509 N.mi
P = 507 n mi
I = 82.07
Period = 94.84 mins

SECRET [redacted]

NRP 38-5[illegible]

OBJECTIVE: To test a new automatic, precision location [illegible] and provide rapid ROB on such priority radars as [illegible] and [illegible]. Future SETTERS will cover [redacted] and other high interest targets in "S" band.

SYSTEM: SETTER is integrally mounted with the prime payload (in this case Mission 7160) on a fully stabilized AGENA vehicle. It is a 6 channel -85 dbm sensitivity system using six circular horn antennas arranged in an interferometric array feeding six superheterodyne receivers each tuned in 256 steps 970.5 - 2935.5 mc with 1.5 mc bandwidth. The dwell time on each step is 7.8 - 100 millisec depending on signal density. During this time the 120 x 340 n mi field of view [illegible] and the radio frequency, pulse width and repetition [illegible] of received pulses are digitized and stored. After [illegible] arrive from any given 15 x 15 n mi space window, additional processing from that window is inhibited until the receivers have stepped to the next rf. This sorting according to location is a new concept in handling high density data [illegible] and is expected to greatly reduce the pulse interleaving problems of more conventional digital systems. The SETTER data is recorded and dumped on the same type of [illegible] tape equipment as is the Mission 7160 data. Two 96 bit words are used for each intercept; 6550 intercepts can be stored and the total dump time is only 165 sec.

Location accuracy of SETTER is [redacted] on a single intercept with even increased confidence and minimized system errors possible from multiple hits. Rf measurement accuracy is ±0.03%, pulse width quantization levels are 1.43, 2.86, and 5.72 microsec, pulse repetition interval is measured [illegible] microsec for prfs 130 to 33,000 pps and pulse amplitude is measured ±2.5 db over a 40 db dynamic range.

SETTER is an advanced all-solid state system using electronically tuned frequency synthesized stripline receivers and a magnetic core data handler.

EXPECTED LIFETIME: 30-40 days.

HANDLE VIA
BYEMAN ~~TALENT-KEYHOLE-COMINT~~
CONTROL SYSTEMS JOINTLY

SCHEDULED LAUNCH DATE: Early 1966.

SECRET [redacted]

B-5846-65