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Op-20-N

September 16, 1942

MEMORANDUM FOR THE DIRECTOR OF NAVAL COMMUNICATIONS.

Subject: Policy in regard to making ECM available to the British.

1. Today, "Combined" (U.S. Navy - British Navy) communications are unsatisfactory due to the slowness and unreliability of Naval Cypher No. 3 and to the differences between the ECM (U.S.) and Type "X" Machines (British) which prevent mutual use. There are two practical solutions to this problem, namely:

- I. Conversion of the ECM and Type "X" to a common cryptographic principle. The ECM conversion unit (CSP 1136) is in service and has proven its reliability. The Type "X" conversion unit is under construction at the Washington Navy Yard and should be completed before the end of this month. This alternative is acceptable to the British subject to successful performance of the "X" Adapter.
- II. Making the ECM available to the British and adopting it for "Combined" communications. This alternative has been disapproved by the two previous Directors of Naval Communications (Admiral Noyes and Captain Redman). The ECM cannot be made available to the British Government without the concurrence of the War Department.

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2. The second plan has many advantages. The Teletype Corporation has stepped up the production of ECMs to 200 per month (just double the former rate). We can supply the British ECMs at the rate of about 100 per month commencing November 1, 1942. By January 1, 1943, we could have the ECM effective throughout the North Atlantic Convoy routes and the worst of our communication headaches would be over. We are, in fact, denying Britain an important implement of war which might mean the difference between defeat and victory. If we expect to furnish the ECM to England eventually, the decision should be made now so that the additional machines may be ordered and the Teletype Corporation can arrange for material and plan other war-time production accordingly.

3. The first plan is feasible but has disadvantages. There will be a delay of nine to twelve months before the "X" Machine will have a sufficient distribution in the British Navy to materially help the situation even if the "Adapters" could be turned out in sufficient quantity by that time. This is doubtful because of the shortages in materials, labor, and manufacturing facilities. Above all, we should not commence the manufacture of the Type "X" Adapter and then shift to the ECM a few months hence. The Converted "X" Machine will be superior to the original "X" Machine, both mechanically and cryptographically, but will fall short of the ECM in both respects. In other words, the "approved plan" will result in a year's delay as well as a second-rate machine. We have no such margin of superiority over the Axis powers nor has the progress of the war to date been such that we can regard the present situation with complacency.

4. The decision to give or withhold the ECM should be based on the Grand Strategy of the United States. If we regard the Allied cause as lost and anticipate that America eventually will have to fight single-handed against the Axis powers until a "negotiated peace" can be arranged, then our present policy is sound. A defeated England would surrender the ECM just as a defeated France surrendered the British "Allied" Code. However, if our plan of war is to keep England from falling and to prosecute the war with all our national resources to a successful conclusion, our present policy is unsound and should be reversed without delay.

5. It is recommended that this matter be referred to the Commander in Chief, U.S. Fleet, and Chief of Naval Operations, for his personal decision.

Respectfully,

/s/

L.F. Safford,
Captain, U.S. Navy.

March 21, 1944.

Note: Captain Holden, (DNC when this memo was submitted) ~~informed~~ informed Captain Safford verbally that he would submit this matter to Admiral King for his decision. Do not know whether this was actually done or not. Nothing further was ever heard of this matter and the policy was not changed. Therefore, we went ahead with the CCM program.

L.F. Safford