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12 PAGES
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CORONA J FLIGHT DATA BOOK

SYSTEM NO. J-27

VEHICLE NO. 1623

MISSION NO. 1829-1

CAMERA NOS. 178/179

DATE 2-7-66

Declassified and Released by the NRO

In Accordance with E. O. 12958

on NOV 26 1997

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SYSTEM NO. J-27
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SYSTEM NO. J-27
VEHICLE NO. 1623
MISSION NO. 1829-1
CAMERA NOS. 178/179

GENERAL FLIGHT DATA

MASTER CAMERA SERIAL NO. 178

SLAVE CAMERA SERIAL NO. 179

S/I -1 SERIAL NO. D79/94/91

S/I -2 SERIAL NO. D76/78/94

LAUNCH DATE 2-2-66

REACTIVATION DATE N/A

REACTIVATION ORBIT NO. N/A

ORBIAL PARAMETERS (REV. 42)

PERIOD 98.688 MIN. ECCENTRICITY 0.81862

PERIGEE 99.841 NM PERIGEE LAT. 28.761 DEG. N

APOGEE 233.438 NM INCL. ANGLE 75.845 DEG.

RECOVERY ORBIT NO. 81

RECOVERY DATE 2-7-66

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SYSTEM NO. J-27
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MISSION NO. 1829-1
CAMERA NOS. 178/179

FLIGHT LENS SETTINGS AND FILM TYPES

LENS SETTINGS

PANORAMIC CAMERA SETTINGS		CAMERA NO. 178	CAMERA NO.
PANORAMIC OPTICS SLIT WIDTH	.275	IN	.175
PANORAMIC OPTICS FILTER TYPE	WRATTEN 25		WRATTEN 21
HORIZON OPTICS EXP. TIME	1/100	SEC.	1/100
HORIZON OPTICS APERTURE	F6.3	SUPPLY	F8.0
HORIZON OPTICS APERTURE	F8.0	TAKE-UP	F6.3
HORIZON OPTICS FILTER TYPE	WRATTEN 25		WRATTEN 25

STELLAR INDEX CAMERA SETTINGS

	D79/94/91		D76/78/94				
	STELLAR	INDEX	STELLAR	IND			
EXPOSURE TIME	2.0	SEC	1/500	SEC	2.0	SEC	1/5
APERTURE SETTING	F1.8		F4.5		F1.8		F4.
FILTER TYPE	NONE		WRATTEN 21		NONE		WRA

RATIO ONE STELLAR/INDEX FRAME PER 7 MASTER CAMERA FRAMES

FILM

PANORAMIC CAMERAS	CAMERA NO. 178	CAMERA NO. 179
TYPE	3484	3484
LENGTH	16000 FT.	16000 FT.
SPLICES	5	4
EMUL. DATA	235-12/1-12-5	235-12/1-12-5

STELLAR/INDEX CAMERAS

	D79/94/91		D76/78/94	
	STELLAR	INDEX	STELLAR	IND
TYPE	4481	4488	4481	448
EMUL. DATA	124-35-18-5	186-14-8-5	124-35-18-5	186

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SYSTEM NO. J-27
VEHICLE NO. 1623
MISSION NO. 1829-1
CAMERA NOS. 178/179

LENS DATA SUMMARY MASTER CAMERA NO. 178

LENS SERIAL NO. 1882435
EQUIVALENT OPERATIONAL FOCAL LENGTH 618.418 MM

RESOLUTION

STATIC	BENCH TEST	LINES/MM	FILM TYPE	TARGET CONT
		238	3484	HIGH
		151	3484	LOW
DYNAMIC	[REDACTED]	198	3484	HIGH
		129	3484	LOW
	AP	176	3484	HIGH
		188	3484	LOW

NOTE [REDACTED] RESOLUTION OF 283 LINES/MM REPORTED IN [REDACTED]

DISTORTION - POSITIVE (PINCUSHION)

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

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SYSTEM NO. J-27
VEHICLE NO. 1623
MISSION NO. 1829-1
CAMERA NOS. 178/179

LENS DATA SUMMARY (HORIZON CAMERAS FOR MASTER CAMERA NO. 178)

	TAKE-UP	SUPPLY
LENS SERIAL NO.	12848	12839
OPERATIONAL FOCAL LENGTH	55.88 MM	55.88 MM
RADIAL DISTORTION		
18 DEG. OFF AXIS	0.828 MM	0.828 MM
28 DEG. OFF AXIS	0.888 MM	0.898 MM
TANGENTIAL DISTORTION (MAXIMUM VECTOR)	0.838 MM	0.825 MM

RESOLUTION

ANGLE OFF
AXIS-DEG.

	0	5	10	15	20	25	27.5	30
TAKE-UP (RADIAL)	166	165	184	143	156	134	-8	45
(TANGENTIAL)	166	164	161	138	116	96	-8	78
SUPPLY (RADIAL)	187	208	184	143	99	158	-8	57
(TANGENTIAL)	166	164	128	98	58	96	-8	62

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.

SYSTEM NO. J-27
VEHICLE NO. 1623
MISSION NO. 1829-1
CAMERA NOS. 178/179

LENS DATA SUMMARY SLAVE CAMERA NO. 179

LENS SERIAL NO. 1812435
EQUIVALENT OPERATIONAL FOCAL LENGTH 618.428 MM

RESOLUTION

STATIC	BENCH TEST	LINES/MM	FILM TYPE	TARGET CONT
		257	3484	HIGH
		148	3484	LOW
DYNAMIC		283	3484	HIGH
		129	3484	LOW
	AP	174	3484	HIGH
		113	3484	LOW

NOTE BOSTON RESOLUTION OF 283 LINES/MM REPORTED IN [REDACTED]

DISTORTION - POSITIVE (PINCUSHION)

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

SYSTEM NO. J-27
VEHICLE NO. 1623
MISSION NO. 1829-1
CAMERA NOS. 178/179

LENS DATA SUMMARY (HORIZON CAMERAS FOR SLAVE CAMERA NO. 179)

	TAKE-UP	SUPPLY
LENS SERIAL NO.	12899	12897
OPERATIONAL FOCAL LENGTH	54.95 MM	54.95 MM
RADIAL DISTORTION		
18 DEG. OFF AXIS	0.028 MM	0.038 MM
28 DEG. OFF AXIS	0.088 MM	0.058 MM
TANGENTIAL DISTORTION (MAXIMUM VECTOR)	0.028 MM	0.025 MM

RESOLUTION

ANGLE OFF
AXIS-DEG.

	0	5	10	15	20	25	27.5	30
TAKE-UP (RADIAL)	187	208	206	143	156	158	-8	64
(TANGENTIAL)	132	131	144	138	138	96	-8	62
SUPPLY (RADIAL)	209	208	184	168	124	158	-8	64
(TANGENTIAL)	209	185	161	133	103	96	-8	78

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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VEHICLE NO. 1623
MISSION NO. 1829-1
CAMERA NOS. 178/179

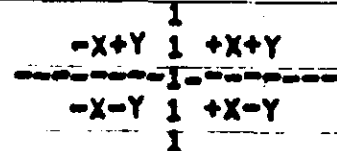
FORMAT DIMENSIONS AND CALIBRATIONS

CAMERA NO. 178

CAMERA NO. 179

A	76.150	76.120
B	355.040	355.110
C	710.040	710.080
D	56.516	56.524
E	56.570	56.482
XT	8.457	8.460
YT	-8.132	-8.318
XS	-8.298	-8.746
YS	-8.187	-8.143
XVO	1.175	-1.002
YVO	1.991	2.134
DTX	8.446	8.449
DTY	1.868	1.698
DSX	-8.298	-8.753
DSY	-3.187	-2.143
DMX	1.189	-8.954
DMY	21.991	22.134
HEIGHT	55.211	55.365
WIDTH	754.600	756.180
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 10MM ABOVE POINT DEFINING TARGET CENTER.
 4. NEGATIVE VIEWED WITH EMULSION SIDE DOWN.
 5. FORMAT SIGN CONVENTION



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MISSION NO. 1829-1
CAMERA NOS. 178/179

LENS DATA SUMMARY STELLAR INDEX D79/94/91 -1 MISSION

	STELLAR	INDEX
LENS SERIAL NO.	18576	819191
RESEAU SERIAL NO.	91	94
FILTER TYPE	NONE	WRATTEN 21
APERTURE	F1.8	F4.5
EXPOSURE TIME	2.8 SEC.	1/588 SEC.
EQUIVALENT FOCAL LENGTH	84 NOM	MM 38.49 MM

RESOLUTION (INDEX)

ANGLE OFF AXIS	0	10	20	30	3
HIGH CONTRAST-R/T (3488 FILM)	888/88	888/82	188/84	887/41	882

AWAR 71 LINES/MM
READ FROM 4488 FILM.

DISTORTION

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

ALIGNMENT	STELLAR	INDEX
	8.8883 INCHES/.937 INCHES	8.8881 INCHES/2.25

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SYSTEM NO. J-27
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MISSION NO. 1829-1
CAMERA NOS. 178/179

LENS DATA SUMMARY STELLAR INDEX D76/78/94 -2 MISSION

	STELLAR	INDEX
LENS SERIAL NO.	18682	817788
RESEAU SERIAL NO.	94	78
FILTER TYPE	NONE	WRATTEN 21
APERTURE	F1.8	F4.5
EXPOSURE TIME	2.8 SEC.	1/500 SEC.
EQUIVALENT FOCAL LENGTH	84 NOM	MM 38.49 MM

RESOLUTION (INDEX)

ANGLE OFF AXIS	8	10	20	30	3
----------------	---	----	----	----	---

HIGH CONTRAST-R/T (3488 FILM) 874/66 874/98 181/81 891/46 881

AWAR 72 LINES/MM
READ FROM 4488 FILM.

DISTORTION

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

ALIGNMENT	STELLAR	INDEX
	-8.8885 INCHES/.937 INCHES	-8.8886 INCHES/2.25

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MISSION NO. 1829-1
CAMERA NOS. 178/179

CYCLE PERIOD DATA

V/H RAMP SETTING LEVEL	AMPLITUDE	TIME UP RAMP-SEC	---CALIBRATED---		---IN-FLIGHT---		O N
			CYCLE PERIOD-SEC MASTER	SLAVE	CYCLE PERIOD-SEC MASTER	SLAVE	
8	3	136	5.158	5.079	5.085	5.148	
8	3	1784	2.267	2.262	2.258	2.318	
8	2	1745	2.285	2.284	2.228	2.258	
8	2	1717	2.286	2.286	2.227	2.265	
8	2	1783	2.285	2.283	2.217	2.268	
8	2	1735	2.286	2.285	2.228	2.257	

NOTE

A -B OR * INDICATE NO DATA AVAILABLE.

- A. 1829-1
- B. DRY
- C. PERFORMANCE ESTIMATE PART ONE

OPERATIONS SUMMARY

FWD PAN CAMERA NUMBER 178

OPN NO	FRA		Q	LAT	LONG	HEIGHT	RANGE	DA	H	M	S	LTIM	S-TIM	
PRE-FLT 128														
1	4	0	15	ON	2 54 58	154 8W	712253	738284	2	23	1	7	1245	82867
				OFF	2 52 17	152 7W	698548	724852	2	23	1	49	1253	82989
3	5	1	38	ON	2 65 24	147 36E	777796	886315	3	1	59	21	1149	7161
				OFF	2 59 4	156 21E	734999	761891	3	2	1	14	1226	7274
3	5	2	21	ON	2 54 24	168 35E	787885	733668	3	2	2	32	1244	7352
				OFF	2 51 1	163 8E	698877	715278	3	2	3	27	1255	7487
5	2	1	21	ON	2 52 16	116 26E	694179	719527	3	5	4	25	1258	18265
				OFF	2 48 53	118 35E	677558	782271	3	5	5	28	1259	18328
5	2	2	38	ON	2 48 17	122 45E	642468	665868	3	5	7	35	1318	18455
				OFF	2 34 27	124 53E	624581	647389	3	5	9	5	1328	18545
6	2	1	24	ON	2 57 22	89 27E	728979	747348	3	6	33	48	1231	23628
				OFF	2 53 38	92 41E	699435	724981	3	6	34	44	1245	23684
6	2	2	28	ON	2 42 58	98 48E	658891	674688	3	6	37	34	1312	23854
				OFF	2 38 28	188 36E	635548	658688	3	6	38	42	1321	23922
6	2	3	49	ON	2 23 52	185 7E	684478	626444	3	6	42	25	1342	24145
				OFF	2 16 39	186 52E	681281	623853	3	6	44	14	1351	24254
7	5	1	28	ON	2 57 49	66 18E	722377	748791	3	8	4	11	1228	29851
				OFF	2 54 27	69 6E	783362	729857	3	8	5	7	1241	29187
7	5	2	87	ON	2 47 48	73 28E	678542	694998	3	8	6	54	13 8	29214
				OFF	2 34 28	79 18E	623177	645852	3	8	18	22	1327	29422
6	6	1	75	ON	2 65 42	32 44E	772933	881266	3	9	32	38	1143	34358
				OFF	2 53 32	46 56E	697321	722787	3	9	36	1	1243	34561
9	6	8	18	ON	1 38 47	117 3W	1287519	1252728	3	18	45	44	257	38744
				OFF	1 41 41	115 53W	1189933	1234438	3	18	46	32	3 3	38792
9	3	1	57	ON	2 58 43	19 33E	725168	751688	3	11	5	12	1223	39912
				OFF	2 49 28	26 48E	676825	788688	3	11	7	44	1254	48864
14	4	1	17	ON	2 48 7	82 54W	636857	659216	3	18	43	23	1311	67483
				OFF	2 37 28	81 53W	627965	658828	3	18	44	4	1316	67444
14	4	2	17	ON	2 29 9	79 18E	689113	631262	3	18	46	11	1329	67571
				OFF	2 26 32	78 24W	685327	627333	3	18	46	51	1333	67611
14	4	3	45	ON	3 24 55	66 55W	746153	773466	3	18	59	49	1432	68389
				OFF	3 33 24	64 27W	884198	833712	3	19	1	59	1444	68519
16	4	8	16	ON	2 34 8	126 26W	618849	641362	3	21	46	11	1328	78371
				OFF	2 31 37	125 37W	613429	635739	3	21	46	58	1324	78418
18	9	1	41	ON	2 65 41	164 12E	762537	798475	4	8	38	51	1135	2331
				OFF	2 59 4	173 28E	719752	746867	4	8	48	49	1214	2449
19	9	1	38	ON	2 64 38	143 12E	754889	781786	4	2	9	48	1142	7788
				OFF	2 58 31	151 11E	715716	741879	4	2	11	36	1216	7896
21	8	1	114	ON	2 65 34	95 58E	758588	786368	4	5	18	46	1134	18646
				OFF	2 47 25	113 48E	659726	683775	4	5	15	52	1258	18952
22	3	1	29	ON	2 55 48	85 15E	697434	722985	4	6	44	17	1225	24257
				OFF	2 58 59	88 42E	674586	699112	4	6	45	33	1248	24333
22	3	2	28	ON	2 41 7	93 49E	636885	659245	4	6	48	9	13 3	24489

			OFF	2	37	58	95	4E	626689	649497	4	6	48	58	13	9	24538
22	3	3	88 ON	2	33	48	96	34E	616124	638535	4	6	58	4	1316		24684
			OFF	2	28	35	188	14E	681895	622943	4	6	53	23	1334		24883
24	1	1	119 ON	2	65	39	27	8E	755998	783688	4	9	42	37	1131		34957
			OFF	2	46	57	45	22E	655987	679812	4	9	47	52	1249		35272
26	2	8	6 ON	1	21	14	158	52W	1288719	1328825	4	12	21	44	218		44584
			OFF	1	22	55	158	27W	1272182	1319948	4	12	22	12	228		44532
26	2	1	54 ON	2	21	38	8	33E	681894	622942	4	12	55	36	1329		46536
			OFF	2	13	36	18	25E	684448	626413	4	12	57	37	1339		46657
27	2	8	5 ON	1	21	18	173	42W	1279183	1327145	4	13	52	22	217		49942
			OFF	1	22	54	173	18W	1278936	1318653	4	13	52	49	219		49969
27	2	1	47 ON	2	26	38	15	35W	683954	625989	4	14	24	57	1322		51897
			OFF	2	19	33	13	47W	688987	622838	4	14	26	45	1331		52885
31	2	1	21 ON	2	34	1	189	13W	614528	636879	4	28	25	32	13	8	73532
			OFF	2	38	55	188	14W	689889	631236	4	28	26	19	1313		73579
34	9	1	26 ON	2	64	34	168	38E	739266	766321	5	8	49	5	1131		2945
			OFF	2	68	34	166	8E	714742	748867	5	8	58	17	1154		3817
36	9	1	39 ON	2	64	37	114	43E	737783	764781	5	3	58	17	1129		13817
			OFF	2	58	33	122	38E	781964	727686	5	3	52	4	12	2	13924
36	9	2	27 ON	2	45	35	131	58E	644668	668142	5	3	55	34	1242		14134
			OFF	2	41	32	133	42E	631598	654581	5	3	56	37	1251		14197
36	9	3	38 ON	3	25	55	158	33E	772816	888312	5	4	13	42	1415		15222
			OFF	3	33	24	152	45E	825327	855656	5	4	15	37	1426		15337
37	9	1	138 ON	2	41	36	118	58E	631348	654331	5	5	27	13	1258		19633
			OFF	2	21	37	117	11E	681819	623694	5	5	32	19	1321		19939
38	3	1	29 ON	2	55	48	79	37E	685677	718784	5	6	54	5	1212		24845
			OFF	2	51	3	83	1E	664694	688938	5	6	55	28	1227		24928
38	3	2	51 ON	2	42	18	87	44E	632645	655676	5	6	57	48	1248		25868
			OFF	2	34	35	98	38E	614819	636351	5	6	59	37	13	2	25177
38	3	3	79 ON	2	26	11	93	9E	683231	625159	5	7	1	46	1314		25386
			OFF	2	14	39	95	58E	685972	628883	5	7	4	48	1328		25488
38	3	4	23 ON	2	4	48	98	3E	624724	647456	5	7	7	9	1339		25629
			OFF	2	1	13	98	47E	635285	658413	5	7	8	3	1343		25683
38	3	5	17 ON	3	1	7	99	16E	643267	666695	5	7	8	38	1345		25718
			OFF	3	3	46	99	49E	653218	677821	5	7	9	18	1348		25758
39	4	1	81 ON	2	55	43	56	44E	685166	718173	5	8	24	48	1211		38288
			OFF	2	43	33	64	16E	636448	659621	5	8	27	55	1245		38475
48	5	1	88 ON	2	61	48	27	48E	716812	742185	5	9	53	35	1144		35615
			OFF	2	49	31	38	17E	657216	681171	5	9	56	57	1238		35817
47	5	1	17 ON	2	37	36	116	3W	617479	639941	5	28	34	13	1249		74853
			OFF	2	35	2	115	8W	612471	634746	5	28	34	52	1254		74892
52	9	1	48 ON	2	58	32	117	5E	689419	714588	6	4	1	34	1149		14494
			OFF	2	52	26	122	14E	661634	685755	6	4	3	15	1212		14595
52	9	2	42 ON	2	44	32	126	47E	633612	656679	6	4	5	28	1232		14728
			OFF	2	38	28	129	23E	617931	648418	6	4	6	54	1244		14814
53	4	1	28 ON	2	57	36	95	18E	684136	789185	6	5	32	25	1153		19945
			OFF	2	54	27	97	53E	669638	694861	6	5	33	17	12	4	19997
53	4	2	173 ON	2	41	37	185	15E	625133	647882	6	5	36	41	1237		28281
			OFF	2	16	34	112	49E	686479	628528	6	5	43	3	1314		28583
54	5	1	74 ON	2	59	33	78	28E	693888	718386	6	7	2	27	1143		25347
			OFF	2	48	26	79	4E	645436	668947	6	7	5	29	1221		25529

55 7 1	16 ON	2 69 59	28 11E	757796	785553	6 8 29	44 1022	38584
	OFF	2 67 43	34 28E	748749	767859	6 8 30	32 1048	38632
55 7 2	88 ON	2 65 32	39 1E	726262	752824	6 8 31	15 11 7	38675
	OFF	2 53 26	52 58E	664144	688359	6 8 34	43 12 6	38883
55 7 3	55 ON	2 43 29	58 45E	629588	652413	6 8 37	21 1232	31841
	OFF	2 35 27	61 56E	611688	633858	6 8 39	25 1247	31165
63 7 1	17 ON	2 38 27	128 47W	618387	632588	6 28 44	8 1248	74648
	OFF	2 32 57	119 57W	687877	629149	6 28 44	38 1244	74678
68 4 1	113 ON	2 52 5	117 8E	651724	675472	7 4 12	28 12 8	15148
	OFF	2 35 27	125 8E	689574	631748	7 4 16	49 1236	15489
69 4 1	28 ON	2 42 48	99 28E	622831	645494	7 5 45	38 1222	28738
	OFF	2 38 31	181 2E	614233	636574	7 5 46	34 1238	28794
69 4 2	184 ON	2 31 39	183 24E	685377	627385	7 5 48	28 1241	28988
	OFF	2 16 35	187 21E	618487	632683	7 5 52	9 13 1	21129
78 7 1	49 ON	2 68 34	49 42E	733216	768842	7 7 8	45 1827	25725
	OFF	2 61 36	62 25E	692871	717348	7 7 18	56 1128	25856
78 7 2	184 ON	2 59 37	64 47E	682265	787163	7 7 11	38 1138	25898
	OFF	2 44 31	75 38E	627186	649938	7 7 15	35 1218	26135
72 8 1	48 ON	2 68 39	17 56E	685853	718887	7 18 12	19 1124	36739
	OFF	2 54 35	23 48E	659181	683127	7 18 14	1 1149	36841
72 8 2	27 ON	2 32 7	34 44E	685684	627621	7 18 19	53 1238	37193
	OFF	2 28 18	35 55E	683617	625568	7 18 28	53 1244	37253
72 8 3	28 ON	2 24 39	36 52E	683797	625746	7 18 21	47 1249	37387
	OFF	2 21 48	37 38E	685393	627482	7 18 22	32 1253	37352
74 2 1	48 ON	2 25 46	9 5W	683727	625673	7 13 22	36 1246	48156
	OFF	2 18 43	7 19W	688791	638926	7 13 24	23 1255	48263
78 5 1	21 ON	2 32 46	182 28W	685716	627737	7 19 23	2 1233	69782
	OFF	2 29 48	181 31W	684881	626841	7 19 23	49 1237	69829
79 5 8	21 ON	2 48 37	128 9W	615886	638285	7 28 51	34 1218	75894
	OFF	2 37 34	126 57W	618813	633826	7 28 52	21 1224	75141
81 3 1	22 ON	2 62 46	169 38E	689866	715851	7 23 46	39 11 5	85599
	OFF	2 59 29	173 43E	674191	698785	7 23 47	36 1122	85656

OPERATIONS SUMMARY

AFT PAN CAMERA	NUMBER	179			HEIGHT	RANGE	DA	H	M	S	LTIM	S-TIM
OPN NO FRA	Q	LAT	LONG									
PRE-FLT 119												
1 4 8	14	ON	2 55 46	154 58W	712253	738284	2 23	1	7	1241	82867	
		OFF	2 53 13	152 58W	698548	724852	2 23	1	49	1258	82989	
3 5 1	37	ON	2 66 17	145 58E	777796	886315	3 1	59	21	1142	7161	
		OFF	2 68 8	155 16E	734999	761891	3 2	1	14	1222	7274	
3 5 2	28	ON	2 55 28	159 47E	787885	733668	3 2	2	32	1241	7352	
		OFF	2 51 56	162 19E	698877	715278	3 2	3	27	1252	7487	
5 2 1	28	ON	2 53 12	115 42E	694179	719527	3 5	4	25	1247	18265	
		OFF	2 49 48	117 58E	677558	782271	3 5	5	28	1257	18328	
5 2 2	37	ON	2 41 18	122 19E	642468	665868	3 5	7	35	1316	18455	
		OFF	2 35 28	124 32E	624581	647389	3 5	9	5	1327	18545	
6 2 1	23	ON	2 58 18	88 29E	728979	747348	3 6	33	48	1227	23628	
		OFF	2 54 25	91 55E	699435	724981	3 6	34	44	1242	23684	
6 2 2	27	ON	2 43 44	98 28E	658891	674688	3 6	37	34	1318	23854	

		OFF	2	39	21	188	12E	635548	658688	3	6	38	42	1319	23922			
6	2	3	47	ON	2	24	43	184	51E	684478	626444	3	6	42	25	1341	24145	
		OFF	2	17	38	186	37E	681281	623853	3	6	44	14	1358	24254			
7	5	1	28	ON	2	58	45	65	18E	722377	748791	3	8	4	11	1224	29851	
		OFF	2	55	23	68	17E	783362	729857	3	8	5	7	1238	29187			
7	5	2	85	ON	2	48	43	72	53E	678542	694998	3	8	6	54	1258	29214	
		OFF	2	35	28	78	49E	623177	645852	3	8	18	22	1325	29422			
8	6	1	73	ON	2	66	34	38	56E	772933	881266	3	9	32	38	1136	34358	
		OFF	2	54	28	46	18E	697321	722787	3	9	36	1	1248	34561			
9	6	8	9	ON	1	37	6	117	47W	1287519	1252728	3	18	45	44	254	38744	
		OFF	1	48	2	116	48W	1189933	1234438	3	18	46	32	259	38792			
9	3	1	56	ON	2	59	38	18	38E	725168	751688	3	11	5	12	1219	39912	
		OFF	2	58	22	26	11E	676825	788688	3	11	7	44	1252	48864			
14	4	1	16	ON	2	41	8	83	19W	636857	659216	3	18	43	23	1318	67483	
		OFF	2	38	21	82	16W	627965	658828	3	18	44	4	1314	67444			
14	4	2	17	ON	2	38	8	79	28W	689113	631262	3	18	46	11	1328	67571	
		OFF	2	27	23	78	43W	685327	627333	3	18	46	51	1331	67611			
14	4	3	44	ON	3	23	51	67	15W	746153	773466	3	18	59	49	1438	68389	
		OFF	3	32	16	64	53W	884198	833712	3	19	1	59	1442	68519			
16	4	8	16	ON	2	34	59	126	46W	618849	641362	3	21	46	11	1319	78371	
		OFF	2	32	28	125	57W	613429	635739	3	21	46	58	1323	78418			
18	9	1	48	ON	2	66	33	162	26E	762537	798475	4	8	38	51	1128	2331	
		OFF	2	59	58	172	24E	719752	746867	4	8	48	49	1218	2449			
19	9	1	37	ON	2	65	38	141	35E	754889	781786	4	2	9	48	1136	7788	
		OFF	2	59	26	158	9E	715716	741879	4	2	11	36	1212	7896			
21	8	1	112	ON	2	66	26	94	6E	758588	786368	4	5	18	46	1127	18646	
		OFF	2	48	19	113	7E	659726	683775	4	5	15	52	1248	18952			
22	3	1	28	ON	2	56	34	84	24E	697434	722985	4	6	44	17	1221	24257	
		OFF	2	51	53	88	3E	674586	699112	4	6	45	33	1237	24333			
22	3	2	28	ON	2	42	8	93	23E	636885	659245	4	6	48	9	13	1	24489
		OFF	2	38	51	94	41E	626689	649497	4	6	48	58	13	7	24538		
22	3	3	86	ON	2	34	32	96	14E	616124	638535	4	6	58	4	1315	24684	
		OFF	2	21	25	99	58E	681895	622943	4	6	53	23	1333	24883			
24	1	1	116	ON	2	66	38	25	23E	755998	783688	4	9	42	37	1124	34957	
		OFF	2	47	51	44	49E	655987	679812	4	9	47	52	1247	35272			
26	2	8	5	ON	1	19	25	151	25W	1288719	1328825	4	12	21	44	216	44584	
		OFF	1	21	7	151	1W	1272182	1319948	4	12	22	12	218	44532			
26	2	1	53	ON	2	22	29	8	17E	681894	622942	4	12	55	36	1328	46536	
		OFF	2	14	27	18	18E	684448	626413	4	12	57	37	1338	46657			
27	2	8	5	ON	1	19	38	174	15W	1279183	1327145	4	13	52	22	215	49942	
		OFF	1	21	7	173	52W	1278936	1318653	4	13	52	49	217	49969			
27	2	1	46	ON	2	27	29	15	52W	683954	625989	4	14	24	67	1321	51897	
		OFF	2	28	24	14	2W	688987	622838	4	14	26	45	1338	52885			
31	2	1	28	ON	2	34	53	189	33W	614528	636879	4	28	25	32	13	7	73532
		OFF	2	31	47	188	33W	689889	631236	4	28	26	19	1312	73579			
34	9	1	25	ON	2	65	26	158	56E	739266	766321	5	8	49	5	1124	2945	
		OFF	2	61	27	164	58E	714742	748867	5	8	58	17	1158	3817			
36	9	1	38	ON	2	65	29	113	8E	737783	764781	5	3	58	17	1122	13817	
		OFF	2	59	27	121	38E	781964	727686	5	3	52	4	1158	13924			
36	9	2	26	ON	2	46	28	131	28E	644668	668142	5	3	55	34	1248	14134	
		OFF	2	42	25	133	16E	631598	654581	5	3	56	37	1249	14197			

36	9	3	38	ON	3	24	58	158	11E	772816	888312	5	4	13	42	1414	15222	
				OFF	3	32	15	152	18E	825327	855656	5	4	15	37	1424	15337	
37	9	1	135	ON	2	42	28	118	24E	631348	654331	5	5	27	13	1248	19633	
				OFF	2	22	28	116	55E	681819	623694	5	5	32	19	1328	19939	
38	3	1	29	ON	2	56	34	78	46E	685677	718784	5	6	54	5	12	9	24845
				OFF	2	51	57	82	22E	664694	688938	5	6	55	28	1224	24928	
38	3	2	58	ON	2	43	3	87	17E	632645	655676	5	6	57	48	1246	25868	
				OFF	2	35	26	98	17E	614819	636351	5	6	59	37	13	8	25177
38	3	3	78	ON	2	27	2	92	52E	683251	625159	5	7	1	46	1313	25386	
				OFF	2	15	31	95	43E	685972	628883	5	7	4	48	1327	25488	
38	3	4	23	ON	2	5	41	97	49E	624724	647456	5	7	7	9	1338	25629	
				OFF	2	2	7	98	33E	635285	658413	5	7	8	3	1342	25683	
38	3	5	16	ON	3	8	13	99	2E	643267	666695	5	7	8	38	1344	25718	
				OFF	3	2	51	99	34E	653218	677821	5	7	9	18	1347	25758	
39	4	1	88	ON	2	56	36	55	53E	685166	718173	5	8	24	48	12	8	38288
				OFF	2	44	25	63	48E	636448	659621	5	8	27	55	1243	38475	
48	5	1	78	ON	2	62	32	26	26E	716812	742186	5	9	53	35	1139	35615	
				OFF	2	58	24	37	41E	657216	681171	5	9	56	57	1227	35817	
47	5	1	16	ON	2	38	27	116	26W	617479	639941	5	28	34	13	1248	74853	
				OFF	2	35	53	115	29W	612471	634746	5	28	34	52	1252	74892	
52	9	1	39	ON	2	59	25	116	6E	689419	714588	6	4	1	34	1145	14494	
				OFF	2	53	18	121	33E	661634	685755	6	4	3	13	12	9	14595
52	9	2	48	ON	2	45	24	126	18E	633612	656679	6	4	5	28	1238	14728	
				OFF	2	39	19	128	59E	617931	648418	6	4	6	54	1242	14814	
53	4	1	28	ON	2	58	29	94	14E	684136	789185	6	5	32	25	1149	19945	
				OFF	2	55	28	97	7E	669638	694861	6	5	33	17	12	1	19997
53	4	2	169	ON	2	42	29	184	58E	625133	647882	6	5	36	41	1236	28281	
				OFF	2	17	26	112	34E	686479	628528	6	5	43	3	1313	28583	
54	5	1	73	ON	2	68	25	69	17E	693888	718386	6	7	2	27	1139	25347	
				OFF	2	49	18	78	38E	645436	668947	6	7	5	29	1219	25529	
55	7	1	16	ON	2	78	42	25	38E	757796	785553	6	8	29	44	1812	38584	
				OFF	2	68	38	32	26E	748749	767859	6	8	38	32	1848	38632	
55	7	2	79	ON	2	66	21	37	21E	726262	752824	6	8	31	15	11	8	38675
				OFF	2	54	19	52	15E	664144	688359	6	8	34	43	12	3	38883
55	7	3	54	ON	2	44	21	58	17E	629588	652413	6	8	37	21	1238	31841	
				OFF	2	36	18	61	35E	611688	633858	6	8	39	25	1245	31165	
63	7	1	16	ON	2	36	18	121	8W	618387	632588	6	28	44	8	1239	74648	
				OFF	2	33	48	128	17W	687877	629149	6	28	44	38	1243	74678	
68	4	1	111	ON	2	52	57	116	28E	651724	675472	7	4	12	28	1157	15148	
				OFF	2	36	18	124	39E	689574	631748	7	4	16	49	1235	15489	
69	4	1	27	ON	2	43	32	98	53E	622831	645494	7	5	45	38	1221	28738	
				OFF	2	39	23	188	39E	614233	636574	7	5	46	34	1229	28794	
69	4	2	182	ON	2	32	38	183	5E	685377	627385	7	5	48	28	1248	28988	
				OFF	2	17	26	187	6E	618487	632683	7	5	52	9	13	8	21129
78	7	1	47	ON	2	69	19	47	32E	733216	768842	7	7	8	45	1818	25725	
				OFF	2	62	27	61	14E	692871	717348	7	7	18	56	1115	25856	
78	7	2	181	ON	2	68	29	63	45E	682265	787163	7	7	11	38	1126	25898	
				OFF	2	45	23	75	18E	627186	649938	7	7	15	35	1216	26135	
71	5	1	67	ON	2	66	28	31	39E	713684	739769	7	8	48	16	1846	31216	
				OFF	2	56	31	44	58E	663987	688197	7	8	43	18	1143	31398	
72	8	1	39	ON	2	61	38	16	49E	685853	718887	7	18	12	19	1119	36739	

		OFF 2	55	27	23	3E	659181	683127	7	18	14	1	1146	36841			
72	8	2	26	ON 2	32	58	34	25E	685684	627621	7	18	19	53	1237	37193	
		OFF 2	29	8	35	37E	683617	625568	7	18	28	53	1243	37253			
72	8	3	28	ON 2	25	38	36	36E	683797	625746	7	18	21	47	1248	37387	
		OFF 2	22	32	37	22E	685393	627482	7	18	22	32	1252	37352			
74	2	1	47	ON 2	26	37	9	22W	683727	625673	7	13	22	36	1245	48156	
		OFF 2	19	34	7	34W	688791	638926	7	13	24	23	1254	48263			
78	5	1	28	ON 2	33	36	182	48W	685716	627737	7	19	23	2	1231	69782	
		OFF 2	38	31	181	58W	684881	626841	7	19	23	49	1236	69829			
79	5	8	28	ON 2	41	28	128	33W	615886	638285	7	28	51	34	1217	75894	
		OFF 2	38	25	127	28W	618813	633826	7	28	52	21	1223	75141			
81	3	1	21	ON 2	63	36	168	21E	689867	715853	8	23	46	39	11	8	85599
		OFF 2	68	22	172	48E	674324	698923	7	23	47	36	1118	85656			

PHOTOGRAPHIC SUMMARY

FWD PAN CAMERA NO 178		B.2758		SLIT W/25		FILTER		3484 FILM			
OPN NO	FRA	FEET	ET	S-EL	S-DIR	EV	FULL	INT	PRI		
PRE-FLT	128	317.4									
1	4	8	15	39.7	ON 283	18.1	34.9	11.52	11.66	11.86	18.46
					OFF 288	20.4	35.4	11.56	11.76	11.16	18.56
3	5	1	38	188.5	ON 178	7.8	33.4	11.33	18.84	18.24	9.64
					OFF 193	14.2	33.9	11.45	11.44	18.84	18.24
3	5	2	21	55.5	ON 284	18.6	34.6	11.52	11.68	11.88	18.48
					OFF 218	21.7	35.3	11.57	11.88	11.28	18.68
5	2	1	21	55.5	ON 218	28.6	34.6	11.56	11.76	11.16	18.56
					OFF 216	23.7	35.4	11.61	11.86	11.26	18.66
5	2	2	38	188.5	ON 238	31.1	38.2	11.78	11.99	11.39	18.79
					OFF 237	35.9	48.7	11.74	12.84	11.44	18.84
6	2	1	24	63.5	ON 199	15.9	33.5	11.49	11.55	18.95	18.35
					OFF 287	19.5	34.2	11.55	11.72	11.12	18.52
6	2	2	28	74.1	ON 226	29.8	37.8	11.68	11.96	11.36	18.76
					OFF 232	32.7	38.7	11.71	12.81	11.41	18.81
6	2	3	49	129.6	ON 246	44.8	46.9	11.79	12.89	11.49	18.89
					OFF 247	48.9	52.9	11.88	12.18	11.58	18.98
7	5	1	28	52.9	ON 199	15.5	33.2	11.49	11.52	18.92	18.32
					OFF 286	18.7	33.8	11.54	11.69	11.89	18.49
7	5	2	87	238.1	ON 219	24.7	35.3	11.63	11.88	11.28	18.68
					OFF 237	36.8	48.3	11.74	12.84	11.44	18.84
8	6	1	75	198.4	ON 188	7.5	32.4	11.35	18.88	18.28	9.68
					OFF 288	19.6	33.8	11.55	11.72	11.12	18.52
9	6	8	18	26.5	ON 183	-47.9	58.8	18.54	8.88	8.88	8.88
					OFF 184	-45.9	48.3	18.55	8.88	8.88	8.88
9	3	1	57	158.8	ON 197	14.7	32.7	11.48	11.47	18.87	18.27
					OFF 216	23.3	34.5	11.61	11.85	11.25	18.65
14	4	1	17	45.8	ON 232	31.8	36.3	11.71	12.88	11.48	18.88
					OFF 235	34.8	37.4	11.73	12.82	11.42	18.82
14	4	2	17	45.8	ON 244	48.8	41.6	11.78	12.87	11.47	18.87
					OFF 245	42.9	43.2	11.79	12.88	11.48	18.88
14	4	3	45	119.8	ON 281	56.6	114.3	11.58	12.18	11.58	18.98
					OFF 184	52.2	125.1	11.37	12.18	11.58	18.98

ST-11 SLURRY

16	4	8	16	42.3	ON	248	37.8	38.5	11.76	12.85	11.45	18.85
					OFF	242	39.8	39.7	11.77	12.86	11.46	18.86
18	9	1	41	188.4	ON	183	7.6	38.5	11.37	18.81	18.21	9.61
					OFF	199	14.5	38.9	11.49	11.46	18.86	18.26
19	9	1	38	188.5	ON	186	8.7	38.3	11.48	18.95	18.35	9.75
					OFF	288	15.1	38.8	11.58	11.58	18.98	18.38
21	8	1	114	381.5	ON	184	7.7	29.9	11.38	18.83	18.23	9.63
					OFF	222	25.7	32.5	11.65	11.98	11.38	18.78
22	3	1	29	76.7	ON	288	18.8	38.8	11.55	11.65	11.85	18.45
					OFF	216	22.4	31.4	11.61	11.82	11.22	18.62
22	3	2	28	52.9	ON	232	31.4	34.2	11.71	11.99	11.39	18.79
					OFF	236	34.1	35.4	11.74	12.82	11.42	18.82
22	3	3	88	232.8	ON	241	37.8	37.3	11.77	12.85	11.45	18.85
					OFF	248	48.1	45.7	11.81	12.18	11.58	18.98
24	1	1	119	314.8	ON	185	7.7	29.3	11.39	18.82	18.22	9.62
					OFF	224	26.2	32.8	11.66	11.91	11.31	18.71
26	2	8	6	15.9	ON	182	-68.1	69.9	18.54	8.88	8.88	8.88
					OFF	182	-59.5	67.1	18.54	8.88	8.88	8.88
26	2	1	54	142.8	ON	245	47.8	43.9	11.79	12.18	11.58	18.98
					OFF	244	53.4	31.4	11.79	12.18	11.58	18.98
27	2	8	5	13.2	ON	181	-68.3	69.6	18.52	8.88	8.88	8.88
					OFF	181	-59.6	66.9	18.52	8.88	8.88	8.88
27	2	1	47	124.3	ON	244	44.8	48.1	11.78	12.89	11.49	18.89
					OFF	245	49.4	45.4	11.79	12.18	11.58	18.98
31	2	1	21	55.5	ON	246	38.1	35.1	11.79	12.85	11.45	18.85
					OFF	248	48.8	36.6	11.81	12.87	11.47	18.87
34	9	1	26	68.8	ON	191	8.9	27.3	11.43	18.97	18.37	9.77
					OFF	281	13.2	27.5	11.58	11.37	18.77	18.17
36	9	1	39	183.2	ON	191	8.8	26.9	11.43	18.96	18.36	9.76
					OFF	286	15.3	27.3	11.54	11.51	18.91	18.31
36	9	2	27	71.4	ON	232	28.8	29.8	11.71	11.95	11.35	18.75
					OFF	238	31.7	31.8	11.75	12.88	11.48	18.88
36	9	3	38	188.5	ON	191	59.9	119.6	11.43	12.18	11.58	18.98
					OFF	175	55.4	129.8	11.38	12.18	11.58	18.98
37	9	1	138	365.8	ON	238	31.7	38.8	11.75	12.88	11.48	18.88
					OFF	253	48.9	41.2	11.83	12.18	11.58	18.98
38	3	1	29	76.7	ON	215	18.3	27.3	11.68	11.67	11.87	18.47
					OFF	224	22.8	28.1	11.66	11.83	11.23	18.63
38	3	2	51	134.9	ON	239	31.2	38.3	11.76	11.99	11.39	18.79
					OFF	248	38.1	33.2	11.81	12.85	11.45	18.85
38	3	3	79	289.8	ON	253	45.3	37.7	11.84	12.89	11.49	18.89
					OFF	253	54.2	47.3	11.84	12.18	11.58	18.98
38	3	4	23	68.8	ON	246	68.3	68.8	11.88	12.18	11.58	18.98
					OFF	242	62.8	66.1	11.77	12.18	11.58	18.98
38	3	5	17	45.8	ON	239	62.9	78.4	11.75	12.18	11.58	18.98
					OFF	236	63.7	75.6	11.73	12.18	11.58	18.98
39	4	1	81	214.2	ON	215	18.3	27.1	11.68	11.67	11.87	18.47
					OFF	237	38.8	29.7	11.74	11.97	11.37	18.77
48	5	1	88	211.6	ON	282	12.1	26.3	11.51	11.28	18.68	18.88
					OFF	228	24.4	28.8	11.68	11.87	11.27	18.67
47	5	1	17	45.8	ON	246	35.9	29.9	11.88	12.84	11.44	18.84

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				OFF 249	38.2	38.9	11.81	12.86	11.46	18.86	
52	9	1	48	185.8	ON 213	15.5	24.1	11.59	11.52	18.92	18.32
					OFF 225	21.8	24.9	11.67	11.88	11.28	18.68
52	9	2	42	111.1	ON 239	29.5	26.6	11.75	11.97	11.37	18.77
					OFF 246	35.3	28.4	11.79	12.83	11.43	18.83
53	4	1	28	52.9	ON 215	16.5	24.8	11.68	11.58	18.98	18.38
					OFF 221	19.8	24.4	11.64	11.73	11.13	18.53
53	4	2	173	457.6	ON 243	32.4	27.2	11.78	12.88	11.48	18.88
					OFF 253	54.4	41.2	11.84	12.18	11.58	18.98
54	5	1	74	195.7	ON 211	14.5	23.6	11.58	11.46	18.86	18.26
					OFF 233	25.8	25.2	11.72	11.91	11.31	18.71
55	7	1	16	42.3	ON 183	2.1	23.4	11.37	9.98	9.38	8.78
					OFF 198	5.1	23.2	11.42	18.48	9.88	9.28
55	7	2	88	211.6	ON 196	7.8	23.2	11.47	18.84	18.24	9.64
					OFF 224	28.8	24.1	11.66	11.77	11.17	18.57
55	7	3	55	145.5	ON 241	38.6	26.2	11.77	11.98	11.38	18.78
					OFF 258	38.2	28.8	11.82	12.86	11.46	18.86
63	7	1	17	45.8	ON 251	38.6	26.9	11.82	12.86	11.46	18.86
					OFF 252	48.9	27.9	11.83	12.87	11.47	18.87
68	4	1	113	298.9	ON 231	22.4	21.6	11.78	11.82	11.22	18.62
					OFF 251	38.8	25.7	11.83	12.86	11.46	18.86
69	4	1	28	74.1	ON 245	31.8	23.3	11.79	12.88	11.48	18.88
					OFF 249	35.9	24.4	11.81	12.84	11.44	18.84
69	4	2	184	275.1	ON 254	42.4	26.9	11.84	12.88	11.48	18.88
					OFF 253	55.9	36.4	11.83	12.18	11.58	18.98
78	7	1	49	129.6	ON 193	3.9	28.4	11.44	18.28	9.68	9.88
					OFF 211	12.2	28.3	11.58	11.29	18.69	18.89
78	7	2	184	275.1	ON 216	14.4	28.4	11.61	11.45	18.85	18.25
					OFF 242	38.8	22.6	11.77	11.98	11.38	18.78
72	8	1	48	185.8	ON 215	13.3	19.9	11.68	11.37	18.77	18.17
					OFF 227	19.8	28.5	11.68	11.74	11.14	18.54
72	8	2	27	71.4	ON 254	42.1	26.8	11.84	12.88	11.48	18.88
					OFF 255	45.8	27.7	11.85	12.18	11.58	18.98
72	8	3	28	52.9	ON 255	49.8	29.6	11.85	12.18	11.58	18.98
					OFF 255	51.7	31.5	11.84	12.18	11.58	18.98
74	2	1	48	127.8	ON 255	48.1	28.4	11.85	12.18	11.58	18.98
					OFF 253	54.5	33.1	11.84	12.18	11.58	18.98
78	5	1	21	55.5	ON 254	41.8	24.2	11.84	12.88	11.48	18.88
					OFF 255	44.7	25.4	11.85	12.89	11.49	18.89
79	5	8	21	55.5	ON 249	34.1	21.5	11.81	12.82	11.42	18.82
					OFF 251	37.1	22.3	11.82	12.85	11.45	18.85
81	3	1	22	58.2	ON 218	18.9	18.1	11.57	11.17	18.57	9.97
					OFF 217	14.6	18.2	11.62	11.46	18.86	18.26

PHOTOGRAPHIC SUMMARY

AFT PAN	CAMERA NO	179	8.1758	SLIT	W/21	FILTER	3484	FILM		
OPN NO	FRA		FEET	ET	S-EL	S-DIR	EV	FULL	INT	PRY
PRE-FLT	119		314.8							
1 4 8	14		37.8	ON 389	17.3	34.8	12.12	12.27	11.67	11.87
				OFF 316	19.6	34.6	12.16	12.38	11.78	11.18

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3 5 1	37	97.9	ON 271	6.8	31.6	11.94	11.37	10.77	10.17
			OFF 294	13.3	32.7	12.05	12.02	11.42	10.82
3 5 2	28	52.9	ON 309	17.7	33.7	12.13	12.29	11.69	11.09
			OFF 319	28.8	34.5	12.17	12.42	11.02	11.22
5 2 1	28	52.9	ON 318	19.8	33.8	12.17	12.38	11.78	11.18
			OFF 327	22.9	34.7	12.21	12.49	11.89	11.29
5 2 2	37	97.9	ON 348	30.4	37.5	12.38	12.63	12.03	11.43
			OFF 359	35.2	48.8	12.34	12.68	12.08	11.48
6 2 1	23	68.8	ON 303	15.8	32.5	12.09	12.14	11.54	10.94
			OFF 314	18.7	33.3	12.15	12.34	11.74	11.14
6 2 2	27	71.4	ON 343	20.2	36.3	12.28	12.60	12.00	11.40
			OFF 352	31.9	38.8	12.31	12.63	12.05	11.45
6 2 3	47	124.3	ON 372	43.4	46.1	12.39	12.74	12.14	11.54
			OFF 375	48.3	51.9	12.40	12.75	12.15	11.55
7 5 1	28	52.9	ON 302	14.6	32.2	12.09	12.11	11.51	10.91
			OFF 312	17.8	32.9	12.14	12.30	11.70	11.10
7 5 2	85	224.8	ON 332	23.9	34.6	12.23	12.51	11.91	11.31
			OFF 360	35.3	39.6	12.34	12.68	12.08	11.48
8 6 1	73	193.1	ON 274	6.5	30.6	11.95	11.33	10.73	10.13
			OFF 315	18.7	32.9	12.15	12.34	11.74	11.14
9 6 0	9	23.8	ON 159	-49.1	51.8	11.16	0.00	0.00	0.00
			OFF 160	-47.2	49.1	11.17	0.00	0.00	0.00
9 3 1	56	148.1	ON 299	13.8	31.6	12.08	12.06	11.46	10.86
			OFF 327	22.5	33.7	12.21	12.48	11.88	11.28
14 4 1	16	42.3	ON 352	31.1	35.6	12.31	12.64	12.04	11.44
			OFF 357	33.3	36.7	12.33	12.66	12.06	11.46
14 4 2	17	45.0	ON 369	40.2	40.9	12.38	12.72	12.12	11.52
			OFF 371	42.2	42.5	12.39	12.73	12.13	11.53
14 4 3	44	116.4	ON 305	57.1	112.9	12.10	12.75	12.15	11.55
			OFF 279	52.9	124.1	11.98	12.75	12.15	11.55
16 4 0	16	42.3	ON 363	36.3	37.8	12.36	12.69	12.09	11.49
			OFF 366	38.4	39.0	12.37	12.71	12.11	11.51
18 9 1	40	105.0	ON 279	6.6	28.7	11.90	11.34	10.74	10.14
			OFF 303	13.6	29.8	12.09	12.05	11.45	10.85
19 9 1	37	97.9	ON 204	7.8	28.7	12.00	11.49	10.89	10.29
			OFF 305	14.2	29.7	12.10	12.09	11.49	10.89
21 8 1	112	296.2	ON 201	6.7	28.1	11.99	11.36	10.76	10.16
			OFF 337	24.9	31.8	12.25	12.54	11.94	11.34
22 3 1	28	74.1	ON 316	17.1	29.6	12.15	12.26	11.66	11.06
			OFF 329	21.6	30.6	12.21	12.45	11.85	11.25
22 3 2	28	52.9	ON 353	30.6	33.5	12.31	12.63	12.03	11.43
			OFF 358	33.4	34.7	12.34	12.66	12.06	11.46
22 3 3	86	227.5	ON 365	37.1	36.7	12.36	12.70	12.10	11.50
			OFF 375	47.5	44.9	12.40	12.75	12.15	11.55
24 1 1	116	306.0	ON 202	6.7	27.5	11.99	11.35	10.75	10.15
			OFF 340	25.4	31.3	12.26	12.55	11.95	11.35
26 2 0	5	13.2	ON 150	-60.0	72.0	11.16	0.00	0.00	0.00
			OFF 150	-60.3	69.0	11.16	0.00	0.00	0.00
26 2 1	53	140.2	ON 375	47.1	43.1	12.40	12.75	12.15	11.55
			OFF 374	52.9	50.4	12.40	12.75	12.15	11.55
27 2 0	5	13.2	ON 150	-61.0	72.5	11.16	0.00	0.00	0.00

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				OFF 158	-68.4	69.7	11.16	8.88	8.88	8.88	
27	2	1	46	121.7	ON 375	43.3	39.4	12.48	12.74	12.14	11.54
					OFF 376	48.8	44.5	12.41	12.75	12.15	11.55
31	2	1	28	52.9	ON 377	37.4	34.4	12.41	12.78	12.18	11.58
					OFF 388	48.1	36.8	12.42	12.72	12.12	11.52
34	9	1	25	66.1	ON 293	7.9	25.8	12.85	11.51	18.91	18.31
					OFF 388	12.3	26.4	12.12	11.94	11.34	18.74
36	9	1	38	188.5	ON 294	7.9	25.4	12.85	11.58	18.98	18.38
					OFF 317	14.4	26.3	12.16	12.18	11.58	18.98
36	9	2	26	68.8	ON 356	27.2	29.1	12.33	12.58	11.98	11.38
					OFF 365	38.9	38.4	12.36	12.64	12.84	11.44
36	9	3	38	188.5	ON 294	68.5	118.1	12.85	12.75	12.15	11.55
					OFF 269	56.3	128.7	11.92	12.75	12.15	11.55
37	9	1	135	357.1	ON 365	38.9	38.1	12.36	12.64	12.84	11.44
					OFF 387	48.2	48.4	12.45	12.75	12.15	11.55
38	3	1	29	76.7	ON 329	17.4	26.4	12.22	12.28	11.68	11.88
					OFF 343	22.8	27.3	12.27	12.46	11.86	11.26
38	3	2	58	132.3	ON 366	38.4	29.7	12.37	12.63	12.83	11.43
					OFF 379	37.3	32.6	12.42	12.78	12.18	11.58
38	3	3	78	286.3	ON 387	44.6	37.8	12.45	12.74	12.14	11.54
					OFF 387	53.6	46.2	12.45	12.75	12.15	11.55
38	3	4	23	68.8	ON 376	59.9	58.6	12.41	12.75	12.15	11.55
					OFF 378	61.6	64.4	12.38	12.75	12.15	11.55
38	3	5	16	42.3	ON 365	62.6	68.6	12.36	12.75	12.15	11.55
					OFF 368	63.5	73.7	12.34	12.75	12.15	11.55
39	4	1	88	211.6	ON 338	17.4	26.2	12.22	12.28	11.68	11.88
					OFF 363	29.2	29.1	12.35	12.61	12.81	11.41
48	5	1	78	286.3	ON 389	11.2	25.8	12.12	11.85	11.25	18.65
					OFF 348	23.5	27.3	12.29	12.58	11.98	11.38
47	5	1	16	42.3	ON 376	35.1	29.3	12.41	12.68	12.88	11.48
					OFF 388	37.4	38.3	12.42	12.78	12.18	11.58
52	9	1	39	183.2	ON 325	14.6	23.1	12.28	12.11	11.51	18.91
					OFF 344	28.9	24.2	12.28	12.42	11.82	11.22
52	9	2	48	185.8	ON 365	28.7	26.8	12.36	12.61	12.81	11.41
					OFF 376	34.5	27.8	12.48	12.67	12.87	11.47
53	4	1	28	52.9	ON 329	15.6	23.1	12.21	12.18	11.58	18.98
					OFF 339	18.9	23.6	12.26	12.35	11.75	11.15
53	4	2	169	447.8	ON 371	31.5	26.6	12.39	12.64	12.84	11.44
					OFF 387	53.7	48.3	12.45	12.75	12.15	11.55
54	5	1	73	193.1	ON 323	13.5	22.6	12.19	12.84	11.44	18.84
					OFF 356	24.9	24.6	12.33	12.54	11.94	11.34
55	7	1	16	42.3	ON 288	1.1	28.9	11.98	18.43	9.83	9.23
					OFF 291	4.1	21.3	12.84	18.97	18.37	9.77
55	7	2	79	289.8	ON 381	6.8	21.6	12.89	11.36	18.76	18.16
					OFF 343	19.9	23.3	12.27	12.39	11.79	11.19
55	7	3	54	142.8	ON 368	29.8	25.6	12.38	12.62	12.82	11.42
					OFF 381	37.4	28.2	12.43	12.78	12.18	11.58
63	7	1	16	42.3	ON 383	37.8	26.3	12.43	12.78	12.18	11.58
					OFF 385	48.1	27.3	12.44	12.72	12.12	11.52
68	4	1	111	293.6	ON 352	21.5	28.9	12.31	12.44	11.84	11.24
					OFF 383	38.8	25.1	12.43	12.78	12.18	11.58

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69 4 1	27	71.4	ON 374	31.8	22.7	12.48	12.64	12.84	11.44
			OFF 388	35.1	23.8	12.42	12.68	12.88	11.48
69 4 2	182	269.8	ON 387	41.6	26.3	12.45	12.73	12.13	11.53
			OFF 386	55.2	35.5	12.44	12.75	12.15	11.55
78 7 1	47	124.3	ON 295	2.8	18.3	12.86	18.76	18.16	9.56
			OFF 323	11.3	19.1	12.19	11.86	11.26	18.66
78 7 2	181	267.1	ON 331	13.5	19.4	12.22	12.84	11.44	18.84
			OFF 378	29.2	22.8	12.38	12.61	12.81	11.41
71 5 1	67	177.2	ON 389	6.5	18.4	12.12	11.33	18.73	18.13
			OFF 343	17.8	19.7	12.28	12.38	11.78	11.18
72 8 1	39	183.2	ON 328	12.3	18.8	12.21	11.95	11.35	18.75
			OFF 347	18.9	19.7	12.29	12.35	11.75	11.15
72 8 2	26	68.8	ON 387	41.3	25.4	12.45	12.73	12.13	11.53
			OFF 389	45.8	27.1	12.45	12.74	12.14	11.54
72 8 3	28	52.9	ON 389	48.3	28.9	12.46	12.75	12.15	11.55
			OFF 388	51.8	38.8	12.45	12.75	12.15	11.55
74 2 1	47	124.3	ON 389	47.4	27.8	12.46	12.75	12.15	11.55
			OFF 387	53.7	32.3	12.45	12.75	12.15	11.55
78 5 1	28	52.9	ON 387	48.9	23.6	12.45	12.72	12.12	11.52
			OFF 389	43.9	24.8	12.45	12.74	12.14	11.54
79 5 8	28	52.9	ON 379	33.3	28.9	12.42	12.66	12.86	11.46
			OFF 383	36.3	21.8	12.43	12.69	12.89	11.49
81 3 1	21	55.5	ON 321	18.2	16.8	12.18	11.75	11.15	18.55
			OFF 332	13.6	17.2	12.23	12.84	11.44	18.84

STELLAR-INDEX SUMMARY

CAMERA DATA	ET	FILM FILTER	GRID	ASSEMBLY NO
STELLAR	2.8	4481 NONE	94	D79
INDEX	1/500	4488 W/21	91	

PERFORMANCE SUMMARY

OPN NO	FR	STEL FEET	INDX FEET	H	M	S	Q	ON LAT	ON LONG	Q	OFF LAT	OFF LONG	SEC DUR
PRE-FLT	17	1.68	3.37										
1 4 8	2	8.28	8.48	23	1	7	2	54	154W	2	52	152W	42
3 5 1	5	8.58	8.99	1	59	21	2	65	147E	2	59	158E	113
3 5 2	3	8.38	8.59	2	2	32	2	54	168E	2	51	163E	55
5 2 1	3	8.38	8.59	5	4	25	2	52	116E	2	48	118E	55
5 2 2	6	8.59	1.19	5	7	35	2	48	122E	2	34	124E	98
6 2 1	3	8.38	8.59	6	33	48	2	57	89E	2	53	92E	64
6 2 2	4	8.48	8.79	6	37	34	2	42	98E	2	38	188E	68
6 2 3	7	8.69	1.39	6	42	25	2	23	185E	2	16	186E	189
7 5 1	3	8.38	8.59	8	4	11	2	57	66E	2	54	69E	56
7 5 2	12	1.19	2.38	8	6	54	2	47	73E	2	34	79E	288
8 6 1	11	1.89	2.18	9	32	38	2	65	32E	2	53	46E	211
9 6 8	2	8.28	8.48	18	45	44	1	38	117W	1	41	115W	48
9 3 1	8	8.79	1.58	11	5	12	2	58	19E	2	49	26E	152
14 4 1	2	8.28	8.48	18	43	23	2	48	82W	2	37	81W	41
14 4 2	3	8.38	8.59	18	46	11	2	29	79W	2	26	78W	48
14 4 3	6	8.59	1.19	18	59	49	3	24	66W	3	33	64W	138
16 4 8	2	8.28	8.48	21	46	11	2	34	126W	2	31	125W	39

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18	9	1	6	0.59	1.19	8	38	51	2	65	164E	2	59	173E	118
19	9	1	6	0.59	1.19	2	9	48	2	64	143E	2	58	151E	188
21	8	1	16	1.58	3.17	5	18	46	2	65	95E	2	47	113E	306
22	3	1	4	0.48	0.79	6	44	17	2	55	85E	2	58	88E	76
22	3	2	3	0.38	0.59	6	48	9	2	41	93E	2	37	95E	49
22	3	3	12	1.19	2.38	6	58	4	2	33	96E	2	28	108E	199
24	1	1	17	1.68	3.37	9	42	37	2	65	27E	2	46	45E	315
26	2	0	1	0.18	0.28	12	21	44	1	21	150W	1	22	150W	28
26	2	1	8	0.79	1.58	12	55	36	2	21	8E	2	13	18E	121
27	2	0	1	0.18	0.28	13	52	22	1	21	173W	1	22	173W	27
27	2	1	6	0.59	1.19	14	24	57	2	26	15W	2	19	13W	188
31	2	1	3	0.38	0.59	28	25	32	2	34	109W	2	38	108W	47
34	9	1	4	0.48	0.79	8	49	5	2	64	168E	2	68	166E	72
36	9	1	6	0.59	1.19	3	58	17	2	64	114E	2	58	122E	187
36	9	2	4	0.48	0.79	3	55	34	2	45	131E	2	41	133E	63
36	9	3	5	0.58	0.99	4	13	42	3	25	158E	3	33	152E	115
37	9	1	20	1.98	3.96	5	27	13	2	41	118E	2	21	117E	386
38	3	1	4	0.48	0.79	6	54	5	2	55	79E	2	51	83E	75
38	3	2	7	0.69	1.39	6	57	48	2	42	87E	2	34	98E	117
38	3	3	11	1.89	2.18	7	1	46	2	26	93E	2	14	95E	174
38	3	4	4	0.48	0.79	7	7	9	2	4	98E	2	1	98E	54
38	3	5	2	0.28	0.48	7	8	38	3	1	99E	3	3	99E	48
39	4	1	12	1.19	2.38	8	24	48	2	55	56E	2	43	64E	195
48	5	1	11	1.89	2.18	9	53	35	2	61	27E	2	49	38E	282
47	5	1	3	0.38	0.59	28	34	13	2	37	116W	2	35	115W	39
52	9	1	5	0.58	0.99	4	1	34	2	58	117E	2	52	122E	181
52	9	2	6	0.59	1.19	4	5	28	2	44	126E	2	38	129E	94
53	4	1	3	0.38	0.59	5	32	25	2	57	95E	2	54	97E	52
53	4	2	25	2.47	4.95	5	36	41	2	41	185E	2	16	112E	382
54	5	1	18	0.99	1.98	7	2	27	2	59	78E	2	48	79E	182
55	7	1	3	0.38	0.59	8	29	44	2	69	28E	2	67	34E	48
55	7	2	11	1.89	2.18	8	31	15	2	65	39E	2	53	52E	288
55	7	3	8	0.79	1.58	8	37	21	2	43	58E	2	35	61E	124
63	7	1	2	0.28	0.48	28	44	8	2	35	128W	2	32	119W	38
68	4	1	17	1.68	3.37	4	12	28	2	52	117E	2	35	125E	261
69	4	1	4	0.48	0.79	5	45	38	2	42	99E	2	38	181E	64
69	4	2	14	1.39	2.77	5	48	28	2	31	183E	2	16	187E	229
78	7	1	7	0.69	1.39	7	8	45	2	68	49E	2	61	62E	131
78	7	2	15	1.48	2.97	7	11	38	2	59	64E	2	44	75E	245
72	8	1	6	0.59	1.19	18	12	19	2	68	17E	2	54	23E	182
72	8	2	4	0.48	0.79	18	19	53	2	32	34E	2	28	35E	68
72	8	3	3	0.38	0.59	18	21	47	2	24	36E	2	21	37E	45
74	2	1	7	0.69	1.39	13	22	36	2	25	9W	2	18	7W	187
78	5	1	3	0.38	0.59	19	23	2	2	32	182W	2	29	181W	47
79	5	8	3	0.38	0.59	28	51	34	2	48	128W	2	37	126W	47
81	3	1	3	0.38	0.59	23	46	39	2	62	169E	2	59	173E	57

NOTE - T/M DATA INDICATE ALL SYSTEMS OPERATING NORMALLY

NOTE - T/M DATA INDICATE THE INDEX CAMERA WAS OUT OF FILM AT THE BEGINNING OF OPERATION 879-85-8

~~SECRET~~
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NOTE - OPERATION #81-#3-1 ACTUALLY CONSISTED OF FIVE MORE CYCLES THAN SHOWN IN THIS REPORT. THE LAST FIVE CYCLES ARE CONTAINED IN THE B MISSION RECOVERY CAPSULE

NOTE - OPERATIONS #79-#5-# AND #81-#3-1 DID NOT COVER THE PLANNED STEREO LATITUDES DUE TO AN H-TIMER BIAS FOR RECOVERY

A. 1829-1
B. DRY
C. PERFORMANCE ESTIMATE PART TWO

RATE ESTIMATE

FWD PAN CAMERA NUMBER 178

OPN NO	FR	R	A	TUR/ DUR	INST CPS	INST ANG VEL	SCAN R/SEC	RATE I/SEC	PCT CALIB	RATE REQD
1 4 8	15	8	3 ON	1389	0.3728	0.03139	2.337	56.18	0.9	-1.7
			OFF	42	0.3888	0.03213	2.393	57.42	0.9	-1.5
3 5 1	38	8	3 ON	1128	0.3258	0.02749	2.847	49.13	0.9	-5.7
			OFF	113	0.3532	0.02988	2.219	53.26	0.9	-3.6
3 5 2	21	8	3 ON	1311	0.3726	0.03144	2.341	56.19	0.9	-2.3
			OFF	55	0.3844	0.03243	2.415	57.96	0.9	-1.8
5 2 1	21	8	3 ON	1358	0.3831	0.03233	2.487	57.77	0.9	-1.5
			OFF	55	0.3942	0.03326	2.477	59.45	0.9	-1.3
5 2 2	38	8	3 ON	1548	0.4282	0.03546	2.648	63.37	0.9	-8.5
			OFF	98	0.4331	0.03654	2.721	65.31	0.9	-8.5
6 2 1	24	8	3 ON	1276	0.3644	0.03875	2.289	54.95	0.9	-2.5
			OFF	64	0.3786	0.03194	2.379	57.89	0.9	-1.9
6 2 2	28	8	3 ON	1511	0.4139	0.03492	2.681	62.41	0.9	-8.6
			OFF	68	0.4247	0.03583	2.668	64.84	0.9	-8.6
6 2 3	49	8	3 ON	1882	0.4489	0.03788	2.821	67.69	0.9	-8.3
			OFF	189	0.4522	0.03816	2.841	68.19	0.9	-8.2
7 5 1	28	8	3 ON	1273	0.3636	0.03868	2.284	54.83	0.9	-2.5
			OFF	56	0.3768	0.03172	2.362	56.69	0.9	-2.8
7 5 2	87	8	3 ON	1436	0.3998	0.03374	2.512	68.29	0.9	-8.9
			OFF	288	0.4348	0.03662	2.727	65.44	0.9	-8.5
8 6 1	75	8	3 ON	1134	0.3291	0.02777	2.868	49.63	0.9	-5.4
			OFF	211	0.3794	0.03282	2.384	57.22	0.9	-2.8
9 6 8	18	8	3 ON	91	0.1885	0.01591	1.185	28.43	0.9	-12.7
			OFF	48	0.1899	0.01683	1.193	28.64	0.9	-13.8
9 3 1	57	8	3 ON	1259	0.3682	0.03848	2.263	54.32	0.9	-3.1
			OFF	152	0.3948	0.03324	2.475	59.41	0.9	-1.6
14 4 1	17	8	3 ON	1569	0.4244	0.03581	2.666	64.88	1.1	-8.6
			OFF	41	0.4388	0.03629	2.782	64.85	1.1	-8.6
14 4 2	17	8	3 ON	1737	0.4451	0.03756	2.797	67.12	1.1	-8.4
			OFF	48	0.4479	0.03788	2.815	67.55	1.1	-8.4
14 4 3	45	8	3 ON	2555	0.3668	0.03893	2.385	55.32	1.1	1.9
			OFF	138	0.3356	0.02832	2.189	58.61	1.1	1.1
16 4 8	16	8	3 ON	1667	0.4388	0.03695	2.752	66.84	1.1	-8.3
			OFF	39	0.4418	0.03728	2.776	66.63	1.1	-8.4
18 9 1	41	8	3 ON	1156	0.3355	0.02831	2.188	58.59	1.1	-4.9
			OFF	118	0.3639	0.03878	2.286	54.87	1.1	-2.9
19 9 1	38	8	3 ON	1178	0.3489	0.02876	2.142	51.48	1.1	-4.5
			OFF	188	0.3665	0.03892	2.383	55.26	1.1	-2.7
21 8 1	114	8	3 ON	1164	0.3373	0.02846	2.128	58.87	1.1	-4.9
			OFF	386	0.4865	0.03438	2.554	61.38	1.1	-1.8
22 3 1	29	8	3 ON	1348	0.3798	0.03284	2.386	57.27	1.1	-1.9
			OFF	76	0.3957	0.03339	2.486	59.67	1.1	-1.4
22 3 2	28	8	3 ON	1572	0.4249	0.03585	2.678	64.87	1.1	-8.5

					OFF	49	0.4316	0.03642	2.712	65.00	1.1	-0.5
22	3	3	88	8	3 ON	1687	0.4402	0.03714	2.766	66.38	1.1	-0.3
					OFF	199	0.4527	0.03820	2.844	68.27	1.1	-0.1
24	1	1	119	8	3 ON	1169	0.3387	0.02850	2.128	51.00	1.1	-4.8
					OFF	315	0.4093	0.03453	2.571	61.71	1.1	-1.0
26	2	0	6	8	3 ON	0	0.1877	0.01584	1.180	28.31	1.1	-5.9
					OFF	28	0.1877	0.01584	1.180	28.31	1.1	-6.7
26	2	1	54	8	3 ON	1879	0.4478	0.03779	2.814	67.53	0.0	-1.2
					OFF	121	0.4468	0.03778	2.807	67.37	0.0	-0.8
27	2	0	5	8	3 ON	0	0.1857	0.01567	1.167	28.01	0.0	-7.2
					OFF	27	0.1857	0.01567	1.167	28.01	0.0	-8.0
27	2	1	47	8	3 ON	1806	0.4451	0.03756	2.797	67.12	0.0	-1.3
					OFF	180	0.4482	0.03782	2.816	67.59	0.0	-1.1
31	2	1	21	8	2 ON	1700	0.4493	0.03791	2.823	67.76	0.0	1.5
					OFF	47	0.4539	0.03838	2.852	68.44	0.0	1.6
34	9	1	26	8	2 ON	1213	0.3488	0.02943	2.192	52.68	0.0	-4.3
					OFF	72	0.3669	0.03096	2.385	55.33	0.0	-2.8
36	9	1	39	8	2 ON	1217	0.3500	0.02953	2.199	52.78	0.0	-4.1
					OFF	187	0.3771	0.03182	2.370	56.87	0.0	-1.9
36	9	2	27	8	2 ON	1534	0.4245	0.03582	2.667	64.01	0.0	0.9
					OFF	63	0.4349	0.03670	2.733	65.58	0.0	1.1
36	9	3	38	8	2 ON	2622	0.3501	0.02954	2.200	52.79	0.0	0.9
					OFF	115	0.3194	0.02695	2.007	48.16	0.0	-1.1
37	9	1	138	8	2 ON	1598	0.4355	0.03675	2.736	65.67	0.0	1.2
					OFF	386	0.4618	0.03897	2.982	69.64	0.0	2.0
38	3	1	29	8	2 ON	1376	0.3932	0.03318	2.471	59.30	0.7	-0.2
					OFF	75	0.4890	0.03458	2.575	61.79	0.7	0.6
38	3	2	51	8	2 ON	1592	0.4373	0.03690	2.748	65.94	0.7	1.0
					OFF	117	0.4530	0.03822	2.846	68.31	0.7	2.2
38	3	3	79	8	2 ON	1837	0.4631	0.03900	2.910	69.04	0.7	2.6
					OFF	174	0.4620	0.03905	2.900	69.79	0.7	3.0
38	3	4	23	8	2 ON	2160	0.4490	0.03795	2.826	67.03	0.7	3.4
					OFF	54	0.4429	0.03737	2.783	66.79	0.7	3.6
38	3	5	17	8	2 ON	2250	0.4369	0.03686	2.745	65.00	0.7	3.5
					OFF	40	0.4306	0.03633	2.705	64.93	0.7	3.7
39	4	1	81	8	2 ON	1370	0.3936	0.03321	2.473	59.36	0.7	-0.2
					OFF	195	0.4335	0.03650	2.724	65.30	0.7	1.6
40	5	1	00	8	2 ON	1279	0.3607	0.03111	2.316	55.60	0.7	-2.1
					OFF	202	0.4159	0.03509	2.613	62.71	0.7	0.9
47	5	1	17	8	2 ON	1600	0.4500	0.03797	2.827	67.05	0.7	2.1
					OFF	39	0.4541	0.03832	2.853	68.40	0.7	2.2
52	9	1	40	8	2 ON	1357	0.3806	0.03279	2.442	58.60	0.7	-0.0
					OFF	101	0.4112	0.03470	2.504	62.01	0.7	0.5
52	9	2	42	8	2 ON	1503	0.4359	0.03670	2.739	65.74	0.7	1.7
					OFF	94	0.4493	0.03791	2.823	67.75	0.7	2.1
53	4	1	20	8	2 ON	1376	0.3931	0.03317	2.470	59.20	0.7	-0.5
					OFF	52	0.4045	0.03413	2.542	61.00	0.7	0.1
53	4	2	173	8	2 ON	1632	0.4435	0.03742	2.706	66.07	0.7	2.0
					OFF	302	0.4627	0.03904	2.907	69.70	0.7	3.0
54	5	1	74	8	2 ON	1344	0.3864	0.03261	2.420	58.27	0.9	-0.0
					OFF	102	0.4262	0.03596	2.670	64.26	0.9	1.4

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55	7	1	16	8	2	ON	1149	8.3344	8.82821	2.181	58.42	8.9	-5.9
						OFF	48	8.3468	8.82927	2.179	52.38	8.9	-4.6
55	7	2	88	8	2	ON	1239	8.3592	8.83831	2.257	54.16	8.9	-3.2
						OFF	288	8.4188	8.83459	2.576	61.82	8.9	8.5
55	7	3	55	8	2	ON	1686	8.4486	8.83718	2.769	66.44	8.9	2.1
						OFF	124	8.4563	8.83858	2.867	68.81	8.9	2.5
63	7	1	17	8	2	ON	1747	8.4582	8.83866	2.879	69.89	8.9	2.7
						OFF	38	8.4611	8.83898	2.897	69.52	8.9	2.8
68	4	1	113	8	2	ON	1499	8.4214	8.83556	2.648	63.54	8.9	1.3
						OFF	261	8.4598	8.83873	2.884	69.22	8.9	2.8
69	4	1	28	8	2	ON	1651	8.4472	8.83773	2.818	67.44	8.9	2.4
						OFF	64	8.4547	8.83837	2.857	68.57	8.9	2.6
69	4	2	184	8	2	ON	1821	8.4634	8.83918	2.912	69.88	8.9	3.8
						OFF	229	8.4618	8.83896	2.982	69.64	8.9	3.5
78	7	1	49	8	2	ON	1215	8.3525	8.82974	2.215	53.15	8.9	-4.1
						OFF	131	8.3859	8.83257	2.425	58.28	8.9	-1.1
78	7	2	184	8	2	ON	1388	8.3951	8.83334	2.482	59.58	8.9	-8.3
						OFF	245	8.4438	8.83738	2.783	66.88	8.9	2.2
72	8	1	48	8	2	ON	1368	8.3921	8.83389	2.464	59.13	8.9	-8.5
						OFF	182	8.4146	8.83499	2.685	62.52	8.9	8.9
72	8	2	27	8	2	ON	1821	8.4635	8.83911	2.912	69.89	8.9	3.8
						OFF	68	8.4656	8.83929	2.925	78.21	8.9	3.1
72	8	3	28	8	2	ON	1935	8.4668	8.83932	2.928	78.27	8.9	3.3
						OFF	45	8.4652	8.83925	2.923	78.14	8.9	3.4
74	2	1	48	8	2	ON	1923	8.4668	8.83932	2.928	78.28	8.9	3.3
						OFF	187	8.4638	8.83986	2.989	69.81	8.9	3.5
78	5	1	21	8	2	ON	1826	8.4637	8.83913	2.914	69.92	8.9	3.1
						OFF	47	8.4654	8.83927	2.924	78.18	8.9	3.2
79	5	8	21	8	2	ON	1786	8.4541	8.83832	2.853	68.48	8.9	2.7
						OFF	47	8.4585	8.83869	2.881	69.14	8.9	2.9
81	3	1	22	8	2	ON	1333	8.3836	8.83237	2.418	57.85	8.9	-2.1
						OFF	57	8.3968	8.83348	2.493	59.84	8.9	-1.1

RATE ESTIMATE
AFT PAN CAMERA NUMBER 179

OPN NO	FR	R	A	TUR/	INST	INST	SCAN	RATE	PCT	RATE			
				DUR	CPS	ANG	VEL	R/SEC	I/SEC	CALIB	REQD		
1	4	8	14	8	3	ON	1389	8.3591	8.83838	2.256	54.15	-2.8	-5.4
						OFF	42	8.3675	8.83181	2.389	55.41	-2.8	-5.2
3	5	1	37	8	3	ON	1128	8.3152	8.82668	1.988	47.53	-2.8	-9.3
						OFF	113	8.3413	8.82879	2.144	51.46	-2.8	-7.2
3	5	2	28	8	3	ON	1311	8.3597	8.83835	2.268	54.24	-2.8	-5.9
						OFF	55	8.3789	8.83129	2.338	55.93	-2.8	-5.6
5	2	1	28	8	3	ON	1358	8.3697	8.83119	2.323	55.75	-2.8	-5.2
						OFF	55	8.3882	8.83288	2.389	57.34	-2.8	-5.8
5	2	2	37	8	3	ON	1548	8.4858	8.83417	2.544	61.87	-2.8	-4.3
						OFF	98	8.4172	8.83528	2.621	62.91	-2.8	-4.3
6	2	1	23	8	3	ON	1276	8.3519	8.82969	2.211	53.86	-2.8	-6.2
						OFF	64	8.3654	8.83883	2.296	55.18	-2.8	-5.6
6	2	2	27	8	3	ON	1511	8.3989	8.83366	2.587	68.16	-2.8	-4.4

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						OFF	68	0.4892	0.03453	2.571	61.71	-2.8	-4.4
6	2	3	47	8	3	ON	1882	0.4322	0.03647	2.716	65.18	-2.8	-4.2
						OFF	189	0.4354	0.03673	2.735	65.65	-2.8	-4.8
7	5	1	28	8	3	ON	1273	0.3511	0.02962	2.286	52.94	-2.8	-6.2
						OFF	56	0.3629	0.03062	2.288	54.72	-2.8	-5.7
7	5	2	85	8	3	ON	1436	0.3856	0.03253	2.423	58.14	-2.8	-4.7
						OFF	288	0.4188	0.03527	2.627	63.84	-2.8	-4.3
8	6	1	73	8	3	ON	1134	0.3184	0.02686	2.888	48.81	-2.8	-8.9
						OFF	211	0.3662	0.03898	2.381	55.22	-2.8	-5.7
9	6	8	9	8	3	ON	91	0.1847	0.01558	1.168	27.85	-2.8	-15.1
						OFF	48	0.1868	0.01578	1.169	28.85	-2.8	-16.1
9	3	1	56	8	3	ON	1259	0.3479	0.02936	2.186	52.47	-2.8	-6.7
						OFF	152	0.3888	0.03286	2.388	57.38	-2.8	-5.3
14	4	1	16	8	3	ON	1569	0.4892	0.03453	2.571	61.71	-2.6	-4.3
						OFF	41	0.4146	0.03498	2.685	62.52	-2.6	-4.4
14	4	2	17	8	3	ON	1737	0.4289	0.03619	2.695	64.68	-2.6	-4.2
						OFF	48	0.4316	0.03642	2.712	65.89	-2.6	-4.2
14	4	3	44	8	3	ON	2555	0.3545	0.02991	2.227	53.45	-2.6	-1.5
						OFF	138	0.3247	0.02748	2.848	48.97	-2.6	-2.2
16	4	8	16	8	3	ON	1667	0.4221	0.03562	2.652	63.65	-2.6	-4.1
						OFF	39	0.4258	0.03593	2.675	64.21	-2.6	-4.1
18	9	1	48	8	3	ON	1156	0.3246	0.02739	2.848	48.95	-2.6	-8.4
						OFF	118	0.3516	0.02967	2.289	53.83	-2.6	-6.4
19	9	1	37	8	3	ON	1178	0.3297	0.02782	2.872	49.72	-2.6	-8.8
						OFF	188	0.3541	0.02988	2.225	53.48	-2.6	-6.3
21	8	1	112	8	3	ON	1164	0.3264	0.02754	2.851	49.22	-2.6	-8.4
						OFF	386	0.3922	0.03318	2.464	59.15	-2.6	-4.7
22	3	1	28	8	3	ON	1348	0.3668	0.03895	2.384	55.31	-2.6	-5.5
						OFF	76	0.3819	0.03223	2.488	57.59	-2.6	-5.8
22	3	2	28	8	3	ON	1572	0.4897	0.03457	2.574	61.78	-2.6	-4.2
						OFF	49	0.4161	0.03511	2.614	62.74	-2.6	-4.2
22	3	3	86	8	3	ON	1687	0.4242	0.03588	2.666	63.97	-2.6	-4.1
						OFF	199	0.4362	0.03688	2.748	65.77	-2.6	-3.9
24	1	1	116	8	3	ON	1169	0.3277	0.02765	2.859	49.42	-2.6	-8.4
						OFF	315	0.3948	0.03331	2.481	59.54	-2.6	-4.6
26	2	8	5	8	3	ON	8	0.1841	0.01553	1.157	27.76	-2.6	-8.8
						OFF	28	0.1841	0.01553	1.157	27.76	-2.6	-8.8
26	2	1	53	8	3	ON	1879	0.4362	0.03688	2.741	65.78	-2.5	-3.9
						OFF	121	0.4352	0.03672	2.734	65.62	-2.5	-3.5
27	2	8	5	8	3	ON	8	0.1841	0.01554	1.157	27.76	-2.5	-8.2
						OFF	27	0.1841	0.01554	1.157	27.76	-2.5	-8.9
27	2	1	46	8	3	ON	1886	0.4336	0.03659	2.724	65.39	-2.5	-4.8
						OFF	188	0.4365	0.03683	2.743	65.83	-2.5	-3.8
31	2	1	28	8	2	ON	1788	0.4377	0.03693	2.758	66.81	-2.5	-1.1
						OFF	47	0.4421	0.03738	2.778	66.66	-2.5	-1.1
34	9	1	25	8	2	ON	1213	0.3418	0.02877	2.142	51.42	-2.5	-6.7
						OFF	72	0.3584	0.03824	2.252	54.83	-2.5	-5.2
36	9	1	38	8	2	ON	1217	0.3421	0.02887	2.158	51.59	-2.5	-6.5
						OFF	187	0.3682	0.03187	2.314	55.53	-2.5	-4.4
36	9	2	26	8	2	ON	1534	0.4138	0.03491	2.688	62.48	-2.5	-1.7
						OFF	63	0.4238	0.03576	2.663	63.91	-2.5	-1.5

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36	9	3	38	8	2	ON	2622	8.3422	8.82888	2.158	51.68	-2.5	-1.3
						OFF	115	8.5126	8.82638	1.964	47.14	-2.5	-3.2
37	9	1	135	8	2	ON	1598	8.4244	8.83581	2.667	64.88	-2.5	-1.4
						OFF	386	8.4497	8.83795	2.826	67.82	-2.5	-8.6
38	3	1	29	8	2	ON	1376	8.3826	8.83229	2.484	57.78	-2.2	-3.8
						OFF	75	8.3985	8.83362	2.584	68.89	-2.2	-2.2
38	3	2	58	8	2	ON	1592	8.4249	8.83585	2.678	64.87	-2.2	-1.8
						OFF	117	8.4399	8.83712	2.764	66.34	-2.2	-8.7
38	3	3	78	8	2	ON	1837	8.4497	8.83795	2.826	67.81	-2.2	-8.4
						OFF	174	8.4494	8.83792	2.824	67.77	-2.2	8.1
38	3	4	23	8	2	ON	2168	8.4369	8.83687	2.745	65.88	-2.2	8.5
						OFF	54	8.4383	8.83631	2.784	64.89	-2.2	8.8
38	3	5	16	8	2	ON	2258	8.4245	8.83582	2.667	64.82	-2.2	8.7
						OFF	48	8.4185	8.83531	2.629	63.18	-2.2	8.9
39	4	1	88	8	2	ON	1378	8.3838	8.83232	2.487	57.76	-2.2	-3.8
						OFF	195	8.4213	8.83555	2.647	63.53	-2.2	-1.2
48	5	1	78	8	2	ON	1279	8.3591	8.83838	2.256	54.15	-2.2	-4.8
						OFF	282	8.4844	8.83412	2.541	68.98	-2.2	-2.8
47	5	1	16	8	2	ON	1688	8.4371	8.83688	2.746	65.91	-2.2	-8.8
						OFF	39	8.4418	8.83721	2.771	66.51	-2.2	-8.7
52	9	1	39	8	2	ON	1357	8.3782	8.83191	2.376	57.83	-2.2	-3.6
						OFF	181	8.3999	8.83374	2.513	68.38	-2.2	-2.4
52	9	2	48	8	2	ON	1583	8.4236	8.83574	2.662	63.88	-2.2	-1.2
						OFF	94	8.4364	8.83682	2.742	65.81	-2.2	-8.8
53	4	1	28	8	2	ON	1376	8.3825	8.83228	2.483	57.68	-2.2	-3.3
						OFF	52	8.3935	8.83328	2.472	59.34	-2.2	-2.7
53	4	2	169	8	2	ON	1632	8.4388	8.83635	2.787	64.97	-2.2	-8.9
						OFF	382	8.4493	8.83791	2.823	67.75	-2.2	8.2
54	5	1	73	8	2	ON	1344	8.3759	8.83171	2.362	56.68	-2.8	-3.7
						OFF	182	8.4148	8.83493	2.681	62.43	-2.8	-1.5
55	7	1	16	8	2	ON	1149	8.3268	8.82758	2.848	49.15	-2.8	-8.7
						OFF	48	8.3379	8.82851	2.123	58.96	-2.8	-7.4
55	7	2	79	8	2	ON	1239	8.3498	8.82951	2.198	52.74	-2.8	-6.8
						OFF	288	8.3984	8.83362	2.583	68.88	-2.8	-2.3
55	7	3	54	8	2	ON	1686	8.4278	8.83618	2.688	64.52	-2.8	-8.9
						OFF	124	8.4429	8.83737	2.783	66.78	-2.8	-8.4
63	7	1	16	8	2	ON	1747	8.4447	8.83752	2.794	67.86	-2.8	-8.3
						OFF	38	8.4474	8.83775	2.811	67.47	-2.8	-8.2
68	4	1	111	8	2	ON	1499	8.4894	8.83454	2.572	61.74	-2.8	-1.6
						OFF	261	8.4455	8.83759	2.799	67.17	-2.8	-8.2
69	4	1	27	8	2	ON	1651	8.4342	8.83663	2.728	65.47	-2.8	-8.5
						OFF	64	8.4413	8.83724	2.773	66.55	-2.8	-8.3
69	4	2	182	8	2	ON	1821	8.4497	8.83795	2.826	67.82	-2.8	8.8
						OFF	229	8.4481	8.83781	2.816	67.58	-2.8	8.6
78	7	1	47	8	2	ON	1215	8.3433	8.82897	2.157	51.77	-2.8	-6.9
						OFF	131	8.3754	8.83168	2.359	56.61	-2.8	-4.8
78	7	2	181	8	2	ON	1388	8.3842	8.83242	2.414	57.93	-2.8	-3.1
						OFF	245	8.4381	8.83629	2.782	64.86	-2.8	-8.7
71	5	1	67	8	2	ON	1275	8.3589	8.83829	2.255	54.13	-2.8	-5.2
						OFF	174	8.3989	8.83366	2.586	68.15	-2.8	-2.2
72	8	1	39	8	2	ON	1368	8.3813	8.83218	2.396	57.58	-2.8	-3.3

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					OFF	182	0.4829	0.03488	2.532	68.76	-2.8	-2.8
72	0	2	26	8	2 ON	1821	0.4498	0.03795	2.826	67.82	-2.8	0.1
					OFF	68	0.4518	0.03812	2.839	68.13	-2.8	0.2
72	0	3	28	8	2 ON	1935	0.4521	0.03815	2.841	68.18	-2.8	0.3
					OFF	45	0.4514	0.03889	2.836	68.86	-2.8	0.4
74	2	1	47	8	2 ON	1923	0.4522	0.03816	2.841	68.19	-2.8	0.3
					OFF	187	0.4493	0.03791	2.823	67.75	-2.8	0.6
76	5	1	28	8	2 ON	1826	0.4588	0.03797	2.827	67.85	-2.8	0.1
					OFF	47	0.4516	0.03818	2.837	68.18	-2.8	0.2
79	5	0	28	8	2 ON	1786	0.4488	0.03719	2.769	66.47	-2.8	-0.2
					OFF	47	0.4458	0.03755	2.796	67.18	-2.8	-0.1
81	3	1	21	8	2 ON	1333	0.3732	0.03149	2.345	56.27	-2.8	-4.9
					OFF	57	0.3857	0.03255	2.423	58.16	-2.8	-4.8

RAMP PROFILE

R= 8 A= 3 PERIOD= 3848

R= 0.3169 A= 0.1312

TUR	PER	CPS	ANG V
0	5.385	0.1857	0.01688
100	5.346	0.1878	0.01692
200	5.234	0.1918	0.01728
300	5.068	0.1976	0.01787
400	4.839	0.2066	0.01869
500	4.589	0.2179	0.01971
600	4.325	0.2312	0.02091
700	4.061	0.2463	0.02227
800	3.806	0.2628	0.02376
900	3.567	0.2804	0.02536
1000	3.348	0.2987	0.02702
1100	3.148	0.3176	0.02873
1200	2.928	0.3425	0.03098
1300	2.729	0.3664	0.03314
1400	2.573	0.3886	0.03515
1500	2.458	0.4081	0.03691
1600	2.356	0.4244	0.03838
1700	2.298	0.4367	0.03958
1800	2.249	0.4447	0.04022
1900	2.232	0.4488	0.04052
2000	2.239	0.4466	0.04039
2100	2.271	0.4404	0.03983
2200	2.327	0.4298	0.03887
2300	2.409	0.4151	0.03754
2400	2.528	0.3968	0.03589
2500	2.663	0.3756	0.03397
2600	2.839	0.3522	0.03186
2700	3.052	0.3276	0.02963
2800	3.266	0.3062	0.02769
2900	3.477	0.2876	0.02601
3000	3.788	0.2697	0.02439
3100	3.957	0.2527	0.02286

3200	4.219	0.2378	0.02144
3300	4.484	0.2230	0.02017
3400	4.742	0.2109	0.01907
3500	4.977	0.2009	0.01817
3600	5.171	0.1934	0.01749
3700	5.310	0.1883	0.01703
3800	5.379	0.1859	0.01682

RAMP PROFILE

R= 8 A= 2 PERIOD= 3840

R= 0.3169 A= 0.1449

TUR	PER	CPS	ANG V
-0	5.814	0.1720	0.01556
100	5.764	0.1735	0.01569
200	5.621	0.1779	0.01609
300	5.481	0.1852	0.01675
400	5.125	0.1951	0.01765
500	4.818	0.2076	0.01877
600	4.499	0.2223	0.02010
700	4.186	0.2389	0.02161
800	3.890	0.2571	0.02325
900	3.616	0.2765	0.02501
1000	3.369	0.2968	0.02685
1100	3.148	0.3177	0.02873
1200	2.897	0.3452	0.03122
1300	2.691	0.3716	0.03361
1400	2.525	0.3961	0.03582
1500	2.394	0.4177	0.03778
1600	2.296	0.4356	0.03940
1700	2.226	0.4492	0.04063
1800	2.183	0.4588	0.04143
1900	2.166	0.4617	0.04176
2000	2.173	0.4601	0.04161
2100	2.206	0.4533	0.04100
2200	2.265	0.4416	0.03994
2300	2.351	0.4253	0.03847
2400	2.468	0.4051	0.03664
2500	2.620	0.3817	0.03452
2600	2.810	0.3559	0.03219
2700	3.042	0.3287	0.02973
2800	3.278	0.3051	0.02759
2900	3.514	0.2846	0.02574
3000	3.777	0.2648	0.02395
3100	4.065	0.2460	0.02225
3200	4.373	0.2287	0.02068
3300	4.691	0.2132	0.01928
3400	5.005	0.1998	0.01807
3500	5.296	0.1888	0.01708
3600	5.541	0.1805	0.01632
3700	5.718	0.1749	0.01582

3888 5.886 8.1722 8.81558

CLOCK SUMMARY

SYS TIME I/P		ORDER FIT 1 CL TIME I/P		COMP SYS TM	DELTA ST	REV	STA
8.38798533D 85	8.188718388D 86	8.387985375D 85	-8.8845	9			
8.78428138D 85	8.148339984D 86	8.784281398D 85	-8.8818	16			
8.39422198D 85	8.195742844D 86	8.394221977D 85	8.8883	25			
8.73585853D 85	8.229985788D 86	8.735858523D 85	8.8887	31			
8.34523999D 85	8.277243844D 86	8.345239942D 85	8.8848	48			
8.74125991D 85	8.316845837D 86	8.741259855D 85	8.8855	47			
8.35188823D 85	8.364227873D 86	8.351888195D 85	8.8835	56			
8.74745885D 85	8.483864863D 86	8.747458878D 85	-8.8828	63			
8.35666178D 85	8.451186831D 86	8.356661738D 85	-8.8838	72			
8.75259823D 85	8.498778884D 86	8.752598251D 85	-8.8821	79			
A8=-8.6991983787D 85 A1= 8.999999957853D 88							
SIGMA=8.88323 NO. POINTS= 18							
RATIO OF CLOCK TIME TO SYS TIME= 8.188888884295D 81							

SYS TIME I/P		ORDER FIT 2 CL TIME I/P		COMP SYS TM	DELTA ST	REV	STA
8.38798533D 85	8.188718388D 86	8.387985329D 85	8.8881	9			
8.78428138D 85	8.148339984D 86	8.784281381D 85	-8.8881	16			
8.39422198D 85	8.195742844D 86	8.394221986D 85	-8.8886	25			
8.73585853D 85	8.229985788D 86	8.735858544D 85	-8.8814	31			
8.34523999D 85	8.277243844D 86	8.345239973D 85	8.8817	48			
8.74125991D 85	8.316845837D 86	8.741259887D 85	8.8823	47			
8.35188823D 85	8.364227873D 86	8.351888218D 85	8.8812	56			
8.74745885D 85	8.483864863D 86	8.747458887D 85	-8.8837	63			
8.35666178D 85	8.451186831D 86	8.356661721D 85	-8.8821	72			
8.75259823D 85	8.498778884D 86	8.752598285D 85	8.8825	79			
A8=-8.6991985385D 85 A1= 8.188888888488D 81							
A2=-8.2138218281777D-12							
SIGMA=8.88182 NO. POINTS= 18							

CLOCK OPERATIONS

OPN NO	FR		H	M	S	DEC	BINARY
1 4 8	15	ON	23	1	7	66386	8881111110108111118881818888
		OFF	23	1	49	66428	8881111110101108111888118888
3 5 1	38	ON	1	59	21	77881	8818818811888881818811818188
		OFF	2	1	14	77194	8818818811881111888118881888
3 5 2	21	ON	2	2	32	77272	88188188118111888188111188888
		OFF	2	3	27	77327	8818818811811111018101881188
5 2 1	21	ON	5	4	25	88185	881818888811881188818181888
		OFF	5	5	28	88248	881818888818811811111888888
5 2 2	38	ON	5	7	35	88375	881818888188811111181181188
		OFF	5	9	5	88465	881818888181118111188118188
6 2 1	24	ON	6	33	48	93548	8818188818811881188118181888
		OFF	6	34	44	93684	88181888188818818818881818888

6 2 2	28	ON	6 37 34	93774	00101100101101110000010110000
		OFF	6 38 42	93842	00101100101111110101001010000
6 2 3	49	ON	6 42 25	94865	00101100110110101000101101000
		OFF	6 44 14	94174	00101100111001111101100110000
7 5 1	28	ON	8 4 11	98971	00101110011000101101011110000
		OFF	8 5 7	99027	00101110011100001100000111000
7 5 2	87	ON	8 6 54	99134	0010111010001010101000110000
		OFF	8 18 22	99342	00101110101111010101010110000
8 6 1	75	ON	9 32 38	104270	00110001101110000100010110000
		OFF	9 36 1	104481	00110001110100100000011101000
9 6 0	10	ON	10 45 44	108664	00110011110100001010110000000
		OFF	10 46 32	108712	00110011110101101000001000000
9 3 1	57	ON	11 5 12	109832	00110100010111110011101000000
		OFF	11 7 44	109984	00110100011100011100100000000
14 4 1	17	ON	18 43 23	137322	01000001011110101111000010000
		OFF	18 44 4	137363	01000001011111111111000111000
14 4 2	17	ON	18 46 11	137491	01000001100011111001000111000
		OFF	18 46 51	137531	01000001100101000111001111000
14 4 3	45	ON	18 59 49	138309	01000001111100110110110001000
		OFF	19 1 59	138439	01000010000000101000101011000
16 4 8	16	ON	21 46 11	148291	01000101011010111101101110000
		OFF	21 46 50	148330	01000101011101010110000100000
18 9 1	41	ON	0 38 51	158651	01001011101001101001001111000
		OFF	0 40 49	158769	01001011101101010111101101000
19 9 1	38	ON	2 9 48	164108	01001100100000001010111000000
		OFF	2 11 36	164216	01001100100110111011011000000
21 8 1	114	ON	5 10 46	174966	01010010101011100010011110000
		OFF	5 15 52	175272	01010011100100111000001000000
22 3 1	29	ON	6 44 17	180576	01010100001010111110000000000
		OFF	6 45 33	180652	01010100010010000011111000000
22 3 2	20	ON	6 48 9	180808	01010100011011101001010000000
		OFF	6 48 58	180857	01010100011110101000101010000
22 3 3	88	ON	6 50 4	180924	01010100100010101110011000000
		OFF	6 53 23	181123	01010100101110110111101110000
24 1 1	119	ON	9 42 37	191277	01010110001010100111110010000
		OFF	9 47 52	191592	01010110101011011011001000000
26 2 0	6	ON	12 21 44	200824	01011111100001010100110000000
		OFF	12 22 12	200852	01011111110001100001000100000
26 2 1	54	ON	12 55 36	202856	01100000101101010110010000000
		OFF	12 57 37	202977	01100000110010001011011101000
27 2 0	5	ON	13 52 22	206262	01100010010110100111011110000
		OFF	13 52 49	206289	01100010010110111000011010000
27 2 1	47	ON	14 24 57	208217	01100010100100100011010100000
		OFF	14 26 45	208325	01100010101011001001100010000
31 2 1	21	ON	20 25 32	229851	011010110010011111011110000
		OFF	20 26 19	229898	011010110011111011100010000
34 9 1	26	ON	0 49 5	245665	01101010010010001100111010000
		OFF	0 50 17	245737	01101010010110100110001010000
36 9 1	39	ON	3 50 17	256537	01110100010100110001101010000
		OFF	3 52 4	256644	01110100011000010011101000000
36 9 2	27	ON	3 55 34	256854	011101000111010001111110000

	OFF	3	56	37	256917	011110101000000011111000001000
36 9 3 38	ON	4	13	42	257942	011110101111111110000111110000
	OFF	4	15	37	258057	01111011000011010001100101000
37 9 1 138	ON	5	27	13	262353	0111101000110011000001101000
	OFF	5	32	19	262659	0111101001111011011011011000
38 3 1 29	ON	6	54	5	267565	01111111001010110111111001000
	OFF	6	55	20	267640	0111111100111011100110000000
38 3 2 51	ON	6	57	40	267780	01111111010111111111110100000
	OFF	6	59	37	267897	0111111101111100100010101000
38 3 3 79	ON	7	1	46	268026	0111111110011100000010001000
	OFF	7	4	40	268200	0111111111000110100001000000
38 3 4 23	ON	7	7	9	268349	01111111110101010111001001000
	OFF	7	8	3	268403	0111111111111000000100111000
38 3 5 17	ON	7	8	38	268438	1000000000000000100111110000
	OFF	7	9	10	268478	1000000000000101001100010000
39 4 1 81	ON	8	24	40	273000	1000010001011010011001000000
	OFF	8	27	55	273195	10000010010001001111111111000
40 5 1 80	ON	9	53	35	278335	10000100101110000111000011000
	OFF	9	56	57	278537	1000010010100010001100101000
47 5 1 17	ON	20	34	13	316773	1001011000011001001010001000
	OFF	20	34	52	316812	1001011000100010101011100000
52 9 1 48	ON	4	1	34	343614	10100011110110010001000110000
	OFF	4	3	15	343715	10100011111001010110010111000
52 9 2 42	ON	4	5	20	343840	1010001111110100101010000000
	OFF	4	6	54	343934	10100100000000000001000010000
53 4 1 20	ON	5	32	25	349065	1010010011100100111001010000
	OFF	5	33	17	349117	1010010011110001101001001000
53 4 2 173	ON	5	36	41	349321	10100110100100011011100101000
	OFF	5	43	3	349703	10100110110000000101101011000
54 5 1 74	ON	7	2	27	354467	10101001000001011110010111000
	OFF	7	5	29	354649	10101001000111000001110101000
55 7 1 16	ON	8	29	44	359704	1010101100001010010111000000
	OFF	8	30	32	359752	1010101100010110000101000000
55 7 2 88	ON	8	31	15	359794	1010101100100000010101010000
	OFF	8	34	43	360002	10101011101010011000111010000
55 7 3 55	ON	8	37	21	360161	1010101110111001111111101000
	OFF	8	39	25	360205	1010101110011000001101001000
63 7 1 17	ON	20	44	8	403759	11000000100001101111110011000
	OFF	20	44	38	403797	1100000010001011010000001000
68 4 1 113	ON	4	12	28	430667	11001101010110111010011111000
	OFF	4	16	49	430928	1100110101110111000010000000
69 4 1 28	ON	5	45	30	436250	1101000000000101001110010000
	OFF	5	46	34	436314	110100000001100111110010000
69 4 2 104	ON	5	48	20	436420	110100000010011110110100000
	OFF	5	52	9	436649	110100000010101110000101000
70 7 1 49	ON	7	8	45	441245	110100100110011011101001000
	OFF	7	10	56	441376	1101001001101101110100000000
70 7 2 104	ON	7	11	30	441410	1101001001110110000111010000
	OFF	7	15	35	441655	110100100110001111011011000
72 8 1 48	ON	10	12	19	452259	1101011101001110110010111000
	OFF	10	14	1	452361	110101110110011110100101000

72	8	2	27	ON	18	19	53	452713	1101011111011101101000101000
				OFF	18	28	53	452773	11010111111001100010010001000
72	8	3	28	ON	18	21	47	452826	110101111110110010011110010000
				OFF	18	22	32	452871	11010111111100100001101011000
74	2	1	48	ON	13	22	36	463676	110111010001100100001001100000
				OFF	13	24	23	463783	110111010010011000010001011000
78	5	1	21	ON	19	23	2	485381	11100111011010001101100001000
				OFF	19	23	49	485348	1110011101101101001010100000
79	5	8	21	ON	28	51	34	498613	11101001111100010100100001000
				OFF	28	52	21	498668	11101001111101110000010100000
81	3	1	22	ON	23	46	39	581119	1110110111100111100000011000
				OFF	23	47	36	581176	1110110111110101011011000000

EOF