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12 PAGES
(NOT INCLUDING PEST)

CORONA J FLIGHT DATA BOOK

SYSTEM NO. J-25

VEHICLE NO. 1628

MISSION NO. 1826-1

CAMERA NOS. 174/175

DATE 11-82-65

Declassified and Released by the NRO

In Accordance with E. O. 12958

on NOV 26 1997

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VEHICLE NO. 1628
MISSION NO. 1826-1
CAMERA NOS. 174/175

GENERAL FLIGHT DATA

MASTER CAMERA SERIAL NO. 174

SLAVE CAMERA SERIAL NO. 175

S/I -1 SERIAL NO. D75/92/93

S/I -2 SERIAL NO. D72/89/85

LAUNCH DATE 10-28-65

REACTIVATION DATE N/A

REACTIVATION ORBIT NO. N/A

ORBIAL PARAMETERS (REV. 40)

PERIOD 98.615 MIN.

ECCENTRICITY 0.01996

PERIGEE 92.951 NM

PERIGEE LAT. 16.978 DEG. N

APOGEE 236.978 NM

INCL. ANGLE 74.978 DEG.

RECOVERY ORBIT NO. 81

RECOVERY DATE 11-02-65

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SYSTEM NO. J-25
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 CAMERA NOS. 174/175

FLIGHT LENS SETTINGS AND FILM TYPES

LENS SETTINGS

PANORAMIC CAMERA SETTINGS		CAMERA NO. 174	CAMERA NO. 175
PANORAMIC OPTICS SLIT WIDTH	0.225	IN .150	
PANORAMIC OPTICS FILTER TYPE	WRATTEN 25	WRATTEN 21	
HORIZON OPTICS EXP. TIME	1/100	SEC. 1/100	SE
HORIZON OPTICS APERTURE	F6.8	SUPPLY F8.0	SUPP
HORIZON OPTICS APERTURE	F8.0	TAKE-UP F6.8	TAKE-
HORIZON OPTICS FILTER TYPE	WRATTEN 25	WRATTEN 25	

STELLAR INDEX CAMERA SETTINGS

	D75/92/93		D72/89/85	
	STELLAR	INDEX	STELLAR	INDEX
EXPOSURE TIME	2.0	SEC 1/500	2.0	SEC 1/500
APERTURE SETTING	F1.8	F4.5	F1.8	F4.5
FILTER TYPE	NONE	WRATTEN 21	NONE	WRATT

RATIO ONE STELLAR/INDEX FRAME PER 7 MASTER CAMERA FRAMES.

FILM

PANORAMIC CAMERAS	CAMERA NO. 174	CAMERA NO. 175
TYPE	3484	3484
LENGTH	16000 FT.	16000 FT.
SPLICES	5	3
EMUL. DATA	227-3-9-5	226-54/1-9-5

STELLAR/INDEX CAMERAS

	D75/92/93		D72/89/85	
	STELLAR	INDEX	STELLAR	INDEX
TYPE	4401	4400	4401	4400
EMUL. DATA	124-35-8-5	104-14-6-5	124-35-8-5	104-1

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LENS DATA SUMMARY MASTER CAMERA NO. 174

LENS SERIAL NO. 1712435
EQUIVALENT OPERATIONAL FOCAL LENGTH 689.651 MM

RESOLUTION

STATIC		LINES/MM	FILM TYPE	TARGET CONTRA
	BENCH TEST	281	3484	HIGH
		147	3484	LOW
DYNAMIC		193	3484	HIGH
		126	3484	LOW
	AP	194	3484	HIGH
		128	3484	LOW

NOTE

RESOLUTION OF 193 LINES/MM REPORTED IN

DISTORTION - POSITIVE (PINCUSHION)

ANGLE OFF AXIS-DEG.	3	2	1	0	359	358	357
MILLIMETERS	0.005	0.004	0.002	0.000	0.000	0.001	0.002

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CAMERA NOS. 174/175

LENS DATA SUMMARY (HORIZON CAMERAS FOR MASTER CAMERA NO. 174)

	TAKE-UP	SUPPLY
LENS SERIAL NO.	816625	816646
OPERATIONAL FOCAL LENGTH	54.48 MM	54.50 MM
RADIAL DISTORTION		
18 DEG. OFF AXIS	0.010 MM	0.020 MM
20 DEG. OFF AXIS	0.020 MM	0.040 MM
TANGENTIAL DISTORTION (MAXIMUM VECTOR)	0.025 MM	0.010 MM

RESOLUTION

ANGLE OFF AXIS-DEG.	0	5	10	15	20	25	27.5	30
TAKE-UP (RADIAL)	187	185	144	116	93	65	-8	35
(TANGENTIAL)	187	186	145	128	117	126	-8	24
SUPPLY (RADIAL)	289	174	161	123	93	57	-8	28
(TANGENTIAL)	166	197	163	143	136	134	-8	20

DYNAMIC (ZERO DEG)
 TAKE-UP -0 LINES/MM
 SUPPLY -0 LINES/MM

NOTE

1. DISTORTION AND RESOLUTION ARE READ AT EQUIVALENT OPERATIONAL FOCAL LENGTH.
2. RESOLUTION IN LINES PER MM ON 3484 FILM AND HIGH CONTRAST TARGET.

SYSTEM NO. J-25
VEHICLE NO. 1620
MISSION NO. 1026-1
CAMERA NOS. 174/175

LENS DATA SUMMARY SLAVE CAMERA NO. 175

LENS SERIAL NO. 1722435
EQUIVALENT OPERATIONAL FOCAL LENGTH 689.682 MM

RESOLUTION

STATIC

BENCH TEST	LINES/MM	FILM TYPE	TARGET CONTRA
	238	3484	HIGH
	147	3484	LOW

DYNAMIC

[REDACTED]	194	3484	HIGH
	126	3484	LOW
AP	194	3484	HIGH
	120	3484	LOW

NOTE [REDACTED] RESOLUTION OF 194 LINES/MM REPORTED IN [REDACTED]

DISTORTION - POSITIVE (PINCUSHION)

ANGLE OFF AXIS-DEG.	3	2	1	0	359	358	357
MILLIMETERS	0.009	0.006	0.003	0.000	0.002	0.003	0.005

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MISSION NO. 1826-1
CAMERA NOS. 174/175

LENS DATA SUMMARY (HORIZON CAMERAS FOR SLAVE CAMERA NO. 175)

	TAKE-UP	SUPPLY
LENS SERIAL NO.	816631	816626
OPERATIONAL FOCAL LENGTH	54.98 MM	54.78 MM
RADIAL DISTORTION		
10 DEG. OFF AXIS	0.018 MM	0.028 MM
20 DEG. OFF AXIS	0.028 MM	0.068 MM
TANGENTIAL DISTORTION (MAXIMUM VECTOR)	0.028 MM	0.018 MM

RESOLUTION

ANGLE OFF AXIS-DEG.	0	5	10	15	20	25	27.5	30
TAKE-UP (RADIAL)	187	166	121	98	41	64	-8	35
(TANGENTIAL)	187	197	145	182	86	182	-8	58
SUPPLY (RADIAL)	187	174	144	98	83	57	-8	28
(TANGENTIAL)	187	186	154	122	186	128	-8	55

DYNAMIC (ZERO DEG)
TAKE-UP -8 LINES/MM
SUPPLY -8 LINES/MM

NOTE

1. DISTORTION AND RESOLUTION ARE READ AT EQUIVALENT OPERATIONAL FOCAL LENGTH.
2. RESOLUTION IN LINES PER MM ON 3484 FILM AND HIGH CONTRAST TARGET.

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SYSTEM NO. J-25
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 MISSION NO. 1826-1
 CAMERA NOS. 174/175

FORMAT DIMENSIONS AND CALIBRATIONS

CAMERA NO. 174

CAMERA NO. 175

A	76.849	75.997
B	354.992	354.992
C	718.824	789.886
D	56.483	56.435
E	56.458	56.583
XT	8.568	8.257
YT	-8.186	8.141
XS	-8.456	-8.879
YS	-8.242	8.121
XVO	-8.278	8.847
YVO	1.977	8.954
DTX	8.548	8.251
DTY	2.893	2.141
USX	-8.448	-8.876
DSY	-2.242	-1.879
DMX	-8.316	8.873
DMY	21.977	28.954
HEIGHT	54.643	55.144
WIDTH	754.884	754.488
DIRECTION		
FLIGHT	-Y	+Y
SCAN	+X	+X

- NOTE 1. ALL DIMENSIONS ARE IN MILLIMETERS AND ARE AVERAGE DIMENSIONS OF THREE FORMATS.
 2. HEIGHT OF MAIN FORMAT IS TAKEN AT CENTER OF FORMAT.
 3. DT, DM, DS, X, AND Y DIMENSIONS ARE TAKEN 18MM ABOVE POINT DEFINING TARGET CENTER.
 4. NEGATIVE VIEWED WITH EMULSION SIDE DOWN.
 5. FORMAT SIGN CONVENTION

$$\begin{array}{c}
 1 \\
 -X+Y \quad 1 \quad +X+Y \\
 \hline
 -X-Y \quad 1 \quad +X-Y \\
 1
 \end{array}$$

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CAMERA NOS. 174/175

LENS DATA SUMMARY STELLAR INDEX D75/92/93 -1 MISSION

	STELLAR	INDEX
LENS SERIAL NO.	18698	817918
RESEAU SERIAL NO.	93	92
FILTER TYPE	NONE	WRATTEN 21
APERTURE	F1.8	F4.5
EXPOSURE TIME	2.8 SEC.	1/500 SEC.
EQUIVALENT FOCAL LENGTH	84 NOM	MM 38.68 MM

RESOLUTION (INDEX)

ANGLE OFF AXIS	0	10	20	30	35
HIGH CONTRAST-R/T (3400 FILM)	66/74	78/77	114/81	88/45	83/3

AWAR 72 LINES/MM
READ FROM 4400 FILM.

DISTORTION

FULL DATA TO BE REPORTED AS PART OF PHOTOGONIOMETER
DATA REDUCTION.

ALIGNMENT

STELLAR

INDEX

-0.0007 INCHES/.937 INCHES -0.0009 INCHES/2.25 IN

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CAMERA NOS. 174/175

LENS DATA SUMMARY STELLAR INDEX D72/89/85 -2 MISSION

	STELLAR	INDEX
LENS SERIAL NO.	11515	817714
RESEAU SERIAL NO.	85	89
FILTER TYPE	NONE	WRATTEN 21
APERTURE	F1.8	F4.5
EXPOSURE TIME	2.0 SEC.	1/500 SEC.
EQUIVALENT FOCAL LENGTH	84 NOM	MM 38.48 MM

RESOLUTION (INDEX)

ANGLE CFF AXIS	8	10	20	30	35
HIGH CONTRAST-R/T (3400 FILM)	74/74	81/76	110/74	181/56	91/

AWAR 74 LINES/MM
READ FROM 4400 FILM.

DISTORTION

FULL DATA TO BE REPORTED AS PART OF PHOTOGONIOMETER
DATA REDUCTION.

ALIGNMENT

STELLAR

INDEX

-0.0007 INCHES/.937 INCHES -0.0004 INCHES/2.25 IN

SYSTEM NO. J-25
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MISSION NO. 1826-1
CAMERA NOS. 174/175

CYCLE PERIOD DATA

V/H RAMP SETTING LEVEL	AMPLITUDE	TIME UP RAMP-SEC	---CALIBRATED---		---IN-FLIGHT---		ORBI CYCLE PERIOD-SEC NO.
			MASTER	SLAVE	MASTER	SLAVE	
7	3	8	4.755	4.784	4.768	4.765	9
7	3	1554	2.295	2.286	2.348	2.322	16
7	3	1625	2.239	2.248	2.258	2.279	31
7	3	123	4.725	4.752	4.722	4.755	48
7	3	1638	2.236	2.248	2.265	2.262	47
7	3	1659	2.233	2.238	2.264	2.282	63
7	2	1695	2.221	2.228	2.233	2.255	79

NOTE

A -B OR * INDICATE NO DATA AVAILABLE.

A. 1826-1

B. FINAL PERFORMANCE ESTIMATE, PART ONE

OPERATIONS SUMMARY

FWD PAN CAMERA NUMBER 174

OPN	NO	FRA	Q	LAT	LONG	HEIGHT	RANGE	DA	H	M	S	LTIM	S-TIM	
PRE-FLT 101														
1	3	1	21	ON	2 72 4	173 33E	918861	944476	28	22	48	38	1814	81638
			21	OFF	2 69 14	175 42W	875992	988265	28	22	41	47	1858	81787
1	3	2	24	ON	2 67 21	178 58W	856291	887887	28	22	42	27	1119	81747
			24	OFF	2 63 32	163 44W	828585	858734	28	22	43	48	1148	81828
3	5	1	38	ON	2 78 33	134 13E	888289	928951	29	1	42	42	1839	6162
			38	OFF	2 64 23	149 9E	825389	855722	29	1	44	49	1141	6289
3	5	2	28	ON	2 54 17	168 32E	744511	771764	29	1	47	45	1229	6465
			28	OFF	2 58 51	162 58E	728715	747866	29	1	48	41	1248	6521
5	5	1	58	ON	2 66 58	98 28E	846918	878876	29	4	45	24	1119	17124
			58	OFF	2 58 31	111 8E	773828	882187	29	4	47	58	1212	17278
5	5	2	17	ON	2 58 56	117 18E	719865	745354	29	4	58	4	1238	17484
			17	OFF	2 47 59	118 57E	699915	725479	29	4	58	52	1246	17452
5	5	3	21	ON	2 39 26	122 58E	651351	675884	29	4	53	6	13	5 17586
			21	OFF	2 35 59	124 15E	634721	657838	29	4	53	59	1311	17639
6	5	1	18	ON	2 41 1	99 26E	658728	682739	29	6	23	24	13	1 23884
			18	OFF	2 38 3	188 37E	643718	667165	29	6	24	18	13	6 23858
6	5	2	52	ON	2 36 29	181 12E	636273	659448	29	6	24	34	13	9 23874
			52	OFF	2 28 6	183 52E	682881	624795	29	6	26	43	1322	23283
6	5	3	24	ON	2 21 59	185 38E	585581	686849	29	6	28	16	1338	23296
			24	OFF	2 18 8	186 26E	577888	598868	29	6	29	14	1334	23354
6	5	4	75	ON	3 23 19	115 38E	655939	679845	29	6	39	38	1421	23978
			75	OFF	3 37 11	119 43E	742127	769288	29	6	43	18	1442	24198
7	2	1	28	ON	2 58 4	65 43E	767822	795968	29	7	49	38	1212	28178
			28	OFF	2 54 48	68 44E	742671	769854	29	7	58	27	1225	28227
7	2	2	59	ON	2 51 8	71 17E	718265	744523	29	7	51	25	1236	28285
			59	OFF	2 41 42	76 17E	661513	685629	29	7	53	55	1259	28435
8	4	1	72	ON	2 66 17	31 17E	835347	866862	29	9	17	44	1122	33464
			72	OFF	2 55 4	45 32E	743476	778689	29	9	21	2	1223	33662
9	1	8	14	ON	1 39 37	116 43W	1385438	1354525	29	18	31	28	244	37888
			14	OFF	1 42 31	115 31W	1288324	1336737	29	18	32	8	258	37928
9	1	1	98	ON	2 57 11	43 41E	758117	785887	29	18	51	4	1345	39864
			98	OFF	2 41 57	53 18E	659834	683887	29	18	55	18	1428	39318
14	9	1	17	ON	2 48 32	83 19W	647938	671535	29	18	29	1	1255	66541
			17	OFF	2 37 51	82 15W	635882	658121	29	18	29	43	13	8 66583
14	9	2	78	ON	3 14 13	69 37W	616442	638864	29	18	42	58	14	4 67378
			78	OFF	3 26 44	66 33W	678987	783761	29	18	45	59	1419	67559
16	4	8	11	ON	2 37 9	127 44W	638463	653412	29	21	31	15	13	8 77475
			11	OFF	2 35 23	127 6W	622774	645434	29	21	31	42	13	3 77582
19	1	1	51	ON	2 78 19	129 7E	868574	892255	38	1	53	47	1838	6827
			51	OFF	2 62 16	146 23E	784818	813683	38	1	56	27	1142	6987
28	1	1	74	ON	2 67 25	114 25E	828995	859466	38	3	25	38	11	3 12338
			74	OFF	2 55 15	138 57E	738726	757456	38	3	29	8	1212	12548

21	1	1	188	ON	2	48	34	116	35E	643189	666533	38	5	3	42	1258	18222	
				OFF	2	24	27	121	58E	584442	685667	38	5	7	58	1315	18478	
23	4	1	19	ON	2	59	28	58	22E	757917	785679	38	7	59	55	1153	28795	
				OFF	2	56	16	61	38E	734582	761459	38	8	8	49	12	6	28849
23	4	2	19	ON	2	52	3	64	47E	786216	732818	38	8	1	58	1221	28918	
				OFF	2	48	58	66	49E	686291	711341	38	8	2	58	1238	28978	
23	4	3	34	ON	2	31	36	74	4E	684525	626582	38	8	7	19	13	3	29239
				OFF	2	26	29	75	33E	588924	618317	38	8	8	37	1318	29317	
24	5	1	181	ON	2	57	32	37	29E	742488	769665	38	9	31	7	12	1	34267
				OFF	2	41	23	47	39E	644945	668438	38	9	35	27	1246	34527	
25	2	1	31	ON	2	54	35	17	18E	728937	747296	38	11	2	35	1211	39755	
				OFF	2	49	25	28	44E	688815	713138	38	11	3	59	1226	39839	
26	9	1	79	ON	3	16	32	16	38E	633287	656341	38	12	51	22	1357	46282	
				OFF	3	29	36	19	52E	785858	731646	38	12	54	48	1414	46488	
38	8	1	41	ON	3	35	9	69	47W	746884	774226	38	18	58	38	1419	68318	
				OFF	3	42	58	66	43W	886871	835666	38	19	8	48	1433	68448	
31	8	1	23	ON	2	32	38	189	5W	683788	625654	38	28	12	13	1255	72733	
				OFF	2	29	27	188	9W	594842	615627	38	28	13	8	13	8	72788
34	1	1	93	ON	2	74	45	115	33E	912544	946223	31	8	38	55	813	1855	
				OFF	2	64	7	168	44E	781858	889788	31	8	35	34	1118	2134	
35	1	1	85	ON	2	74	22	98	56E	898361	931495	31	2	1	59	837	7319	
				OFF	2	64	3	137	58E	779358	887935	31	2	6	13	1118	7573	
37	1	1	96	ON	2	57	38	188	12E	728717	755372	31	5	9	28	1158	18568	
				OFF	2	42	28	118	1E	648572	663988	31	5	13	25	1233	18885	
37	1	2	88	ON	2	31	41	114	1E	598188	619844	31	5	16	11	1252	18971	
				OFF	2	21	36	116	48E	574699	595568	31	5	18	44	13	5	19124
36	1	1	153	ON	2	58	37	82	51E	682898	787821	31	6	41	52	1213	24112	
				OFF	2	27	32	92	23E	586122	687418	31	6	47	51	1257	24471	
39	9	1	19	ON	2	78	27	31	27E	833581	864145	31	8	6	31	1812	29191	
				OFF	2	67	36	39	36E	885177	834738	31	8	7	33	1846	29253	
39	4	2	87	ON	2	53	48	57	53E	788467	726852	31	8	11	48	12	3	29588
				OFF	2	44	35	63	28E	649332	672998	31	8	14	6	1227	29646	
39	9	3	33	ON	2	48	42	65	4E	631862	654833	31	8	15	6	1235	29786	
				OFF	2	35	38	67	8E	618527	632728	31	8	16	24	1244	29784	
40	4	8	14	ON	1	39	22	185	35W	1252559	1299547	31	9	21	31	219	33691	
				OFF	1	42	16	184	24W	1234888	1281891	31	9	22	19	224	33739	
42	4	1	14	ON	2	61	37	27	12E	754847	761663	31	9	48	2	1128	34882	
				OFF	2	56	27	38	58E	731865	757888	31	9	48	57	1144	34857	
40	4	2	79	ON	2	58	43	37	4E	681657	786533	31	9	43	4	1211	34984	
				OFF	2	38	32	43	5E	621188	643789	31	9	46	16	1238	35176	
41	1	1	81	ON	2	54	11	11	47E	781634	727264	31	11	12	45	1159	48365	
				OFF	2	44	32	17	39E	647565	671157	31	11	15	28	1225	48528	
46	2	1	21	ON	2	39	44	94	28W	622248	644888	31	18	49	34	1231	67774	
				OFF	2	36	32	93	15W	689854	632838	31	18	58	23	1237	67823	
47	6	1	28	ON	2	37	43	116	32W	613651	635969	31	28	28	41	1234	73241	
				OFF	2	34	38	115	27W	682721	624638	31	28	21	28	1239	73288	
51	3	1	43	ON	2	62	38	134	29E	748469	775873	1	2	16	18	1114	8178	
				OFF	2	55	28	142	16E	699461	725888	1	2	18	21	1147	8381	
52	3	1	72	ON	2	53	43	128	48E	687845	712954	1	3	49	24	1152	13764	
				OFF	2	42	32	127	15E	638122	653858	1	3	52	22	1221	13942	
53	3	1	64	ON	2	68	39	91	22E	731765	758535	1	5	18	2	1123	19882	

			OFF	2	50	32	100	10E	668679	693065	1	5	20	50	12	1	19250
53	3	2	41 ON	2	22	48	118	54E	572993	593790	1	5	20	8	1251		19680
			OFF	2	16	39	112	24E	560046	580659	1	5	29	33	1259		19773
54	4	1	65 ON	2	69	30	51	52E	882667	832133	1	6	45	48	1013		24340
			OFF	2	59	31	69	49E	722783	749213	1	6	48	57	1128		24537
54	4	2	26 ON	2	51	38	76	36E	673905	698488	1	6	51	7	1157		24667
			OFF	2	47	26	79	8E	651600	675352	1	6	52	14	12	8	24734
61	2	1	17 ON	2	40	9	77	18W	614576	636929	1	17	20	5	1218		62885
			OFF	2	37	29	76	16W	605004	626990	1	17	20	46	1223		62926
63	4	0	16 ON	2	36	2	122	9W	605827	627852	1	20	29	45	1221		73705
			OFF	2	35	28	121	13W	597538	619254	1	20	30	24	1225		73824
64	5	1	19 ON	2	67	28	171	9W	771020	799209	1	21	52	7	1027		78727
			OFF	2	64	28	165	15W	746863	774205	1	21	53	5	1052		78785
66	5	1	20 ON	2	54	8	160	43E	677102	701005	2	0	57	9	1140		3429
			OFF	2	50	59	162	57E	659906	684045	2	0	58	0	1149		3400
68	5	1	09 ON	2	71	29	84	56E	804563	834101	2	3	52	48	932		13968
			OFF	2	61	35	107	37E	721614	748000	2	3	56	7	11	6	14167
68	5	2	56 ON	2	44	46	120	46E	620900	651074	2	4	0	43	12	3	14443
			OFF	2	36	36	124	11E	590736	620496	2	4	2	50	1219		14570
69	5	1	65 ON	2	68	36	71	51E	774670	803069	2	5	24	27	1011		19467
			OFF	2	55	34	91	3E	602605	707516	2	5	28	22	1132		19702
69	5	2	20 ON	2	23	51	105	13E	571569	592313	2	5	36	37	1237		20197
			OFF	2	19	44	106	15E	560437	589064	2	5	37	39	1242		20259
70	2	1	42 ON	2	47	46	73	32E	641043	664309	2	7	1	0	1155		25260
			OFF	2	41	37	76	32E	615020	637399	2	7	2	37	12	8	25357
72	1	1	129 ON	2	59	43	18	31E	705100	730069	2	9	50	48	1112		35920
			OFF	2	40	36	31	10E	610101	632370	2	10	3	56	12	9	36236
70	7	1	10 ON	2	40	37	105	40W	606754	628014	2	19	7	3	12	4	60023
			OFF	2	30	8	104	41W	590626	620302	2	19	7	42	12	8	60062
79	7	0	11 ON	2	37	19	127	12W	595610	617253	2	20	30	25	12	9	74305
			OFF	2	35	39	126	36W	590919	612307	2	20	30	51	1212		74331

OPERATIONS SUMMARY

AFT PAN CAMERA NUMBER 175																		
OPN	NO	FRA	Q	LAT	LONG	HEIGHT	RANGE	DA	H	M	S	LTIM	S-TIM					
PRE-FLT 100																		
1	3	1	21	ON	2	72	45	169	44E	910061	944476	28	22	40	38	959	01630	
			OFF	2	70	5	170	29W	875992	900265	28	22	41	47	1047		01707	
1	3	2	24	ON	2	68	16	173	0W	850291	887007	28	22	42	27	11	9	01747
			OFF	2	64	30	165	22W	820505	850734	28	22	43	40	1142		01020	
3	5	1	30	ON	2	71	21	131	1E	800209	920951	29	1	42	42	1026	0162	
			OFF	2	65	20	147	24E	825309	855722	29	1	44	49	1134		0209	
3	5	2	19	ON	2	55	15	159	41E	744511	771764	29	1	47	45	1226	0465	
			OFF	2	51	49	162	16E	720715	747066	29	1	48	41	1237		0521	
5	5	1	54	ON	2	67	53	96	10E	840910	870076	29	4	45	24	1110	17124	
			OFF	2	59	30	109	53E	773020	802107	29	4	47	50	12	7	17270	
5	5	2	17	ON	2	51	54	116	20E	719065	745354	29	4	50	4	1235	17404	
			OFF	2	40	56	118	20E	699915	725479	29	4	50	52	1244		17452	
5	5	3	21	ON	2	40	20	122	33E	651351	675004	29	4	53	6	13	3	17506

		OFF	2	36	52	123	53E	634721	657838	29	4	53	59	13	9	17639		
6	5	1	18	ON	2	41	56	99	8E	658728	682739	29	6	23	24	1259	23884	
			OFF	2	38	57	188	13E	643718	667165	29	6	24	18	13	5	23858	
6	5	2	53	ON	2	37	22	188	49E	636273	659448	29	6	24	34	13	7	23874
			OFF	2	28	56	183	34E	682881	624795	29	6	26	43	1321		23283	
6	5	3	24	ON	2	22	48	185	14E	585581	686849	29	6	28	16	1329	23296	
			OFF	2	18	57	186	11E	577888	598868	29	6	29	14	1334		23354	
6	5	4	76	ON	3	22	23	115	13E	655939	679845	29	6	39	38	1428	23978	
			OFF	3	36	9	119	17E	742127	769288	29	6	43	18	1448		24198	
7	2	1	28	ON	2	59	2	64	38E	767822	795968	29	7	49	38	12	8	28178
			OFF	2	55	39	67	52E	742671	769854	29	7	58	27	1221		28227	
7	2	2	59	ON	2	52	6	78	34E	718265	744523	29	7	51	25	1233	28285	
			OFF	2	42	37	75	49E	661513	685629	29	7	53	55	1257		28435	
8	4	1	72	ON	2	67	13	29	14E	835347	866862	29	9	17	44	1114	33464	
			OFF	2	56	2	44	39E	743476	778689	29	9	21	2	1219		33662	
9	1	8	18	ON	1	37	48	117	33W	1385438	1354525	29	18	31	28	241	37888	
			OFF	1	48	44	116	24W	1288324	1336737	29	18	32	8	246		37928	
9	1	1	91	ON	2	58	18	42	48E	758117	785887	29	18	51	4	1341	39864	
			OFF	2	42	51	52	58E	659834	683887	29	18	55	18	1426		39318	
14	9	1	17	ON	2	41	25	83	45W	647938	671535	29	18	29	1	1254	66541	
			OFF	2	38	44	82	39W	635882	658121	29	18	29	43	1259		66583	
14	9	2	78	ON	3	13	28	69	52W	616442	638864	29	18	42	58	14	3	67378
			OFF	3	25	46	66	52W	678987	783761	29	18	45	59	1418		67559	
16	4	8	11	ON	2	38	1	128	7W	638463	653412	29	21	31	15	1258	77475	
			OFF	2	36	15	127	28W	622774	645434	29	21	31	42	13	1	77582	
19	1	1	51	ON	2	71	6	126	6E	868574	892255	38	1	53	47	1818	6827	
			OFF	2	63	14	144	57E	784818	813683	38	1	56	27	1136		6987	
22	1	1	75	ON	2	68	19	112	11E	828995	859466	38	3	25	38	1854	12338	
			OFF	2	58	12	138	4E	738726	757456	38	3	29	8	12	9	12548	
21	1	1	183	ON	2	41	28	116	9E	643189	666533	38	5	3	42	1248	18222	
			OFF	2	25	16	121	33E	584442	625667	38	5	7	58	1314		18478	
23	4	1	19	ON	2	68	25	57	12E	757917	785679	38	7	59	55	1148	28795	
			OFF	2	57	13	68	34E	734582	761459	38	8	8	49	12	3	28849	
23	4	2	28	ON	2	52	59	64	3E	786216	732818	38	8	1	58	1218	28918	
			OFF	2	49	46	66	12E	686291	711341	38	8	2	58	1227		28978	
23	4	3	34	ON	2	32	27	73	44E	684525	626582	38	8	7	19	13	2	29239
			OFF	2	27	19	75	16E	588924	618317	38	8	8	37	13	9	29317	
24	5	1	96	ON	2	58	29	36	28E	742488	769665	38	9	31	7	1157	34267	
			OFF	2	42	16	47	13E	644945	668438	38	9	35	27	1244		34527	
25	2	1	32	ON	2	55	32	16	28E	728937	747296	38	11	2	35	12	7	39755
			OFF	2	52	21	28	6E	688815	713138	38	11	3	59	1224		39839	
26	9	1	88	ON	3	15	39	16	14E	633287	656341	38	12	51	22	1356	46282	
			OFF	3	28	37	19	31E	785858	731646	38	12	54	48	1412		46488	
32	5	1	42	ON	3	34	6	78	12W	746884	774226	38	18	58	38	1417	68318	
			OFF	3	41	51	67	17W	886871	835666	38	19	8	48	1431		68448	
31	8	1	22	ON	2	33	21	189	25W	683788	625654	38	28	12	13	1254	72733	
			OFF	2	38	17	188	27W	594842	615627	38	28	13	8	1259		72782	
34	1	1	93	ON	2	74	55	118	27E	912544	946223	31	8	38	55	752	1855	
			OFF	2	65	2	159	7E	781858	889788	31	8	35	34	1112		2134	
35	1	1	85	ON	2	74	48	94	7E	898361	931495	31	2	1	59	818	7319	
			OFF	2	64	58	136	21E	779358	887935	31	2	6	13	1111		7573	

37	1	1	95	ON	2	58	34	99	13E	728717	755372	31	5	9	28	1146	18568	
				OFF	2	43	21	189	34E	648572	663988	31	5	13	25	1231	18885	
37	1	2	68	ON	2	32	31	113	42E	598188	619844	31	5	16	11	1258	18971	
				OFF	2	22	24	116	33E	574699	595568	31	5	18	44	13	4	19124
38	1	1	148	ON	2	51	32	82	11E	682898	787821	31	6	41	52	1218	24112	
				OFF	2	28	21	92	6E	586122	687418	31	6	47	51	1256	24471	
39	9	1	19	ON	2	71	12	28	29E	833581	864145	31	8	6	31	10	8	29191
				OFF	2	68	29	37	24E	885177	834738	31	8	7	33	1837	29253	
39	9	2	55	ON	2	54	36	57	6E	788467	726852	31	8	11	48	12	8	29588
				OFF	2	45	28	62	51E	649332	672998	31	8	14	6	1225	29646	
39	9	3	32	ON	2	41	34	64	39E	631862	654833	31	8	15	6	1233	29786	
				OFF	2	36	29	66	39E	618527	632728	31	8	16	24	1243	29784	
48	4	8	18	ON	1	37	38	186	22W	1252559	1299547	31	9	21	31	216	33691	
				OFF	1	48	34	185	14W	1234888	1281891	31	9	22	19	221	33739	
48	4	1	18	ON	2	62	33	25	53E	754847	781663	31	9	48	2	1123	34882	
				OFF	2	59	23	29	47E	731865	757888	31	9	48	57	1148	34857	
48	4	2	73	ON	2	51	38	36	25E	681657	786533	31	9	43	4	12	8	34984
				OFF	2	39	24	42	42E	621188	643789	31	9	46	16	1237	35176	
41	1	1	62	ON	2	55	6	18	59E	781634	727264	31	11	12	45	1156	48365	
				OFF	2	45	25	17	18E	647565	671157	31	11	15	28	1224	48528	
46	2	1	21	ON	2	48	35	94	52W	622248	644888	31	18	49	34	1238	67774	
				OFF	2	37	23	93	37W	689854	632838	31	18	58	23	1235	67823	
47	6	1	21	ON	2	38	34	116	55W	613651	635969	31	28	28	41	1233	73241	
				OFF	2	35	29	115	47W	682721	624638	31	28	21	28	1238	73288	
51	3	1	48	ON	2	63	32	133	5E	748469	775873	1	2	16	18	11	8	8178
				OFF	2	56	22	141	25E	699461	725888	1	2	18	21	1144	8381	
52	3	1	65	ON	2	54	38	128	2E	687845	712954	1	3	49	24	1149	13764	
				OFF	2	43	24	126	48E	638122	653858	1	3	52	22	1219	13942	
53	3	1	63	ON	2	61	34	98	18E	731765	758535	1	5	18	2	1118	19882	
				OFF	2	51	26	99	31E	668679	693865	1	5	28	58	1158	19258	
53	3	2	42	ON	2	23	37	118	39E	572993	593798	1	5	28	8	1258	19688	
				OFF	2	17	27	112	9E	568846	588659	1	5	29	33	1258	19773	
54	4	1	64	ON	2	78	16	49	16E	882667	832133	1	6	45	48	18	2	24348
				OFF	2	68	26	68	43E	722783	749213	1	6	48	57	1123	24537	
54	4	2	26	ON	2	52	32	75	55E	673985	698488	1	6	51	7	1154	24667	
				OFF	2	48	19	78	35E	651688	675352	1	6	52	14	12	6	24734
61	2	1	18	ON	2	41	8	77	42W	614576	636929	1	17	28	5	1217	62885	
				OFF	2	38	28	76	38W	685884	626998	1	17	28	46	1222	62926	
63	4	8	17	ON	2	38	52	122	32W	685827	627852	1	28	29	45	1219	73785	
				OFF	2	36	18	121	34W	597538	619254	1	28	38	24	1224	73824	
64	5	1	24	ON	2	68	17	173	13W	771828	799289	1	21	52	7	1819	78727	
				OFF	2	65	28	166	58W	746863	774285	1	21	53	5	1845	78785	
65	5	1	28	ON	2	55	1	159	57E	677182	781885	2	8	57	9	1136	3429	
				OFF	2	51	52	162	18E	659986	684845	2	8	58	8	1147	3488	
68	5	1	67	ON	2	72	8	81	46E	884563	834181	2	3	52	48	919	13968	
				OFF	2	62	28	186	22E	721614	748888	2	3	56	7	11	1	14167
68	5	2	58	ON	2	45	38	128	17E	628988	651874	2	4	8	43	12	1	14443
				OFF	2	37	26	123	49E	598736	628496	2	4	2	58	1218	14578	
69	5	1	64	ON	2	69	23	69	32E	774678	883869	2	5	24	27	18	2	19467
				OFF	2	56	27	98	13E	682685	787516	2	5	28	22	1129	19782	
69	5	2	23	ON	2	24	39	184	57E	571569	592313	2	5	36	37	1236	28197	

			OFF 2 28 32 186 8E	568437	589864	2 5 37 39 1241 28259
78 2 1	41 ON 2 48 39 72 59E	641843	664389	2 7 1 8 1152 25268		
	OFF 2 42 28 76 7E	615828	637399	2 7 2 37 12 7 25357		
72 1 1 138	ON 2 68 37 17 26E	785188	738869	2 9 58 48 11 8 35928		
	OFF 2 41 27 38 53E	618181	632378	2 18 3 56 12 7 36236		
78 7 1	17 ON 2 41 28 186 5W	686754	628814	2 19 7 3 12 2 68823		
	OFF 2 38 58 185 3W	598626	628382	2 19 7 42 12 7 68862		
79 7 8	11 ON 2 38 9 127 34W	595618	617253	2 28 38 25 12 8 74385		
	OFF 2 36 28 126 57W	598919	612387	2 28 38 51 1211 74331		

PHOTOGRAPHIC SUMMARY

FWD PAN CAMERA NO 174 B-2258 SLIT W/25 FILTER 3484 FILM
 OPN NO FRA FEET ET S-EL S-DIR EV FULL INT PRI

PRE-FLT	181	267.1									
1 3 1	21	55.5	ON 286	3.4	37.7	11.54	18.28	9.68	9.88		
			OFF 214	7.1	37.4	11.68	18.75	10.15	9.55		
1 3 2	24	63.5	ON 221	9.2	37.4	11.64	11.88	18.48	9.88		
			OFF 232	13.2	37.6	11.71	11.36	18.76	18.16		
3 5 1	36	188.5	ON 281	5.4	37.1	11.58	18.52	9.92	9.32		
			OFF 214	12.3	37.2	11.68	11.29	18.69	18.89		
3 5 2	28	52.9	ON 238	21.7	38.9	11.75	11.88	11.28	18.68		
			OFF 245	24.6	39.8	11.79	11.88	11.28	18.68		
5 5 1	58	132.3	ON 288	9.5	36.6	11.55	11.84	18.44	9.84		
			OFF 227	17.9	37.6	11.68	11.65	11.85	18.45		
5 5 2	17	45.8	ON 244	24.6	39.4	11.78	11.88	11.28	18.68		
			OFF 258	27.8	48.3	11.82	11.93	11.33	18.73		
5 5 3	21	55.5	ON 265	33.9	43.8	11.98	12.82	11.42	18.82		
			OFF 289	36.5	45.6	11.93	12.84	11.44	18.84		
6 5 1	18	47.8	ON 262	32.7	42.9	11.88	12.81	11.41	18.81		
			OFF 266	35.8	44.3	11.91	12.83	11.43	18.83		
6 5 2	52	137.5	ON 268	36.2	45.1	11.92	12.84	11.44	18.84		
			OFF 278	42.1	58.4	11.97	12.88	11.48	18.88		
6 5 3	24	63.5	ON 283	46.8	55.3	12.88	12.18	11.58	18.98		
			OFF 285	48.2	58.8	12.88	12.18	11.58	18.98		
6 5 4	75	198.4	ON 251	51.3	114.1	11.82	12.18	11.58	18.98		
			OFF 223	43.8	127.7	11.66	12.89	11.49	18.89		
7 2 1	28	52.9	ON 228	18.3	37.2	11.69	11.67	11.87	18.47		
			OFF 237	21.3	38.8	11.74	11.79	11.19	18.59		
7 2 2	59	156.1	ON 246	24.4	38.9	11.88	11.87	11.27	18.67		
			OFF 268	32.2	42.3	11.92	12.88	11.48	18.88		
8 4 1	72	198.4	ON 287	18.2	36.8	11.54	11.18	18.58	9.98		
			OFF 233	21.8	37.7	11.72	11.78	11.18	18.58		
9 1 8	18	26.5	ON 137	-42.5	58.2	18.96	8.88	8.88	8.88		
			OFF 137	-48.5	48.2	18.96	8.88	8.88	8.88		
9 1 1	98	238.8	ON 228	19.1	37.2	11.68	11.78	11.18	18.58		
			OFF 264	32.8	42.8	11.98	12.88	11.48	18.88		
14 9 1	17	45.8	ON 276	33.4	41.3	11.96	12.81	11.41	18.81		
			OFF 288	35.5	42.5	11.98	12.83	11.43	18.83		
14 9 2	78	288.3	ON 283	55.9	182.2	12.88	12.18	11.58	18.98		

				OFF 268	51.2	118.8	11.87	12.18	11.58	18.98
16	4	8	11	29.1 ON 282	36.1	42.4	11.99	12.84	11.44	18.84
				OFF 285	37.5	43.4	12.81	12.85	11.45	18.85
19	1	1	51	134.9 ON 286	5.1	34.8	11.54	18.47	9.87	9.27
				OFF 225	14.8	34.2	11.67	11.43	18.83	18.23
28	1	1	74	195.7 ON 213	8.5	33.7	11.59	18.93	18.33	9.73
				OFF 245	28.8	35.1	11.79	11.77	11.17	18.57
21	1	1	188	285.7 ON 278	33.6	39.6	11.97	12.82	11.42	18.82
				OFF 299	45.8	49.4	12.88	12.18	11.58	18.98
23	4	1	19	58.3 ON 236	16.8	33.7	11.73	11.59	18.99	18.39
				OFF 244	19.8	34.3	11.78	11.73	11.13	18.53
23	4	2	19	58.3 ON 255	23.7	35.2	11.85	11.86	11.26	18.66
				OFF 262	26.6	36.1	11.88	11.92	11.32	18.72
23	4	3	34	89.9 ON 293	48.7	43.9	12.85	12.87	11.47	18.87
				OFF 298	44.5	47.3	12.87	12.89	11.49	18.89
24	5	1	181	267.1 ON 241	18.6	33.8	11.77	11.68	11.88	18.48
				OFF 277	33.8	38.6	11.97	12.81	11.41	18.81
25	2	1	31	82.8 ON 249	21.4	34.2	11.81	11.79	11.19	18.59
				OFF 261	26.8	35.5	11.88	11.91	11.31	18.71
26	9	1	79	289.8 ON 276	57.6	185.8	11.96	12.18	11.58	18.98
				OFF 258	51.8	123.4	11.82	12.18	11.58	18.98
38	8	1	41	188.4 ON 235	49.8	129.6	11.73	12.18	11.58	18.98
				OFF 217	43.4	135.9	11.62	12.89	11.49	18.89
31	8	1	28	52.9 ON 293	48.5	41.3	12.85	12.87	11.47	18.87
				OFF 296	42.8	43.2	12.86	12.88	11.48	18.88
34	1	1	93	246.8 ON 284	-4.5	32.2	11.53	8.88	8.88	8.88
				OFF 242	11.8	31.8	11.77	11.25	18.65	18.85
35	1	1	35	224.8 ON 287	-3.8	31.8	11.55	8.88	8.88	8.88
				OFF 243	11.8	38.8	11.78	11.25	18.65	18.85
37	1	1	96	253.9 ON 245	18.3	31.2	11.79	11.67	11.87	18.47
				OFF 278	32.3	35.2	11.97	12.88	11.48	18.88
37	1	2	88	179.9 ON 294	41.4	48.3	12.85	12.88	11.48	18.88
				OFF 382	49.8	47.7	12.89	12.18	11.58	18.98
38	1	1	153	484.7 ON 262	25.8	32.4	11.89	11.89	11.29	18.69
				OFF 298	44.7	42.7	12.87	12.89	11.49	18.89
39	9	1	19	58.3 ON 218	4.8	38.1	11.57	18.38	9.78	9.18
				OFF 217	7.6	38.8	11.62	18.82	18.22	9.62
39	9	2	57	158.8 ON 255	22.1	31.5	11.85	11.81	11.21	18.61
				OFF 274	38.5	34.8	11.95	11.98	11.38	18.78
39	9	3	33	87.3 ON 282	33.9	35.4	11.99	12.82	11.42	18.82
				OFF 289	38.2	37.7	12.83	12.86	11.46	18.86
42	4	8	18	26.5 ON 138	-47.5	45.2	18.96	8.88	8.88	8.88
				OFF 138	-45.3	43.8	18.97	8.88	8.88	8.88
42	4	1	19	58.3 ON 235	14.2	38.8	11.73	11.44	18.84	18.24
				OFF 243	17.4	38.4	11.78	11.63	11.83	18.43
42	4	2	79	289.8 ON 262	24.9	31.9	11.89	11.89	11.29	18.69
				OFF 285	35.8	36.1	12.81	12.84	11.44	18.84
41	1	1	61	161.3 ON 255	21.6	31.8	11.85	11.88	11.28	18.68
				OFF 275	38.5	33.5	11.96	11.98	11.38	18.78
46	2	1	21	55.5 ON 285	34.9	34.2	12.81	12.83	11.43	18.83
				OFF 289	37.7	35.5	12.83	12.85	11.45	18.85

47	6	1	28	52.9	ON	288	36.7	34.8	12.82	12.84	11.44	18.84
					OFF	292	39.3	36.2	12.84	12.86	11.46	18.86
51	3	1	45	119.8	ON	234	24.8	25.3	11.72	11.86	11.26	18.66
					OFF	252	31.5	27.8	11.83	11.99	11.39	18.79
52	3	1	72	198.4	ON	257	33.2	27.2	11.86	12.81	11.41	18.81
					OFF	279	43.8	31.8	11.97	12.89	11.49	18.89
53	3	1	64	169.3	ON	248	26.8	25.3	11.76	11.91	11.31	18.71
					OFF	264	36.3	28.1	11.98	12.84	11.44	18.84
53	3	2	41	188.4	ON	388	68.8	48.7	12.88	12.18	11.58	18.98
					OFF	381	63.8	58.3	12.88	12.18	11.58	18.98
54	4	1	65	171.9	ON	215	15.6	24.8	11.68	11.53	18.93	18.33
					OFF	243	27.2	25.3	11.78	11.93	11.33	18.73
54	4	2	26	68.8	ON	262	35.2	27.4	11.89	12.83	11.43	18.83
					OFF	278	39.2	29.8	11.93	12.86	11.46	18.86
61	2	1	17	45.8	ON	285	46.8	38.6	12.81	12.18	11.58	18.98
					OFF	288	48.4	32.2	12.82	12.18	11.58	18.98
63	4	8	16	42.3	ON	288	48.8	31.2	12.82	12.18	11.58	18.98
					OFF	291	58.3	32.9	12.84	12.18	11.58	18.98
64	5	1	19	58.3	ON	224	17.7	22.1	11.66	11.64	11.84	18.44
					OFF	233	21.3	22.4	11.71	11.79	11.19	18.59
66	5	1	28	52.9	ON	265	32.4	23.9	11.98	12.88	11.48	18.88
					OFF	272	35.6	24.8	11.94	12.83	11.43	18.83
68	5	1	89	182.5	ON	213	11.8	21.3	11.59	11.26	18.66	18.86
					OFF	245	24.4	21.9	11.79	11.88	11.28	18.68
68	5	2	56	148.1	ON	286	41.6	26.5	12.81	12.88	11.48	18.88
					OFF	298	49.3	38.6	12.87	12.18	11.58	18.98
69	5	1	86	227.5	ON	223	16.8	21.1	11.66	11.55	18.95	18.35
					OFF	262	38.8	22.8	11.89	11.99	11.39	18.79
69	5	2	26	74.1	ON	389	68.2	41.4	12.12	12.18	11.58	18.98
					OFF	389	63.3	46.9	12.13	12.18	11.58	18.98
72	2	1	42	111.1	ON	288	38.7	24.8	11.98	12.86	11.46	18.86
					OFF	291	44.6	27.3	12.84	12.89	11.49	18.89
72	1	1	129	341.2	ON	253	26.3	21.4	11.83	11.92	11.32	18.72
					OFF	293	45.6	27.3	12.85	12.89	11.49	18.89
78	7	1	16	42.3	ON	295	45.5	25.6	12.86	12.89	11.49	18.89
					OFF	298	47.9	26.8	12.87	12.18	11.58	18.98
79	7	2	11	29.1	ON	299	48.7	26.9	12.88	12.18	11.58	18.98
					OFF	381	58.2	27.8	12.89	12.18	11.58	18.98

PHOTOGRAPHIC SUMMARY

AFT PAN	CAMERA NO	175	8.1588	SLIT	W/21	FILTER	3484	FILM				
OPN NO	FRA	FEET	ET	S-EL	S-DIR	EV	FULL	INT	PRI			
PRE-FLT	188	264.5										
1	3	1	21	55.5	ON	311	2.3	33.9	12.13	18.65	18.85	9.45
					OFF	324	6.8	34.6	12.19	11.26	18.66	18.86
1	3	2	24	63.5	ON	334	8.2	35.1	12.24	11.54	18.94	18.34
					OFF	351	12.2	35.9	12.31	11.94	11.34	18.74
3	5	1	38	188.5	ON	383	4.3	33.9	12.18	11.88	18.48	9.88
					OFF	323	11.3	35.4	12.19	11.86	11.26	18.66

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3	5	2	19	58.3	ON	368	28.8	37.9	12.34	12.42	11.82	11.22
					OFF	378	23.8	38.9	12.38	12.51	11.91	11.31
5	5	1	58	132.3	ON	314	8.5	34.4	12.15	11.57	10.97	10.37
					OFF	343	17.8	36.3	12.27	12.25	11.65	11.05
5	5	2	17	45.8	ON	369	23.7	38.5	12.38	12.51	11.91	11.31
					OFF	377	26.3	39.5	12.41	12.56	11.96	11.36
5	5	3	21	55.5	ON	488	33.2	43.1	12.58	12.66	12.86	11.46
					OFF	487	35.8	44.8	12.52	12.69	12.89	11.49
6	5	1	18	47.6	ON	396	32.8	42.1	12.48	12.65	12.85	11.45
					OFF	483	34.3	43.5	12.58	12.67	12.87	11.47
6	5	2	53	148.2	ON	486	35.5	44.3	12.52	12.68	12.88	11.48
					OFF	421	41.6	49.6	12.57	12.73	12.13	11.53
6	5	3	24	63.5	ON	428	45.5	54.4	12.59	12.74	12.14	11.54
					OFF	431	47.8	57.9	12.68	12.75	12.15	11.55
6	5	4	76	281.8	ON	379	51.8	113.1	12.42	12.75	12.15	11.55
					OFF	337	44.5	127.2	12.25	12.74	12.14	11.54
7	2	1	28	52.9	ON	342	17.4	36.8	12.27	12.28	11.68	11.88
					OFF	356	28.5	36.9	12.33	12.41	11.81	11.21
7	2	2	59	156.1	ON	371	23.6	38.8	12.39	12.58	11.98	11.38
					OFF	484	31.5	41.6	12.51	12.64	12.84	11.44
8	4	1	72	198.4	ON	312	9.2	34.8	12.14	11.65	11.85	10.45
					OFF	352	28.1	36.6	12.31	12.48	11.86	11.28
9	1	8	18	26.5	ON	285	-43.8	51.8	11.53	8.88	8.88	8.88
					OFF	285	-41.8	48.7	11.53	8.88	8.88	8.88
9	1	1	91	248.7	ON	344	18.2	36.1	12.28	12.31	11.71	11.11
					OFF	481	31.3	41.2	12.58	12.64	12.84	11.44
14	9	1	17	45.8	ON	419	32.7	48.5	12.56	12.66	12.86	11.46
					OFF	426	34.8	41.8	12.59	12.68	12.88	11.48
14	9	2	76	286.3	ON	438	56.1	188.9	12.68	12.75	12.15	11.55
					OFF	394	51.7	117.8	12.47	12.75	12.15	11.55
16	4	8	11	29.1	ON	429	35.4	41.7	12.68	12.68	12.88	11.48
					OFF	433	36.8	42.6	12.61	12.69	12.89	11.49
19	1	1	51	134.9	ON	318	4.8	31.8	12.13	18.95	18.35	9.75
					OFF	341	13.1	32.7	12.27	12.81	11.41	18.81
22	1	1	75	198.4	ON	322	7.5	31.4	12.18	11.46	18.86	18.26
					OFF	371	19.9	34.1	12.39	12.39	11.79	11.19
21	1	1	188	285.7	ON	422	32.8	38.9	12.57	12.66	12.86	11.46
					OFF	455	45.2	48.6	12.68	12.74	12.14	11.54
23	4	1	19	58.3	ON	354	15.8	32.5	12.32	12.19	11.59	18.99
					OFF	366	18.9	33.2	12.37	12.35	11.75	11.15
23	4	2	28	52.9	ON	383	22.8	34.3	12.43	12.48	11.88	11.28
					OFF	393	25.7	35.3	12.47	12.55	11.95	11.35
23	4	3	34	89.9	ON	441	48.1	43.1	12.64	12.72	12.12	11.52
					OFF	449	43.9	46.5	12.66	12.74	12.14	11.54
24	5	1	46	253.9	ON	362	17.7	32.7	12.35	12.29	11.69	11.89
					OFF	417	32.2	37.9	12.56	12.65	12.85	11.45
25	2	1	32	84.8	ON	374	28.5	33.2	12.48	12.41	11.81	11.21
					OFF	392	25.2	34.7	12.47	12.54	11.94	11.34
26	9	1	88	211.6	ON	416	57.9	184.5	12.55	12.75	12.15	11.55
					OFF	375	52.4	122.5	12.48	12.75	12.15	11.55
38	5	1	42	111.1	ON	352	49.8	128.9	12.31	12.75	12.15	11.55

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				OFF	326	44.3	135.5	12.28	12.74	12.14	11.54	
31	8	1	28	52.9	ON	442	39.8	48.6	12.64	12.72	12.12	11.52
					OFF	447	42.2	42.5	12.65	12.73	12.13	11.53
34	1	1	93	246.8	ON	385	-5.6	27.2	12.11	8.88	8.88	8.88
					OFF	364	18.8	29.4	12.36	11.81	11.21	18.61
35	1	1	85	224.8	ON	318	-4.2	27.1	12.13	8.88	8.88	8.88
					OFF	364	18.8	29.2	12.36	11.81	11.21	18.61
37	1	1	95	251.3	ON	352	17.4	38.1	12.31	12.28	11.68	11.88
					OFF	488	31.6	34.5	12.58	12.64	12.84	11.44
37	1	2	68	179.9	ON	424	48.7	39.6	12.58	12.72	12.12	11.52
					OFF	436	48.5	46.8	12.62	12.75	12.15	11.55
38	1	1	148	378.3	ON	377	24.1	31.6	12.41	12.52	11.92	11.32
					OFF	438	44.1	42.8	12.68	12.74	12.14	11.54
39	9	1	19	58.3	ON	381	2.9	27.2	12.89	18.77	18.17	9.57
					OFF	312	6.6	27.8	12.14	11.33	18.73	18.13
39	9	2	55	145.5	ON	367	21.2	38.6	12.37	12.44	11.84	11.24
					OFF	395	29.7	33.2	12.48	12.62	12.82	11.42
39	9	3	32	84.6	ON	486	33.2	34.7	12.52	12.66	12.86	11.46
					OFF	417	37.5	37.8	12.56	12.78	12.18	11.58
48	4	8	18	26.5	ON	195	-48.9	46.1	11.46	8.88	8.88	8.88
					OFF	196	-46.7	43.7	11.47	8.88	8.88	8.88
48	4	1	18	47.6	ON	338	13.2	28.7	12.25	12.82	11.42	18.82
					OFF	358	16.5	29.3	12.38	12.23	11.63	11.83
48	4	2	73	193.1	ON	378	24.8	31.1	12.41	12.52	11.92	11.32
					OFF	411	35.1	35.4	12.53	12.68	12.88	11.48
41	1	1	82	164.8	ON	366	28.7	38.8	12.37	12.42	11.82	11.22
					OFF	396	29.8	32.8	12.48	12.62	12.82	11.42
46	2	1	21	55.5	ON	411	34.1	33.5	12.53	12.67	12.87	11.47
					OFF	417	36.9	34.9	12.56	12.78	12.18	11.58
47	8	1	28	52.9	ON	416	35.9	34.1	12.55	12.69	12.89	11.49
					OFF	421	38.6	35.5	12.57	12.71	12.11	11.51
51	3	1	48	185.8	ON	352	23.8	23.8	12.31	12.49	11.89	11.29
					OFF	388	38.6	25.9	12.42	12.63	12.83	11.43
52	3	1	85	171.9	ON	387	32.3	26.3	12.45	12.65	12.85	11.45
					OFF	421	43.8	31.8	12.57	12.73	12.13	11.53
53	3	1	83	166.6	ON	382	25.8	23.9	12.35	12.54	11.94	11.34
					OFF	398	35.4	27.2	12.49	12.68	12.88	11.48
53	3	2	42	111.1	ON	453	59.4	47.4	12.68	12.75	12.15	11.55
					OFF	455	63.4	56.7	12.68	12.75	12.15	11.55
54	4	1	84	169.3	ON	323	14.5	21.4	12.19	12.11	11.51	18.91
					OFF	366	26.2	24.8	12.37	12.56	11.96	11.36
54	4	2	28	68.8	ON	395	34.3	26.5	12.48	12.67	12.87	11.47
					OFF	488	38.4	28.1	12.52	12.71	12.11	11.51
61	2	1	18	47.6	ON	438	45.2	29.8	12.68	12.74	12.14	11.54
					OFF	435	47.7	31.3	12.62	12.75	12.15	11.55
63	4	8	17	45.8	ON	435	47.2	38.4	12.62	12.75	12.15	11.55
					OFF	448	49.5	32.8	12.63	12.75	12.15	11.55
64	5	1	28	52.9	ON	337	16.6	28.8	12.25	12.24	11.64	11.84
					OFF	358	28.3	28.7	12.38	12.48	11.88	11.28
66	5	1	28	52.9	ON	399	31.5	22.9	12.49	12.64	12.84	11.44
					OFF	418	34.7	23.9	12.53	12.68	12.88	11.48

68 5 1	67	177.2	ON 328	18.7	18.2	12.18	11.88	11.28	18.68
			OFF 378	23.4	28.6	12.38	12.58	11.98	11.38
68 5 2	55	145.5	ON 432	48.8	25.7	12.61	12.72	12.12	11.52
			OFF 451	48.6	29.8	12.67	12.75	12.15	11.55
69 5 1	84	222.2	ON 336	14.9	18.7	12.24	12.13	11.53	18.93
			OFF 395	29.9	21.9	12.48	12.62	12.82	11.42
69 5 2	28	74.1	ON 467	59.6	48.2	12.72	12.75	12.15	11.55
			OFF 468	62.8	45.6	12.72	12.75	12.15	11.55
70 2 1	41	188.4	ON 424	37.8	24.8	12.58	12.78	12.18	11.58
			OFF 448	43.8	26.6	12.63	12.74	12.14	11.54
72 1 1	138	343.8	ON 381	25.3	28.2	12.43	12.55	11.95	11.35
			OFF 444	44.8	26.5	12.64	12.74	12.14	11.54
78 7 1	17	45.8	ON 446	44.7	24.9	12.65	12.74	12.14	11.54
			OFF 451	47.1	26.1	12.67	12.75	12.15	11.55
79 7 8	11	29.1	ON 453	47.9	26.2	12.67	12.75	12.15	11.55
			OFF 455	49.5	27.1	12.68	12.75	12.15	11.55

STELLAR-INDEX SUMMARY

CAMERA DATA	ET	FILM	FILTER	GRID	ASSEMBLY NO D75
STELLAR	2.8	4481	NONE	92	
INDEX	1/500	4488	W/21	93	

PERFORMANCE SUMMARY

OPN NO	FR	STEL FEET	INDX FEET	H	M	S	G	ON		OFF		SEC DUR	
								LAT	LONG	LAT	LONG		
PPE-FLT	14	1.39	2.77										
1 3 1	3	8.38	8.59	22	48	38	2	72	173E	2	69	175W	69
1 3 2	3	8.38	8.59	22	42	27	2	67	178W	2	63	163W	73
3 5 1	0	8.59	1.19	1	42	42	2	78	134E	2	64	149E	127
3 5 2	3	8.38	8.59	1	47	45	2	54	168E	2	58	162E	56
5 5 1	7	8.69	1.39	4	45	24	2	66	98E	2	58	111E	154
5 5 2	2	8.28	8.48	4	58	4	2	58	117E	2	47	118E	48
5 5 3	3	8.38	8.59	4	53	6	2	39	122E	2	35	124E	53
6 5 1	3	8.38	8.59	6	23	24	2	41	99E	2	38	188E	46
6 5 2	7	8.69	1.39	6	24	34	2	36	181E	2	28	183E	129
6 5 3	4	8.48	8.79	6	28	16	2	21	185E	2	18	186E	58
6 5 4	18	8.99	1.98	6	39	38	3	23	115E	3	37	119E	212
7 2 1	3	8.38	8.59	7	49	38	2	58	65E	2	54	68E	57
7 2 2	9	8.89	1.78	7	51	25	2	51	71E	2	41	76E	158
8 4 1	18	8.99	1.98	9	17	44	2	66	31E	2	55	45E	198
9 1 2	1	8.18	8.28	18	31	28	1	39	116W	1	42	115W	48
9 1 1	13	1.29	2.57	18	51	4	2	57	43E	2	41	53E	246
14 9 1	3	8.38	8.59	18	29	1	2	48	83W	2	37	82W	42
14 9 2	11	1.89	2.16	18	42	58	3	14	69W	3	26	66W	189
16 4 8	1	8.18	8.28	21	31	15	2	37	127W	2	35	127W	27
19 1 1	5	8.79	1.58	1	53	47	2	78	129E	2	62	146E	168
24 1 1	18	8.99	1.98	3	25	38	2	67	114E	2	55	138E	218
21 1 1	10	1.58	3.17	5	3	42	2	48	116E	2	24	121E	248
23 4 1	2	8.28	8.48	7	59	55	2	59	58E	2	56	61E	54

23	4	2	3	0.30	0.59	8	1	58	2	52	64E	2	48	66E	52
23	4	3	5	0.50	0.99	8	7	19	2	31	74E	2	26	75E	78
24	5	1	14	1.39	2.77	9	31	7	2	57	37E	2	41	47E	260
25	2	1	5	0.50	0.99	11	2	35	2	54	17E	2	49	28E	84
26	9	1	11	1.09	2.18	12	51	22	3	16	16E	3	29	19E	198
30	8	1	6	0.59	1.19	18	58	38	3	35	69W	3	42	66W	122
31	8	1	3	0.30	0.59	20	12	13	2	32	109W	2	29	180W	47
34	1	1	13	1.29	2.57	8	38	55	2	74	115E	2	64	160E	279
35	1	1	12	1.19	2.38	2	1	59	2	74	98E	2	64	137E	254
37	1	1	14	1.39	2.77	5	9	20	2	57	100E	2	42	110E	245
37	1	2	18	0.99	1.98	5	16	11	2	31	114E	2	21	116E	153
38	1	1	22	2.18	4.36	6	41	52	2	50	82E	2	27	92E	359
39	9	1	2	0.20	0.40	8	6	31	2	70	31E	2	67	39E	62
39	9	2	8	0.79	1.58	8	11	40	2	53	57E	2	44	63E	146
39	9	3	5	0.50	0.99	8	15	6	2	40	65E	2	35	67E	78
40	4	0	2	0.20	0.40	9	21	31	1	39	105W	1	42	104W	48
40	4	1	2	0.20	0.40	9	40	2	2	61	27E	2	58	30E	55
40	4	2	12	1.19	2.38	9	43	4	2	50	37E	2	38	43E	192
41	1	1	8	0.79	1.58	11	12	45	2	54	11E	2	44	17E	155
40	2	1	3	0.30	0.59	18	49	34	2	39	94W	2	36	93W	49
47	0	1	3	0.30	0.59	20	20	41	2	37	116W	2	34	115W	47
51	3	1	7	0.69	1.39	2	16	18	2	62	134E	2	55	142E	123
52	3	1	10	0.99	1.98	3	49	24	2	53	120E	2	42	127E	178
53	3	1	9	0.89	1.78	5	18	2	2	60	91E	2	50	100E	168
53	3	2	0	0.59	1.19	5	28	0	2	22	110E	2	16	112E	93
54	4	1	9	0.89	1.78	6	45	48	2	69	51E	2	59	69E	189
54	4	2	4	0.40	0.79	6	51	7	2	51	76E	2	47	79E	67
61	2	1	2	0.20	0.40	17	28	5	2	40	77W	2	37	76W	41
63	4	0	3	0.30	0.59	20	29	45	2	38	122W	2	35	121W	39
64	0	1	2	0.20	0.40	21	52	7	2	67	171W	2	64	165W	58
60	0	1	3	0.30	0.59	0	57	9	2	54	160E	2	50	162E	51
60	0	1	10	0.99	1.98	3	52	48	2	71	84E	2	61	107E	199
68	5	2	0	0.79	1.58	4	0	43	2	44	120E	2	36	124E	127
69	0	1	12	1.19	2.38	5	24	27	2	68	71E	2	55	91E	235
69	0	2	4	0.40	0.79	5	36	37	2	23	105E	2	19	106E	62
72	2	1	0	0.59	1.19	7	1	0	2	47	73E	2	41	76E	97
72	1	1	19	1.88	3.76	9	58	48	2	59	18E	2	40	31E	308
70	7	1	2	0.20	0.40	19	7	3	2	40	105W	2	38	104W	39
79	7	0	2	0.20	0.40	20	38	25	2	37	127W	2	35	126W	26

NOTES - PART ONE

THE H-TIMER WAS RESET APPROXIMATELY 100 SEC EARLY AT [REDACTED] ON REV 33, CAUSING OPERATIONS ON REVS 34 AND 35 TO BE DISPLACED NORTHWARDS. RECOVERY OF TIMER SYNCHRONIZATION WAS MADE AT [REDACTED] ON REV 36, AND SUBSEQUENT OPERATION LATITUDES APPEAR NORMAL. REQUIRED LATITUDE COVERAGE IS BEING ASSURED BY A CONSTANT H-TIMER BIAS TO COMPENSATE THE INITIAL SOUTHWARD PERIGEE LOCATION.

ABOVE ITEMS ARE REPORTED ACCORDING TO EXACT CYCLE COUNTER READINGS. HOWEVER, THE DATA INDICATE A POSSIBLE ANOMALY IN THE AFT CAMERA CYCLE COUNTER, WHICH MAY ACCOUNT FOR FEWER AFT FRAMES INDICATED FOR CERTAIN OPERATIONS THAN FOR THE FWD CAMERA. PRELIMINARY EVALUATION INDICATES POSSIBLE OCCASIONAL DROPOUT OF UNIT COUNTS DURING A STEP OF THE HUNDREDS- POSITION COUNTER WHEEL. THE TM MONITOR FOR TAKEUP SPOOL RADIUS DOES NOT HAVE THE RESOLUTION TO CONFIRM OR DENY THE ABOVE ESTIMATE. CAMERA FUNCTIONS APPEAR NORMAL DURING ALL ENGINEERING OPNS.

OPERATIONS AFFECTED ARE 24-5-1 (5-6 FRAMES), 38-1-1 (13-15 FRAMES), 48-4-1 AND 48-4-2 (7-8 FRAMES), 51-3-1 AND 52-3-1 (12-13 FRAMES).

ITEMS AFFECTED ON THIS REPORT ARE NUMBER OF FRAMES (ALL SECTIONS) AND THE PHOTOGRAPHIC SUMMARY (EXPOSURE TIMES AND ACTUAL E.V. NUMBER). FOLLOWING ARE THESE OPERATIONS AS THEY COULD BE ADJUSTED FOR THE PHOTOGRAPHIC SUMMARY -

AFT PAN	CAMERA	NO	175	8.1588	SLIT	W/21	FILTER	3404	FILM			
OPN NO	FRA	FEET	ET	S-EL	S-DIR	EV	FULL	INT	PRI			
24	5	1	181	267.1	ON 364	17.7	32.7	12.36	12.29	11.69	11.89	
					OFF 420	32.2	37.9	12.57	12.65	12.85	11.45	
38	1	1	153	404.7	ON 391	24.1	31.6	12.46	12.52	11.92	11.32	
					OFF 447	44.1	42.8	12.65	12.74	12.14	11.54	
48	4	1	19	58.3	ON 351	13.2	28.7	12.31	12.82	11.42	10.82	
					OFF 363	16.5	29.3	12.35	12.23	11.63	11.83	
48	4	2	79	289.8	ON 392	24.8	31.1	12.47	12.52	11.92	11.32	
					OFF 427	35.1	35.4	12.59	12.68	12.88	11.48	
51	3	1	45	119.8	ON 352	23.8	23.8	12.31	12.49	11.89	11.29	
					OFF 388	38.6	25.9	12.42	12.63	12.83	11.43	
52	3	1	72	198.4	ON 387	32.3	26.3	12.45	12.65	12.85	11.45	
					OFF 421	43.8	31.8	12.57	12.73	12.13	11.53	

A. 1826-1
 B. FINAL PERFORMANCE ESTIMATE, PART TWO

RATE ESTIMATE

FWD PAN CAMERA NUMBER 174

OPN NO	FR	R	A	TUR/ DUR	INST CPS	INST ANG VEL	SCAN RATE R/SEC	I/SEC	PCT CALIB	RATE REQD	
1 3 1	21	8	3	ON	1038	0.3081	0.02600	1.936	46.47	-1.4	5.8
				OFF	69	0.3207	0.02706	2.015	48.36	-1.4	5.5
1 3 2	24	8	3	ON	1147	0.3310	0.02793	2.079	49.91	-1.4	6.2
				OFF	73	0.3476	0.02933	2.184	52.42	-1.4	6.5
3 5 1	38	8	4	ON	980	0.3006	0.02536	1.889	45.33	-1.4	0.7
				OFF	127	0.3202	0.02702	2.012	48.28	-1.4	-0.9
3 5 2	20	8	4	ON	1282	0.3562	0.03006	2.238	53.72	-1.4	-1.3
				OFF	56	0.3663	0.03091	2.301	55.24	-1.4	-2.0
5 5 1	52	8	4	ON	1048	0.3111	0.02625	1.954	46.91	-1.4	-1.0
				OFF	154	0.3396	0.02866	2.134	51.22	-1.4	-2.0
5 5 2	17	8	4	ON	1327	0.3649	0.03079	2.293	55.02	-1.4	-2.7
				OFF	48	0.3730	0.03147	2.344	56.25	-1.4	-3.4
5 5 3	21	8	4	ON	1509	0.3955	0.03337	2.405	59.64	-1.4	-5.2
				OFF	53	0.4025	0.03396	2.529	60.69	-1.4	-6.3
6 5 1	10	8	4	ON	1481	0.3912	0.03301	2.450	59.00	-1.4	-5.1
				OFF	46	0.3976	0.03355	2.498	59.96	-1.4	-6.0
6 5 2	52	8	4	ON	1551	0.4014	0.03387	2.522	60.52	-1.4	-6.3
				OFF	129	0.4156	0.03507	2.611	62.67	-1.4	-8.7
6 5 3	24	8	4	ON	1773	0.4227	0.03567	2.656	63.75	-1.4	-10.2
				OFF	58	0.4253	0.03588	2.672	64.13	-1.4	-11.1
6 5 4	75	8	4	ON	2455	0.3746	0.03161	2.354	56.49	-1.4	-10.2
				OFF	212	0.3342	0.02820	2.100	50.39	-1.4	-8.3
7 2 1	20	7	3	ON	1119	0.3411	0.02870	2.143	51.43	-1.4	-2.4
				OFF	57	0.3540	0.02987	2.224	53.30	-1.4	-2.2
7 2 2	54	7	3	ON	1234	0.3684	0.03100	2.315	55.55	-1.4	-1.0
				OFF	150	0.4009	0.03383	2.519	60.46	-1.4	-2.1
8 4 1	70	7	3	ON	975	0.3089	0.02606	1.941	46.50	-2.9	-3.3
				OFF	198	0.3400	0.02937	2.107	52.40	-2.9	-3.9
9 1 2	10	7	3	ON	0	0.2057	0.01730	1.292	31.02	-2.9	5.3
				OFF	40	0.2057	0.01730	1.292	31.02	-2.9	3.9
9 1 1	90	7	3	ON	1130	0.3404	0.02872	2.139	51.32	-2.9	-4.0
				OFF	246	0.3949	0.03332	2.401	59.55	-2.9	-4.0
14 9 1	17	7	3	ON	1472	0.4124	0.03400	2.591	62.19	-2.9	-1.5
				OFF	42	0.4191	0.03536	2.633	63.19	-2.9	-2.0
14 9 2	70	7	3	ON	2301	0.4231	0.03570	2.650	63.00	-2.9	-4.2
				OFF	109	0.3802	0.03276	2.439	50.54	-2.9	-2.5
16 4 0	11	7	3	ON	1529	0.4221	0.03562	2.652	63.65	-2.9	-2.1
				OFF	27	0.4259	0.03594	2.676	64.22	-2.9	-2.5
19 1 1	51	7	3	ON	960	0.3076	0.02595	1.933	46.30	-2.9	-0.4
				OFF	160	0.3371	0.02845	2.110	50.04	-2.9	-1.2
20 1 1	74	7	3	ON	1033	0.3191	0.02692	2.005	48.11	-2.9	-0.0

					OFF	218	0.3659	0.03087	2.299	55.17	-2.9	-0.6
21	1	1	108	7	3 ON	1488	0.4152	0.03503	2.608	62.60	-2.9	-1.6
					OFF	248	0.4472	0.03773	2.810	67.43	-2.9	-4.4
23	4	1	19	7	3 ON	1186	0.3524	0.02974	2.214	53.15	-2.7	-0.5
					OFF	54	0.3644	0.03074	2.289	54.94	-2.7	-0.5
23	4	2	19	7	3 ON	1309	0.3807	0.03212	2.392	57.40	-2.7	-0.3
					OFF	52	0.3911	0.03300	2.457	58.98	-2.7	-0.7
23	4	3	34	7	3 ON	1630	0.4376	0.03692	2.750	65.99	-2.7	-2.9
					OFF	78	0.4458	0.03762	2.801	67.23	-2.7	-3.8
24	5	1	101	7	3 ON	1222	0.3610	0.03046	2.268	54.44	-2.7	-0.3
					OFF	260	0.4147	0.03499	2.605	62.53	-2.7	-1.4
25	2	1	51	7	3 ON	1273	0.3726	0.03144	2.341	56.19	-2.7	-0.2
					OFF	84	0.3903	0.03293	2.452	58.85	-2.7	-0.6
26	9	1	79	7	3 ON	2365	0.4133	0.03487	2.597	62.32	-2.7	-3.7
					OFF	196	0.3734	0.03151	2.346	56.30	-2.7	-2.3
30	0	1	41	7	3 ON	2655	0.3514	0.02965	2.288	52.99	-2.7	-2.3
					OFF	122	0.3252	0.02744	2.043	49.03	-2.7	-1.8
31	0	1	20	7	3 ON	1634	0.4381	0.03697	2.753	66.06	-2.7	-3.8
					OFF	47	0.4431	0.03739	2.784	66.82	-2.7	-3.5
34	1	1	93	7	3 ON	952	0.3055	0.02578	1.919	46.07	-2.7	5.2
					OFF	279	0.3623	0.03057	2.276	54.63	-2.7	5.4
35	1	1	05	7	3 ON	979	0.3103	0.02618	1.950	46.79	-2.7	5.0
					OFF	254	0.3627	0.03061	2.279	54.70	-2.7	5.3
37	1	1	40	7	3 ON	1251	0.3659	0.03088	2.299	55.10	-3.1	-0.9
					OFF	245	0.4151	0.03503	2.608	62.60	-3.1	-2.0
37	1	2	09	7	3 ON	1662	0.4394	0.03700	2.761	66.27	-3.1	-3.6
					OFF	153	0.4515	0.03810	2.837	68.00	-3.1	-5.2
38	1	1	153	7	3 ON	1369	0.3916	0.03304	2.460	59.05	-3.1	-1.1
					OFF	359	0.4456	0.03760	2.800	67.20	-3.1	-4.4
39	9	1	19	7	3 ON	1012	0.3147	0.02655	1.977	47.45	-3.1	-1.6
					OFF	62	0.3250	0.02743	2.042	49.01	-3.1	-2.1
39	9	2	57	7	3 ON	1320	0.3814	0.03210	2.396	57.51	-3.1	-1.0
					OFF	146	0.4099	0.03458	2.575	61.01	-3.1	-1.9
39	9	3	33	7	3 ON	1527	0.4200	0.03551	2.644	63.46	-3.1	-2.3
					OFF	70	0.4320	0.03645	2.714	65.14	-3.1	-3.2
42	4	2	10	7	3 ON	77	0.2000	0.01730	1.295	31.07	-3.1	1.0
					OFF	48	0.2072	0.01740	1.302	31.24	-3.1	-0.0
42	4	1	10	7	3 ON	1180	0.3515	0.02966	2.209	53.01	-3.1	-1.3
					OFF	55	0.3635	0.03067	2.284	54.01	-3.1	-1.2
42	4	2	79	7	3 ON	1371	0.3920	0.03300	2.463	59.12	-3.1	-1.1
					OFF	192	0.4260	0.03594	2.677	64.24	-3.1	-2.7
41	1	1	01	7	3 ON	1317	0.3807	0.03212	2.392	57.41	-3.1	-1.0
					OFF	155	0.4110	0.03460	2.502	61.97	-3.1	-1.9
40	2	1	01	7	3 ON	1550	0.4257	0.03592	2.675	64.19	-3.1	-2.6
					OFF	49	0.4323	0.03640	2.716	65.19	-3.1	-3.2
47	0	1	20	7	3 ON	1593	0.4300	0.03635	2.707	64.96	-3.1	-2.9
					OFF	47	0.4365	0.03683	2.743	65.03	-3.1	-3.5
51	3	1	45	7	3 ON	1190	0.3496	0.02950	2.197	52.72	-4.1	-2.6
					OFF	123	0.3705	0.03176	2.365	56.77	-4.1	-2.5
52	3	1	72	7	3 ON	1350	0.3830	0.03230	2.411	57.07	-4.1	-2.3
					OFF	178	0.4163	0.03513	2.616	62.70	-4.1	-3.5

53	3	1	64	7	3	ON	1236	0.3589	0.83028	2.255	54.12	-4.1	-2.4
						OFF	168	0.3941	0.83325	2.476	59.43	-4.1	-2.7
53	3	2	41	7	3	ON	1834	0.4477	0.83778	2.813	67.52	-4.1	-6.4
						OFF	93	0.4493	0.83791	2.823	67.76	-4.1	-7.8
54	4	1	65	7	3	ON	1069	0.3215	0.82713	2.820	48.49	-4.1	-3.5
						OFF	189	0.3630	0.83063	2.281	54.74	-4.1	-2.6
54	4	2	26	7	3	ON	1389	0.3916	0.83304	2.460	59.85	-4.1	-2.5
						OFF	67	0.4038	0.83487	2.537	60.89	-4.1	-3.0
61	2	1	17	7	3	ON	1586	0.4254	0.83589	2.673	64.14	-4.1	-4.0
						OFF	41	0.4304	0.83632	2.704	64.90	-4.1	-4.5
63	4	0	10	7	3	ON	1622	0.4302	0.83630	2.703	64.87	-4.1	-4.4
						OFF	39	0.4345	0.83666	2.730	65.52	-4.1	-4.9
64	5	1	19	7	3	ON	1133	0.3350	0.82827	2.185	50.52	-4.1	-3.7
						OFF	58	0.3478	0.82935	2.185	52.45	-4.1	-3.4
66	5	1	20	7	2	ON	1375	0.3955	0.83337	2.485	59.63	-4.1	-1.0
						OFF	51	0.4859	0.83425	2.550	61.20	-4.1	-1.1
68	5	1	09	7	2	ON	1057	0.3187	0.82689	2.082	48.06	-4.1	-4.2
						OFF	199	0.3666	0.83093	2.303	55.20	-4.1	-1.8
68	5	2	50	7	2	ON	1532	0.4270	0.83603	2.683	64.38	-4.1	-1.1
						OFF	127	0.4456	0.83760	2.800	67.19	-4.1	-2.1
69	5	1	00	7	2	ON	1125	0.3339	0.82817	2.098	50.35	-4.1	-3.6
						OFF	235	0.3915	0.83303	2.460	59.03	-4.1	-1.1
69	5	2	20	7	2	ON	1855	0.4613	0.83892	2.899	69.56	-4.1	-3.5
						OFF	62	0.4623	0.83901	2.905	69.71	-4.1	-3.9
70	2	1	42	7	2	ON	1490	0.4192	0.83537	2.634	63.22	-4.1	-8.9
						OFF	97	0.4354	0.83674	2.736	65.06	-4.1	-1.6
72	1	1	129	7	2	ON	1298	0.3776	0.83186	2.372	56.93	-4.1	-1.3
						OFF	308	0.4384	0.83699	2.755	66.11	-4.1	-1.7
78	7	1	16	7	2	ON	1618	0.4405	0.83717	2.768	66.43	-4.1	-1.8
						OFF	39	0.4453	0.83757	2.798	67.14	-4.1	-2.2
79	7	0	11	7	2	ON	1671	0.4474	0.83775	2.811	67.47	-4.1	-2.2
						OFF	26	0.4500	0.83797	2.827	67.85	-4.1	-2.5

RATE ESTIMATE

AFT PAN CAMERA NUMBER 175

OPN	NO	FR	R	A	TUR/ DUR	INST CPS	INST ANG VEL	SCAN R/SEC	RATE I/SEC	PCT CALIB	RATE REQD		
1	3	1	21	8	3	ON	1030	0.3095	0.82611	1.945	46.67	-1.2	6.2
						OFF	69	0.3223	0.82720	2.025	48.61	-1.2	6.0
1	3	2	24	8	3	ON	1147	0.3320	0.82800	2.091	50.19	-1.2	6.7
						OFF	73	0.3499	0.82952	2.199	52.77	-1.2	7.1
3	5	1	30	8	4	ON	980	0.3018	0.82546	1.896	45.51	-1.2	1.1
						OFF	127	0.3210	0.82715	2.022	48.53	-1.2	-0.4
3	5	2	19	8	4	ON	1282	0.3506	0.83026	2.253	54.00	-1.2	-0.6
						OFF	56	0.3609	0.83113	2.318	55.63	-1.2	-1.3
5	5	1	54	8	4	ON	1048	0.3125	0.82637	1.963	47.12	-1.2	-0.5
						OFF	154	0.3417	0.82803	2.147	51.53	-1.2	-1.4
5	5	2	17	8	4	ON	1327	0.3675	0.83101	2.309	55.41	-1.2	-1.9
						OFF	48	0.3750	0.83171	2.361	56.67	-1.2	-2.6

5	5	3	21	8	4	ON	1589	8.3987	8.83364	2.585	68.13	-1.2	-4.4
						OFF	53	8.4858	8.83424	2.558	61.28	-1.2	-5.4
6	5	1	18	8	4	ON	1481	8.3944	8.83328	2.478	59.47	-1.2	-4.3
						OFF	46	8.4889	8.83382	2.519	68.45	-1.2	-5.1
6	5	2	53	8	4	ON	1551	8.4847	8.83415	2.543	61.83	-1.2	-5.4
						OFF	129	8.4192	8.83538	2.634	63.22	-1.2	-7.7
6	5	3	24	8	4	ON	1773	8.4265	8.83599	2.688	64.32	-1.2	-9.2
						OFF	58	8.4291	8.83621	2.696	64.71	-1.2	-18.1
6	5	4	76	8	4	ON	2455	8.3774	8.83185	2.371	56.91	-1.2	-9.4
						OFF	212	8.3361	8.82836	2.112	58.69	-1.2	-7.7
7	2	1	22	7	3	ON	1119	8.3411	8.82879	2.143	51.44	-1.2	-2.4
						OFF	57	8.3544	8.82998	2.227	53.44	-1.2	-2.1
7	2	2	59	7	3	ON	1234	8.3691	8.83115	2.319	55.66	-1.2	-1.6
						OFF	158	8.4824	8.83396	2.529	68.68	-1.2	-1.7
8	4	1	72	7	3	ON	975	8.3185	8.82628	1.951	46.82	-2.8	-2.7
						OFF	198	8.3588	8.82968	2.284	52.98	-2.8	-3.8
9	1	8	18	7	3	ON	8	8.2842	8.81723	1.283	38.79	-2.8	4.6
						OFF	48	8.2842	8.81723	1.283	38.79	-2.8	3.2
9	1	1	91	7	3	ON	1138	8.3429	8.82894	2.155	51.71	-2.8	-3.2
						OFF	248	8.3991	8.83368	2.588	68.19	-2.8	-2.9
14	9	1	17	7	3	ON	1472	8.4172	8.83528	2.621	62.91	-2.8	-8.3
						OFF	42	8.4248	8.83578	2.664	63.94	-2.8	-8.8
14	9	2	78	7	3	ON	2381	8.4281	8.83613	2.698	64.56	-2.8	-3.8
						OFF	189	8.3923	8.83318	2.465	59.15	-2.8	-1.5
16	4	8	11	7	3	ON	1529	8.4272	8.83684	2.684	64.41	-2.8	-8.9
						OFF	27	8.4311	8.83637	2.788	65.88	-2.8	-1.3
19	1	1	51	7	3	ON	968	8.3892	8.82689	1.943	46.62	-2.8	8.1
						OFF	168	8.3396	8.82866	2.134	51.21	-2.8	-8.4
22	1	1	75	7	3	ON	1833	8.3218	8.82788	2.817	48.48	-2.8	-8.2
						OFF	218	8.3692	8.83115	2.328	55.67	-2.8	8.3
21	1	1	188	7	3	ON	1488	8.4288	8.83544	2.639	63.33	-2.8	-8.4
						OFF	248	8.4538	8.83822	2.846	68.31	-2.8	-3.8
23	4	1	19	7	3	ON	1186	8.3522	8.82972	2.213	53.11	-2.7	-8.5
						OFF	54	8.3644	8.83875	2.289	54.95	-2.7	-8.5
23	4	2	28	7	3	ON	1389	8.3818	8.83215	2.394	57.46	-2.7	-8.2
						OFF	52	8.3917	8.83385	2.461	59.87	-2.7	-8.5
23	4	3	34	7	3	ON	1638	8.4392	8.83786	2.759	66.23	-2.7	-2.6
						OFF	78	8.4476	8.83777	2.812	67.49	-2.7	-3.4
24	5	1	98	7	3	ON	1222	8.3689	8.83846	2.268	54.43	-2.7	-8.3
						OFF	268	8.4157	8.83588	2.612	62.69	-2.7	-1.2
25	2	1	32	7	3	ON	1273	8.3728	8.83146	2.343	56.22	-2.7	-8.2
						OFF	84	8.3988	8.83298	2.456	58.94	-2.7	-8.5
28	9	1	88	7	3	ON	2365	8.4144	8.83498	2.683	62.48	-2.7	-3.4
						OFF	198	8.3736	8.83152	2.347	56.34	-2.7	-2.2
32	8	1	42	7	3	ON	2655	8.3511	8.82963	2.286	52.95	-2.7	-2.4
						OFF	122	8.3244	8.82737	2.838	48.91	-2.7	-2.1
31	8	1	22	7	3	ON	1634	8.4397	8.83718	2.763	66.38	-2.7	-2.6
						OFF	47	8.4448	8.83753	2.795	67.87	-2.7	-3.1
34	1	1	98	7	3	ON	952	8.3843	8.82567	1.912	45.88	-2.7	4.8
						OFF	279	8.3622	8.83856	2.276	54.62	-2.7	5.4
35	1	1	85	7	3	ON	979	8.3891	8.82688	1.942	46.62	-2.7	4.7

					OFF	254	0.3627	0.03061	2.279	54.70	-2.7	5.3
37	1	1	95	7	3 ON	1251	0.3505	0.02958	2.202	52.06	-7.2	-5.4
					OFF	245	0.3986	0.03363	2.505	60.11	-7.2	-6.3
37	1	2	68	7	3 ON	1662	0.4224	0.03564	2.654	63.70	-7.2	-7.8
					OFF	153	0.4342	0.03664	2.720	65.48	-7.2	-9.4
38	1	1	140	7	3 ON	1369	0.3756	0.03169	2.360	56.64	-7.2	-5.4
					OFF	359	0.4285	0.03615	2.692	64.61	-7.2	-8.6
39	9	1	19	7	3 ON	1012	0.3004	0.02535	1.807	45.30	-7.2	-6.4
					OFF	62	0.3105	0.02620	1.951	46.83	-7.2	-6.8
39	9	2	55	7	3 ON	1320	0.3656	0.03005	2.297	55.13	-7.2	-5.4
					OFF	146	0.3935	0.03320	2.472	59.34	-7.2	-6.1
39	9	3	32	7	3 ON	1527	0.4042	0.03411	2.540	60.96	-7.2	-6.5
					OFF	78	0.4152	0.03503	2.600	62.60	-7.2	-7.4
40	4	0	10	7	3 ON	77	0.1941	0.01630	1.220	29.20	-7.2	-5.0
					OFF	48	0.1953	0.01640	1.227	29.44	-7.2	-6.1
40	4	1	10	7	3 ON	1100	0.3364	0.02839	2.114	50.73	-7.2	-5.0
					OFF	55	0.3402	0.02938	2.100	52.50	-7.2	-5.7
40	4	2	73	7	3 ON	1371	0.3761	0.03173	2.363	56.71	-7.2	-5.4
					OFF	192	0.4093	0.03453	2.572	61.72	-7.2	-6.9
41	1	1	02	7	3 ON	1317	0.3650	0.03000	2.293	55.04	-7.2	-5.3
					OFF	155	0.3946	0.03329	2.479	59.50	-7.2	-6.1
46	2	1	21	7	3 ON	1550	0.4090	0.03451	2.570	61.67	-7.2	-6.0
					OFF	49	0.4155	0.03506	2.610	62.65	-7.2	-7.4
47	0	1	20	7	3 ON	1593	0.4140	0.03493	2.601	62.43	-7.2	-7.1
					OFF	47	0.4196	0.03540	2.636	63.27	-7.2	-7.7
51	3	1	40	7	3 ON	1196	0.3500	0.02960	2.204	52.90	-3.7	-2.3
					OFF	123	0.3703	0.03192	2.377	57.05	-3.7	-2.0
52	3	1	65	7	3 ON	1350	0.3850	0.03256	2.424	58.10	-3.7	-1.0
					OFF	170	0.4192	0.03537	2.634	63.21	-3.7	-2.0
53	3	1	63	7	3 ON	1236	0.3603	0.03040	2.264	54.33	-3.7	-2.0
					OFF	160	0.3964	0.03345	2.491	59.70	-3.7	-2.1
53	3	2	42	7	3 ON	1034	0.4514	0.03809	2.836	68.07	-3.7	-5.5
					OFF	93	0.4531	0.03823	2.847	68.32	-3.7	-6.1
54	4	1	64	7	3 ON	1069	0.3220	0.02717	2.023	48.56	-3.7	-3.4
					OFF	109	0.3645	0.03076	2.290	54.97	-3.7	-2.2
54	4	2	20	7	3 ON	1309	0.3930	0.03323	2.474	59.39	-3.7	-1.9
					OFF	67	0.4064	0.03429	2.553	61.20	-3.7	-2.4
61	2	1	10	7	3 ON	1506	0.4205	0.03615	2.692	64.61	-3.7	-3.3
					OFF	41	0.4336	0.03659	2.725	65.39	-3.7	-3.0
63	4	0	17	7	3 ON	1622	0.4334	0.03657	2.723	65.35	-3.7	-3.7
					OFF	39	0.4370	0.03694	2.751	66.02	-3.7	-4.1
64	0	1	20	7	3 ON	1133	0.3359	0.02834	2.110	50.65	-3.7	-3.5
					OFF	50	0.3490	0.02945	2.193	52.62	-3.7	-3.1
60	0	1	20	7	2 ON	1375	0.3977	0.03355	2.499	59.97	-3.7	-0.4
					OFF	51	0.4003	0.03445	2.566	61.57	-3.7	-0.5
60	0	1	67	7	2 ON	1057	0.3191	0.02693	2.005	48.12	-3.7	-4.0
					OFF	199	0.3601	0.03106	2.313	55.51	-3.7	-1.4
66	0	2	00	7	2 ON	1532	0.4299	0.03620	2.701	64.03	-3.7	-0.4
					OFF	127	0.4490	0.03700	2.821	67.70	-3.7	-1.3
69	0	1	64	7	2 ON	1125	0.3347	0.02824	2.103	50.47	-3.7	-3.3
					OFF	235	0.3936	0.03321	2.473	59.35	-3.7	-0.6

69	5	2	28	7	2	ON	1855	0.4651	0.83924	2.922	78.13	-3.7	-2.7
						OFF	62	0.4661	0.83933	2.928	78.28	-3.7	-3.1
70	2	1	41	7	2	ON	1498	0.4228	0.83561	2.652	63.64	-3.7	-0.3
						OFF	97	0.4385	0.83788	2.755	66.13	-3.7	-0.8
72	1	1	138	7	2	ON	1298	0.3794	0.83281	2.384	57.21	-3.7	-0.8
						OFF	388	0.4417	0.83727	2.775	66.68	-3.7	-1.0
78	7	1	17	7	2	ON	1618	0.4438	0.83745	2.789	66.92	-3.7	-1.1
						OFF	39	0.4486	0.83785	2.819	67.65	-3.7	-1.4
79	7	0	11	7	2	ON	1671	0.4589	0.83884	2.833	67.99	-3.7	-1.4
						OFF	26	0.4535	0.83826	2.849	68.38	-3.7	-1.7

RAMP PROFILE

R= 7 A= 3 PERIOD= 3837
R= 0.3483 A= 0.1284
TUR PER CPS ANG V

-0	4.719	0.2119	0.81917
100	4.693	0.2132	0.81928
200	4.685	0.2171	0.81964
300	4.473	0.2236	0.82822
400	4.383	0.2324	0.82182
500	4.187	0.2435	0.82282
600	3.899	0.2565	0.82328
700	3.687	0.2712	0.82453
800	3.479	0.2874	0.82688
900	3.282	0.3047	0.82756
1000	3.099	0.3226	0.82918
1100	2.931	0.3412	0.83886
1200	2.735	0.3656	0.83386
1300	2.571	0.3898	0.83518
1400	2.435	0.4187	0.83714
1500	2.327	0.4298	0.83887
1600	2.244	0.4457	0.84831
1700	2.185	0.4577	0.84139
1800	2.149	0.4654	0.84218
1900	2.134	0.4686	0.84238
2000	2.141	0.4671	0.84225
2100	2.164	0.4611	0.84178
2200	2.219	0.4586	0.84875
2300	2.293	0.4361	0.83944
2400	2.392	0.4181	0.83782
2500	2.517	0.3973	0.83593
2600	2.671	0.3744	0.83386
2700	2.655	0.3583	0.83168
2800	3.836	0.3294	0.82979
2900	3.213	0.3112	0.82615
3000	3.485	0.2937	0.82656
3100	3.689	0.2771	0.82586
3200	3.822	0.2618	0.82368

3300	4.831	0.2481	0.02244
3400	4.233	0.2363	0.02137
3500	4.413	0.2266	0.02049
3600	4.561	0.2192	0.01983
3700	4.665	0.2144	0.01939
3800	4.715	0.2121	0.01918

R= 8 A= 3 PERIOD= 3837
R= 0.3232 A= 0.1284
TUR PER CPS ANG V

-0	5.133	0.1948	0.01762
100	5.899	0.1961	0.01774
200	4.999	0.2000	0.01809
300	4.843	0.2065	0.01868
400	4.044	0.2153	0.01947
500	4.410	0.2264	0.02047
600	4.177	0.2394	0.02165
700	3.935	0.2541	0.02299
800	3.699	0.2703	0.02445
900	3.470	0.2876	0.02601
1000	3.273	0.3055	0.02763
1100	3.085	0.3241	0.02931
1200	2.878	0.3485	0.03152
1300	2.689	0.3719	0.03364
1400	2.541	0.3936	0.03560
1500	2.423	0.4127	0.03733
1600	2.333	0.4286	0.03876
1700	2.270	0.4406	0.03985
1800	2.231	0.4483	0.04055
1900	2.215	0.4515	0.04084
2000	2.222	0.4500	0.04070
2100	2.252	0.4440	0.04015
2200	2.307	0.4335	0.03921
2300	2.367	0.4190	0.03769
2400	2.494	0.4010	0.03627
2500	2.030	0.3802	0.03439
2600	2.794	0.3573	0.03232
2700	3.001	0.3332	0.03013
2800	3.202	0.3123	0.02825
2900	3.400	0.2941	0.02660
3000	3.015	0.2766	0.02502
3100	3.040	0.2600	0.02351
3200	4.087	0.2447	0.02213
3300	4.330	0.2310	0.02089
3400	4.563	0.2192	0.01982
3500	4.774	0.2095	0.01895
3600	4.947	0.2021	0.01828
3700	5.069	0.1973	0.01784
3800	5.129	0.1950	0.01764

R= 8 A= 4 PERIOD= 3837

R= 8.3232 A= 8.1899

TUR	PER	CPS	ANG V
-0	4.686	0.2133	0.81929
100	4.664	0.2144	0.81939
200	4.592	0.2178	0.81970
300	4.478	0.2233	0.82020
400	4.332	0.2309	0.82088
500	4.161	0.2403	0.82174
600	3.977	0.2515	0.82274
700	3.780	0.2641	0.82389
800	3.596	0.2779	0.82514
900	3.417	0.2927	0.82647
1000	3.246	0.3081	0.82786
1100	3.087	0.3240	0.82930
1200	2.900	0.3446	0.83119
1300	2.740	0.3649	0.83300
1400	2.608	0.3834	0.83468
1500	2.501	0.3998	0.83616
1600	2.414	0.4134	0.83739
1700	2.360	0.4237	0.83832
1800	2.324	0.4303	0.83892
1900	2.309	0.4330	0.83917
2000	2.310	0.4316	0.83905
2100	2.344	0.4266	0.83858
2200	2.395	0.4176	0.83777
2300	2.460	0.4052	0.83665
2400	2.565	0.3898	0.83525
2500	2.680	0.3720	0.83364
2600	2.830	0.3524	0.83187
2700	3.014	0.3317	0.83000
2800	3.180	0.3139	0.82839
2900	3.352	0.2963	0.82690
3000	3.530	0.2833	0.82562
3100	3.716	0.2691	0.82434
3200	3.900	0.2568	0.82315
3300	4.094	0.2443	0.82209
3400	4.271	0.2341	0.82118
3500	4.427	0.2259	0.82043
3600	4.554	0.2196	0.81986
3700	4.642	0.2154	0.81948
3800	4.685	0.2135	0.81931

R= 7 A= 2 PERIOD= 3837

R= 0.3423 A= 0.1419

TUR PER CPS ANG V

-8	5.848	8.1984	8.81794
100	5.884	8.1999	8.81888
200	4.897	8.2042	8.81847
300	4.732	8.2113	8.81911
400	4.523	8.2211	8.82088
500	4.287	8.2333	8.82110
600	4.037	8.2477	8.82248
700	3.788	8.2648	8.82388
800	3.548	8.2819	8.82549
900	3.323	8.3009	8.82722
1000	3.117	8.3208	8.82901
1100	2.938	8.3413	8.83087
1200	2.716	8.3682	8.83338
1300	2.537	8.3941	8.83565
1400	2.392	8.4181	8.83781
1500	2.277	8.4392	8.83972
1600	2.189	8.4567	8.84131
1700	2.126	8.4708	8.84251
1800	2.090	8.4786	8.84329
1900	2.074	8.4821	8.84362
2000	2.081	8.4865	8.84346
2100	2.111	8.4738	8.84285
2200	2.164	8.4622	8.84188
2300	2.241	8.4462	8.84035
2400	2.340	8.4263	8.83855
2500	2.480	8.4033	8.83647
2600	2.646	8.3780	8.83419
2700	2.846	8.3513	8.83178
2800	3.046	8.3283	8.82969
2900	3.245	8.3082	8.82787
3000	3.463	8.2888	8.82612
3100	3.690	8.2704	8.82446
3200	3.945	8.2535	8.82293
3300	4.195	8.2384	8.82156
3400	4.438	8.2253	8.82038
3500	4.659	8.2146	8.81941
3600	4.843	8.2065	8.81868
3700	4.972	8.2011	8.81819
3800	5.035	8.1986	8.81796

CLOCK SUMMARY

SYS TIME I/P	ORDER FIT 1 CL TIME I/P	COMP SYS TM	DELTA ST	REV	STA
0.379451380 05	0.7858127800 04	0.3794513880 05	-0.8008	9	
0.775228760 05	0.4663587000 05	0.7752288140 05	-0.8034	16	
0.331580580 05	0.8866304300 05	0.3315805400 05	0.8040	24	
0.727992360 05	0.1283122260 06	0.7279923660 05	0.8014	31	
0.337557800 05	0.1756687740 06	0.3375578410 05	0.8009	40	
0.732938180 05	0.2152868800 06	0.7329381770 05	0.8003	47	

0.341382480 05	0.2624432340 06	0.3413824320 05	-0.0032	56
0.738448770 05	0.3021578690 06	0.7384487780 05	-0.0008	63
0.348531280 05	0.3495661160 06	0.3485312440 05	0.0036	72
0.743516780 05	0.3898646720 06	0.7435168800 05	-0.0020	79

AR= 0.30887011800 05 A1= 0.999999899270 00

SIGMA=0.00233 NO. POINTS= 10

RATIO OF CLOCK TIME TO SYS TIME= 0.1000000010070 01

ORDER FIT 2

SYS TIME I/P	CL TIME I/P	COMP SYS TM	DELTA ST	REV	STA
P.379451380 05	0.7058127800 04	0.3794513800 05	-0.0000	9	
P.775228780 05	0.4663587800 05	0.7752288110 05	-0.0031	16	
P.331500580 05	0.8866304380 05	0.3315005410 05	0.0039	24	
0.727992380 05	0.1283122260 06	0.7279923780 05	0.0010	31	
P.337557850 05	0.1756687740 06	0.3375578460 05	0.0004	40	
P.732930180 05	0.2152060880 06	0.7329301830 05	-0.0003	47	
0.341382480 05	0.2624432340 06	0.3413824360 05	-0.0036	56	
P.738448770 05	0.3021578690 06	0.7384487800 05	-0.0010	63	
0.348531280 05	0.3495661160 06	0.3485312410 05	0.0039	72	
0.743516780 05	0.3898646720 06	0.7435167920 05	-0.0012	79	

AR= 0.30887011800 05 A1= 0.1000000004320 01

A2=-0.36332254703180-13

SIGMA=0.00228 NO. POINTS= 10

CLOCK OPERATIONS

CPN NO	FR		H	M	S	DEC	BINARY
1 3 1	21	ON	22	40	38	501222	1110111000000000101001110000
		OFF	22	41	47	501291	1110111000010001011111110000
1 3 2	24	ON	22	42	27	501331	1110111000011011010000111000
		OFF	22	43	40	501404	1110111000101101000101100000
3 5 1	33	ON	1	42	42	512146	1111010001101011101001010000
		OFF	1	44	49	512273	11110100010001010101001101000
3 5 2	20	ON	1	47	45	512449	1111010001010101100111101000
		OFF	1	48	41	512505	11110100011000011010010101000
5 5 1	50	ON	4	45	24	523108	1111001011011111111010100000
		OFF	4	47	58	523262	1111001100000101100000110000
5 5 2	17	ON	4	50	4	523308	1111001100100100010001100000
		OFF	4	50	52	523436	1111001100101111111111100000
5 5 3	21	ON	4	53	6	523578	1111001101010000101101010000
		OFF	4	53	59	523623	1111001101011101101001011000
6 5 1	10	ON	6	23	24	528988	1111100001111011011101100000
		OFF	6	24	10	529034	1111100010000110101100010000
6 5 2	50	ON	6	24	34	529058	1111100010001100100011010000
		OFF	6	26	43	529187	1111100010101100000010111000
6 5 3	24	ON	6	28	16	529280	1111100011000010110000000000
		OFF	6	29	14	529338	1111100011010000111010010000
6 5 4	70	ON	6	39	38	529962	1111100101101001010000010000
		OFF	6	43	18	530174	1111100110011101000000110000
7 2 1	20	ON	7	49	30	534154	1111110101101000101100010000

			OFF	7	58	27	534211	1111110101110110100110111000
7	2	2	59	ON	7	51	25 534269	1111110110000100110001001000
			OFF	7	53	55	534419	11111101101010101011100011000
8	4	1	72	ON	9	17	44 2577	0000001001110101001001101000
			OFF	9	21	2	2775	0000000101010010101111011000
9	1	8	18	ON	10	31	20 6993	0000001010101011010001101000
			OFF	10	32	8	7041	000000101011011011111101000
9	1	1	90	ON	10	51	4 8177	00000011111001100010101101000
			OFF	10	55	10	8423	0000010000001000011001011000
14	9	1	17	ON	18	29	1 35654	00010001000000000010010110000
			OFF	18	29	43	35696	0001000100000101010110000000
14	9	2	75	ON	18	42	50 36483	0001000101100101011110111000
			OFF	18	45	59	36672	0001000101111001001000000000
16	4	0	11	ON	21	31	15 46588	00010110001101110000001100000
			OFF	21	31	42	46615	00010110001110100100111011000
19	1	1	51	ON	1	53	47 62340	000110110111001110110100000
			OFF	1	56	27	62500	000110110110110110110100000
20	1	1	74	ON	3	25	30 67843	00100000010110011001110111000
			OFF	3	29	8	68061	001000000110100001101001000
21	1	1	100	ON	5	3	42 73735	00100011001010001101101011000
			OFF	5	7	50	73983	00100011010001110010000011000
23	4	1	19	ON	7	59	55 84308	00101000001100111000000100000
			OFF	8	0	49	84362	00101000001110100001100010000
23	4	2	19	ON	8	1	58 84431	00101000010000101000010011000
			OFF	8	2	50	84483	00101000010010001101110111000
23	4	3	34	ON	8	7	19 84752	00101000011010011011010000000
			OFF	8	8	37	84830	00101000011100110011100110000
24	5	1	101	ON	9	31	7 89700	00101010110011110111100100000
			OFF	9	35	27	90040	00101010111011110011011000000
25	2	1	31	ON	11	2	35 95208	00101101011011010110011010000
			OFF	11	3	59	95352	00101101011101111010011000000
26	9	1	70	ON	12	51	22 101795	00110000100010100010010111000
			OFF	12	54	40	101993	00110000101000100101000101000
28	5	1	41	ON	18	58	38 123831	00110110000110000001011011000
			OFF	19	0	40	123953	0011011000110101111101101000
31	0	1	20	ON	20	12	13 128246	00111010001001110000011110000
			OFF	20	13	0	128293	00111010001011001100010001000
34	1	1	93	ON	0	30	55 143768	01000100100011011100111000000
			OFF	0	35	34	144047	0100010010101111101110011000
35	1	1	05	ON	2	1	59 149232	01000111001010001100110000000
			OFF	2	6	13	149486	01000111010001111001101100000
37	1	1	00	ON	5	9	20 160473	01001101000010011111101010000
			OFF	5	13	25	160710	01001100101000101110010110000
37	1	2	00	ON	5	16	11 160804	01001100101101110010100100000
			OFF	5	18	44	161037	01001100110010011101011001000
30	1	1	153	ON	6	41	52 166025	0100111001010101011100101000
			OFF	6	47	51	166304	01001110101011010001100000000
39	9	1	10	ON	8	6	31 171104	01010001100101101011100000000
			OFF	8	7	33	171166	01010001100111100100100110000
39	9	2	57	ON	8	11	40 171413	01010001101111000111000001000
			OFF	8	14	6	171559	01010001110011100100001011000

39	9	3	33	ON	8	15	6	171619	01010001110101011001010111000
				OFF	8	16	24	171697	01010001110111110001010101000
40	4	0	10	ON	9	21	31	175604	01010011101111000000100100000
				OFF	9	22	19	175652	01010011110000011110010100000
40	4	1	19	ON	9	40	2	176715	01010001000001110100111110000
				OFF	9	40	57	176770	01010100010010100101111010000
40	4	2	79	ON	9	43	4	176897	01010100010110011101111101000
				OFF	9	46	16	177089	01010100011100010100111101000
41	1	1	61	ON	11	12	45	182278	01010101110101010111011100000
				OFF	11	15	20	182433	01010101111111010100111010000
46	2	1	21	ON	18	49	34	209687	01100011111111001000111011000
				OFF	18	50	23	209736	01100100000000101000101000000
47	0	1	24	ON	20	20	41	215154	01100101000101111110101010000
				OFF	20	21	28	215201	01100101000110101010011101000
51	3	1	45	ON	2	16	18	236491	01110000110001001000011111000
				OFF	2	18	21	236614	01110000110100111000101111000
52	3	1	72	ON	3	49	24	242077	01110011011011100110101001000
				OFF	3	52	22	242255	01110011100001000010010011000
53	3	1	04	ON	5	10	2	247395	01110101111101111001010111000
				OFF	5	20	50	247563	01110100000110000010111110000
53	3	2	41	ON	5	20	0	247993	01110100010000001001010101000
				OFF	5	29	33	248086	01110100010010111110111110000
54	4	1	65	ON	6	45	48	252661	011100001110100110100001000
				OFF	6	48	57	252850	01110001001000101111010100000
54	4	2	20	ON	6	51	7	252980	01110001010000101011001000000
				OFF	6	52	14	253047	01110001010100011000011011000
61	2	1	17	ON	17	20	5	291190	10001010110101010101000110000
				OFF	17	28	46	291239	10001010110111111010001011000
63	4	0	10	ON	20	29	45	302098	10010000000110100110010100000
				OFF	20	30	24	302137	10010000000100011111010101000
64	5	1	19	ON	21	52	7	307040	10010010011010000111100000000
				OFF	21	53	5	307098	10010010011011111000100010000
66	5	1	20	ON	0	57	9	310142	10010111011001110110001100000
				OFF	0	58	0	310193	10010111011100111101011010000
66	5	1	69	ON	3	52	48	328681	100110010110100011000101000
				OFF	3	56	7	328800	10011001101001001111100000000
68	5	2	50	ON	4	0	43	329156	10011100111101000010110100000
				OFF	4	2	50	329283	100111010000011101010111000
69	5	1	00	ON	5	24	27	334100	10011110101100101110101000000
				OFF	5	28	22	334415	10011110111011000100100110000
69	5	2	20	ON	5	36	37	334910	100111110110010101000110000
				OFF	5	37	39	334972	10011111011101000100011000000
70	2	1	42	ON	7	1	0	339973	10100010000111001001110001000
				OFF	7	2	37	340070	10100010001010000111001110000
72	1	1	129	ON	9	58	48	350641	10100111001100101101101101000
				OFF	10	3	56	350949	10100111010110000111010001000
76	7	1	10	ON	19	7	3	383530	10110101110001001011100000000
				OFF	19	7	42	383575	10110101110011100011110110000
79	7	0	11	ON	22	38	25	389018	10110010111111110001100100000
				OFF	22	38	51	389044	10110011000001010111001000000

NOTES - PART TWO

ENDLAP AND FMC MATCH MAY BE LESS THAN OPTIMUM FOR PHOTOGRAPHY BETWEEN LATITUDES 230 AND 205, BECAUSE OF LOW PERIGEE HEIGHT AND THE PAN CAMERA CYCLE RATE LIMITER CIRCUIT. DATA INDICATE ERROR MAY BE FROM 5 TO 7 PERCENT. SOME OPERATIONS ON THE FIRST DAY ALSO ENCOUNTERED ERROR RATES HIGHER THAN NORMAL, PREVIOUS TO ADEQUATE ORBIT DEFINITION AND RAMP SETTINGS.

ABOVE ITEMS ARE REPORTED ACCORDING TO EXACT CYCLE COUNTER READINGS. HOWEVER, THE DATA INDICATE A POSSIBLE ANOMALY IN THE AFT CAMERA CYCLE COUNTER, WHICH MAY ACCOUNT FOR FEWER AFT FRAMES INDICATED FOR CERTAIN OPERATIONS THAN FOR THE FWD CAMERA. PRELIMINARY EVALUATION INDICATES POSSIBLE OCCASIONAL DROPOUT OF UNIT COUNTS DURING A STEP OF THE HUNDREDS- POSITION COUNTER WHEEL. THE TM MONITOR FOR TAKEUP SPOOL RADIUS DOES NOT HAVE THE RESOLUTION TO CONFIRM OR DENY THE ABOVE ESTIMATE. CAMERA FUNCTIONS APPEAR NORMAL DURING ALL ENGINEERING OPNS.

OPERATIONS AFFECTED ARE 24-5-1 (5-6 FRAMES), 38-1-1 (13-15 FRAMES), 48-4-1 AND 48-4-2 (7-8 FRAMES), 51-3-1 AND 52-3-1 (12-13 FRAMES).

ITEMS AFFECTED ON THIS REPORT ARE NUMBER OF FRAMES (ALL SECTIONS) AND THE RATE ESTIMATE (IN TOTO). FOLLOWING ARE THESE OPERATIONS AS THEY COULD BE ADJUSTED FOR THE RATE ESTIMATE -

AFT PAN CAMERA NUMBER 175												
CPN NO	FR	R	A	TUR/DUR	INST CPS	INST ANG VEL	SCAN RATE R/SEC	SCAN RATE I/SEC	PCT CALIB	PCT RATE REQD		
24	5	1	101	7	3 ON	1222	0.3629	0.03062	2.288	54.73	-2.1	0.3
					OFF	260	0.4188	0.03527	2.627	63.04	-2.1	-0.6
38	1	1	153	7	3 ON	1369	0.3898	0.03289	2.449	58.78	-3.7	-1.5
					OFF	359	0.4447	0.03752	2.794	67.86	-3.7	-4.6
48	4	1	14	7	3 ON	1188	0.3491	0.02946	2.194	52.65	-3.7	-2.8
					OFF	55	0.3613	0.03049	2.270	54.48	-3.7	-1.9
48	4	2	79	7	3 ON	1371	0.3983	0.03293	2.452	58.85	-3.7	-1.6
					OFF	192	0.4247	0.03584	2.669	64.05	-3.7	-3.0
51	3	1	45	7	3 ON	1196	0.3588	0.02960	2.204	52.90	-3.7	-2.3
					OFF	123	0.3783	0.03192	2.377	57.85	-3.7	-2.8
52	3	1	72	7	3 ON	1350	0.3858	0.03256	2.424	58.18	-3.7	-1.8
					OFF	178	0.4192	0.03537	2.634	63.21	-3.7	-2.6

LDF