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PROGRAM LANYARD

SECURITY:

OPERATIONAL: CORONA
EXPLOITATION: ~~KEYHOLE~~

MISSION: Reconnaissance

TYPE OF SENSOR: Single panoramic camera scanning transverse to the line of flight (a modified SAMOS E-5). A mirror provides 30° convergent stereo in 80 nm strips (and 80 nm gaps) or continuous non-stereo coverage.

LENS AND FOCAL LENGTH: f 5.0, F.L. 66", T/7.0

FORMAT SIZE: 4.5" x 25"

RESOLUTION: 115 l/mm on high contrast targets on the lens bench. 80 l/mm at 2:1 contrast-dynamic (detection size 5 - 7').

GROUND COVERAGE PER MISSION:

LATERAL: 10°50' on each side of flight line (total transverse coverage, 47nm)
LENGTH: 25,700 nm linear coverage

OPERATIONAL ALTITUDE: Orbital (assume 123 nm nominal altitude)

VEHICLE VELOCITY: 24,500 ft/sec

FILM DATA:

TYPE: S.O. 130 and S.O. 132
FOOTAGE: 7,600 ft of 3 mil film
WIDTH: 5"

SCALE OF PHOTOGRAPHY AT NADIR: 1/136,000

IMAGE MOTION COMPENSATION: Similar to KH-4

DATA CHAMBER: 29 bit binary time, roll position, mirror position (stereo or continuous)

TEST SCHEDULES:

DATE OPERATIONAL: March 1963

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CONTRACTORS AND SUBCONTRACTORS:

PRIME/SUB/ASSOCIATE: LMSC-Itek are associate contractors
CAMERA: Itek
FILM: E.K.
VEHICLE: Douglas thrust augmented thor

REMARKS: Five missions are presently programmed, with an additional two a possibility

Yaw programming is required for compensation of image motion induced by Coriolis acceleration

Based on 80 l/mm at 2:1 contrast-dynamic. Ground detection size is 5.7'

THE SIE UNIT FIRES EVERY 10 TH FRAME WITH A CAPABILITY OF A MINIMUM OF 3 SHOTS IN A STEREO GROUP

Detection Size: 5-7'
Coverage : 47 nm x 25,200 nm