#14000 40409

SYSTEM NO. JX-28
VEHICLE NO. 1616
MISSION NO. 1025-1
CAMERA NOS. 142/127

GENERAL FLIGHT DATA

MASTER CAMERA SERIAL NO. 142

SLAVE CAMERA SERIAL NO. 127

S/I -1 SERIAL NO. D73/78/88

S/I -2 SERIAL NO. D70/88/81

LAUNCH DATE 10-05-65

REACTIVATION DATE N/A

REACTIVATION ORBIT NO. N/A

ORBIAL PARAMETERS (REV. 40)

PERIOD 89.759 MIN. ECCENTRICITY 0.00947

PERIGEE 112.870 NM PERIGEE LAT. 44.340 DEG. N

APOGEE 180.800 NM INCL. ANGLE 75.040 DEG.

RECOVERY ORBIT NO. 81

RECOVERY DATE 10-10-65

Declassified and Released by the N R O
In Accordance with E. O. 12958
on NOV 26 1997

SYSTEM NO. JX-28
VEHICLE NO. 1616
MISSION NO. 1025-1
CAMERA NOS. 142/127

FLIGHT LENS SETTINGS AND FILM TYPES

LENS SETTINGS

PANORAMIC CAMERA SETTINGS	CAMERA NO. 142	CAMERA NO. 127
PANORAMIC OPTICS SLIT WIDTH	.175 IN	.175 IN
PANORAMIC OPTICS FILTER TYPE	WRATTEN 21	WRATTEN 21
HORIZON OPTICS EXP. TIME	1/100 SEC.	1/100 SEC.
HORIZON OPTICS APERTURE	F6.8 SUPPLY	F8.0 SUPPLY
HORIZON OPTICS APERTURE	F8.0 TAKE-UP	F6.8 TAKE-UP
HORIZON OPTICS FILTER TYPE	WRATTEN 25	WRATTEN 25

STELLAR INDEX CAMERA SETTINGS

	D73/78/88		D70/88/81	
	STELLAR	INDEX	STELLAR	INDEX
EXPOSURE TIME	2 SEC	1/500 SEC	2 SEC	1/500
APERTURE SETTING	F1.8	F4.5	F1.8	F4.5
FILTER TYPE	NONE	WRATTEN 21	NONE	WRATTEN

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

FILM

PANORAMIC CAMERAS	CAMERA NO. 142	CAMERA NO. 127
TYPE	3404	3404
LENGTH	16000 FT.	16000 FT.
SPLICES	5	5
EMUL. DATA	222-1-7-5	222-1-7-5

STELLAR/INDEX CAMERAS

	D73/78/88		D70/88/81	
	STELLAR	INDEX	STELLAR	INDEX
TYPE	3401	3400	3401	3400
EMUL. DATA	124-35-8-5	104-14-6-5	124-35-8-5	104-14-

SYSTEM NO. JX-28
VEHICLE NO. 1616
MISSION NO. 1025-1
CAMERA NOS. 142/127

LENS DATA SUMMARY MASTER CAMERA NO. 142

LENS SERIAL NO. 1222435
EQUIVALENT OPERATIONAL FOCAL LENGTH 609.602 MM

RESOLUTION

STATIC		LINES/MM	FILM TYPE	TARGET CONTRAST
	BENCH TEST	255	3404	HIGH
		150	3404	LOW
DYNAMIC	[redacted]	183	3404	HIGH
		132	3404	LOW
	AP	190	3404	HIGH
		130	3404	LOW

NOTE [redacted] RESOLUTION OF 183 LINES/MM REPORTED IN [redacted]

DISTORTION - POSITIVE (PINCUSHION)

ANGLE OFF AXIS-DEG.	3	2	1	0	359	358	357
MILLIMETERS	0.004	0.003	0.000	0.000	0.000	0.002	0.004

DRAFT

SYSTEM NO. JX-28
VEHICLE NO. 1616
MISSION NO. 1025-1
CAMERA NOS. 142/127

LENS DATA SUMMARY (HORIZON CAMERAS FOR MASTER CAMERA NO. 142)

	TAKE-UP	SUPPLY
LENS SERIAL NO.	812269	812289
OPERATIONAL FOCAL LENGTH	54.49 MM	54.01 MM
RADIAL DISTORTION		
10 DEG. OFF AXIS	0.001 MM	0.002 MM
20 DEG. OFF AXIS	0.002 MM	0.002 MM
TANGENTIAL DISTORTION (MAXIMUM VECTOR)	0.003 MM	0.004 MM

RESOLUTION

ANGLE OFF AXIS-DEG.		0	5	10	15	20	25	27.5	30
TAKE-UP	(RADIAL)	184	183	162	106	103	112	62	-0
	(TANGENTIAL)	164	145	134	108	91	60	51	-0
SUPPLY	(RADIAL)	184	182	162	134	116	99	51	-0
	(TANGENTIAL)	184	162	142	121	86	67	46	-0

DYNAMIC (ZERO DEG)
TAKE-UP 147 LINES/MM
SUPPLY 134 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.

DRAFT

SYSTEM NO. JX-28
VEHICLE NO. 1616
MISSION NO. 1025-1
CAMERA NOS. 142/127

LENS DATA SUMMARY SLAVE CAMERA NO. 127

LENS SERIAL NO. 1032435
EQUIVALENT OPERATIONAL FOCAL LENGTH 609.602 MM

RESOLUTION

		LINES/MM	FILM TYPE	TARGET CONTRAST
STATIC	BENCH TEST	233	3404	HIGH
		162	3404	LOW
DYNAMIC	[redacted]	175	3404	HIGH
		132	3404	LOW
	AP	205	3404	HIGH
		132	3404	LOW

NOTE [redacted] RESOLUTION OF 175 LINES/MM REPORTED IN [redacted]

DISTORTION - POSITIVE (PINCUSHION)

ANGLE OFF AXIS-DEG.	3	2	1	0	359	358	357
MILLIMETERS	0.027	0.005	0.003	0.000	0.000	0.002	0.005

SYSTEM NO. JX-28
VEHICLE NO. 1616
MISSION NO. 1025-1
CAMERA NOS. 142/127

LENS DATA SUMMARY (HORIZON CAMERAS FOR SLAVE CAMERA NO. 127)

	TAKE-UP	SUPPLY
LENS SERIAL NO.	812280	813549
OPERATIONAL FOCAL LENGTH	54.67 MM	54.83 MM
RADIAL DISTORTION		
10 DEG. OFF AXIS	0.002 MM	0.001 MM
20 DEG. OFF AXIS	0.002 MM	0.004 MM
TANGENTIAL DISTORTION (MAXIMUM VECTOR)	0.003 MM	0.004 MM

RESOLUTION

ANGLE OFF AXIS-DEG.		0	5	10	15	20	25	27.5	30
TAKE-UP	(RADIAL)	184	174	162	141	130	119	49	-0
	(TANGENTIAL)	164	172	142	114	97	64	46	-0
SUPPLY	(RADIAL)	170	-0	112	87	80	68	-0	-0
	(TANGENTIAL)	170	-0	116	89	66	55	-0	-0

DYNAMIC (ZERO DEG)
TAKE-UP 151 LINES/MM
SUPPLY 134 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.

Notice of Missing Page(s)

Pages 1 and 2 of the original document were missing.