

~~TOP SECRET~~



History

Launch 22 June 1960

Orbital characteristics

Inclination 66.7 degrees

Altitude 452 ±120 nautical miles

Satellite condition in orbit

Temperatures 17 to 52 degrees Fahrenheit
(ideal for long life)

Solar Power greater than 125% of required power

5 July 1960

Data Link tests performed from Hawaii on orbit numbers 199 through 213. Twenty-two interrogation attempts provided verification of proper equipment operation in the satellite and proved feasibility of this method of obtaining ELINT data. The signals received in these tests were from friendly radars.

August and September

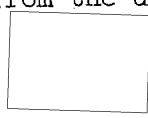
Operations using [redacted] as the interrogating site were conducted on about 22 orbits providing a high degree of confidence in the capability of the ground complex involved in interrogations and reception.

The first failure to turn on the data link was on September 20 and it was followed by two successful interrogations. The next scheduled interrogation was on September 28 and it was unsuccessful. One hour and forty minutes after the unsuccessful interrogation attempt, the satellite was within range of station [redacted] but no signal was received on 108 megacycles. The following day, September 29, as the satellite passed the Washington area attempts were made to interrogate the data link and the 108 megacycle system. The first attempt to turn on the 108 megacycle system was successful using equipment similar to that at [redacted]. The 108 megacycle system has not gone off again. Attempts to interrogate the data link system have been numerous but all have been unsuccessful since September 20.

Conclusions:

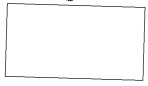
The turn off of the 108 megacycle system is not related to the failure of the data link. The equipment required for 108 megacycle turn off and on is separate from the data link system.

~~TOP SECRET~~



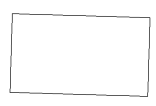
CONTROL SYSTEM ONLY
Talant Keyhole jointly

~~TOP SECRET~~



The data link system composed of detectors, an amplifier, a modulator, a transmitter, and a command receiver contains 35 transistors and diodes all of which must operate to produce results. A failure of any one of these transistors would completely silence this link.

~~TOP SECRET~~



HANDLE VIA
RYEMAN / *Salent Keyhole*
CONTROL SYSTEM ~~ONLY~~ *gently*

Page Denied

Page Denied