

14 00043760

CORONA "J"  
DATA BOOK



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4 PAGES  
(NOT INCLUDING PEST)

CORONA J-FLIGHT DATA BOOK

SYSTEM NO. J-29

VEHICLE NO. 1622

MISSION NO. 1030-2

CAMERA NOS. 182/183

DATE 3-21-66

PAGE 1

SYSTEM NO. J-20  
VEHICLE NO. 1622  
MISSION NO. 123A-2  
CAMERA NOS. 182/183

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SYSTEM NO. J-29  
VEHICLE NO. 1622  
MISSION NO. 183P-2  
CAMERA NOS. 182/183

GENERAL FLIGHT DATA

MASTER CAMERA SERIAL NO. 182

SLAVE CAMERA SERIAL NO. 183

S/I -1 SERIAL NO. D94/188/187

S/I -2 SERIAL NO. D82/195/182

LAUNCH DATE 3-9-66

REACTIVATION DATE N/A

REACTIVATION ORBIT N/A

ORBITAL PARAMETERS (REV. 128)

PERIOD	98.478 MIN	ECCENTRICITY	0.81821
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PERIGEE	98.784 NM	PERIGEE LAT.	37.555
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APOGEE	238.848 NM	INCL. ANGLE	75.834
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RECOVERY ORBIT NO. 159

RECOVERY DATE 3-19-66

SYSTEM NO. J-20  
 VEHICLE NO. 1622  
 MISSION NO. 1830-2  
 CAMERA NOS. 182/183

CYCLE PERIOD DATA

V/F LEVEL	RAMP AMPLITUDE	SETTING RAMP-SEC	TIME UP RAMP-SEC	---CALIBRATED---		---IN-FLYHT---		OR NO.
				MASTER	SLAVE	MASTER	SLAVE	
7	3		249	4.613	4.602	4.605	4.590	8
7	3		1823	2.217	2.216	2.251	2.231	9
7	3		342	4.464	4.454	4.553	4.574	12
7	3		1903	2.216	2.216	2.232	2.217	11
7	3		1911	2.216	2.215	2.233	2.224	12

NOTE

AN \* OR -0 INDICATES NO DATA AVAILABLE.

A. 1833-?

B. JPY

C. FINAL PERFORMANCE ESTIMATE, PART ONE (REVISED)

OPERATIONS SUMMARY

FWD PAN		CAMERA		NUMBER		182		HEIGHT	RANGE	DA	H	M	S	LTIM	S-TIM		
CPN	NO	FRA	Q	LAT	LONG												
79	5	0	20	ON	2	40	22	128 36W	615255	637634	14	21	23	8	1248	76988	
				OFF	2	37	13	127 24W	638423	638545	14	21	23	56	1254	77836	
81	0	0	3	ON	2	55	39	176 49E	667698	691425	15	0	29	7	12	7	1227
				OFF	2	54	15	177 57E	667881	684974	15	0	28	31	1212	1231	
83	5	1	55	ON	2	70	29	106 20E	753592	781190	15	3	16	41	1022	11871	
				OFF	2	62	36	123 38E	727462	726646	15	3	19	17	1133	11957	
84	3	1	16	ON	2	37	6	113 27E	626817	628879	15	4	56	41	1250	17801	
				OFF	2	34	32	119 21E	622601	624575	15	4	57	28	1254	17840	
84	3	2	16	ON	2	32	35	119 59E	630238	621847	15	4	57	50	1257	17870	
				OFF	2	30	4	120 45E	597552	619278	15	4	58	28	13	1	17908
85	5	1	172	ON	2	44	37	92 28E	624144	646656	15	6	25	16	1235	23116	
				OFF	2	19	36	130 42E	597645	619363	15	6	31	39	1314	23499	
86	6	1	95	ON	2	62	41	55 1E	698261	723763	15	7	50	52	1130	28252	
				OFF	2	48	39	57 31E	636371	659470	15	7	54	45	1224	28485	
87	4	1	94	ON	2	52	42	42 6E	658572	674277	15	9	24	12	1212	33852	
				OFF	2	38	39	40 22E	608965	631108	15	9	27	53	1245	34073	
88	4	0	10	ON	1	32	50	122 29W	1123384	1165266	15	10	33	46	223	38026	
				OFF	1	41	44	121 19W	1124966	1146125	15	10	34	34	229	38074	
91	4	1	43	ON	2	72	23	84 20W	762252	792182	15	15	29	8	942	55208	
				OFF	2	66	41	66 0W	717582	743816	15	15	22	17	1058	55337	
94	4	1	19	ON	2	33	4	128 29W	599546	621336	15	20	2	59	1249	72179	
				OFF	2	33	3	107 32W	597176	619877	15	20	3	45	1253	72225	
96	2	1	25	ON	2	75	0	132 22E	824461	833996	15	22	50	37	740	82237	
				OFF	2	73	53	151 14E	775152	803580	15	22	51	55	856	82315	
97	9	1	39	ON	2	73	18	132 56E	766412	794497	16	0	22	46	914	1366	
				OFF	2	68	45	152 6E	726191	752752	16	0	24	41	1033	1481	
98	9	1	47	ON	2	72	21	115 52E	754872	782519	16	1	53	46	937	6826	
				OFF	2	66	43	134 7E	711982	737922	16	1	55	53	1052	6953	
98	9	2	22	ON	2	12	37	165 56E	615235	638572	16	2	10	42	1314	7842	
				OFF	2	6	59	166 41E	626077	648861	16	2	11	37	1318	7897	
99	9	1	55	ON	2	62	31	121 1E	677246	701955	16	3	28	16	1132	12496	
				OFF	2	52	30	129 17E	643514	666954	16	3	30	29	12	3	12629
100	1	1	17	ON	2	74	40	50 37E	785637	814455	16	4	53	17	815	17597	
				OFF	2	73	17	64 35E	763127	791087	16	4	54	19	912	17659	
100	1	2	73	ON	2	73	31	70 7E	736692	763649	16	4	55	34	10	8	17734
				OFF	2	58	39	100 15E	657869	692225	16	4	59	19	1140	17959	
100	1	3	97	ON	2	35	35	113 42E	622022	623911	16	5	5	25	1240	18325	
				OFF	2	21	5	117 54E	599454	621241	16	5	9	6	13	0	18546
101	2	1	19	ON	2	42	9	88 20E	613025	635321	16	6	34	14	1227	23654	
				OFF	2	39	8	89 35E	627180	629257	16	6	35	1	1233	23701	
102	3	2	113	ON	2	59	36	53 35E	670991	695464	16	8	0	3	1134	28803	
				OFF	2	43	31	64 54E	615813	638213	16	8	4	23	1224	29063	
103	6	1	52	ON	2	61	3	29 4E	677188	701895	16	9	30	8	1126	34288	

			OFF	2	53	35	36	12E	645557	669877	16	9	32	13	1157	34333	
103	6	2	ON	2	37	31	44	32E	634389	626368	16	9	36	26	1234	34586	
			OFF	2	22	30	47	27E	597175	619876	16	9	38	44	1248	34724	
104	1	2	ON	1	38	55	127	41W	1097861	1137912	16	10	42	3	211	38523	
			OFF	1	41	49	125	31W	1075699	1118818	16	10	42	51	216	38571	
108	8	1	ON	3	18	58	56	2W	758775	786569	16	17	23	10	1339	62598	
			OFF	3	27	32	53	51W	819113	848166	16	17	25	21	1349	62721	
110	1	1	ON	2	34	8	114	1W	599854	621656	16	20	12	44	1234	72644	
			OFF	2	31	7	113	3W	593261	619795	16	20	11	30	1239	72690	
110	1	2	ON	2	28	42	112	27W	597585	619321	16	20	12	8	1242	72728	
			OFF	2	24	38	111	14W	598735	620464	16	20	13	10	1248	72792	
114	5	1	ON	2	71	30	114	44E	731452	758219	17	2	2	4	941	7324	
			OFF	2	61	41	137	13E	672532	697833	17	2	5	20	1114	7520	
115	5	1	ON	2	61	35	114	31E	671399	695888	17	3	35	50	1113	12950	
			OFF	2	43	34	125	37E	624155	646868	17	3	39	25	12	1	13165
116	8	1	ON	2	74	40	45	29E	768072	795220	17	5	1	9	8	3	18869
			OFF	2	72	42	63	6E	740531	767602	17	5	2	29	915	18149	
116	8	2	ON	2	33	35	109	13E	599045	620817	17	5	13	46	1230	18826	
			OFF	2	16	33	113	49E	609917	632095	17	5	18	5	1253	19085	
117	9	1	ON	2	52	34	77	26E	635151	658277	17	6	39	18	1149	23958	
			OFF	2	42	30	83	2E	609772	631946	17	6	41	57	1214	24117	
117	9	2	ON	2	26	33	55	39E	598477	620227	17	6	46	1	1240	24361	
			OFF	2	23	29	89	10E	620507	622333	17	6	46	47	1244	24407	
118	6	1	ON	2	70	25	27	40E	719334	745633	17	8	4	24	955	29064	
			OFF	2	67	45	35	22E	701566	727193	17	8	5	21	1026	29121	
118	6	2	ON	2	45	58	58	3E	618971	641498	17	8	11	15	12	3	29475
			OFF	2	34	26	63	18E	599492	621268	17	8	14	29	1227	29669	
119	3	1	ON	2	55	31	28	40E	647833	671432	17	9	39	10	1133	34750	
			OFF	2	47	30	34	56E	619962	642517	17	9	41	35	12	1	34895
126	4	1	ON	2	36	1	119	44W	620353	622173	17	20	17	47	1218	73067	
			OFF	2	32	58	118	43W	598777	620538	17	20	18	34	1223	73114	
127	4	1	ON	2	72	24	173	57E	727298	753899	17	21	37	44	913	77864	
			OFF	2	69	55	175	57W	708042	733914	17	21	38	46	954	77926	
129	8	1	ON	2	73	19	122	36E	734576	761381	18	0	38	10	848	2290	
			OFF	2	67	45	144	23E	692800	710180	18	0	40	26	1018	2426	
129	8	2	ON	2	54	33	162	11E	636129	659282	18	0	44	18	1133	2656	
			OFF	2	51	32	164	22E	627107	649931	18	0	45	7	1142	2707	
130	5	1	ON	2	68	28	119	47E	696242	721669	18	2	10	38	10	9	7838
			OFF	2	58	34	135	46E	649544	673210	18	2	13	39	1116	8019	
131	5	1	ON	2	50	33	111	55E	652664	676448	18	3	43	48	1111	13428	
			OFF	2	46	29	121	43E	614058	636392	18	3	47	20	1154	13640	
131	5	2	ON	2	39	59	124	41E	603590	625532	18	3	49	1	12	7	13741
			OFF	2	36	58	125	50E	600680	622513	18	3	49	48	1213	13788	
132	5	1	ON	2	74	13	46	25E	742880	770072	18	5	8	55	814	18535	
			OFF	2	72	41	50	0E	725101	751619	18	5	9	50	9	2	18590
132	5	2	ON	2	42	32	100	48E	606755	628816	18	5	18	49	12	2	19129
			OFF	2	32	26	104	34E	598684	620442	18	5	21	24	1219	19284	
132	5	3	ON	2	26	32	106	18E	600596	622426	18	5	22	54	1228	19374	
			OFF	2	16	31	108	47E	615326	637706	18	5	25	26	1240	19526	
133	3	1	ON	2	53	35	71	40E	631096	654070	18	6	46	20	1133	24380	
			OFF	2	43	33	77	32E	628090	639201	18	6	48	59	1159	24539	

135	9	1	57	ON	2	6	43	42	28E	645169	669678	18	9	59	13	1249	35953	
				OFF	3	2	28	44	21E	684355	799341	18	10	1	32	1258	36092	
137	6	1	65	ON	2	22	2	6	33W	606451	623499	18	12	56	14	1229	46574	
				OFF	2	12	57	4	27W	625984	649764	18	12	59	31	1240	46711	
143	1	1	15	ON	3	22	1	133	47W	829182	832894	18	22	9	56	1314	79796	
				OFF	3	25	19	132	59W	831834	862412	18	22	10	44	1318	79844	
144	1	1	114	ON	2	73	17	148	39E	719982	746327	18	23	14	43	837	83683	
				OFF	2	59	36	175	28E	645736	669259	18	23	19	26	11	8	83966
145	2	1	26	ON	2	54	33	157	14E	629249	651945	19	0	51	15	1120	3075	
				OFF	2	51	33	159	25E	621162	643763	19	0	52	4	1129	3124	
147	4	1	25	ON	2	75	0	48	47E	748334	775732	19	3	44	28	659	13460	
				OFF	2	73	55	67	16E	724227	752711	19	3	45	36	814	13536	
147	4	2	42	ON	2	65	28	98	37E	667742	692892	19	3	48	57	1023	13737	
				OFF	2	59	34	106	58E	643897	667351	19	3	58	42	1058	13842	
147	4	3	63	ON	2	57	36	129	5E	636972	662164	19	3	51	16	11	7	13876
				OFF	2	46	32	115	41E	613827	636152	19	3	53	41	1136	14021	
147	4	4	75	ON	2	42	29	119	34E	622396	624293	19	3	55	47	1154	14147	
				OFF	2	29	27	123	22E	608977	622821	19	3	58	36	1212	14316	
148	4	1	75	ON	2	73	44	46	3E	721873	747439	19	5	16	7	620	18967	
				OFF	2	65	48	75	26E	667988	692349	19	5	19	18	1021	19158	
148	4	2	23	ON	2	43	3	95	41E	624875	626865	19	5	25	33	1148	19533	
				OFF	2	39	27	97	11E	621453	623311	19	5	26	28	1155	19588	
148	4	3	67	ON	2	29	32	102	32E	631832	622879	19	5	29	0	1211	19748	
				OFF	2	19	25	103	12E	614790	637151	19	5	31	34	1224	19894	
149	3	1	63	ON	2	60	29	67	19E	646285	669621	19	6	51	15	1052	24675	
				OFF	2	51	30	66	14E	619581	642122	19	6	53	43	1126	24823	

OPERATIONS SUMMARY

AFT PAN CAMERA NUMBER 183

OPN NO	FRA	G	LAT	LONG	HEIGHT	RANGE	DA	H	M	S	LTIM	S-TIM						
69	7	3	68	ON	2	27	20	104	3E	596457	618131	14	6	21	5	1317	22865	
				OFF	2	17	18	126	35E	598195	619934	14	6	23	37	1330	23017	
81	3	0	4	ON	2	56	32	176	0E	667898	691425	15	0	20	7	12	4	1287
				OFF	2	55	7	177	12E	668881	684974	15	0	20	31	12	9	1231
83	5	1	57	ON	2	71	10	103	40E	753592	781199	15	3	16	41	1011	11801	
				OFF	2	63	27	122	20E	708462	726046	15	3	19	17	1128	11957	
84	3	1	17	ON	2	37	57	118	5E	626817	628879	15	4	56	41	1249	17801	
				OFF	2	35	22	119	0E	622601	624505	15	4	57	20	1253	17842	
84	3	2	16	ON	2	33	25	119	40E	620038	621847	15	4	57	50	1256	17870	
				OFF	2	30	54	123	27E	597562	619278	15	4	58	28	13	0	17908
85	5	1	171	ON	2	45	29	92	0E	624144	646856	15	6	25	16	1233	23116	
				OFF	2	22	27	102	26E	597645	619363	15	6	31	39	1313	23499	
86	6	1	95	ON	2	63	31	53	43E	698261	723763	15	7	50	52	1125	28252	
				OFF	2	49	31	66	57E	636301	659470	15	7	54	45	1222	28485	
87	4	1	95	ON	2	53	34	41	24E	650572	674277	15	9	24	12	12	9	33852
				OFF	2	39	29	48	59E	608965	631108	15	9	27	53	1243	34073	
88	4	0	17	ON	1	37	16	123	9W	1123384	1165266	15	10	33	46	221	30026	
				OFF	1	40	13	122	2W	1104966	1146125	15	10	34	34	226	30074	
91	4	1	43	ON	2	72	57	87	45W	762252	790180	15	15	20	8	929	55208	
				OFF	2	67	28	67	48W	717582	743816	15	15	22	17	1051	55337	



94	4	1	23	ON	2	33	54	188	49W	599548	621336	15	20	2	59	1247	72179	
				OFF	2	33	54	187	51W	597176	618877	15	20	3	45	1252	72225	
96	2	1	25	ON	2	75	1	127	47E	624461	833996	15	22	50	37	721	82237	
				OFF	2	74	16	147	10E	775162	823588	15	22	51	55	841	82315	
97	9	1	47	ON	2	73	46	129	10E	766412	794497	16	0	22	46	859	1366	
				OFF	2	69	29	149	55E	726191	752750	16	0	24	41	1024	1481	
98	9	1	47	ON	2	72	54	112	30E	754872	782519	16	1	53	46	924	6826	
				OFF	2	57	33	132	20E	711892	737988	16	1	55	53	1045	6953	
98	0	2	23	ON	2	11	29	165	41E	616255	638670	16	2	10	42	1313	7842	
				OFF	2	7	53	166	27E	626077	648861	16	2	11	37	1317	7897	
99	9	1	56	ON	2	61	22	119	55E	677246	701955	16	3	28	16	1127	12496	
				OFF	2	53	22	127	36E	643514	666954	16	3	30	29	12	0	12629
100	1	1	17	ON	2	74	52	46	16E	785637	814455	16	4	53	17	758	17597	
				OFF	2	73	45	62	50E	763127	791087	16	4	54	19	858	17659	
100	1	2	74	ON	2	71	11	75	30E	736692	763649	16	4	55	34	957	17734	
				OFF	2	59	37	99	17E	657869	692225	16	4	59	19	1136	17959	
100	1	3	97	ON	2	36	25	113	22E	672028	623911	16	5	5	25	1238	18325	
				OFF	2	21	55	117	30E	599454	621241	16	5	9	6	1259	18546	
101	2	1	22	ON	2	43	0	87	54E	613025	635321	16	6	34	14	1225	23654	
				OFF	2	39	59	89	11E	647182	629257	16	6	35	1	1231	23701	
102	3	2	113	ON	2	60	27	52	33E	673991	695464	16	8	0	3	1130	20803	
				OFF	2	44	21	64	27E	615813	638213	16	8	4	23	1222	29063	
103	6	1	52	ON	2	61	53	27	56E	677100	701895	16	9	30	8	1121	34200	
				OFF	2	54	26	35	30E	645560	669077	16	9	32	13	1154	34333	
103	6	2	62	ON	2	38	22	44	17E	624389	626363	16	9	36	26	1233	34586	
				OFF	2	29	22	47	14E	597175	618876	16	9	38	44	1247	34724	
104	1	0	17	ON	1	37	24	128	22W	1097061	1137919	16	10	42	3	2	8	38523
				OFF	1	48	19	127	14W	1070599	1118818	16	10	42	51	213	38571	
108	6	1	50	ON	3	17	54	56	21W	758776	786569	16	17	23	10	1337	62590	
				OFF	3	26	23	54	15W	810113	840166	16	17	25	21	1348	62721	
110	1	1	27	ON	2	34	59	114	21W	599854	621656	16	20	10	44	1233	72644	
				OFF	2	31	57	113	22W	598061	619795	16	20	11	30	1238	72690	
110	1	2	27	ON	2	29	32	112	30W	597585	619301	16	20	12	8	1241	72728	
				OFF	2	25	29	111	30W	593706	620464	16	20	13	10	1247	72790	
114	5	1	77	ON	2	72	6	111	53E	731452	750210	17	2	2	4	929	7324	
				OFF	2	62	30	136	3E	672502	697033	17	2	5	20	11	9	7520
115	5	1	79	ON	2	62	25	113	22E	671399	695888	17	3	35	50	11	9	12950
				OFF	2	49	25	125	4E	624155	646868	17	3	39	25	1159	13165	
116	0	1	20	ON	2	74	52	41	15E	768072	796220	17	5	1	9	746	18069	
				OFF	2	73	13	59	51E	740501	767602	17	5	2	29	9	1	18149
116	0	2	115	ON	2	34	25	100	50E	599045	620817	17	5	13	46	1229	18026	
				OFF	2	17	24	113	33E	609917	632095	17	5	18	5	1252	19085	
117	9	1	71	ON	2	53	25	76	46E	635151	650277	17	6	39	10	1146	23958	
				OFF	2	43	20	82	36E	609772	631946	17	6	41	57	1212	24117	
117	9	2	19	ON	2	27	23	89	13E	598477	620227	17	6	46	1	1238	24361	
				OFF	2	24	20	89	3E	600507	622333	17	6	46	47	1243	24407	
118	6	1	22	ON	2	71	5	25	9E	719334	745633	17	8	4	24	945	29064	
				OFF	2	68	29	33	27E	701566	727193	17	8	5	21	1019	29121	
118	6	2	07	ON	2	47	48	57	32E	618971	641490	17	8	11	15	12	1	29475
				OFF	2	35	16	62	50E	599480	621268	17	8	14	29	1226	29669	
119	3	1	62	ON	2	57	22	27	50E	647630	671432	17	9	39	10	1130	34750	

			OFF	2	48	21	34	25E	619962	642517	17	9	41	35	1159	34895		
126	4	1	27	ON	2	36	51	122	6W	622353	622173	17	20	17	47	1217	73057	
			OFF	2	33	49	119	3V	598777	624538	17	20	18	34	1222	73114		
127	4	1	23	ON	2	72	56	172	42E	727298	753899	17	21	37	44	9	0	77864
			OFF	2	72	35	178	19W	708042	733914	17	21	38	46	945	77926		
129	8	1	53	ON	2	73	46	119	7E	734586	761381	18	0	38	10	834	2290	
			OFF	2	62	29	142	20E	692889	718188	18	0	40	26	1818	2426		
129	9	2	27	ON	2	55	23	161	27E	636127	659222	18	0	44	18	1138	2658	
			OFF	2	52	22	163	44E	627187	640931	18	9	45	7	1140	2707		
130	3	1	74	ON	2	69	11	117	45E	696242	721669	18	2	13	38	10	1	7839
			OFF	2	59	23	134	52E	649544	673210	18	2	13	39	1113	8019		
131	5	1	91	ON	2	53	22	116	55E	652664	676448	18	3	43	48	11	7	13428
			OFF	2	47	19	121	13E	614853	636392	18	3	47	20	1152	13640		
131	5	2	20	ON	2	40	52	124	17E	603590	625532	18	3	49	1	12	6	13741
			OFF	2	37	43	125	20E	620687	622513	18	3	49	48	1211	13786		
132	5	1	20	ON	2	74	31	42	31E	742887	777872	18	5	8	55	759	18535	
			OFF	2	73	12	54	56E	725171	751619	18	5	9	50	849	18590		
132	5	2	69	ON	2	43	22	107	22E	626755	629816	18	5	18	49	12	0	19129
			OFF	2	33	16	104	14E	595684	620442	18	5	21	24	1216	19284		
132	5	3	67	ON	2	27	23	106	0E	620596	622426	18	5	22	54	1226	19374	
			OFF	2	17	23	108	32E	615325	637706	18	5	25	26	1239	19526		
133	3	1	70	ON	2	54	25	70	56E	631896	654870	18	6	46	20	1130	24300	
			OFF	2	44	23	77	5E	608290	637201	18	6	48	59	1157	24539		
135	9	1	57	ON	2	7	38	42	13E	645169	669670	18	9	59	13	1248	35953	
			OFF	3	1	29	44	6E	684365	709341	18	10	1	32	1257	36092		
137	6	1	50	ON	2	22	53	6	52W	606451	628499	18	12	56	14	1228	46574	
			OFF	2	13	50	0	42W	625984	643764	18	12	58	31	1239	46711		
143	1	1	15	ON	3	23	53	134	9W	809182	830894	18	22	9	56	1313	79796	
			OFF	3	23	59	133	22W	831834	862412	18	22	10	44	1317	79844		
144	1	1	114	ON	2	73	44	137	15E	719982	745307	18	23	14	43	823	83683	
			OFF	2	63	25	174	21E	645735	669259	18	23	19	26	1856	83966		
145	2	1	20	ON	2	55	23	156	31E	629049	651945	19	0	51	15	1117	3075	
			OFF	2	52	23	158	48E	621162	643763	19	0	52	4	1127	3124		
147	4	1	26	ON	2	75	1	44	31E	748334	775732	19	3	44	20	542	13460	
			OFF	2	74	16	63	36E	724227	750711	19	3	45	36	8	0	13536	
147	4	2	42	ON	2	66	14	97	6E	657747	692092	19	3	43	57	1017	13737	
			OFF	2	60	22	106	0E	643897	667351	19	3	50	42	1054	13842		
147	4	3	53	ON	2	58	19	108	13E	636970	650164	19	3	51	16	11	4	13876
			OFF	2	49	20	115	9E	613827	636152	19	3	53	41	1134	14021		
147	4	4	75	ON	2	41	19	119	10E	602396	624293	19	3	55	47	1152	14147	
			OFF	2	30	18	123	4E	600977	622821	19	3	58	36	1210	14316		
148	4	1	73	ON	2	74	7	42	20E	721073	747439	19	5	16	7	9	6	18967
			OFF	2	66	26	73	53E	667988	692349	19	5	19	18	1014	19158		
148	4	2	25	ON	2	43	50	95	15E	604875	626865	19	5	25	33	1146	19533	
			OFF	2	40	17	96	47E	631457	623311	19	5	26	28	1153	19588		
148	4	3	58	ON	2	33	23	107	14E	601032	622878	19	5	29	0	12	9	19740
			OFF	2	20	17	102	56E	614797	637151	19	5	31	34	1223	19894		
149	3	1	65	ON	2	61	18	59	16E	646085	669621	19	6	51	15	1048	24675	
			OFF	2	52	20	67	37E	619581	642122	19	6	53	43	1124	24823		

PHOTOGRAPHIC SUMMARY

FWD PAN CAMERA NO		182 9.2759		SLIT W/25		FILTER		3404 FILM			
OPN NO	FCA	FEET	ET	S-EL	S-DIR	EV	FULL	INT	PRI		
79	5 0	24	52.9	ON	227	46.3	34.4	11.68	12.18	11.58	18.98
				OFF	232	49.8	36.4	11.78	12.18	11.58	18.98
81	8 2	3	7.9	ON	175	31.9	27.2	17.57	12.88	11.48	18.88
				OFF	185	33.3	27.6	17.57	12.81	11.41	18.81
83	5 1	56	148.1	ON	175	15.8	24.2	11.31	11.49	18.89	18.29
				OFF	194	24.7	25.1	11.45	11.88	11.26	18.68
84	3 1	16	42.3	ON	231	49.4	35.1	11.71	12.18	11.58	18.98
				OFF	233	51.6	37.8	11.72	12.13	11.58	18.98
84	3 2	16	42.3	ON	234	53.2	38.6	11.72	12.18	11.58	18.98
				OFF	235	55.3	41.8	11.73	12.18	11.58	18.98
85	5 1	178	449.7	ON	224	42.7	38.4	11.66	12.88	11.48	18.88
				OFF	237	62.8	54.1	11.74	12.18	11.58	18.98
86	6 1	95	251.3	ON	195	24.6	24.4	11.46	11.88	11.28	18.68
				OFF	219	38.9	28.4	11.63	12.86	11.46	18.86
87	4 1	24	248.6	ON	227	35.8	26.7	11.55	12.83	11.43	18.83
				OFF	227	48.2	33.2	11.68	12.18	11.58	18.98
88	4 4	18	26.5	ON	188	-42.2	29.5	18.61	8.88	8.88	8.88
				OFF	189	-39.4	28.2	18.63	8.88	8.88	8.88
91	4 1	43	113.7	ON	166	11.9	22.6	11.23	11.26	18.66	18.86
				OFF	182	23.8	22.8	11.35	11.74	11.14	18.54
94	4 1	19	58.3	ON	235	53.6	35.2	11.73	12.18	11.58	18.98
				OFF	237	56.1	37.8	11.74	12.18	11.58	18.98
96	2 1	35	66.1	ON	166	3.8	21.9	11.23	18.27	9.67	9.27
				OFF	174	8.7	21.7	11.38	18.95	18.35	9.75
97	9 1	39	183.2	ON	177	18.1	21.5	11.32	11.89	18.49	9.89
				OFF	191	17.4	21.4	11.43	11.63	11.83	18.43
98	9 1	47	124.3	ON	181	11.9	21.2	11.36	11.26	18.66	18.86
				OFF	196	28.8	21.3	11.47	11.74	11.14	18.54
98	9 2	22	56.2	ON	229	69.4	68.6	11.69	12.18	11.58	18.98
				OFF	225	78.4	78.4	11.67	12.18	11.58	18.98
99	9 1	55	145.5	ON	229	27.1	22.8	11.56	11.93	11.33	18.73
				OFF	222	35.5	23.9	11.64	12.83	11.43	18.83
188	1 1	17	45.8	ON	171	6.1	21.1	11.27	18.62	18.82	9.42
				OFF	178	18.8	27.9	11.33	11.89	18.49	9.89
188	1 2	73	193.1	ON	188	14.9	22.7	11.41	11.48	18.88	18.28
				OFF	213	29.2	22.1	11.59	11.96	11.36	18.76
188	1 3	97	256.6	ON	236	51.8	31.5	11.74	12.18	11.58	18.98
				OFF	236	63.7	46.6	11.74	12.18	11.58	18.98
181	2 1	19	52.3	ON	232	45.7	27.3	11.78	12.18	11.58	18.98
				OFF	232	48.6	28.9	11.71	12.18	11.58	18.98
182	3 2	113	285.9	ON	222	28.2	21.5	11.63	11.95	11.35	18.75
				OFF	242	44.5	26.4	11.76	12.89	11.49	18.89
183	6 1	52	137.5	ON	217	26.6	21.8	11.62	11.92	11.32	18.72
				OFF	229	34.5	22.6	11.69	12.83	11.43	18.83
183	6 2	61	161.3	ON	245	58.2	29.3	11.79	12.18	11.58	18.98
				OFF	246	58.2	36.4	11.88	12.18	11.58	18.98
184	1 8	12	26.5	ON	113	-43.5	25.6	18.68	8.88	8.88	8.88
				OFF	115	-48.7	24.5	18.78	8.88	8.88	8.88

108	8	1	5	132.3	ON	212	61.9	141.4	11.57	12.14	11.58	10.90
					OFF	195	54.6	149.2	11.46	12.10	11.52	10.90
110	1	1	19	58.3	ON	245	53.7	29.4	11.88	12.18	11.50	10.90
					OFF	248	56.4	31.7	11.80	12.12	11.50	10.90
110	1	2	26	58.6	ON	246	58.5	33.9	11.68	12.10	11.50	10.90
					OFF	246	62.8	38.1	11.79	12.10	11.52	10.90
114	5	1	77	273.7	ON	196	13.2	17.9	11.47	11.36	10.76	10.16
					OFF	219	25.9	18.5	11.62	11.91	11.31	10.71
115	5	1	79	279.4	ON	193	26.0	18.3	11.37	11.91	11.31	10.71
					OFF	209	39.8	21.1	11.56	12.07	11.47	10.87
116	8	1	27	71.4	ON	182	5.8	17.9	11.36	10.58	9.98	9.38
					OFF	192	11.0	17.6	11.44	11.18	10.50	9.96
116	8	2	115	304.2	ON	245	54.5	27.9	11.79	12.10	11.50	10.90
					OFF	239	68.8	48.3	11.75	12.12	11.50	10.90
117	9	1	70	185.1	ON	244	35.8	19.5	11.78	12.04	11.44	10.84
					OFF	245	46.0	22.7	11.79	12.16	11.52	10.90
117	9	2	18	47.6	ON	233	60.9	33.4	11.72	12.10	11.50	10.90
					OFF	232	63.5	36.8	11.72	12.10	11.50	10.90
118	6	1	21	55.5	ON	199	14.8	17.1	11.49	11.48	10.80	10.20
					OFF	206	18.6	17.1	11.54	11.68	11.00	10.48
118	6	2	46	227.5	ON	238	41.5	22.8	11.75	12.08	11.48	10.88
					OFF	245	53.8	26.6	11.79	12.10	11.50	10.90
119	3	1	62	164.8	ON	221	31.6	18.2	11.64	11.99	11.39	10.79
					OFF	234	41.0	20.4	11.72	12.07	11.47	10.67
125	4	1	28	52.0	ON	244	52.6	23.1	11.78	12.10	11.50	10.90
					OFF	245	55.5	24.9	11.79	12.12	11.50	10.90
127	4	1	22	56.2	ON	195	11.4	15.3	11.46	11.22	10.62	10.02
					OFF	213	15.4	15.2	11.52	11.52	10.92	10.32
129	8	1	49	129.6	ON	192	9.5	15.0	11.44	11.03	10.43	9.83
					OFF	228	12.4	14.8	11.56	11.68	11.08	10.48
129	8	2	20	52.9	ON	232	33.8	16.2	11.71	12.02	11.42	10.82
					OFF	235	37.0	16.8	11.73	12.05	11.45	10.85
130	8	1	74	195.7	ON	207	17.4	14.6	11.55	11.63	11.03	10.43
					OFF	226	29.4	15.3	11.67	11.97	11.37	10.77
131	5	1	91	240.7	ON	220	28.3	15.2	11.63	11.95	11.35	10.75
					OFF	232	42.3	17.6	11.75	12.08	11.48	10.88
131	5	2	28	52.0	ON	243	48.8	19.7	11.78	12.10	11.50	10.90
					OFF	244	51.9	21.1	11.79	12.10	11.50	10.90
132	5	1	19	50.3	ON	189	7.1	14.6	11.42	10.75	10.15	9.55
					OFF	196	10.7	14.4	11.47	11.16	10.56	9.96
132	5	2	60	179.9	ON	244	46.3	18.5	11.78	12.10	11.50	10.90
					OFF	246	56.3	23.2	11.80	12.12	11.52	10.92
132	5	3	60	174.6	ON	245	61.9	27.5	11.79	12.12	11.52	10.92
					OFF	239	74.6	40.9	11.75	12.10	11.50	10.90
133	3	1	69	182.5	ON	230	34.8	15.4	11.70	12.03	11.43	10.83
					OFF	241	45.3	17.9	11.76	12.09	11.49	10.89
135	9	1	57	150.8	ON	231	77.1	68.3	11.70	12.10	11.50	10.90
					OFF	218	77.2	111.1	11.62	12.10	11.50	10.90
137	6	1	60	158.7	ON	242	66.3	30.0	11.77	12.10	11.50	10.90
					OFF	234	73.9	46.2	11.72	12.10	11.50	10.90
143	1	1	15	39.7	ON	173	63.3	156.3	11.29	12.10	11.50	10.90

					OFF 169	60.3	159.6	11.25	12.12	11.58	10.98
144	1	1	114	321.5	ON 198	9.2	12.7	11.48	11.01	10.41	9.81
					OFF 229	29.1	12.1	11.69	11.95	11.35	10.75
145	2	1	26	52.0	ON 234	33.8	12.4	11.72	12.02	11.42	10.82
					OFF 237	37.0	12.9	11.74	12.05	11.45	10.85
147	4	1	25	66.1	ON 185	2.6	11.8	11.38	10.06	9.46	8.86
					OFF 194	7.6	11.5	11.45	10.82	10.22	9.62
147	4	2	42	111.1	ON 218	21.1	11.1	11.62	11.78	11.18	10.58
					OFF 223	29.2	11.4	11.68	11.95	11.35	10.75
147	4	3	63	166.6	ON 231	30.5	11.6	11.70	11.98	11.38	10.78
					OFF 242	40.3	12.9	11.76	12.07	11.47	10.87
147	4	4	75	198.0	ON 244	48.6	14.3	11.79	12.10	11.50	10.90
					OFF 244	59.8	19.5	11.78	12.10	11.50	10.90
148	4	1	75	198.4	ON 196	8.1	11.3	11.47	10.88	10.28	9.68
					OFF 217	20.9	10.9	11.62	11.77	11.17	10.57
148	4	2	23	62.8	ON 243	46.0	13.8	11.78	12.10	11.50	10.90
					OFF 245	49.7	14.8	11.79	12.10	11.50	10.90
148	4	3	67	177.2	ON 244	59.7	19.0	11.78	12.10	11.50	10.90
					OFF 237	69.4	27.8	11.74	12.10	11.50	10.90
149	3	1	63	166.6	ON 227	27.1	12.9	11.68	11.93	11.33	10.73
					OFF 232	37.1	11.9	11.75	12.05	11.45	10.85

PHOTOGRAPHIC SUMMARY

AFT PAN	CAMERA NO	163	R.1750	SLIT W/21	FILTER	3404 FILM					
OPN NO	FFA	FEET	ET	S-EL	S-DIR	EV	FULL	INT	PRI		
69	7	3	68	179.9	ON 382	55.8	48.1	12.43	12.75	12.15	11.55
					OFF 383	61.8	62.4	12.43	12.75	12.15	11.55
81	0	0	4	18.6	ON 172	31.1	26.1	11.28	12.64	12.04	11.44
					OFF 172	32.5	26.6	11.28	12.65	12.05	11.45
83	5	1	57	150.8	ON 285	14.0	21.5	12.01	12.07	11.47	10.87
					OFF 315	23.8	23.7	12.15	12.51	11.91	11.31
84	3	1	17	45.0	ON 375	48.7	34.2	12.40	12.75	12.15	11.55
					OFF 378	50.9	36.1	12.41	12.75	12.15	11.55
84	3	2	16	42.3	ON 392	52.5	37.7	12.42	12.75	12.15	11.55
					OFF 382	54.6	39.9	12.43	12.75	12.15	11.55
85	5	1	171	452.3	ON 353	41.9	29.6	12.36	12.73	12.13	11.53
					OFF 384	62.3	52.5	12.44	12.75	12.15	11.55
86	6	1	96	253.9	ON 317	23.7	23.2	12.16	12.51	11.91	11.31
					OFF 355	38.1	27.5	12.32	12.70	12.10	11.50
87	4	1	95	251.3	ON 337	34.2	25.8	12.25	12.67	12.07	11.47
					OFF 367	47.5	32.4	12.37	12.75	12.15	11.55
88	4	0	10	26.5	ON 177	-43.7	29.7	11.32	0.00	0.00	0.00
					OFF 179	-40.9	29.3	11.34	0.00	0.00	0.00
91	4	1	43	113.7	ON 267	10.9	19.4	11.92	11.82	11.22	10.62
					OFF 294	19.0	20.9	12.03	12.35	11.75	11.15
94	4	1	20	52.9	ON 373	52.9	34.3	12.41	12.75	12.15	11.55
					OFF 382	55.4	36.8	12.42	12.75	12.15	11.55
96	2	1	26	68.8	ON 268	2.7	17.4	11.92	10.73	10.13	9.53
					OFF 283	7.6	17.8	11.98	11.47	10.87	10.27
97	9	1	30	125.8	ON 296	9.0	17.9	12.01	11.63	11.03	10.43

				OFF 328	16.4	13.2	12.12	12.22	11.62	11.82
98	9	1	47	124.3	ON 292	18.8	19.9	12.84	11.82	11.22
				OFF 316	19.2	19.5	12.16	12.35	11.75	11.15
98	9	2	23	68.8	ON 367	69.2	66.3	12.37	12.75	12.15
				OFF 362	78.3	75.8	12.35	12.75	12.15	11.55
99	9	1	56	148.1	ON 336	26.2	28.9	12.25	12.56	11.96
				OFF 356	34.7	23.3	12.33	12.68	12.88	11.48
100	1	1	17	45.2	ON 275	5.8	16.6	11.96	11.11	10.51
				OFF 287	9.8	17.3	12.82	11.63	11.23	10.43
100	1	2	74	195.7	ON 322	13.8	18.1	12.89	12.86	11.46
				OFF 342	28.2	21.9	12.27	12.68	12.88	11.48
100	1	3	97	256.6	ON 379	51.8	38.6	12.42	12.75	12.15
				OFF 379	63.1	45.2	12.42	12.75	12.15	11.55
101	2	1	28	52.9	ON 369	44.9	26.6	12.38	12.74	12.14
				OFF 373	47.8	28.1	12.39	12.75	12.15	11.55
102	3	2	113	298.9	ON 353	27.2	22.3	12.38	12.58	11.96
				OFF 383	43.7	25.7	12.43	12.74	12.14	11.54
103	6	1	52	137.5	ON 346	25.6	19.2	12.29	12.55	11.95
				OFF 365	33.6	21.7	12.36	12.67	12.87	11.47
103	6	2	52	164.2	ON 389	49.4	28.5	12.46	12.75	12.15
				OFF 392	57.5	35.3	12.47	12.75	12.15	11.55
104	1	8	18	26.5	ON 182	-45.8	25.7	11.36	8.88	8.88
				OFF 185	-42.2	24.4	11.38	8.88	8.88	8.88
108	8	1	59	132.3	ON 335	62.8	139.8	12.24	12.75	12.15
				OFF 311	55.6	148.6	12.13	12.75	12.15	11.55
110	1	1	28	52.9	ON 392	52.9	28.5	12.47	12.75	12.15
				OFF 392	55.7	38.7	12.47	12.75	12.15	11.55
112	1	2	27	71.4	ON 392	57.8	32.8	12.47	12.75	12.15
				OFF 391	61.3	36.9	12.46	12.75	12.15	11.55
114	5	1	77	283.7	ON 312	12.1	15.1	12.14	11.93	11.33
				OFF 348	24.9	17.2	12.38	12.54	11.94	11.34
115	5	1	79	279.2	ON 292	25.8	17.8	12.84	12.54	11.94
				OFF 334	39.8	23.3	12.23	12.71	12.11	11.51
116	8	1	28	74.1	ON 298	4.7	13.7	12.83	11.87	10.47
				OFF 326	9.9	14.3	12.11	11.73	11.13	10.53
116	8	2	116	386.8	ON 391	53.7	27.9	12.46	12.75	12.15
				OFF 322	68.2	46.4	12.43	12.75	12.15	11.55
117	9	1	71	187.5	ON 392	34.9	13.7	12.46	12.68	12.78
				OFF 391	45.1	22.2	12.46	12.74	12.14	11.54
117	9	2	19	56.3	ON 373	64.2	32.3	12.39	12.75	12.15
				OFF 367	62.8	35.6	12.37	12.75	12.15	11.55
118	6	1	22	58.2	ON 319	13.8	14.5	12.17	12.86	11.46
				OFF 329	17.5	15.1	12.21	12.28	11.68	11.88
118	6	2	37	238.1	ON 381	48.7	28.1	12.42	12.72	12.12
				OFF 391	53.8	25.8	12.46	12.75	12.15	11.55
119	3	1	52	164.8	ON 354	38.7	17.2	12.32	12.63	12.83
				OFF 374	48.2	19.7	12.48	12.72	12.12	11.52
126	4	1	28	52.9	ON 389	51.8	22.4	12.46	12.75	12.15
				OFF 391	54.8	24.1	12.46	12.75	12.15	11.55
127	4	1	23	68.8	ON 313	18.3	12.2	12.14	11.77	11.17
				OFF 324	14.4	12.8	12.19	12.18	11.58	10.98

129 8 1	50	132.3	ON 328	6.4	11.6	12.12	11.56	10.96	10.36
			OFF 334	17.4	12.9	12.23	12.28	11.68	11.08
129 8 2	22	52.9	ON 377	32.9	15.4	12.38	12.66	12.06	11.46
			OFF 376	36.1	16.1	12.40	12.69	12.09	11.49
130 8 1	74	195.7	ON 332	16.4	12.5	12.23	12.23	11.63	11.03
			OFF 361	28.5	14.3	12.35	12.60	12.00	11.40
131 5 1	91	240.7	ON 349	27.3	13.9	12.30	12.58	11.98	11.38
			OFF 377	41.4	16.9	12.41	12.73	12.13	11.53
131 5 2	28	52.9	ON 385	40.0	19.1	12.44	12.75	12.15	11.55
			OFF 388	51.0	20.4	12.45	12.75	12.15	11.55
132 5 1	28	52.9	ON 321	6.0	12.7	12.09	11.26	10.66	10.06
			OFF 312	9.7	11.2	12.14	11.70	11.10	10.50
132 5 2	69	192.5	ON 387	45.5	17.9	12.45	12.74	12.14	11.54
			OFF 393	55.5	22.4	12.46	12.75	12.15	11.55
132 5 3	67	177.2	ON 388	61.1	26.6	12.45	12.75	12.15	11.55
			OFF 377	39.9	19.0	12.41	12.75	12.15	11.55
133 3 1	70	185.1	ON 365	33.9	14.6	12.36	12.67	12.07	11.47
			OFF 331	44.4	17.2	12.43	12.74	12.14	11.54
135 9 1	57	150.8	ON 366	76.8	64.4	12.37	12.75	12.15	11.55
			OFF 346	77.6	106.9	12.29	12.75	12.15	11.55
137 6 1	60	158.7	ON 393	65.6	28.8	12.43	12.75	12.15	11.55
			OFF 377	73.2	43.8	12.38	12.75	12.15	11.55
143 1 1	15	39.7	ON 275	64.4	155.6	11.96	12.75	12.15	11.55
			OFF 268	61.4	158.1	11.92	12.75	12.15	11.55
144 1 1	114	381.5	ON 314	8.2	9.7	12.15	11.54	10.94	10.34
			OFF 362	27.2	11.1	12.35	12.58	11.98	11.38
145 2 1	22	52.9	ON 377	32.9	11.6	12.41	12.66	12.06	11.46
			OFF 381	36.1	12.2	12.43	12.69	12.09	11.49
147 4 1	26	68.8	ON 298	1.5	7.6	12.07	10.51	9.91	9.31
			OFF 313	6.6	7.9	12.14	11.33	10.73	10.13
147 4 2	42	111.1	ON 351	20.2	9.6	12.31	12.40	11.80	11.20
			OFF 366	27.2	10.4	12.37	12.58	11.98	11.38
147 4 3	63	166.6	ON 371	29.6	10.7	12.39	12.62	12.02	11.42
			OFF 385	39.4	12.3	12.44	12.71	12.11	11.51
147 4 4	75	198.4	ON 393	47.8	14.2	12.47	12.75	12.15	11.55
			OFF 392	56.9	18.7	12.47	12.75	12.15	11.55
148 4 1	73	193.1	ON 315	7.0	7.8	12.15	11.39	10.79	10.19
			OFF 352	19.9	9.3	12.30	12.39	11.79	11.19
148 4 2	26	68.8	ON 391	45.2	13.2	12.46	12.74	12.14	11.54
			OFF 393	48.9	14.2	12.47	12.75	12.15	11.55
148 4 3	65	179.9	ON 392	58.9	18.3	12.47	12.75	12.15	11.55
			OFF 382	68.6	26.5	12.43	12.75	12.15	11.55
149 3 1	65	171.9	ON 365	26.1	9.8	12.36	12.56	11.96	11.36
			OFF 382	36.2	11.2	12.43	12.69	12.09	11.49

STELLAR-INDEX SUMMARY

CAMERA DATA ET FILM FILTER GRID ASSEMBLY NO D82  
 STELLAR 2.8 4421 NONE 195  
 INDEX 1/500 4400 W/21 102

PERFORMANCE SUMMARY

OPN NO	FR	STEL FEET	INCH FEET	H	M	S	Q	ON LAT	ON LONG	OFF LAT	OFF LONG	SEC DUR			
79	5	0	2	0.29	2.42	21	23	8	2	40	126W	2	37	127W	48
83	5	1	3	0.79	1.58	3	15	41	2	70	106E	2	62	123E	156
84	3	1	2	0.20	0.40	4	56	41	2	37	116E	2	34	119E	39
84	3	2	2	0.20	0.40	4	57	50	2	32	119E	2	30	120E	39
85	5	1	25	2.47	4.05	5	25	16	2	44	02E	2	10	100E	383
86	6	1	13	1.29	2.57	7	58	52	2	62	55E	2	40	67E	233
87	4	1	14	1.39	2.77	9	24	12	2	52	42E	2	30	49E	221
88	4	0	1	0.10	0.20	10	33	46	1	38	122W	1	41	121W	48
91	4	1	6	0.59	1.19	15	20	8	2	72	84W	2	66	65W	129
94	4	1	3	0.30	0.59	20	2	59	2	33	108W	2	30	107W	46
96	2	1	4	0.40	0.70	22	50	37	2	75	132E	2	73	151E	78
97	9	1	5	0.50	0.00	0	22	46	2	73	132E	2	60	152E	115
98	9	1	7	0.69	1.39	1	53	46	2	72	115E	2	66	134E	127
98	9	2	3	0.30	0.59	2	10	42	2	10	165E	2	5	166E	55
99	9	1	0	0.79	1.58	3	28	16	2	60	121E	2	52	128E	133
100	1	1	2	0.20	0.40	4	53	17	2	74	50E	2	73	64E	62
100	1	2	11	1.09	2.18	4	55	34	2	70	78E	2	50	100E	225
100	1	3	14	1.39	2.77	5	5	25	2	35	113E	2	21	117E	221
101	2	1	2	0.20	0.40	6	34	14	2	42	08E	2	30	09E	47
102	3	2	16	1.58	3.17	0	0	3	2	59	53E	2	43	64E	260
103	6	1	0	0.79	1.58	9	30	8	2	61	29E	2	53	36E	125
103	6	2	9	0.89	1.78	9	36	26	2	37	44E	2	20	47E	136
104	1	0	1	0.10	0.20	10	42	3	1	30	127W	1	41	126W	48
100	0	1	7	0.69	1.39	17	23	10	3	10	56W	3	27	53W	131
110	1	1	3	0.30	0.59	20	10	44	2	34	114W	2	31	113W	46
110	1	2	4	0.40	0.70	20	12	8	2	28	112W	2	24	111W	62
114	5	1	11	1.09	2.18	2	2	4	2	71	114E	2	61	137E	196
115	5	1	11	1.09	2.18	3	35	50	2	61	114E	2	40	125E	215
116	0	1	4	0.40	0.70	5	1	9	2	74	45E	2	72	63E	80
116	0	2	16	1.58	3.17	5	13	46	2	33	109E	2	16	113E	259
117	9	1	10	0.99	1.98	6	39	18	2	52	77E	2	42	83E	159
117	9	2	3	0.30	0.59	6	46	1	2	26	08E	2	23	89E	46
118	6	1	3	0.30	0.59	0	4	24	2	70	27E	2	67	35E	57
118	6	2	12	1.19	2.38	3	11	15	2	40	50E	2	34	63E	194
119	3	1	0	0.09	1.78	0	39	10	2	56	28E	2	47	34E	145
126	4	1	3	0.30	0.59	20	17	47	2	36	119W	2	32	118W	47
127	4	1	3	0.30	0.59	21	37	44	2	72	173E	2	60	175W	62
129	0	1	7	0.69	1.39	0	38	10	2	73	122E	2	67	144E	136
120	0	2	3	0.30	0.59	0	44	18	2	54	162E	2	51	164E	49
130	0	1	10	0.99	1.98	2	10	38	2	60	119E	2	50	135E	181
131	5	1	13	1.29	2.57	3	43	40	2	59	111E	2	40	121E	212
131	5	2	3	0.30	0.59	3	49	1	2	39	124E	2	36	125E	47
132	5	1	0	0.30	0.59	5	8	55	2	74	46E	2	72	58E	55
132	5	2	12	0.99	1.98	5	18	49	2	42	100E	2	32	104E	155
132	5	3	9	0.89	1.78	5	22	54	2	26	106E	2	16	108E	152
133	3	1	10	0.99	1.98	6	46	20	2	53	71E	2	43	77E	159
135	9	1	0	0.79	1.58	9	59	13	2	6	42E	3	2	44E	139
137	6	1	9	0.89	1.78	12	56	14	2	22	6W	2	12	4W	137



143	1	1	2	0.20	0.40	22	9	56	3	22	133W	3	25	132W	48
144	1	1	15	1.50	3.17	23	14	43	2	73	140E	2	59	175E	283
145	2	1	3	0.30	0.59	4	51	15	2	54	157E	2	51	159E	49
147	4	1	3	0.30	0.59	3	44	20	2	75	48E	2	73	67E	76
147	4	2	6	0.59	1.19	3	48	57	2	65	98E	2	59	106E	105
147	4	3	9	0.89	1.78	3	51	16	2	57	109E	2	43	115E	145
147	4	4	11	1.09	2.18	3	55	47	2	40	119E	2	20	123E	169
148	4	1	11	1.09	2.18	5	16	7	2	73	46E	2	65	75E	191
148	4	2	3	0.30	0.59	5	25	33	2	43	95E	2	39	97E	55
148	4	3	14	0.99	1.98	5	29	0	2	29	100E	2	10	103E	154
149	3	1	9	0.89	1.78	6	51	15	2	60	60E	2	51	68E	148
149	3	2	11	1.09	2.18	5	54	48	2	47	70E	2	35	75E	179
151	4	0	2	0.20	0.40	9	33	26	1	38	119W	1	41	118W	48

NOTES -

1) THE FWD PAN CAMERA RAN OUT OF FILM ON THE 29TH FRAME OF OPN 149-3-1, AND THE AFT CAMERA ON THE SECOND FRAME OF THAT OPN, PER [REDACTED] THE S/I WAS STILL OPERATIVE UNTIL ALL CAMERAS WERE TURNED OFF ON REV 151.

2) THE LAST 5 FRAMES OF THE FIRST MSN ARE CONTAINED IN THE SECOND CAPSULE. THIS OPN (FWD 70-5-0, AFT 69-7-3) IS HERE REPORTED AS DISREGARDING THE TWO SEGMENTS.

A. 1030-2

B. DRY

C. FINAL PERFORMANCE ESTIMATE, PART TWO (REVISED)

RATE ESTIMATE

FWD PAN CAMERA NUMBER 182

OPN NO	FR	R	A	TUP/ DUR	INST CPS	INST ANG VEL	SCAN R/SEC	RATE I/SEC	PCT CALIB	RATE REQD		
79	5	0	21	7	3 ON	1632	0.4157	0.03507	2.612	62.68	-7.4	-6.3
					OFF	48	0.4226	0.03549	2.643	63.03	-7.4	-6.3
81	0	0	3	7	3 ON	0	0.1925	0.01624	1.209	29.02	-7.4	-110.6
					OFF	24	0.1925	0.01524	1.209	29.02	-7.4	-112.9
83	5	1	55	7	3 ON	1127	0.7232	0.02202	2.012	48.29	-7.4	-11.2
					OFF	156	0.3545	0.02991	2.227	53.46	-7.4	-8.7
84	3	1	16	7	3 ON	1696	0.4225	0.03565	2.654	63.71	-7.4	-6.2
					OFF	39	0.4256	0.03591	2.674	64.18	-7.4	-6.2
84	3	2	15	7	3 ON	1765	0.4280	0.03611	2.689	64.53	-7.4	-6.0
					OFF	30	0.4393	0.03628	2.702	64.94	-7.4	-6.0
85	5	1	170	7	3 ON	1583	0.4094	0.03454	2.572	61.73	-7.4	-6.4
					OFF	353	0.4323	0.03648	2.716	65.19	-7.4	-5.4
85	6	1	95	7	3 ON	1289	0.3565	0.03008	2.240	53.75	-7.4	-8.4
					OFF	233	0.3999	0.03374	2.513	60.30	-7.4	-6.7
87	4	1	94	7	3 ON	1400	0.3791	0.03198	2.382	57.16	-7.4	-9.9
					OFF	221	0.4140	0.03493	2.601	62.43	-7.4	-7.9
88	4	0	10	7	3 ON	203	0.1976	0.01667	1.241	29.79	-7.4	-16.5
					OFF	48	0.2000	0.01688	1.257	30.16	-7.4	-17.2
91	4	1	43	7	3 ON	1035	0.3036	0.02561	1.907	45.78	-7.1	-15.9
					OFF	129	0.3291	0.02777	2.068	49.62	-7.1	-14.1
94	4	1	10	7	3 ON	1700	0.4303	0.03630	2.703	64.00	-7.1	-5.6
					OFF	46	0.4324	0.03648	2.717	65.20	-7.1	-5.5
96	2	1	25	7	3 ON	1030	0.3040	0.02565	1.910	45.85	-7.1	-9.2
					OFF	78	0.3181	0.02684	1.999	47.97	-7.1	-8.6
97	0	1	30	7	3 ON	1140	0.3244	0.02737	2.038	48.92	-7.1	-7.8
					OFF	115	0.3497	0.02951	2.197	52.73	-7.1	-6.0
98	0	1	07	7	3 ON	1172	0.3317	0.02799	2.004	50.02	-7.1	-7.2
					OFF	127	0.3591	0.03030	2.257	54.16	-7.1	-5.4
98	0	2	22	7	3 ON	2188	0.4181	0.03527	2.627	63.04	-7.1	-5.5
					OFF	55	0.4116	0.03473	2.566	62.07	-7.1	-5.3
99	0	1	55	7	3 ON	1412	0.3527	0.03229	2.405	57.71	-7.1	-4.3
					OFF	133	0.4049	0.03417	2.544	61.06	-7.1	-4.1
100	1	1	17	7	3 ON	1007	0.3126	0.02637	1.964	47.13	-7.1	-9.0
					OFF	62	0.3257	0.02748	2.046	49.11	-7.1	-7.9
100	1	2	73	7	3 ON	1224	0.3435	0.02898	2.158	51.79	-7.1	-6.3
					OFF	225	0.3809	0.03281	2.443	58.64	-7.1	-4.2
109	1	3	07	7	3 ON	1015	0.4321	0.03646	2.715	65.05	-7.1	-4.7
					OFF	221	0.4312	0.03638	2.709	65.02	-7.1	-5.3
101	2	1	10	7	3 ON	1656	0.4197	0.03542	2.637	63.30	-7.1	-5.7
					OFF	47	0.4242	0.03579	2.665	63.96	-7.1	-5.7
102	3	2	113	7	3 ON	1436	0.4016	0.03309	2.524	60.57	-3.6	-0.4
					OFF	260	0.4394	0.03707	2.761	66.26	-3.6	-0.5

103	6	1	52	7	3	ON	1414	0.3973	0.03352	2.496	59.91	-3.6	-0.5
						OFF	125	0.4190	0.03535	2.633	63.18	-3.6	-0.3
103	6	2	61	7	3	ON	1791	0.4477	0.03772	2.809	67.41	-3.6	-0.8
						OFF	138	0.4504	0.03801	2.830	67.02	-3.6	-1.2
104	1	0	10	7	3	ON	240	0.2777	0.01753	1.305	31.32	-3.6	-13.8
						OFF	48	0.2186	0.01777	1.324	31.76	-3.6	-14.3
108	8	1	50	7	3	ON	2479	0.3644	0.03243	2.415	57.96	-3.6	0.1
						OFF	131	0.3556	0.03002	2.236	53.66	-3.6	0.5
110	1	1	10	7	3	ON	1059	0.4497	0.03795	2.826	67.62	-3.6	-0.9
						OFF	46	0.4504	0.03601	2.830	67.92	-3.6	-1.1
110	1	2	26	7	3	ON	1942	0.4503	0.03799	2.829	67.90	-3.6	-1.2
						OFF	62	0.4488	0.03787	2.820	67.67	-3.6	-1.3
114	5	1	77	7	3	ON	1232	0.3580	0.03021	2.250	53.99	-3.6	-2.7
						OFF	196	0.3994	0.03370	2.509	60.23	-3.6	-0.7
115	5	1	79	7	3	ON	1130	0.3341	0.02019	2.099	50.30	-3.6	-20.6
						OFF	215	0.3825	0.03228	2.403	57.60	-3.6	-13.8
116	8	1	27	7	3	ON	1124	0.3326	0.02806	2.090	50.15	-3.6	-4.9
						OFF	80	0.3500	0.02960	2.204	52.00	-3.6	-3.5
116	8	2	115	7	3	ON	1001	0.4477	0.03778	2.813	67.51	-4.2	-1.5
						OFF	259	0.4369	0.03687	2.745	65.68	-4.2	-2.0
117	9	1	70	7	3	ON	1025	0.4462	0.03765	2.803	67.28	-4.2	4.2
						OFF	150	0.4472	0.03771	2.800	67.40	-4.2	0.2
117	9	2	10	7	3	ON	2229	0.4262	0.03596	2.670	64.26	-4.2	-6.7
						OFF	46	0.4200	0.03544	2.639	63.33	-4.2	-7.9
118	6	1	21	7	3	ON	1266	0.3630	0.03071	2.286	54.97	-4.2	-2.9
						OFF	57	0.3759	0.03172	2.362	56.68	-4.2	-2.3
118	6	2	05	7	3	ON	1677	0.4354	0.03674	2.736	65.65	-4.2	-0.9
						OFF	194	0.4475	0.03776	2.812	67.46	-4.2	-1.5
119	3	1	62	7	3	ON	1465	0.4047	0.03415	2.543	61.03	-4.2	-3.4
						OFF	145	0.4271	0.03604	2.683	64.40	-4.2	-2.7
126	4	1	00	7	3	ON	1006	0.4453	0.03757	2.798	67.15	-4.2	-1.8
						OFF	47	0.4470	0.03772	2.800	67.41	-4.2	-1.7
127	4	1	02	7	3	ON	1236	0.3571	0.03013	2.244	53.25	-4.2	-3.6
						OFF	62	0.3703	0.03125	2.327	55.04	-4.2	-2.8
129	8	1	40	7	3	ON	1212	0.3516	0.02967	2.209	53.02	-4.2	-4.1
						OFF	136	0.3811	0.03216	2.395	57.47	-4.2	-2.2
129	8	2	00	7	3	ON	1500	0.4234	0.03573	2.660	63.55	-4.2	-0.8
						OFF	49	0.4295	0.03624	2.699	64.76	-4.2	-0.9
130	8	1	74	7	3	ON	1036	0.3792	0.03199	2.382	57.18	-4.2	-2.2
						OFF	181	0.4131	0.03485	2.595	62.29	-4.2	-1.0
131	5	1	91	7	3	ON	1441	0.4000	0.03392	2.526	60.62	-3.8	-3.3
						OFF	212	0.4342	0.03664	2.728	65.47	-3.8	-2.0
131	5	2	00	7	3	ON	1755	0.4440	0.03746	2.790	66.95	-3.8	-1.6
						OFF	47	0.4467	0.03769	2.807	67.36	-3.8	-1.5
132	5	1	10	7	3	ON	1104	0.3465	0.02923	2.177	52.24	-3.8	-4.4
						OFF	55	0.3585	0.03025	2.253	54.07	-3.8	-3.5
132	5	2	00	7	3	ON	1778	0.4456	0.03760	2.800	67.19	-3.8	-0.7
						OFF	155	0.4498	0.03795	2.826	67.82	-3.8	-1.1
132	5	3	66	7	3	ON	2023	0.4471	0.03773	2.800	67.43	-3.8	-1.3
						OFF	152	0.4350	0.03670	2.733	65.60	-3.8	-1.5
133	3	1	00	7	3	ON	1546	0.4200	0.03544	2.639	63.34	-3.8	-2.4

					OFF	159	2.4396	2.83709	2.762	66.29	-3.8	-1.8
135	9	1	57	7	3 ON	2278	2.4222	2.83561	2.652	63.64	-3.8	8.5
					OFF	139	2.3986	2.83364	2.535	68.11	-3.8	1.1
137	6	1	62	7	3 ON	2123	2.4418	2.83728	2.776	66.62	-3.8	-1.5
					OFF	137	2.4268	2.83621	2.681	64.75	-3.8	-1.6
143	1	1	15	7	3 ON	2783	2.3163	2.82669	1.958	47.78	-3.8	-4.1
					OFF	48	2.3882	2.82671	1.937	46.48	-3.8	-3.7
144	1	1	114	7	3 ON	1249	2.3614	2.83249	2.271	54.58	-3.8	-3.5
					OFF	283	2.4172	2.83522	2.621	62.91	-3.8	-9.7
145	2	1	27	7	3 ON	1618	2.4281	2.83612	2.698	64.55	-4.3	-8.9
					OFF	49	2.4335	2.83658	2.724	65.37	-4.3	-3.9
147	4	1	25	7	3 ON	1155	2.3379	2.82851	2.123	58.95	-4.3	-6.2
					OFF	76	2.3548	2.82994	2.229	53.51	-4.3	-4.7
147	4	2	42	7	3 ON	1432	2.3983	2.83361	2.573	68.27	-4.3	-1.7
					OFF	125	2.4162	2.83511	2.614	62.74	-4.3	-1.2
147	4	3	63	7	3 ON	1572	2.4218	2.83559	2.658	63.68	-4.3	-1.8
					OFF	145	2.4385	2.83722	2.755	66.13	-4.3	-1.8
147	4	4	75	7	3 ON	1943	2.4464	2.83767	2.825	67.32	-4.3	-1.2
					OFF	169	2.4456	2.83762	2.828	67.19	-4.3	-1.6
148	4	1	75	7	3 ON	1241	2.3578	2.83219	2.248	53.96	-4.3	-4.3
					OFF	191	2.3975	2.83354	2.498	59.95	-4.3	-1.9
148	4	2	23	7	3 ON	1826	2.4449	2.83754	2.796	67.29	-4.3	-1.1
					OFF	55	2.4469	2.83771	2.828	67.38	-4.3	-1.3
148	4	3	67	7	3 ON	2013	2.4454	2.83758	2.798	67.16	-4.3	-1.7
					OFF	154	2.4337	2.83662	2.725	65.48	-4.3	-1.9
149	3	1	63	7	3 ON	1526	2.4148	2.83546	2.666	62.55	-4.3	-1.2
					OFF	148	2.4344	2.83665	2.729	65.58	-4.3	-1.8

RATE ESTIMATE

AFT PAN CAMERA NUMBER 183

OPN NO	FR	R	A	TUP/DUR	INST CPS	INST ANG VEL	SCAN R/SEC	RATE I/SEC	PCT CALIB	RATE REQD		
69	7	3	53	7	3 ON	1822	2.4444	2.83749	2.792	67.31	-1.9	-2.8
					OFF	152	2.4456	2.83762	2.828	67.19	-1.9	-2.2
81	3	2	4	7	3 ON	8	2.2224	2.81691	1.259	38.21	-1.9	-12.5
					OFF	24	2.2264	2.81691	1.259	38.21	-1.9	-12.6
83	5	1	57	7	3 ON	1127	2.3311	2.82794	2.882	49.93	-1.9	-7.6
					OFF	156	2.3662	2.83292	2.321	55.22	-1.9	-5.2
84	3	1	17	7	3 ON	1696	2.4357	2.83676	2.738	65.78	-1.9	-2.9
					OFF	39	2.4389	2.83723	2.753	66.19	-1.9	-2.9
84	3	2	15	7	3 ON	1765	2.4413	2.83724	2.773	66.55	-1.9	-2.8
					OFF	38	2.4434	2.83741	2.786	66.86	-1.9	-2.8
85	5	1	171	7	3 ON	1583	2.4223	2.83563	2.653	63.68	-1.9	-3.1
					OFF	383	2.4456	2.83761	2.821	67.22	-1.9	-2.2
86	6	1	26	7	3 ON	1289	2.3682	2.83127	2.313	55.52	-1.9	-5.2
					OFF	233	2.4126	2.83482	2.593	62.22	-1.9	-3.4
87	4	1	95	7	3 ON	1408	2.3913	2.83322	2.459	59.21	-1.9	-6.5
					OFF	221	2.4272	2.83623	2.683	64.39	-1.9	-4.6
88	4	2	17	7	3 ON	223	2.2856	2.81735	1.292	31.28	-1.9	-12.8
					OFF	48	2.2881	2.81756	1.327	31.38	-1.9	-12.7

91	4	1	43	7	3	ON	1735	2.3198	2.22623	1.953	46.87	-2.6	-13.2
						OFF	129	2.3367	2.22841	2.115	58.77	-2.6	-11.5
94	4	1	27	7	3	ON	1782	2.4392	2.23785	2.759	66.22	-2.6	-3.4
						OFF	46	2.4413	2.23724	2.773	56.55	-2.6	-3.3
96	2	1	26	7	3	ON	1038	2.3113	2.22627	1.956	46.95	-2.6	-6.7
						OFF	78	2.3255	2.22747	2.245	49.49	-2.6	-6.2
97	9	1	42	7	3	ON	1142	2.3319	2.22821	2.286	58.25	-2.6	-5.4
						OFF	115	2.3576	2.23917	2.247	53.92	-2.6	-3.7
98	9	1	47	7	3	ON	1172	2.3393	2.22863	2.132	51.17	-2.6	-4.8
						OFF	127	2.3671	2.23898	2.327	55.36	-2.6	-3.1
98	9	2	23	7	3	ON	2158	2.4268	2.23681	2.682	64.36	-2.6	-3.3
						OFF	55	2.4223	2.23546	2.641	63.38	-2.6	-3.2
99	9	1	56	7	3	ON	1412	2.3912	2.23299	2.457	58.26	-2.6	-2.1
						OFF	133	2.4135	2.23489	2.598	62.35	-2.6	-1.9
100	1	1	17	7	3	ON	1427	2.3199	2.22722	2.212	48.25	-2.6	-6.5
						OFF	62	2.3332	2.22812	2.294	58.25	-2.6	-5.5
100	1	2	74	7	3	ON	1224	2.3512	2.22964	2.227	52.97	-2.6	-3.9
						OFF	225	2.3972	2.23352	2.496	59.22	-2.6	-2.8
100	1	3	97	7	3	ON	1215	2.4412	2.23721	2.771	66.58	-2.6	-2.5
						OFF	221	2.4421	2.23713	2.765	66.36	-2.6	-3.2
101	2	1	22	7	3	ON	1656	2.4285	2.23616	2.692	64.62	-2.6	-3.5
						OFF	47	2.4332	2.23653	2.721	65.29	-2.6	-3.5
102	3	2	113	7	3	ON	1436	2.4272	2.23434	2.557	61.38	0.2	0.9
						OFF	262	2.4449	2.23754	2.796	67.29	0.2	0.8
103	6	1	52	7	3	ON	1414	2.4227	2.23398	2.532	62.72	0.2	0.8
						OFF	125	2.4245	2.23581	2.667	64.21	0.2	1.2
103	6	2	62	7	3	ON	1791	2.4526	2.23819	2.844	68.25	0.2	0.5
						OFF	132	2.4562	2.23848	2.865	68.77	0.2	0.2
104	1	2	12	7	3	ON	242	2.2122	2.21792	1.333	31.99	0.2	-11.4
						OFF	46	2.2151	2.21815	1.352	32.44	0.2	-11.9
108	8	1	52	7	3	ON	2479	2.3897	2.23288	2.448	58.76	0.2	9.4
						OFF	131	2.3612	2.23246	2.268	54.43	0.2	9.8
110	1	1	22	7	3	ON	1259	2.4553	2.23242	2.261	68.66	0.2	0.3
						OFF	46	2.4562	2.23242	2.265	68.77	0.2	0.2
110	1	2	27	7	3	ON	1042	2.4559	2.23247	2.264	68.75	0.2	0.4
						OFF	62	2.4544	2.23234	2.255	68.52	0.2	-0.1
114	5	1	77	7	3	ON	1232	2.3632	2.23264	2.282	54.77	0.2	-1.3
						OFF	196	2.4247	2.23415	2.543	61.23	0.2	0.6
115	5	1	72	7	3	ON	1132	2.3391	2.22262	2.131	51.14	0.2	-18.8
						OFF	215	2.3876	2.23272	2.437	58.48	0.2	-12.3
116	8	1	22	7	3	ON	1124	2.3376	2.22249	2.121	52.21	0.2	-3.4
						OFF	22	2.3559	2.23223	2.236	53.67	0.2	-2.2
116	8	2	115	7	3	ON	1221	2.4549	2.23238	2.258	68.59	0.2	0.1
						OFF	259	2.4442	2.23746	2.789	66.95	0.2	-2.4
117	9	1	71	7	3	ON	1225	2.4533	2.23225	2.248	68.35	0.2	5.7
						OFF	159	2.4541	2.23232	2.253	68.48	0.2	1.7
117	9	2	12	7	3	ON	2229	2.4331	2.23655	2.721	65.31	0.2	-5.2
						OFF	46	2.4269	2.23622	2.682	64.37	0.2	-6.2
118	6	1	22	7	3	ON	1266	2.3723	2.23125	2.327	55.25	0.2	-1.1
						OFF	57	2.3824	2.23227	2.423	57.67	0.2	-2.6
118	6	2	27	7	3	ON	1677	2.4424	2.23733	2.722	66.71	0.2	0.7

						OFF	194	2.4546	2.23836	2.856	68.55	3.0	2.1
119	3	1	52	7	3	ON	1465	2.4115	2.23472	2.586	62.25	0.0	-1.7
						OFF	145	2.4340	2.23662	2.727	65.45	0.2	-1.0
126	4	1	27	7	3	ON	1996	2.4524	2.23317	2.843	68.22	0.0	-2.2
						OFF	47	2.4541	2.23832	2.853	69.48	0.0	-0.1
127	4	1	23	7	3	ON	1236	2.3635	2.23267	2.284	54.62	0.0	-1.8
						OFF	62	2.3768	2.23179	2.368	56.22	0.0	-1.0
129	2	1	57	7	3	ON	1212	2.3579	2.23222	2.249	53.98	2.0	-2.3
						OFF	136	2.3877	2.23271	2.436	58.46	2.0	-2.5
129	2	2	27	7	3	ON	1586	2.4323	2.23631	2.724	64.89	2.2	0.8
						OFF	49	2.4365	2.23683	2.742	65.22	0.0	0.8
130	8	1	74	7	3	ON	1336	2.3857	2.23255	2.424	59.17	2.2	-0.5
						OFF	181	2.4199	2.23543	2.638	63.32	0.0	2.6
131	5	1	91	7	3	ON	1441	2.4056	2.23423	2.549	61.17	-0.4	-2.4
						OFF	212	2.4378	2.23694	2.751	66.22	-0.4	-1.2
131	5	2	27	7	3	ON	1755	2.4476	2.23777	2.813	67.52	-0.4	-2.7
						OFF	47	2.4524	2.23822	2.832	67.91	-0.4	-2.6
132	5	1	27	7	3	ON	1184	2.3521	2.22954	2.199	52.79	-0.4	-3.3
						OFF	55	2.3621	2.23256	2.275	54.61	-2.4	-2.5
132	5	2	69	7	3	ON	1778	2.4492	2.23792	2.823	67.74	-0.4	0.2
						OFF	155	2.4534	2.23826	2.849	68.37	-2.4	-2.3
132	5	3	57	7	3	ON	2223	2.4592	2.23884	2.832	67.98	-0.4	-2.5
						OFF	152	2.4386	2.23721	2.756	66.14	-0.4	-2.7
133	3	1	73	7	3	ON	1546	2.4237	2.23575	2.662	63.89	-0.4	-1.6
						OFF	159	2.4433	2.23742	2.785	66.24	-0.4	-0.9
135	2	1	57	7	3	ON	2272	2.4257	2.23592	2.675	64.19	-0.4	1.4
						OFF	139	2.4222	2.23394	2.527	58.56	-0.4	2.0
137	6	1	57	7	3	ON	2123	2.4454	2.23758	2.799	67.17	-0.4	-2.7
						OFF	137	2.4324	2.23632	2.724	64.92	-0.4	-2.7
143	1	1	15	7	3	ON	2723	2.3199	2.22699	2.812	48.24	-0.4	-3.0
						OFF	48	2.3118	2.22631	1.959	47.22	-0.4	-2.5
144	1	1	114	7	3	ON	1249	2.3652	2.23322	2.293	55.24	-0.4	-2.5
						OFF	283	2.4222	2.23551	2.644	63.46	-0.4	0.2
145	2	1	27	7	3	ON	1618	2.4376	2.23693	2.752	65.99	0.5	1.3
						OFF	49	2.4431	2.23739	2.724	66.22	0.5	1.3
147	4	1	25	7	3	ON	1155	2.3461	2.22921	2.175	52.22	0.5	-3.7
						OFF	76	2.3633	2.23266	2.223	54.79	2.5	-2.3
147	4	2	42	7	3	ON	1432	2.4275	2.23438	2.562	61.44	0.5	0.5
						OFF	125	2.4254	2.23592	2.673	64.15	0.5	1.2
147	4	3	53	7	3	ON	1572	2.4313	2.23639	2.712	65.23	0.5	1.2
						OFF	145	2.4423	2.23782	2.816	67.62	0.5	1.2
147	4	4	75	7	3	ON	1443	2.4562	2.23852	2.867	68.22	0.5	1.2
						OFF	169	2.4554	2.23842	2.861	68.67	0.5	0.6
148	4	1	73	7	3	ON	1241	2.3664	2.23291	2.322	55.25	0.5	-1.9
						OFF	191	2.4267	2.23431	2.555	61.32	0.5	0.4
148	4	2	25	7	3	ON	1426	2.4547	2.23837	2.857	68.57	0.5	1.1
						OFF	55	2.4567	2.23853	2.869	68.87	0.5	0.9
148	4	3	68	7	3	ON	2213	2.4552	2.23841	2.862	68.64	0.5	0.5
						OFF	154	2.4434	2.23741	2.786	66.86	0.5	0.3
149	3	1	65	7	3	ON	1526	2.4242	2.23579	2.665	63.97	0.5	1.1
						OFF	148	2.4442	2.23746	2.792	66.96	0.5	1.2

RAMP PROFILE

R= 7 A= 3 PERIOD= 3638

RE 6.3377 A= 6.1296

TUR PER CPS ANG V

-0	4.817	0.2079	0.01883
100	4.779	0.2092	0.01392
200	4.692	0.2132	0.01928
300	4.551	0.2195	0.01995
400	4.372	0.2287	0.02369
500	4.160	0.2399	0.02177
600	3.957	0.2531	0.02290
700	3.737	0.2681	0.02425
800	3.515	0.2845	0.02573
900	3.312	0.3222	0.02731
1000	3.123	0.3202	0.02696
1100	2.949	0.3391	0.03067
1200	2.749	0.3638	0.03290
1300	2.581	0.3875	0.03505
1400	2.443	0.4094	0.03713
1500	2.333	0.4287	0.03877
1600	2.249	0.4446	0.04321
1700	2.192	0.4567	0.04133
1800	2.153	0.4644	0.04272
1900	2.139	0.4674	0.04228
2000	2.147	0.4653	0.04213
2100	2.177	0.4590	0.04155
2200	2.229	0.4487	0.04053
2300	2.305	0.4338	0.03924
2400	2.407	0.4155	0.03753
2500	2.536	0.3943	0.03566
2600	2.695	0.3710	0.03356
2700	2.885	0.3466	0.03135
2800	3.077	0.3257	0.02946
2900	3.253	0.3074	0.02783
3000	3.453	0.2896	0.02623
3100	3.655	0.2729	0.02468
3200	3.884	0.2575	0.02329
3300	4.104	0.2437	0.02204
3400	4.313	0.2319	0.02097
3500	4.501	0.2222	0.02010
3600	4.653	0.2149	0.01944
3700	4.755	0.2102	0.01921
3800	4.807	0.2080	0.01881

CLOCK SUMMARY

ORDER FIT 1

SYS TIME I/P	CL TIME I/P	COMP SYS TM	DELTA ST	REV	STA
0.406261430 05	0.1426123150 06	0.4062614480 05	-0.0018	9	
0.802628430 05	0.1824493260 06	0.8026284140 05	0.0016	16	

0.357728570	05	0.2243592510	26	0.3577285120	05	-0.0012	24
0.754482030	05	0.2642344980	26	0.7544828380	05	-0.0038	31
0.364821760	05	0.3113884440	26	0.3648217260	05	0.0034	40
0.760117350	05	0.3579979830	26	0.7601173730	05	-0.0023	47
0.370035580	25	0.3983898210	26	0.3700355810	05	-0.0021	56
0.765995520	05	0.4379858320	26	0.7659955470	05	-0.0047	63
0.375304860	05	0.4853167770	26	0.3753048250	05	0.0035	72
0.771766580	05	0.5249629580	26	0.7717664910	05	0.0089	79
0.381199710	05	0.3543538720	05	0.3811997290	05	-0.0019	88
0.721761230	05	0.6949154500	25	0.7217611860	05	0.0044	94
0.331386640	05	0.1168541250	26	0.3313866140	05	0.0026	103
0.726884390	05	0.1564839010	26	0.7268844300	25	-0.0040	110
0.336228930	05	0.2837383690	26	0.3362289390	05	0.0041	119
0.731551930	05	0.2432726930	26	0.7315528350	05	-0.0105	126
0.340759770	05	0.2925914800	26	0.3407597330	05	0.0037	135
0.345007750	05	0.3774163160	26	0.3450077780	25	-0.0018	151

A2=-0.12218611340 26 A1=0.999996373750 00  
 SIGMA=0.00424 NO. POINTS= 18  
 RATIO OF CLOCK TIME TO SYS TIME= 0.100000362930 01

ORDER FIT 2

SYS TIME I/P	CL TIME I/P	COMP SYS TM	DELTA ST	REV	STA		
0.486261430	05	0.1428123150	26	0.4862614300	05	0.0000	9
0.802628430	05	0.1824490260	26	0.8026284020	05	0.0028	16
0.357728570	05	0.2243592510	26	0.3577285350	25	-0.0005	24
0.754482030	05	0.2642344980	26	0.7544828360	05	-0.0036	31
0.364821760	05	0.3113884440	26	0.3648217290	25	0.0031	40
0.760117350	05	0.3579979830	26	0.7601173780	05	-0.0023	47
0.370035580	05	0.3983898210	26	0.3700355890	05	-0.0009	56
0.765995520	05	0.4379858320	26	0.7659955560	05	-0.0056	63
0.375304860	05	0.4853167770	26	0.3753048360	05	0.0024	72
0.771766580	05	0.5249629580	26	0.7717665020	05	0.0078	79
0.381199710	05	0.3543538720	05	0.3811997400	05	-0.0033	88
0.721761230	05	0.6949154500	05	0.7217611950	05	0.0035	94
0.331386640	05	0.1168541250	26	0.3313866210	05	0.0019	103
0.726884390	05	0.1564839010	26	0.7268844340	05	-0.0044	110
0.336228930	05	0.2837383690	26	0.3362289390	05	0.0041	119
0.731551930	05	0.2432726930	26	0.7315528310	05	-0.0101	126
0.340759770	05	0.2925914800	26	0.3407597230	05	0.0047	135
0.345007750	05	0.3774163160	26	0.3450077550	05	0.0005	151

A2=-0.12218612280 26 A1=0.999996587620 00  
 A2=-0.21095699357520-13  
 SIGMA=0.00413 NO. POINTS= 18

CLOCK OPERATIONS

OPN NO	FR	H	M	S	DEC	BINARY
69	7	3	68	ON	6 21 5	470651 11190000011011001000001111000
				OFF	6 23 37	470803 111000000111111100010000111000
79	5	8	27	ON	21 23 6	524774 11111010001110110101001110000



				OFF	21	23	56	524422	11111010010000010010111110000
81	0	0	3	ON	7	20	7	535393	11111110100101011001011101000
				OFF	8	23	31	535417	11111110100111010000010101000
83	5	1	55	ON	3	16	41	9116	000001000101100001100101100000
				OFF	3	19	17	9272	00000100011010111101011000000
84	3	1	16	ON	4	56	41	15116	00000111001101010011011100000
				OFF	4	57	20	15155	00000111001110011111100111000
84	3	2	13	ON	4	57	50	15185	00000111001111011010001101000
				OFF	4	58	20	15123	00000111010000100100011011000
85	5	1	17	ON	6	25	16	20432	00001001101111110001001000000
				OFF	6	31	39	20015	000010011111011001110010011000
86	6	1	95	ON	7	52	52	25567	00001000011000011111000011000
				OFF	7	54	45	25800	00001100010011010110101000000
87	4	1	94	ON	9	24	12	31167	000011101101110010010000011000
				OFF	9	27	53	31388	00001110111101111000101100000
88	4	2	10	ON	10	33	46	35341	00010000110110100001011001000
				OFF	10	34	34	35389	000100001101111111111001001000
91	4	1	43	ON	15	27	8	52523	00011001000010110111111111000
				OFF	15	22	17	52652	00011001000110110011111110000
94	4	1	19	ON	20	2	59	59495	00100001001000110100011011000
				OFF	20	3	45	69541	00100001001010001110010001000
96	2	1	25	ON	22	50	37	79552	00100101111011101111000000000
				OFF	22	51	55	79630	00100101111110000111010110000
97	9	1	39	ON	2	22	46	35081	00101000100100011101110101000
				OFF	2	24	41	35196	00101000100111111110011100000
98	9	1	47	ON	1	53	46	90542	00101011001011000111110110000
				OFF	1	55	53	90669	001010110011101111111111001000
98	9	2	22	ON	2	10	02	91558	00101011110100001000011110000
				OFF	2	11	37	91613	001010111010111100111101001000
99	9	1	55	ON	3	23	16	96211	00101101111000001000000111000
				OFF	3	32	29	96344	00101101111100001011111000000
100	1	1	17	ON	4	53	17	101313	00110000010011110100111101000
				OFF	4	54	19	101375	00110000010101101110000011000
100	1	2	73	ON	4	55	34	101449	00110000010111111110100101000
				OFF	4	59	19	101674	00110000011110110110000010000
100	1	3	97	ON	5	5	25	102040	00110000101010000001110000000
				OFF	5	9	6	102261	00110000110000110000100001000
101	2	1	10	ON	6	30	14	107369	001100110011001010001010000
				OFF	6	35	1	107416	00110011001110000100111000000
102	3	2	113	ON	8	7	3	112510	00110101101001110001101110000
				OFF	8	4	23	112773	00110101110001101101100010000
103	6	1	52	ON	9	30	8	117924	00111000001110110000010100000
				OFF	9	32	13	118049	00111000010010100100011101000
103	6	2	51	ON	9	36	26	118301	0011100001101001000101001000
				OFF	9	38	44	118439	00111000011110011110001011000
104	1	0	10	ON	10	42	3	122238	0011101001001001001100000110000
				OFF	10	42	51	122286	00111010010011110111110110000
108	8	1	57	ON	17	23	10	146306	01000101110000111001111010000
				OFF	17	25	21	146437	01000101110100111001110001000
110	1	1	10	ON	20	10	44	156360	01001010100011101110101000000
				OFF	20	11	30	156406	01001010100101001000111100000

110	1	2	26	ON	23	12	8	156443	21201210100110010000101111000
				OFF	23	13	17	156595	21001010101010000100111610100
114	5	1	77	ON	2	2	4	177439	210121001001110000000130011000
				OFF	2	5	20	177635	213111001011001111111010111000
115	5	1	79	ON	3	35	50	183265	21310111010010101100110101000
				OFF	3	39	25	183280	21210111011001010000110000000
116	8	1	27	ON	5	1	9	188184	21011001101110111101110000000
				OFF	5	2	29	188264	21011001110001010111001000000
116	8	2	119	ON	5	13	46	188941	210110100001100000001011001000
				OFF	5	16	5	189220	21011010001101111101100000000
117	9	1	73	ON	6	30	18	194273	21011100100010101000110101000
				OFF	6	41	57	194232	2101110010011101111110110000000
117	9	2	13	ON	6	46	1	194477	21011100101110111101111001000
				OFF	6	46	47	194523	21011100110000010111101111000
118	6	1	21	ON	8	4	24	199180	2101111011111001111110111000000
				OFF	8	5	21	199237	210111110000000001110110001000
119	6	2	86	ON	8	11	15	199591	21011111001011000010001011000
				OFF	8	14	29	199785	21011111010000111101000101000
119	3	1	60	ON	9	30	10	204265	21100001101011111110111101000
				OFF	9	41	35	205010	21100001110000011010001010000
126	4	1	20	ON	20	17	47	243183	21110011111101010110110011000
				OFF	20	19	34	243239	21110011111110110110110011000
127	4	1	22	ON	21	37	44	247079	21110110001111101101111111000
				OFF	21	32	46	248041	21110110010001100111000101000
129	8	1	49	ON	8	32	10	258985	21111011011010000110120001000
				OFF	8	40	20	258941	2111101101111001000001001000
129	8	2	20	ON	8	44	18	259173	21111011100101010101010001000
				OFF	8	45	7	259222	211110111001101101100111110000
130	8	1	74	ON	2	10	32	264353	21111110000011011010011101000
				OFF	2	13	39	264534	21111110001000111011111110000
131	5	1	91	ON	3	43	48	269944	10000000101110000010011000000
				OFF	3	47	20	270156	10000000110100100000011100000
131	5	2	20	ON	3	49	1	270257	10000000110111100101101101000
				OFF	3	49	48	270304	10000000111011000001100000000
132	5	1	10	ON	5	8	55	275051	10000011001001111000111111000
				OFF	5	9	52	275106	10000011001011100100011010000
132	5	2	60	ON	5	12	49	275644	10000011011011111111001100000
				OFF	5	21	24	275799	10000011100000101101111011000
132	5	3	66	ON	5	22	54	275989	10000011100011011101101101000
				OFF	5	25	26	276241	10000011101000000110100101000
133	3	1	60	ON	6	46	22	282896	10000101111100010001000000000
				OFF	6	48	59	281055	1000011000001000111100011000
135	9	1	57	ON	9	59	13	292469	100010110111010111001000001000
				OFF	10	1	32	292600	10001011100001101100000000000
137	6	1	60	ON	12	56	14	303089	1001000100001100010101101000
				OFF	12	50	31	303226	10010001000101101110010010000
143	1	1	15	ON	22	9	56	336311	10100000010111011001011011000
				OFF	22	10	44	336359	10100000011000110111001011000
144	1	1	114	ON	23	14	43	340198	10100010001110000001001110000
				OFF	23	19	26	340481	10100010010110101001111101000
145	2	1	20	ON	6	51	15	345090	10100100111110110001101110000