TOP SECRET

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SYSTEMS COMMAND
ANDREWS AIR FORCE BASE, WASHINGTON, D.C. 20331

REPLY TO ATTN OF: SCSS

4 January 1968

SUBJECT: Space Launch Data

BYE 69200-68

TO: SCG (General Ferguson)

1. For December 1967, two space reconnaissance missions were successfully orbited to obtain photographic data over the Sino-Soviet complex.

a. Program 110 (GAMBIT-CUBED):

The tenth GAMBIT-CUBED vehicle equipped with a high resolution spotting camera was successfully launched on 5 December 1967 for a ten-day mission. Recovery was delayed until the eleventh day (16 December 1967) because of poor weather conditions in the recovery zone. The mission was reported to be nominal with 2417 targets framed; the fifth highest for this system. A Read-Out target count obtained after processing has not been completed. Operational expenditure of film which is planned to cover all possible intelligence targets, and to support other activities when possible such as mapping and charting, is listed below:

Film Use	Feet
Pre-flight	178
R&D	338
Unexposed	34
Intel	3145
Domestic & Mapping and Charting	1200
TOTAL	4895

b. Program 846 (CORONA J CUBED):

The second vehicle for this new series was launched on 9 December 1967 for a nominal fourteen-day mission to obtain search photography. Recovery of the first capsule was accomplished on

14 December 1967 (5 days). This early recovery was possible because of good weather over the China area that permitted a rapid expenditure of the film available in the first capsule. The second part of the mission encountered some bad weather; thus the second capsule was kept on orbit the maximum time and was recovered on 22 December 1967 (9 days). Mission results were reported to be better than that obtained from CORONA J-1 missions. This satellite system, in comparison to J-1, has dynamically improved stability, provides larger-scale photography because of system design to attain lower altitudes at perigee, and provides improved exposure and filter selection in the cameras. Also, this system has improved tape-recording devices which return information in the capsule and has additional information recorded on the film border for improved photogrammetric capabilities.

2. No new SIGINT vehicles were placed in orbit during December 1967. The status of vehicles on orbit follows:

a. Program 989 (P-11 Subsatellites):

Mission 732D (launched 26 June 1967) and mission 7321 (launched 2 November 1967) are operating nominally. These systems were designed to gather ABM data in the 250-2200 MHZ region. The continued operation of a third satellite, mission 7103 launched on 19 January 64, is considered a marvel since it has operated for nearly four years and over 10,000 revolutions. Its design life was only nine months. Mission objectives are in the General Search area of 105-125, 1060-1360, 1580-2020 and 4650-5150 MHZ frequency ranges.

b. Program 770 (EARPOP):

The multi-payload vehicle launched on 24 July 1967 has experienced a command failure for missions 7162 and 7230. The third mission (7231) is still operating on a different command system. This vehicle is well beyond its design life of thirty days. A new vehicle will be launched for replacement purposes.

Multi-payload (all)	125 MHZ - 250 MHZ 530 MHZ - 9200 MHZ	(Failed)
Setter 1B (EOB)	2609 MHZ - 3215 MHZ	(Failed)
Donkey (DC)	2450 MHZ - 3820 MHZ	(Working)

c. Program 770 (POPPY):

This program [redacted] of sphere-shaped vehicles to obtain EOB data in the 125 MHZ - 9500 MHZ. Four vehicles are launched together. Of the vehicles now on orbit, one is still operating for mission 7103, launched 9 March 65; two for mission 7104, launched 9 March 67; and four for mission 7105, launched 31 May 1967. Design life for each sphere is [redacted]

3. The following launches are scheduled for January 1968:

50X1

a. Program 110 (GAMBIT CUBED) is scheduled to launch mission 4311 on 16 January 1968.

b. Program 846 (CORONA J) has mission 1045 scheduled for launch on 24 January 1968. This vehicle is also scheduled to carry a P-11 subsatellite.

c. Program 989 (P-11 Subsatellite) is scheduled to launch mission 7324 as piggyback (para 3c) on 24 January 1968. This will be a directed coverage mission, entitled TIVOLI, and will be directed at the ABM radars. (100 - 4000 MHZ frequency range)

d. Program 770 (EARPOP). A new multiple-payload capability (missions 2733, 7163 and 7232) is scheduled for launch on 12 January 1968. Frequency coverage is as follows:

MG 3	250 - 4200 MHZ
Setter 1B (EOB)	2604 - 3215 MHZ

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Fact Sheet

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Page 3 of 4 pages

BYE 69200-68

FACT SHEET

December 67

1. Program 110 (GAMBIT CUBED) - High Resolution Spotting System

Mission No: 4310
Launch Complex: SLC-4
Booster: Titan IIIB/Agena
Camera: 160 Inch Focal Length
Capsule: One

a. Launched: 5 December 1967, 1346 EDT
b. Recovered: 16 December 1967, 1705 EST
c. Orbital parameters:

Apogee:	230.55 NM
Perigee:	75.82 NM
Inclination:	109.56 degrees
Period:	89.93 minutes

2. Program 846 (CORONA J CUBED) - Broad Coverage System

Mission No: 1102
Launch Complex: SLC-1
Boosters: TAT/Agena
Camera: Two 24-Inch Focal Length
Capsules: Two

a. Launched: 9 December 1967, 1726 EST
b. 1st Recovery: 14 December 1967, 2032 EST
c. 2nd Recovery: 22 December 1967, 1900 EST
d. Orbital parameters:

Apogee:	149 NM
Perigee:	83.8 NM
Inclination:	81.64 degrees
Period:	88.59 minutes