

1966 June

ARMY MEMBER CONTROL
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1. I re-iterate my strong plea that an effort be made to evaluate these systems at least in part on what they HAVE accomplished rather than what they may hypothetically do. I was told at the last meeting that this has been done. I have searched the Army and NSA C-15 records and find no evidence of such a significant accomplishment. May I suggest that if such a paper has been done it be submitted as an annex for our group, to be considered at the next as input. If it has not been done I consider it should be done. "What is past is prologue"! Although I agree that we should not inhibit ourselves to the "dead past", I do not want to marry ourselves to the unfilled promises of the future either. If we are to do a 1967 and 1969 comparison I suggest we do a 1966 or 1965 comparison as well. I feel very strongly on this question and wish to table it again.

2. Page 2 paragraph 2. As in the prior paper I challenge the requirement of [redacted] radars. Certain selected ones of greater capability in critical areas this might hold, but certainly to update every [redacted] thusly is an extravagant requirement. I think you will find the requirement lists radars in priority; if not, it should. Further it should list areas in priority- we should not stress equally areas which are readily accessible by other means including peripheral collection. How much stress should we place on [redacted] since photo data now makes a contribution of great significance there, and certainly by 1969 photography will make a sizeable contribution on even smaller targets? Also the areas amenable to coverage exclusively by satellite as compared to other means- including, I might add COMINT- must be considered. We find from this study that the only almost exclusive satellite EOB areas are in the far interior of China, Mongolia and the USSR.

3. P 2 Paragraph 3. The danger of using existing collectors or existing EOB's even as criteria is somewhat misleading. It may be of interest to consider a particular Army and Navy problem- and to some extent AF as well. It is particularly terrible in the Army area due to peripheral little accessibility

[redacted]

which is not at all well covered in existing EOB's and certainly not well-sampled in the [redacted] data. For example, although in the band of coverage, there were only [redacted] radars among all the 1100 odd radar sites from 7228. A large number of these radars are well defined as far as parameters; yet we need EOB or environmental data- they are thus not really general search. Examples, [redacted] and [redacted] radars at sea or on the ground. I call your attention to the fact that a large number of these targets are [redacted] and above, a region which your paper earlier suggests be de-emphasized- at least on POPPY. The Department of the Army will resist vigorously such a recommendation.

4. On your rationale to come up with probability of seeing a radar I see no evidence that you considered the reduction in probability inherent in the superheterodyne systems as contradistinct to the several systems that use d-v collector with their inherently greater window. The frequency domain is just as important as the spatial domain so greatly stressed here, and this certainly inhibits the superhets despite their greater non-amplified sensitivity. This is the hold probability of intercept problem and certainly applies in a problem with such as high speed collector and missile [redacted] with such short "on times". This applies to [redacted] paper, especially of [redacted] seq.

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5. I should be a lot happier if we all had a spec format similar to the DD-1493 on all systems. Although I am fairly familiar with the systems I must admit I get lost- especially in futuristic names such as XYLENE/STRAWMAN/~~etc~~ Reaper as well as the non-flown SOUSEA/SAMPAN. This should be a basic working document available to all CETF persons. We have some of these within ACSI spaces in the SWG files, but they are unfortunately incomplete, particularly on the future programs other than POPPY.

6. Page 8; where is [redacted] Is this to be considered at all. If not my passionate plea on the mobile targets and less exotic ^{radar} cases made in par 3 applies equally well.

7. I continue to doubt really the appraisal of any systems without relationship to all other programs. You cannot cost-evaluate things in a vacuum with all other collectors omitted. Now, however you have fairly dropped consideration of the synchronous case, so I won't belabor the point other than to ~~ask~~ why collect signals from space you can collect from Berlin, Moscow, a submarine or an aircraft, or perhaps as well from airplane overflights or from overhead photography? This still troubles me.

8. The timeliness factor in MOB should probably be addressed. This is a great factor which very seriously affects the basic requirement, which I challenged. This is of course a great advantage of 7228 even though it covered a narrow band. There is no need to update every 30 days if it takes three months to process. Also the timeliness need varies with the international situation.

9. I think the processing problem is a very real one- especially in platforms which require new techniques. Whether we can include it is perhaps questionable but it should be considered or clearly stated that we didn't consider ~~the~~ processing.

I think we have made progress, but I am still quite disturbed about assumptions here and some of the rationale. Some of it is not clear and I am certain will be less clear to the SIB consumer thereof. My apologies for absence this Friday.

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