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Copy No. 47 Pages
(Including Cover Sheet)

CORONA "J" FLIGHT DATA BOOK

SYSTEM NO. J-21

VEHICLE NO. 1615

MISSION NO. 1021

CAMERA NOS. 166 & 167

Prepared by: [REDACTED]

Checked by: [REDACTED]

Approved by: [REDACTED]

Approved by: [REDACTED]

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In Accordance with E. O. 12958

on NOV 26 1997

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27 MAY 1998

NC
SYSTEM NO. J-21
VEHICLE NO. 1615
MISSION NO. 1021
CAMERA NOS. 166 & 167

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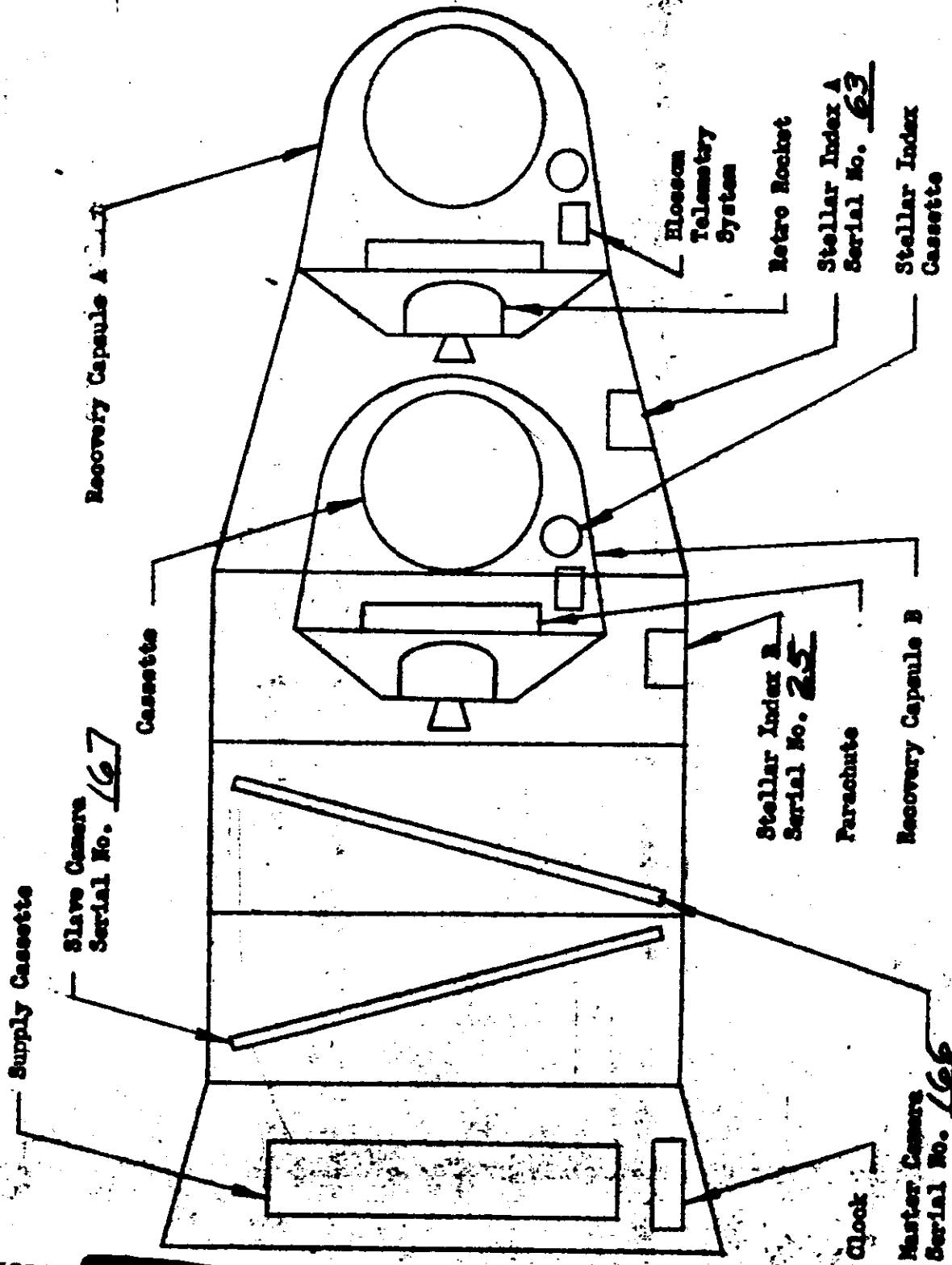
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VEHICLE LAYOUT:

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GENERAL FLIGHT DATA:

Master Camera Serial No. 166

Slave Camera Serial No. 167

Stellar Index "A" Serial No. D63/69/69

Stellar Index "B" Serial No. D25/27/25

Launch Date 18 MAY, 1965

Reactivation Date NONE

Reactivation Orbit No. NONE

Orbital Parameters: (Rev. 40)

Period 89.81 Min.

Eccentricity .00988

Perigee 109.17 NM

Perigee Latitude 24.288 Deg. N

Apogee 180.06 NM

Inclination Angle 75.02 Deg. N

Recovery Orbit No. 81

Recovery Date 23 MAY, 1965

REMARKS: VEHICLE IS NOT YAWED AROUND ON THIS MISSION; THEREFORE, FLIGHT DIRECTION IS IN THE FORWARD DIRECTION, I.E. MASTER CAMERA LOOKING AFT DURING FLIGHT, AND SLAVE CAMERA LOOKING FORWARD DURING FLIGHT. REFER TO VEHICLE LAYOUT PAGE 3.

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LENS DATA SUMMARY: Master Camera No. 166 ✓

Lens Serial No. 1852435 ✓

Slit Width .175 Inch

Filter Type WRATTEN 21

Equivalent Operational Focal Length 609.60 MM {24.000} ✓

Resolution:

Static:

	Lines/MM	Film Type	Target Contrast
Wench Test	<u>266</u> ✓	<u>50-132</u>	<u>HIGH</u>
Other	<u>146</u>	<u>50-132</u>	<u>LOW</u>

Dynamic:

	Lines/MM	Film Type	Target Contrast
Post Itak Pre -Vibration	<u>208</u>	<u>50-132</u>	<u>HIGH</u>
Itak Post Vibration	<u>127</u>	<u>50-132</u>	<u>LOW</u>
AP	<u>107</u>	<u>50-132</u>	<u>LOW</u>
AP	<u>208</u>	<u>50-132</u>	<u>HIGH</u>
Other	_____	_____	_____

Note: Itak Post Vibration Resolution of 208 lines/MM Reported In
Message No. _____ dated _____

Distortion - Positive (Pincushion)

Angle Off Axis Deg.	<u>3</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>359</u>	<u>358</u>	<u>357</u>		
Distortion Millimeters	<u>.001</u>	<u>.000</u>	<u>.000</u>	<u>.000</u>	<u>.001</u>	<u>.001</u>	<u>.001</u>		

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LENS DATA SUMMARY: (Horizon Cameras for ~~MASTER~~ Camera No. 166)

	Take-Up	Supply
Lens Serial No.	<u>813528</u>	<u>812294</u>
Exposure Time	<u>1/100</u> Sec.	<u>1/100</u> Sec.
Filter Type	<u>WRATTEN 25</u>	<u>WRATTEN 25</u>
Aperture	<u>F8.0</u>	<u>F6.8</u>
Operational Focal Length	<u>54.77</u> MM	<u>55.53</u> MM
Radial Distortion:		
10° off Axis	<u>.000</u> MM	<u>-.001</u> MM
20° off Axis	<u>.003</u> MM	<u>-.002</u> MM
Tangential Distortion (Maximum Vector)	<u>.007</u> MM	<u>.003</u> MM

Resolution:

Angle off Axis Deg.	0	5	10	15	20	25	27.5	0	5	10	15	20	25	30
Radial Resolution	164	164	153	126	109	125	60	189	164	144	112	103	112	25
Tangential Resolution	164	129	126	96	91	60	51	164	145	134	108	91	60	28

Notes:

1. Distortion and resolution are read at equivalent operational focal length.
2. Resolution in lines per mm on 4404 film and HIGH contrast target.

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LENS DATA SUMMARY: Slave Camera No. 167

Lens Serial No. 150 2435

Slit Width .250 Inch

Filter Type WRATTEN 25

Equivalent Operational Focal Length 609.60 MM

Resolution:

Static:

	<u>Lines/MM</u>	<u>Film Type</u>	<u>Target Contrast</u>
Bench Test	<u>239</u> ✓	<u>SO-132</u>	<u>HIGH</u>
Other	<u>144</u>	<u>SO-132</u>	<u>LOW</u>

Dynamic:

Itek ^{Post} Pre Vibration	<u>134</u> ✓	<u>SO-132</u>	<u>LOW</u>
Itek Post Vibration	<u>177</u>	<u>SO-132</u>	<u>HIGH</u>
AP	<u>116</u> ✓	<u>SO-132</u>	<u>Low</u>
AP	<u>187</u> ✓	<u>SO-132</u>	<u>HIGH</u>
Other	_____	_____	_____

NOTE: Itek Post Vibration Resolution of 177 lines/MM Reported In

Message No. _____ dated _____.

Distortion - Positive (Pincushion)

Angle Off Axis Deg.	<u>3</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>359</u>	<u>358</u>	<u>357</u>		
Distortion Millimeters	<u>.006</u>	<u>.004</u>	<u>.001</u>	<u>.000</u>	<u>.000</u>	<u>.002</u>	<u>.002</u>		

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LENS DATA SUMMARY: (Horizon Cameras for SLAVE Camera No. 167)

	<u>Take-Up</u>	<u>Supply</u>
Lens Serial No.	<u>813529</u>	<u>814021</u>
Exposure Time	<u>1/100</u> Sec.	<u>1/100</u> Sec.
Filter Type	<u>WRATTEN 25</u>	<u>WRATTEN 25</u>
Aperture	<u>F 8.0</u> 2.8	<u>F 6.8</u> 2.8
Operational Focal Length	<u>54.30</u> MM	<u>54.56</u> MM
Radial Distortion:		
10° off Axis	<u>.002</u> MM	<u>.002</u> MM
20° off Axis	<u>.009</u> MM	<u>.008</u> MM
Tangential Distortion (Maximum Vector)	<u>.003</u> MM	<u>.005</u> MM

Resolution:

Angle off Axis Deg.	0	10	15	20	25	27.5	
Radial Resolution	166	130	101	98	68	57	
Tangential Resolution	166	128	98	73	58	42	

Angle off Axis Deg.	0	10	15	20	25	27.5	
Radial Resolution	170	125	92	91	66	46	
Tangential Resolution	170	123	89	85	50	42	

NOTE:

- Distortion and resolution are read at equivalent operational focal length.
- Resolution in lines per MM on 4404 film and HIGH contrast target.

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LENS DATA SUMMARY STELLAR INDEX D63/69/69 "A" MISSION

	<u>Stellar</u>	<u>Index</u>
Lens Serial No.	<u>10605</u>	<u>817459</u>
Reseau Serial No.	<u>69</u>	<u>69</u>
Filter Type	<u>NONE</u>	<u>WRITTEN 21</u>
Aperture	<u>F 1.8</u>	<u>F 4.5</u>
Exposure Time	<u>2.0</u> Sec.	<u>1/500</u> Sec.
Equivalent Focal Length	<u>84 NOMINAL</u> MM	<u>38.54</u> MM

Resolution:

Angle Off Axis	0°	10°	20°	30°	35°
Resolution L/MM High Contrast	<u>76/74</u>	<u>76/74</u>	<u>99/88</u>	<u>101/46</u>	<u>88/25</u>

NOTE: Index Resolution of 73 Lines/MM AWAR
Read From 4400 Film.

Distortion:

All distortions less than maximum allowable. Full Data to be reported as part of Photogrameter Data Reduction.

Alignment:

.0008 "/.937 Inches .0005 "/2.25 Inches

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LENS DATA SUMMARY STELLAR INDEX D 25/27/25 B MISSION

	Stellar		Index
Lens Serial No.	<u>10453</u>		<u>811709</u>
Reseau Serial No.	<u>25</u>		<u>27</u>
Filter Type	<u>NONE</u>		<u>WRATTEN 21</u>
Aperture	<u>F/1.8</u>		<u>F/4.5</u>
Exposure Time	<u>2</u>	Sec.	<u>1/500</u>
Equivalent Focal Length	<u>84.18</u>	MM	<u>38.28</u>
			MM

Resolution:

Angle Off Axis	0	10	20	30	35
Resolution L/MM	90	96	113	91	82
High Contrast	81	86	83	59	32

NOTE: Index Resolution of 72 Lines/MM AMAR
 Read From 4400 Film

Distortion:

All distortions less than maximum allowable. Full Data to be reported as part of Photogrameter Data Reduction.

Alignment:

0.07 MM 0.01 Inches 0.000 1/2.25 Inches

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DEFINITION OF PANORAMIC CAMERA FORMAT CALIBRATIONS:

- 1.0 Measurements are made with respect to collimator targets fixed with respect to the mechanical interface between the total payload assembly and the orbital vehicle.
- 2.0 Two sets of three targets each, are aligned to be coplanar within $\pm 5''$ of arc so positioned to form an angle of $\pm 15.00^\circ \pm 5''$ to the mechanical interface for master camera calibrations and an angle of $\pm 15.00^\circ \pm 5''$ to the mechanical interface for slave camera calibrations.
 - 2.1 One target, Target 1 of each set is imaged on the Terrain format.
 - 2.2 The second and third targets of each set are at angles of $75.00^\circ \pm 5''$ from target one and are imaged on the horizon formats.
- 3.0 The indicated center of format for the panoramic cameras is given by the intersection of a line through the center of mass of the central shrinkage marker drawn normal to the edge of format containing the shrinkage marker and a line parallel to the same edge located at a position half-way between the format edges.
- 4.0 The indicated principal points of the horizon cameras are the points of intersection of lines joining opposite fiducials.
- 5.0 X_0 and Y_0 are the offsets of Target 1 from the indicated center of format of the panoramic cameras as defined in Paragraph 3.
- 6.0 X_s , Y_s and X_t , Y_t are the offsets of Targets 2 and 3 from the indicated principal points of the supply and take-up horizon cameras respectively.
- 7.0 The indicated flight direction is the direction of vehicle travel during orbit. The forward edge of format is the edge opposite the shrinkage markers for the master camera and is the edge containing the shrinkage markers for the slave camera.
- 8.0 Dimensions A, B and C are the spacings of the shrinkage markers and dimensions D and E are the spacings of the Y Axis fiducials. Techniques for exact measurement of these dimensions have not been developed. The figures quoted are measurements made on hand processed film without control of shrinkage.
- 9.0 The format dimensions are measured to the best estimate of format edge.
- 10.0 Measurement of the angle between the indicated axis of the panoramic cameras and the line of intersection of the plane defined in Paragraph 2 on the format is obtained from the offset dimensions D_{x1} and D_{y1} of Target 1 for each camera.
- 11.0 Measurement of the angle between the indicated axis of the horizon cameras and the line of intersection of the plane defined in Paragraph 2 on the format is made by measuring the scan direction offset of the targets defined in Paragraph 2.2 at a fixed distance from the target center in the Y direction. Dimensions D_{x1} , D_{y1} , D_{x2} and D_{y2} are the effects of these measurements.

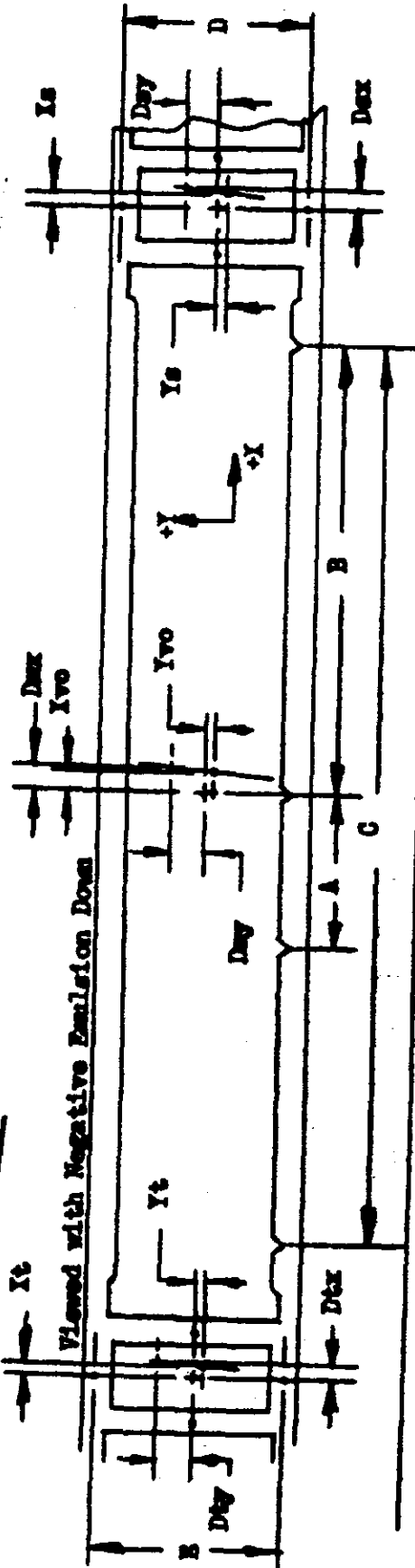
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FORMAT DIMENSIONS: (PANORAMIC CAMERAS)

NO. [REDACTED]



Camera No. <u>167</u>	Vehicle Motion	Seen Direction	Panoramic Take-Up	Supply
A <u>76.099</u>	$X_t + 0.516$	$D_{tz} + 0.514$	<u>N/A</u>	<u>N/A</u>
B <u>355.119</u>	$X_t + 0.060$	$D_{ty} + 2.060$	<u>N/A</u>	<u>N/A</u>
C <u>710.111</u>	$X_s - 0.333$	$D_{zx} - 0.342$	<u>N/A</u>	<u>N/A</u>
D <u>56.463</u>	$Y_s - 0.179$	$D_{zy} - 3.179$	<u>N/A</u>	<u>N/A</u>
E <u>56.433</u>	$X_{vo} - 0.091$	$D_{zx} - 0.058$	<u>N/A</u>	<u>N/A</u>
	$X_{vo} + 1.787$	$D_{zy} + 11.787$		

Format Dimensions:

Height	Width
<u>N/A</u>	<u>N/A</u>
<u>N/A</u>	<u>N/A</u>

Camera No. <u>166</u>	Vehicle Motion	Seen Direction	Panoramic Take-Up	Supply
A <u>76.099</u>	$X_t + 0.168$	$D_{zx} + 0.169$	<u>N/A</u>	<u>N/A</u>
B <u>354.992</u>	$Y_t - 0.046$	$D_{ty} + 2.954$	<u>N/A</u>	<u>N/A</u>
C <u>709.984</u>	$X_s + 0.366$	$D_{zx} + 0.371$	<u>N/A</u>	<u>N/A</u>
D <u>56.464</u>	$Y_s - 0.176$	$D_{zy} - 2.176$	<u>N/A</u>	<u>N/A</u>
E <u>56.482</u>	$X_{vo} + 0.163$	$D_{zx} + 0.153$	<u>N/A</u>	<u>N/A</u>
	$X_{vo} + 1.437$	$D_{zy} + 11.437$		

Format Dimensions:

Height	Width
<u>N/A</u>	<u>N/A</u>
<u>N/A</u>	<u>N/A</u>

- Notes:
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. D_t , D_s , D_x , X and Y dimensions are taken IONM above point defining target center.
 4. Format Sign Convention

$-X+Y$	$+X+Y$
$-X-Y$	$+X-Y$

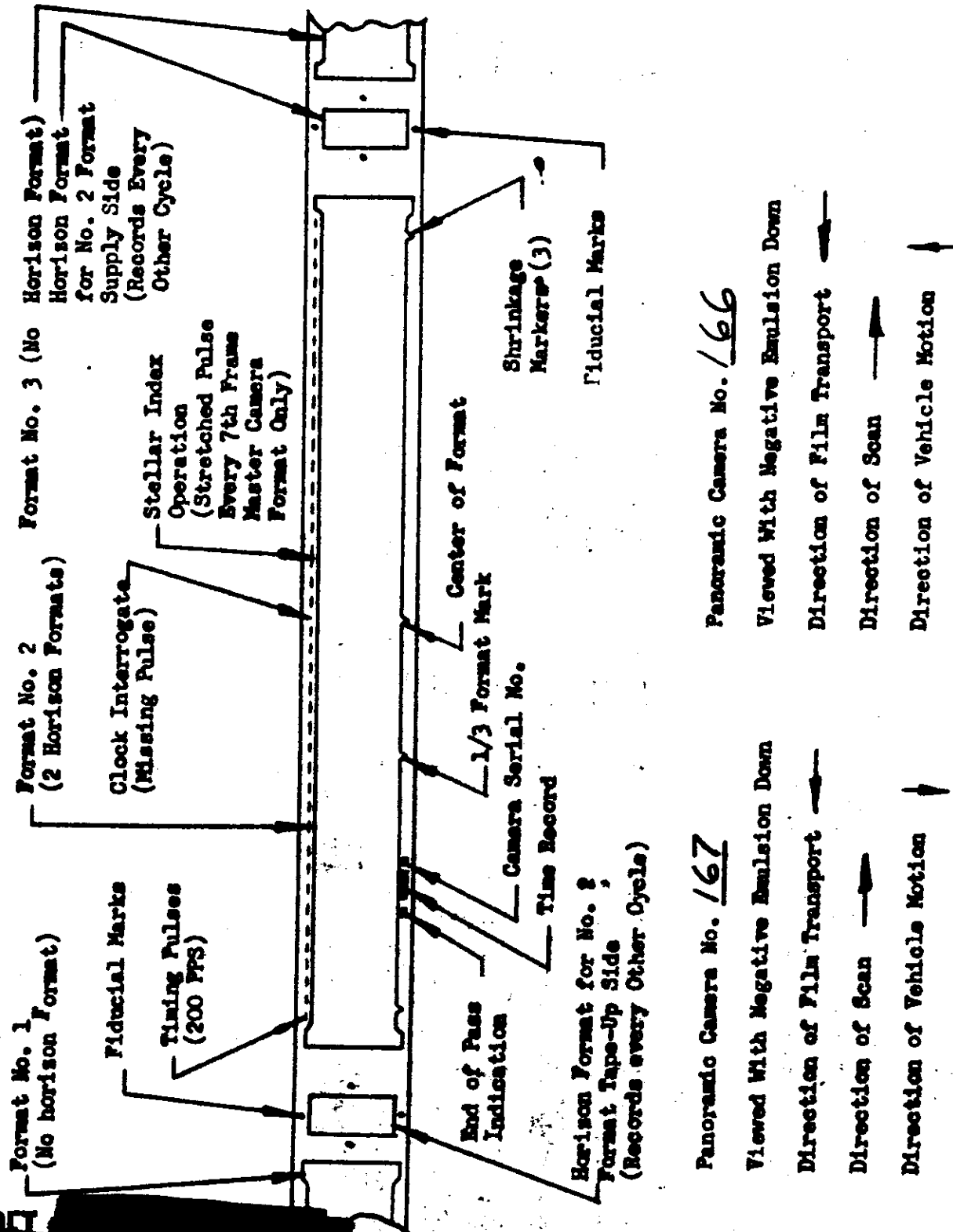
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FORMAT LAYOUT: (PANORAMIC CAMERAS)



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LENS SETTINGS AND FILM TYPES:

Panoramic Camera Settings:	Camera No. <u>166</u>	Camera No. <u>167</u>
Panoramic Optics Slit Width	<u>.175</u> in.	<u>.250</u> in.
Panoramic Optics Filter Type	<u>WRATTEN 21</u>	<u>WRATTEN 25</u>
Horison Optics Exp. Time	<u>1/100</u> sec.	<u>1/100</u> sec.
Horison Optics Aperture	<u>F6.8 SUPPLY</u> <u>F8.0 TAKE-UP</u>	<u>F8.0 SUPPLY</u> <u>F6.8 TAKE-UP</u>
Horison Optics Filter Type	<u>WRATTEN 25</u>	<u>WRATTEN 25</u>

Stellar Index Camera Settings:

	Stellar Index A		Stellar Index B	
	Stellar	Index	Stellar	Index
Exposure Time	<u>2.0 SEC</u>	<u>1/500 SEC</u>	<u>2.0 SEC</u>	<u>1/500 SEC</u>
Aperture Setting	<u>F1.8</u>	<u>F4.5</u>	<u>F1.8</u>	<u>F4.5</u>
Filter Type	<u>NONE</u>	<u>WRATTEN 21</u>	<u>NONE</u>	<u>WRATTEN 21</u>
Ratio: One Stellar Index Frame Per	<u>7</u>		Master Camera Frames.	

Film:

Panoramic Cameras:	Camera No. <u>166</u>	Camera No. <u>167</u>
Type	<u>7J-40</u>	<u>7J-40</u>
Length	<u>16000</u> ft.	<u>16000</u> ft.
Splices	<u>5</u>	<u>5</u>
Emul. Data	<u>81-2-1-5</u>	<u>81-2-7-1-5</u>

Stellar Index Cameras:

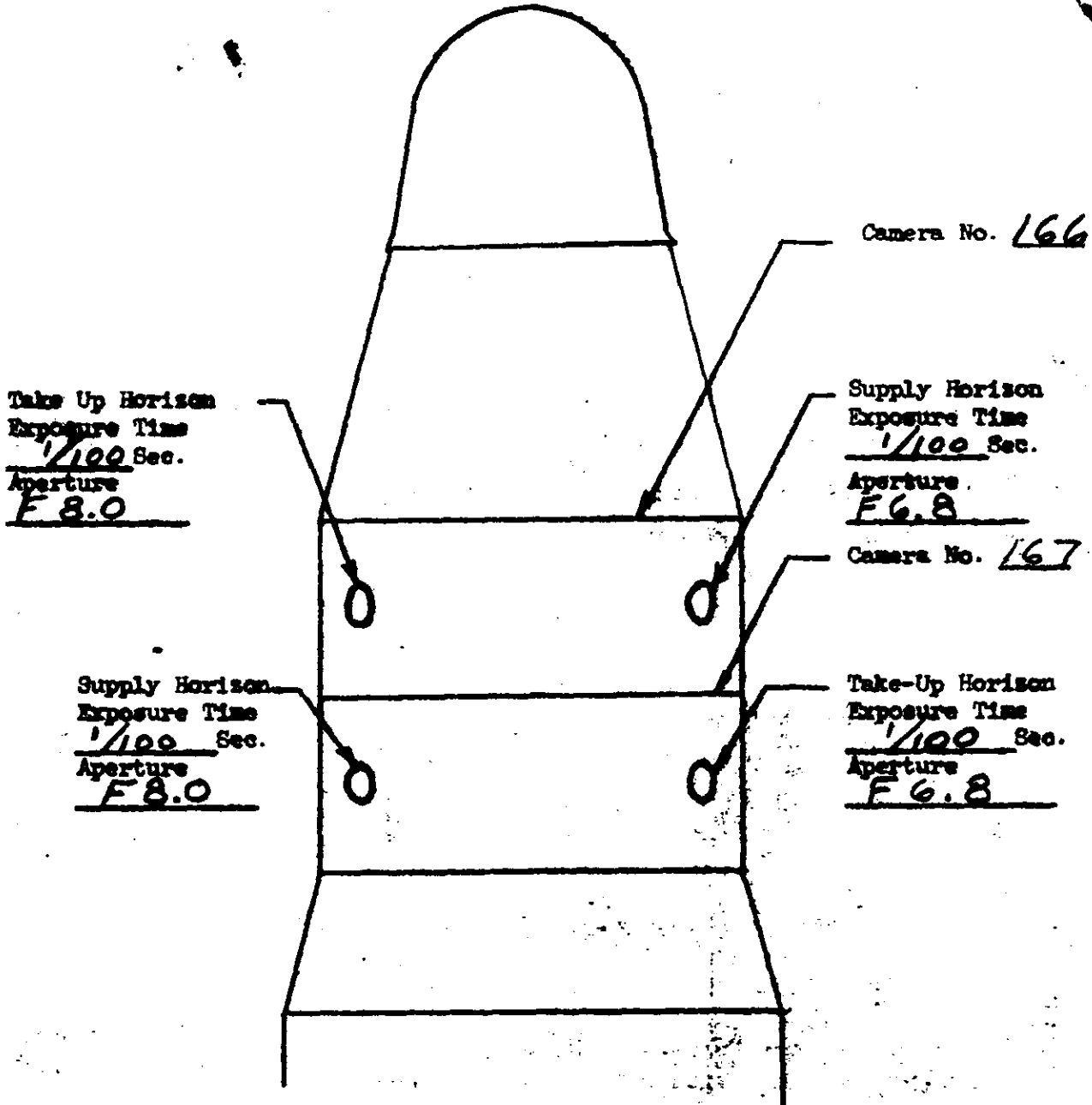
	Stellar Index A		Stellar Index B	
	Stellar	Index	Stellar	Index
Type	<u>3J-34</u>	<u>7J-33</u>	<u>3J-34</u>	<u>7J-33</u>
Emul. Data	<u>51-10-12-4</u>	<u>37-1-12-4</u>	<u>51-10-12-4</u>	<u>37-1-12-4</u>

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HORIZON LENS SETTINGS (Viewed from top of vehicle in flight)



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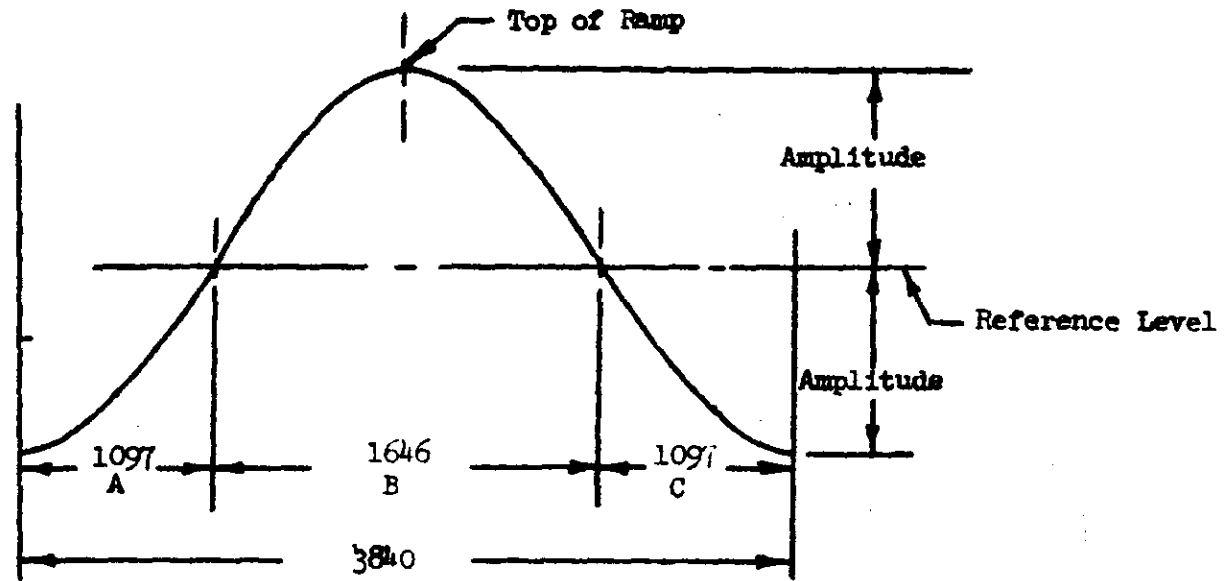
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V/H RAMP CONFIGURATION AND CONSTANTS:



Cycle Rate Computation:

- A. 0 to 1097 Sec Up Ramp: $CPS = R+A \sin (1.5 X -1.5707963)$
- B. 1097 to 2743 Sec Up Ramp: $CPS = R+A \sin (2 X -2.0943951) \leq .4625$
- C. 2743 to 3840 Sec Up Ramp: $CPS = R+A \sin (1.5 X -0.7853982)$

FMC Rate Computation:

$$FMC \text{ Rate (In/Sec)} = 2 \pi \left(\frac{0.3223}{CP} \right) = 2.02507 \times CPS$$

$$FMC \text{ Rate (Radians/Sec)} = 2 \pi \left(\frac{0.3224}{24 CP} \right) = 0.84378 \times CPS$$

Scan Velocity Computation:

$$\text{Scan Velocity (In/Sec)} = \frac{48 \pi}{CP} = 150.796 \times CPS$$

$$\text{Scan Velocity (Radians/Sec)} = \frac{48 \pi}{24 CP} = 6.28319 \times CPS$$

$$\text{Exposure Time (Milliseconds)} = 1000 \left(\frac{CP \times SLIT}{48 \pi} \right) = 6.63146 \left(\frac{SLIT}{CPS} \right)$$

WHERE: $X = \frac{\text{Time Up Ramp (Seconds)}}{1047.6942}$ $R = \frac{1}{2} (CPS(\text{top}) + CPS(\text{bottom}))$
 $A = \frac{1}{2} (CPS \text{ top} - CPS \text{ bottom})$ $CP = \text{Camera Cycle Period in Sec/Cycle}$

CPS = Camera Cycle Rate in Cycles/Sec
 SLIT = Slit Width in Inches

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CYCLE PERIOD DATA:

PRE-FLIGHT CYCLE PERIODS:

V/H Ramp Level	V/H Ramp Amplitude	Cycle Period Seconds		Time Up Ramp Sec
		Master	Slave	
7	6	3.902	3.909	140.
6	6	2.388	2.386	1582.
6	6	3.675	3.684	115.
6	6	2.371	2.368	1615.
6	6	2.361	2.357	1640.
6	6	2.350	2.345	1675.
6	6	2.316	2.311	1798.

IN-FLIGHT CYCLE PERIODS

V/H Ramp Level	V/H Ramp Amplitude	Cycle Period Seconds		Orbit No.	Time Up Ramp Sec
		Master	Slave		
7	6	4.000	4.020	9	140.
6	6	2.423	2.482	16	1582.
6	6	3.720	3.800	25	115.
6	6	2.412	2.485	32	1615.
6	6	2.390	2.450	48	1640.
6	6	2.375	2.430	64	1675.
6	6	2.345	2.400	79	1798.

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- A. 1021-1 LAUNCH 1802Z 05/18/65
- B. DRY
- C. PERFORMANCE ESTIMATE, PART 1

10004
10005
10006

[REDACTED]



OPERATIONS SUMMARY

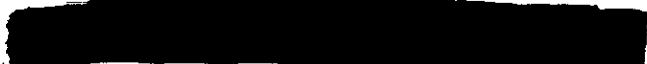
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OPN NO	FRA	Q	LAT	LONG	HEIGHT	RANGE	DA	H	M	S	LTIM	S-TIM						
PRE-FLT	113																	10010
1	8	0	14	ON	2 52 02	151 53w	739549	766614	18	19	31	00	0923	70260				10011
				OFF	2 49 43	150 24w	731608	758371	18	19	31	38	0930	70298				10012
2	1	1	20	ON	2 71 25	154 15E	823378	853635	18	20	54	52	0711	75292				10013
				OFF	2 68 41	163 26E	807996	837666	18	20	55	55	0749	75355				11001
2	1	2	20	ON	2 53 12	175 23W	743201	770404	18	21	00	32	0918	75632				11002
				OFF	2 49 49	173 07W	731520	758281	18	21	01	27	0928	75687				11003
6	7	1	17	ON	3 06 04	112 42E	679164	703943	19	03	15	11	1046	11711				11004
				OFF	3 09 09	113 21E	685264	710274	19	03	15	58	1049	11758				11005
9	7	0	11	ON	1 38 44	115 23W	1008475	1045865	19	07	08	34	2326	25714				11006
				OFF	1 41 41	114 12W	1000978	1038078	19	07	09	22	2332	25762				11007
9	7	1	33	ON	2 29 03	036 47E	676934	701630	19	07	35	47	1002	27347				11008
				OFF	2 23 31	038 18E	669263	693670	19	07	37	12	1010	27432				11009
9	7	2	63	ON	2 16 08	040 04E	663589	687782	19	07	39	04	1019	27544				11010
				OFF	2 05 36	042 20E	664979	689225	19	07	41	44	1031	27704				11011
10	5	1	49	ON	3 06 45	022 12E	681459	706326	19	09	14	42	1043	33282				11012
				OFF	3 15 20	024 02E	701578	727203	19	09	16	53	1053	33413				11013
11	6	1	21	ON	2 28 05	008 14W	675344	699980	19	10	35	42	1002	38142				11014
				OFF	2 24 34	007 17W	670528	694983	19	10	36	36	1007	38196				11015
13	7	1	57	ON	3 05 53	045 56W	680755	705594	19	13	43	59	1040	49439				11016
				OFF	3 15 27	043 53W	703073	728755	19	13	46	25	1050	49585				11017
16	7	1	32	ON	2 58 36	137 17W	756645	784359	19	17	56	46	0847	64606				11018
				OFF	2 53 15	132 39W	737449	764434	19	17	58	15	0907	64695				11019
16	7	0	15	ON	2 37 54	124 42W	693396	718713	19	18	02	20	0943	64940				11020
				OFF	2 35 27	123 50W	687998	713112	19	18	02	58	0947	64978				11021
17	1	1	25	ON	2 75 00	141 02E	850315	881603	19	19	19	54	0444	69594				11022
				OFF	2 73 50	160 05E	831549	862119	19	19	21	13	0601	69673				11023
18	1	1	27	ON	2 71 23	151 51E	813057	842920	19	20	52	17	0659	75137				11024
				OFF	2 67 36	163 36E	793133	822236	19	20	53	41	0748	75221				11025
20	3	1	39	ON	2 50 37	138 29E	726969	753556	19	23	58	17	0912	86297				11026
				OFF	2 44 09	142 02E	707826	733689	19	24	00	01	0928	86401				11027
21	3	1	20	ON	2 52 41	114 27E	733211	760035	20	01	27	33	0905	05253				11028
				OFF	2 49 16	116 40E	722280	748690	20	01	28	29	0915	05309				11029
21	3	2	34	ON	2 00 05	131 33E	672561	697092	20	01	41	07	1027	06067				11030
				OFF	3 05 34	132 43E	681872	706753	20	01	42	33	1033	06153				11031
21	3	3	50	ON	3 11 57	134 04E	696142	721563	20	01	44	10	1040	06250				11032
				OFF	3 20 31	136 00E	721043	747405	20	01	46	21	1050	06381				11033
22	3	1	20	ON	2 57 07	088 12E	748024	775410	20	02	56	09	0849	10569				11034
				OFF	2 53 41	091 03E	736091	763025	20	02	57	06	0901	10626				11035
22	3	2	22	ON	2 42 44	097 22E	703351	729045	20	03	00	02	0929	10802				11036
				OFF	2 39 08	098 52E	694481	719840	20	03	00	58	0936	10858				11037
22	3	3	28	ON	2 02 00	108 31E	670304	694750	20	03	10	27	1024	11427				11038
				OFF	3 02 35	109 27E	676796	701486	20	03	11	37	1029	11497				11039
22	3	4	22	ON	3 05 56	110 08E	682850	707768	20	03	12	28	1033	11548				11040
				OFF	3 09 36	110 54E	690709	715924	20	03	13	24	1037	11604				11041
23	6	1	20	ON	2 48 01	072 04E	717681	743917	20	04	28	28	0916	16108				11042
				OFF	2 44 39	073 49E	708104	733978	20	04	29	22	0924	16162				11043
23	6	2	91	ON	2 31 09	078 57E	678280	703027	20	04	32	52	0948	16372				11044
				OFF	2 16 44	082 43E	663952	688159	20	04	36	33	1007	16593				11045



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24	9	1	35	ON	2	25	06	058	0CE	669779	694205	20	06	04	14	0956	21854	11049
				OFF	2	19	34	059	24E	665157	689409	20	06	05	39	1003	21939	11050
25	6	0	12	ON	1	38	40	117	57W	996590	1033519	20	07	05	51	2314	25551	11051
				OFF	1	41	31	116	48W	989142	1025781	20	07	06	37	2319	25597	11052
25	6	1	90	ON	2	23	05	035	52E	667660	692006	20	07	34	35	0958	27275	11053
				OFF	2	08	40	039	10E	664941	689185	20	07	38	15	1014	27495	11054
26	2	1	24	ON	2	71	59	032	05W	811354	841152	20	08	50	38	0642	31838	11055
				OFF	2	68	50	020	45W	793993	823129	20	08	51	52	0728	31912	11056
26	2	2	80	ON	3	05	44	019	28E	683371	708309	20	09	11	43	1029	33103	11057
				OFF	3	19	20	022	26E	719038	745324	20	09	15	10	1044	33310	11058
27	6	1	22	ON	2	27	06	010	29W	671630	696127	20	10	33	12	0951	37992	11059
				OFF	2	23	37	009	33W	667847	692200	20	10	34	05	0955	38045	11060
30	9	1	44	ON	3	31	53	064	47W	767104	795213	20	15	17	40	1058	55060	11061
				OFF	3	40	23	061	46W	804351	833880	20	15	19	52	1112	55192	11062
32	9	0	15	ON	2	37	46	127	10W	688354	713482	20	17	59	33	0930	64773	11063
				OFF	2	35	20	126	17W	683472	708415	20	18	00	11	0934	64811	11064
34	8	1	51	ON	2	72	18	145	01E	807998	837667	20	20	49	03	0629	74943	11065
				OFF	2	65	25	165	36E	773437	801790	20	20	51	34	0754	75094	11066
35	8	1	31	ON	2	63	29	146	09E	764967	792997	20	22	21	59	0806	80519	11067
				OFF	2	58	19	152	31E	745531	772822	20	22	23	30	0833	80610	11068
35	8	2	20	ON	3	16	03	177	47E	711599	737603	20	22	42	42	1033	81762	11069
				OFF	3	19	35	178	36E	722793	749221	20	22	43	36	1038	81816	11070
37	8	1	33	ON	2	46	39	115	38E	708246	734125	21	01	26	18	0908	05178	11071
				OFF	2	41	15	118	11E	694666	720032	21	01	27	43	0920	05263	11072
37	8	2	49	ON	3	12	01	131	35E	700819	726416	21	01	41	18	1027	06078	11073
				OFF	3	20	31	133	31E	726765	753344	21	01	43	28	1037	06208	11074
41	5	1	39	ON	2	62	37	011	30E	758437	786219	21	07	21	07	0807	26467	11075
				OFF	2	56	19	018	29E	735925	762852	21	07	22	56	0836	26576	11076
41	5	2	45	ON	3	03	53	039	16E	683124	708053	21	07	38	30	1015	27510	11077
				OFF	3	11	30	040	51E	700823	726420	21	07	40	26	1023	27626	11078
42	9	1	68	ON	3	06	51	017	13E	689682	714858	21	09	09	03	1017	32943	11079
				OFF	3	18	21	019	44E	721624	748008	21	09	11	58	1030	33118	11080
42	9	2	52	ON	3	24	50	021	20E	744474	771724	21	09	13	38	1039	33218	11081
				OFF	3	34	25	024	10E	783541	812276	21	09	16	06	1052	33366	11082
43	5	1	22	ON	2	26	02	012	40W	668612	692994	21	10	30	31	0939	37831	11083
				OFF	2	22	25	011	43W	665768	690044	21	10	31	26	0944	37886	11084
45	5	1	58	ON	2	57	43	073	24W	738914	765954	21	13	21	46	0828	48106	11085
				OFF	2	48	16	066	27W	710076	736024	21	13	24	21	0858	48261	11086
46	9	1	60	ON	3	32	02	067	12W	775251	803670	21	15	14	43	1045	54883	11087
				OFF	3	43	33	062	52W	827572	857988	21	15	17	43	1106	55063	11088
48	9	0	14	ON	2	37	52	129	39W	684941	709940	21	17	56	30	0917	64590	11089
				OFF	2	35	29	128	48W	680603	705438	21	17	57	07	0921	64627	11090
50	2	1	20	ON	2	65	34	162	52E	765294	793337	21	20	48	29	0740	74909	11091
				OFF	2	62	25	167	54E	753068	780646	21	20	49	27	0801	74967	11092
51	2	1	32	ON	2	63	39	143	28E	757163	784897	21	22	18	53	0752	80333	11093
				OFF	2	58	21	150	03E	738168	765180	21	22	20	26	0820	80426	11094
55	8	1	66	ON	2	28	57	074	41E	670197	694639	22	04	27	25	0926	16045	11095
				OFF	2	18	27	077	24E	663965	688173	22	04	30	06	0939	16206	11096
56	5	1	53	ON	2	25	00	053	08E	666565	690870	22	05	58	13	0930	21493	11097
				OFF	2	16	27	055	13E	663977	688185	22	06	00	24	0941	21624	11098
57	8	1	85	ON	2	22	01	031	14E	664828	689068	22	07	28	47	0933	26927	11099
				OFF	2	08	32	034	17E	668022	692382	22	07	32	12	0949	27132	11100
58	3	1	73	ON	3	05	47	014	35E	691299	716536	22	09	05	38	1003	32738	11101
				OFF	3	18	24	017	19E	727486	754092	22	09	08	50	1018	32930	11102

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59	9	1	54	ON	2	17	05	012	52W	663956	688163	22	10	29	38	0938	37778	11103
				OFF	2	08	33	011	00W	668214	692581	22	10	31	48	0947	37908	11104
62	3	1	78	ON	2	60	43	101	42W	740990	768110	22	14	47	31	0800	53251	11105
				OFF	2	48	15	091	30W	703956	729673	22	14	50	57	0844	53457	11106
62	3	2	19	ON	2	37	11	086	30W	680481	705311	22	14	53	51	0907	53631	11107
				OFF	2	34	04	085	25W	675586	700231	22	14	54	39	0912	53679	11108
62	3	3	19	ON	2	10	19	079	19W	667010	691332	22	15	00	43	0943	54043	11109
				OFF	2	07	13	078	40W	669898	694328	22	15	01	30	0946	54090	11110
64	4	0	15	ON	2	37	51	132	03W	681201	706059	22	17	53	16	0905	64396	11111
				OFF	2	35	22	131	09W	677165	701871	22	17	53	55	0909	64435	11112
65	4	1	20	ON	2	69	28	173	57E	773690	802053	22	19	14	07	0649	69247	11113
				OFF	2	66	29	178	38W	760849	788722	22	19	15	08	0720	69308	11114
66	5	1	21	ON	2	70	56	146	20E	780286	808899	22	20	43	21	0628	74601	11115
				OFF	2	68	08	154	58E	767184	795299	22	20	44	23	0704	74663	11116
66	5	2	36	ON	2	65	06	161	19E	754948	782598	22	20	45	22	0730	74722	11117
				OFF	2	59	21	169	15E	734599	761477	22	20	47	05	0804	74825	11118
67	5	1	24	ON	2	62	41	142	30E	745495	772786	22	22	15	54	0745	80154	11119
				OFF	2	58	50	147	09E	732489	759286	22	22	17	01	0805	80221	11120
69	5	1	41	ON	2	30	55	117	01E	670595	695052	23	01	24	00	0912	05040	11121
				OFF	2	24	21	118	52E	665333	689593	23	01	25	41	0921	05141	11122
69	5	2	38	ON	3	13	49	127	09E	716156	742333	23	01	35	22	1003	05722	11123
				OFF	3	20	30	128	41E	738696	765727	23	01	37	04	1011	05824	11124
70	2	1	39	ON	2	56	45	081	14E	724699	751201	23	02	46	58	0811	10018	11125
				OFF	2	50	20	086	03E	706675	732495	23	02	48	43	0832	10123	11126
70	2	2	22	ON	2	42	23	090	13E	688331	713457	23	02	50	49	0851	10249	11127
				OFF	2	38	52	091	40E	681723	706601	23	02	51	44	0858	10304	11128
71	8	1	79	ON	2	25	00	073	24E	665567	689835	23	04	25	05	0918	15905	11129
				OFF	2	12	29	076	22E	666207	690499	23	04	28	16	0933	16096	11130
72	6	1	60	ON	2	25	00	050	45E	665521	689787	23	05	54	52	0917	21292	11131
				OFF	2	15	30	053	03E	664724	688960	23	05	57	17	0929	21437	11132
73	4	1	99	ON	2	29	03	026	59E	668312	692684	23	07	23	37	0911	26617	11133
				OFF	2	13	26	030	52E	665774	690049	23	07	27	36	0931	26856	11134
74	6	1	60	ON	3	08	50	012	51E	703114	728798	23	09	03	01	0954	32581	11135
				OFF	3	19	19	015	10E	736251	763189	23	09	05	41	1006	32741	11136
74	6	2	28	ON	3	27	49	017	21E	769202	797391	23	09	07	52	1017	32872	11137
				OFF	3	33	17	019	00E	792748	821833	23	09	09	17	1025	32957	11138
75	7	1	41	ON	2	15	02	014	45W	665087	689337	23	10	26	45	0927	37605	11139
				OFF	2	08	30	013	21W	670084	694522	23	10	28	24	0934	37704	11140
79	9	1	28	ON	2	33	45	110	19W	672571	697103	23	16	21	06	0859	58866	11141
				OFF	2	29	19	108	57W	668001	692361	23	16	22	14	0906	58934	11142
																		11143



24	9	1	36	ON	2	26	C3	057	42E	669779	694205	20	08	04	14	0955	21854	12049
				OFF	2	20	31	059	06E	665157	689409	20	06	05	39	1002	21939	12050
25	6	0	12	ON	1	37	17	118	34W	996590	1033519	20	07	05	51	2311	25551	12051
				OFF	1	40	09	117	28W	989142	1025781	20	07	06	37	2316	25597	12052
25	6	1	93	ON	2	24	02	035	34E	667660	692006	20	07	34	35	0956	27275	12053
				OFF	2	09	36	038	54E	664941	689185	20	07	38	15	1013	27495	12054
26	2	1	24	ON	2	72	36	035	26W	811354	841152	20	08	50	38	0628	31838	12055
				OFF	2	69	38	023	10W	793993	823129	20	08	51	52	0719	31912	12056
26	2	2	82	ON	3	04	46	019	12E	683371	708309	20	09	11	43	1028	33103	12057
				OFF	3	18	19	022	08E	719038	745324	20	09	15	10	1043	33310	12058
27	6	1	21	ON	2	28	C3	010	49W	671630	696127	20	10	33	12	0949	37992	12059
				OFF	2	24	34	009	52W	667847	692200	20	10	34	05	0954	38045	12060
30	9	1	45	ON	3	30	49	065	11W	767104	795213	20	15	17	40	1056	55060	12061
				OFF	3	39	16	062	18W	804351	833880	20	15	19	52	1110	55192	12062
32	9	0	15	ON	2	38	44	127	35W	688354	713482	20	17	59	33	0929	64773	12063
				OFF	2	36	17	126	41W	683472	708415	20	18	00	11	0933	64811	12064
34	8	1	51	ON	2	72	54	141	34E	807998	837667	20	20	49	03	0615	74943	12065
				OFF	2	66	18	163	51E	773437	801790	20	20	51	34	0746	75094	12066
35	8	1	32	ON	2	64	24	144	39E	764967	792997	20	22	21	59	0800	80519	12067
				OFF	2	59	16	151	28E	745531	772822	20	22	23	30	0829	80610	12068
35	8	2	21	ON	3	15	C3	177	29E	711599	737603	20	22	42	42	1032	81762	12069
				OFF	3	18	34	178	18E	722793	749221	20	22	43	36	1036	81816	12070
37	8	1	34	ON	2	47	37	115	03E	708246	734125	21	01	26	18	0906	05178	12071
				OFF	2	42	12	117	42E	694666	720032	21	01	27	43	0918	05263	12072
37	8	2	50	ON	3	11	02	131	18E	700819	726416	21	01	41	18	1026	06078	12073
				OFF	3	19	29	133	12E	726765	753344	21	01	43	28	1036	06208	12074
41	5	1	39	ON	2	63	32	010	06E	758437	786219	21	07	21	07	0801	26467	12075
				OFF	2	57	16	017	33E	735925	762852	21	07	22	56	0833	26576	12076
41	5	2	46	ON	3	02	55	039	00E	683124	708053	21	07	38	30	1014	27510	12077
				OFF	3	10	30	040	35E	700823	726420	21	07	40	26	1022	27626	12078
42	9	1	68	ON	3	05	52	016	57E	689682	714858	21	09	09	03	1016	32943	12079
				OFF	3	17	20	019	26E	721624	748008	21	09	11	58	1029	33118	12080
42	9	2	52	ON	3	23	47	021	00E	744474	771724	21	09	13	38	1037	33218	12081
				OFF	3	33	19	023	44E	783541	812276	21	09	16	06	1051	33366	12082
43	5	1	22	ON	2	26	59	012	59W	668612	692994	21	10	30	31	0938	37831	12083
				OFF	2	23	21	012	01W	665768	690044	21	10	31	26	0943	37886	12084
45	5	1	59	ON	2	58	40	074	25W	738914	765954	21	13	21	46	0824	48106	12085
				OFF	2	49	14	067	05W	710076	736024	21	13	24	21	0856	48261	12086
46	9	1	60	ON	3	30	57	067	36W	775251	803670	21	15	14	43	1044	54883	12087
				OFF	3	42	25	063	27W	827572	857988	21	15	17	43	1103	55063	12088
48	9	0	15	ON	2	38	50	130	05W	684941	709940	21	17	56	30	0916	64590	12089
				OFF	2	36	26	129	12W	680603	705438	21	17	57	07	0920	64627	12090
50	2	1	19	ON	2	66	26	161	06E	765294	793337	21	20	48	29	0732	74909	12091
				OFF	2	63	20	166	31E	753068	780646	21	20	49	27	0755	74967	12092
51	2	1	34	ON	2	64	33	141	57E	757163	784897	21	22	18	53	0746	80333	12093
				OFF	2	59	17	149	00E	738168	765180	21	22	20	26	0816	80426	12094
55	8	1	66	ON	2	29	53	074	21E	670197	694639	22	04	27	25	0924	16045	12095
				OFF	2	19	24	077	07E	663965	688173	22	04	30	06	0938	16206	12096
56	5	1	55	ON	2	25	56	052	49E	666565	690870	22	05	58	13	0929	21493	12097
				OFF	2	17	23	054	56E	663977	688185	22	06	00	24	0940	21624	12098
57	8	1	87	ON	2	22	58	030	57E	664828	689068	22	07	28	47	0932	26927	12099
				OFF	2	09	29	034	01E	668022	692382	22	07	32	12	0948	27132	12100
58	3	1	75	ON	3	04	48	014	19E	691299	716536	22	09	05	38	1002	32738	12101
				OFF	3	17	22	017	01E	727486	754092	22	09	08	50	1016	32930	12102

59	9	1	54	ON	2	18	01	013	09W	663956	688163	22	10	29	38	0937	37778	12103
				OFF	2	09	30	011	16W	668214	692581	22	10	31	48	0946	37908	12104
62	3	1	80	ON	2	61	38	102	55W	740990	768110	22	14	47	31	0755	53251	12105
				OFF	2	49	12	092	07W	703956	729673	22	14	50	57	0842	53457	12106
62	3	2	19	ON	2	38	08	086	55W	680481	705311	22	14	53	51	0906	53631	12107
				OFF	2	35	00	085	48W	675586	700231	22	14	54	39	0911	53679	12108
62	3	3	19	ON	2	11	16	079	35W	667010	691332	22	15	00	43	0942	54043	12109
				OFF	2	08	10	078	56W	669898	694328	22	15	01	30	0945	54090	12110
64	4	0	16	ON	2	38	47	132	28W	681201	706059	22	17	53	16	0903	64396	12111
				OFF	2	36	18	131	33W	677165	701871	22	17	53	55	0907	64435	12112
65	4	1	22	ON	2	70	13	171	28E	773690	802053	22	19	14	07	0640	69247	12113
				OFF	2	67	19	180	32W	760849	788722	22	19	15	08	0713	69308	12114
66	5	1	21	ON	2	71	36	143	26E	780286	808899	22	20	43	21	0617	74601	12115
				OFF	2	68	56	152	47E	767184	795299	22	20	44	23	0655	74663	12116
66	5	2	37	ON	2	65	59	159	38E	754948	782598	22	20	45	22	0723	74722	12117
				OFF	2	60	17	168	09E	734599	761477	22	20	47	05	0759	74825	12118
67	5	1	24	ON	2	63	35	141	07E	745495	772786	22	22	15	54	0740	80154	12119
				OFF	2	59	46	146	05E	732489	759286	22	22	17	01	0801	80221	12120
69	5	1	42	ON	2	31	52	116	40E	670595	695052	23	01	24	00	0910	05040	12121
				OFF	2	25	17	118	33E	665333	689593	23	01	25	41	0919	05141	12122
69	5	2	38	ON	3	12	48	126	52E	716156	742333	23	01	35	22	1002	05722	12123
				OFF	3	19	27	128	22E	738696	765727	23	01	37	04	1010	05824	12124
70	2	1	41	ON	2	57	41	080	18E	724699	751201	23	02	46	58	0808	10018	12125
				OFF	2	51	17	085	23E	706675	732495	23	02	48	43	0830	10123	12126
70	2	2	22	ON	2	43	19	089	44E	688331	713457	23	02	50	49	0849	10249	12127
				OFF	2	39	48	091	14E	681723	706601	23	02	51	44	0856	10304	12128
71	8	1	80	ON	2	25	56	073	05E	665567	689835	23	04	25	05	0917	15905	12129
				OFF	2	13	26	076	06E	666207	690499	23	04	28	16	0932	16096	12130
72	6	1	61	ON	2	25	57	050	26E	665521	689787	23	05	54	52	0916	21292	12131
				OFF	2	16	27	052	47E	664724	688960	23	05	57	17	0928	21437	12132
73	4	1	101	ON	2	29	59	026	39E	668312	692684	23	07	23	37	0910	26617	12133
				OFF	2	14	23	030	36E	665774	690049	23	07	27	36	0930	26856	12134
74	6	1	61	ON	3	07	50	012	34E	703114	728798	23	09	03	01	0953	32581	12135
				OFF	3	18	17	014	51E	736251	763189	23	09	05	41	1005	32741	12136
74	6	2	29	ON	3	26	45	016	59E	769202	797391	23	09	07	52	1015	32872	12137
				OFF	3	32	11	018	34E	792748	821833	23	09	09	17	1023	32957	12138
75	7	1	41	ON	2	15	58	015	02W	665087	689337	23	10	26	45	0926	37605	12139
				OFF	2	09	27	013	37W	670084	694522	23	10	28	24	0933	37704	12140
79	9	1	28	ON	2	34	41	110	41W	672571	697103	23	16	21	06	0858	58866	12141
				OFF	2	30	15	109	17W	668001	692361	23	16	22	14	0905	58934	12142
																		12143





PHOTOGRAPHIC SUMMARY

FWD PAN CAMERA NO		167	0.2500	SLIT	W/25	FILTER	4404	FILM	
OPN NO	FRA	FEET	ET	S-EL	S-DIR	EV	FULL	INT	PRI
PRE-FLT	113	298.9							
1 8 0	14	37.0	ON 214	46.1	-31.9	11.59	12.10	11.50	10.90
			OFF 217	48.2	-33.4	11.61	12.10	11.50	10.90
2 1 1	20	52.9	ON 186	24.6	-22.6	11.39	11.88	11.28	10.68
			OFF 190	28.4	-23.9	11.42	11.95	11.35	10.75
2 1 2	20	52.9	ON 213	44.9	-31.4	11.59	12.09	11.49	10.89
			OFF 217	48.0	-33.6	11.62	12.10	11.50	10.90
6 7 1	17	45.0	ON 230	59.0-131.6		11.70	12.10	11.50	10.90
			OFF 227	56.8-135.3		11.68	12.10	11.50	10.90
9 7 0	11	29.1	ON 146	-31.1	332.9	11.04	0.	0.	0.
			OFF 146	-28.3	333.7	11.05	0.	0.	0.
9 7 1	33	87.3	ON 236	62.7	-59.2	11.74	12.10	11.50	10.90
			OFF 238	65.2	-69.9	11.75	12.10	11.50	10.90
9 7 2	63	166.6	ON 239	66.7	-86.9	11.76	12.10	11.50	10.90
			OFF 237	65.0-111.2		11.74	12.10	11.50	10.90
10 5 1	49	129.6	ON 229	58.0-131.3		11.69	12.10	11.50	10.90
			OFF 220	51.6-140.2		11.64	12.10	11.50	10.90
11 6 1	21	55.5	ON 237	62.9	-61.3	11.74	12.10	11.50	10.90
			OFF 238	64.4	-68.0	11.75	12.10	11.50	10.90
13 7 1	57	150.8	ON 242	58.2-129.4		11.77	12.10	11.50	10.90
			OFF 234	51.3-139.5		11.73	12.10	11.50	10.90
16 7 1	32	84.6	ON 213	38.5	-31.6	11.59	12.06	11.46	10.86
			OFF 220	43.6	-34.6	11.64	12.09	11.49	10.89
16 7 0	15	39.7	ON 238	56.1	-47.9	11.75	12.10	11.50	10.90
			OFF 240	57.7	-51.0	11.76	12.10	11.50	10.90
17 1 1	25	66.1	ON 184	14.6	-23.2	11.38	11.47	10.87	10.27
			OFF 189	19.4	-24.3	11.41	11.72	11.12	10.52
18 1 1	27	71.4	ON 194	23.8	-25.9	11.45	11.86	11.26	10.66
			OFF 199	28.8	-27.7	11.49	11.96	11.36	10.76
20 3 1	39	103.2	ON 225	45.5	-37.3	11.66	12.09	11.49	10.89
			OFF 232	50.7	-42.2	11.71	12.10	11.50	10.90
21 3 1	20	52.9	ON 222	43.6	-36.1	11.65	12.09	11.49	10.89
			OFF 226	46.6	-38.5	11.67	12.10	11.50	10.90
21 3 2	34	89.9	ON 246	60.6-118.7		11.79	12.10	11.50	10.90
			OFF 242	57.4-126.9		11.77	12.10	11.50	10.90
21 3 3	50	132.2	ON 237	53.1-134.2		11.74	12.10	11.50	10.90
			OFF 228	46.5-141.3		11.69	12.10	11.50	10.90
22 3 1	20	52.9	ON 216	39.5	-33.7	11.61	12.06	11.46	10.86
			OFF 221	42.6	-35.7	11.64	12.08	11.48	10.88
22 3 2	22	58.2	ON 234	51.7	-44.2	11.72	12.10	11.50	10.90
			OFF 237	54.4	-47.9	11.74	12.10	11.50	10.90
22 3 3	28	74.1	ON 247	61.3-115.3		11.80	12.10	11.50	10.90
			OFF 244	59.0-122.6		11.79	12.10	11.50	10.90
22 3 4	22	58.2	ON 242	57.0-127.1		11.77	12.10	11.50	10.90
			OFF 239	54.6-131.5		11.75	12.10	11.50	10.90
23 6 1	20	52.9	ON 228	47.4	-39.9	11.69	12.10	11.50	10.90
			OFF 232	50.1	-42.7	11.71	12.10	11.50	10.90
23 6 2	91	240.7	ON 244	59.3	-58.6	11.78	12.10	11.50	10.90
			OFF 250	64.0	-85.5	11.82	12.10	11.50	10.90





24	9	1	35	92.6	ON 248	61.9 -68.8	11.80	12.10	11.50	10.90	13049
					CFF 249	63.5 -79.6	11.81	12.10	11.50	10.90	13050
25	6	0	12	31.7	ON 156	-30.6 329.4	11.14	0.	0.	0.	13051
					CFF 156	-27.9 330.3	11.14	0.	0.	0.	13052
25	6	1	90	238.0	ON 248	62.4 -72.7	11.81	12.10	11.50	10.90	13053
					CFF 249	63.1-102.3	11.81	12.10	11.50	10.90	13054
26	2	1	24	63.5	ON 194	22.5 -27.2	11.46	11.83	11.23	10.63	13055
					CFF 199	26.9 -28.8	11.49	11.93	11.33	10.73	13056
26	2	2	80	211.6	ON 241	56.6-125.9	11.77	12.10	11.50	10.90	13057
					CFF 228	47.0-139.2	11.69	12.10	11.50	10.90	13058
27	6	1	22	58.2	ON 247	60.6 -65.8	11.80	12.10	11.50	10.90	13059
					CFF 248	61.9 -72.0	11.81	12.10	11.50	10.90	13060
30	9	1	44	116.4	ON 212	36.3-145.5	11.58	12.04	11.44	10.84	13061
					CFF 201	28.8-148.7	11.50	11.96	11.36	10.76	13062
32	9	0	15	39.7	ON 240	53.9 -51.7	11.76	12.10	11.50	10.90	13063
					CFF 242	55.4 -54.6	11.77	12.10	11.50	10.90	13064
34	8	1	51	134.9	ON 194	21.6 -28.6	11.46	11.80	11.20	10.60	13065
					CFF 205	30.3 -32.0	11.53	11.98	11.38	10.78	13066
35	8	1	31	82.0	ON 207	32.2 -33.2	11.55	12.00	11.40	10.80	13067
					CFF 215	37.2 -35.8	11.60	12.05	11.45	10.85	13068
35	8	2	20	52.9	ON 229	48.6-134.5	11.69	12.10	11.50	10.90	13069
					CFF 225	45.9-137.3	11.67	12.10	11.50	10.90	13070
37	8	1	33	87.3	ON 230	46.9 -44.1	11.70	12.10	11.50	10.90	13071
					CFF 235	50.9 -49.0	11.73	12.10	11.50	10.90	13072
37	8	2	49	129.6	ON 233	51.2-130.4	11.72	12.10	11.50	10.90	13073
					CFF 224	45.0-137.5	11.66	12.09	11.49	10.89	13074
41	5	1	39	103.2	ON 210	32.7 -34.8	11.56	12.01	11.41	10.81	13075
					CFF 219	38.5 -38.3	11.62	12.06	11.46	10.86	13076
41	5	2	45	119.0	ON 240	55.5-120.2	11.76	12.10	11.50	10.90	13077
					CFF 233	51.0-128.9	11.72	12.10	11.50	10.90	13078
42	9	1	68	179.9	ON 237	53.7-123.6	11.74	12.10	11.50	10.90	13079
					CFF 226	46.2-134.7	11.67	12.10	11.50	10.90	13080
42	9	2	52	137.5	ON 217	41.2-139.2	11.62	12.07	11.47	10.87	13081
					CFF 205	33.4-144.0	11.53	12.01	11.41	10.81	13082
43	5	1	22	58.2	ON 246	58.2 -69.8	11.80	12.10	11.50	10.90	13083
					CFF 247	59.3 -75.8	11.80	12.10	11.50	10.90	13084
45	5	1	58	153.4	ON 218	36.9 -38.3	11.62	12.05	11.45	10.85	13085
					CFF 229	44.7 -44.5	11.69	12.09	11.49	10.89	13086
46	9	1	60	158.7	ON 207	35.1-142.1	11.55	12.03	11.43	10.83	13087
					CFF 194	25.2-146.4	11.45	11.89	11.29	10.69	13088
48	9	0	14	37.0	ON 240	51.5 -54.8	11.76	12.10	11.50	10.90	13089
					CFF 241	52.9 -57.5	11.77	12.10	11.50	10.90	13090
50	2	1	20	52.9	ON 206	29.0 -35.2	11.54	11.96	11.36	10.76	13091
					CFF 211	32.1 -36.8	11.58	12.00	11.40	10.80	13092
51	2	1	32	84.6	ON 210	30.9 -36.4	11.57	11.99	11.39	10.79	13093
					CFF 217	35.8 -39.2	11.62	12.04	11.44	10.84	13094
55	8	1	66	174.6	ON 246	55.0 -67.1	11.79	12.10	11.50	10.90	13095
					CFF 248	57.8 -83.2	11.81	12.10	11.50	10.90	13096
56	5	1	53	140.2	ON 248	56.2 -72.9	11.81	12.10	11.50	10.90	13097
					CFF 249	57.8 -86.5	11.81	12.10	11.50	10.90	13098
57	8	1	85	224.8	ON 249	56.8 -77.6	11.81	12.10	11.50	10.90	13099
					CFF 247	57.2 -99.4	11.80	12.10	11.50	10.90	13100
58	3	1	73	193.1	ON 237	52.0-119.2	11.74	12.10	11.50	10.90	13101
					CFF 224	44.4-131.3	11.66	12.09	11.49	10.89	13102



59	9	1	54	142.8	ON 249	57.2	-85.5	11.81	12.10	11.50	10.90	13103
					CFF 247	56.8	-99.2	11.80	12.10	11.50	10.90	13104
62	3	1	78	206.3	ON 217	32.8	-40.1	11.61	12.01	11.41	10.81	13105
					OFF 233	42.8	-48.1	11.71	12.08	11.48	10.88	13106
62	3	2	19	50.3	ON 243	49.9	-58.2	11.78	12.10	11.50	10.90	13107
					OFF 244	51.5	-61.7	11.79	12.10	11.50	10.90	13108
62	3	3	19	50.3	ON 247	56.5	-96.3	11.80	12.10	11.50	10.90	13109
					OFF 246	56.0	-101.0	11.79	12.10	11.50	10.90	13110
64	4	0	15	39.7	ON 242	49.2	-57.8	11.77	12.10	11.50	10.90	13111
					CFF 244	50.5	-60.5	11.78	12.10	11.50	10.90	13112
65	4	1	20	52.9	ON 203	23.8	-36.3	11.52	11.86	11.26	10.66	13113
					OFF 208	27.1	-37.8	11.55	11.93	11.33	10.73	13114
66	5	1	21	55.5	ON 201	21.9	-35.7	11.51	11.81	11.21	10.61	13115
					CFF 206	25.2	-37.2	11.54	11.89	11.29	10.69	13116
66	5	2	36	95.2	ON 212	28.4	-38.7	11.58	11.95	11.35	10.75	13117
					OFF 220	33.6	-41.7	11.64	12.02	11.42	10.82	13118
67	5	1	24	63.5	ON 216	30.6	-40.1	11.61	11.98	11.38	10.78	13119
					CFF 221	34.0	-42.2	11.64	12.02	11.42	10.82	13120
69	5	1	41	108.4	ON 248	51.8	-66.6	11.81	12.10	11.50	10.90	13121
					CFF 250	54.0	-75.2	11.82	12.10	11.50	10.90	13122
69	5	2	38	100.5	ON 229	45.9	-125.3	11.69	12.10	11.50	10.90	13123
					CFF 221	41.7	-130.5	11.64	12.08	11.48	10.88	13124
70	2	1	39	103.2	ON 225	35.4	-44.0	11.67	12.03	11.43	10.83	13125
					CFF 233	40.3	-48.1	11.71	12.07	11.47	10.87	13126
70	2	2	22	58.2	ON 241	45.7	-54.5	11.76	12.09	11.49	10.89	13127
					CFF 243	47.7	-57.9	11.78	12.10	11.50	10.90	13128
71	8	1	79	209.0	ON 250	53.5	-74.5	11.82	12.10	11.50	10.90	13129
					CFF 249	55.0	-92.7	11.81	12.10	11.50	10.90	13130
72	6	1	60	158.7	ON 250	53.3	-74.6	11.82	12.10	11.50	10.90	13131
					OFF 250	54.8	-88.2	11.82	12.10	11.50	10.90	13132
73	4	1	99	261.9	ON 249	51.9	-69.4	11.81	12.10	11.50	10.90	13133
					CFF 249	54.6	-91.2	11.81	12.10	11.50	10.90	13134
74	6	1	60	158.7	ON 233	48.0	-119.6	11.72	12.10	11.50	10.90	13135
					OFF 221	41.9	-128.7	11.64	12.08	11.48	10.88	13136
74	6	2	28	74.1	ON 210	36.0	-134.1	11.57	12.04	11.44	10.84	13137
					CFF 203	31.9	-136.9	11.52	12.00	11.40	10.80	13138
75	7	1	41	108.4	ON 249	54.2	-88.9	11.81	12.10	11.50	10.90	13139
					CFF 247	53.8	-98.2	11.80	12.10	11.50	10.90	13140
79	9	1	28	74.1	ON 247	48.9	-64.7	11.80	12.10	11.50	10.90	13141
					CFF 249	50.7	-69.9	11.81	12.10	11.50	10.90	13142
												13143



PHOTOGRAPHIC SUMMARY

OPN NO	FRA	FEET	ET	S-EL	S-DIR	FILTER	EV	FULL	INT	PRI	
AFT PAN CAMERA NO	166	0.1750	SLIT	W/21				4404	FILM		10040
PRE-FLT	162	428.5									10041
1 8 0	14	37.0	ON 302	45.1	-32.0		12.09	12.74	12.14	11.54	10042
			CFF 306	47.3	-33.4		12.11	12.75	12.15	11.55	10043
2 1 1	20	52.9	ON 262	23.5	-25.5		11.89	12.50	11.90	11.30	14001
			CFF 267	27.3	-26.0		11.92	12.58	11.98	11.38	14002
2 1 2	20	52.9	ON 301	43.9	-31.6		12.08	12.74	12.14	11.54	14003
			CFF 307	47.1	-33.5		12.11	12.75	12.15	11.55	14004
6 7 1	17	45.0	ON 324	59.6	-130.2		12.19	12.75	12.15	11.55	14005
			CFF 321	57.5	-134.1		12.18	12.75	12.15	11.55	14006
9 7 0	10	26.5	ON 205	-32.4	332.0		11.54	0.	0.	0.	14007
			CFF 206	-29.6	332.8		11.54	0.	0.	0.	14008
9 7 1	33	87.3	ON 334	62.1	-57.8		12.24	12.75	12.15	11.55	14009
			CFF 337	64.8	-68.1		12.25	12.75	12.15	11.55	14010
9 7 2	63	166.6	ON 338	66.6	-84.7		12.25	12.75	12.15	11.55	14011
			CFF 335	65.2	-109.2		12.24	12.75	12.15	11.55	14012
10 5 1	48	127.0	ON 323	58.7	-130.0		12.19	12.75	12.15	11.55	14013
			CFF 311	52.4	-139.2		12.13	12.75	12.15	11.55	14014
11 6 1	21	55.5	ON 335	62.3	-59.8		12.24	12.75	12.15	11.55	14015
			CFF 336	64.0	-66.3		12.25	12.75	12.15	11.55	14016
13 7 1	54	142.8	ON 343	58.8	-128.0		12.27	12.75	12.15	11.55	14017
			CFF 331	52.0	-138.5		12.22	12.75	12.15	11.55	14018
16 7 1	31	82.0	ON 300	37.6	-32.1		12.08	12.70	12.10	11.50	14019
			CFF 311	42.6	-34.7		12.13	12.73	12.13	11.53	14020
16 7 0	14	37.0	ON 336	55.3	-47.2		12.25	12.75	12.15	11.55	14021
			CFF 339	57.1	-50.1		12.26	12.75	12.15	11.55	14022
17 1 1	24	63.5	ON 259	13.5	-27.8		11.87	12.04	11.44	10.84	14023
			CFF 266	18.3	-28.2		11.91	12.32	11.72	11.12	14024
18 1 1	26	68.8	ON 274	22.8	-28.7		11.95	12.48	11.88	11.28	14025
			CFF 281	27.8	-29.5		11.99	12.59	11.99	11.39	14026
20 3 1	39	103.2	ON 325	44.6	-37.2		12.20	12.74	12.14	11.54	14027
			CFF 336	49.9	-41.8		12.25	12.75	12.15	11.55	14028
21 3 1	20	52.9	ON 321	42.7	-36.2		12.18	12.73	12.13	11.53	14029
			CFF 328	45.7	-38.4		12.21	12.75	12.15	11.55	14030
21 3 2	35	92.6	ON 356	61.0	-117.0		12.33	12.75	12.15	11.55	14031
			CFF 351	58.0	-125.5		12.31	12.75	12.15	11.55	14032
21 3 3	50	132.2	ON 343	53.8	-133.1		12.27	12.75	12.15	11.55	14033
			CFF 330	47.3	-140.4		12.22	12.75	12.15	11.55	14034
22 3 1	20	52.9	ON 313	38.5	-34.1		12.14	12.71	12.11	11.51	14035
			CFF 319	41.7	-35.9		12.17	12.73	12.13	11.53	14036
22 3 2	22	58.2	ON 339	50.9	-43.7		12.26	12.75	12.15	11.55	14037
			CFF 344	53.6	-47.2		12.28	12.75	12.15	11.55	14038
22 3 3	28	74.1	ON 357	61.7	-113.6		12.33	12.75	12.15	11.55	14039
			CFF 354	59.5	-121.1		12.32	12.75	12.15	11.55	14040
22 3 4	22	58.2	ON 350	57.6	-125.8		12.30	12.75	12.15	11.55	14041
			CFF 346	55.3	-130.3		12.29	12.75	12.15	11.55	14042
23 6 1	21	55.5	ON 330	46.6	-39.7		12.22	12.75	12.15	11.55	14043
			CFF 336	49.3	-42.3		12.24	12.75	12.15	11.55	14044
23 6 2	93	246.0	ON 354	58.7	-57.4		12.32	12.75	12.15	11.55	14045
			CFF 361	63.9	-83.6		12.35	12.75	12.15	11.55	14046

24	9	1	36	95.2	ON 359	61.5 -67.3	12.34	12.75	12.15	11.55	14049
					CFF 361	63.2 -77.8	12.35	12.75	12.15	11.55	14050
25	6	0	12	31.7	ON 225	-31.8 328.5	11.67	0.	0.	0.	14051
					CFF 226	-29.2 329.4	11.67	0.	0.	0.	14052
25	6	1	93	246.0	ON 360	62.1 -71.1	12.34	12.75	12.15	11.55	14053
					CFF 361	63.2-100.4	12.35	12.75	12.15	11.55	14054
26	2	1	24	63.5	ON 281	21.4 -30.2	11.99	12.44	11.84	11.24	14055
					CFF 288	25.8 -30.8	12.02	12.56	11.96	11.36	14056
26	2	2	82	216.9	ON 350	57.2-124.6	12.30	12.75	12.15	11.55	14057
					CFF 331	47.8-138.3	12.22	12.75	12.15	11.55	14058
27	6	1	21	55.5	ON 358	60.1 -64.4	12.33	12.75	12.15	11.55	14059
					CFF 360	61.5 -70.4	12.34	12.75	12.15	11.55	14060
30	9	1	45	119.0	ON 306	37.2-144.8	12.11	12.70	12.10	11.50	14061
					CFF 290	29.8-148.0	12.03	12.62	12.02	11.42	14062
32	9	0	15	39.7	ON 348	53.2 -50.9	12.29	12.75	12.15	11.55	14063
					CFF 350	54.8 -53.7	12.31	12.75	12.15	11.55	14064
34	8	1	51	134.9	ON 282	20.5 -31.7	11.99	12.41	11.81	11.21	14065
					CFF 298	29.3 -33.3	12.07	12.62	12.02	11.42	14066
35	8	1	32	84.6	ON 303	31.3 -34.2	12.10	12.64	12.04	11.44	14067
					CFF 314	36.3 -36.3	12.15	12.69	12.09	11.49	14068
35	8	2	21	55.5	ON 336	49.3-133.5	12.24	12.75	12.15	11.55	14069
					CFF 330	46.7-136.4	12.22	12.75	12.15	11.55	14070
37	8	1	34	89.9	ON 337	46.1 -43.8	12.25	12.75	12.15	11.55	14071
					CFF 345	50.2 -48.4	12.28	12.75	12.15	11.55	14072
37	8	2	50	132.2	ON 341	51.8-129.2	12.27	12.75	12.15	11.55	14073
					CFF 328	45.8-136.6	12.21	12.75	12.15	11.55	14074
41	5	1	39	103.2	ON 303	31.7 -35.8	12.10	12.65	12.05	11.45	14075
					CFF 316	37.6 -38.6	12.16	12.70	12.10	11.50	14076
41	5	2	46	121.7	ON 347	56.0-118.8	12.29	12.75	12.15	11.55	14077
					CFF 338	51.6-127.8	12.25	12.75	12.15	11.55	14078
42	9	1	68	179.9	ON 344	54.3-122.4	12.28	12.75	12.15	11.55	14079
					CFF 327	46.9-133.8	12.20	12.75	12.15	11.55	14080
42	9	2	52	137.5	ON 315	42.0-138.3	12.15	12.73	12.13	11.53	14081
					CFF 297	34.3-143.2	12.06	12.67	12.07	11.47	14082
43	5	1	22	58.2	ON 357	57.8 -68.5	12.33	12.75	12.15	11.55	14083
					CFF 358	59.0 -74.3	12.34	12.75	12.15	11.55	14084
45	5	1	59	156.1	ON 315	36.0 -38.7	12.15	12.69	12.09	11.49	14085
					CFF 332	43.9 -44.3	12.23	12.74	12.14	11.54	14086
46	9	1	60	158.7	ON 300	36.0-141.3	12.08	12.69	12.09	11.49	14087
					CFF 280	26.2-145.6	11.98	12.56	11.96	11.36	14088
48	9	0	15	39.7	ON 347	50.9 -54.1	12.29	12.75	12.15	11.55	14089
					CFF 350	52.3 -56.7	12.30	12.75	12.15	11.55	14090
50	2	1	19	50.3	ON 299	28.1 -36.5	12.08	12.60	12.00	11.40	14091
					CFF 306	31.2 -37.7	12.11	12.64	12.04	11.44	14092
51	2	1	34	89.9	ON 304	30.0 -37.4	12.10	12.62	12.02	11.42	14093
					CFF 315	34.9 -39.6	12.15	12.68	12.08	11.48	14094
55	8	1	66	174.6	ON 356	54.5 -66.1	12.33	12.75	12.15	11.55	14095
					CFF 359	57.6 -81.8	12.34	12.75	12.15	11.55	14096
56	5	1	55	145.5	ON 364	55.9 -71.7	12.36	12.75	12.15	11.55	14097
					CFF 365	57.7 -85.1	12.36	12.75	12.15	11.55	14098
57	8	1	87	230.1	ON 365	56.5 -76.3	12.36	12.75	12.15	11.55	14099
					CFF 362	57.3 -97.9	12.35	12.75	12.15	11.55	14100
58	3	1	75	198.4	ON 348	52.4-118.0	12.29	12.75	12.15	11.55	14101
					CFF 328	45.0-130.3	12.21	12.74	12.14	11.54	14102

59	9	1	54	142.8	ON 365	57.0	-84.1	12.36	12.75	12.15	11.55	14103
					CFF 362	56.9	-97.8	12.35	12.75	12.15	11.55	14104
62	3	1	80	211.6	ON 318	31.9	-40.8	12.17	12.65	12.05	11.45	14105
					CFF 341	42.0	-47.9	12.27	12.73	12.13	11.53	14106
62	3	2	19	50.3	ON 356	49.3	-57.5	12.33	12.75	12.15	11.55	14107
					CFF 359	51.0	-60.9	12.34	12.75	12.15	11.55	14108
62	3	3	19	50.3	ON 362	56.5	-94.8	12.35	12.75	12.15	11.55	14109
					CFF 361	56.1	-99.6	12.35	12.75	12.15	11.55	14110
64	4	0	16	42.3	ON 355	48.6	-57.2	12.32	12.75	12.15	11.55	14111
					CFF 357	50.0	-59.8	12.33	12.75	12.15	11.55	14112
65	4	1	22	58.2	ON 297	22.9	-38.4	12.07	12.49	11.89	11.29	14113
					CFF 305	26.1	-39.2	12.10	12.56	11.96	11.36	14114
66	5	1	21	55.5	ON 293	21.0	-38.2	12.05	12.43	11.83	11.23	14115
					CFF 300	24.3	-38.9	12.08	12.52	11.92	11.32	14116
66	5	2	37	97.9	ON 308	27.5	-39.9	12.12	12.59	11.99	11.39	14117
					CFF 320	32.8	-42.2	12.18	12.66	12.06	11.46	14118
67	5	1	24	63.5	ON 314	29.7	-41.0	12.15	12.62	12.02	11.42	14119
					CFF 322	33.1	-42.7	12.18	12.66	12.06	11.46	14120
69	5	1	42	111.1	ON 361	51.4	-65.6	12.35	12.75	12.15	11.55	14121
					CFF 363	53.7	-74.1	12.36	12.75	12.15	11.55	14122
69	5	2	38	100.5	ON 333	46.5	-124.2	12.23	12.75	12.15	11.55	14123
					CFF 321	42.3	-129.6	12.18	12.73	12.13	11.53	14124
70	2	1	41	108.4	ON 327	34.6	-44.3	12.21	12.68	12.08	11.48	14125
					CFF 338	39.6	-48.1	12.25	12.71	12.11	11.51	14126
70	2	2	22	58.2	ON 350	45.0	-54.1	12.30	12.74	12.14	11.54	14127
					CFF 354	47.2	-57.3	12.32	12.75	12.15	11.55	14128
71	8	1	80	211.6	ON 363	53.2	-73.4	12.36	12.75	12.15	11.55	14129
					CFF 362	55.0	-91.3	12.35	12.75	12.15	11.55	14130
72	6	1	61	161.3	ON 363	53.0	-73.5	12.36	12.75	12.15	11.55	14131
					CFF 363	54.7	-86.9	12.36	12.75	12.15	11.55	14132
73	4	1	101	267.1	ON 362	51.5	-68.5	12.35	12.75	12.15	11.55	14133
					CFF 362	54.6	-89.9	12.35	12.75	12.15	11.55	14134
74	6	1	61	161.3	ON 340	48.5	-118.5	12.26	12.75	12.15	11.55	14135
					CFF 322	42.5	-127.8	12.18	12.73	12.13	11.53	14136
74	6	2	29	76.7	ON 305	36.8	-133.3	12.11	12.69	12.09	11.49	14137
					CFF 295	32.7	-136.1	12.06	12.66	12.06	11.46	14138
75	7	1	41	108.4	ON 363	54.2	-87.6	12.36	12.75	12.15	11.55	14139
					CFF 360	53.9	-96.9	12.34	12.75	12.15	11.55	14140
79	9	1	28	74.1	ON 360	48.5	-64.0	12.34	12.75	12.15	11.55	14141
					CFF 362	50.3	-68.9	12.35	12.75	12.15	11.55	14142
												14143



STELLAR-INDEX SUMMARY

CAMERA DATA	ET	FILM	FILTER	GRID	ASSEMBLY NO	D63
STELLAR	2.0	4401	NONE	69		
INDEX	1/500	4400	w/21	69		

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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	23	2.28	4.55										
1 8 0	2	0.20	C.40	19	31	00	2	52	151W	2	49	150W	38
2 1 1	3	0.30	0.59	20	54	52	2	71	154E	2	68	163E	63
2 1 2	2	0.20	C.40	21	00	32	2	53	175W	2	49	173W	55
6 7 1	3	0.30	0.59	03	15	11	3	06	112E	3	09	113E	47
9 7 0	1	0.10	C.20	07	08	34	1	38	115W	1	41	114W	48
9 7 1	5	0.50	C.99	07	35	47	2	29	036E	2	23	038E	85
9 7 2	9	0.89	1.78	07	39	04	2	16	040E	2	05	042E	160
10 5 1	7	0.69	1.39	09	14	42	3	06	022E	3	15	024E	131
11 6 1	3	0.30	0.59	10	35	42	2	28	008W	2	24	007W	54
13 7 1	8	0.79	1.58	13	43	59	3	05	045W	3	15	043W	146
16 7 1	5	0.50	C.99	17	56	46	2	58	137W	2	53	132W	89
16 7 0	2	0.20	C.40	18	02	20	2	37	124W	2	35	123W	38
17 1 1	4	0.40	C.79	19	19	54	2	75	141E	2	73	160E	79
18 1 1	3	0.30	0.59	20	52	17	2	71	151E	2	67	163E	84
20 3 1	6	0.59	1.19	23	58	17	2	50	138E	2	44	142E	104
21 3 1	3	0.30	0.59	01	27	33	2	52	114E	2	49	116E	56
21 3 2	5	0.50	C.99	01	41	07	2	00	131E	3	05	132E	86
21 3 3	7	0.69	1.39	01	44	10	3	11	134E	3	20	136E	131
22 3 1	3	0.30	0.59	02	56	09	2	57	088E	2	53	091E	57
22 3 2	3	0.30	0.59	03	00	02	2	42	097E	2	39	098E	56
22 3 3	4	0.40	C.79	03	10	27	2	02	108E	3	02	109E	70
22 3 4	3	0.30	0.59	03	12	28	3	05	110E	3	09	110E	56
23 6 1	3	0.30	0.59	04	28	28	2	48	072E	2	44	073E	54
23 6 2	13	1.29	2.57	04	32	52	2	31	078E	2	16	082E	221
24 9 1	5	0.50	C.99	06	04	14	2	25	058E	2	19	059E	85
25 6 0	2	0.20	C.40	07	05	51	1	38	117W	1	41	116W	46
25 6 1	12	1.19	2.38	07	34	35	2	23	035E	2	08	039E	220
26 2 1	4	0.40	C.79	08	50	38	2	71	032W	2	68	020W	74
26 2 2	11	1.09	2.18	09	11	43	3	05	019E	3	19	022E	207
27 6 1	3	0.30	C.59	10	33	12	2	27	010W	2	23	009W	53
30 9 1	7	0.69	1.39	15	17	40	3	31	064W	3	40	061W	132
32 9 0	2	0.20	C.40	17	59	33	2	37	127W	2	35	126W	38
34 8 1	7	0.69	1.39	20	49	03	2	72	145E	2	65	165E	151
35 8 1	5	0.50	C.99	22	21	59	2	63	146E	2	58	152E	91
35 8 2	2	0.20	0.40	22	42	42	3	16	177E	3	19	178E	54
37 8 1	5	0.50	C.99	01	26	18	2	46	115E	2	41	118E	85
37 8 2	7	0.69	1.39	01	41	18	3	12	131E	3	20	133E	130
41 5 1	6	0.59	1.19	07	21	07	2	62	011E	2	56	018E	109
41 5 2	6	0.59	1.19	07	38	30	3	03	039E	3	11	040E	116
42 9 1	10	0.99	1.98	09	09	03	3	06	017E	3	18	019E	175
42 9 2	7	0.69	1.39	09	13	38	3	24	021E	3	34	024E	148
43 5 1	3	0.30	C.59	10	30	31	2	26	012W	2	22	011W	55
45 5 1	9	0.89	1.78	13	21	46	2	57	073W	2	48	066W	155
46 9 1	8	0.79	1.58	15	14	43	3	32	067W	3	43	062W	180





48	9	0	2	0.20	0.40	17	56	30	2	37	129W	2	35	128W	37	15045
50	2	1	3	0.30	0.59	20	48	29	2	65	162E	2	62	167E	58	15046
51	2	1	5	0.50	0.99	22	18	53	2	63	143E	2	58	150E	93	15047
55	8	1	9	0.89	1.78	04	27	25	2	28	074E	2	18	077E	161	15048
56	5	1	8	0.79	1.58	05	58	13	2	25	053E	2	16	055E	131	15049
57	8	1	12	1.19	2.38	07	28	47	2	22	031E	2	08	034E	205	15050
58	3	1	10	0.99	1.98	09	05	38	3	05	014E	3	18	017E	192	15051
59	9	1	8	0.79	1.58	10	29	38	2	17	012W	2	08	011W	130	15052
62	3	1	11	1.09	2.18	14	47	31	2	60	101W	2	48	091W	206	15053
62	3	2	3	0.30	0.59	14	53	51	2	37	086W	2	34	085W	48	15054
62	3	3	3	0.30	0.59	15	00	43	2	10	079W	2	07	078W	47	15055
64	4	0	2	0.20	0.40	17	53	16	2	37	132W	2	35	131W	39	15056
65	4	1	3	0.30	0.59	19	14	07	2	69	173E	2	66	178W	61	15057
66	5	1	3	0.30	0.59	20	43	21	2	70	146E	2	68	154E	62	15058
66	5	2	5	0.50	0.99	20	45	22	2	65	161E	2	59	169E	103	15059
67	5	1	3	0.30	0.59	22	15	54	2	62	142E	2	58	147E	67	15060
69	5	1	6	0.59	1.19	01	24	00	2	30	117E	2	24	118E	101	15061
69	5	2	5	0.50	0.99	01	35	22	3	13	127E	3	20	128E	102	15062
70	2	1	6	0.59	1.19	02	46	58	2	56	081E	2	50	086E	105	15063
70	2	2	3	0.30	0.59	02	50	49	2	42	090E	2	38	091E	55	15064
71	8	1	11	1.09	2.18	04	25	05	2	25	073E	2	12	076E	191	15065
72	6	1	9	0.89	1.78	05	54	52	2	25	050E	2	15	053E	145	15066
73	4	1	14	1.39	2.77	07	23	37	2	29	026E	2	13	030E	239	15067
74	6	1	9	0.89	1.78	09	03	01	3	08	012E	3	19	015E	160	15068
74	6	2	4	0.40	0.79	09	07	52	3	27	017E	3	33	019E	85	15069
75	7	1	6	0.59	1.19	10	26	45	2	15	014W	2	08	013W	99	15070
79	9	1	4	0.40	0.79	16	21	06	2	33	110W	2	29	108W	68	15071
																15072



[REDACTED]

- NOTE - THE CYCLE COUNTER FOR INSTRUMENT 166 APPEARED TO BE DROPPING CYCLES RANDOMLY IN THE EARLY PORTION OF THE MISSION, BUT NOW APPEARS TO BE OPERATING CORRECTLY. ALL CONSUMPTION FIGURES REPRESENT CYCLE COUNTER READINGS IN FLIGHT. 10060
- NOTE - THE LAST FIVE FRAMES OF OPERATION 079-09-1 ARE IN THE SECOND MISSION RECOVERY BUCKET. 10061
- NOTE - MISSION 1021 IS BEING FLOWN WITH THE AGENA MOVING NOSE-FIRST THROUGH ORBIT INSTEAD OF THE USUAL TAIL-FIRST FLIGHT. 10062
- AS A RESULT OF THIS CHANGE IN AGENA ORIENTATION THE FOLLOWING VARIATIONS IN NORMAL SYSTEM PARAMETERS SHOULD BE NOTED - 10063
- (1) AT THE DESCENDING NODE THE STELLAR CAMERA NOW LOOKS WESTWARD INSTEAD OF EASTWARD. 10064
- (2) THE MASTER PAN CAMERA, INSTRUMENT 166, IS THE AFT LOOKING CAMERA AND THE SLAVE PAN CAMERA, INSTRUMENT 167, IS THE FORWARD LOOKING CAMERA. 10065

[REDACTED]

- A. 1021-1 LAUNCH 1802Z 05/18/65
- B. DRY
- . PERFORMANCE ESTIMATE, PART 2

20004
20005
20006

[REDACTED]