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CORONA "J" FLIGHT DATA
BOOK 1041-1
9 - 16 MAY 1967

Declassified and Released by the NRO

In Accordance with E. O. 12958

on NOV 26 1997

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12 PAGES
(NOT INCLUDING PEST)

CORONA J FLIGHT DATA BOOK

SYSTEM NO. J-48

VEHICLE NO. 1634

MISSION NO. 1841-1

CAMERA NOS. 288/289

DATE 25-16-67

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SYSTEM NO. J-40
VEHICLE NO. 1634
MISSION NO. 1041-1
CAMERA NOS. 208/209

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SYSTEM NO. J-48
VEHICLE NO. 1634
MISSION NO. 1841-1
CAMERA NOS. 288/289

GENERAL FLIGHT DATA

MASTER CAMERA SERIAL NO. 288

SLAVE CAMERA SERIAL NO. 289

S/I -1 SERIAL NO. D185/134/133

S/I -2 SERIAL NO. D182/127/127

LAUNCH DATE 25-09-67

LAUNCH TIME 21-52-40 GMT

REACTIVATION DATE N/A

REACTIVATION ORBIT NO. N/A

SEE NOTES
AT END OF P. EST. *

ORBITAL PARAMETERS (REV. 45)

PERIOD 94.347 MIN.

ECCENTRICITY 0.84468

PERIGEE 182.133 NM

PERIGEE LAT. 32.986 DEG. N

APOGEE 432.652 NM

INCL. ANGLE 85.051 DEG.

RECOVERY ORBIT NO. 93 *

RECOVERY DATE 25-10-67 *

SEE NOTES AT END OF P. EST.

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SYSTEM NO. J-48
VEHICLE NO. 1634
MISSION NO. 1841-1
CAMERA NOS. 288/289

FLIGHT LENS SETTINGS AND FILM TYPES

LENS SETTINGS

PANORAMIC CAMERA SETTINGS CAMERA NO. 288 CAMERA NO. 289

PANORAMIC OPTICS SLIT WIDTH	.225	IN	.175	IN
PANORAMIC OPTICS FILTER TYPE	WRATTEN 23A		WRATTEN 21	
HORIZON OPTICS EXP. TIME	1/100	SEC.	1/100	SEC.
HORIZON OPTICS APERTURE	F6.3	SUPPLY	F8.0	SUPPLY
HORIZON OPTICS APERTURE	F8.0	TAKE-UP	F6.3	TAKE-UP
HORIZON OPTICS FILTER TYPE	WRATTEN 25		WRATTEN 25	

STELLAR INDEX CAMERA SETTINGS

	D125/134/133		D182/127/127	
	STELLAR INDEX		STELLAR INDEX	
EXPOSURE TIME	2.8 SEC	1/500 SEC	1.8 SEC	1/500 SEC
APERTURE SETTING	F1.8	F4.5	F1.8	F4.5
FILTER TYPE	NONE	WRATTEN 21	NONE	WRATTEN 21

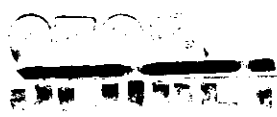
RATIO ONE STELLAR/INDEX FRAME PER 7 MASTER CAMERA FRAMES.

FILM

PANORAMIC CAMERAS	CAMERA NO. 288	CAMERA NO. 289
TYPE	7J-48	7J-48
LENGTH	16800 FT.	16800 FT.
SPLICES	2	2
EMUL. DATA	278-3-4-7	278-3-4-7
LG. BETWEEN	5780-5890-4410-	4385-5753-5862-
SPLICE TO CORE	- - -	- - -
	- - -	- - -
	- - -	- - -

STELLAR/INDEX CAMERAS

	D125/134/133		D182/127/127	
	STELLAR INDEX		STELLAR INDEX	
TYPE	3J-34	7J-33	3J-34	7J-33
EMUL. DATA	183-14-18-6	122-6-7-6	183-14-18-6	122-6-7-6



SYSTEM NO. J-48
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MISSION NO. 1841-1
CAMERA NOS. 208/209

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LENS DATA SUMMARY MASTER CAMERA NO. 208

LENS SERIAL NO. 2172435
EQUIVALENT OPERATIONAL FOCAL LENGTH 609.628 MM

RESOLUTION

STATIC		LINES/MM	FILM TYPE	TARGET CONTRAS
	BENCH TEST	253	3484	HIGH
		131	3484	LOW
DYNAMIC	[REDACTED]	201	3484	HIGH
		128	3484	LOW
	AP	178	3484	HIGH
		111	3484	LOW

NOTE [REDACTED] RESOLUTION OF 178 LINES/MM REPORTED IN [REDACTED]

DISTORTION - POSITIVE (PINCUSHION)

ANGLE OFF AXIS-DEG.	3	2	1	0	359	358	357
MILLIMETERS	0.0	0.0	0.002	0.0	0.001	0.0	0.003

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SYSTEM NO. J-4B
 VEHICLE NO. 1634
 MISSION NO. 1041-1
 CAMERA NOS. 288/289

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LENS DATA SUMMARY (HORIZONTAL CAMERAS FOR MASTER CAMERA NO. 288)

	TAKE-UP	SUPPLY
LENS SERIAL NO.	12866	12861
OPERATIONAL FOCAL LENGTH	55.00 MM	54.90 MM
RADIAL DISTORTION		
10 DEG. OFF AXIS	0.020 MM	0.018 MM
20 DEG. OFF AXIS	0.050 MM	0.050 MM
TANGENTIAL DISTORTION (MAXIMUM VECTOR)	0.025 MM	0.020 MM

RESOLUTION

ANGLE OFF AXIS-DEG.	0	5	10	15	20	25	27.5	30
TAKE-UP (RADIAL)	289	186	226	181	196	134	0	45
(TANGENTIAL)	187	207	181	138	116	109	0	62
SUPPLY (RADIAL)	209	186	184	181	156	119	0	51
(TANGENTIAL)	166	164	144	109	116	96	0	62

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 3404 FILM AND HIGH CONTRAST TARGET.

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SYSTEM NO. J-48
VEHICLE NO. 1634
MISSION NO. 1841-1
CAMERA NOS. 288/289

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LENS DATA SUMMARY SLAVE CAMERA NO. 289

LENS SERIAL NO. 2182435
EQUIVALENT OPERATIONAL FOCAL LENGTH 689.682 MM

RESOLUTION

STATIC		LINES/MM	FILM TYPE	TARGET CONTRAST
	BENCH TEST	245	3484	HIGH
		130	3484	LOW
DYNAMIC				
	[REDACTED]	199	3484	HIGH
		119	3484	LOW
	AP	187	3484	HIGH
		112	3484	LOW

NOTE

[REDACTED] RESOLUTION OF 187 LINES/MM REPORTED IN [REDACTED]

DISTORTION - POSITIVE (PINCUSHION)

ANGLE OFF AXIS-DEG.	3	2	1	0	359	358	357
MILLIMETERS	0.022	0.001	0.0	0.0	0.0	0.002	0.003

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SYSTEM NO. J-48
 VEHICLE NO. 1634
 MISSION NO. 1841-1
 CAMERA NOS. 288/289

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LENS DATA SUMMARY (HORIZON CAMERAS FOR SLAVE CAMERA NO. 289)

	TAKE-UP	SUPPLY
LENS SERIAL NO.	19185	19181
OPERATIONAL FOCAL LENGTH	55.00 MM	55.00 MM
RADIAL DISTORTION		
12 DEG. OFF AXIS	0.010 MM	0.010 MM
20 DEG. OFF AXIS	0.040 MM	0.030 MM
TANGENTIAL DISTORTION (MAXIMUM VECTOR)	0.010 MM	0.030 MM

RESOLUTION

ANGLE OFF AXIS-DEG.	0	5	10	15	20	25	27.5	30
TAKE-UP (RADIAL)	187	186	184	181	99	150	0	81
(TANGENTIAL)	187	185	181	189	58	86	0	62
SUPPLY (RADIAL)	187	186	184	70	55	150	0	182
(TANGENTIAL)	187	185	133	98	58	77	0	62

DYNAMIC (ZERO DEG)

TAKE-UP 2 LINES/MM
 SUPPLY 2 LINES/MM

NOTE

1. DISTORTION AND RESOLUTION ARE READ AT EQUIVALENT OPERATIONAL FOCAL LENGTH.
2. RESOLUTION IN LINES PER MM ON 3404 FILM AND HIGH CONTRAST TARGET.

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SYSTEM NO. J-48
 VEHICLE NO. 1634
 MISSION NO. 1841-1
 CAMERA NOS. 288/289

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FORMAT DIMENSIONS AND CALIBRATIONS

CAMERA NO. 288

CAMERA NO. 289

A	76.188	75.988
B	354.988	354.768
C	729.988	789.428
D	56.495	56.362
E	56.742	56.476
XT	0.335	-0.162
YT	0.329	0.085
XS	0.356	-0.281
YS	-0.119	0.015
XVO	2.276	-0.240
YVO	2.977	1.678
DTX	0.329	-0.167
DTY	2.029	2.085
DSX	0.355	-0.285
DSY	-2.119	-1.985
DMX	0.211	-0.282
DMY	20.977	21.678
HEIGHT	55.371	55.764
WIDTH	753.518	755.192
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

1
 -X+Y 1 +X+Y
 -----1-----
 -X-Y 1 +X-Y
 1

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SYSTEM NO. J-48
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CAMERA NOS. 288/289

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LENS DATA SUMMARY STELLAR INDEX D185/134/133 -1 MISSION

	STELLAR	INDEX
LENS SERIAL NO.	11714	821943
RESEAU SERIAL NO.	133	134
FILTER TYPE	NONE	WRATTEN 21
APERTURE	F1.8	F4.5
EXPOSURE TIME	2.8 SEC.	1/500 SEC.
EQUIVALENT FOCAL LENGTH	85 NOM	MM 38.54 MM

RESOLUTION (INDEX)

ANGLE OFF AXIS	5	10	20	30	35
HIGH CONTRAST-R/T (3428 FILM)	871/67	888/86	104/76	888/44	885/33

AWAP 71 LINES/MM
READ FROM 4488 FILM.

DISTORTION

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

ALIGNMENT	STELLAR	INDEX
	-0.0082 INCHES/.937 INCHES	-0.0088 INCHES/2.25 INCHES

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SYSTEM NO. J-40
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CAMERA NOS. 208/209

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LENS DATA SUMMARY STELLAR INDEX D102/127/127 -2 MISSION

	STELLAR	INDEX
LENS SERIAL NO.	10594	828199
RESEAU SERIAL NO.	127	127
FILTER TYPE	NONE	WRATTEN 21
APERTURE	F1.8	F4.5
EXPOSURE TIME	1.0 SEC.	1/500 SEC.
EQUIVALENT FOCAL LENGTH	85 MM	38.42 MM

RESOLUTION (INDEX)

ANGLE OFF AXIS	5	10	20	30	35
HIGH CONTRAST-R/T (3400 FILM)	063/63	079/83	099/86	095/42	086/32

AWAR 73 LINES/MM
READ FROM 4400 FILM.

DISTORTION

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

ALIGNMENT	STELLAR	INDEX
	-0.0006 INCHES/.937 INCHES	-0.0003 INCHES/2.25 INCHES

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SYSTEM NO. J-40
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CAMERA NOS. 288/289

CYCLE PERIOD DATA

V/R LEVEL	RAMP AMPLITUDE	SETTING	TIME UP RAMP-SEC	---CALIBRATED---		---IN-FLIGHT---		ORBIT CYCLE PERIOD-SEC NO.
				CYCLE PERIOD-SEC MASTER	SLAVE	CYCLE PERIOD-SEC MASTER	SLAVE	
4	1		118	4.375	4.350	4.320	4.330	8
4	1		276	4.174	4.153	4.148	4.173	54
16	1		1788	2.326	2.330	2.335	2.325	61

NOTE

A, Z OR * INDICATE NO DATA AVAILABLE.

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- A. 1041-1
- B. DRY
- C. PERFORMANCE ESTIMATE - PART ONE

OPERATIONS SUMMARY

FWD PAN CAMERA NUMBER 288

OPN NO FRA Q-LAT LONG HEIGHT RANGE DA H M S LTIM S-TIM

PRE-FLT 105

1	4	0	14	ON	2	57	39	147	24W	822256	850480	9	23	24	0	1334	84240	
				OFF	2	55	3	146	49W	792816	821920	9	23	24	39	1337	84279	
2	4	1	23	ON	2	75	8	178	52E	1841524	1880200	10	0	53	53	1249	3233	
				OFF	2	70	56	176	53E	981124	1017456	10	0	54	59	13	7	3290
2	4	2	29	ON	2	69	18	175	43E	958524	994096	10	0	55	25	1312	3325	
				OFF	2	64	10	173	7E	892572	925600	10	0	56	43	1324	3403	
5	9	6	63	ON	2	46	42	119	42E	729632	735568	10	5	44	14	1343	20654	
				OFF	2	36	29	122	40E	645120	668624	10	5	45	43	1349	20803	
6	8	3	52	ON	2	61	8	93	6E	845496	877648	10	7	15	2	1327	26102	
				OFF	2	51	12	95	21E	745776	773088	10	7	17	30	1338	26250	
7	8	5	30	ON	2	72	29	64	54E	959808	995328	10	8	47	3	13	6	31623
				OFF	2	64	13	68	19E	679888	912320	10	8	48	39	1321	31719	
7	8	5	44	ON	2	48	5	72	6E	717760	744216	10	8	52	39	1341	31959	
				OFF	2	40	21	72	57E	664000	688224	10	8	54	32	1346	32072	
8	9	0	11	ON	1	39	25	116	1W	2063136	2143552	10	10	3	15	219	36195	
				OFF	1	42	15	115	46E	2218800	2097408	10	10	4	3	220	36243	
8	7	4	54	ON	2	61	57	45	26E	850800	882192	10	10	23	36	1325	37416	
				OFF	2	51	31	47	53E	744396	772176	10	10	26	12	1337	37572	
9	5	4	41	ON	2	56	52	23	8E	793760	822896	10	11	59	15	1331	43155	
				OFF	2	49	20	24	31E	724576	751088	10	12	1	7	1339	43267	
15	3	0	10	ON	2	44	48	117	7E	680768	725632	10	21	28	31	1340	77311	
				OFF	2	43	11	116	56E	673448	694912	10	21	28	55	1341	77335	
20	3	1	84	ON	2	75	20	111	53E	934896	1021392	11	5	12	42	1240	18762	
				OFF	2	53	31	122	0E	784432	813216	11	5	16	59	1325	19019	
20	3	4	42	ON	2	52	28	123	17E	729552	756256	11	5	18	29	1331	19109	
				OFF	2	45	23	124	18E	677400	722128	11	5	20	13	1337	19213	
21	5	4	55	ON	2	53	32	98	18E	782160	810864	11	6	51	22	1324	24682	
				OFF	2	40	32	100	12E	697328	722016	11	6	53	49	1334	24829	
21	5	0	55	ON	2	46	1	100	31E	680016	724848	11	6	54	26	1336	24866	
				OFF	2	36	46	101	24E	631952	654976	11	6	56	41	1342	25001	
21	5	6	58	ON	2	27	27	101	57E	608300	630944	11	6	58	56	1346	25136	
				OFF	2	13	9	102	22E	611960	634240	11	7	1	10	1350	25270	
23	5	6	53	ON	2	54	23	51	50E	739632	766704	11	10	1	8	1328	36068	
				OFF	2	45	1	53	14E	670976	695472	11	10	3	25	1336	36205	
24	5	3	93	ON	2	60	44	25	35E	797552	826832	11	11	33	55	1320	41635	
				OFF	2	44	21	29	37E	665712	690000	11	11	37	57	1336	41877	
26	5	4	50	ON	2	64	27	100	54E	807312	836960	12	6	25	17	13	8	23117
				OFF	2	54	53	103	40E	722264	746400	12	6	27	39	1322	23259	
26	5	6	163	ON	2	47	56	124	49E	671632	696144	12	6	29	21	1320	23361	
				OFF	2	21	32	106	45E	613280	635600	12	6	35	44	1342	23744	
27	5	6	174	ON	2	54	17	80	5E	713776	739872	12	8	2	9	1322	28929	
				OFF	2	26	4	82	52E	608736	630896	12	8	9	0	1340	29340	

38	5	5	13	ON	2	58	16	55	38E	744488	771744	12	9	35	31	1317	34531
				OFF	2	55	54	56	3E	724736	751248	12	9	36	6	1328	34566
38	5	8	86	ON	2	49	58	57	8E	681728	786624	12	9	37	33	1326	34653
				OFF	2	35	48	58	36E	618464	648976	12	9	48	59	1335	34859
39	8	3	188	ON	2	62	3	38	42E	776896	885392	12	11	8	55	1311	48135
				OFF	2	43	31	34	15E	644968	668464	12	11	13	28	1338	48488
51	4	4	55	ON	2	46	18	189	37E	645744	669288	13	6	4	51	1323	21891
				OFF	2	37	13	118	38E	616888	638512	13	6	7	3	1329	22823
52	4	1	4	ON	1	27	39	79	28W	2863216	2143632	13	7	11	56	154	25916
				OFF	1	29	16	79	23W	2835848	2115888	13	7	12	27	154	25947
52	3	7	57	ON	2	57	42	83	56E	713928	748832	13	7	36	23	1312	27383
				OFF	2	47	57	85	43E	652624	676432	13	7	38	46	1321	27526
52	3	9	68	ON	2	37	58	86	45E	616944	639392	13	7	41	13	1328	27673
				OFF	2	28	13	87	22E	618728	632944	13	7	43	33	1333	27813
53	1	4	155	ON	2	59	3	59	54E	722592	749824	13	9	18	23	1318	33823
				OFF	2	33	27	53	23E	618592	632816	13	9	16	36	1338	33396
53	1	8	24	ON	2	27	4	63	44E	612112	634384	13	9	18	8	1333	33488
				OFF	2	23	5	63	55E	619296	641848	13	9	19	6	1334	33546
54	2	8	11	ON	1	38	24	126	14W	1888656	1953344	13	18	23	42	158	37422
				OFF	1	41	18	126	1W	1832888	1963568	13	18	24	38	2	37478
54	4	1	13	ON	2	71	5	38	38E	833584	864248	13	18	41	42	1244	38582
				OFF	2	63	26	32	27E	825528	835184	13	18	42	23	1252	38543
54	5	3	113	ON	2	59	5	36	13E	721184	747488	13	18	44	42	13	9
				OFF	2	48	21	39	11E	621984	644544	13	18	49	16	1326	38956
55	8	3	81	ON	2	55	16	13	26E	691688	716864	13	12	19	58	1313	44398
				OFF	2	41	47	15	21E	625424	648288	13	12	23	15	1324	44595
55	8	5	72	ON	2	13	42	16	53E	657568	681552	13	12	38	8	1337	45888
				OFF	2	1	15	17	14E	746512	773856	13	12	33	8	1341	45188
56	8	4	48	ON	2	34	21	7	44W	618976	633288	13	13	59	22	1328	58362
				OFF	2	27	46	7	21W	612384	634672	13	14	8	57	1331	58457
61	9	1	9	ON	2	35	12	126	18W	612888	634352	13	21	58	31	1325	78631
				OFF	2	34	35	126	12W	618864	633888	13	21	58	54	1326	78654
65	5	3	86	ON	2	63	37	134	14E	736488	763448	14	4	1	7	1258	14467
				OFF	2	48	58	137	39E	643824	667288	14	4	4	43	1315	14683
66	3	5	45	ON	2	62	8	111	2E	723688	758168	14	5	35	46	1259	28146
				OFF	2	54	23	113	3E	678752	695232	14	5	37	41	13	9
66	3	6	31	ON	2	51	59	113	29E	657688	681664	14	5	38	15	1312	28295
				OFF	2	46	43	114	15E	634528	657648	14	5	39	32	1316	28372
66	3	6	33	ON	2	41	19	114	57E	618816	641344	14	5	48	58	1328	28458
				OFF	2	35	56	115	16E	611536	633792	14	5	42	8	1323	28528
67	1	4	21	ON	2	55	23	89	9E	675392	788848	14	7	11	44	13	9
				OFF	2	51	54	89	48E	656224	688168	14	7	12	35	1311	25955
67	1	6	37	ON	2	41	48	91	6E	619456	642888	14	7	15	2	1319	26182
				OFF	2	35	54	91	38E	612112	634384	14	7	16	13	1322	26173
68	3	5	22	ON	2	52	4	66	5E	655952	679872	14	8	46	51	1311	31611
				OFF	2	48	17	66	42E	638896	662176	14	8	47	46	1314	31666
68	3	7	37	ON	2	42	12	67	23E	619928	642496	14	8	49	15	1318	31755
				OFF	2	36	3	67	53E	611552	633888	14	8	58	44	1322	31844
69	9	4	76	ON	2	58	28	41	4E	592888	717368	14	18	19	35	13	3
				OFF	2	45	56	43	17E	629696	652624	14	18	22	38	1315	37358
69	5	4	13	ON	2	54	8	141	31E	653632	677472	15	3	37	56	13	4

			OFF	2	51	46	141	57E	643088	666528	15	3	38	31	13	6	13111
81	8	3	78 ON	2	61	54	115	52E	697344	722816	15	5	18	28	1253	18628	
			OFF	2	58	12	118	31E	636144	659328	15	5	13	12	13	7	18792
81	8	5	81 CN	2	34	58	128	5E	613712	636848	15	5	16	52	1317	19812	
			OFF	2	21	54	128	47E	648224	671856	15	5	28	1	1323	19281	
82	3	3	53 ON	2	57	11	93	38E	666992	691328	15	6	45	46	1259	24346	
			OFF	2	48	31	95	5E	629824	652768	15	6	47	53	13	8	24473
83	2	3	38 ON	2	72	24	62	39E	779088	807584	15	8	16	17	1226	29777	
			OFF	2	65	34	67	5E	720512	746880	15	8	18	8	1246	29880	
83	2	4	14 ON	2	47	22	71	33E	625872	648656	15	8	22	27	13	8	30147
			OFF	2	44	57	71	51E	620176	642752	15	8	23	2	1310	30182	
83	2	5	164 ON	2	48	39	72	18E	614128	636480	15	8	24	4	1313	30244	
			OFF	2	14	32	73	41E	692848	718168	15	8	30	21	1325	30621	
84	5	4	24 ON	2	52	24	47	7E	642224	665632	15	9	55	38	13	4	35730
			OFF	2	48	27	47	44E	628400	651280	15	9	56	28	13	7	35788
84	5	8	5 ON	2	11	22	54	7E	717664	743984	15	10	5	24	1325	36324	
			OFF	2	10	26	50	8E	725008	751536	15	10	5	38	1326	36338	

OPERATIONS SUMMARY

AFT PAID	CAMERA	NUMBER	249														
UPN NO	FRA	G	LAT	LONG	HEIGHT	RANGE	DA	H	M	S	LTIM	S-TIM					
PRE-FLT	114																
1	4	2	14 ON	2	57	57	147	32W	810728	840512	9	23	24	13	1333	84253	
			OFF	2	55	18	146	56W	783848	812592	9	23	24	52	1336	84292	
2	4	1	23 ON	2	75	44	177	56E	1629104	1067312	10	8	54	6	1245	3246	
			OFF	2	71	26	177	23W	969328	1005216	10	8	55	12	13	5	3312
2	4	2	29 ON	2	69	47	176	8W	947128	982144	10	8	55	38	1310	3338	
			OFF	2	64	34	173	21W	881968	914480	10	8	56	56	1323	3416	
5	9	6	62 ON	2	46	47	119	37E	742784	728384	10	5	44	27	1342	20667	
			OFF	2	36	31	120	37E	640736	664000	10	5	46	56	1349	20816	
6	3	3	52 ON	2	61	22	92	56E	836512	867280	10	7	15	15	1326	26115	
			OFF	2	51	23	95	15E	737872	764880	10	7	17	43	1338	26263	
7	8	3	34 ON	2	70	58	64	26E	949272	983344	10	8	47	16	13	4	31636
			OFF	2	64	36	65	5E	869408	901440	10	8	48	52	1321	31732	
7	8	5	45 ON	2	48	14	72	1E	710624	736608	10	8	52	52	1340	31972	
			OFF	2	40	24	72	53E	658784	682816	10	8	54	45	1346	32085	
8	9	2	11 ON	1	37	12	116	22W	2052752	2130640	10	10	3	28	217	36208	
			OFF	1	42	6	116	10W	2006192	2004192	10	10	4	16	219	36256	
8	7	4	54 ON	2	62	18	45	15E	840848	871776	10	10	23	49	1324	37429	
			OFF	2	51	42	47	47E	737024	754000	10	10	26	25	1337	37585	
9	5	4	41 ON	2	57	7	23	1E	784704	813584	10	11	59	28	1331	43160	
			OFF	2	49	29	24	26E	717280	743520	10	12	1	20	1338	43280	
15	3	7	17 ON	2	44	53	117	10W	674896	699536	10	21	28	44	1339	77324	
			OFF	2	43	15	117	7W	664992	689248	10	21	29	8	1340	77348	
20	3	1	34 ON	2	75	51	141	3E	973168	1009200	11	5	12	55	1236	18775	
			OFF	2	58	45	121	53E	775696	804160	11	5	17	12	1324	19032	
20	3	4	41 ON	2	52	38	123	12E	722160	748592	11	5	18	42	1331	19122	
			OFF	2	45	26	124	13E	671696	696208	11	5	20	26	1337	19226	
21	5	4	55 ON	2	58	44	98	11E	773488	801856	11	6	51	35	1324	24695	
			OFF	2	48	39	100	7E	690880	716112	11	6	54	2	1334	24842	

21	5	6	55	ON	2	46	6	188	28E	674238	698816	11	6	54	39	1336	24879	
			OFF	2	36	47	181	28E	628528	651488	11	6	56	54	1342	25814		
21	5	8	57	ON	2	27	26	181	54E	627928	638832	11	6	59	9	1346	25149	
			OFF	2	18	8	182	17E	613744	636888	11	7	1	23	1358	25283		
23	5	6	53	ON	2	54	38	51	45E	732888	758784	11	18	1	21	1328	36881	
			OFF	2	45	5	53	18E	665568	689856	11	18	3	38	1336	36218		
24	5	3	92	ON	2	67	59	26	27E	788592	817536	11	11	34	8	1319	41648	
			OFF	2	44	24	29	33E	668496	684592	11	11	38	18	1336	41898		
36	5	4	58	ON	2	64	43	188	43E	798224	827536	12	6	25	38	13	8	23138
			OFF	2	55	1	183	35E	713848	739128	12	6	27	52	1322	23272		
36	5	6	161	ON	2	48	8	184	44E	666248	698544	12	6	29	34	1328	23374	
			OFF	2	21	31	186	42E	615224	637488	12	6	35	57	1342	23757		
37	5	8	173	ON	2	54	25	88	1E	726912	732752	12	8	2	22	1322	28942	
			OFF	2	26	2	82	49E	629264	631424	12	8	9	13	1348	29353		
38	5	5	13	ON	2	58	26	55	24E	736888	763776	12	9	35	44	1317	34544	
			OFF	2	56	3	55	58E	717616	743856	12	9	36	19	1328	34579		
38	5	8	86	ON	2	52	2	57	4E	675968	788648	12	9	37	46	1325	34666	
			OFF	2	35	47	53	33E	615368	638888	12	9	41	12	1335	34872		
39	5	3	138	ON	2	62	16	37	34E	768488	796656	12	11	9	8	1311	48148	
			OFF	2	43	32	34	11E	648864	664288	12	11	13	41	1338	48421		
31	4	4	55	ON	2	46	19	159	34E	641648	665848	13	6	5	4	1323	21884	
			OFF	2	37	12	118	27E	614384	636736	13	6	7	16	1328	22836		
32	4	1	4	ON	1	25	17	79	45W	2258864	2138752	13	7	12	9	152	25929	
			OFF	1	27	6	79	41W	2823328	2182448	13	7	12	48	153	25968		
32	3	7	57	ON	2	57	58	83	52E	727184	733824	13	7	36	36	1311	27396	
			OFF	2	48	7	85	39E	648224	671856	13	7	38	59	1321	27539		
32	3	9	59	ON	2	37	49	86	43E	615136	637528	13	7	41	26	1328	27686	
			OFF	2	28	9	87	19E	611552	633888	13	7	43	46	1332	27826		
33	1	4	154	ON	2	59	12	59	49E	715616	741792	13	9	18	36	13	9	33836
			OFF	2	33	26	63	28E	618864	632256	13	9	16	49	1329	33489		
33	1	5	24	ON	2	27	3	63	41E	613368	635688	13	9	18	21	1332	33581	
			OFF	2	23	4	63	52E	621688	644384	13	9	19	19	1334	33559		
34	9	8	11	ON	1	36	29	126	33W	1867296	1939424	13	18	23	55	157	37435	
			OFF	1	39	27	126	21W	1819344	1889472	13	18	24	43	159	37483		
34	9	1	13	ON	2	71	24	38	19E	824144	854448	13	18	41	55	1242	38515	
			OFF	2	68	42	32	13E	736592	825848	13	18	42	36	1251	38556		
34	9	3	112	ON	2	59	14	36	7E	714176	748384	13	18	44	55	13	9	38695
			OFF	2	48	28	39	7E	619616	642176	13	18	49	29	1325	38969		
35	8	3	81	ON	2	55	22	13	22E	625688	718648	13	12	28	11	1313	44411	
			OFF	2	41	46	15	13E	622784	645456	13	12	23	28	1324	44688		
35	8	5	71	ON	2	13	45	16	49E	662688	686784	13	12	38	13	1337	45813	
			OFF	2	1	27	17	9E	754724	782432	13	12	33	13	1341	45193		
36	8	4	42	ON	2	34	19	7	46W	618416	632624	13	13	59	35	1328	58375	
			OFF	2	27	45	7	24W	613616	635936	13	14	1	18	1331	58478		
31	9	1	9	ON	2	36	11	126	21E	611296	633536	13	21	58	44	1325	78644	
			OFF	2	34	34	126	14W	618568	632784	13	21	51	7	1325	78667		
35	5	3	66	ON	2	63	48	134	6E	729152	755848	14	4	1	28	1257	14488	
			OFF	2	48	52	137	35E	639958	663296	14	4	4	56	1315	14696		
36	3	5	44	ON	2	62	17	118	56E	716752	742968	14	5	35	59	1259	28159	
			OFF	2	54	26	112	59E	665616	689984	14	5	37	54	13	9	28274	
36	3	6	31	ON	2	52	2	113	25E	653128	676944	14	5	38	28	1311	28388	

66	3	8	33	ON	2	46	44	114	11E	631288	654272	14	5	39	45	1316	28385	
				OFF	2	41	19	114	46E	616992	639456	14	5	41	3	1319	28463	
67	1	4	26	ON	2	55	27	89	6E	678864	694512	14	7	11	57	13	8	25917
				OFF	2	51	57	89	45E	651712	675472	14	7	12	48	1311	25968	
67	1	6	38	ON	2	41	47	91	2E	617552	648832	14	7	15	15	1319	26115	
				OFF	2	36	53	91	28E	611536	633792	14	7	16	26	1322	26186	
68	3	5	22	ON	2	52	7	66	2E	651488	675248	14	8	47	4	1311	31624	
				OFF	2	48	18	66	36E	635368	658512	14	8	47	59	1314	31679	
68	3	7	37	ON	2	42	11	67	28E	618888	648496	14	8	49	28	1318	31768	
				OFF	2	36	2	67	51E	611248	633488	14	8	58	57	1322	31857	
69	9	4	75	ON	2	58	33	41	2E	686144	711288	14	18	19	48	13	3	37188
				OFF	2	45	57	43	14E	626864	649696	14	18	22	51	1315	37371	
69	5	4	13	ON	2	54	18	141	28E	649392	673872	15	3	38	9	13	3	13889
				OFF	2	51	48	141	54E	639424	662728	15	3	38	44	13	6	13124
61	8	3	78	ON	2	62	8	115	47E	691368	716624	15	5	18	33	1253	18633	
				OFF	2	59	13	118	28E	632968	656816	15	5	13	25	13	7	18885
61	8	5	81	ON	2	34	57	128	3E	614544	636912	15	5	17	5	1317	19825	
				OFF	2	21	56	128	43E	652568	676352	15	5	28	14	1322	19214	
62	3	3	51	ON	2	57	14	93	26E	662168	686328	15	6	45	59	1259	24359	
				OFF	2	48	31	95	1E	627888	649928	15	6	48	6	13	8	24486
63	2	3	38	ON	2	72	38	62	22E	774816	799888	15	8	16	38	1225	29798	
				OFF	2	65	42	66	57E	713888	739928	15	8	18	13	1245	29893	
63	2	4	14	ON	2	47	21	71	38E	623536	646248	15	8	22	48	13	8	38168
				OFF	2	44	57	71	48E	618496	641888	15	8	23	15	1318	38195	
63	2	5	159	ON	2	48	38	72	13E	613536	635872	15	8	24	17	1312	38257	
				OFF	2	14	39	73	37E	699288	724752	15	8	38	34	1324	38634	
64	5	4	23	ON	2	52	26	47	5E	638648	651984	15	9	55	43	13	3	35743
				OFF	2	48	27	47	41E	625848	648624	15	9	56	41	13	7	35881
64	5	8	4	ON	2	11	31	58	2E	724864	751392	15	18	5	37	1325	36337	
				OFF	2	18	36	58	3E	732488	759296	15	18	5	51	1325	36351	

PHOTOGRAPHIC SUMMARY

FRD	PAI	CAMERA	NO	228	2.225"	SLIT	W/23A	FILTER	3484	FILM								
OPN	NO	FRA	FEET		ET	S-CL	S-DIR	EV	FULL	INT	PRI							
PRE-FLT	178	277.7																
1	4	8	14	37.8	ON	284	45.8	44.1	12.38	12.42	11.82	11.22						
					OFF	288	47.6	46.8	12.82	12.42	11.82	11.22						
2	4	1	23	68.8	ON	247	31.8	35.6	11.88	12.32	11.72	11.12						
					OFF	257	35.4	36.8	11.86	12.35	11.75	11.15						
2	4	2	29	76.7	ON	268	36.7	37.5	11.88	12.36	11.76	11.16						
					OFF	271	40.9	39.9	11.94	12.39	11.79	11.19						
5	9	8	63	166.6	ON	277	53.4	53.3	11.97	12.42	11.82	11.22						
					OFF	267	58.6	66.5	12.82	12.42	11.82	11.22						
6	8	3	52	137.5	ON	222	43.4	41.2	11.65	12.41	11.81	11.21						
					OFF	249	52.6	48.7	11.81	12.42	11.82	11.22						
7	8	3	32	79.3	ON	195	35.9	36.4	11.46	12.36	11.76	11.16						
					OFF	214	41.8	39.3	11.68	12.39	11.79	11.19						
7	5	5	44	116.4	ON	256	52.6	51.5	11.85	12.42	11.82	11.22						
					OFF	271	57.8	68.7	11.93	12.42	11.82	11.22						

8	9	8	11	29.1	ON	158	-24.8	31.4	11.89	8.8	8.8	8.8
					OFF	152	-21.6	38.8	11.18	8.8	8.8	8.8
8	7	4	54	142.8	ON	219	42.8	48.4	11.63	12.48	11.88	11.28
					OFF	247	58.5	48.1	11.88	12.42	11.82	11.22
9	5	4	41	188.4	ON	235	46.7	43.6	11.73	12.42	11.82	11.22
					OFF	254	52.2	52.8	11.84	12.42	11.82	11.22
15	3	8	13	26.4	ON	383	55.2	54.8	12.18	12.42	11.82	11.22
					OFF	383	56.1	56.8	12.18	12.42	11.82	11.22
28	3	1	84	222.2	ON	198	32.1	33.4	11.42	12.32	11.72	11.12
					OFF	248	46.8	41.8	11.76	12.42	11.82	11.22
28	3	4	42	185.8	ON	254	58.5	45.6	11.84	12.42	11.82	11.22
					OFF	268	55.2	52.7	11.92	12.42	11.82	11.22
21	5	4	55	145.5	ON	243	46.1	48.8	11.78	12.42	11.82	11.22
					OFF	266	53.3	49.2	11.91	12.42	11.82	11.22
21	5	6	55	145.5	ON	271	54.9	51.9	11.93	12.42	11.82	11.22
					OFF	285	59.9	64.2	12.81	12.42	11.82	11.22
21	5	8	58	153.4	ON	292	62.7	88.5	12.84	12.42	11.82	11.22
					OFF	292	62.8	98.8	12.84	12.42	11.82	11.22
23	5	6	53	148.2	ON	255	49.3	43.6	11.85	12.42	11.82	11.22
					OFF	274	55.6	52.7	11.95	12.42	11.82	11.22
24	5	3	93	246.2	ON	239	44.5	39.8	11.76	12.41	11.81	11.21
					OFF	275	56.1	53.4	11.96	12.42	11.82	11.22
36	5	4	52	132.2	ON	225	41.9	35.4	11.67	12.48	11.88	11.28
					OFF	251	49.6	41.4	11.82	12.42	11.82	11.22
36	5	6	163	431.1	ON	266	54.6	47.7	11.91	12.42	11.82	11.22
					OFF	293	64.7	92.2	12.85	12.42	11.82	11.22
37	5	8	174	468.2	ON	266	52.1	41.7	11.91	12.42	11.82	11.22
					OFF	292	64.5	82.4	12.84	12.42	11.82	11.22
38	5	5	18	34.4	ON	254	47.2	38.7	11.84	12.42	11.82	11.22
					OFF	259	48.9	42.3	11.87	12.42	11.82	11.22
38	5	8	26	227.5	ON	271	53.3	45.3	11.93	12.42	11.82	11.22
					OFF	289	61.7	63.7	12.83	12.42	11.82	11.22
39	5	8	172	285.7	ON	245	44.8	36.2	11.79	12.41	11.81	11.21
					OFF	281	57.7	52.3	11.99	12.42	11.82	11.22
51	4	4	58	145.5	ON	278	56.6	47.2	11.97	12.42	11.82	11.22
					OFF	289	62.1	58.6	12.83	12.42	11.82	11.22
52	4	1	4	18.6	ON	74	-36.2	32.8	18.86	8.8	8.8	8.8
					OFF	74	-34.5	29.4	18.87	8.8	8.8	8.8
52	3	7	57	158.8	ON	262	48.1	37.1	11.89	12.42	11.82	11.22
					OFF	288	55.5	45.3	11.98	12.42	11.82	11.22
52	3	9	68	158.7	ON	298	61.9	58.5	12.83	12.42	11.82	11.22
					OFF	292	65.7	76.8	12.84	12.42	11.82	11.22
53	1	4	158	412.6	ON	258	47.2	36.1	11.96	12.42	11.82	11.22
					OFF	292	64.2	65.8	12.83	12.42	11.82	11.22
53	1	8	24	53.5	ON	298	66.8	79.1	12.83	12.42	11.82	11.22
					OFF	298	66.4	88.2	12.82	12.42	11.82	11.22
54	4	2	11	29.1	ON	158	-26.4	26.6	11.15	8.8	8.8	8.8
					OFF	162	-23.8	26.8	11.18	8.8	8.8	8.8
54	5	1	13	54.4	ON	228	36.7	32.3	11.69	12.36	11.76	11.16
					OFF	236	39.1	31.2	11.73	12.38	11.78	11.18
54	5	3	113	298.9	ON	258	47.2	35.9	11.87	12.42	11.82	11.22

		OFF	287	68.6	54.4	12.81	12.42	11.82	11.22
55 8 3	81	214.2 ON	266	58.2	38.4	11.91	12.42	11.82	11.22
		OFF	285	59.9	52.2	12.81	12.42	11.82	11.22
55 8 5	72	198.4 ON	278	65.2	129.1	11.97	12.42	11.82	11.22
		OFF	256	58.9	129.8	11.85	12.42	11.82	11.22
56 8 4	48	125.8 ON	298	63.9	63.9	12.83	12.42	11.82	11.22
		OFF	298	66.1	77.4	12.83	12.42	11.82	11.22
61 9 1	9	23.8 ON	298	63.5	59.9	12.83	12.42	11.82	11.22
		OFF	298	64.3	62.8	12.83	12.42	11.82	11.22
65 5 3	86	227.5 ON	254	43.7	31.9	11.84	12.41	11.81	11.21
		OFF	287	55.6	42.4	11.98	12.42	11.82	11.22
66 3 5	45	119.2 ON	258	44.9	32.5	11.86	12.41	11.81	11.21
		OFF	273	51.4	37.4	11.94	12.42	11.82	11.22
66 3 6	31	82.8 ON	277	53.3	39.3	11.96	12.42	11.82	11.22
		OFF	283	57.3	44.4	12.88	12.42	11.82	11.22
66 3 8	33	87.3 ON	288	68.9	51.1	12.82	12.42	11.82	11.22
		OFF	298	64.8	59.7	12.83	12.42	11.82	11.22
67 1 4	21	55.5 ON	271	58.6	36.5	11.94	12.42	11.82	11.22
		OFF	277	53.4	39.2	11.97	12.42	11.82	11.22
67 1 6	32	79.3 ON	288	63.7	52.3	12.82	12.42	11.82	11.22
		OFF	298	63.6	57.8	12.83	12.42	11.82	11.22
68 3 5	22	58.2 ON	277	53.3	39.8	11.97	12.42	11.82	11.22
		OFF	282	56.2	42.5	11.99	12.42	11.82	11.22
68 3 7	37	97.9 ON	287	68.5	49.6	12.82	12.42	11.82	11.22
		OFF	298	64.1	59.2	12.83	12.42	11.82	11.22
69 9 4	78	291.8 ON	269	42.2	34.2	11.92	12.42	11.82	11.22
		OFF	286	58.8	44.8	12.81	12.42	11.82	11.22
68 5 4	13	34.4 ON	268	52.2	35.5	11.92	12.42	11.82	11.22
		OFF	272	54.1	37.3	11.94	12.42	11.82	11.22
61 8 3	78	185.1 ON	266	45.6	32.5	11.91	12.41	11.81	11.21
		OFF	283	55.4	38.6	12.88	12.42	11.82	11.22
61 8 5	81	214.2 ON	298	65.8	59.2	12.83	12.42	11.82	11.22
		OFF	281	69.4	98.4	11.99	12.42	11.82	11.22
62 3 3	53	148.2 ON	274	49.7	33.8	11.95	12.42	11.82	11.22
		OFF	285	56.8	48.8	12.81	12.42	11.82	11.22
63 2 3	38	128.5 ON	243	36.1	26.2	11.78	12.36	11.76	11.16
		OFF	259	42.4	28.5	11.87	12.42	11.88	11.28
63 2 4	14	37.8 ON	286	57.8	41.8	12.81	12.42	11.82	11.22
		OFF	288	59.5	43.7	12.82	12.42	11.82	11.22
63 2 5	168	423.2 ON	298	62.5	49.3	12.83	12.42	11.82	11.22
		OFF	269	68.3	129.3	11.92	12.42	11.82	11.22
64 5 4	24	63.5 ON	283	53.8	36.2	12.88	12.42	11.82	11.22
		OFF	287	57.8	38.7	12.82	12.42	11.82	11.22
64 5 6	8	13.2 ON	268	67.1	116.6	11.88	12.42	11.82	11.22
		OFF	258	66.7	118.5	11.87	12.42	11.82	11.22

PHOTOGRAPHIC SUMMARY

AFT PAN CAMERA NO 289 E.175° SLIT 4/21 FILTER 34#4 FILM
UPR NO FRA FEET ET S-EL S-DIR EV FULL INT PRI
PRE-FLT 114 331.5

1	4	8	14	37.8	ON	365	45.6	43.5	12.36	12.74	12.14	11.54
					OFF	378	47.5	45.5	12.38	12.75	12.15	11.55
2	4	1	23	58.8	ON	317	31.3	33.3	12.16	12.64	12.84	11.44
					OFF	338	35.8	35.4	12.22	12.68	12.88	11.48
2	4	2	29	76.7	ON	335	36.4	36.3	12.24	12.69	12.89	11.49
					OFF	349	48.6	39.1	12.38	12.72	12.12	11.52
5	9	6	62	164.8	ON	356	53.3	53.8	12.33	12.75	12.15	11.55
					OFF	369	58.6	66.3	12.38	12.75	12.15	11.55
6	8	3	52	137.5	ON	286	43.2	48.5	12.81	12.74	12.14	11.54
					OFF	328	52.5	48.2	12.17	12.75	12.15	11.55
7	8	3	38	79.3	ON	251	35.5	35.1	11.93	12.68	12.88	11.48
					OFF	276	48.7	38.5	11.96	12.72	12.12	11.52
7	8	5	45	119.8	ON	329	52.6	51.2	12.22	12.75	12.15	11.55
					OFF	349	57.8	68.5	12.38	12.75	12.15	11.55
8	9	7	11	29.1	ON	195	-25.9	31.6	11.46	8.8	8.8	8.8
					OFF	196	-23.4	36.8	11.47	8.8	8.8	8.8
8	7	4	54	142.8	ON	262	42.6	39.7	11.99	12.73	12.13	11.53
					OFF	318	58.4	47.7	12.17	12.75	12.15	11.55
9	5	4	41	138.4	ON	322	46.6	43.1	12.89	12.75	12.15	11.55
					OFF	326	51.9	48.6	12.28	12.75	12.15	11.55
15	3	2	17	26.4	ON	392	55.2	53.8	12.47	12.75	12.15	11.55
					OFF	393	56.1	55.7	12.47	12.75	12.15	11.55
23	3	1	84	222.2	ON	245	31.6	31.2	11.79	12.64	12.84	11.44
					OFF	328	45.9	42.4	12.12	12.75	12.15	11.55
23	3	4	41	128.4	ON	327	52.4	45.2	12.28	12.75	12.15	11.55
					OFF	345	55.2	52.4	12.28	12.75	12.15	11.55
21	5	4	55	145.5	ON	318	45.9	48.3	12.13	12.75	12.15	11.55
					OFF	348	53.2	48.8	12.26	12.75	12.15	11.55
21	5	5	55	145.5	ON	346	54.8	51.6	12.29	12.75	12.15	11.55
					OFF	363	59.9	64.8	12.36	12.75	12.15	11.55
21	5	6	57	158.8	ON	372	62.8	87.5	12.39	12.75	12.15	11.55
					OFF	372	62.8	96.8	12.39	12.75	12.15	11.55
23	5	0	53	148.2	ON	325	49.2	43.2	12.28	12.75	12.15	11.55
					OFF	349	55.6	52.4	12.38	12.75	12.15	11.55
24	5	0	92	243.3	ON	366	44.3	38.4	12.11	12.74	12.14	11.54
					OFF	351	55.1	53.1	12.31	12.75	12.15	11.55
36	5	4	58	132.2	ON	298	41.7	34.6	12.82	12.73	12.13	11.53
					OFF	328	49.5	41.8	12.18	12.75	12.15	11.55
36	5	0	151	425.8	ON	348	54.6	47.4	12.26	12.75	12.15	11.55
					OFF	374	64.7	92.8	12.48	12.75	12.15	11.55
37	5	0	173	457.6	ON	341	58.2	41.3	12.27	12.75	12.15	11.55
					OFF	373	64.8	82.3	12.42	12.75	12.15	11.55
38	5	5	13	34.4	ON	325	46.9	38.2	12.28	12.75	12.15	11.55
					OFF	332	48.8	39.9	12.23	12.75	12.15	11.55
38	5	8	56	227.5	ON	347	53.3	45.8	12.29	12.75	12.15	11.55
					OFF	373	61.8	63.6	12.38	12.75	12.15	11.55
39	5	0	125	285.7	ON	313	43.5	35.6	12.14	12.74	12.14	11.54
					OFF	363	57.7	52.1	12.34	12.75	12.15	11.55
51	4	4	58	145.5	ON	356	56.6	47.8	12.33	12.75	12.15	11.55
					OFF	369	62.2	59.5	12.38	12.75	12.15	11.55
52	4	1	4	12.6	ON	97	-38.8	38.5	18.46	8.8	8.8	8.8

			OFF	98	-36.4	29.8	18.47	0.0	0.0	0.0		
52	3	7	57	158.8	ON	336	48.8	36.7	12.24	12.75	12.15	11.55
			OFF			358	55.5	45.0	12.34	12.75	12.15	11.55
52	3	9	59	156.1	ON	371	61.9	58.3	12.39	12.75	12.15	11.55
			OFF			374	65.7	76.8	12.48	12.75	12.15	11.55
53	1	4	154	487.3	ON	338	46.9	35.6	12.22	12.75	12.15	11.55
			OFF			371	64.1	65.9	12.39	12.75	12.15	11.55
53	1	8	24	63.5	ON	371	66.8	79.1	12.39	12.75	12.15	11.55
			OFF			368	66.5	88.1	12.38	12.75	12.15	11.55
54	9	8	11	29.1	ON	283	-28.2	26.7	11.52	0.0	0.0	0.0
			OFF			287	-25.5	26.0	11.54	0.0	0.0	0.0
54	9	1	13	34.4	ON	292	36.4	29.1	12.04	12.69	12.09	11.49
			OFF			322	33.6	38.3	12.09	12.71	12.11	11.51
54	9	3	112	296.2	ON	331	46.9	35.5	12.22	12.75	12.15	11.55
			OFF			366	68.7	54.2	12.37	12.75	12.15	11.55
55	8	3	81	214.2	ON	341	58.1	38.8	12.27	12.75	12.15	11.55
			OFF			365	59.9	52.0	12.36	12.75	12.15	11.55
55	8	5	71	187.8	ON	356	65.3	129.0	12.33	12.75	12.15	11.55
			OFF			328	59.1	129.6	12.21	12.75	12.15	11.55
56	7	4	42	125.8	ON	371	64.8	63.9	12.39	12.75	12.15	11.55
			OFF			371	66.2	77.3	12.39	12.75	12.15	11.55
51	9	1	9	23.8	ON	378	63.5	59.8	12.39	12.75	12.15	11.55
			OFF			371	64.3	62.7	12.39	12.75	12.15	11.55
65	5	3	26	227.5	ON	325	43.6	31.3	12.28	12.74	12.14	11.54
			OFF			359	55.6	42.1	12.34	12.75	12.15	11.55
66	3	5	44	116.4	ON	329	44.8	32.0	12.21	12.74	12.14	11.54
			OFF			348	51.4	37.1	12.29	12.75	12.15	11.55
66	3	6	51	62.8	ON	353	53.3	39.0	12.31	12.75	12.15	11.55
			OFF			361	57.3	44.2	12.35	12.75	12.15	11.55
66	3	8	33	87.3	ON	367	61.6	51.2	12.37	12.75	12.15	11.55
			OFF			370	64.1	59.6	12.38	12.75	12.15	11.55
67	1	4	22	52.9	ON	346	58.6	36.2	12.29	12.75	12.15	11.55
			OFF			353	53.4	39.0	12.32	12.75	12.15	11.55
67	1	6	32	79.3	ON	367	60.7	50.1	12.37	12.75	12.15	11.55
			OFF			379	63.6	57.7	12.38	12.75	12.15	11.55
68	3	5	22	58.2	ON	353	53.3	38.7	12.32	12.75	12.15	11.55
			OFF			359	56.2	42.2	12.34	12.75	12.15	11.55
68	3	7	37	97.9	ON	366	62.5	49.4	12.37	12.75	12.15	11.55
			OFF			370	64.2	59.1	12.38	12.75	12.15	11.55
69	9	4	75	196.4	ON	343	48.1	33.3	12.27	12.75	12.15	11.55
			OFF			364	58.0	44.6	12.36	12.75	12.15	11.55
66	3	4	13	34.4	ON	341	52.2	35.2	12.27	12.75	12.15	11.55
			OFF			347	54.1	37.1	12.29	12.75	12.15	11.55
61	8	3	7	185.1	ON	339	45.5	30.0	12.26	12.74	12.14	11.54
			OFF			361	55.4	38.3	12.35	12.75	12.15	11.55
61	8	5	21	214.2	ON	370	65.8	59.1	12.38	12.75	12.15	11.55
			OFF			358	69.4	90.2	12.34	12.75	12.15	11.55
62	3	3	51	134.9	ON	352	49.7	32.7	12.32	12.75	12.15	11.55
			OFF			364	56.6	39.7	12.36	12.75	12.15	11.55
63	2	3	35	148.5	ON	310	35.9	25.0	12.13	12.69	12.09	11.49
			OFF			331	42.3	27.9	12.22	12.73	12.13	11.53



83	2	4	14	37.8	ON	365	57.8	48.8	12.36	12.75	12.15	11.55
					OFF	367	59.6	43.5	12.37	12.75	12.15	11.55
83	2	5	159	428.6	ON	378	62.6	49.1	12.38	12.75	12.15	11.55
					OFF	343	68.4	189.1	12.27	12.75	12.15	11.55
84	5	4	23	68.8	ON	361	53.8	35.9	12.35	12.75	12.15	11.55
					OFF	365	57.8	39.5	12.37	12.75	12.15	11.55
84	5	8	4	18.6	ON	332	67.3	116.3	12.23	12.75	12.15	11.55
					OFF	338	66.8	118.2	12.22	12.75	12.15	11.55

STELLAR-INDEX SUMMARY

CAMERA DATA	ET	FILM	FILTER	GRID	ASSEMBLY NO	D185
STELLAR	2.8	4482	NONE	134		
INDEX	1/500	4480	2/21	133		

PERFORMANCE SUMMARY

OP. NO	FR	STEL FEET	INDX FEET	H	M	S	Q	ON LAT	ON LONG	Q	OFF LAT	OFF LONG	SEC DUR		
PNE-FLT	15	1.48	2.97												
1	4	2	3	2.39	2.59	23	24	2	57	147W	2	55	146W	52	
2	4	1	4	2.42	2.79	0	53	53	2	75	178E	2	70	176W	79
2	4	2	5	2.49	2.99	2	55	25	2	69	175W	2	64	173W	91
5	9	6	14	2.99	1.98	5	44	14	2	46	119E	2	36	128E	162
6	6	3	3	2.79	1.58	7	15	2	2	61	93E	2	51	95E	161
7	6	3	5	2.49	2.99	8	47	3	2	78	64E	2	64	68E	189
7	6	5	7	2.69	1.39	8	52	39	2	48	72E	2	48	72E	126
8	9	2	2	2.28	2.48	12	3	15	1	39	116W	1	42	115W	61
8	7	4	8	2.79	1.58	12	23	36	2	51	45E	2	51	47E	169
9	5	4	7	2.69	1.39	11	59	15	2	56	23E	2	49	24E	125
15	3	5	2	2.28	2.48	21	28	31	2	44	117W	2	43	116W	37
22	3	1	13	1.29	2.57	5	12	42	2	75	111E	2	58	122E	278
23	6	4	6	2.59	1.19	5	18	29	2	52	123E	2	45	124E	117
21	6	4	9	2.89	1.78	6	51	22	2	58	98E	2	48	188E	168
21	6	6	9	2.89	1.78	6	54	26	2	46	188E	2	36	181E	148
21	6	8	9	2.89	1.78	6	58	56	2	27	181E	2	19	182E	147
23	6	6	2	2.79	1.58	12	1	8	2	54	51E	2	45	53E	152
24	6	3	14	1.39	2.77	11	33	55	2	62	26E	2	44	29E	255
36	6	4	2	2.79	1.58	6	25	17	2	64	188E	2	54	183E	155
36	5	6	24	2.38	4.75	6	29	21	2	47	184E	2	21	186E	396
37	6	6	26	2.57	5.15	8	2	9	2	54	82E	2	26	82E	424
38	5	5	3	2.38	2.59	9	35	31	2	58	55E	2	55	56E	48
38	6	6	13	1.29	2.57	9	37	33	2	49	57E	2	35	58E	219
39	6	3	15	1.58	3.17	11	2	55	2	62	38E	2	43	34E	286
51	6	4	9	2.89	1.78	6	4	51	2	46	189E	2	37	118E	145
52	4	1	1	2.18	2.22	7	11	56	1	27	79W	1	29	79W	44
52	3	7	9	2.89	1.78	7	36	23	2	57	83E	2	47	85E	156
52	3	9	9	2.89	1.78	7	41	13	2	37	86E	2	28	87E	153
53	1	4	23	2.28	4.55	9	12	23	2	59	59E	2	33	63E	386
53	1	6	4	2.42	2.79	9	18	6	2	27	63E	2	23	63E	71
54	9	2	2	2.28	2.48	12	23	42	1	38	126W	1	41	126W	61
54	9	1	2	2.28	2.48	12	41	42	2	71	32E	2	68	32E	54
54	9	3	17	1.68	3.37	12	44	42	2	59	36E	2	48	39E	287

55	8	3	12	1.19	2.38	12	19	58	2	55	13E	2	41	15E	218
55	8	5	11	1.89	2.18	12	38	8	2	13	16E	2	1	17E	193
56	8	4	6	0.59	1.19	13	59	22	2	34	7W	2	27	7W	188
61	9	1	2	0.28	0.48	21	58	31	2	36	126W	2	34	126W	36
65	5	3	13	1.29	2.57	4	1	7	2	63	134E	2	48	137E	229
66	3	5	7	0.69	1.39	5	35	46	2	62	111E	2	54	113E	128
66	3	6	5	0.49	0.99	5	38	15	2	51	113E	2	46	114E	98
66	3	8	6	0.59	1.19	5	48	58	2	41	114E	2	35	115E	91
67	1	4	4	0.48	0.79	7	11	44	2	55	89E	2	51	89E	64
67	1	6	5	0.49	0.99	7	15	2	2	41	91E	2	36	91E	84
68	3	5	4	0.48	0.79	8	46	51	2	52	66E	2	48	66E	68
68	3	7	6	0.59	1.19	8	49	15	2	42	67E	2	36	67E	182
69	9	4	12	1.19	2.38	18	19	35	2	58	41E	2	45	43E	196
68	5	4	3	0.38	0.59	3	37	56	2	54	141E	2	51	141E	48
61	5	3	11	1.89	2.18	5	18	28	2	61	115E	2	58	118E	185
61	5	5	12	1.19	2.38	5	16	52	2	34	128E	2	21	128E	282
62	3	3	2	0.79	1.58	6	45	46	2	57	93E	2	48	95E	148
63	2	3	6	0.59	1.19	8	16	17	2	72	62E	2	65	67E	116
63	2	4	3	0.38	0.59	8	22	27	2	47	71E	2	44	71E	48
63	2	5	24	2.38	4.75	8	24	4	2	48	72E	2	14	73E	398
64	5	4	4	0.48	0.79	9	55	38	2	52	47E	2	48	47E	71
64	5	8	1	0.18	0.26	18	5	24	2	11	58E	2	18	58E	27

NOTE - OPERATION 84-5-3 ACTUALLY CONSISTED OF 5 MORE FRAMES FOR THE FWD PAN CAMERA AND 6 MORE FOR THE AFT PAN CAMERA THAN WAS REPORTED. THESE FRAMES WILL BE INCLUDED IN THE 3 MISSION RECOVERY BUCKET.

NOTE - TLM DATA INDICATED NORMAL CAMERA SYSTEM PERFORMANCE DURING THE ENTIRE 4 MISSION.

- A. 1041-1
- B. DRY
- C. PERFORMANCE ESTIMATE - PART TWO

RATE ESTIMATE

FWD PAN CAMERA NUMBER 208

OPN NO	FR	R	A	TUR/	DUR	INST	INST	SCAN RATE	PCT RATE
						CPS	ANG-VEL	R/SEC I/SEC	CALIB REQD
1 4 0	14	7	3	ON	1529	0.4242	0.03578	2.664 63.94	-0.8 21.5
				OFF	39	0.4304	0.03632	2.704 64.90	-0.8 19.8
2 4 1	23	7	3	ON	1236	0.3687	0.03111	2.317 55.60	-0.8 30.4
				OFF	66	0.3838	0.03238	2.411 57.87	-0.8 28.6
2 4 2	29	7	3	ON	1332	0.3892	0.03284	2.445 58.69	-0.8 27.6
				OFF	78	0.4256	0.03422	2.548 61.16	-0.8 25.1
5 9 6	63	11	1	ON	1660	0.4142	0.03493	2.601 62.42	-0.8 6.1
				OFF	149	0.4291	0.03620	2.696 64.70	-0.8 -0.3
6 8 3	52	11	1	ON	1381	0.3326	0.02826	2.098 50.15	-0.8 3.2
				OFF	148	0.3717	0.03136	2.335 56.05	-0.8 0.8
7 8 3	34	11	1	ON	1161	0.2913	0.02458	1.830 43.92	-0.8 3.6
				OFF	96	0.3221	0.02781	2.012 48.28	-0.8 3.6
7 8 5	44	11	1	ON	1490	0.3627	0.03230	2.425 57.72	-0.8 -0.4
				OFF	113	0.4251	0.03418	2.546 61.09	-0.8 -3.0
8 9 6	11	4	1	ON	65	0.2273	0.01918	1.428 34.27	-0.8 48.3
				OFF	48	0.2273	0.01918	1.428 34.27	-0.8 47.2
8 7 4	54	11	1	ON	1285	0.3279	0.02767	2.060 49.45	-0.8 2.4
				OFF	156	0.3696	0.03119	2.322 55.74	-0.8 0.1
9 5 4	41	11	1	ON	1370	0.3513	0.02964	2.237 52.98	-0.8 1.6
				OFF	112	0.3791	0.03199	2.382 57.17	-0.8 -0.3
15 3 0	10	4	1	ON	1531	0.4533	0.03822	2.846 68.31	-0.8 10.3
				OFF	24	0.4534	0.03826	2.849 68.37	-0.8 8.9
20 3 1	04	11	1	ON	1135	0.2842	0.02398	1.786 42.86	-0.8 4.2
				OFF	257	0.3523	0.03023	2.251 54.03	-0.8 2.5
20 3 4	40	11	1	ON	1485	0.3799	0.03205	2.387 57.28	-0.8 0.6
				OFF	134	0.4012	0.03386	2.521 60.50	-0.8 -1.8
21 5 4	55	11	1	ON	1398	0.3632	0.03064	2.282 54.77	0.4 3.5
				OFF	147	0.3977	0.03356	2.499 59.97	0.4 0.4
21 5 6	55	11	1	ON	1583	0.4040	0.03416	2.543 61.04	0.4 -0.5
				OFF	135	0.4254	0.03590	2.673 64.15	0.4 -3.4
21 5 2	59	11	1	ON	1852	0.4360	0.03679	2.739 65.75	0.4 -4.9
				OFF	134	0.4360	0.03679	2.739 65.74	0.4 -4.3
23 5 6	63	11	1	ON	1469	0.3827	0.03213	2.392 57.41	0.4 2.3
				OFF	137	0.4091	0.03452	2.571 61.69	0.4 -0.9
24 5 3	93	11	1	ON	1370	0.3577	0.03019	2.248 53.95	0.4 4.1
				OFF	242	0.4114	0.03472	2.585 62.04	0.4 -1.2
26 5 4	59	11	1	ON	1301	0.3364	0.02838	2.114 50.73	0.4 -0.7
				OFF	142	0.3746	0.03161	2.354 56.49	0.4 -2.2
26 5 6	103	11	1	ON	1545	0.3975	0.03354	2.497 59.94	0.4 -3.7
				OFF	383	0.4373	0.03690	2.748 65.95	0.4 -3.6
27 5 5	174	11	1	ON	1552	0.3931	0.03359	2.501 60.03	0.2 2.9
				OFF	411	0.4360	0.03679	2.739 65.75	0.2 -4.9

38	5	5	13	11	1 ON	1465	0.3792	0.03200	2.383	57.18	0.2	2.6
					OFF	35	0.3874	0.03268	2.434	58.41	0.2	1.8
38	5	8	86	11	1 ON	1588	0.4050	0.03417	2.545	61.07	0.2	-0.2
					OFF	206	0.4319	0.03645	2.714	65.14	0.2	-4.2
39	8	3	108	11	1 ON	1411	0.3658	0.03086	2.298	55.16	0.2	3.5
					OFF	273	0.4204	0.03547	2.642	63.40	0.2	-2.4
51	4	4	55	11	1 ON	1655	0.4163	0.03512	2.615	62.77	0.2	-3.3
					OFF	132	0.4314	0.03648	2.711	65.05	0.2	-4.7
52	4	1	4	11	1 ON	56	0.1107	0.00934	0.695	16.69	0.2	-6.1
					OFF	31	0.1115	0.00941	0.701	16.81	0.2	-7.0
52	3	7	57	11	1 ON	1523	0.3921	0.03309	2.464	59.13	0.2	1.5
					OFF	143	0.4170	0.03526	2.626	63.02	0.2	-1.7
52	3	9	62	11	1 ON	1813	0.4332	0.03655	2.722	65.32	0.2	-4.2
					OFF	140	0.4362	0.03681	2.741	65.78	0.2	-4.5
53	1	4	156	11	1 ON	1524	0.3856	0.03253	2.423	58.14	-0.4	1.1
					OFF	370	0.4333	0.03656	2.722	65.34	-0.4	-5.3
53	1	8	24	11	1 ON	1969	0.4331	0.03654	2.721	65.30	-0.4	-5.0
					OFF	50	0.4324	0.03631	2.704	64.90	-0.4	-4.4
54	9	0	11	4	1 ON	247	0.2282	0.01925	1.434	34.41	-0.4	42.6
					OFF	48	0.2282	0.01925	1.434	34.41	-0.4	40.8
54	9	1	13	11	1 ON	1327	0.3410	0.02878	2.143	51.43	-0.4	4.1
					OFF	41	0.3522	0.02972	2.213	53.12	-0.4	3.6
54	9	3	113	11	1 ON	1507	0.3863	0.03259	2.427	58.25	-0.4	1.0
					OFF	274	0.4282	0.03613	2.691	64.50	-0.4	-4.5
55	0	3	81	11	1 ON	1565	0.3903	0.03360	2.502	60.06	-0.4	-0.4
					OFF	197	0.4260	0.03600	2.681	64.33	-0.4	-4.2
55	0	5	72	11	1 ON	2100	0.4167	0.03510	2.614	62.72	-0.4	-1.3
					OFF	180	0.3820	0.03228	2.404	57.69	-0.4	3.0
56	0	4	40	11	1 ON	1874	0.4332	0.03655	2.722	65.32	-0.4	-5.2
					OFF	95	0.4331	0.03654	2.721	65.31	-0.4	-5.0
51	9	1	9	11	1 ON	1804	0.4320	0.03653	2.720	65.28	-0.4	-5.1
					OFF	23	0.4335	0.03658	2.724	65.37	-0.4	-5.2
55	5	3	55	11	1 ON	1479	0.3801	0.03207	2.380	57.31	-0.4	1.7
					OFF	210	0.4193	0.03538	2.634	63.22	-0.4	-2.9
56	3	5	45	11	1 ON	1504	0.3850	0.03253	2.422	58.13	-0.4	1.2
					OFF	110	0.4070	0.03442	2.563	61.51	-0.4	-1.3
56	3	6	31	11	1 ON	1653	0.4134	0.03400	2.597	62.33	-0.4	-2.0
					OFF	77	0.4234	0.03572	2.660	63.04	-0.4	-3.5
56	3	8	33	11	1 ON	1820	0.4302	0.03630	2.723	64.87	-0.4	-4.5
					OFF	70	0.4335	0.03658	2.724	65.37	-0.4	-5.0
57	1	4	21	11	1 ON	1600	0.4057	0.03423	2.549	61.17	-0.4	-1.1
					OFF	51	0.4140	0.03493	2.601	62.42	-0.4	-2.1
57	1	6	30	11	1 ON	1804	0.4290	0.03627	2.701	64.02	-0.4	-4.5
					OFF	71	0.4332	0.03656	2.722	65.33	-0.4	-5.0
58	3	5	22	11	1 ON	1657	0.4130	0.03493	2.601	62.42	-0.4	-2.2
					OFF	55	0.4214	0.03555	2.648	63.54	-0.4	-3.2
58	3	7	37	11	1 ON	1800	0.4297	0.03625	2.700	64.79	-0.4	-4.5
					OFF	89	0.4330	0.03658	2.724	65.30	-0.4	-5.0
59	9	4	70	11	1 ON	1503	0.4010	0.03300	2.523	60.56	-0.4	0.5
					OFF	103	0.4270	0.03600	2.683	64.38	-0.4	-3.4
58	5	4	13	11	1 ON	1570	0.4000	0.03370	2.515	60.36	-0.4	-6.0

				OFF	35	0.4066	0.03431	2.555	61.31	-0.4	-6.2
81	8	3	70	1 ON	1560	0.3972	0.03352	2.496	59.98	-0.4	0.2
				OFF	172	0.4236	0.03574	2.661	63.87	-0.4	-3.1
81	8	5	81	1 ON	1952	0.4335	0.03658	2.724	65.37	-0.4	-4.6
				OFF	189	0.4196	0.03548	2.636	63.27	-0.4	-2.0
82	3	3	53	1 ON	1632	0.4121	0.03461	2.577	61.85	-0.4	-1.3
				OFF	127	0.4263	0.03597	2.679	64.29	-0.4	-3.6
83	2	3	38	1 ON	1410	0.3632	0.03065	2.282	54.78	-0.4	3.1
				OFF	103	0.3877	0.03271	2.436	58.46	-0.4	1.3
83	2	4	14	1 ON	1780	0.4282	0.03613	2.698	64.56	-0.4	-3.8
				OFF	35	0.4327	0.03634	2.786	64.94	-0.4	-4.2
83	2	5	160	1 ON	1877	0.4333	0.03656	2.723	65.34	-0.4	-4.6
				OFF	377	0.4018	0.03390	2.524	60.59	-0.4	0.8
84	5	4	24	1 ON	1725	0.4223	0.03567	2.656	63.75	-0.4	-2.3
				OFF	58	0.4284	0.03614	2.691	64.68	-0.4	-3.3
84	5	8	5	1 ON	2310	0.3892	0.03284	2.446	58.69	-0.4	1.4
				OFF	14	0.3862	0.03259	2.426	58.24	-0.4	1.7

RATE ESTIMATE

AFT PAN. CALIB. NUMBER 209

OP.	NO	FR	R	A	TIME	INST	INST	SCAN	RATE	PCT	RATE	
					DUR	CPS	ANG-VEL	R/SEC	I/SEC	CALIB	REQD	
1	4	6	14	7	3 ON	1522	0.4239	0.03577	2.663	63.92	-0.7	20.5
					OFF	39	0.4392	0.03630	2.703	64.88	-0.7	18.8
2	4	1	23	7	3 ON	1251	0.3689	0.03113	2.318	55.63	-0.7	29.5
					OFF	66	0.3830	0.03239	2.412	57.88	-0.7	27.7
2	4	2	29	7	3 ON	1343	0.3892	0.03284	2.446	58.78	-0.7	26.8
					OFF	78	0.4055	0.03422	2.548	61.15	-0.7	24.1
5	9	6	62	11	1 ON	1681	0.4139	0.03492	2.620	62.41	-0.7	5.1
					OFF	149	0.4289	0.03619	2.695	64.68	-0.7	-1.1
6	6	3	52	11	1 ON	1314	0.3330	0.02910	2.093	50.22	-0.7	2.1
					OFF	148	0.3719	0.03138	2.336	56.07	-0.7	-0.3
7	8	3	30	11	1 ON	1174	0.2921	0.02465	1.835	44.05	-0.7	2.6
					OFF	96	0.3207	0.02706	2.015	48.36	-0.7	2.5
7	3	5	45	11	1 ON	1511	0.3320	0.03230	2.405	57.73	-0.7	-1.4
					OFF	113	0.4051	0.03418	2.545	61.89	-0.7	-3.9
8	9	0	11	4	1 ON	78	0.2275	0.01920	1.430	34.31	-0.7	48.0
					OFF	48	0.2275	0.01920	1.430	34.31	-0.7	46.6
8	7	4	54	11	1 ON	1290	0.3284	0.02771	2.063	49.52	-0.7	1.3
					OFF	156	0.3690	0.03120	2.323	55.76	-0.7	-1.0
9	6	4	41	11	1 ON	1383	0.3515	0.02967	2.209	53.02	-0.7	0.7
					OFF	112	0.3792	0.03200	2.383	57.18	-0.7	-1.4
15	3	2	10	4	1 ON	1594	0.4559	0.03847	2.865	68.75	-0.7	10.2
					OFF	24	0.4564	0.03851	2.868	68.83	-0.7	8.7
20	3	1	84	11	1 ON	1151	0.2851	0.02406	1.791	42.99	-0.7	3.0
					OFF	257	0.3505	0.03025	2.253	54.06	-0.7	1.4
23	3	4	41	11	1 ON	1490	0.3800	0.03206	2.387	57.30	-0.7	-0.5
					OFF	120	0.4012	0.03385	2.521	60.50	-0.7	-2.0
21	5	4	55	11	1 ON	1411	0.3600	0.03045	2.267	54.41	-0.2	1.7
					OFF	147	0.3949	0.03332	2.481	59.55	-0.2	-1.3

21	5	6	55	11	1 ON	1596	0.4819	0.03391	2.525	68.61	-0.2	-2.2
					OFF	135	0.4223	0.03563	2.653	63.68	-0.2	-4.8
21	5	8	57	11	1 ON	1865	0.4327	0.03651	2.719	65.26	-0.2	-5.9
					OFF	134	0.4327	0.03651	2.719	65.25	-0.2	-4.8
23	5	6	53	11	1 ON	1482	0.3782	0.03191	2.376	57.83	-0.2	0.5
					OFF	137	0.4862	0.03427	2.552	61.25	-0.2	-2.5
24	5	3	92	11	1 ON	1391	0.3555	0.03088	2.234	53.61	-0.2	2.3
					OFF	242	0.4885	0.03447	2.566	61.59	-0.2	-2.6
36	5	4	53	11	1 ON	1314	0.3345	0.02822	2.182	58.44	-0.2	-2.5
					OFF	142	0.3722	0.03148	2.338	56.12	-0.2	-4.8
36	5	6	161	11	1 ON	1558	0.3947	0.03338	2.488	59.52	-0.2	-5.4
					OFF	383	0.4341	0.03662	2.727	65.45	-0.2	-4.2
37	5	6	173	11	1 ON	1565	0.3963	0.03344	2.498	59.76	-0.1	1.5
					OFF	411	0.4338	0.03661	2.726	65.42	-0.1	-5.4
38	5	5	13	11	1 ON	1478	0.3776	0.03186	2.373	56.94	-0.1	1.1
					OFF	35	0.3857	0.03254	2.423	58.16	-0.1	0.4
38	5	8	86	11	1 ON	1681	0.4031	0.03482	2.533	62.79	-0.1	-1.6
					OFF	236	0.4298	0.03627	2.781	64.82	-0.1	-5.1
39	5	3	188	11	1 ON	1424	0.3643	0.03074	2.289	54.94	-0.1	2.2
					OFF	273	0.4184	0.03538	2.629	63.89	-0.1	-3.6
31	4	4	55	11	1 ON	1668	0.4143	0.03496	2.683	62.47	-0.1	-4.5
					OFF	132	0.4293	0.03622	2.697	64.73	-0.1	-5.6
52	4	1	4	11	1 ON	69	0.1137	0.00959	0.714	17.14	-0.1	-4.8
					OFF	31	0.1145	0.00966	0.719	17.26	-0.1	-5.8
52	3	7	57	11	1 ON	1536	0.3924	0.03294	2.453	58.87	-0.1	0.8
					OFF	143	0.4159	0.03599	2.613	62.72	-0.1	-3.8
52	3	9	59	11	1 ON	1826	0.4311	0.03637	2.788	65.88	-0.1	-5.8
					OFF	146	0.4341	0.03663	2.727	65.45	-0.1	-4.9
53	1	4	154	11	1 ON	1517	0.3835	0.03237	2.418	57.85	-0.8	-0.5
					OFF	373	0.4329	0.03636	2.727	64.97	-0.8	-6.8
53	1	6	24	11	1 ON	1982	0.4386	0.03634	2.786	64.94	-0.8	-5.4
					OFF	55	0.4284	0.03611	2.689	64.54	-0.8	-4.5
54	9	4	11	4	1 ON	268	0.2273	0.01917	1.428	34.27	-0.8	41.8
					OFF	48	0.2273	0.01917	1.428	34.27	-0.8	48.8
54	9	1	13	11	1 ON	1346	0.3396	0.02866	2.134	51.22	-0.8	2.5
					OFF	41	0.3527	0.02959	2.244	52.89	-0.8	2.8
54	9	5	112	11	1 ON	1528	0.3843	0.03243	2.415	57.95	-0.8	-0.5
					OFF	274	0.4259	0.03593	2.676	64.22	-0.8	-5.5
55	5	5	81	11	1 ON	1576	0.3962	0.03343	2.489	59.74	-0.8	-1.8
					OFF	197	0.4243	0.03588	2.666	63.98	-0.8	-5.3
55	5	5	71	11	1 ON	2181	0.4137	0.03491	2.599	62.38	-0.8	-1.8
					OFF	188	0.3827	0.03212	2.392	57.41	-0.8	4.5
56	5	4	42	11	1 ON	1827	0.4388	0.03635	2.787	64.96	-0.8	-5.9
					OFF	95	0.4388	0.03634	2.786	64.94	-0.8	-5.3
61	5	1	9	11	1 ON	1877	0.4385	0.03632	2.785	64.91	-0.8	-5.8
					OFF	23	0.4311	0.03637	2.789	65.88	-0.8	-5.8
65	5	3	86	11	1 ON	1492	0.3732	0.03191	2.376	57.83	-0.8	0.1
					OFF	216	0.4172	0.03518	2.622	62.88	-0.8	-4.1
66	3	5	44	11	1 ON	1517	0.3623	0.03226	2.422	57.65	-1.2	-0.7
					OFF	115	0.4243	0.03412	2.541	62.97	-1.2	-3.8
66	3	6	31	11	1 ON	1666	0.4098	0.03457	2.575	61.79	-1.2	-3.7

				OFF	77	0.4197	0.03541	2.637	63.28	-1.2	-4.9
66	3	8	33	1 ON	1821	0.4264	0.03598	2.679	64.29	-1.2	-5.8
				OFF	78	0.4296	0.03625	2.788	64.79	-1.2	-6.1
67	1	4	28	1 ON	1619	0.4022	0.03394	2.527	60.65	-1.2	-2.8
				OFF	51	0.4184	0.03463	2.578	61.88	-1.2	-3.8
67	1	6	30	1 ON	1817	0.4261	0.03595	2.677	64.25	-1.2	-5.8
				OFF	71	0.4294	0.03623	2.698	64.75	-1.2	-6.8
68	3	5	22	1 ON	1670	0.4183	0.03462	2.578	61.87	-1.2	-3.8
				OFF	55	0.4177	0.03524	2.624	62.98	-1.2	-4.7
68	3	7	37	1 ON	1813	0.4259	0.03593	2.676	64.22	-1.2	-5.8
				OFF	89	0.4297	0.03626	2.788	64.88	-1.2	-6.8
69	9	4	75	1 ON	1596	0.3981	0.03359	2.582	60.84	-1.2	-1.3
				OFF	183	0.4232	0.03571	2.659	63.81	-1.2	-4.6
62	5	4	13	1 ON	1589	0.3969	0.03349	2.494	59.85	-1.2	-7.7
				OFF	35	0.4131	0.03481	2.533	60.78	-1.2	-7.8
61	6	3	70	1 ON	1573	0.3938	0.03323	2.475	59.39	-1.2	-1.5
				OFF	172	0.4198	0.03543	2.638	63.31	-1.2	-4.6
61	5	5	21	1 ON	1965	0.4297	0.03625	2.788	64.79	-1.2	-5.4
				OFF	159	0.4159	0.03589	2.613	62.71	-1.2	-2.1
62	3	3	51	1 ON	1645	0.4066	0.03431	2.555	61.31	-1.2	-3.8
				OFF	127	0.4222	0.03566	2.655	63.72	-1.2	-5.8
63	2	3	38	1 ON	1423	0.3624	0.03041	2.264	54.34	-1.2	1.2
				OFF	123	0.3845	0.03244	2.416	57.98	-1.2	-8.5
63	2	4	14	1 ON	1793	0.4244	0.03581	2.666	63.99	-1.2	-5.1
				OFF	35	0.4268	0.03682	2.682	64.37	-1.2	-5.4
63	2	5	159	1 ON	1898	0.4294	0.03624	2.698	64.76	-1.2	-5.7
				OFF	377	0.3983	0.03361	2.583	60.87	-1.2	0.9
64	5	4	23	1 ON	1733	0.4191	0.03536	2.633	63.19	-1.2	-3.8
				OFF	58	0.4248	0.03582	2.668	64.82	-1.2	-4.7
64	5	3	4	1 ON	2331	0.3862	0.03257	2.425	58.28	-1.2	1.6
				OFF	14	0.3832	0.03231	2.486	57.75	-1.2	2.8

RAMP PROFILE

R = 4 A = 1 PERIOD = 3862

RE = 0.0715 A = 0.1322

TUR	PER	CPS	ANG-V
400	4.428	0.2252	0.02246
420	4.383	0.2282	0.02264
440	4.287	0.2333	0.02211
460	4.141	0.2415	0.02184
480	3.959	0.2526	0.02234
500	3.754	0.2564	0.02249
520	3.539	0.2526	0.02256
540	3.323	0.3089	0.02722
560	3.116	0.3218	0.02923
580	2.921	0.3424	0.03097
600	2.742	0.3647	0.03298
620	2.578	0.3878	0.03506
640	2.495	0.4176	0.03777
660	2.241	0.4462	0.04036

1400	2.210	0.4525	0.04292
1500	2.197	0.4552	0.04117
1600	2.188	0.4571	0.04134
1700	2.182	0.4583	0.04145
1800	2.179	0.4589	0.04151
1900	2.178	0.4592	0.04153
2000	2.178	0.4591	0.04152
2100	2.181	0.4586	0.04148
2200	2.185	0.4576	0.04139
2300	2.193	0.4560	0.04125
2400	2.204	0.4537	0.04103
2500	2.220	0.4504	0.04074
2600	2.330	0.4292	0.03682
2700	2.501	0.3998	0.03616
2800	2.676	0.3738	0.03380
2900	2.847	0.3512	0.03176
3000	3.036	0.3294	0.02979
3100	3.239	0.3087	0.02792
3200	3.452	0.2897	0.02620
3300	3.669	0.2726	0.02465
3400	3.879	0.2578	0.02331
3500	4.072	0.2456	0.02221
3600	4.234	0.2362	0.02136
3700	4.351	0.2295	0.02079
3800	4.412	0.2266	0.02050

RAMP PROFILE

K= 7 A= 3 PERIOD= 3868
K= 0.3333 A= 0.1499

TUR	PER	CP5	ANG-V
0	4.788	0.2089	0.01089
100	4.752	0.2104	0.01196
200	4.661	0.2145	0.01340
300	4.522	0.2211	0.01500
400	4.347	0.2308	0.01681
500	4.147	0.2411	0.01881
600	3.934	0.2542	0.02099
700	3.719	0.2689	0.02332
800	3.500	0.2850	0.02578
900	3.309	0.3022	0.02834
1000	3.123	0.3202	0.03096
1100	2.952	0.3388	0.03364
1200	2.757	0.3627	0.03620
1300	2.593	0.3857	0.03848
1400	2.457	0.4070	0.04061
1500	2.348	0.4258	0.04251
1600	2.265	0.4415	0.04393
1700	2.223	0.4499	0.04469
1800	2.210	0.4509	0.04479
1900	2.215	0.4514	0.04482
2000	2.216	0.4512	0.04481

2100	2.220	0.4504	0.04073
2200	2.239	0.4467	0.04040
2300	2.312	0.4325	0.03912
2400	2.410	0.4149	0.03752
2500	2.535	0.3945	0.03568
2600	2.680	0.3721	0.03365
2700	2.870	0.3484	0.03151
2800	3.254	0.3275	0.02962
2900	3.233	0.3093	0.02798
3000	3.427	0.2918	0.02639
3100	3.633	0.2752	0.02489
3200	3.840	0.2599	0.02351
3300	4.063	0.2461	0.02226
3400	4.269	0.2342	0.02119
3500	4.456	0.2244	0.02030
3600	4.611	0.2169	0.01962
3700	4.722	0.2118	0.01915
3800	4.780	0.2092	0.01892

RAMP PROFILE

N = 11 A = 1 PERIOD = 3060

K = 0.2724 L = 0.1382

TUR	PER	CPS	ANG-V
0	9.115	0.1497	0.02992
100	8.953	0.1117	0.01810
200	8.554	0.1169	0.01057
300	7.904	0.1253	0.01103
400	7.322	0.1366	0.01235
500	6.630	0.1506	0.01303
600	5.901	0.1672	0.01512
700	5.080	0.1859	0.01681
800	4.242	0.2064	0.01866
900	4.382	0.2282	0.02064
1000	3.985	0.2510	0.02270
1100	3.541	0.2746	0.02484
1200	3.276	0.3053	0.02751
1300	2.987	0.3348	0.03028
1400	2.762	0.3521	0.03275
1500	2.589	0.3563	0.03493
1600	2.461	0.4063	0.03675
1700	2.372	0.4216	0.03813
1800	2.310	0.4314	0.03952
1900	2.290	0.4306	0.03939
2000	2.300	0.4335	0.03923
2100	2.346	0.4262	0.03855
2200	2.421	0.4130	0.03736
2300	2.533	0.3948	0.03571
2400	2.687	0.3722	0.03366
2500	2.890	0.3460	0.03130
2600	3.152	0.3173	0.02870
2700	3.485	0.2869	0.02595

2880	3.843	2.2682	0.02354
2980	4.216	2.2372	0.02145
3080	4.652	2.2158	0.01944
3180	5.158	2.1939	0.01754
3280	5.733	2.1744	0.01578
3380	6.370	2.1578	0.01420
3480	7.248	2.1419	0.01283
3580	7.726	2.1294	0.01171
3680	8.342	2.1199	0.01084
3780	8.819	2.1134	0.01026
3880	9.281	2.1181	0.02996

CLOCK CORRELATION SUMMARY

ORDER FIT ONE

SYS TIME I/P	CL TIME I/P	COMP SYS TM	DELTA ST	REV	STA
0.359425530 25	2.6699845100 25	0.3594255070 25	0.0023	8	
0.772993010 25	2.1283552120 26	0.7729930620 25	-0.0052	15	
0.346715530 25	2.1521264670 26	0.3467055550 25	-0.0025	23	
0.385649430 25	2.2424278630 26	0.3856493950 25	0.0035	39	
0.374020630 25	2.3276579920 26	0.3740205730 25	0.0057	54	
0.785079480 25	2.3687638910 26	0.7850795080 25	-0.0028	61	
0.356453420 25	2.4123712810 26	0.3564533510 25	0.0049	69	
0.341924230 25	2.4972483860 26	0.3419242090 25	-0.0059	84	

A2=-0.31255891430 25 A1=0.9999998678410 00
 SIGMA=0.20489 NO. POINTS= 8
 RATIO OF CLOCK TIME TO SYS TIME= 0.100000132160 81

ORDER FIT TWO

SYS TIME I/P	CL TIME I/P	COMP SYS TM	DELTA ST	REV	STA
0.359425570 25	2.6699845100 25	0.3594254820 25	0.0050	8	
0.772993010 25	2.1283552120 26	0.7729930540 25	-0.0044	15	
0.346715530 25	2.1521264670 26	0.3467055620 25	-0.0032	23	
0.385649430 25	2.2424278630 26	0.3856494200 25	0.0010	39	
0.374020630 25	2.3276579920 26	0.3740205950 25	0.0035	54	
0.785079480 25	2.3687638910 26	0.7850795230 25	-0.0043	61	
0.356453420 25	2.4123712810 26	0.3564533530 25	0.0047	69	
0.341924230 25	2.4972483860 26	0.3419242520 25	-0.0022	84	

A2=-0.31255898250 25 A1=0.9999999369330 00
 A2=-0.12627719193190-12
 SIGMA=1.00356 NO. POINTS= 8

CLOCK OPERATIONS

FID PAN CAMERA NUMBER 226

OPR NO	FR	H	M	S	DEC	BINARY EQUIVALENT		
1	4	14	01	23	24	2	28097 00001101110001110111011101000	
		OFF		23	24	39	28936 00001101110011000011101000000	
2	4	1	23	01	53	53	34292 00010000010110011100101010000	
		OFF		0	54	59	34356 00010000011000011101100100000	
2	4	2	23	01	8	55	25	34381 00010000011001001110011001000

	OFF	8	56	43	34459	00010000011011100110101111000
5 9 6 63	ON	5	44	14	51711	000110001010100011000011000
	OFF	5	46	43	51860	00011000101110101001000100000
6 8 3 52	ON	7	15	2	57159	00011011010000010110101011000
	OFF	7	17	30	57307	000110110101001101110111011000
7 8 3 32	ON	8	47	3	62679	00011101111000110011111011000
	OFF	8	48	39	62775	000111011110111011101101101000
7 8 5 44	ON	8	52	39	63016	00011110000011000110001000000
	OFF	8	54	32	63129	00011110000110100010110101000
8 9 2 11	ON	10	3	15	67252	00100000000100010111100100000
	OFF	10	4	3	67300	00100000000101110101010100000
8 7 4 54	ON	10	23	36	68473	001000010100110100010101000
	OFF	10	26	12	68629	00100000101110011001000001000
9 5 4 41	ON	11	59	15	74212	00100011011000110001010100000
	OFF	12	1	7	74324	00100011011100001100000100000
15 3 2 12	ON	21	28	31	108367	00110011101011000110010011000
	OFF	21	28	55	108391	00110011101011110101001011000
20 3 1 84	ON	5	12	42	135219	01000000111101000100101111000
	OFF	5	16	59	136476	01000001000100111010101100000
20 3 4 40	ON	5	18	29	136566	01000001000111101010011110000
	OFF	5	20	13	136670	01000001001010101010100110000
21 5 4 55	ON	6	51	22	142139	01000011110001101111001111000
	OFF	6	53	49	142206	01000011110110001110010110000
21 5 6 55	ON	6	54	26	142323	01000011110111010110100111000
	OFF	6	56	41	142458	01000011111011011110010010000
21 5 8 58	ON	6	58	56	142593	010000111111111100101111101000
	OFF	7	1	10	142727	01000100000011101011101011000
23 5 6 53	ON	10	1	8	153525	01001001001101001101100001000
	OFF	10	3	25	153662	01001001010001011001000110000
24 5 3 93	ON	11	33	55	159492	01001011110111000110100100000
	OFF	11	37	57	159334	01001011111110011111001111000
26 5 4 54	ON	6	25	17	226974	01101100001110101100100110000
	OFF	6	27	39	227116	01101100010011000001111100000
26 5 6 163	ON	6	29	21	227218	01101100010110001001001010000
	OFF	6	35	44	227601	01101100100001101010011010000
27 5 6 174	ON	8	2	9	232786	01101110000000001000010100000
	OFF	8	9	8	233197	01101111001100100110111001000
28 5 5 13	ON	9	35	31	238388	01110001101011000001100100000
	OFF	9	36	6	238423	01110001101100000101111011000
28 5 8 56	ON	9	37	33	238510	01110001101110101111110110000
	OFF	9	40	59	238716	01110001110101000010001100000
29 5 3 182	ON	11	3	55	243992	01110100010110000010111000000
	OFF	11	13	28	244265	01110100011110011000000101000
31 4 4 55	ON	6	4	51	312147	10010100110101111110000111000
	OFF	6	7	3	312279	10010100111001111111111011000
32 4 1 4	ON	7	11	56	316173	10010101100000110101011001000
	OFF	7	12	27	316204	10010101100001110001111100000
32 3 7 57	ON	7	36	23	317640	10010111011101100110101000000
	OFF	7	33	46	317763	10010111100001111101110110000
32 3 9 60	ON	7	41	13	317930	10010111100110011101000010000
	OFF	7	43	33	318070	10010111101010101110011110000

53	1	4	156	ON	9	18	23	323288	100110100010011011100100000000
				OFF	9	16	36	323653	10011010010101000110110001000
53	1	8	24	ON	9	18	8	323745	10011010010111111010011101000
				OFF	9	19	6	323803	10011010011001101011101111000
54	9	0	11	ON	10	23	42	327679	10011100001111111110000011000
				OFF	10	24	38	327727	10011100010001011011110211000
54	9	1	13	ON	10	41	42	328758	100111001100001110010111110000
				OFF	10	42	23	328799	10011100110010001001100011000
54	9	3	113	ON	10	44	42	328939	10011100110110011010111111000
				OFF	10	49	16	329213	10011100111110110010001001000
55	8	3	81	ON	12	19	58	334654	10011111100100110101000110000
				OFF	12	23	15	334851	1001111110101011010110111000
55	8	5	72	ON	12	30	8	335257	10011111110111001110110101000
				OFF	12	33	8	335437	1001111111100101110011001000
56	8	4	40	ON	13	59	22	340618	10100010011010110101100010000
				OFF	14	9	57	340713	1010001001101101111000101000
61	9	1	9	ON	21	50	31	368887	10101111111001100010011011000
				OFF	21	50	54	368910	10101111111010001111010110000
65	5	3	86	ON	4	1	7	391123	10111010100000001000000111000
				OFF	4	4	43	391339	10111010100110101101111111000
66	3	5	45	ON	5	35	46	396803	101111010101101011101110111000
				OFF	5	37	41	396918	101111010100001111100111110000
66	3	6	31	ON	5	38	15	396952	10111101010010000000111000000
				OFF	5	39	32	397029	10111101010100010111010001000
66	3	8	33	ON	5	40	50	397107	10111101010110101111100111000
				OFF	5	42	8	397185	10111101011001000111111101000
67	1	4	21	ON	7	11	44	402561	10111111111101001011111101000
				OFF	7	12	35	402612	10111111111110101111100100000
67	1	6	30	ON	7	15	2	402759	11000000000011001110101011000
				OFF	7	16	13	402830	11000000000101011001010110000
68	3	5	22	ON	8	46	51	408268	11000010101011010110011100000
				OFF	8	47	46	408323	11000010101101000001110111000
68	3	7	37	ON	8	49	15	408412	11000010101111101111101100000
				OFF	8	50	44	408501	11000010110010011101100001000
69	9	4	76	ON	10	19	35	413832	11000101010101001001101000000
				OFF	10	22	38	414015	11000101011010101111000011000
69	5	4	13	ON	3	37	56	476133	11100011000010011011010001000
				OFF	3	38	31	476168	11100011000011011111101000000
61	8	3	70	ON	5	10	20	481676	11100101101011100101011100000
				OFF	5	13	12	481848	11100101110000110101011100000
61	8	5	81	ON	5	16	52	482269	11100101110111100101000001000
				OFF	5	20	1	482258	1110010111101010110001010000
62	3	3	53	ON	6	45	46	487403	11101000011010010110111111000
				OFF	6	47	53	487530	11101000011110001111000010000
63	2	3	30	ON	8	16	17	492833	1110101100000000100011101000
				OFF	8	18	2	492936	11101011000011001101101000000
63	2	4	14	ON	8	22	27	493204	11101011001011011001000100000
				OFF	8	23	2	493239	11101011001100011101011011000
63	2	5	160	ON	8	24	4	493301	11101011001110010110100001000
				OFF	8	30	21	493678	11101011011001110110110110000
64	5	4	24	ON	9	55	30	498787	11101101110101110001010111000

	OFF	9	56	28	498845	11101101110111100010101001000			
84	5	8	5	ON	10	5	24	499381	11101110000111111001100001000
	OFF	10	5	38	499395	111011100010000101001101111000			

CLOCK OPERATIONS

AFT PAN CAMERA NUMBER 209

CPN NO	FR		H	M	S	DEC	BINARY EQUIVALENT		
1	4	8	14	ON	23	24	13	28910	00001101110010010000110110000
				OFF	23	24	52	28949	00001101110011011101000001000
2	4	1	23	ON	0	54	6	34303	00010000010110110110000011000
				OFF	0	55	12	34369	00010000011000110110111101000
2	4	2	29	ON	0	55	38	34395	00010000011001101001101111000
				OFF	0	56	56	34473	00010000011100000010000101000
5	9	6	62	ON	5	44	27	51724	00011000101010011111011100000
				OFF	5	46	56	51873	00011000101111000010011101000
6	8	3	52	ON	7	15	15	57172	00011011010000110000000010000
				OFF	7	17	43	57320	00011011010101010001001000000
7	3	3	30	ON	8	47	16	62693	00011101111001001111010001000
				OFF	8	48	52	62789	00011101111100001010110001000
7	8	5	45	ON	8	52	52	63029	0001110000011011111000001000
				OFF	8	54	45	63142	0001110000110111100001110000
8	9	2	11	ON	10	3	28	67266	00100000000100110010111010000
				OFF	10	4	16	67314	00100000000110010000101010000
8	7	4	54	ON	10	23	49	68486	00100000101010000001101110000
				OFF	10	26	25	68642	00100000101110110010011101000
9	5	4	41	ON	11	59	28	74225	00100011011001001010101101000
				OFF	12	1	20	74337	001000110111001001001011101000
15	3	0	10	ON	21	28	44	100381	00110011101011100001101001000
				OFF	21	29	8	100405	00110011101100010000100001000
20	3	1	84	ON	5	12	55	136233	010000001111011000000000101000
				OFF	5	17	12	136490	01000001000101010110000010000
20	3	4	41	ON	5	18	42	136579	01000001001000000011110111000
				OFF	5	20	26	136683	01000001001011001110111111000
21	5	4	55	ON	6	51	35	142152	01000011110010001000101000000
				OFF	6	54	2	142299	01000011110110100111101111000
21	5	6	55	ON	6	54	39	142336	0100001111011111000000000000000
				OFF	6	56	54	142471	01000011111011110111101011000
21	5	8	57	ON	6	59	9	142606	01000011111111111111010110000
				OFF	7	1	23	142740	01000100000100000101000100000
23	5	6	53	ON	10	1	21	153538	01001001001101100110111010000
				OFF	10	3	38	153675	01001001010001110010011111000
24	5	3	92	ON	11	34	8	159105	01001011110111011111111101000
				OFF	11	38	10	159347	0100101111110111000100111000
36	5	4	50	ON	6	25	30	226987	01101100001111000101111111000
				OFF	6	27	52	227129	01101100010011011011010101000
36	5	6	161	ON	6	23	34	227231	01101100010110100010100011000
				OFF	6	35	57	227614	01101100100010001110100110000
37	5	6	173	ON	8	2	22	232799	0110111000000001101100011000
				OFF	8	9	13	233210	0110111001101000000010010000
38	5	5	13	ON	9	35	44	238401	01110001101011011010111101000

	OFF	9	36	19	238436	01110001101100011111010100000
38 5 8 86	ON	9	37	46	238524	01110001101111001011001100000
	OFF	9	41	12	238730	01110001110101011101100010000
39 8 3 108	ON	11	9	8	244006	01110100010110011110001110000
	OFF	11	13	41	244279	01110100011110110011011011000
51 4 4 55	ON	6	5	4	312161	10010100110110011001011101000
	OFF	6	7	16	312293	10010100111010011011010001000
52 4 1 4	ON	7	12	9	316186	10010110110001001110110010000
	OFF	7	12	40	316217	10010110110010001011010101000
52 3 7 57	ON	7	36	36	317653	10010111011110000000000001000
	OFF	7	38	59	317796	10010111100010010111010100000
52 3 9 59	ON	7	41	26	317943	10010111100110110110011011000
	OFF	7	43	46	318083	100101111010110001111101111000
53 1 4 154	ON	9	10	36	323293	10011010001010000111101001000
	OFF	9	16	49	323566	10011010010101100000001010000
53 1 6 24	ON	9	18	21	323759	10011010011000010101110011000
	OFF	9	19	19	323817	10011010011010000111000101000
54 9 8 11	ON	10	23	55	327692	10011100010000010111011100000
	OFF	10	24	43	327740	10011100010001110101001100000
54 9 1 13	ON	10	41	55	328772	10011100110001010100110100000
	OFF	10	42	36	328813	10011100110010100100111001000
54 9 3 112	ON	10	44	55	328952	10011100110110110100011000000
	OFF	10	49	29	329226	10011100111111001011100010000
55 8 3 81	ON	12	20	11	334668	10011111001010100000111000000
	OFF	12	23	28	334865	10011111010110100001001101000
55 8 5 71	ON	12	30	13	335270	10011111101111010000011100000
	OFF	12	33	13	335450	10011111111101000111110010000
56 8 4 40	ON	13	59	35	340632	10100010011011010000111000000
	OFF	14	1	10	340727	10100010011110001010011011000
61 9 1 9	ON	21	50	44	368901	10101111111001111101110001000
	OFF	21	51	7	368924	10101111111010101010101100000
65 5 3 86	ON	4	1	20	391137	10111010100000100011011101000
	OFF	4	4	56	391353	10111010100111001001010101000
66 3 5 44	ON	5	35	59	396816	10111101001101110111010000000
	OFF	5	37	54	396931	10111101010001010111110111000
66 3 6 31	ON	5	38	28	396965	10111101010010011010010001000
	OFF	5	39	45	397042	10111101010100110000101010000
66 3 8 33	ON	5	41	3	397120	10111101010110010010000000000
	OFF	5	42	21	397198	10111101011001100001010110000
67 1 4 20	ON	7	11	57	402574	10111111111101100101010110000
	OFF	7	12	48	402625	10111111111111001000111101000
67 1 0 32	ON	7	15	15	402772	11000000000011101000000100000
	OFF	7	16	26	402843	11000000000101110010101111000
68 3 5 22	ON	8	47	4	408281	11000010101011101111110101000
	OFF	8	47	59	408336	11000010101101011011010000000
68 3 7 37	ON	8	49	28	408425	11000010110000001001000101000
	OFF	8	50	57	408514	11000010110010110110111010000
69 9 4 75	ON	10	19	48	413845	110001010101100011000001000
	OFF	10	22	51	414028	11000101011011001000011100000
69 5 4 13	ON	3	38	9	476146	11100011000010110100101010000
	OFF	3	38	44	476181	11100011000011111001000001000

81	8	3	70	ON	5	10	33	481690	111001011011000000000110010000
				OFF	5	13	25	481862	11100101110001010000101110000
81	8	5	81	ON	5	17	5	482082	111001011101111111110011010000
				OFF	5	20	14	482271	11100101111101101111100011000
82	3	3	51	ON	6	45	59	487416	11101000011010110000011000000
				OFF	6	48	6	487543	11101000011110101000011011000
83	2	3	38	ON	8	16	30	492047	11101011000000011111110011000
				OFF	8	19	13	492950	11101011000011101000111110000
83	2	4	14	ON	8	22	40	493217	11101011001011110010011101000
				OFF	8	23	15	493252	11101011001100110110110100000
83	2	5	159	ON	8	24	17	493314	11101011001110101111111010000
				OFF	8	32	34	493691	11101011011010010000001111000
84	5	4	23	ON	9	55	43	498001	11101101110110001100101101000
				OFF	9	56	41	498059	1110110111011111110111111000
84	5	6	4	ON	10	5	37	499394	11101110001000010010111010000
				OFF	10	5	51	499400	11101110001000101110010000000

NOTE - OPERATION 84-5-8 ACTUALLY CONSISTED OF 5 MORE FRAMES FOR THE FWD PAN CAMERA AND 6 MORE FOR THE AFT PAN CAMERA THAN WAS REPORTED. THESE FRAMES WILL BE INCLUDED IN THE 8 MISSION RECOVERY BUCKET.

NOTE - TLI DATA INDICATED NORMAL CAMERA SYSTEM PERFORMANCE DURING THE ENTIRE A MISSION.

NOTE - REV 91 (PASS 91D) WAS CUT/WRAP OPERATION

" - REV 93 (" 93D) WAS RECOVERY (EJECTION) REV.

" BUCKET #1 WAS REPORTED RECOVERED AT 16 MAY 0036 GMT. 1961