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AFSAC: 63/71

1 August 023  
6 July 1953

~~SECRET - SECURITY INFORMATION~~

MEMORANDUM FOR THE MEMBERS OF AFSAC:

Subject: Release of the ASAM-4 (SIGNIN) Cryptoprinciples to the U.K., Canada, Australia, and New Zealand

1. Inclosure 1 is forwarded with a vote sheet for the concurrence or comments of the members of AFSAC.

*Mary C. Fisher*

MARY C. FISHER  
LTJC, USN  
Secretary, AFSAC

Inclosures - 2

1. Draft Memorandum by the Director, NSA for the Joint Chiefs of Staff, subject as above.
2. Vote sheet dated 6 July 1953. (*See Incl. 2*)

AFSAC: 63/71

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## MEMORANDUM BY THE DIRECTOR, NATIONAL SECURITY AGENCY

for the  
JOINT CHIEFS OF STAFF

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on

RELEASE OF THE ASAM-4 (SIGNIN)  
CRIPTOPRINCIPLES TO THE U.K., CANADA,  
AUSTRALIA, AND NEW ZEALAND

1. The Army Security Agency has requested that consideration be given to the use of the ASAM-4 for on-line operation in exchanging certain COMINT information between Army and British intercept stations in Europe. The ASAM-4 offers certain security advantages in these communications which are not now obtainable with standard teletypewriter equipment and associated encryption equipment. In releasing the ASAM-4 for Combined use, additional teletypewriter encryption equipments now needed will become available.
2. The ASAM-4 (SIGNIN), a cipher machine for encryption of teletypewriter signals, was produced in limited quantities in 1945. By the close of World War II, service tests only had been made on the equipment. The equipment was recently re-introduced for limited joint use in the Far East for certain specialized communications.
3. Before further consideration can be given to employment of the ASAM-4 for the purpose stated above, it will be necessary to disclose the cryptopriniciple to British communications security experts in order that they can make a security evaluation of the equipment. The ASAM-4 contains no novel cryptopriniciple and is similar to the ASAM-2-1, a teletypewriter encryption equipment well known to the U.K. and Canada. The ASAM-4 is classified CONFIDENTIAL. It is not anticipated that the ASAM-4 will be released to Canada, Australia, and New Zealand unless a combined communications requirement with any or all these countries is expressed.
4. As prescribed in Joint Action of the Armed Forces, no joint cryptographic device or publication will be made available for Combined use without the approval of the Joint Chiefs of Staff.

Inclosure 1

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5. The policy\* of the State-Defense Military Information Control Committee permits release of SECRET cryptographic information to the U.K., Canada, Australia, and New Zealand.

6. It is recommended that the Joint Chiefs of Staff authorize the Director, National Security Agency, to disclose the cryptoprinciples of the ASAM-4 (SIGNIN) to the Cypher Policy Board, London, for security evaluation and consideration for use in communications for exchange of certain COMINT information and other possible Combined uses; and authorize release to Canada, Australia, and New Zealand if Combined communications requirements with any or all of those countries, which can be met by the ASAM-4, are developed after discussion with the Cypher Policy Board.

7. This matter has been coordinated with the Armed Forces Security Agency Council.

\* See "Footnote to J.C.S. 927/89 (13th Corrigendum) 3 Sept 1952

Inclosure 1

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