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19 March 1969

SORS MEETING (held CIA Room 7Z24 0930)

Subj: Expanding on Sea Surveillance Point Paper

1. Attendees - [] CIA, [] CIA;

[] Army; LtCdr. COKEFAIR, Navy; []
NRO; J. LIBBERT, NSA; [] DIA; Air Force, plus
a large audience (20 people). R. POTTS, NSA; SA Group,
[], NRO staff (Col ALLEN).

2. [] started with brief introduction and he listed points which he felt had to be considered:

(1) Competition between principle responsibilities
(ABM competition)

(2) A. Tasking time and utilization of resources
B. Need of demonstrative capability

(3) The characteristic for production of intelligence
from restricted areas.

3. Capt MOFFIT then had introduction remarks and people included [] Cdr McGRAW, [] Lt. POTTS, R. D. MAYO, L. HAMMARSTROM. Mr. MAYO next gave brief statement of improvements in system. Made the statement we would - R. POTTS then went into detailed run through (45minutes) of [] results. (See outline and charts from procedure manual for specifics.) Lee HAMMARSTROM addressed initial points (10 minutes) of chairman on "competition" with discussion on parallel operation of station, i.e. (a) All data transmitted from satellite (ABM-Sea - EW) is collected and put on digital tape on all pass. (b) only possible area if conflict is in NSA tasked responsibilities and these were all met at the same time the ship processing was underway. Cited number of SOI's reported, showed viewgraph of NSA requested []

Went to point #2 of tasking and utilization of payloads during 1968. (See viewgraphs on A,B,C,D.) and pointed out sea surveillance bands were same as other significant emitters and all were tasked several hundred times during 11 months = but, this still represented only 42-50% of available tasking limitations and other sea ABM requirements could be added easily citing [] now task 1.3 times per day could be increased to 6 times by adding it [] existing task groups.

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L. HMMARSTROM

Brief summary meeting primary responsibility on ABM showing chart on firsts which POPPY has had. Showed graph of CIA document on BUGH intelligence. Then verbally mention 2 reports from each agency CIA, NSA, DIA, which listed ABM results from POPPY.

Capt MOFFIT

Then summarized

[] then said questions he had.

1. Requirement? What is usable location accuracy?
 - a. Needs careful statement of accuracy
 - b. What sort of accuracy is produced?
 - c. What sort of accuracy is required for Ocean Surveillance

LT. POTTS

Cited some NAU sum correlation and narrow passage in [] where location fell in water.

Ray POTTS - NSA

1. Said he ran 8 of [] locations and the worst was 20 miles
 - a. 3 ran o.k.
 - b. 5 needed manual interface
2. Cited on Bench-mark radars that while L.O.P.'s were larger centers agreed with bench marks to []

[] Said he questioned if ephemeris was that good.

Lee HAMMARSTROM

Showed chart of brower-lydane U.S. "timation" data which had [] variation and made the statement we felt this was the system's overall limitation at the present time.

Discussion followed on need of radar calibration on all bands to eliminate any bias

Lt. POTTS made reference to accuracy of mean delay

Capt Moffit ask what he should do now?

[] Said committee would need more time to act.

1. Requirements by areas
 - A. What accuracy liked
 - B. What accuracy can be used.

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2. [] of ocean surveillance by class, etc.
warship, [] etc.

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1. How long does it take to locate?
2. How many targets can be located?

Lt. POTTS

His "first team"

could now do them within [redacted] if they were
set up for just that emitter.

L. HAMMARSTROM

In overall response to questions and need for precise statements on accuracy - timeliness, etc. that the system was still in the R&D phase-example; of new hardware and software and that he felt that prime goal should be to get more time and experience before being pinned down to exact statements. The "learning curve" on what all can be done is very steep.

[redacted]
Cited timeliness requirement of Field vs NSA processing.

[redacted]
Made comment that they both still could be done i.e. digital tape was still forwarded.

[redacted]
Cited long range impact and interference.

- a. Payloads (designed for ship emitters)
- b. General processing

Capt MOFFIT

Ask [redacted] if he should go on thru to sigint committee and to
USIB.

[redacted]
Said he had alerted USIB and that the first steps he thought were to get an approved SORS position with three steps

1. Provisional capability now while establishing and defining specific goals.

2. Trade offs on system design

....Made point on which radars

of 5 or so on a ship you might use if you were limited. Other satellites where does timeliness stand - record - dump, process, etc.

Test case w/ [redacted] wman on low priority (no fast response, no interference)

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Suggestions:

1. Committee needs time
2. We should reconsider the memo and add the other aspects.
3. Memo before the committee is too open-ended!
4. Goals
 - a. 6-9 months plan for defining
 - b. Then longer term problems and definitions.

Steps should be

1. Continue is going
2. Then later come to NRO with tasking changes etc. (easy system changes)
3. Then later world wide problem; locational accuracy, other systems hardware changes
4. coming down the pike!

LIBBERT

Committee should endorse

1. R&D etc.
 2. More definition
 3. Look for possible problems
- ...and even continue with some interference for awhile to test out system etc.

Get specific authorization for world wide system

Capt MOFFITT

Questions, what next, USIB, Sigint

Said wait until we....

They want time in order to consider.

NRP resource producer and consumer narrow line and that he and program would work closely to develop

Said wide line!

11:30

Thank you gentlemen

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~~TOP SECRET~~ [] At the time of the initial briefing to SORS the remarks and discussion which followed indicated that there had been a communication [] as to the overall effectiveness of the POPPY system. This discussion is intended to show that (1) POPPY has a solid history of Elint Intelligence collection (2) that the use of POPPY data to supplement the Navy sea surveillance requirements is a logical addition (3) that all of assignments placed on a field station can be ^{met} ~~mean~~ in addition to the ship location capability. [] capability of POPPY. (5) that there are significant new aspects which should be investigated to avoid future communication gaps and to insure response to significant aspects of the program.

Gentlemen - what we have presented while the numbers are accurate is a distortion of the overall ~~elint~~ ^{elint} picture. We have presented this to dramatize and put a perspective on the power of POPPY system and the significance of our requests which we put before this the Nations highest satellite Elint committee.

These requests are as follows:

- (1) The use of POPPY for the Navy sea surveillance mission.
- (2) the consideration of digitizing all POPPY ground stations and other stations to support the Navy and Nation missions i.e. mid Indian Ocean.
- (3) the expansion of the POPPY processing resources to a [] (The minimum point for this would be (a) the capability for a level of activity on each magnatron family. For example - The [] varients which we feel and is suggested by [] reports equates to Soviet ABM activity.)

4. The development of the software on POPPY which [] [] (This should be a logical step because POPPY digital data provides all of the basic inputs in a simpler form, i.e. [] []

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[redacted]
the availability to the Elint community today the intelligence of

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a working program [redacted]

5. Expanding inputs to signals of Interest and tasking reflecting SOI's. Procedure for detailed review of SOI's intercepted by organizations requesting SOI signals for further possible intelligence, for example, Dog House (a) Occasional high stability solid enough to see a [redacted] This is hard to obtain on a [redacted] thru a crystal video over a wide

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