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MR*Comments on Cmdr Weeks Paper.

1. The present paper by Commander Weeks places an adequate and proper emphasis on the entire German Navy Communications Intelligence Effort as revealed by TICOM investigation. Cmdr. Weeks, however, is interested solely with German success (or failure) to derive intelligence from a study of United States Navy communications. Evaluation of the German successes in the communications intelligence field with British and Russian communications are very similar.

2. AS-14-TICOM, from study of the activities of the German Army and German Airforce Signal Intelligence Services, believes that the following warning in connection with the German Navy use of traffic analysis should be emphasized (Cmdr. Weeks paper, page 2, paragraph b-2 and Appendix II, pp. 16 and following, presents the same points, the only question is of additional emphasis): The German Navy Signal Intelligence Service did not consider applied traffic analysis as a primary source of intelligence until after the results of their cryptanalysis fell off in 1943. Up to 1943 traffic analysis was ancillary to cryptanalysis. The Germans failed to develop and test their traffic analysis techniques while it was possible to check the accuracy of the results of traffic analysis by cryptanalysis. Accordingly, when cryptanalysis failed it was too late for traffic analysis to produce satisfactory intelligence even with expanded resources and personnel. The German Army Signal Intelligence Service derived a great deal of intelligence from operators chatter, low grade systems, and careful cataloguing of all available intelligence. The German Airforce Signal Intelligence Service believed that communications intelligence should concern itself with every "noise picked up on the air" (Ticom Interrogation I 13, I 112 etc.) and produced adequate intelligence from study of radar, navigational aids, operators

chatter, traffic analysis, and exploitation of low level systems. High level systems were believed secure and were therefore not subjected to cryptanalysis by either the German Army or German Airforce Signal Intelligence Service (only one man, the head cryptanalyst of the German Airforce Signal Intelligence Service [redacted] even believed that it was worth while to attack United States machine systems). Captured documents dating from the 1930's supplement prisoner of war statements which prove that the German Army and Airforce expected their greatest yield to come from traffic analysis rather than cryptanalysis of systems yielding as highly valuable intelligence as were read by the German Navy cryptanalysts to 1943. An interesting example of the use of a traffic analysis team by the German Navy which is not mentioned by Commander Weeks (as it does not concern United States communications) is found in I 146. This concerns the assignment of a German Navy Traffic Analysis team to the cruisers Scharnhorst and Gneisenau when these ships made their escape from Brest and "ran" the channel. The T/A team monitored British Air Craft Reporting Channels and Coast Artillery nets to determine when the presence of the cruisers was discovered and assist in evasive action or summoning German fighter cover.

3. A copy of the final draft of Commander Weeks paper is requested for inclusion with the AS-14-TICOM files.

ADCR:

1. This report is highly interesting, emphasizing as it does the Naval picture of the last war. Copies of the report in final printed form should be made available to the three operating divisions to have on hand for reference. Of special importance are the German successes in T/A, exploiting the weaknesses in our communications systems.

2. It is noteworthy that the Germans apparently did not solve Navy authentication systems. On the other hand, indicator systems and weather ciphers should be strengthened to enhance their security.

3. In weather ciphers, the Japanese point out our effective use of dummy groups, and the efficacy of syhoptics of irregular length. However such gifts as internal indicators of the pattern AAAAAA aided the Japanese in additive recovery, therefore such pattern groups should be eliminated in future considerations.

- Capt C.