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SP NO. _____
COPY NO. _____
26 PAGES
(Including Cover Sheet)

CORONA "L" FLIGHT DATA BOOK

SYSTEM NO. L3

VEHICLE NO. 1167

MISSION NO. 8003

PREPARED BY: [redacted]

CHECKED BY: [redacted]

APPROVED BY: [redacted]
MANAGER
REQUIREMENTS AND ANALYSIS

APPROVED BY: [redacted]
PROGRAM MANAGER

APPROVED BY: [redacted]
(S.A.I.C.)

SECRET [redacted]

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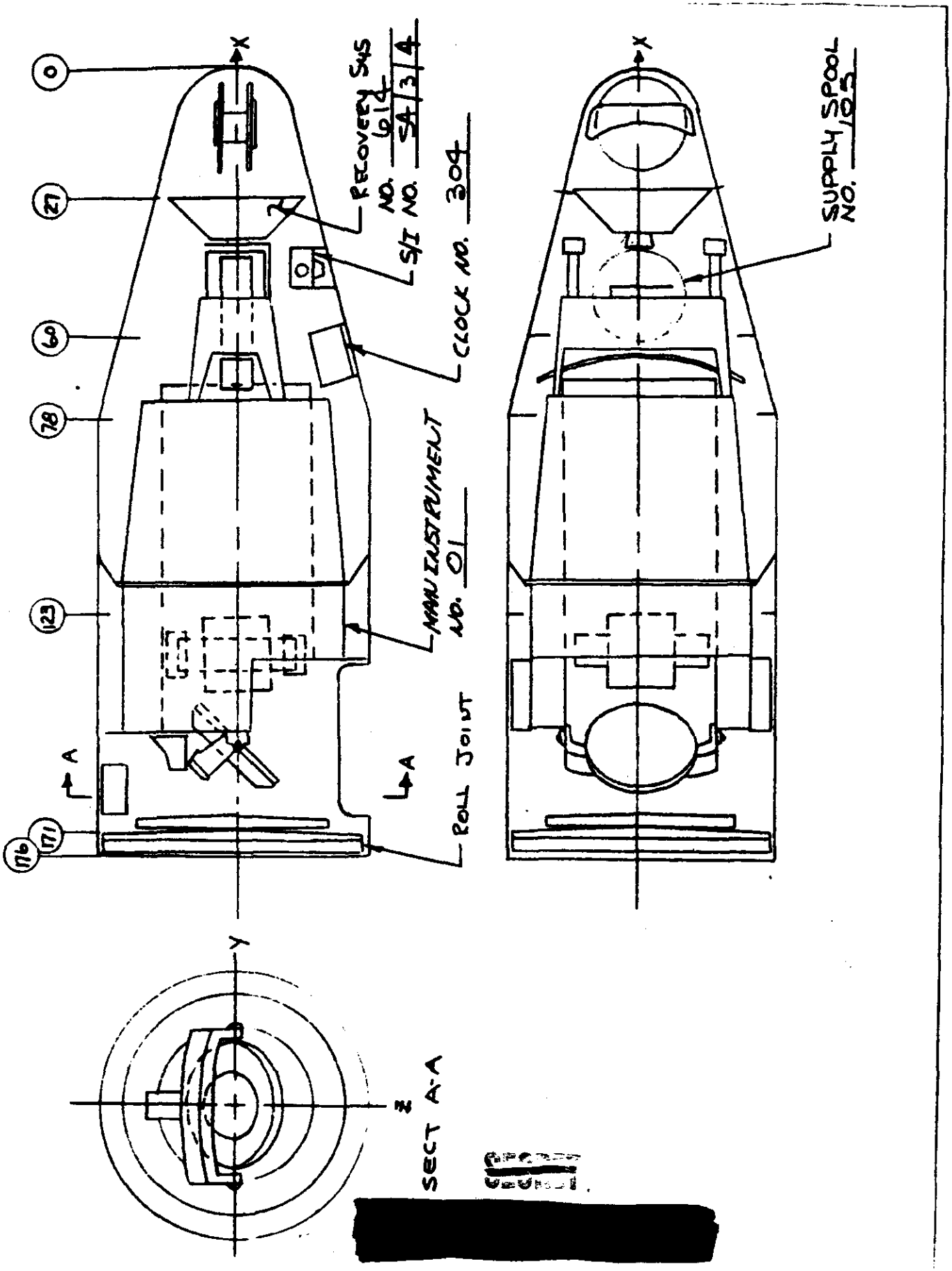

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[redacted]

SYSTEM NO
VEHICLE NO 1167
MISSION NO 8003
PANORAMIC INSTRUMENT NO 01

[redacted]

GENERAL FLIGHT DATA AND PRE-LAUNCH SETTINGS:

Panoramic Instrument Serial No. 01

Stellar/Index Serial Number S4|3|4

Launch Date 7-30-63

Command Settings at Launch:

Command	8	9	10	11	12	15
Setting	5	1	6	3	11	11

Panoramic Instrument Settings:

Slit Width .307 Inch

Filter Type WRATTEN 12

Stellar/Index Settings:

	Stellar	Index
Exposure Time	2 sec. CYCLE	1/500 sec.
Aperture Setting	F1.9	F4.5
Filter Type	NONE	WRATTEN 21

Ratio: One Stellar/Index Frame Per 10 Panoramic Frames

Film:

	Panoramic	Stellar	Index
Type	S0132	S0130	S0130
Length	8000	250	500
No. of Splices	1	0	0
Emulsion Data	29-11-9-4-3	7-3-5-3	1-2-5-3

Orbital Parameters: (Orbit 29 Data)

Period 90.58 Min. Eccentricity .02194

Perigee 91.09 N.M. Perigee Latitude 53.96 deg.

Apogee 249.29 N.M. Inclination Angle 74.94 deg.

Recovery Orbit 33. Recovery Date 8-1-63.

[redacted]

SYSTEM NO 23
VEHICLE NO 1162
MISSION NO 8003
PANORAMIC INSTRUMENT NO 01

[redacted]

CYCLE PERIODS, IMC AND SCAN DATA

Scan Velocity:

95.79 / Cycle Period (inches/second)

$\frac{.06158}{G.A.V.} \times 1.0718 = SCP$

83.153 / Cycle Period (degrees/second)

1.451 / Cycle Period (Radians/second)

IMC Velocity:

4.127 / Cycle Period (Inches/second)

0.0[illegible]6 / Cycle Period (Radians/seconds)

Pre-Flight Cycle Period

V/H Ramp	Time Up Ramp	Cycle Period
4	0 SEC (BOT.)	2.519 SEC.
4	1800 SEC (TOP)	1.372 SEC.

In-Flight Cycle Period

V/H Ramp	Time Up Ramp	Cycle Period
Ø9 4	* 270 SEC	2.617 SEC
Ø16 4	* 1800 SEC	1.455 SEC
Ø16 4	* 1880 SEC	1.485 SEC

* AFTER PROGRAMMER START

[redacted]

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PANORAMIC INSTRUMENT LENS DATA SUMMARY

Lens Serial Number 11

Flight Slit Width .307 Inch

Flight Filter Type WRATTEN 12

Effective Operational Focal Length 66.036 inches

Dynamic Resolution: (Figure of Merit)

	Lines/MM	Film Type	Target	Slit
Itek Pre-Vibration	88.7	SO132	Hi	.265
Itek Post-Vibration	108.0	SO132	Hi	.265
AP PRE- VIBRATION	80.5	SO132	Low	.132
AP POST- VIBRATION	118.5	SO132	Low	.132
AP PRE- SHIP	77.0	SO132	Low	.307

Distortion:

Angle off Axis Deg.	-2.0	-1.5	-1.0	-0.5	0	+0.5	+1.0	+1.5	+2.0
Distortion Millimeters	.01	.01	.01	.01	.01	.013	.013	.01	.01

SYSTEM NO. [redacted]
VEHICLE NO. 1167
MISSION NO. 3003
PANORAMIC INSTRUMENT NO. 01

SECRET

STELLAR/INDEX LENS DATA SUMMARY:

	Stellar	Index
Lens Serial No.	809930	80243
Reseau Serial No.	4	3
Flight Filter Type	NONE	WRATTEN 21
Flight Aperture	F1.9	F4.5
Flight Exposure Time	2 Sec.	1/500 Sec.
Equivalent Focal Length	38.23 MM	83.67 MM
Operational Focal Length	38.33 MM	83.55 MM

Resolution:

Angle Off Axis	0	10	20	30	35
Resolution L/MM High Contrast	101/90	112/109	118/94	90/59	68/39
Resolution L/MM Low Contrast	72/71	72/77	79/75	60/40	50/32

— L/MM AWAR from — film

77.61 L/MM AWAR from 50130 film

Distortion: NOT AVAILABLE

Angle Off Axis Deg.										
Distortion Millimeters										

Perpendicularity of Reseau to Optical Axis: .019MM IN 35MM; .000MM IN 57.15MM

Location of Principal Point:

X	+.011 MM	+.050 MM
Y	−.016 MM	−.061 MM

Knee Calibration: NOT AVAIL. Deg. _____ Min. _____ Sec. _____

Date of Stellar Calibration: 4-23-63

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[redacted]

[redacted]

SYSTEM NO. L3
VEHICLE NO. 1167
MISSION NO. 8003
PANORAMIC INSTRUMENT NO. 01

SECRET

ANGULAR RELATIONS:

Optical Axis of Index to optical axis of Panoramic Instrument:

Perpendicularity REFER TO ENCLOSED TEST PROCEDU L-2050, PAGE 25 AND PAYLOAD

Rotational

Mirror Positions with respect to yaw axis:

Forward Position 52° 27' 2"

Normal Position 44° 58' 22"

Aft Position 37° 31' 43"

Roll Steering Angles

Acceptance limit for nominal 15° increments between +30° and -30° is ±.25°.

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[redacted]

VEHICLE NO. 1167
MISSION NO. 9009
PANORAMIC INSTRUMENT NO. 01

[redacted]

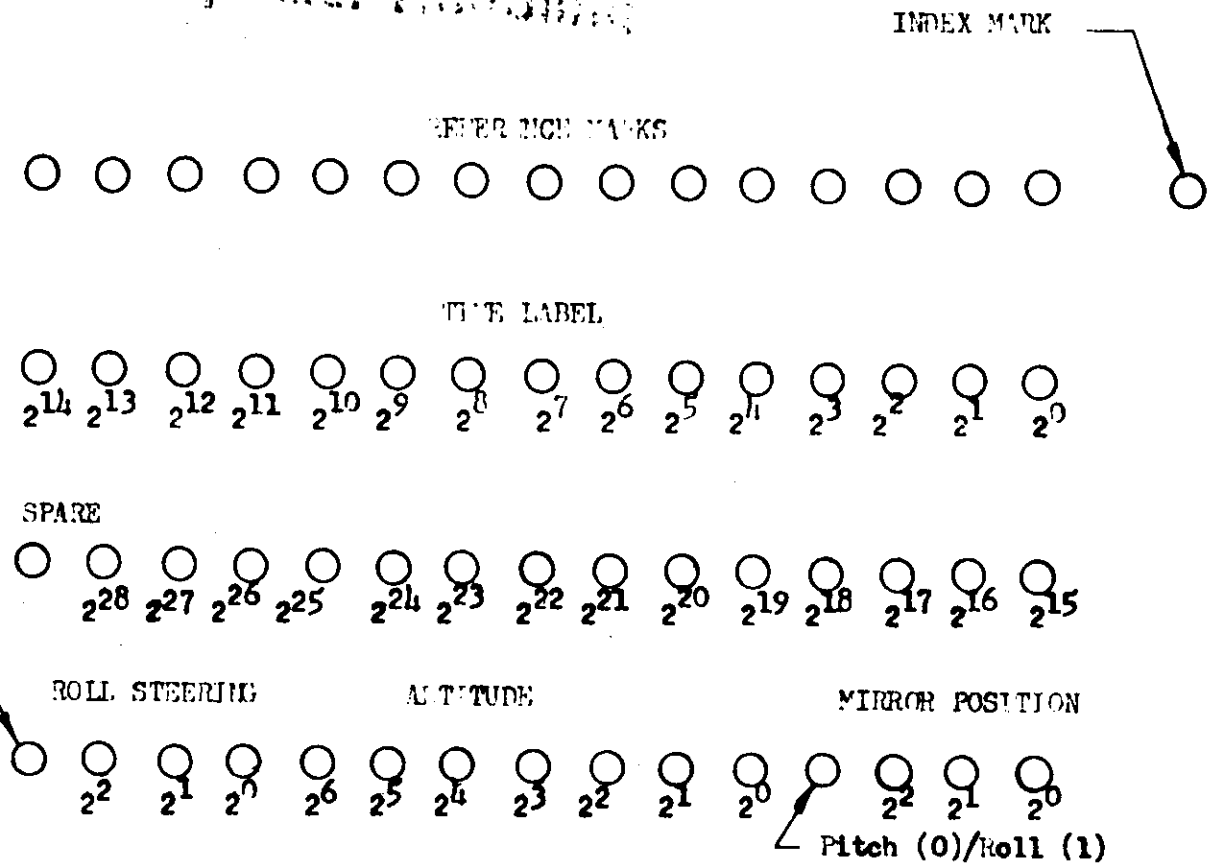
PRELIMINARY CLOCK CORRELATION:

REV. NO.	SYSTEM TIME	CLOCK TIME	DELTA SYSTEM TIME	DELTA CLOCK TIME	DIFF
LAUNCH	00057.772	25174.686			
9	47595.100	72712.007	47537.328	47537.321	-.007
16	702.541	112219.445	39507.441	39507.438	-.003
25	48193.560	159710.459	47491.019	47491.014	-.005
31	82396.792	193913.698	34203.232	34203.239	+.005

[redacted]

SYSTEM NO. 7-3
VEHICLE NO. 1167
MISSION NO. Boo3
PANORAMIC INSTRUMENT NO. 07

DATA BLOCK LAYOUT:



DIRECTIONS
FLIGHT
FILM TRAVEL
SCAN

MIRROR POSITION			
	2^2	2^1	2^0
Forward	1	0	0
Vertical	0	1	0
Aft	0	0	1

ROLL STEERING			
	2^2	2^1	2^0
+30°	1	0	0
+15°	0	1	0
0°	0	0	0
-15°	0	1	1
-30°	1	0	1

ATTITUDE							
	2^6	2^5	2^4	2^3	2^2	2^1	2^0
-5	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0
4.9	1	1	1	1	1	1	1

[redacted]

PERFORMANCE ESTIMATE MISSION 8003

A. 8003

B. LAUNCHED JULY 31 1963
   1. PANORAMIC SO 132 ,F5, 0.307,WRATTEN 12
   2. STELLAR SO 130, F1.9, 2 SEC. WRATTEN 21
   3. INDEX SO 130, F 4.5, 1/500, WRATTEN 21

C.
PANORAMIC CAMERA

NOTE
PRE-LAUNCH CONSUMPTION - 7 BLOCKS

P	R RP	RE ST	AB END	OP (SEE	LD IDENTIFICATION	LM CODES)	LGD	LGM	B	ALT	SE	Y/M/D/H/M	ET
1	00 4	00	DS	01	13	39N	115	25W	01	101.5	026	6307310009	08.6
1	00 4	01 1158	DM	01	70	52N	178	55E	01	101.6	036	6307310124	04.9
			1183										
1	00 4	01 1466	DS	02	53	58N	153	31W	01	091.5	038	6307310129	04.7
			1490										
1	00 4	01 1490	DS	02	52	28N	152	26W	02	091.1	038	6307310130	04.7
			1514										
1	00 4	01 1514	DS	02	50	58N	151	25W	03	090.8	038	6307310130	04.7
			1538										
1	00 4	02 1068	DM	01	73	48N	139	48E	01	105.6	034	6307310253	05.1
			1094										
1	00 4	02 1185	DS	02	69	23N	161	01E	01	100.0	037	6307310255	05.2
			1211										
1	00 4	02 1862	DS	03	27	58N	164	41W	01	093.2	033	6307310307	04.8
			1886										
1	00 4	03 1131	DM	01	71	42N	129	41E	01	102.3	036	6307310425	05.0
			1156										
1	00 4	06 1113	DM	01	72	13N	058	37E	01	102.6	035	6307310857	05.0
			1138										
1	00 4	06 1481	DS	02	52	21N	093	19E	01	091.0	039	6307310903	04.7
			1505										
1	00 4	06 1741	DS	03	35	35N	101	28E	01	091.0	036	6307310907	04.7
			1765										
1	00 4	07 1439	DS	01	54	49N	068	36E	01	091.6	039	6307311033	04.8
			1463										
1	00	07	DS	02	43	56N	075	15E	01	090.1	038	6307311036	04.7

[redacted]

[redacted]

4 1612 1636

1 00 08 DS 01 64 40N 034 21E 01 095.9 039 6307311201 05.0
4 1299 1324

1 00 08 DS 02 61 30N 039 01E 01 094.2 039 6307311202 04.9
4 1355 1380

1 00 08 DS 03 56 36N 044 15E 01 092.1 040 6307311203 04.8
4 1438 1462

1 00 08 DS 04 52 22N 047 34E 01 091.0 040 6307311204 04.7
4 1506 1530

1 00 08 DS 05 39 31N 054 16E 01 090.4 038 6307311208 04.7
4 1707 1731

1 00 09 AS 01 37 56N 117 40W 01 163.9 004 6307311314 08.5
4 244 287

1 00 09 DS 02 56 39N 021 20E 01 092.1 039 6307311334 04.8
4 1443 1467

1 00 09 DS 02 55 11N 022 36E 02 091.7 039 6307311334 04.7
4 1467 1491

1 00 09 DS 02 53 42N 023 45E 03 091.3 039 6307311335 04.7
4 1491 1515

1 00 09 DM 03 49 15N 026 43E 01 090.4 039 6307311336 04.4
4 1563 1585

1 00 13 AM 01 68 25N 179 10E 01 123.1 024 6307311925 06.0
4 799 829

1 00 14 DS 01 41 35N 083 42W 01 090.4 038 6307312111 04.7
4 1747 1771

1 00 14 DS 01 40 03N 083 03W 02 090.6 038 6307312111 04.7
4 1771 1795

1 00 14 DS 01 38 30N 082 27W 03 090.8 038 6307312112 04.7
4 1795 1819

1 00 14 DS 01 36 56N 081 52W 04 091.1 037 6307312112 04.7
4 1819 1842

1 00 14 DS 01 35 22N 081 19W 05 091.5 037 6307312113 04.8
4 1842 1866

1 00 14 DS 01 33 47N 080 47W 06 092.0 037 6307312113 04.8
4 1866 1890

[redacted]

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[redacted]

1 00 14 DM 02 21 57N 077 25W 01 097.4 032 6307312116 04.7
4 2045 2069

1 00 14 DM 02 20 22N 077 01W 02 098.4 032 6307312116 04.8
4 2069 2093

1 00 14 DM 02 18 46N 076 39W 03 099.4 031 6307312117 04.8
4 2093 2117

1 00 15 DM 01 45 57N 108 35W 01 090.3 039 6307312240 04.3
4 1625 1647

1 00 15 DM 01 44 31N 107 53W 02 090.3 039 6307312241 04.3
4 1647 1669

1 00 15 DM 01 43 07N 107 13W 03 090.3 039 6307312241 04.3
4 1669 1691

1 00 15 DM 01 41 41N 106 36W 04 090.4 039 6307312242 04.4
4 1691 1712

1 00 15 DM 01 40 15N 106 00W 05 090.6 038 6307312242 04.4
4 1712 1734

1 00 16 DS 01 38 24N 128 07W 01 090.9 038 6308010013 04.7
4 1782 1806

1 -30 16 DS 02 33 08N 125 11W 01 092.4 036 6308010014 04.8
4 1866 1890

1 00 18 AS 01 58 47N 049 19E 01 134.4 017 6308010255 07.3
4 625 661

1 -15 18 AS 02 63 15N 053 19E 01 129.1 019 6308010257 06.9
4 699 734

1 -15 18 DM 03 73 37N 139 20E 01 102.4 034 6308010304 04.9
4 1153 1178

1 00 19 AS 01 55 31N 023 25E 01 138.2 015 6308010425 07.5
4 577 615

1 15 19 AS 02 59 54N 029 02E 01 132.4 018 6308010426 07.1
4 658 694

1 -15 19 AS 03 67 55N 038 51E 01 122.9 023 6308010429 06.5
4 795 828

1 -30 19 DS 04 72 01N 127 46E 01 099.9 035 6308010435 05.1
4 1215 1241

SECRET

[redacted]

```
1 -15 20 DM 01 72 11N 101 27E 01 100.4 035 6308010606 04.8
     4   1184    1208

1  00 20 DS 02 49 00N 135 28E 01 090.4 040 6308010613 04.7
     4   1594    1618

1 -15 21 DM 01 69 45N 087 26E 01 098.1 036 6308010737 04.7
     4   1245    1269

1 -30 21 DS 02 51 42N 112 26E 01 090.7 039 6308010743 04.7
     4   1561    1585

1  15 21 DS 03 40 20N 116 16E 01 090.8 040 6308010745 04.7
     4   1732    1756

1 -30 22 DM 01 73 08N 054 13E 01 100.8 034 6308010907 04.9
     4   1170    1195

1  30 22 DM 02 67 41N 064 57E 01 097.2 038 6308010908 04.7
     4   1263    1287

1  00 22 DS 03 57 16N 083 39E 01 091.9 040 6308010912 04.7
     4   1460    1484

1 -15 22 DM 04 43 15N 093 19E 01 090.5 039 6308010915 04.4
     4   1686    1708
```

IDENTIFICATION CODES

P	=	PROGRAM NUMBER
R	=	ROLL ANGLE
RE	=	REV NUMBER
A	=	ASCENDING OR DESCENDING
B	=	STEREO OR MONO MODE
OP	=	OPERATION NUMBER
LD	=	DEGREES LATITUDE
LM	=	MINUTES LATITUDE
LGD	=	DEGREES LONGITUDE
LGM	=	MINUTES LONGITUDE
B	=	BLOCK NUMBER
ALT	=	ALTITUDE IN NAUTICAL MILES
SE	=	SOLAR ELEVATION
Y/M/D/H/M	=	YEAR/MONTH/DAY/HOUR/MINUTE
ET	=	EXPOSURE TIME
RP	=	RAMP NUMBER
ST	=	START TIME UP RAMP
END	=	END TIME UP RAMP

SECRET [redacted]

SECRET

[redacted]

STELLAR-INDEX CAMERAS

A.	B.	C.	D.	E.	F.
SL	0	0009	213	0010	211
ID	1	0110	140	0127	265
SL	1	0129	254	0130	250
ID	2	0240	140	0259	260
SL	2	0307	228	0308	227
ID	3	0411	140	0432	250
ID	4	0542	140	0606	240
ID	5	0725	275	0738	232
ID	6	0856	275	0915	208
ID	7	1014	140	1044	215
ID	8	1144	140	1212	225
SL	9	1314	138	1315	139
ID	9	1332	265	1342	225
ID	10	1504	260	1510	235
ID	13	1920	150	1926	170
ID	14	2048	140	2118	215
ID	15	2219	140	2247	220
ID	16	2349	140	0001	175
SL	16	0013	238	0014	237
SL	16	0014	233	0015	232
ID	17	0120	140	0138	260
ID	18	0251	140	0309	260
ID	19	0421	140	0443	250
ID	20	0552	140	0617	235
ID	21	0735	275	0751	222
ID	22	0905	275	0924	212

A. SLAVE OR INDEPENDENT OPERATION
B. REV NO.
C. TIME ON (HRS AND MIN.)
D. LATITUDE ON
E. TIME OFF (HRS AND MIN)
F. LATITUDE OFF

THE METERING PERFORMANCE ON THE SI UNIT WAS ERRATIC.
THEREFORE,NO INDIVIDUAL CONSUMPTION FIGURES ARE GIVEN.
ESTIMATED TOTAL CONSUMPTION IS
INDEX 420 PLUS OR MINUS 15 FT
STELLAR 210 PLUS OR MINUS 8 FT

R. PRELIMINARY CLOCK CORRELATION

REV NO.	SYSTEM TIME	CLOCK TIME	DELTA SYSTEM	DELTA CLOCK	DIFF
LAUNCH	57.772	25174.686			
9	47595.100	72712.007	47537.328	47537.321	-.007
16	702.541	112219.445	39507.441	39507.438	-.003
25	48193.560	159710.459	47491.019	47491.014	-.005
31	82396.792	193913.698	34203.232	34203.239	+.007

S. FILM

	PANORAMIC	STELLAR	INDEX
TYPE	SO-132	SO-130	SO-130
LENGTH	8000	250	500

SECRET

[redacted]

[redacted]

NO SPLICES	1	0	0
EMULSION DATA	29-11-9-4-3	7-3-5-3	1-2-5-3

W. DRY

X. 1. COSINE
2. RAMP 4

		BOTTOM	TOP
A CYCLE PERIOD		2.519 SEC	1.372 SEC
B SCAN VELOCITY	INCHES/SECOND	38.027	69.818
	DEGREES/SECOND	33.010	60.607
	RADIANS/SECOND	.576	1.058
C IMC VELOCITY	INCHES/SECOND	1.638	3.008
	RADIANS/SECOND	.0244	.0449

DESCRIPTION OF ANGULAR RELATIONS

Reflector Alignment

Reflector alignment is performed by positioning the camera subsystem in a test fixture with the plane defined by the pitch and roll axes vertical. With the reflector removed, a theodolite is sighted through the lens cell and centered on the platen center. The reflector is then installed in the normal position and a second theodolite is positioned so the reflector can be viewed normally in all three positions. This theodolite is focused on the platen center through the lens cell by viewing through the reflector. The alignment errors and repeatability are then obtained by measuring the angular relationship of the two theodolites related to the camera subsystem after cycling the reflector. Tests are run on the forward, rear, and normal positions of the reflector.

SECRET

DATE 6-27-44

CHECKED BY

LOCKHEED AIRCRAFT CORPORATION
MISSILES and SPACE DIVISION

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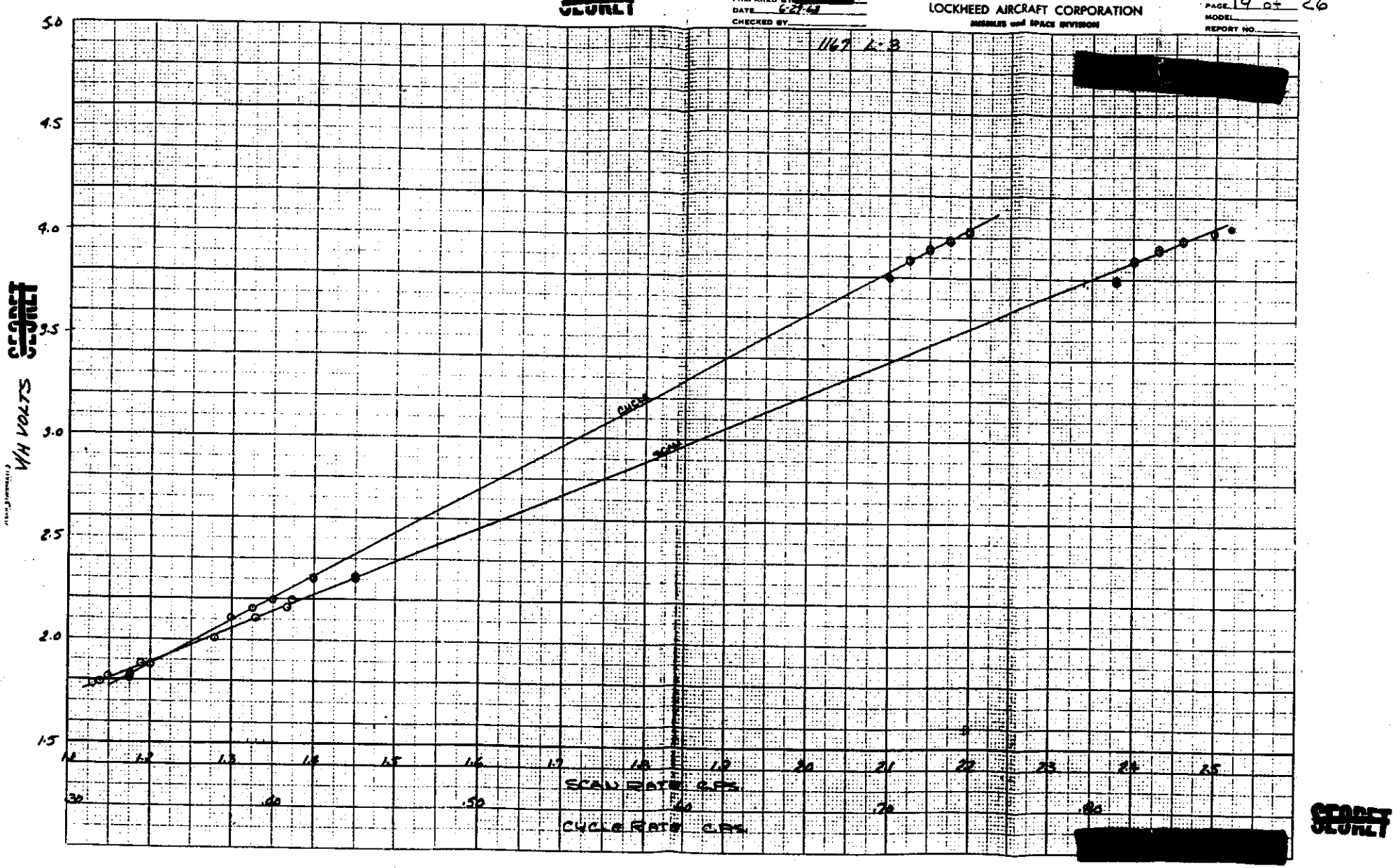
MODEL

REPORT NO.



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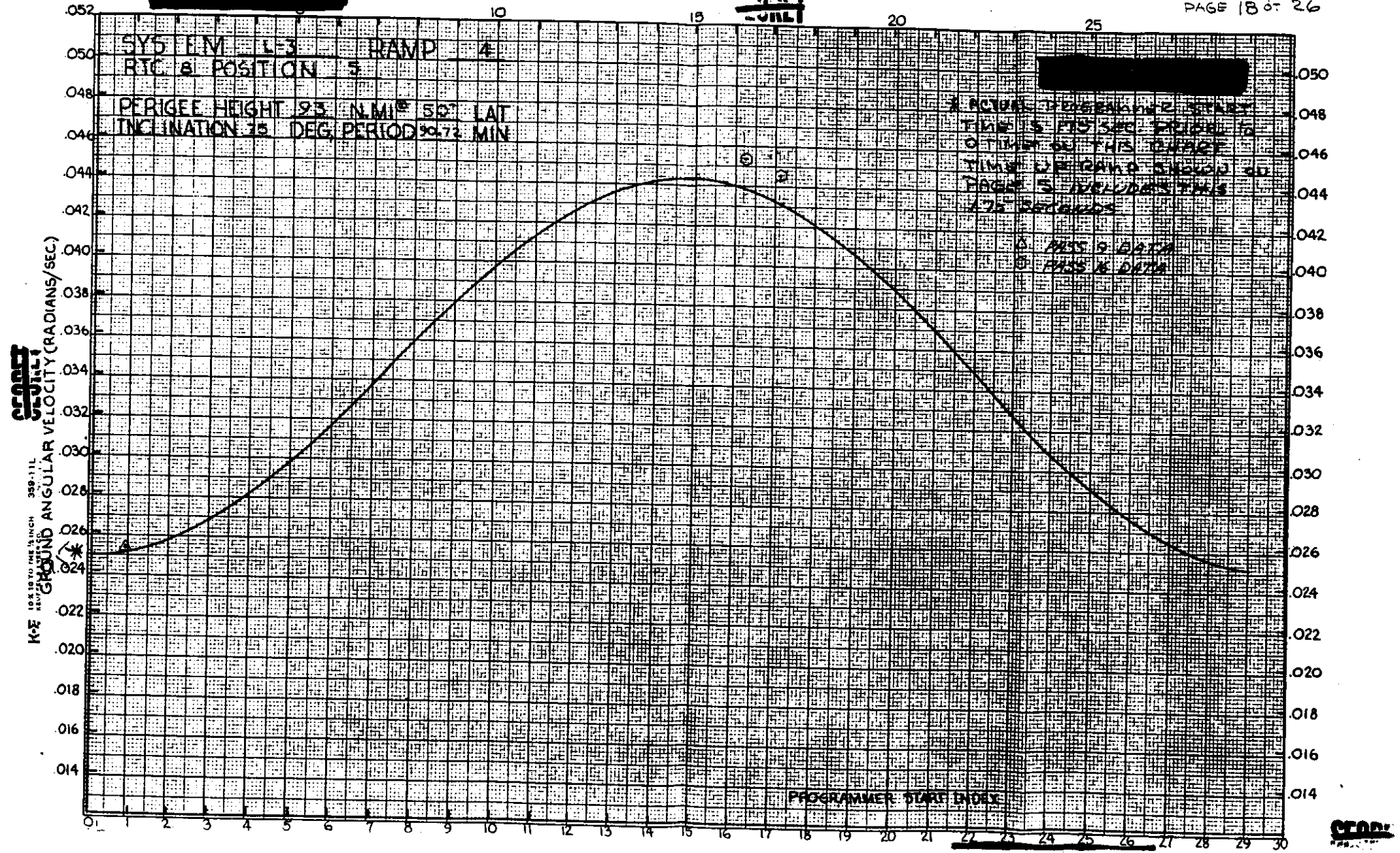

SYS I.M. L-3 RAMP 4
RTC. & POSITION 5
PERIGEE HEIGHT 93 N.MI @ 52° LAT
INCLINATION 35 DEG, PERIOD 90.72 MIN
GROUND ANGULAR VELOCITY (RADIANS/SEC.)
PROGRAMMER START INDEX
K·E 10 X 10 TO THE INCH 359-11L

A. MISSION NO.
B. VEHICLE
C. INSTRUMENT NUMBERS
   1. PANORAMIC
   2. STELLAR
   3. INDEX
D. LENS SERIAL NUMBERS
   1. PANORAMIC
   2. STELLAR
   3. INDEX
E. OPERATIONAL FOCAL LENGTHS (MM)
   1. PANORAMIC
   2. STELLAR
   3. INDEX
F. LENS DISTORTION
   A. PANORAMIC LENS (PINCUSHION)
G. RESOLUTION (L/MM)
   1. PANORAMIC LENS
   2. INDEX (AWAR)
H. PLATEN AND FORMAT DIMENSIONS (MM)
   1. PANORAMIC
   2. STELLAR (LOC. OF P.P.)
   3. INDEX (LOC. OF P.P.)
I. ANGULAR RELATION BETWEEN CAMERAS (MM)
   1. OPTICAL AXIS INDEX/ OPTICAL AXIS OF PANORAMIC (VERTICAL MODE)
   2. MIRROR POSITION OF PANORAMIC WITH RESPECT TO THE YAW AXIS
      A. FORWARD
      B. CENTER
      C. AFT
   3. ANGULAR RELATION STELLAR/ INDEX
   4. DIRECTION OF DIMENSIONS
      A. X
      B. Y
J. FILTERS AND EXPOSURES
   1. PANORAMIC
      A. FILTER TYPE
      B. APERATURE
      C. EXPOSURE
      D. SLIT WIDTH
   2. STELLAR
      A. FILTER TYPE
      B. APERTURE SETTING
      C. EXPOSURE TIME
   3. INDEX
      A. FILTER TYPE
      B. APERTURE SETTING
      C. EXPOSURE TIME
K. FILM
   1. PANORAMIC
      A. TYPE

A.
B.
C. INSTRUMENT NUMBERS
   1.
   2.
   3.
D. LENS SERIAL NUMBERS
   1.
   2.
   3.
E. OPERATIONAL FOCAL LENGTHS(MM)
   1.
   2.
   3.
F. LENS DISTORTION
   A. MM / DEG.
G. RESOLUTION (L/MM)
   1. L/MM AVG
   2. L/MM AWAR
H. PLATEN AND FORMAT DIM. (MM)
   1. PANORAMIC
   2. STELLAR (LOC. OF P.P.)
      1.X (MM)
      2.Y (MM)
   3. INDEX(LOC. OF P.P.)
      1.X (MM)
      2.Y (MM)
I. ANG REL BETWEEN CAMERAS
   1.
   2.
      A.
      B.
      C.
   3.
      A.
      B.
J. FILTERS AND EXPOSURES
   1. PANORAMIC
      A.
      B.
      C. SEC
      D. INCH
   2. STELLAR
      A.
      B.
      C. SEC
   3. INDEX
      A.
      B.
      C. SEC
K. FILM
   1. PANORAMIC
      A.

B. FILM IDENTIFICATION
C. EMULSION NO. AND CODE
D. WT. NO. OF SPLICES SPOOL NO.
E. BOX SERIAL NUMBER

2. STELLAR
A. FILM TYPE
B. FILM IDENTIFICATION AND LENGTH
C. EMULSION NO. AND CODE

3. INDEX
A. FILM TYPE
B. FILM IDENTIFICATION AND LENGTH
C. EMULSION NO. AND CODE

B.
C.
D.
E.

2. STELLAR
A.
B.
C.

3. INDEX
A.
B.
C.

TITLE	LOCKHEED AIRCRAFT CORPORATION MISSILES and SPACE DIVISION	TEST PROCEDURE L-2050
ALIGNMENT TEST (PAN INSTRUMENT VS. INDEX INSTRUMENT)	[redacted]	SHEET 1 OF 3 SHEETS

PHASE V

7.0 ALIGNMENT TEST (Pan Instrument vs. Index Instrument)

7.1 SCOPE

To establish the angular relationship between the optical axes of the "L" system Pan Instrument and the terrain camera of the T/I.

7.2 EQUIPMENT

7.2.1 Two (2) T-2 Theodolites with Reticule Illuminators

7.2.2 Two (2) [illegible] Adjustable Theodolite Stands

7.2.3 T/I Power and Command Console

7.2.4 "L" System [illegible] Power and Command Console (Boston Console).

7.3 [illegible]

7.3.1 Mount the "L" system in the shipping and mating dolly with the fairing and recovery vehicle removed.

7.3.2 Disconnect J-2, J-11 and J-17. Cover the cell and pin.

7.3.3 Remove the shutter slit and place the "bug" at the center of the format.

7.3.4 Cut a 1" square hole in the payload in the supply dancer.

7.3.5 Place a light in the platen support tube to illuminate the platen.

7.3.6 Depress [illegible] operate command.

7.3.7 Manually winding the metering flywheel, advance the cutout film to the center of format.

7.3.8 Depress [illegible] command.

7.3.9 Load the terrain camera with [illegible] SO-130 film.

7.3.10 Mount the T/I camera in the fairing.

7.3.11 Attach the fairing to the forward barrel and cut two alignment marks (drafting pen) at the fairing-conic adapter interface at approx. the +Y and -Y axis.

7.3.12 Connect the T/I power and command console.

7.3.13 Start T/I operation.

7.3.14 Set terrain camera shutter for 1/30 sec. exposure.

[redacted]

7.3.15 With theodolites mounted at Sta. "A" and "B" (Fig. 1), level and align the system to a horizontal reference, using primary reference marks on the Pan instrument.

7.3.16 Measure and record the deviation of the roll joint from Sta. "A".

7.3.17 Align and adjust the theodolite "B" to the optical axis of the Pan instrument. Set the horizontal plate vernier to 0° 0' 0".

7.3.18 Transfer theodolite at Sta. "A" to Sta. "C".

7.3.19 With theodolite "B" turn off angle "a" (Fig. 1) 90° 0' 0".

7.3.20 Illuminate theodolite reticules.

7.3.21 Slave theodolite "C" to theodolite "B".

7.3.22 Set theodolite "C" horizontal plate vernier to 0° 0' 0". Verify elevation at 90° 0' 0".

7.3.23 With theodolite "C" turn off angle "B" (Fig. 1) 90° 0' 0".

7.3.24 Place a sheet of thin vellum paper with a 1/2" hole in the center over the front of the terrain camera lens.

7.3.25 Place a reticule illuminator on the eyepiece of theodolite "C". Set lamp intensity to 25.

7.3.26 Operating the terrain camera, make ten exposures of the theodolite "C" reticule.

7.3.27 Remove exposed film from the terrain camera.

Process:

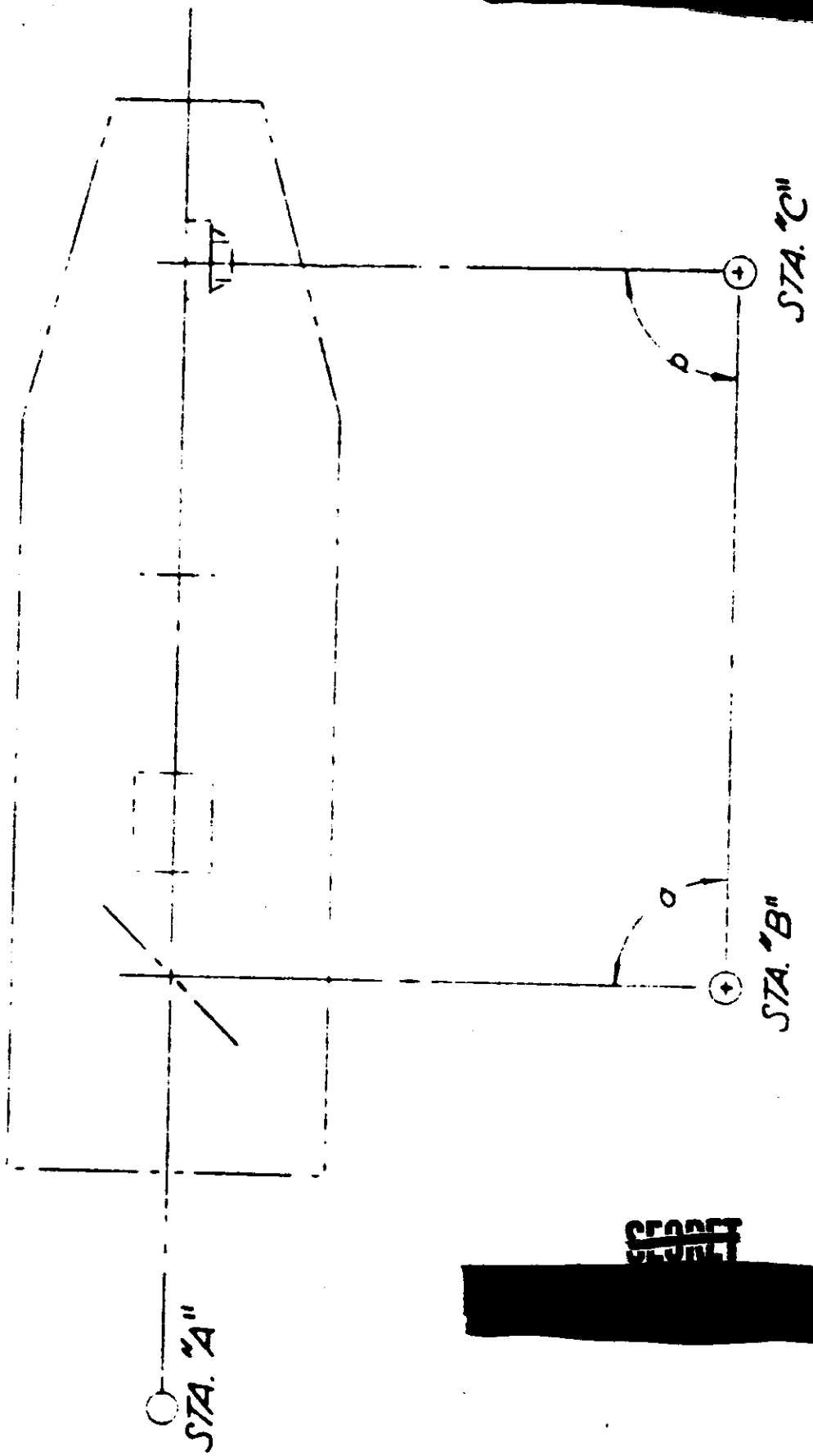
7.3.28 Process the film in D-19 at 68° for 7 minutes.

7.3.29 Turn processed index film over to Dept. Manager (60-65) for forwarding to customer.

SECRET

[redacted]

FIG. 1



SECRET

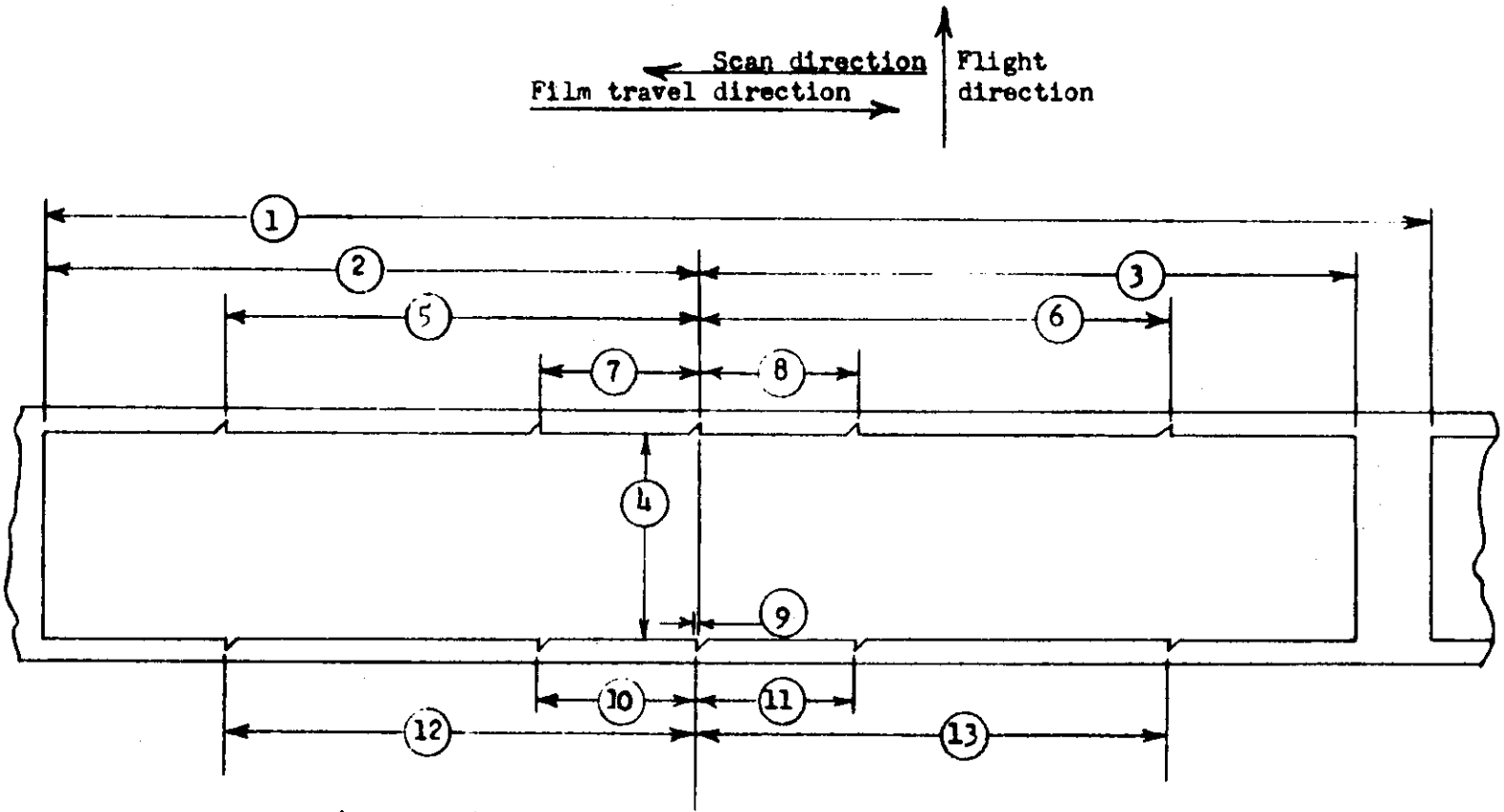
[redacted]

System No. 13
Vehicle No. 1167
Mission No. 8003
Panoramic Instrument No. 01

[redacted] CORRECT CLOSURE

PANORAMIC FORMAT DIMENSIONS

FORMAT VIEWED WITH EMULSION SIDE DOWN



Format Dimensions: (± 0.1 mm)

1 ___.___ 2 ___.___ 3 ___.___ 4 ___.___

Calibration Dimensions: (± 0.001 mm)

5 ___.___ 6 ___.___ 7 ___.___

8 ___.___ 9 (+,-) ___.___ 10 ___.___

11 ___.___ 12 ___.___ 13 ___.___

Notes:

1. All dimensions in millimeters with tolerances as shown.
2. Dimensions are the average of three frames.
3. Dimension (4) taken at center of format.
4. Dimension (9) is the deviation of the lower center shrinkage marker from a reference line through the upper center marker. This reference line is perpendicular to the upper format edge. A (-) number indicates the lower marker is to the left of reference line.

[redacted] CORRECT CLOSURE

DIMENSIONS NOT AVAILABL

1167/L-3

15th. bit of time word on S/I was moved from normal position to the spare position following the 28th bit - reason: lite bulb failure in the normal 15th position.

Ref: Page 26 of data book.