516		1755	3341															C/C 0720 (still NO good records)	R.N.
		↓	↓															DFS Drive still out	R.N.
1522		1767	3403															Partial Record(?)	
1530		1782	3443	30	35	50	45	55	-									still No good Records	R.N.

CRUISE		LINE		AREA - PROJECT										DATE					
I.G. 19-2		A.C. B-1		N.E. Gulf of Mex. - Panama City, Fla.										16 June '76					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1535	190016	1792	3462							60	15	120	.01	8	12	30		Partial record (2) ^{not rec.}	R.N.
1541		1804	—															Prob. good record	R.N.
1549		1820	3574															Direct Play out (No record)	R.N.
1554		1831	3611															Testing DFS	W.H.
1601		1845	3645	32	35	52	47	58	—								38 fms.	Still No record	R.N.
1603		1850	3652															Direct Play out	R.N.
1612		1868	3714															c/c 077° (No record)	R.N.
1620	1883	1884	—															Direct Play out	R.N.
1634		1911	4024	31	34	50	46	54	—								34 fms.		R.N.
1635		1913	4026															Direct Play out	R.N.
1638		1919	4033															Sat. Nav. SYNC.	R.N.
1650		1942	4063														31 fms.	Direct Play out	R.N.
1700		1963	—														29 fms.	DFS tape drive still out	R.N.
1708		1963	—															c/c 080	R.N.
1706		1974	4151														28 fms.	DIRECT RECORD ON CAMERA DFS	
1708		1980	4162	32	34	48	45	56	—									c/c 075°	
1722		2008	4277														26 fms.	DIRECT RECORD ON CAMERA	
1736		2034	4341	31	35	48	46	56	—								25 fms.	" " " "	
1740		2053	—															c/c 085°	
1750		2063	4442														26	DIRECT RECORD	WV
1807																		c/c 080	DFS
1808		3000	4515														20	DIRECT RCD ON CAMERA	
																		GUN #2 FIRING OUT OF SYNC	
1817	190016	2118	4555							60	15	120	.01	3	12	30		Tape transport required.	
1818		2119	4556											8				Record w/usual record length	

Still having
tape drive problems

CRUISE		LINE		AREA - PROJECT										DATE					
16 19-2		P.C. B-1		NEGMEX PANAMA CITY, FLA										16 JUNE 76					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FTH)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1821	190016	2123	4562							60	15	120	.01	8	12	30	20	RC/RP (CAMERA REEL ON REPLAY)	DK
1822		2124	4563	32	36	50	46	57	-									Record as usual.	
1827		2127	4600															SAT FIX SYNC #148	
1842		2165	4634															TAPE TRANSPORT INOPERATIVE (MAY HAVE BEEN FOR A FEW SHOTS BEFORE THIS)	
																		(GUN #2 STILL FIRING OUT OF SYNC OR NOT FIRING AT ALL)	
1845		2173	4650															Type transport recording as usual	
																		Record as usual	
1851		2185	4664															FAIR GUNS DIDN'T FIRE - NOT B. (GEORGE P. WORKING ON GUN REEL)	
1853		2189	4670															BAD AIR GUN FIRING - NO TIME BREAK	
																		Record as usual	
1857		2198	4700															SAT. FIX SYNC #149	
1903	✓	2209	4715	31	35	52	45	56	-									C/C 084°	
1914	190016	2232	4743															LAST SHOT REEL 190016	KV
1915	190017	2235	4746															First Shot RC/RP REEL 190017	KV
1915																		C/C 086	KV
1916		2236	4707															First shot after RC/RP	KV
1925		2254	4767															ALL 4 GUNS BEGIN OPERATING	DKS
1928		2259	4774	31	37	50	45	54	-									C/C 089	KV
1933		2269	5006															SAT FIX SYNC. Doppler #1	DKS
1944		2219	5034	31	38	52	46	51										C/C 086: BEGIN SERIES OF EXCHANGES FOR RECONNOISSANCE W/ NAVY VESSEL.	KV
																		DEPTH GAUGES ON CONTINUOUSLY	
2001		2326	5077															START MAJOR TURN TO STRD (PICK UP NAVY MAN FROM PLATFORM)	
2009	190017	2342	5117															SAT FIX SYNC Doppler #2	

Begin
PC-1-A1 →end
PC-B1 →

CRUISE		LINE		AREA - PROJECT													DATE		
1619-2		P.C. A-1		NEG MEX PANAMA CITY													16-17 June		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
2010	190017									60	15	120	101	8	12	30	15		KV
2019		2361	5142															RENDEZVOUS WITH DESTINY!!	
2020	↓	2363	5144	31	46	50	40	48	-								15	complete course change; on course 225, 6.0 kts	KV
2030	190017	2382	5170															last record	
2032	190018	2387	5171														16	RCIRP	
2032		2388	5172	32	42	52	46	54	-	60	15	120	101	8	12	30	16	continue	
2046		2416	5226															SAT FIX SYNC DOPPLER#1	KV
2101		2445	5263	31	39	53	48	58	-	60	15	120	101	8	12	30	17	Streamer depths	ELA
2130	↓	2503	5355	31	38	53	49	59	-	60	15	120	101	8	12	30	19	Streamer depths	
2151	190018	2544	5426															Last shot	
2152	190019	2547	5427	30	38	51	48	59	-	60	15	120	101	8	12	30	21	First shot RCIRP	
2153		2548	5430															continue	
		2552	5434															No record tape transport	
2203		2571	5501															First shot after tape heads cleaned + work	
2230		2623	5565	30	39	54	50	59	-	60	15	120	101	8	12	30	20	Streamer depths	
2304	↓	2691	5671	31	39	53	47	55	-									Streamer depths	
2317	190019	2717	5723															last shot	
2319	190020	2723	5725															first shot RCIRP	
		2725	5726															continue	
2327		2738	5743							65	15	120						initial gain 60 db changed to 65 db	
2330		2743	5746	30	39	52	46	55	-	70	15	120						changed to 70 db	
2331		2743	5752							60	15	120						changed back to 60 db	
2335		2753	5762							65	15	120						changed to 65 db	
		2754	5763							65	15	120							
2336	↓	2755	5764							70	15	120						C/C 235° C/S 800 RPM	
	190020	2756	5765							60	15	120						change to 60 db	

Begin PCAI
at 2010
SAT FIX AT
2008

CRUISE IG 19-2		LINE PC. A1		AREA-PROJECT NE. GMEX - PANAMA CITY													DATE 17 JUNE 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0248Z	190022	313P	6552															deck with satellite time	TSAI
0300Z		3163	6601	27	35	51	59	60	-	60	15	120	.01	8	12	30	81	streamer depth	
0307Z		3176	6616															% 220°	
0321		3206	6654															No. 2 AirGun not firing	
0324	190022	3211	6661															Last shot, partial record is not good	
	190023																	* NO. 2 indicator out	
0326	190023	3215	6665															first shot	
0327		3218	6670															RC/RP	
0330		3223	6675	28	36	54	52	62	-	60	15	120	.01	8	12	30	93	streamer depth	
0336		3236	6712															% 225°	
0339		3241	6717																MMH
0340		3244	6722															Sat Fix #156	
0349		3261	6743							65	15	120							
		3262	6744																
		3263	6745																
		3264	6746							60	15	120							
0351	190023	3265	6747							62	15	120							
0400		3283	6771	28	36	54	51	60	-	62	15	120	.01	8	12	30	109	streamer depth	TSAI
0430		3343	7065	27	37	58	56	66	-	62	15	120	.01	8	12	30	126	streamer depth	
0434		3352	7076															Sate fix	
0439		3360	7106															% 230°	
0444		3371	7121																
0444	190023	3372	7122															Last shot, partial record	
0446	190024	3377	7127															first shot	
0448	190024	3379	7131															RC/RP	
0500		3403	7161	28	37	52	52	62	-	62	15	120	.01	8	12	30	144	streamer depth	
0507		3419	7201															% 235°	law
0513		3430	7214															SAT FIX SYNC DOPP #12	

END (Processed)
PC-1-A1

0513 SAT FIX

CRUISE IG 19-2		LINE PC-A1		AREA-PROJECT NE GMEV - PANAMA CITY												DATE 12 JUNE			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FH)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
		3964	10230															not recorded; guns	ELA
		et. al.																not firing	
0943		3969	10235															guns firing, shot	
																		guns 1,2, 3, 4 firing,	
																		but slow in timing	
1004		4012	10310															Sat. Nav. fix?	
1008	190027	4019	10317	2	31	50	48	54	-									last shot	
1012	190028	4028	10320															RC/RP first shot	
1013		4030	10321															continue	
1030		4063	10362	25	36	51	47	57	-	62	15	120	.01	8	12	30	366	Streamer depths	
1106		4135	10472	30	36	54	49	62	-	62	15	120	.01	8	12	30	393	guns 320 psi ^{at} streamer	ELA
1130		4183	10552						-	62	15	120	.01	8	12	30	414	Streamer depths	
1131	190028	4185	10554															last shot	
1135	190029	4194	10555															first shot RC/RP	
1136		4196	10556															continue	
1144		4210	10595	25	36	54	51	61	-	62	15	120	.01	8	12	30	424	Streamer depths	ELA
1230		4303	10731	30	35	53	51	61	-	62	15	120	.01	8	12	30		Streamer depths	
1254	190029	4352	11012															Last shot	TSI
1258	190030	4364	11013															first shot RC/RP	TSI
1259		4362	11014															continue	
1301		4366	11020	30	35	52	49	57	-	62	15	120	.01	8	12	30	464	streamer depths	
1308																		% 227°	
1330		4423	11111	31	35	50	47	58	-	62	15	120	.01	8	12	30	492	streamer depths	
1331		4424	11112										.05					Change Trip Delay	WHA
		4425	11113										.05						
		4426	11114										.5					Change Trip Delay	
		4433	11122										.4					Change Trip Delay	
1335																			

Tom
did it!

NOTE: all
records lost
by gun misfire
and/or power
failure, were
stopped as
they started

CRUISE		LINE		AREA - PROJECT												DATE			
IG 19-2		PCA1		Gulf of Mexico - Panama City												17 June			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITIALS OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
		4436	11126										.5					Change Trip Delay	
1337	190030	4437	11127										.6					Change Trip Delay	WMA
1339		4441	11133							62	15	120	.6	8	12	30		continue	TSAI
1341		4445	11137															satellite fix	TSAI
1400		4483	11205	30	39	54	48	56	-	62	15	120	.6	8	12	30	522	streamer depths	
1421	190030	4484	11256															last shot	← PCA1
1423																		C/L 135° slowly	
1423	190031	4530	11264															first shot	
1425	190031	4533	11267															first shot CD/CP	
1430		4543	11301	29	39	52	48	51	-	62	15	120	.6	8	12	30	549	streamer depths	
1500		4603	11375	31	38	51	46	55	-	62	15	120	.6	8	12	30	500	streamer depths	
1502																		C/C 045° slow turn	
1526																		sat fix // start L. PCA2	←
1530		4663	11471	32	39	50	45	54	-	62	15	120	.6	8	12	30	462	streamer depths	PCA2
1533 1536	190031	4675	11506															ship approaches may affect	some
	190031	4686	11520															last shot # 31	
1542		4687	11521															Missed shot	
1542		4688	11522															" "	
		4689	11523															" "	
1543		4690	11524															" "	
		4691	11525															" "	
1544		4692	11526															" "	
1545	190032	4693	11527															1st shot # 32	
		4697	-															Missed shot	note discrepancy btwn shot no. & rec. nos. doesn't increase record counter for missed shot
		4698	-															" "	
	190032	4699	11533															RC/RP	
1549		4700	11534							62	15	120	.6	8	12	30		Record OK-	

For convenience, start PCA2 here, in the middle of a wide turn.

CRUISE		LINE		AREA - PROJECT												DATE			
1919-2		PCA2		Gulf of Mexico - Panama City												17 June 76			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INIT. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1552	190032	4708	11544							62	15	120	0.6	8	12	30		Sat Fix (4 dopplers)	
1600		4723	11563	31	40	10	40	15	-	62	15	120	0.6	8	12	30	432	streamer depth	TSAI
1612																		no. 3 gun goes up to 60 (disconnected)	
1613		4751	11617															0.42	
1628		4780	11654															only gun #1 & working	
1630		4783	11657	32	38	49	43	52	-	62	15	120	0.6	8	12	30	401	streamer depths	
1645		4812	11714															guns did trigger long record	
1648		4820	11724															ye 039°	
1657		4837	11745															continue	TSAI
1658		4840	11750										0.4					change delay time	
1658		4841	11751										0.2					"	
1700	V	4843	11753	32	39	52	45	54	-	62	15	120	0.2	8	12	30	378	streamer depths	
	190032	4855	11767															last shot #190032	
		4856	11770															Missed shot	
1707		4857	11771															" "	
		4858	11772															" "	
		4859	11773															" "	
	190033	4860	11774															1 st record #190033	
		4861	11775															RC/RP not reproducible tape did not stop	OK on tape?
1708		4862	11776														370	RC/RP 190033 OK.	
	190033	4863	11777															record OK	
1716		4874	12012															No time break - reset kv	
1717		4878	12016	32	38	52	46	55	-	62	15	120	0.2	8	12	30		3 AIR GUNS WORKING	KV
1734		4912	12060															c/c 041	KV
1743		4928	12100															4 GUNS WORKING	KV
1752		4947	12123															NO TIME BREAK - SHOT MISSED.	DKS
"		"	"															SAT. FIX SYNCH.	
1804		4972	12154															SAT. FIX SYNCH.	

CRUISE 16-19-2		LINE P.C. A-2		AREA - PROJECT Gulf of Mexico - Panama City													DATE 17 June 1978		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FH)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1806	190033	4975	12157							62	15	120	.02	8	12	30	328	C/C 044*	JKS
1822		5008	12220															SAT SYNC	
1825		5013	12225	31	37	51	46	59	-									LAST SHOT THIS REEL	
1827		5018	12232															No time break	
1828	190034	5020	12233															First shot this reel	
1829		5021	12234													312		RC/RP	
1830		5022	12235															Continue Record - OK.	
1834		5037	12254															C/C 046	
1900		5083	12332															C/C 049	
1918		5119	12376															C/S 800 RPM	
1945		5173	12464															LAST SHOT THIS RECORD	
1946	190035	5176	12467	30	35	52	47	54	-	62	15	12	.02	8	12	30	268	FIRST SHOT, RC/RP	
1947		5178	12471															CONTINUE RECORD - OK	
1949		5181	12474															SAT SYNC	
2007		5216	12567															C/C 052	
2023		5248	12477															C/C 060	
2101	190035	5326	12715															last shot	TS
2105	190036	5333	12716	30	43	54	47	57	-	62	15	120	.2	8	12	30		RC/RP first shot	TS
2106		5335	12717															continue	TS
2130		5384	13000	30	40	54	50	60	-									guns fire time c/k at 400 pps	TS
2200		5443	13073	30	37	54	50	62	-									time / on # c/k	TS
2225	190036	5493	13155															Last shot reel 190036	
2226	190037	5496	13156															First shot RC/RP	
2227		5498	13157															continue	
2300		5564	13261	30	36	54	49	60	-	62	15	120	.02	8	12	30	176	streamer depths	ELA
2330		5623	13354	30	38	52	48	58	-	62	15	120	0.2	8	12	30	156	time-record c/k	TS

CRUISE IG 19-2		LINE PCA-2		AREA-PROJECT NE OMEX - PANAMA CITY												DATE 17-18 JUNE			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
2344	190037	5652	13411															Last shot of reel	ELA
	190038	5655	13412															No TB	ELA
2352		5662	13420															First good record of reel 190038	ELA
2353		5666	13424															RC/RP	ELA
		5667	13425															No TB	ELA
2355		5668	13426															continue	ELA
0030		5738	13534	30	38	53	49	57	-	— 18 JUNE 1976 —							114		
0100		5798	13630	30	36	50	47	57	-	62	15	120	0.2	8	12	30	94	time-check	TS
0107	190038	5813	13647															Last Shot	TSAL
0109	190039	5817	13650															RC/RP first shot	
0110		5819	13651	30	39	52	46	56	-	62	15	120	0.2	8	12	30		continue, 5/6 050°	
0123		5844	13701										0.01					Change Trip Delay	
0124		5846	13703							62	15	120	0.01	8	12	30			
0130	190039	5858	13720	30	37	50	45	55	-	62	15	120	0.01	8	12	30	79	streamer depth	
0136		5870	13734															no time break	
0140		5878	13744															continue, 5/6 052°	
0200		5919	14015	30	37	52	47	56	-	62	15	120	0.01	8	12	30	67	5/6 054° streamer depths	
0206		5931	14031																
0227	190039	5972	14102															Last shot	
0229	190040	5976	14106															first shot	
0230	190040	5978	14110															RC/RP	
0230		5979	14111	29	35	51	47	57	-	62	15	120	0.01	8	12	30	65	continue, streamer depths	
0237		5992	14126															5/6 060°	
0242		6003	14141															Sat Sync.	
0300		6038	14204	30	36	54	50	60	-	62	15	120	0.01	8	12	30	35	streamer depths	
0330		6098	14300	30	36	53	49	59	-	62	15	120	0.01	8	12	30	30	streamer depths	
0344		6127	14335															Satellite Syn	
0346		6130	14340															Gun #3 occurred and 1 minute	MMH

CRUISE IG 19-2		LINE PCA-2		AREA - PROJECT NE G MEX - PANAMA CITY										DATE 18 June 1976					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
	190040	6133	14343							62	15	120	.01	8	12	30			TSAL
0348	190040	6134	14344															1st shot reel #40	
		6135	14345															Missed shot	
		6136	14346															"	
		6137	14347															"	
		6138	14350															"	
	190041	6139	14351															OK - 1st record	
		6140	14352															blank gap on tape after record	data OK
		6141	14353															OK	
0352		6142	14354															OK	
0353		6145	14357															RC/RP reel #190041	
		6146	14360															record OK	
0400		6158	14373	30	36	12	48	58	-	62	15	120	.01	8	12	30	24	streamer depth	
0408		6174	14413															1/2 045°	
0406		6210	14417															satellite syn	
0430		6218	14467	30	37	55	52	61	-	62	15	120	.01	8	12	30	24	streamer depths	
0434		6227	14500															1/2 050°	
0500		6278	14563	28	36	54	50	60	-	62	15	120	.01	8	12	30	22	streamer depths	
0506		6292	14601															c/c 045°	DKS
0508		6293	14602															last record this reel.	
0509	190042	6296	14605														22	RC/RP first shot this reel.	
0509	1	6297	14606															Record as usual	
0522		6322	14636														22	RC/RP - OK	
0523		6323	14637															Record as usual	KV
0535		6347	14666															Set fix synch (D149)	DKS
0539		6355	14675															Gun #3 firing time off	
																		↑ very occasional - generally fine	

possibly no record
no. on tape

CRUISE		LINE		AREA - PROJECT												DATE			
TG-19-2		PC A-2		Panama City - NE G Mexico												18 JUNE 1976			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0627	190042	6453	15040															LAST SHOT THIS RECORD	KN
0629	190043	6456	15043															FIRST SHOT RL/RP	
0630		6458	15045	30	37	53	50	59	-	62	15	120	.01	8	12	30	18	CONTINUE RECORD - OK	KN
0635		6469	15060															c/c 055°	KN
0710		6539	15166															c/c start long turn to 315°	DKS
0720		6559	15212															Sat fix synch	
0741		6599	15262															c/c begin turn to 239°	KN
0747		6612	15297															Last shot this record	
0748	190049	6615	15302															First shot RL/RP PCA 3	
0749		6616	15303															No time break	
0749		6617	15304	26	34	51	42	52	-	62	15	120	.01	8	12	30	17	Continue Record - OK	KN
0754		6626	15315															Sat Fix Sync Dopp 28	
0755		6630	15321													18		c/c 049	KN
0803		6644	15337															c/c 260°	DKS
0853		6743	15502															c/c 239°	
		6753	15515															SAT FIX SYNCH	
0908	190044	6773	15540															Last shot	ELA
0910	190045	6779	15541															first shot RL/RP	
0911		6780	15542	27	36	53	52	64	-									continue c/c 245°	
0926		6811	15600															Sat nav. Sync.	
0930		6818	15607	29	39	58	56	66	-							20		streamer depths	
1000		6878	15703	29	38	55	54	64	-							22		streamer depths	
1006		6891	15720															c/c 260°	
1028	190045	6935	15774															last shot	TS
1031	190046	6941	15775															first shot RL/RP	TS
		6943	15776															continue	TS
1100		6998	16065	28	35	51	49	60	-									streamer depths	ELA

BEGIN
PCA 3

CRUISE 10 19-2		LINE PCA-3		AREA-PROJECT NE GMEX		PANAMA CITY, FLORIDA										DATE 18 JUNE 1976			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1110	190046	7018	16111							62	15	120	.01	8	12	30		C/C 245°	ELA
1130		7058	16161	27	36	55	51	62	-									Streamer depths	
																		guns firing at 410 psc	
1134		7067	16172															C/C 240°	
1136		7071	16176															#3 gun did not fire	
1148	190046	7094	16225															last shot	
1149	190047	7098	16227															first shot RC/RP NO RECORD!!	ELA
1151		7101	16232															RC/RP	
1152		7103	16233															Continue	
1223																		gun 3 free fires,	VS
1234		7186	16356	38	35	51	49	60	-	62	15	120	.01	8	12	30	52	gun 2 leaks	VS
1240		7199	16373															C/C 235°	
1248		7217	16415															C/C 230°	
1250		7219	16417															late syn	
1256		7230	16432															#3 gun misfire	
1300		7238	16442	29	36	53	60	61	-	62	15	120	.01	8	12	30		streamer depth	ELA
1308	190047	7255	16463															last shot	KA/
1309		7256	16464															miss shot	
		7257	16465															"	
		7258	16466															"	
1310	190048	7259	16467															first shot	
		7260	16470															CONTINUE	
1311		7261	16471															RC/RP	
		7262	16472															CONTINUE	
1316		7271	16503															C/C 235°	
1330		7298	16536	27	36	55	56	62	-	62	15	120	.01	8	12	30	67	streamer depths	
1335		7308	16550															C/C 245°	
1356		7351	16623															continue	

CRUISE IGT 19-2		LINE PCA-3		AREA - PROJECT NE GMEK - PANAMA CITY, FLORIDA													DATE 18 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1357	190048	7353	16625							62	15	120	0.01	8	12	30		continue	TSI
1400		7358	16632	27	36	53	51	63	-	62	15	120	0.01	8	12	30	75	streamer	
1406		7370	16646															% 255°	
1429		7417	16725																
	190048	7418	16726															last shot #48	
		7419	16727															Missed Shot	
1431		7420	16730															"	
		7421	16731															"	
		7422	16732															"	
		7423	16733															"	
		7424	16734															"	
		7425	16735															"	
	190049	7426	16736															1 st record #49	
1435	190049	7428	16740														85ms	RC/RP may have started late	
		7429	16741															record OK	
1436		7430	16742																
1445		7449	16765	28	35	51	49	61	-	62	15	120	0.01	8	12	30	88	streamer depth	
1446		7451	16767															% 230°	
1454		7467	17007															% 215°	
1500		7478	17022	29	35	51	48	59	-	62	15	120	0.01	8	12	30	94	streamer depths	
1530		7538	17116	26	36	55	51	63	-								110	streamer depths	
1535		7549	17131															% 200°	
1538		7554	17136															continue	
1540		7578	17166															% 185°	
1544		7587	17177															last shot	
		7588	17170															missed shot	
		7589	17201															missed shot	
		7590	17202															missed shot	

CRUISE IG 19-2		LINE PCA-3		AREA - PROJECT NE GMEX - PANAMA CITY, FLORIDA													DATE 18 JUNE, 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1556		7591	17203															missed shot	TSA1
1557	190050	7592	17204															first shot	
		7593	17205															continue	
1558		7594	17206															RC/RP	
		7595	17207															may be too good, no time break	
1559		7596	17210															continue	
1600	190050	7598	17212	26	36	55	12	62	-	62	15	120	0.01	8	12	30	125	streamer depths	
1615		7639	17251															c/c 205°	
1630		7657	17305	28	36	54	49	59	-	62	15	120	0.01	8	12	30	143	streamer depths	
1631		7661	17311															c/c 215°	
1632		7662	17312															continue	
1652		7702	17362															sat. / 8 dopplers	
1648		7694	17352															sat. syn (estimation)	
1700		7718	17402	29	37	55	50	62	-	62	15	120	0.01	8	12	30	172	streamer depths	
1715	190051	7749	17441															LAST SHOT THIS REEL	
1717	190051	7752	17444	29	36	50	48	60	-	62	15	126	.01	8	12	30	185	First shot, RC/RP	W
1717		7753	17445															Continue Record - OK	W
1731		7780	17506															SAT SYNC dop #18	
1735		7788	17510															c/c 230°	DFS
1833		7904	17674															c/c 232°	
1835		7908	17700															Last shot this reel	W
1836	190052	7911	17703	28	36	53	50	63	-	62	15	12	.01	8	12	30	243	First shot RC/RP	W
1837		7912	17704															Continue Record - OK	W
1841		7921	17715															SAT SYNC dop #2	W
1856		7951	17753															SAT SYNC DOPPLER #4	DFS
1905		7967	17773															c/c 229	
1951		8060	20130															#3 GUN OCCASIONALLY INDICATES OUT OF SYNC	
																		RELATIVE FIRE TIME.	

CRUISE IG 19-2		LINE PCA-3/PCX-1		AREA-PROJECT NE G MEX PANAMA CITY, FLORIDA														DATE 18-19 JUNE 76	
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1957	190052	8043	20195	26	36	56	50	63		62	15	120	.01	8	12	30		LAST SHOT THIS REEL	W
1958	190053	8075	20197														311	FIRST SHOT RC/RP	W
1959		8076	20150															Continue Record of	W
2001		8082	20156															C/C 226	
2012		8103	20203															SAT FIX SYNCH	Dks.
2056		8191	20333															SAT SYNC doppler #2	W
2101		8200	20344	26	37	57	52	63	-	62	15	120	.01	8	12	30	375	Streamer depths	
2115	190053	8229	20401															Last shot of reel	TS
2118	190054	8234	20402															first shot RC/RP	TS
2119		8236	20403														395	continue	TS
2132		8262	20435	29	36	54	50	61	-								408	Streamer depths	TS
2200		8316	20523	28	37	56	52	63	-	62	15	120	.01	8	12	30	428	guns fire at 390psi	TS
2230		8378	20621	27	37	56	52	62	-	62	15	120	.01	8	12	30			TS
	190054	8386	20631															last shot # 190054	
2235		8387																Missed Shot. No Rec	Increased
		8388																"	
2236		8389																"	
	190055	8390	20632														448	RC/RP / 1st shot. 190055	
		8391																Missed Shot	
2237		8392	20633	29	36	51	45	53	-									Record OK	
2231		8499	21006	28	38	56	52	63	-	62	15	120	.01	8	12	30	491	Stre	TS
2354	190055	8546	21065															Last shot of reel	ELA
2355	190050	8550	21066															First shot RC/RP	
2356		8552	21067														484	continue	
0030		8619	21192	28	36	54	51	60	-									Streamer depths	ELA
0100		8677	21264	28	38	58	55	65	-	62	15	120	.01	8	12	30	494		
0111		8699	21312															continue	TSAT
0111		8700	21313															"	

End
PCA3Begin PCX-1
PC-1E

CRUISE		LINE		AREA - PROJECT										DATE					
IG 19-2		PCX-1		NE GMEK - PANAMA CITY, FLORIDA										19 June 1976					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0111	190056	8701	21314							62	15	120	.01	8	12	30		continue	TSA1
0112		8702	21315															"	
0112		8703	21316															"	
0113		8704	21317															"	
0114		8705	21320															"	
0114		8706	21321															"	
0115		8707																no fire, tape stop running	
		8708																" Record no. stopped	
		8709																"	
		8710																"	
		8711																"	
0117	190056	8712	21322															Fire / NO TB	
		-																last shot #190056	
		8713	21323															Missed Shot	
		8714	21324															"	
		8715	21325															"	
0119		8716	21326															"	
		8717	21327															" - Tape slipped	
0120	190057	8718	21330															1 st good shot	
0120		8719	21331														502	Re/Re - OK	
		8720	21332															No TB Manual stop	
0121		8721	21333															Record OK	
0131		8741	21357	28	36	54	50	61	-	62	15	120	.01	8	12	30	511	streamer depths	
0146		8771	21415															late syn	
0200		8798	21450	26	36	54	51	61	-								489	streamer depths	
0206		8811	21465															4/5 3/2	
0230		8858	21544	27	36	56	53	62	-								416	streamer depths	
0235		8867	21555															continue	

CRUISE IG 19-2		LINE PCX-1		AREA - PROJECT NE G MEX - PANAMA CITY FLORIDA													DATE 19 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0236	190057	8870	21560							62	15	120	0.01	8	12	30		continue	TBAI
0237	↓	8872	21562															"	
		8873	21563															"	
0238	↓	8874	21564															"	
	190057	8875	21565															last shot	
	-	8876	21566															Missed shot	
0239	-	8877	21567															" "	
	-	8878	21570															" "	
0240	190058	8879	21571															1 st shot rec / # 58	
0241	190058	8880	21572														372	RC/RP	
		8881	21573															Missed TB.	
0242		8882	21574															Record OK	
0300		8918	21640	28	35	13	48	18	-	62	15	120	0.01	8	12	30	273	streamer depths	
0258		8914	21634															late syn	
0316		8951	21701															not fired	
0316		8912	21702															fired, continue ok	
0323		8965	21717															continue	
0324		8966	21720															no time break	
0324		8967	21721															continue o/c	
0330		8978	21734	29	36	55	126	-	62	15	120	0.01	8	12	30	172	streamer depths		
0334		8987	21745															late syn	
0337		8991	21752															c/c 310"	
0357		9033	22023															continue	
0358		9034	22024																
0358	190058	9035	22025															last shot	
		9036	22026															missed shot	
0359		9037	22027															"	
0400	190059	9038	22030							62	15	120	0.01	8	12	30		First shot	

9035
8879
157

CRUISE IG 19-2		LINE PCX-1, B-2		AREA - PROJECT NE GMEX - PANAMA CITY, FLORIDA													DATE 19 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INIT. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0400	190019	9039	22031															continue	TSAI
0401		9040	22032														89	RC/RP	
		9041	22033															no fire, record probably missed	
0402		9042	22034	30	36	14	12	61	-	62	15	120	0.01	8	12	30	87	continue, streamer, depth	
0430		9097	22122	29	36	14	12	62	-	62	15	120	0.01	8	12	30	47	streamer, depths	
0444		9126	22157															satellite syn	
0500		9158	22217	30	36	14	14	61	-	62	15	120	0.01	8	12	30	43	depths streamer	
0505		9170	22233															start long turn 072°	DKS
0517		9193	22262															last record this reel	
0518	190060	9195	22264															First shot RC/RP	
0518		9196	22265															Missed. No time break	
0519		9197	22266	30	38	56	48	56		62	15	120	.01	8	12	30	38	Continue recording as usual	W
0524		9207	22300															SAT FIX SYNC	W
0558		9274	22403															c/c OBS	DKS
0634		9345	22512															Tape did not stop - no TB	
0634		9346	22513															c/c 075°	
0636		9351	22520															LAST SHOT, THIS REEL	
0637	190061	9353	22522	30	42	54	50	58		62	15	120	.01	8	12	30	33	First shot RC/RP	W
0637		9354	22523															No time break - missed shot	
0638		9355	22524															Continue Record - ok	W
0643		9363	22534															Sat fix synch	DKS
0656		9396	22567															Sat fix synch	
0657		9393																TB occurred, tape did not advance	
0658		9394																Ditto	
0658		9395	22574															Reset tape drive	
0705		9409	22612															This record on tape - Continue recording as usual	
0711		9419																c/c 080°	
0711		9420	22625															Tape did not advance, as above.	
																		Record as usual,	

PCX-1
end pointBEGIN LINE
PC B-2problem
may have
been
caused

CRUISE 16-19-2		LINE PC B-2		AREA - PROJECT Panama City - NE G Mexico													DATE 19 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0712	190061	9423								62	15	120	.01	8	12	30	38	Tape did not advance	DKS.
0713		9424	22631															Record as usual.	
0715		9428																No	
0715		9429	22636															Yes	
		9430																No.	
		9431																Yes.	
		9432																Yes.	
		9433																Yes.	
		↓																Clean tape transport thorough	
		9441	22652															- very dirty tape.	
0722		9442	22653															Start recording as usual.	
0726		9451	22664															c/c 085°	
1747		9493	22736															Sat fix synch D#7.	
6814		9547	23023															Sat fix synch D#20	
0819		9554	23036															LAST STAT THIS REEL	KV
0821	190062	9562	23043	28	35	53	50	60	-	62	15	120	.01	8	12	30	71	FIRST RC/RP - NO TRACES	KV
0822		9563	23044															Continue Record	KV
0824		9567	23050															RC/RP - NO TRACES	
0825		9568	23051															No time break	
		9569	23052															Continue - OK	
0826		9571	23054															direct record - no traces	KV
0827		9572	23055															No lamp in galvanometer	
0830		9579	23064														116	c/c 088	KV
0839		9597	23106															SAT FIX SYNC dop#2	KV
0841		9600	23111														139	RC/RP - OK	KV
0841		9601	23112															No time break	KV
0842		9602	23113															Continue - OK!	KV

lamp bulb burned out.
→ lamp bulb replaced @ 0832.

CRUISE IG 19-2			LINE PC B-2		AREA-PROJECT NE G MEX PANAMA CITY, FLA.													DATE 19 JUNE 76	
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0850	190062	9619	23139	26	35	53	50	60	-	62	15	120	.01	8	12	30	150	streamer depth. SAT SYNC DOPPLER #6	W
0930		9698	23253	26	36	55	53	63	-	62	15	120	.01	8	12	30	159	streamer depth	ECA
0934		9705	23262															#3 gun misfire	
0935		9708	23265															" "	
0940	190062	9718	23277															Last shot	
0943	190063	9724	23300														159	RC/RP first shot	TS
0944		9726	23301															continue	
1002		9762	23345	28	36	54	50	58	-	62	15	120	.01	8	12	30	159	Streamer depths	TS
1015		9788	23377															c/c 081°	ECA
1030		9818	23435	28	37	59	50	58	-	62	15	120	.01	8	12	30		Streamer depths	ECA
1101	190063	9880	23533							62	15	120	.01	8	12	30		Last shot	ECA
1103	190064	9884	23534														145	First shot	
1104		9886	23535															continue	
1112		9902	23555	27	35	50	46	57	-									Streamer depths	
1130		9937	23620	26	35	51	50	61	-									guns fire at 380psi	
1201		10000	23717	28	35	50	59	61	-	62	15	120	.01	8	12	30	125		
1220	190064	10,0039	23766															last shot	
1223	190065	10,0043	23767															No TB	
		10,0044	23770															No TB	
1223		10,0045	23771															Good Shot (Rec only)	
1224		10,0047	23773														118	First RC/AP	
1225		10,0049	23774	27	34	52	48	58	-	62	15	120	.01	8	12	30		Continue	
1300		10,0118	24,101	26	35	53	50	59	-									Streamer depths	
1308		10135	24122															% 072°	TSAI
1320		10157	24151															type don't stop	
1330		0178	24175	26	35	52	49	59	-								97	streamer depths	
1337		10193	24213															continue	
1338		10194	24214															continue	

CRUISE		LINE		AREA - PROJECT										DATE					
IG 19-2		PCB-2		Gulf of Mexico Panama City										19 June 76					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1504	190067	0366	24471															RC/RP	TSAI
		0367	24472															No TIS	
1505		0368	24473															Record OK	
1514		0387	24516	29	35	54	51	62	-	62	15	120	0.01	8	12	30	74	streamer depths	
1527		0413	24550															Sat Sync - 6 dopplers.	
1530		0418	24515	29	35	54	51	61	-	62	15	120	0.01	8	12	30	70	streamer depths	
1535		0428	24567															c/c 075°	
1600		0478	24651	30	35	53	50	60	-								65	streamer depths	
1623	190067	0524	24721															Last shot # 190067	
1624		0525	24730															missed shot	
1624		0526	24731															"	
1624		0527	24732															"	
1625	190068	0528	24733															first shot # 190068	
1625	190068	0529	24734															OK	
1626		0530	24735															RC/RP (1st) recorded data OK, but tape manually stopped; shot missed during NIG manual SPWD to get beyond data.	
1626		0531	-															OK	
1627		0532	24736															OK	
1627		0533	24737															60 - RC/RP (2nd) - tape again failed to stop during rewind. Missed shot above RC/RP, looked OK in manual REP	
		0534	-															OK	
1628		0535	24740															OK	
1629		0536	24741															continue	
1643		0564	24775	29	35	52	49	58	-									c/c 073°	
1700		0598	25037	30	35	52	49	59	-	62	15	120	0.01	8	12	30	52	streamer depths	
1706		0611	15054															c/c 070	
1745		0688	15171															Last shot this reel	
1746	190069	0690	15173															FIRST → RC/RP - No time	KV
		0691	15174															break, air guns not	
1747		0692															43	firing	

CRUISE 16-19-2		LINE PC B-2		AREA - PROJECT Panama City - NE G Mexico										DATE 17 July 1976					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1747	19006	693-695								62	15	126	.01	30	12	30	43	no trigger from cycle fine manual from JFS;	DK
		696	25175															good records.	
		697	25176															missed	
		698																	
1750		699	25200															Manual fire, OK.	
1750		700																missed	
1751		701																"	
1751		702	25202															Manual fire, OK	
1754		703-707	25203															" " "	
		708																} missed	
		709																	
1756		710-721	25212															Manual fire, OK.	
		722																} missed	
		723																	
		724																?	
		725-727	25226															Manual fire, OK.	
		738																missed	
		739	25143															Manual fire, OK.	
1806		731	25234															c/c 073°	
1814		746	25253															Got fix signal D#7	
1828		775																no TB - missed.	
1829		776																"	
1829		777																	
		778																	
1830		779?																c/c 076°	
1830		7	25324															Manual fire OK. - shot pt or is off	
1834		800	25324															Reset - shot pt counter manually	
																		Manual fire OK.	

Though we were manually firing, getting TB, RP did not increment here (prob due to s.p. counter being turned off.)

CRUISE IG-19-2		LINE PC B-2		AREA - PROJECT Panama City - NE G. Mexico													DATE 19 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITIALS OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1835	190069	10803	25326							62	15	120	.01	8	12	30	34	Cycle timer OK - fire on cycle timer automatically. Manual fires prev. pg. not sync in 30 sec synch w/ this aut cycling.	
1905		0863	25423	29	35	50	46	56	-									Last shot this reel	LV
1906	190070	0865	25425															First shot RC/RP	
1909		0870	25426							62	15	120	.01	8	12	30	27	Continue Record - ok	LV
1910		0873	25431															c/c 062	
2003		0981	25605															c/c 065 - SUFFIX SYNC, 24 km	
2021		1015	25647															c/c 068°	LV
2028		1027	25663															last record this reel	DKS
2029	190071	1031	25667														20	RC/RP first record	
2030		1032	25670															no TB	
2030		1033	25671															record as usual	
2039		1051	25713	30	35	53	49	60									20	Streamer depth	
2046		1065	25731															c/s 850 turns	LV
2113		1118	26016	32	38	52	45	52										Streamer depths	ELA
2124		1141	26045															c/c 065°	
2136		1164	26074															c/c 062°	
2146	190071	11183	26117															last shot	
2148	190072	11188	26120															first shot RC/RP	
2149		11190	26121															continue	
2155		1202	26134															c/c 059°	
2204		1220	26157	30	35	51	47	57	-	62	15	120	.01	8	12	30	17	c/c 055°	
2208		1227	26166															END PCB-2	
2208		1228	26167															BEGIN PCC-1	- turn to 298°
2220		1244	26233															on course 298°	

PCB2 ↑

PC C-1 ↓

CRUISE		LINE		AREA - PROJECT												DATE			
IG 19-2		PC C-2		NE GMEX. Panama City												19-20 JUNE 76			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OR OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
2228	190072	11269	26240							62	15	120	.01	8	12	30		c/c 295°	ELA
2230		11273	26244	31	39	54	46	56	-								15	Streamer depths	ELA
2254		11321	26324															c/c 304°	
2300		11333	26337	32	36	52	46	52	-								16	Streamer depths	
2304	190072	11340	26347															Last shot	
2306	190073	11344	26350														15	First shot RC/RP	ELA
2309		11346	26351															continue	ELA
2332		11395	26432	30	37	52	50	57	-	62	15	120	.01	8	12	30	14	air pressure adj. 370 psi new 390 psi	B
2343		11419	26462															c/c 302°	
0000		11452	26522	30	37	55	52	59	-	62	15	120	.01	8	12	30	15	20 JUNE	TS
0026	190073	11503	26606															Last shot	
0028	190074	11508	26609															First shot RC/RP	
0029		11510	26610	30	37	53	50	59	-	62	15	120	.01	8	12	30	16	continue	TS
0100		11572	24706	26	37	54	52	62	-								17	streamer depths	TSAI
0130		11632	27004	25	35	52	49	16	-								16	streamer depths	
0145		11661	27037															continue	
0145		11662	27040															"	
0146		11663	27041															"	
		11664	27042															"	
0147		11665	27043															"	
0147	190074	11666	27044															Last shot #190074	
		11667	27045															missed shot	
		11668	27046															"	
0149	190075	11669	27047															first shot #190075	
		11670	27050															OK - Mounted Texaco Tape - will	
0150		11671	27051														16	RC/RP / check for oxide dust	
0150		11672	27052															OK / outtape transport	
0151		11673	27053															continue	

20 JUNE

CRUISE		LINE		AREA - PROJECT													DATE		
IG 19-2		PCC-1/PCX-2		NE GMEX - PANAMA CITY, FLORIDA													20 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0200	190075	11691	27075	23	34	48	47	54	-	62	15	120	0.01	8	12	30	16	streamer depths	TSR1
0231	190075	11754	27174	20	33	51	48	57	-								15	streamer depths	
0246		11784	27232															satellite Synchronix	
0254		11799	27251															slow turn 9/195°	
END PCC-1																		END PCC-1	
BEGIN PCX-2																		START PCX-2	
0300		11811	27265	24	30	48	40	46	-										
0307	190075	11827																last shot # 190075	
0308		11828																Missed shot	
0308		11829	27307															"	
0309		11830	27310															"	
0309		11831	27311															"	
0310		11832	27312															"	
0310	190076	11833	27313															1 st record # 190076	
0311		11834	27314														13	RC/RP	
0311		11835	27315															Missed shot	
0312		11836	27316															record OK	
0312		11837	27317															"	
0321		11854	27340															9/190°	
0330		11871	27362	24	32	49	45	53	-	62	15	120	0.01	8	12	30	17	streamer depths	
0352		11916	27436															Sat sync.	
0400		11931	27455	25	33	51	48	56	-								19	streamer depths	
0406		11945	27473															9/195°	
0428		11989	27540															9/198°	
0430		11992	27552															continue	
0430		11993	27553															"	
0431	190076	11994	27554															Last shot (6 sec only) # 190076	
0432		11995	27555															missed shot	

endpoint.

PCC1 ↑

PCX2 ↓

PC-1-F

CRUISE IG 19-2		LINE PCX2/PCB1B		AREA - PROJECT NE GMEK - PANAMA CITY, FLORIDA												DATE 20 June 1976			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0432		1996	27556															missed shot	TSA
0433		1997	27557															"	
0433	190077	1998	27560															first shot #190077	
0434	190077	1999	27561														25	RC/RP	
0441		2014	27600	25	33	50	48	58	-	62	15	120	.01	8	12	30	25	streamer depths	
0500		2051	27645	25	32	52	48	57	-								25	streamer depths	
0537		2127	27761															c/c 203° SAT SYNC	KV
0552		2157	30017															LAST shot	
0554	190078	2160	30022														40	FIRST shot RC/RP	
0554	Tape Tape	2161	30023	25	33	52	49	57	-	62	15	120	.01	8	12	30	40	Continue Record - OK	
0606		2184	30032															c/c 212° / sat sync	
0637		2246	301															} clean tape drive DKS } lots of crud from this tape	
		2257																	
0643		2258	30164															recorded OK.	
0644		2259	30165															} Bad } " / Clean again -	
		2260	30166																
		2264																	
0646		2265	30173															OK - Tape may not be	
0648		2268																pulling through as fast as possible	
		2269	30177															Bad.	
0649		2270																OK	
0650		Cleaning tape drive																Bad	
0651		2273	30204															c/c 073°	
0653		2278	30210															Bad	
0654		2279	30211															OK	
		2280	30212															Bad.	
0655		2282	30214															OK	
		2283	30215															Bad.	

END
PCIFEND
PCX2BEGIN
PCB1B

CRUISE 18-19-2		LINE PCBIB/PCB3A		AREA - PROJECT Panama City - NE 6 Mexico										DATE 20 June 1976					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FH)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0658	190678	2284	→							62	15	120	101	8	12	30		problems w/ tape transport. - these plus preceding bad records may each have a couple of sec. of red. before drive unable to pull tape through I stopped prematurely	DKS
0714		2320	30272	← not on tape														SAT FIX SYNC	WV
0715		2323	30275															OK	
0809		WORK ON TAPE DRIVE																4c 077°	DKS
0842																		4c 079°	
0952	190078	12644	31147															Reel removed	ELA
0958	190079	12648	31152	26	32	50	45	51	-								23	Restart line	RC/RP part of BI
0958		12649	31153															continue	
1028		12709	31247	26	32	50	47	54	-	62	15	120	101	8	12	30	20	Begin course change to 340°	
1041		12734	31300															on course 340°	
1102		12776	31352	25	26	50	49	60	-									Streamer depths	
1111		12793	31373	ETC.														No record	
1135		12842	31441															First good shot	
1140	190079	12851	31472															Last shot of reel	
	190080	12857	31473															No record	
1143		12858	31474															Record only	
1144		12860	31476														19	RC/RP (First shot)	
1145		12862	31477															continue	
1203		12898	31543	27	32	52	51	62	-									Streamer depths	ELA
1232		12956	31635	28	32	50	50	60	-									Streamer depths	
1258		13009	31722															continue	ISA
1259		13010	31723																

END PCBIB

Begin
PCB3A
↓

CRUISE IG 19-2		LINE PCB 3A		AREA - PROJECT NE GMEX - PANAMA CITY, FLORIDA												DATE 20 June 1976			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1259	190080	13011	31724							62	15	120	0.01	8	12	30		continue	TSA1
1300		13012	31725															"	
1300		13013	31726															"	
1301		13014	31727															"	
1301	190080	13015	31730															last shot #190080	
1302		13016	31731															missed shot	
1302		13017	31732															"	
1303		13018	31733															"	
1303	170081	13019	31734															first shot #170081	
1304	190081	13020	31735	28	33	51	50	60	-	62	15	120	0.01	8	12	30	26	RC/RP, streamer depths	
1330		13071	32020	29	33	52	51	60	-									streamer depths	
1337		13087	32040															1/2 263°	
1400		13133	32114	28	33	50	51	61	-								33	streamer depths	
1423	190081	13178	32173															last shot - short record	
		13179	32174															Missed shot	
1424		13180	32175															"	
		13181	32176															"	
1425		13182	32177															"	
		13183	32200															"	
1426		13184	32201															"	
	190082	13185	32202															1 st good record #82	
1427		13186	32203														39	RC/RP	
		13187	-															Missed Shot	
1428		13188	32204															Record OK	
1430		13192	32210	29	32	50	48	59	-								40	streamer depths	
1436		13204	32224															1/2 268°	
1500		13253	32303	28	34	52	51	63	-								42	streamer depths	
1530		13311	32377	28	35	52	51	61	-								52	streamer depths	

CRUISE		LINE		AREA - PROJECT													DATE		
19-2		PCB3A/PCB1C		NE GMEX - PANAMA CITY, FLORIDA													20 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FTH)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1530	190082	13311	32377	28	35	52	51	61	-	62	15	120	0.01	8	12	30	52	slow turn to 163°	TSAI
1542		13337	32431															continue	
1543		13338	32432															"	
		13339	32433															"	
1544		13339	32434															"	
		13340	32435															"	
	190082	13341	32436															Last shot # 190082	
1545		13342	-															missed shot	
		13343	32437															"	
		13344	32440															"	
		13345	32441															"	
		13346	32442															"	
	190083	13347	32443															"	
1548	190083	13348	32444															first shot # 190083	
1548		13349	32445														46	RC/RP (PCB1C)	
		13350	32446															Record OK	
1557		13365	32465															may on initial gain only	
1600		13371	32473	29	35	50	47	55	-								57	streamer depths	
1612		13395	32523															C/C 073 - slow turn	
1620		13412	32544															on course	
1630		13432	32570	30	35	50	47	57	-	62	15	120	0.01	8	12	30	54	streamer depths	
1636		13441	32604															% 070°	
1700		13491	32663	26	34	50	48	57	-									streamer depth	
1705		13502	32676																
		13503	32677																
1706	190083	13504	32700															Last shot # 190083	
1709	190084	13511	32707														40	First shot # 190084 RC/RP	

endpoint-

END PCB3A

for convenience
break the lines
hereinclude this in
data for PCB1CEnd
BLBegin
PCB1Cbeginning
point.

CRUISE		LINE		AREA - PROJECT													DATE		
IG 19-2		PCB 1C		NEGMEX - PANAMA CITY, FLORIDA													20 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FTH)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
1719	190084	3530	32732							62	15	120	.01	8	12	30	39	c/c 070°	DK-
1828		3668	33194															last record this reel.	
1830	190085	3674	33152															first record RC/RP	
1831		3675	33153	29	34	48	44	57	-	62	15	120	.01	8	12	30	37	Continue Record - ok	10V
1840		3691	33173															c/c 073°	DKs
1934		3801	33350															c/c 076°	
1950		3828	33405															last record this reel	
1950	190086	3833	33411															first record RC/RP.	
1951		3834	33412	28	35	51	50	60	-	62	15	120	.01	8	12	30	22	Continue Record - ok	14V
2006		3864	33450															set fix synch D#1	DKs
2018		3888	33500															start turn to 350°	DKs
2026		3908	33524															turn completed.	
2040		3932	33554															250° c/c begin	
2050		3953	33601															turn completed	
2107	190086	3986	33642															last shot working	TS
																		on tape transport	
2114	190087	14000	33652	30	38	51	47	54	-	62	15	120	.01	8	12	30	22	first shot, RC/RP	TS
2115		14002	33653															continue	TS
2206		14013	34021	27	35	53	51	60	-	62	15	120	.01	8	12	30		Streamer depths	
2230	190087	14153	34102															Last shot of red	ECA
2232	190088	14157	34103	30	35	52	51	60	-	62	15	120	.01	8	12	30	28	First shot RC/RP	
2233		14159	34104															Continue	
2333		14277	34272	28	34	50	51	58	-	62	15	120	.01	8	12	30	39	Streamer depths	TS
2350	190088	14312	34335															Last shot	
2353	190089	14318	34336	28	35	51	52	61	-								41	First shot RC/RP	
2354		14320	34337															Continue	
0034		14400	34456	28	34	51	50	59	-	62	15	120	.01	8	12	30	51		TS
0100		14451	34542	27	34	50	50	58	-	62	15	120	.01	8	12	30			TS

for convenience
break the lines here

BEGIN

PCB 3B →

→

21 JUNE

CRUISE		LINE		AREA - PROJECT										DATE					
IG 19-2		PCB-3B		NE GMEX - PANAMA CITY, FLORIDA										21 June 1976					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH(FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0113	190089	14477	34574															last shot #190089	TSAI
0115		14481	34600															missed shot	
0115	190090	14481	34601															first shot #190090	
		14482	34602														61	RC/RP	
0115		14483	-															NO TB	
		14484	34603															record OK	
0117		14485	34604															record OK	
0130		14511	34536	28	34	50	48	60	-	62	15	120	0.01	8	12	30	64	streamer depths	
0137		14527	34556															% 252°	
0144		14540	34673															satellite syn.	
0200		14571	34732	28	34	51	50	58	-								70	streamer depths	
0209		14589	34754															% 254°	
0234		14641	35040															last good shot	
0235	190090	14642	35041															N.G. tape ran out	
0235		14643	35042															Missed shot.	
0236		14644	35043															"	
0236		14645	35044															"	
0237		14646	35045															"	
0237		14647	35046															"	
0238	190091	14648	35047															1st shot #91	
0238		14649	-															Missed shot	
0239		14650	35050														78	RC/RP	
0239		14651	-															Missed shot	
0240		14652	35051	28	34	51	49	56	-	62	15	120	.01	8	12	30		Record OK	
0300		14692	35121	29	36	54	13	62	-								83	streamer depths, Sate Syn	
0305		14702	35133															% 245°	
0330		14751	35214	28	35	51	50	60	-								89	streamer depths, sate syn	
0345		14782	35253															% 247°	

CRUISE IGT 19-2		LINE PCB-3B		AREA - PROJECT NE GMEX - PANAMA CITY, FLORIDA													DATE 21 June 1976		
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
0357	190091	14806	35303							62	15	120	0.01	8	12	30		Continue	BAI
0358		14808	35305															"	
0358		14809	35306															Last Shot # 190091	
0400	190092	14812	35311															first shot # 190092	
0401		14813	35312															RC/RP didn't stop, no good	
		14814	35312															no increment	
0401		14815	35313															OK	
0402		14816	35314	29	34	52	51	60	-								95	RC/RP (nd) record OK	
0421		14852	35360															No TB light on, But record scene OK	
0423		14859	35367															RC/RP, record OK	
0430		14872	35404	28	34	51	49	60	-	62	15	120	0.01	8	12	30	101	streamer, depths	
0450		14912	35414															safe syn	
0500		14931	35477	29	35	54	52	63	-								107	streamer depths	
0518		14968	35543															last shot # 92	
0518		14969	35544															Missed Shot	
0519		14970	35545															"	
0518		14971	-															"	
0520	190093	14972	35546														112	RC/RP - 1 st record	
0520		14973	-															Missed Shot	
0521		14974	35547															OK	
		14979	35554															NO T.M.	
		14980	35555															NO T.B.	
0524		14981	35556															OK	
0529		14989	35566	29	35	54	53	63	-	62	15	120	0.01	8	12	30	114	SAT SYNC	UN
0605		15003	35900															c/c 265	UN
0637		15126	35947															LAST SHOT	
0638	190094	15128	36001														102	First shot RC/RP	
0639		15130	36003															Continue Record	UN

0509
c/c 255

CRUISE IG 19-2		LINE PCB-38		AREA - PROJECT NE GMEC PANAMA CITY, FLORIDA													DATE 21 JUNE 76			
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FTH)	REMARKS	INITIALS OF OBS.	
				1	2	3	4	5	6	INIT.	RATE	FINAL								
0643	190094	15138	36013	26	35	55	54	65	-	62	15	120	.01	8	12	30	102	SAT SYNC/streamer depth	KT	
0705		5182	36067															c/c 267°	DJS	
0728		5228	36145															SAT SYNC	KV	
0738		5248	36171															c/c 265°	DJS	
0956		5285	36236															LAST SHOT		
0958	190095	5288	36242															FIRST RC/RP		
0959		5290	36249														43	Continue OK —		
0816		5324	36306															SAT FIX SYNC	KV	
0847		5385	36400	30	36	55	55	62	-	62	15	120	.01	8	12	30	30	SAT FIX SYNC	KV	
0906		5424	36452															c/c 263° sat sync	TS	
0914	190095	15440	36472															last shot		
0917	190096	15446	36473	30	37	56	55	64	-	62	15	120	.01	8	12	30	27	first shot RC/RP		
0918		15447	36474															continue		
1000		15531	36616	30	35	51	50	60	-	62	15	120	.01	8	12	30	22	streamer depths	ELA	
1005		15542	36630															c/c 260°	ELA	
				probably lost about 10 records															tape transport malfunction	
1028		15586	36705															continue		
1034				30	35	50	49	60	-									streamer depths	ELA	
1043	190096	15618	36745															last shot		
	190097	15625	36747															first shot RC/RP		
1047		15627	36750	30	34	51	50	61	-	62	15	120	.01	8	12	30	22	continue		
1154		15659	37153															c/c 153°		
1203	190092	15728	37126															last shot of reel		
1204	190098	15781	37177	31	35	44	40	49	-								22	First shot/RC/RP		
1206		15783	37200															trace art in midst of a course change		
1222		15815	37240															continue		
1230		15832	37261	31	30	47	43	50	-									c/c 150°		
1300		15892	37355	30	34	47	43	48	-									streamer depths		
																		looks like tape transport		

end line here.
rest of data
probably n/g.

pulling tape evenly - probably skewed

CRUISE IG 19-2		LINE PCB 3B		AREA - PROJECT NE GMEX - PANAMA CITY, FLORIDA														DATE 21 June 1976	
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FM)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
	190098	5894																	TSB/
		5895																	Mark
		5896																	
		5897	61																
		5898																	
		5899																	
		5900	37365																
1305		5901	37366																
1305		5902	37367																
1306		5903	37370																
1306		5904	37371																
		5905	37372																
		5906	37373																
1308		5907	37374																
1308		5908	37375																
		5909	37376																
		5910	37377																
		5911	37400																
1310		5912	37401																
		5913	37402																
1311		5914	37403																
		5915	37404																
		5916	37405																
1312		5917	37406																
1313		5918	37407																
1314	190098	5920	37411	31	35	48	44	48	-62	15	120	0.01	8	12	30	34		Last Shot on Line	

CRUISE 19-2		LINE <small>LINE A CONTAINER</small> Sonobuoys		AREA - PROJECT NEGMEX Panama City										DATE 22 June 76					
TIME	REEL	SHOT PT. NO.	RECORD NO.	STREAMER DEPTH						GAIN (DB)			TRIP DEL.	REC. LGTH	FOLD	REP. RATE	WATER DEPTH (FTH)	REMARKS	INITS. OF OBS.
				1	2	3	4	5	6	INIT.	RATE	FINAL							
														14s		30		Sonobuoy Channel #25	TSAI
0233																		Single Channel #1	
0234																		receive sounds	
0257	190099	0001	0126							65	15	110		14		30		first shot #190099	
0300		0009	0136														14		
0325		0058	0217															NOTB	
0327		0061	0217															no increment	
		0062	0222															no TR	
0328		0063	0223															OK, only #1 gun firing	
0331		0070	0232														13	OK, only #1 gun	
0334		0075	0237															#1, #3 gun firing	
0342		0092	0260															confirm guns OK	
0343	190099	0093	0261															last shot #190099	
	190100	0101	0271															first shot #190100	
0400		0127	0323														9	turn around, begin recording S.B. (#2) (0403Z)	
0433	190100	193	0425											14				last shot #190100	
0436	190101	200	0434							65	15	110	.01	10	1	30		first shot 10sec record	
0500		0246	0512														14		
0541		0329	0635															LAST record this reel	WV
0542	190102	0331	0637							65	15	110	.01	10	1	30		FIRST record this reel.	
0605		377	0715							65	15	100						change final PCC gain	OKS.
0608		384	0724															turn around - begin recording S.B. (#1) again	
0622		412	0760															c/c 020°	
0626		420	0770															c/c 060°	
0633		434	1006															c/c 0360	
0644		456	1034															last record this reel	

AS FAR AS WE
CAN TELL, THIS
TAPE ↓ IS UNUSED.

NOTE: CHECK
TAPE #
1900103:
POSSIBLE SONO-
BUOY RECORD -
OR POSSIBLY
WOUND BACKWARDS
TO START WITH.

S.B.
#1S.B.
#2

21 June 76

(22 June - Z-Time)

Z-Time +5	Time (H)	Stage I		Stage II		Ships Hdg	Comments
		Range ₁	Bearing ₁	Range ₂	Bearing ₂		
	2041	-	-	9 n.m.	002	048	stopper near Stage I to put out guns. - slow to 2.5 kts
	2052	1.5	170	8.0	000	049	deploying guns
	2107	2.5	180	7.0	001	049	guns firing
	2114	3.0	180	6.4	000	049	c/s 800 RPM - streaming single channel
	2117	3.4					c/c by 180° - will drop sonobuoy 2 n.m. from SI
	2119 ³⁰	3.4	270				rel. bearing 270°
	2123	3.25	355			200	run back to 2 mi from platform & drop buoy
	2129 ³⁰					225	c/c 225
	2131					220	c/c 220
	2135	2.0	000	9.3	185	221	2 n.m. from SI dropped sonobuoy
	2138						c/c 222°
	2145	1.0	000			221	c/c on ³⁰² turn rnr reverse course to sonobuoy
	2147		270			2130	
	2150 ³⁰	2.15 2.15	215	8.0	035 ¹⁸⁰	018	
	2152						c/c 045° - on line b/w 2 stages
	2153	1 3/4	180	7.6	000	050	c/c 050° -
	2159	2.1	180	7.4	000	050	just beyond est. sonobuoy pos.
	2201	2.4	180	7.0	000	050	
	2206	3.0	180	6.3	000	050	
	2207					048	c/c 048°
	2212	2.8	178	5.6	002	049	c/c 049
	2215	4.0	178	5.3	002	049	
	2222 ³⁰					050	c/c 050
	2224	5.0	180	4.3	000	050	
	2233	6.0	180	3.3	000	052	c/c 052
	2242	7.0	180	2.3	000	052	
	2251	8.0	180	1.25	000	052	
	2254	8.3	180	1.0	000	052	
	2258	8.7	180	0.6	000		start turn to starboard

depth 50 ft
on Bendix

Stage I Stage II

Time (Kp) local	Range ₁	Bearing ₁	Range ₂	Bearing ₂	Ship's Hdg	Comments
2305	8.5	002	0.8	152°	230	Sonobuoy #2
2307	8.3	000	1.0	155°	230	
2317	7.3	002	2.0	175	230	
2327	6.3	002	3.0	176	230	
2337	5.3	000	4.0	177	230	
2346 ³⁰	4.3	000	5.0	178	230	
2355						c/c 227
2355 ³⁰	3.3	000	6.0	180	227	
0005 ³⁰	2.3	000	7.0	180	227	
0015	1.3	000	8.0	180	227	c/c 225
0018	1.0	358	8.3	180	225	
0025	0.3	020	9.0	180	225	
0027					225	closest approach (STIP STIP) Stage I
0035	0.7	180	10.0	180	225	
0037 ³⁰	1.0	180			225	
0045	1.75	178	11.0	180	225	
0047 ³⁰	2.0	178			225	
0058	3.0	180			225 180	Stage II out of range.
0107	3.9				045	c/c to 045°
0112	3.6	180.			040	on course.
0120					039	c/c to 039°
0123					022	c/c to 022°
0127					060	c/c to 060
0135					025	c/c 025