REF ID: A2435947



CSGAS 400 112

SUBJECT: Combined Cipher Machine Modification of

TO:

Chief of Naval Communications Naval Communications Annex Washington 25, D. C.

1. A Joint meeting of representatives of the Army and the Navy was held on 16 February 1948 to discuss the British document entitled, "Services Cypher Policy Committee Paper Number 3," of 29 October 1947. At that same meeting consideration was given to the letter dated 30 January 1948, from the Chief of Naval Communications on the subject of the Combined Cipher Machine. The minutes of that meeting are attached hereto as Inclosure 1.

- 2. As is indicated in the minutes of the meeting, a decision with regard to the improvement of the Combined Cipher Machine must await additional information, in particular:
- a. Technical data concerning the nature of the British Typex Mark 22.
- b. A study with regard to feasibility of the new idea presented by Navy for effecting rotatable and interchangeable cam contours.
- 3. With regard to 2a above, the British Liaison Officer has taken steps to obtain the necessary data from London. With regard to 2b, the Navy representatives have been requested to provide the Army Security Agency with some of the new rings and grooved rotors, together with a modified ECM basket so that studies may be made at the Army Security Agency as to the feasibility of the new idea.
- 4. It is agreed that no further information should be given to the British until the matters discussed above have been clarified.
- 5. Paragraph 5 of the letter dated 30 January 1948 from the Chief of Naval Communications requests a reconsideration of



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the previous decision of the Chief, Army Security Agency with regard to the Joint use of the CSP 2900. The basis and reasons for that decision have been fully set forth in previous communications as well as in Joint meetings and they still appear to be cogent. Among them was the factor of considerable cost in making the conversion. even though the work would be done in conjunction with rehabilitation of the SIGABA machines. cost involves that of additional parts and labor. Informal indication has recently been given this Agency that the necessary parts, as well as special tools and jigs for the conversion, could be furnished by the Navy. This offer is greatly appreciated and would result in a considerable reduction in the cost of conversion. However, a more significant concern is the extra labor involved, which calls for expenditure of time on the part of very scarce technical personnel. The Navy's own estimate of the additional time required, if the conversion is performed concurrently with rehabilitation, is two and onehalf hours per machine. Since at least 2000 Army SIGABA's are shortly due to be rehabilitated the total additional time would be 5000 man-hours. Such expenditure cannot be economically justified in the case of a machine whose security is considered to be entirely satisfactory.

6. It is therefore with great regret that the Army Security Agency feels compelled to adhere to its original decision that it cannot accept the CSP 2900 in principle and is not able to undertake the conversion of SIGABA's in connection with its own rehabilitation program.

1 Incl
Minutes of Army-Navy
Meeting. 16 Feb 48

HAROLD G. HAYES Colonel, Signal Corps Chief, Army Security Agency

