~~SECRET~~ [redacted]

satellite,

165-200 O1A/Band A-1, Bravo receiver (wide Pulsew).

1. In this frequency band, TALL KING Radar are the major source of signals and widely displaced throughout the Soviet Union. These signals are so strong that side lobes may appear in the data. At present this is not confusing the analysis. So far the data indicates a heavy concentration on the Southern border In some areas these radar seem to have supplanted certain of the S-Band early warning radar. To date no evidence of staggered pulsing has been present. All the standard parameters of TALL KING have been observed. At present these radar only appear in the Soviet Union [redacted]

192- 237 mc O1B satellite, Collection band B-1, Bravo receiver (wide pulses).

1. The [redacted] which is one of the Missile detection radar of the U.S. has been apearing often in the data. The principal locations of these radar are in [redacted] All of the usual characteristics have been noted in the data. PRF's of 12.5 and 25 pps have been observed.

2. Some intercepts of other radar in this band appear to be friendly and are of lesser power.

3. To date the Soviet Long Range, High-Power Radar postulated to probably be in this band have not appeared.

HANDLE VIA
BYEMAN
CONTROL SYSTEM ONLY

[redacted]

SECRET [redacted]

320 to 390 mc 01A satellite, Collection band A-2, Receiver Charlie Wide pules.

1. [redacted] of the BMEWS System in [redacted] have been appearing regularily in the dapa. The PRF of this radar is extremely stable at [redacted] pulses per second. Scan times average about 4 seconds. Burst structures show evidence of pulse pairs with duration as long as 233 milliseconds.

2. No other signals have appeared in the data analyzed to date.

3. The signals in this band have not been observed in the Asia and the Far East areas.

380 to 480 mc 01B satellite, B nd B-2, Receiver Charlie wide pulses.

1. So far the data analyzed has indicated no signals were present in this band.

510 to 610 mc. 01A satellite, Collection band A-3, Receiver Charlie Narrow pulses.

1. The [redacted] has produced the most intercepts in this band. Its distribution in the Soviet Satellite countries is rather wide. This radar also appears in [redacted] The scan rates vary considerably from 14 seconds to 40 seconds per scan with a PRF in the vacinity of 198 to 200 pulses per second.

2. [redacted] "L"Band conponents are heard frequently in this band. Characteristics [illegible] are normal for this radar.

3. [redacted] with the usual characteristics of 5.6 second scan rate with widely varying PRF from 385 to 800 pps are intercepted widely/mostly from [redacted]

[redacted]

SECRET [redacted]

HANDLE VIA
BYEMAN
CONTROL SYSTEM ONLY

~~SECRET~~ [redacted]

4. [redacted] are also present in this band. These radar are located in [redacted] and exhibit most of the usual parameters for this equipment. PRF of 380 pps have been observed rather than the 500 pps listed in most references, carrying this radar's characteristics.

570 to 710 mc. 01B staellite, Band B-3, Receiver Charlie Narrow pulses.

1. Only a few [redacted] are appearing in this frequency range, indicating that the majority of these radar are below ~~kkkk~~ the frequency cutoff of this band.

2. [redacted] "L" Band components and [redacted] have not been observed in the data analyzed to date for this band.

3. Numerous signals of new types are evident, particularly from the [redacted] Some of these are undoubtedly friendly ~~kkk~~ since their characteristics are common to many of the U.S. Radars.

4. The portions of this band which overlaps the next lower band of the other bird, has not produced a large number of signals in common, thus limiting the data for ~~wkkkxxkkkkk~~ the mathamaticians working on the [redacted]

5. None of the data analyzed to date has shown any intercepts of the type previously referred to as Soviet ABM Type.

~~SECRET~~ [redacted]

HANDLE VIA
BYEMAN
CONTROL SYSTEM ONLY

~~SECRET~~

2000 to 2750 mc satellite, Band A-4, Receiverr Bravo, Narrow pulses.

1. The density in this portion of the "S-Band" is considerably lower than the 2600 to 3250 mc portion employed in the other satellite.

2. The mahority of the radar intercepted have been of the ROCK CAKE/STONE CAKE types.

3. family have appearing in the data from this band. These signals should provide the principle targets for the evaluation of the

4. No new radar types have been evident to date.

2600 to 3250 mc OlB Satellite, Band B-4, Receiver Bravo, Narrow Pulses.

1. The signal density in this band is considerably higher than that encountered in June 1960 on Dyno I. Counts as high as 15 radar illuminations per second have been observed compared to 9 or 10 on Dyno I. Incidents have noted from field observations that when missile range activity is taking place, signal densities in this band are higher than normal..

2. To date, due to high signal density, signal analysis has been limited to manual methods in this band.

3. "S-Band" emitters are located throughout the entire Sino-Soviet Bloc.

4. A unique S Band type radar has been intercepted from area with the following characteristics, PRF -340 pps, circular Scan Rate 19.95 seeonds.

5. Early Warning radar of the are evident in Large numbers throughout the data.

6. such as the Rock Cake/Stone Cake family are also numerous. These radars exhibit typical published characteristics.

7. To date no unidentified types have been evident. Numerous Soviet radar have similar characteristics which makes accurate identification

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

difficult.

8. From field observations report signals on one frequency band appear to be PRF locked with signals of another frequency band such as might be expected from [redacted] which would be keyed in synchronism from a common modulator.