

~~SECRET~~

BRIEFING FOR ADM DAVIES 24 February 1970

(Assuming his interest is to support his position that our Fleet is indeed, very vulnerable to detection by SIGINT Satellite systems)....

We should disclose:

1. Relative to the MOSKVA work by [] in January 1970,
 - A. Timliness of locations
 - B. Productivity of results= with available tasking how many cuts/day.
 - C. Accuracy estimate by testimony of the Tailing Destroyer "Warington"
2. Demonstration by this Program of
 - A: converging in Altitude to 5200 feet on Airborn Target.
 - B: Ability by Scan Compression or expansion or detecting Hard Port or Starboard Turns
 - C. With the extreme ability to detect PRI we were able to detect damage to the aft face of the Radar on the Enterprise caused by their ^{accidental} fire and Explosion. Thus on this Electronic Scanning emitter we can tell when ever this particular Face of the array is pointed toward the Collection Platform. (20 microseconds discontinuity of PRI every 8th pulse. *at ~220 pps rate*)
 - D. []
 - E. SIGNIFICANT "ALERT" capability

I= First ELINT SIGINT SATELLITE SYSTEM OF THE USA.

II= SIMPLE = LONG-LIFE SYSTEMS Upstairs therefore long-time sampling of environment can disclose changes and trends, and Tip-Offs.

III= MAIN-BEAM INTERCEPT (Horizon to Horizon) consideration

xxx We raise the horizon of the ELINT station to 3500 EN Mi. 6 times per day.

IV=.

CONTROL SYSTEM ONLY

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Charts now in the canvas case for the AMM DAVIS BRIEFING ON22 Feb 70

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1. Cover [] an

Basic Concepts for POPPY

3. Vertical antenna coverage determines time illuminated

4. a pictorial over Europe

5. Block Diagram

6. HUTs

7. Overseas Site locations and hosts.

8. Growth Trends

9. How [] Works

10 How well it works

11. , OCEAN SURVEILLANCE

. Beginning in April 1968 after CNO requested we demonstrate our capability to locate ships at sea. . . .

12. The first evidence was that we could ~~not~~ EXTEND the track of a vessel both forward and backward into the DENIED WATERS like the inner BALTIC and into the WHITE SEA as an example.

; 3/

HANDLE VIA
BYEMAN
CONTROL SYSTEM ONLY

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Meeting of February 19 at NSG

Subj: TOOT

In attendance were [] of NSA
Reid Mayo and George Price from NRL and Cmdr. Olson, L/Cdr
McGraw, Lt. Morgan, Ens. Bob Lentz from NSG, and Cdr.
C
Barberry from SAFSS.

[] opened the meeting. He stated that he felt
that ^{TOOT}~~TOOT~~ would enhance our system by utilizing ^{SLX}~~sticks~~ and
^{PWX}~~picks~~ more efficiently. This will allow our systems to
address itself to the total weapon system and not just a
portion of it. It will also allow our system to react
on a real time basis. [] stated that ideally
he would like the operator to have the ability to spot
an [?]~~UNIDENT~~ and react to it immediately. However, he
realized that this was very difficult. It would also
cause many false alarms. So an alternate proposal was
to utilize a list of previously ^{observed}~~found~~ unidents and
react to them quickly. The main distinction here is
that in one case the reaction is to the first observation
of an unident and in the second case the reaction is to
a previously found unident. He made the statement that
he realized that there would be a certain amount of false
alarms utilizing this system, however NSA was prepared
to accept these false alarms at this time. It was also

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BYEMAN

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TALENT-KEYHOLE-COMINT
CONTROL SYSTEMS JOINTLY

~~SECRET~~ [] proposed that Toot could be utilized not only in the same

REV but in the case of the 1st observation of an unident Toot could be utilized on the next rev. Reid Mayo cautioned that the systems should be started slowly to allow confidence to build up in it and recommended that 3 signals be initially selected and a careful ^{SOP} ~~sop~~ generated so that ~~xxxx~~ predicted site response would result.

[] came with a list of unidents ranging from 10 to 30 for each site. He was prepared at that time to turn the sites loose on this list. However, after being cautioned of the problems ^{of implementing the system,} NSA is going to review this list ~~in~~ and select what they feel is the most important from an interest standpoint.

At this time it would be appropriate for someone to look at it from an ~~xxxx~~ implementation standpoint.

^{There} It is going to be a great difference in "potential" of the possible unidents and this will depend on the interested parties. ^(i.e. VSG vs NSA) As a beginning rule of thumb the number ~~2 or~~ 2 or 3 signals for each site was considered a good starting point.

The software problems this would cause NSA were ~~xxxx~~ discussed briefly. It is apparent that they are doing no automatic processing of these signals at this time

and therefore no special recognition characters are needed. ^{yet.} They made the statement that as long as the

tape was especially marked, in the log, that they would process around this particular rev by using a deletion

technique and handle the ^{REV} Toot interest manually. ^{HANDLE VIA} ~~SECRET~~ [] ^{BYEMAN} TALENT-KEYHOLE-COMINT CONTROL SYSTEMS JOINTLY

~~SECRET~~ []

For this reason when the Toot system is initially ~~implemen~~
implemented there will be no special characters, no end
of file, no special designation at all required on the
digital tape. ^{by NSA} This means that the tape will not have to
be stopped at any time during the ^{retasking} . No method for
identifying the analog tape was discussed at this time.

After the meeting Lt. Morgan expressed an interest in
seeing that a well written, explicit ^{SOP} ~~sop~~ is developed for
this area before Toot is implemented. Reid Mayo suggested
that more than ^{SLX} ~~links~~ and [] should be considered for
Toot, for instance, polarization, diversity, and low and
high options in the appropriate ^{bands} NSA was ~~not~~ ^{not} ~~NON~~ ^{NON} ~~committal~~ in this and said that they would consider it.

Reid Mayo suggested that Toot be implemented just on the
06's. However, it is not known at this time whether
everyone in the meeting agreed with this, as there were
no statements one way or the other made on it. []

NSA
stated in the meeting that ~~he~~ expected NRL was making
a modification to the ^{ADD/S} , that would allow hardware

~~wide~~ characters to be added to the appropriate channels ~~via hardware~~
~~mod~~ on the digital tape. *via a hardware mod.*

~~SECRET~~ []

TELEMAN

HANDLE VIA
TALENT-KEYHOLE-COMINT
CONTROL SYSTEMS JOINTLY