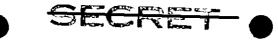
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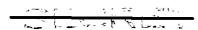
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BECKET-

MEMORARIAM FOR THE ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)
ATTE: Mr. Clifford S. Livermore

SUBJECT: WSA FY 1962 Budget for the Besearch, Development, Test and Evaluation Appropriation (U)

- 1. The Department of Defense staff evaluation of the FY 1962 budget recommends that an amount of \$34,000,000 be included for National Security Agency in the President's budget for the Research, Development, Test and Evaluation Appropriation. This represents a reduction of \$3,086,000 from the estimate of \$37,086,000 submitted by this Agency.
- 2. Attached for your consideration is a special request for restoration of \$2,500,000 of the proposed reduction. These funds will be needed to permit the Mational Security Agency to meet urgent national needs in the several important areas of endeavor which have been indicated.
- 3. Much of the Agency's future success or lack thereof will depend to a large extent on NEA's ability to capitalize on available technology and developments in the cryptologic field. While the evaluation of potential cryptologic success is indeed difficult to measure in dollars, we are confident that even by this measure the anticipated pay-off will far outweigh the investment. However, the indisputable fact remains that rapidly changing world conditions and the changes in secure communication techniques of target nations dictate the necessity for timely application of resources is order to maintain or improve our cryptologic capability. Failure to obtain and apply adequate resources to the establishment of our cryptologic readiness in the immediate future will be apparent for years to come and the responsibility for future conditions must be attributed to today's actions. MMA cannot be held completely responsible for failure to achieve certain successes if amounts of resources considered to be minimum are not allowed for application to areas where our considered opinion indicates future pay-off. This responsibility must be shared with those who in fact control the allocation of the resources.
- 4. Upon request, this Agency will provide any additional information which may be required.





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5. This memorandum may be downgraded to Confidential upon removal of inclosures.

L. H. FROST Vice Admiral, USH Director

Incl:

Copy Farnished: General G. B. Erskine, USMC-Ret, Asst to SecDef, Sp Opns

Director of Defense Research & Engineering

AG
Reading File
COMP-4
COMP-01

M/R: On 22 November 1960, Admiral Frost approved the recommendation made by Mr. Barlow (R/D) that the Agency submit a reclama for \$2.6 million in FY 1962 RDT/E Appropriation. The initial reclama statement prepared by R/D, and provided to COMP on 23 November, was comprised of items which represented either new or expanded programs from the budget originally submitted to SECDEF/BOB. This matter was presented to Dr. Tordella by the Comptroller on 23 November. Dr. Tordella directed that the reclama be made only on the basis of items previously included in the NSA FY 1962 Budget. A revised reclama conforming with Dr. Tordella's decision was provided to COMP by R/D on 25 November. This statement has been used, substantially as submitted, as the inclosure to this letter. In addition, paragraph 3 of the letter was inserted verbatim at R/D's request.

R. L. Wignall, COMP-41, 3119, 28 Nov 60, gjh

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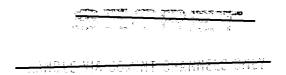
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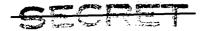
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Reclama for FY 1962 RDF/E Rodget

- 1. Of the proposed reduction of \$3,086,000 in the NEA FY 1962 RUT/E budget, an amount of \$2,500,000 is intended for application in three areas of endeavor considered to be of sufficient importance to varrant reconsideration by the Department of Defense. These concern the enhancement of capability to collect desired signals, to exploit target cryptographic systems, and to conduct a test and evaluation program for SIGINT/CONSEC equipment urgently needed by the Services for a maticial cryptologic effort. Details on the planned use of FI 1962 funds in these areas are provided in the following paragraphs.
- 2. Approximately \$200,000 is intended for application to a program mised toward the development of a readiness capability for the interception of new, and the identification of known, signals. The MSA field research and technical search programs are becoming increasingly important due to the geographical restriction of intercept sites. As further geographical restrictions are placed on intercept site locations, our state of readiness to intercept new signals will decrease further, unless an adequate program is carried out to develop the techniques and the equipment accessary to increase our intercept ranges from less desirable geographical locations. Aurthersore, there are indications that during this budget period, target nations will be employing new cryptographic systems in which operational procedures have not been finalized. The acquisition and analysis of these signals is of utmost importance to the derivation of intelligence, since procedural veaknesses and equipment calfunctions provide tremendous opportumities for exploitation. Dur ability to intercept traffic from these sew systems will depend to a considerable extent on the success of our field research and technical search programs.
- 3. The sam of \$1,000,000 is required in FT 1962 to begin the development of a general surpose wired rotor device. Many of the cryptographic systems against which our analytic efforts are directed employ wired rotors in one form or another to achieve their cryptographic security. Hornally, one of the first steps in an attack on such a system is to construct a specific wired rotor analog of at least a part of the equipment. In each case these are specific, tailor-sade devices applicable to only one rotor equipment. It is proposed to develop a universal rotor snalog which can be applied to any cryptographic rotor system as soon as basic facts about the system become known. The development of such a device would result in obvious efficiencies and economies of time and somey. Application of such a device on a problem would decrease considerably the amount of resources required for the development of the exploitation equipment necessary for final solution. Present technology has reached the point where such a device can be developed in FY 1962. The deletion of this project from the MSA R/D program will make necessary the continuance of the policy to design and build a specific rotor device for each specific rotor problem which occurs in the future.



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4. The sum of \$1,300,000 is required for the proper conduct of an adequate test and evaluation program in support of SIGIRT and COMENC developments. Service test models of SIGINT/CONSEC equipment must be tested in FY 1962 in order to proceed with the production of operational equipment. Of the test and evaluation requirements for FT 1962, about 31 per cent are a direct result of recearch and development programs in SIGINT and CONSEC which are under way at Mid or within the Military Departments. The other 17 per cent of the test and evaluation requirements are for the purchase of commercially-developed equipments required for the proper evaluation of intercept and data processing systems. The research and development programs under way at the present time are. for the most part, in direct response to requirements placed on MA by the Services and the SIGINT Community. It is only with the proper annetary support for test and evaluation that these developments can be carried through to completion and eventual placement in operational units. Only with this apprort can ISA hope to capitalize on the technical advances in deriving intelligence information made possible by recent cryptologic equipment developments.