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(Including Cover Sheet)

CORONA "J" FLIGHT DATA BOOK

SYSTEM NO. J-19

VEHICLE NO. 1612

MISSION NO. 1018-2

CAMERA NOS. 122+123

Prepared by:

Checked by:

Approved by:

Approved by:

Program

Manager

Declassified and Released by the NFO

In Accordance with E. O. 12958

on NOV 26 1997

6 APR 1965

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TOP SECRET

SYSTEM NO. J-19
VEHICLE NO. 1612
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CAMERA NOS. 122, 123

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SYSTEM NO. T-19
VEHICLE NO. 1612
MISSION NO. 101P-2
CAMERA NOS. 122 + 123

GENERAL FLIGHT DATA:

Master Camera Serial No. 122

Slave Camera Serial No. 123

Stellar Index "A" Serial No. D20/20/20

Stellar Index "B" Serial No. D22/22/22

Launch Date 3/25/65

Reactivation Date N/A

Reactivation Orbit No. N/A

Orbital Parameters: (Rev. 82)

Period 88.8372 Min.

Eccentricity .006423

Perigee 100.76 NM

Perigee Latitude 253 Deg. N

Apogee 146.47 NM

Inclination Angle 96 Deg. N

Recovery Orbit No. 99

Recovery Date 3/31/65

REMARKS:

A/P NO. [REDACTED]

COPY NO. [REDACTED]

SYSTEM NO. J-19
 VEHICLE NO. 1612
 MISSION NO. 1018-2
 CAMERA NOS. 122+123

CYCLE PERIOD DATA:

PRE-FLIGHT CYCLE PERIODS:

V/H Ramp Level	V/H Ramp Amplitude	Cycle Period Seconds		Time Up Ramp Sec
		Master	Slave	
2	8	2.753	2.753	BOR
2	8	2.207	2.214	1940
2	8	2.208*	2.215*	2056

* BASED ON R-2, A-8

IN-FLIGHT CYCLE PERIODS

V/H Ramp Level	V/H Ramp Amplitude	Cycle Period Seconds		Orbit No.	Time Up Ramp Sec
		Master	Slave		
2	8	2.700	2.700	73	BOR
2	8	2.245	2.222	81	1940
2	7	2.193*	2.225*	97	2056

A/P NO. [REDACTED]

COPY NO. [REDACTED]
 TOP SECRET

A. 1018-2
 B. DRY
 C. PERFORMANCE ESTIMATE

		CAM PAN SI		LAT.		TIME ON		TUR		OUR SJLAR		EXPOS.						
SUB PROG NO.		FR.	FR	ON	OFF	ZD	ST	NO	SEC.	SEC	ON	OFF	UN	OFF				
CUT/WRAP	122						4											
CUT/WRAP	123						4											
70	1	1	122	319	46	276	228	3017482	2	8	1252	717	14	61	3.9	3.6		
70	1	1	123	318		276	228	3017482	2	8	1252	717	14	60	2.8	2.5		
70	1	2	122	62	09	2	5	3	4	3018540	2	8	2309	141	76	75	3.7	3.8
70	1	2	123	61		2	5	3	3	3018540	2	8	2309	141	76	75	2.6	2.7
70	1	3	122	23	03	3	7	310		3018715	2	8	2485	54	74	71	3.8	3.9
70	1	3	123	22		3	5	3	9	3018715	2	8	2485	54	74	72	2.7	2.7
71	1	1	122	164	23	274	249	3022848	2	8	1286	373	16	41	3.9	3.7		
71	1	1	123	164		274	249	3022848	2	8	1286	373	16	40	2.7	2.6		
71	1	2	122	138	20	242	221	3023330	2	8	1769	303	48	67	3.6	3.6		
71	1	2	123	138		242	221	3023330	2	8	1769	303	47	66	2.5	2.5		
71	1	3	122	24	03	2	6	2	2	3023858	2	8	2297	54	76	76	3.7	3.8
71	1	3	123	24		2	6	2	2	3023858	2	8	2297	54	76	77	2.6	2.6
72	1	1	122	312	45	276	229	3028147	2	8	1256	701	14	60	3.9	3.6		
72	1	1	123	312		276	229	3028147	2	8	1256	701	14	59	2.7	2.5		
73	1	0	122	16	02	138	141	3032534	2	8	314	45-47-44			4.6	4.6		
73	1	0	123	16		137	139	3032534	2	8	314	45-48-45			3.2	3.2		
73	1	1	122	265	38	276	236	3033479	2	8	1259	598	14	53	3.9	3.6		
73	1	1	123	266		276	236	3033479	2	8	1259	598	14	53	2.7	2.5		
74	4	1	122	54	08	278	269	3038784	2	8	1236	129	12	21	4.0	3.9		
74	4	1	123	54		278	269	3038784	2	8	1236	129	12	20	2.8	2.7		
74	4	2	122	57	08	260	251	3039056	2	8	1508	130	31	39	3.8	3.7		
74	4	2	123	57		260	251	3039056	2	8	1508	130	30	38	2.6	2.6		
74	4	3	122	36	05	2	6	2	0	3039851	2	8	2303	84	76	76	3.8	3.8
74	4	3	123	36		2	7	2	0	3039851	2	8	2303	84	76	77	2.6	2.7
75	6	1	122	57	08	256	247	3044447	2	8	1570	128	35	43	3.7	3.7		
75	6	1	123	57		256	247	3044447	2	8	1570	128	34	42	2.6	2.6		
79	8	1	122	24	04	224	220	3066240	2	8	2047	55	64	67	3.7	3.7		
79	8	1	123	24		224	220	3066240	2	8	2047	55	64	67	2.6	2.6		
80	5	1	122	23	03	251	246	3071181	2	8	1663	54	40	43	3.8	3.8		
80	5	1	123	23		251	247	3071181	2	8	1663	54	39	43	2.7	2.7		
81	1	1	122	23	03	237	233	3076712	2	8	1866	54	53	56	3.8	3.8		
81	1	1	123	23		237	233	3076712	2	8	1866	54	52	56	2.7	2.7		
84	9	1	122	51	08	269	261	31	5829	2	8	1398	116	22	30	3.8	3.7	
84	9	1	123	51		269	261	31	5829	2	8	1398	116	21	29	2.6	2.6	
85	8	1	122	79	11	272	260	3111111	2	7	1430	178	19	31	3.8	3.7		
85	8	1	123	79		272	260	3111111	2	7	1430	178	18	30	2.7	2.6		
86	9	1	122	24	03	276	272	3116378	2	7	1370	56	14	18	3.9	3.8		
86	9	1	123	24		276	272	3116378	2	7	1370	56	14	18	2.7	2.7		
86	9	2	122	37	06	270	264	3116472	2	7	1465	86	21	27	3.8	3.7		
86	9	2	123	37		270	264	3116472	2	7	1465	86	20	26	2.7	2.6		
86	9	3	122	89	12	254	240	3116714	2	7	1707	196	37	50	3.7	3.6		
86	9	3	123	89		254	240	3116714	2	7	1707	196	36	49	2.6	2.5		
87	1	1	122	145	21	243	221	3122207	2	7	1871	319	48	67	3.6	3.7		

87	1	1	123	145		243	221	3122207	2	7	1871	319	47	67	2.5	2.6		
87	1	2	122	34	05	2	4	3	1	3122779	2	7	2443	82	76	76	3.9	4.0
87	1	2	123	34		2	4	3	0	3122779	2	7	2443	82	77	76	2.7	2.8
88	1	1	122	51	07	258	250	3127313	2	7	1651	114	33	41	3.7	3.7		
88	1	1	123	51		258	250	3127313	2	7	1651	114	32	40	2.6	2.6		
88	1	2	122	117	17	246	228	3127492	2	7	1829	261	45	61	3.7	3.7		
88	1	2	123	117		246	228	3127492	2	7	1829	261	44	61	2.6	2.6		
89	3	1	122	65	09	276	266	3132365	2	7	1377	150	15	25	3.9	3.8		
89	3	1	123	65		276	266	3132365	2	7	1377	150	14	24	2.7	2.6		
89	3	2	122	23	03	258	254	3132634	2	7	1645	52	32	36	3.7	3.7		
89	3	2	123	23		259	255	3132634	2	7	1645	52	32	35	2.6	2.6		
89	3	3	122	21	03	253	249	3132720	2	7	1731	47	38	41	3.6	3.6		
89	3	3	123	21		253	249	3132720	2	7	1731	47	37	41	2.5	2.5		
89	3	4	122	74	11	247	236	3132801	2	7	1813	162	43	54	3.6	3.6		
89	3	4	123	74		247	236	3132801	2	7	1813	162	43	53	2.5	2.5		
90	7	1	122	120	17	277	259	3137677	2	7	1362	269	13	31	3.8	3.6		
90	7	1	123	120		277	259	3137677	2	7	1362	269	13	31	2.7	2.5		
90	7	2	122	23	03	257	253	3137981	2	7	1666	50	34	37	3.6	3.6		
90	7	2	123	23		257	254	3137981	2	7	1666	50	33	36	2.5	2.5		
90	7	3	122	62	09	2	8	3	1	3138706	2	7	2391	142	75	76	3.7	3.9
90	7	3	123	62		2	8	3	0	3138706	2	7	2391	142	75	76	2.6	2.7
91	4	1	122	24	04	282	278	3142918	2	7	1277	59	7	12	4.0	3.9		
91	4	1	123	24		282	278	3142918	2	7	1277	59	8	11	2.8	2.8		
91	4	2	122	24	03	271	267	3143100	2	7	1459	57	20	24	3.8	3.8		
91	4	2	123	24		271	267	3143100	2	7	1459	57	19	23	2.7	2.6		
91	4	3	122	112	16	261	244	3143252	2	7	1611	249	30	46	3.7	3.6		
91	4	3	123	112		261	244	3143252	2	7	1611	249	29	46	2.6	2.5		
95	1	1	122	22	03	248	245	3164750	2	7	1809	50	42	46	3.7	3.7		
95	1	1	123	22		249	245	3164750	2	7	1809	50	42	45	2.6	2.6		
95	1	2	122	22	03	243	239	3164836	2	7	1894	50	48	51	3.7	3.7		
95	1	2	123	22		243	239	3164836	2	7	1894	50	47	50	2.6	2.6		
95	1	3	122	23	04	222	218	3165140	2	7	2198	53	66	69	3.7	3.8		
95	1	3	123	23		222	218	3165140	2	7	2198	53	66	69	2.6	2.7		
96	3	1	122	53	07	232	223	3170321	2	7	2054	121	58	65	3.7	3.8		
96	3	1	123	53		232	224	3170321	2	7	2054	121	57	64	2.6	2.6		
97	6	1	122	24	04	249	245	3175398	2	7	1805	55	42	45	3.7	3.7		
97	6	1	123	28		249	245	3175398	2	7	1805	55	41	45	2.2	2.2		
97	6	2	122	23	03	234	230	3175612	2	7	2019	53	56	59	3.7	3.7		
97	6	2	123	23		235	231	3175612	2	7	2019	53	55	58	2.6	2.6		

AAA BB C DDD EEE FF GHH GII JJKKKKK LLMM NNNN OOO PP QQ RRR SSS

- A REVOLUTION NUMBER
- B PROGRAM NUMBER
- C OPERATION NUMBER
- D PAN. CAMERA SERIAL NUMBER (MASTER IS EVEN, SLAVE IS ODD)
- E EST. NO OF PAN FRAMES, BASED ON COUNTER READINGS INFLITE
- F EST. NUMBER OF STELLAR/INDEX FRAMES
- G QUADRANT
- H EST. LATITUDE OF FIRST FORMAT CENTER IN PASS
- I EST. LATITUDE OF LAST FORMAT CENTER IN PASS
- J ZULU DATE
- K SYSTEM TIME IN SECONDS (GMT)
- L FMC PROGRAMMER REFERENCE LEVEL
- M FMC PROGRAMMER AMPLITUDE LEVEL

N EST. TIME UP RAMP IN SECONDS TO OPERATE COMMAND
 O EST. SECONDS DURATION OF OPERATION, BETWEEN ON AND OFF
 P SOLAR ELEVATION AT ITEM H
 Q SOLAR ELEVATION AT ITEM I
 R EST. MILLISECOND EXPOSURE TIME AT ITEM H
 S EST. MILLISECOND EXPOSURE TIME AT ITEM I

FRAMES TO FEET, PAN X 2.645 STELLAR X 0.099, INDEX X 0.198

NOTE - TM INDICATES S/I CAMERAS NOT FUNCTIONING DURING THIS MSN.
 NOTE - AFT PAN CAMERA CYCLE COUNTER WAS INTERMITTANT.
 NOTE - TM INDICATES FILM DEPLETION OF FWD CAMERA SUPPLY DURING
 20TH FRAME OF CPN 97-6-2. AFT CAMERA SUPPLY NOT DEPLETED.

RAMP PROFILES

R- 2 A- 8

R= 0.4197 A= 0.0514

TUR	PER	CPS	ANG V
100	2.711	0.3688	C.03336
200	2.700	0.3704	C.03350
300	2.681	0.3730	0.03373
400	2.656	0.3765	C.03405
500	2.625	0.3809	C.03445
600	2.590	0.3861	C.03492
700	2.551	0.3920	C.03546
800	2.509	0.3985	0.03604
900	2.467	0.4054	C.03666
1000	2.424	0.4126	0.03732
1100	2.381	0.4200	C.03799
1200	2.327	0.4297	0.03887
1300	2.277	0.4391	C.03972
1400	2.233	0.4478	C.04050
1500	2.196	0.4554	0.04119
1600	2.165	0.4618	C.04177
1700	2.143	0.4666	C.04220
1800	2.129	0.4698	C.04249
1900	2.123	0.4711	C.04261
2000	2.125	0.4705	C.04255
2100	2.136	0.4681	C.04234
2200	2.155	0.4639	C.04196
2300	2.183	0.4582	C.04144
2400	2.217	0.4510	C.04079
2500	2.259	0.4427	C.04004
2600	2.307	0.4335	C.03921
2700	2.359	0.4239	C.03834
2800	2.407	0.4155	0.03758
2900	2.450	0.4082	C.03692
3000	2.493	0.4012	C.03629
3100	2.535	0.3945	C.03568
3200	2.575	0.3884	C.03513
3300	2.612	0.3829	C.03463
3400	2.644	0.3782	0.03420
3500	2.672	0.3743	0.03385
3600	2.693	0.3713	C.03358
3700	2.708	0.3693	C.03340

3800 2.715 0.3684 0.03332

R- 2 A- 7

R= 0.4197 A= 0.0690

TUR	PER	CPS	ANG V
100	2.846	0.3514	C.03178
200	2.829	0.3535	0.03197
300	2.801	0.3570	C.03229
400	2.765	0.3617	C.03271
500	2.720	0.3676	C.03325
600	2.669	0.3746	C.03388
700	2.614	0.3825	C.03460
800	2.556	0.3912	C.03538
900	2.497	0.4005	C.03622
1000	2.438	0.4101	0.03709
1100	2.381	0.4201	C.03799
1200	2.309	0.4332	C.03918
1300	2.243	0.4458	C.04032
1400	2.186	0.4574	C.04137
1500	2.138	0.4677	C.04230
1600	2.100	0.4762	C.04307
1700	2.072	0.4827	C.04366
1800	2.054	0.4869	0.04404
1900	2.046	0.4886	0.04420
2000	2.050	0.4879	C.04413
2100	2.063	0.4847	C.04384
2200	2.087	0.4791	0.04333
2300	2.122	0.4713	0.04263
2400	2.166	0.4617	C.04176
2500	2.219	0.4506	C.04075
2600	2.282	0.4383	C.03964
2700	2.351	0.4253	C.03847
2800	2.415	0.4141	0.03745
2900	2.473	0.4043	0.03657
3000	2.532	0.3949	C.03571
3100	2.591	0.3859	0.03491
3200	2.648	0.3777	C.03416
3300	2.700	0.3703	0.03349
3400	2.748	0.3639	0.03292
3500	2.788	0.3587	C.03244
3600	2.819	0.3547	0.03208
3700	2.840	0.3521	C.03184
3800	2.851	0.3508	C.03173


 A/P NO. _____ COPY NO. _____

TOD _____

PRELIMINARY CLOCK CORRELATION

ORDER FIT 1

SYS TIME I/P	CL TIME I/P	COMP SYS TM	DELTA ST	REV	STA
56632.268	395404.54190	56632.27520	-0.00628	0	1
31321.622	456493.88690	31321.61980	0.00314	8	1
75649.309	500821.57590	75649.30850	0.00145	16	1
30360.145	5061.49890	30360.14320	0.00273	24	1
74671.579	49372.93390	74671.57790	0.00203	32	1
29276.552	90377.90990	29276.55360	-0.00069	40	1
73568.432	134669.79290	73568.43630	-0.00338	48	1
28333.667	175835.02690	28333.67010	-0.00210	56	1
77875.992	225377.34590	77875.98870	0.00424	65	1
32594.385	266495.73990	32594.38240	0.00352	73	1
76841.137	310742.49690	76841.13910	-0.00117	81	1
31482.427	351783.78690	31482.42880	-0.00089	89	1
75704.865	396006.22690	75704.86850	-0.00259	97	1

A0=-0.3387722640D 06 A1= 0.99999993137D 00
 SIGMA=0.00291 NO. POINTS= 13
 RATIO OF CLOCK TIME TO SYS TIME= 0.10000000686D 01

ORDER FIT 2

SYS TIME I/P	CL TIME I/P	COMP SYS TM	DELTA ST	REV	STA
56632.268	395404.54190	56632.27280	-0.00389	0	1
31321.622	456493.88690	31321.61890	0.00404	8	1
75649.309	500821.57590	75649.30850	0.00150	16	1
30360.145	5061.49890	30360.14380	0.00217	24	1
74671.579	49372.93390	74671.57890	0.00101	32	1
29276.552	90377.90990	29276.55490	-0.00196	40	1
73568.432	134669.79290	73568.43770	-0.00474	48	1
28333.667	175835.02690	28333.67130	-0.00336	56	1
77875.992	225377.34590	77875.98960	0.00332	65	1
32594.385	266495.73990	32594.38290	0.00308	73	1
76841.137	310742.49690	76841.13890	-0.00092	81	1
31482.427	351783.78690	31482.42780	0.00019	89	1
75704.865	396006.22690	75704.86640	-0.00043	97	1

A0=-0.3387722851D 06 A1= 0.100000006041D 01
 A2=-0.5031740567485D-13
 SIGMA=0.00265 NO. POINTS= 13

