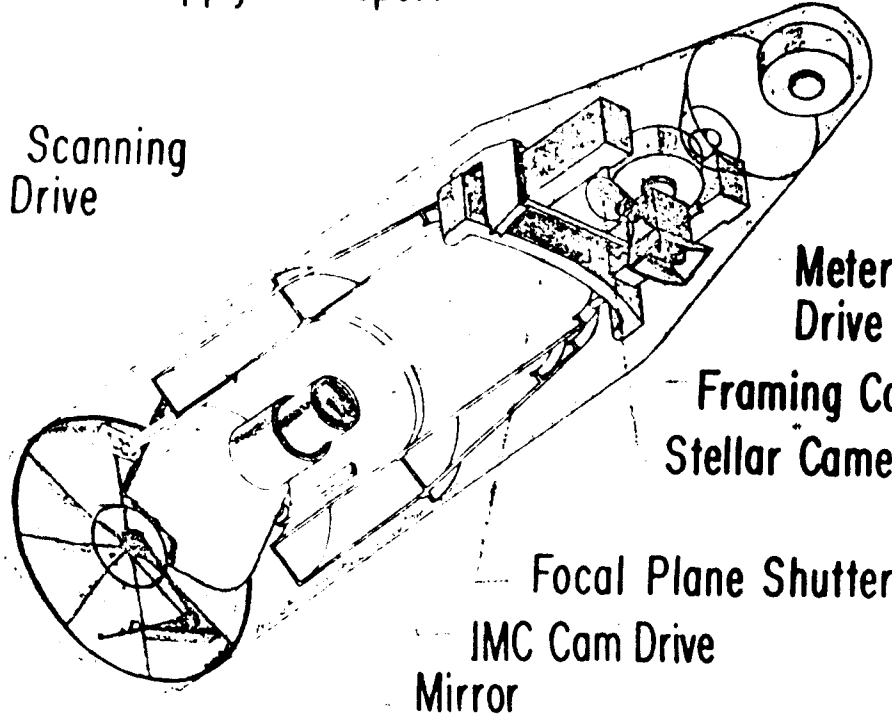
~~SECRET~~

14 00070560D

5.5

LANYARD PAYLOAD CHARACTERISTICS



Declassified/Released by the NRO
In Accordance with E.O. 12958
on NOV 26 1997

5 MIRROR POS.
STOW
NADIR

1 Panoramic terrain camera, 22° scan
30° Convergent stereo configuration
ROLL POS. ±15, ±30°, VERTICAL
66 Inch focal length, f/5, T-6 ACC ±1/4°

8000 Feet of 5 inch film
JUST UNDER 1 MILLION SqNM

1 Millisecond time resolution clock

Selective I.M.C. control by scan rate
- 7 bit binary function ramp
- Variable start ramp capability
- Command selection (15) V/H RAMP
- Yaw steering

Payload weight

Instrument	632 lbs
Recovery	282
Film (4day)	71
Structure	296
Electrical	107
	1388 lbs

~~SECRET~~

SECRET

CAMERA SYSTEMS.....

PANORAMIC	
Focal length	66"
f/T	5/6
Scan angle/convergence angle	22/30°
IMC Error	2.5%
Exposure (10 fixed slits)	1/75 to 1/1500
Modular construction	
STELLAR/INDEX (90±1°)	
Focal length (mm)	85/38
f-T	1.9-2.2/4.5-4.8
Film :	
Width (mm)	35/70
Format	1 in. cir./$2\frac{1}{4}$x$2\frac{1}{4}$ in.
Type	130/206
Capacity	250'/500'
Frame size	N.A./230x230
Exposure (sec)	2/ 1/125, 1/250, 1/500
Operates 1 frame for every 10 pan frames	
Independent operation from pan	
Reseau grid for each camera	

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Scan angle/convergence angle	22/30
IMC Error	2.5%
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Modular construction	
STELLAR/INDEX (90+1)	
Focal length (mm)	85/38
f-T	1.9-2.2/4.5-4.8
Film	
Width (mm)	35/70
Format	1 in. cir./$2\frac{1}{4}$x$2\frac{1}{4}$ in.
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LANYARD PROGRAM.....

Initiated.....Feb 1962

* Equipment & facilities available for 5 flights by termination of [redacted] (E-5).

* 1st flight--Feb 1963--1 per mo thru June 1963.

* Requires thrust assisted Thor Dm 21 & 3 solid propellant rocket motors (172,000 lbs Dm 21+3@ 53,850 lbs ea - 161,550 lbs solids)=333550 lbs Fn.

* Interchangeability---Payloads interchangeable, without significant weight penalty,with C & A.

* Satisfy USIB requirement of 5 July 1960.

LANYARD.....

OBJECTIVES

High resolution.

Specific targeting to 77° N.

Operational flexibility:

Alternate target programs ground selectable.
Stereo/Mono-program variable in same mission.
Roll steering:
200 per mission.
5 positions 0, ±15, ±30
Equivalent swath width 192nm.
Launch azimuth variation.
Ascending-Decending photography.

CHARACTERISTICS.....

NOMINAL ORBIT

Period	91min:-3,+8
Altitude	110 nm:-20,+60
Eccentricity	0.0 : 0.015
Inclination Angle	75° :-10°,+20°

FILM (S0132)

Width	5"
Format	4.5"x25"
Capacity	8000'
Frame Size (nm)	7.5x42.3 (10% overlap)

RESOLUTION

Lens/Film (4:1/2:1 AWAR 1/mm) 175/100

Camera (4:1/2:1 AWAR 1/mm) 130/80

Ground Resolution (4;1/2:1) 3/5 ft