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PROCESSING AND DUPLICATION REPORT OF ORIGINAL CAMERA RECORDS MISSION 1116-2

HQ AIR FORCE SPECIAL PROJECTS PRODUCTION FACILITY

[redacted]
GROUP 1
Excluded from automatic downgrading and declassification.

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PROCESSING AND DUPLICATION REPORT
OF ORIGINAL CAMERA RECORDS
MISSION 1116-2

26 MAY 1972

[redacted]

This document consists of 16 pages.

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ABSTRACT

The Panoramic Camera records received a single level dual gamma process. The Stellar and Terrain Cameras were not launched with this mission. Both records were processed without incident.

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SECTION A - INTRODUCTION

This report follows completion of the original camera film processing and duplication requirements for Mission Segment 1116-2. It provides information in the following areas of interest:

(1) The processing history for each original film.

(2) Technical data relative to the mission.

(3) The physical condition of the original camera film when shipped.

(4) Production information.

Other information deemed pertinent is also included.

SECTION B - PROCEDURES

Standard procedures have been developed to insure that the photographic processing of the mission camera records will be uniformly high in quality. Some of the areas monitored are as follows:

(1) Sensitometry - Sensitometric exposures are used to establish and maintain process control. With the original camera films, flight roll samples are evaluated whenever available so that the process conditions can be adjusted, if necessary, to attain maximum photographic speed with reasonable fog levels for the particular flight film.

(2) Physical Properties - When the mission records are prepared for processing, they are inspected for physical damage, adequacy of manufacturing splices, etc. They receive another inspection immediately after processing and again prior to shipment. All defects are listed in this report.

(3) Miscellaneous - Significant observations noted during the normal course of work which affect mission quality are recorded. New operational procedures and techniques are also included.

SECTION C - GENERAL INFORMATION

FLIGHT INFORMATION

1.	Vehicle	1661
2.	Launch	19 April 1972
3.	Orbits	154 - 301
4.	Recovery	8 May 1972; Dry
5.	Arrival at Processing Site	*9 May 1972

*The Forward and Aft Camera records were received in suitcases.

SECTION D - PROCESSING INFORMATION

The Panoramic Camera records received dual gamma viscous processing. No Stellar or Terrain Camera records were scheduled for this mission.

Additional processing information is as follows:

CAMERA	FILM TYPE	PROCESSOR	TOTAL FOOTAGE
Forward	3414	Trenton	8,180
Aft	3414	Trenton	8,129

Both camera records were processed without incident.

SECTION E - MISCELLANEOUS INFORMATION:

DEFILMING:

Forward - Severe damage was noted on the end of the records for approximately 18 inches of film. This was removed and hand processed. No other significant problems were noted.

Aft - A condition similar to that which was noted on the Forward Camera was noted on the end of the Aft record. Approximately 11 inches of film was removed and hand processed.

SECTION F - DISCREPANCIES

Panoramic Camera Records: Intermittent light emulsion scratches, light pinholes, static marks, embedded dirt, and abrasions were noted throughout both camera records. Specific degradations are listed by rev and frame on the following pages.

FORWARD CAMERA RECORD

REV	FRAME	COMMENT
D-154	023-025	Heavy continuous base scratches
	031	Adhesive residue
A155	---	---
D159	---	---
D161	---	---
D166	---	---
D167	---	---
D168	068	Moisture spots
D169	064	Manufacturer splice
D170	---	---
D175	---	---
D180	---	---
D181	---	---
D182	---	---
D183	---	---
D186	---	---
D187	006	Manufacturer splice
D197	---	---
D198	---	---

REV	FRAME	COMMENT
D199	---	---
D200	---	---
D202	086	---
D203	---	---
D204	---	---
D208	---	---
D216	---	---
D219	---	---
D232	---	---
D235	---	---
D245	---	---
D247	---	---
D248	---	---
D249	054	Manufacturers splice
D250	099	Manufacturers splice
	109	Adhesive residue
	175	Title transfer
	110,180,181	Adhesive residue
	152	Pinholes
D263	046,047	Edge wrinkles
	001,047	Adhesive residue
D265	001	Adhesive residue
D266	022-038	Title transfer
	038	Adhesive residue

REV	FRAME	COMMENT
D267	002	Pinholes
	052-058,067,149	Light deckled edges
	062,149	Adhesive residue
D268	054,065	Light edge wrinkles
	001,002,068,069	Adhesive residue
D278	001,036,038	Adhesive residue
	016	Pinholes
D279	001	Pinholes
	001,042	Adhesive residue
D281	001	Emulsion abrasions
	026	Adhesive residue
D283	001	Light edge wrinkles
D284	023	Adhesive residue
D290	---	---
D297	029	Adhesive residue
D298	042	Adhesive residue
D299	001,111,112,128	Adhesive residue
D300	044,108	Pinholes
	108	Adhesive residue
D301	002	Fog
	001	Adhesive residue
	002	Pinholes

AFT CAMERA RECORD

REV	FRAME	COMMENT
154	025	Emulsion abrasions
	025	Pinholes
	031	Adhesive residue
A155	---	---
D159	052,053,055,103	Kinks
	047	Fingerprints
	047,048	Fog
	001,103	Emulsion abrasions
	047	Emulsion pickoff
	001,103	Adhesive residue
D161	---	---
D 166	020	Adhesive residue
D167	002,002	Kinks
	001,071,084	Adhesive residue
D 168	052	Edge wrinkles
	044	Manufacturers splice
	001	Adhesive residue
D169	001	Title transfer
	001,088	Adhesive residue
D170	001,049	Adhesive residue
D175	001	Moisture spots
D180	---	---
D181	067	Dryer streaks

REV	FRAME	COMMENT
	052-054	Edge wrinkles
	026	Moisture spots
	001	Adhesive residue
D182	022	Emulsion abrasions
	023	Moisture spots
	001	Adhesive residue
D183	023	Manufacturers splice
D186	001,018	Adhesive residue
D187	001	Adhesive residue
D197	---	---
D198	---	---
D199	030	Adhesive residue
D200	045	Moisture spots
	044	Pinholes
D202	081-083	Ferrotyping
	083	Chemical stains.
	001	Adhesive residue
D203	---	---
D204	---	---
D208	---	---
D216	---	---
D219	001,067	Adhesive residue
D232	034	Adhesive residue

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REV	FRAME	COMMENT
D235	001	Kinks
	050	Adhesive residue
D245	045	Adhesive residue
D247	010	Moisture spots
	084	Adhesive residue
D248	053	Adhesive residue
D249	069	Adhesive residue
D250	072,094	Moisture spots
	051,116	Adhesive residue
	038	Manufacturers splice
D251	005	Moisture spots
	094	Manufacturers splice
	021,110,181	Adhesive residue
	131-133	Chemical Stains
	131	Emulsion pickoff
	130	Emulsion stuck to base
	178	Streaks
	110,115,148	Embedded dirt
D263	017	Adhesive residue
D265	---	---
D266	---	---
D267	113	Emulsion pickoff
D268	---	---
D278	015,016	Emulsion stuck to base
D279	---	---

REV	FRAME	COMMENT
D281	---	---
D283	---	---
D284	---	---
D290	---	---
D297	---	---
D298	030-036	Creases
D299	055	Emulsion pickoff
	001,110	Adhesive residue
D300	001	Adhesive residue
D301	001-004	Creases
	001-004	Emulsion abrasions

SECTION G - SENSITOMETRIC CURVES

The flight roll sensitometric characteristics are evaluated prior to mission arrival and the process is adjusted from standard control conditions, if necessary, to attain maximum photographic speed with a reasonable fog level for the particular batch of flight film involved. The mission record is then processed under these conditions with additional flight film sensitometric strips attached to each end of the mission film. Sensitometric curves from these strips are published in this section of the report as Figures 1 and 2 and are most representative of the sensitometry of the flight film.

SENSITOMETRIC CURVE
MISSION MATERIAL
FORWARD CAMERA

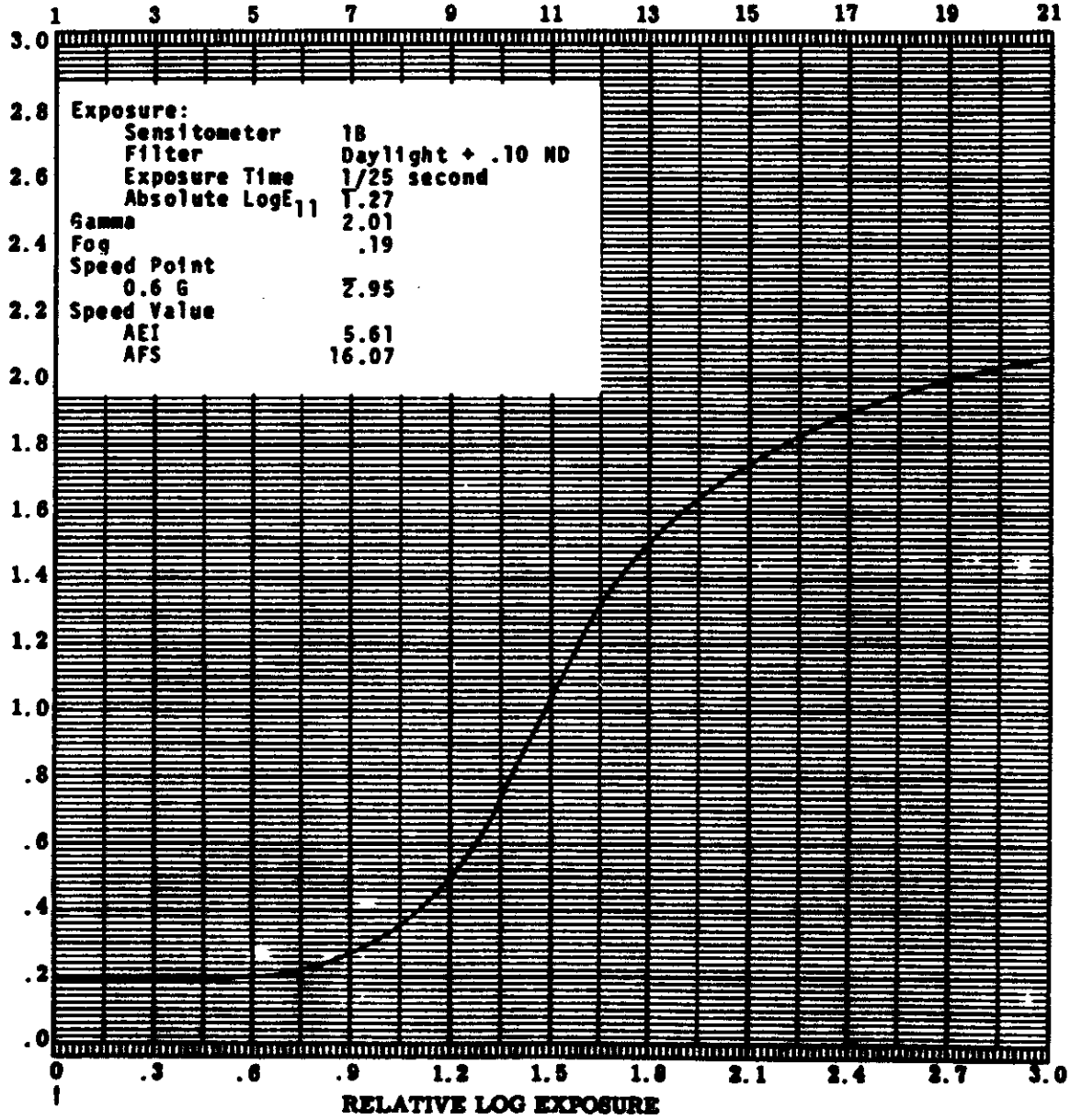

FIGURE 1

SENSITOMETRIC CURVE
MISSION MATERIAL
AFT CAMERA

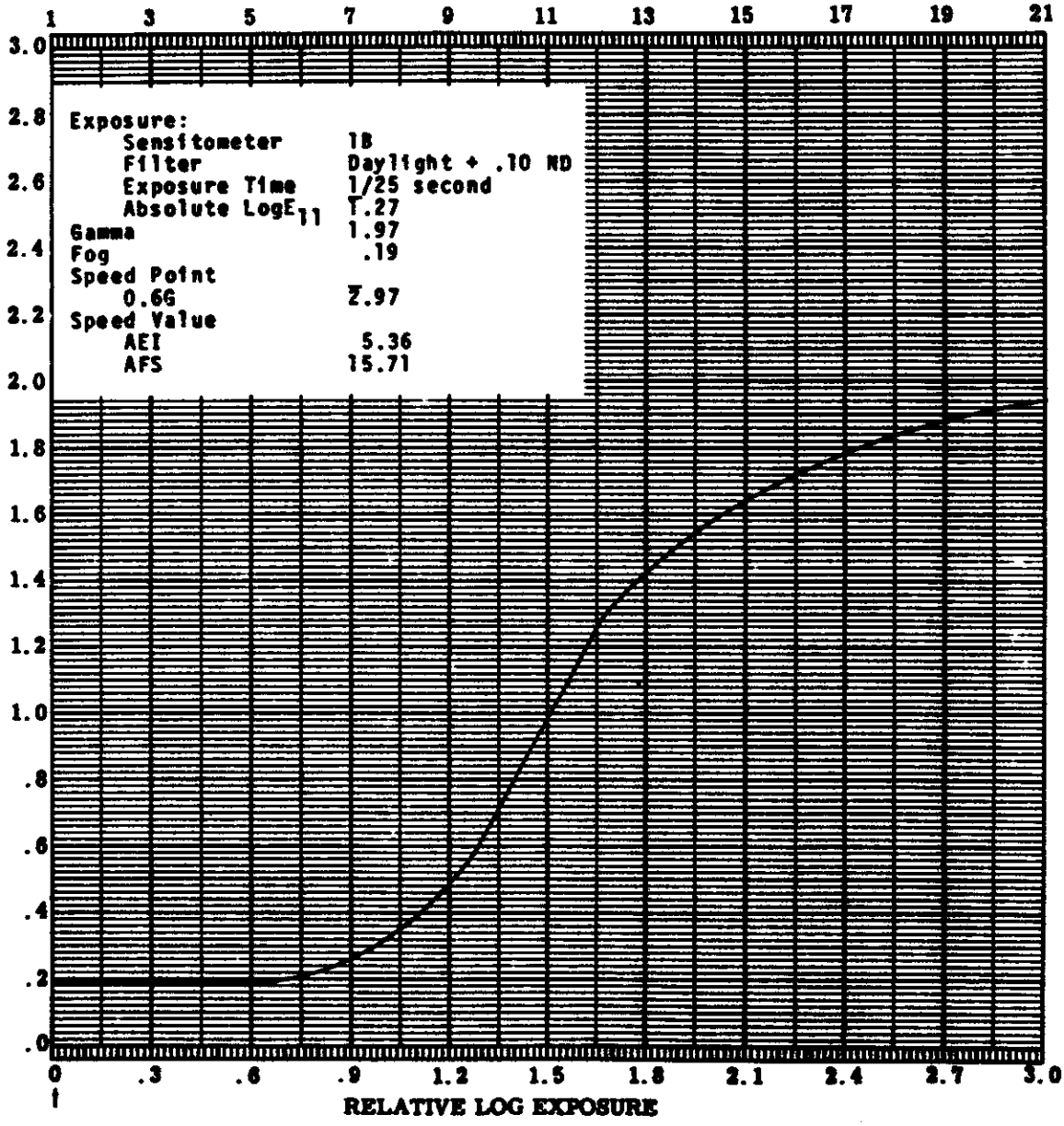

FIGURE 2

SECTION H - PRODUCTION SUMMARY

1. Time Summary

   a. Priority I: Completed at H plus 60 hours.

   b. Priority II: Completed at H plus 77 hours.

   c. Priority III: Completed at H plus 125 hours.

   See Figure 3 for Production Graph

2. Production Summary

	PERCENT OF TOTAL FILM USED	FOOTAGE
a. Film Shipped	48.9	574,538
b. Film Rejected	4.7	54,841
c. Printer Certification	0.2	2,800
d. Printer Threading	4.8	56,220
e. Extras	0.5	5,888
f. Processor Certification	35.2	413,600
g. Tag Ends	5.7	65,913
TOTAL FILM USED		1,173,800
REJECT RATE		8.7 Percent
EFFECTIVE PROCESS RATE PER HOUR:		4,652 Feet

3. Cost Summary

   a. Facility [redacted]

   b. Data Processing

   c. Manpower

   d. Materials

   TOTAL COST

   COST PER FOOT FILM SHIPPED $

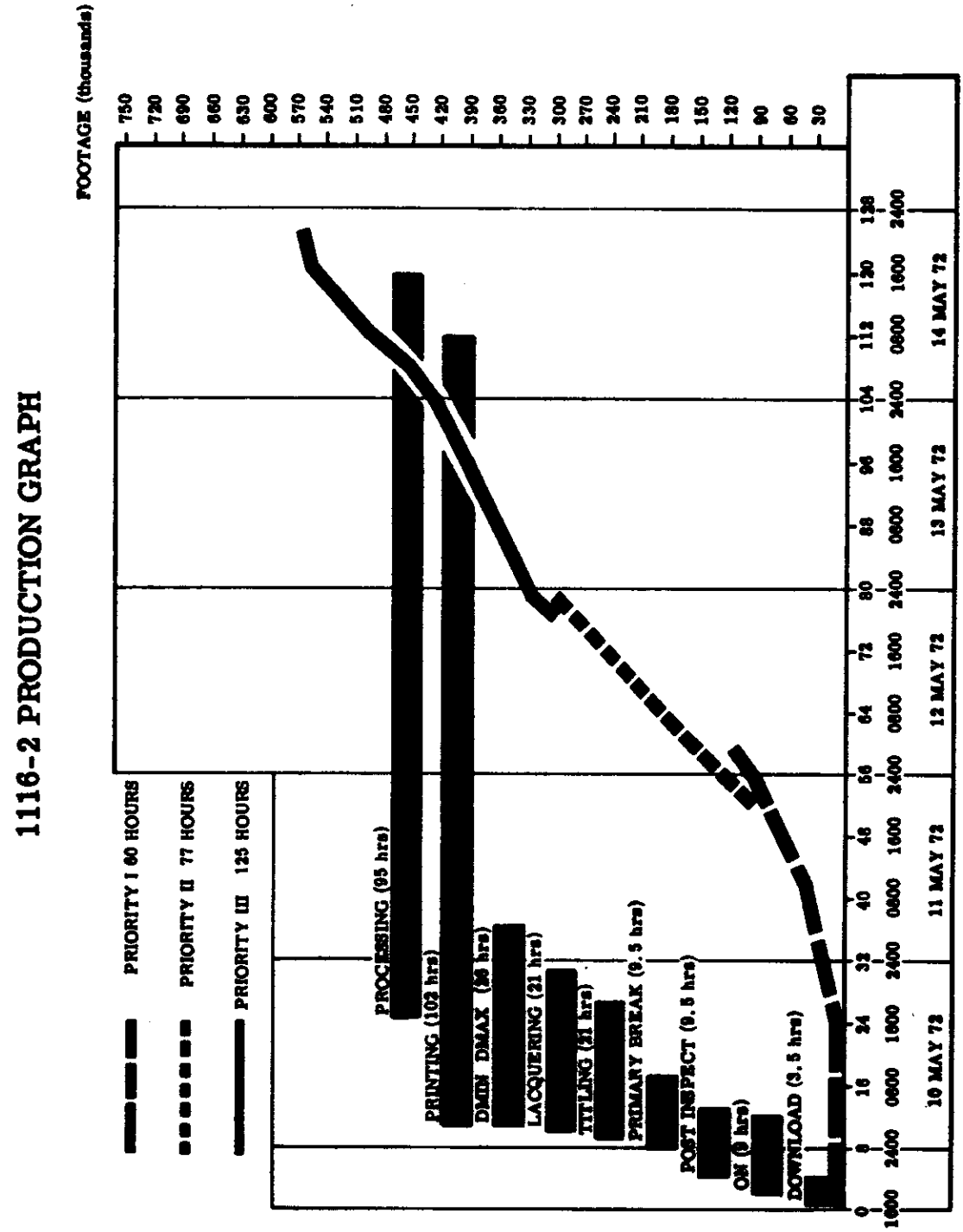
1116-2 PRODUCTION GRAPH
FOOTAGE (thousands)
750 720 690 660 630 600 570 540 510 480 450 420 390 360 330 300 270 240 210 180 150 120 90 60 30
PRIORITY I 60 HOURS
PRIORITY II 77 HOURS
PRIORITY III 125 HOURS
PROCESSING (95 hrs)
PRINTING (102 hrs)
DMIN DMAX (28 hrs)
LACQUERING (21 hrs)
TITLING (21 hrs)
PRIMARY BREAK (8.5 hrs)
POST INSPECT (9.5 hrs)
QM (8 hrs)
DOWNLOAD (3.5 hrs)
10 MAY 72
11 MAY 72
12 MAY 72
13 MAY 72
14 MAY 72

FIGURE 3