REF ID: A488484

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WDGSS-14

7 December 1945

SUBJECT: Minimizing Adverse Effects of the Joint Congressional

Pearl Harbor Investigation

TO:

Chief, Army Security Agency

In accordance with your request of 4 December 1945, there is submitted herewith a draft of a paper on the subject noted above, with the recommendation that it be forwarded to G-2 for consideration.

1 Incl
 Rpt = "Pearl Harbor
 Investigation, Minimizing
 Adverse Effects of"

WILLIAM F. FRIEDMAN
Director of Communications Research

REF ID: A488484

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10 December 1945

SUBJECT: Pearl Harbor Investigation, Minimizing Adverse Effects of

TO:

Deputy Chief, Military Intelligence Service Room 2E 800, The Pentagon Washington 25, D. C.

- l. The testimony now being presented before, and the results being produced by, the Joint Congressional Investigation of the Japanese surprise attack on Pearl Harbor on 7 December 1941, are being widely publicized throughout the nation and the world. This testimony and the results of the investigation will probably have a very important direct effect upon our future activities. They may also effect the War Department as a whole, the Navy Department, the State Department, and other governmental departments. They may, in fact, impringe on future Army-Navy relations, as well as United States-British relations in the communications intelligence field.
- 2. If certain phases of, or lines of questioning followed in the investigation are based upon serious misconceptions, misapprehensions, and misunderstandings relating to cryptologic science, as seems obviously to be the case, then it appears to be important to try to remove the basis for them insofar as possible, by adopting a course of action likely to bring a better understanding of the basic philosophy and techniques upon which cryptologic science rests.
- 3. Some of the misconceptions referred to in paragraph 2 are as follows:
- a. That hundreds of messages offered in evidence constitute documents the availability of which is to be taken as a matter of normal expectancy; that it should and can be taken for granted that the solution of cryptograms is something that can be achieved under all circumstances; that the Army and Navy communications intelligence services should and can always be expected to be successful in doing so because it is normal to expect them to do so.
- b. That the reason for trying to suppress all the facts concerning the Pearl Harbor disaster was purely political; that there was no sound reason, other than political, why all the facts concerning the disaster should not have been disclosed immediately or soon



after the event; moreover, that even at this late date there is no reason other than political for withholding certain facts, because there is no further need for secrecy about any aspects of the disaster; finally, that no harm whatever can come from a full and complete disclosure of all the facts.

- c. That cryptanalytic processing can be conducted on a production line assembly basis the raw material can be inserted at one end of the line, and finished intelligence emerges at the other.
- d. That the solution of the Japanese codes must have been a relatively simple job, judging from certain of the messages entered in evidence, such as the Trans-Pacific Telephone messages, the Winds Code messages, etc.
- e. That the Army and the Navy were delinquent in translating certain messages, and that there were numerous avoidable delays; this leads to the misconception that the business of solving and translating cryptograms is now as simple as, or only a little more complicated than, reading the daily newspaper.
- f. That information that might have been sent to the Commanders in the field but was withheld was so treated because of serious apprehensions regarding the security of Army and/or Navy cryptographic systems.
- g. That the Army cryptographic systems are far inferior in security to the Navy systems.
- h. That no code or cipher can hereafter be trusted; that they can all be read and read quickly by experts; that therefore, apprehensions as to the security of our highest governmental communications are warranted.
- i. That the information derived from communications intelligence was improperly handled before Pearl Harbor, and therefore, it was probably improperly handled after that disaster, so that the contribution of communications intelligence toward the ultimate victory must have been quite insignificant.
- j. That a world-wide spy system would produce a greater quantity of reliable intelligence than communications intelligence can produce.
- k. That the solution of some cryptograms involves slight-of-hand, legerdemain, mystical processes and guess-work; that one can never be sure of the validity of the translation of a cryptogram;



that the science of cryptanalysis does not rest upon the same secure foundation that other sciences rest upon, and that therefore, the validity of the results of cryptanalysis cannot be demonstrated and proved, as can the results of other scientific work.

- 1. That building up a staff of cryptanalytic experts is a simple matter, to be taken as a matter of course because there are in civil life experts available in all fields of knowledge, including cryptography and cryptanalysis.
- m. That governmental cryptanalytic activities during peacetime can be conducted in the same manner and on the same basis that
  all other governmental scientific activities are conducted, whereas,
  as a matter of fact, from 1930 to 7 December 1941, the government
  itself, by engaging in intercept and cryptanalytic work, conspired
  to violate the law by inducing and hiring people to enter upon
  activities which are under our present laws criminal offenses, and
  which made every member of the communications intelligence services
  of the Army and the Navy subject to heavy fines and imprisonment.
  If anybody wanted to make a test case, it would have been possible
  to prosecute and possibly convict all members of those services during
  the period indicated because they themselves did or caused others to
  perform the following acts: interception, solution, translation, and
  dissemination of the very messages introduced in evidence in this
  hearing.
- n. That the obtaining of the raw material for cryptanalysis is an easy matter; that the interception of all radio traffic is an easy matter; and that the obtaining of cable and wire traffic is to be taken for granted at all times, whereas, as a matter of fact, it is decidedly illegal under our present laws to do any one of those things in peacetime.
- 4. It is unnecessary here to set forth in detail the facts which may be adduced to combat the misconceptions listed in paragraph 3. These facts are well known to those who have had the advantage of daily contact with the work of and the results obtained by the communications intelligence services. But these facts are not so well known or clear to the members of the Joint Committee or to its Counsel. To give them an opportunity to learn these facts would be conducive to the public interest. It would obviously not be necessary to spread the facts on the front pages of the newspapers of the country; but by giving the Committee and its Counsel a better conception, appreciation, and understanding of cryptography and cryptanalysis, it is possible that the serious danger to the future continuity and success of our communications intelligence services that will result from a full disclosure of all the facts may be minimized.



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WDGSS-14 (10 December 1945)

- 5. There is an additional reason for "educating" the Committee and its Counsel. No matter what happens from now on in the Pearl Harbor investigation, sufficient information concerning cryptanalysis has already been disclosed to put every government in the world on guard against the communications intelligence services of all other governments. They are going to look into and improve their cryptographic techniques and methods, with the result that we may now look forward more or less apprehensively to the time, within a few years, when our success in the cryptanalytic field will be a glory of the past. This will be the case unless we are provided with the means for expanding our research to the extent made necessary by the very disclosures of the present investigation. We will need to do more work than ever before. There are on the Committee members of Congress who will be in a position to help us obtain the necessary legislation and funds to support our work. By "educating" them we will help ourselves.
- 6. It is therefore recommended that steps be taken as soon as possible to invite the whole Committee and its Counsel, together with the new Chief of Staff and the Secretary of War, to visit this station and to make a tour of its activities for their better orientation in cryptology. And the psychological time to do this is now, not six months from now. For we could not only capitalize on the undoubtedly good impression which General Marshall will make on the Committee, but also take advantage of the circumstance that the Counsel of the Committee now appears to be surfeited with the uninformed line of questioning followed by certain members of the Committee.

W. PRESTON CORDERMAN Brigadier General, USA Chief, Army Security Agency



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