MEMORANDUM FOR Mr. Friedman

Subject.

In February 1945 Admiral King proposed to General Marshall the establishment of an Army-Navy Communication Intelligence Board. For nearly a year thereafter memoranda were exchanged discussing methods for the better organization of the production, evaluation, and dissemination of radio intelligence. There was sharp disagreement on the handling of operational intelligence, but the Army and Navy remained in accord throughout on the necessity for joint evaluation and dissemination of strategic, non-operational intelligence.

Admiral King to General Marshall (18 September 1945)

"There should be effective coordination and integration of Army and Navy communication intelligence activities, with free interchange of technical information, and joint evaluation and dissemination of strategic, non-operational intelligence."

Admiral King to General Marshall (2 October 1945)

"The processing of non-military and non-naval traffic should be jointly undertaken... Strategic non-operational signal intelligence should be evaluated and disseminated as a joint product. I recognize a real need for one joint ULTRA center, physically located in one building, into which all material of common interest shall be fed by the Navy and Army cryptanalytic processing units. This joint unit should also contain a joint
collateral center and a joint ULTRA evaluation unit.

General Marshall to Admiral King (10 October 1945).

"After reading your memorandum of 7 October, I am convinced that a joint Ultra intelligence evaluation center would be ineffective unless in the same center there were combined all other types of Army and Navy intelligence.

"It seems to me that the best solution for improving not only the effectiveness of Ultra intelligence but to resolve the entire question of Army and Navy intelligence organizations would be for us to combine in one location, under joint control, all Army and Navy intelligence effort, personnel and direction including all of the product of the Ultra."

General Eisenhower and Admiral Nimitz having succeeded to top command, the exchange continued.

Admiral Nimitz to General Eisenhower (28 December 1945).

"It is essential for the Navy to retain under its control those communication intelligence functions paramountly related to naval operational requirements and the exercise of naval command. This is true regardless of the extent of joint effort by the two services and, likewise, regardless of the extent of control which may otherwise be exercised over the field of intelligence generally by the interdepartmental joint intelligence agency which may be created."

General Eisenhower to Admiral Nimitz (29 December 1945)

"There is another factor which has been bothering me for some time and that is the establishment of a system where there
is a direct and free exchange of all information which may be of value to both departments. The Intelligence Exchange Office as part of the War Cabinet and I understand it served very well. This agency is needed, in addition to the Joint Allied Committee, because of the character of some of the information involved.

Admiral Nimitz to General Eisenhower (4 January 1946).

"It is increasingly apparent to me that, with present demobilization of personnel and the increasing necessity for intelligence on a number of targets, we cannot keep ourselves properly informed unless we have the most complete integration, either by joint direction or allocation of all tasks in the communication intelligence field."

The best means to integrate communications intelligence production, evaluation, and dissemination had concerned the Navy throughout the war. The problem was, and is, to execute the flow of operational intelligence to theatre commanders, while providing in the same organization for the full exploitation of the strategic information which radio intelligence carries in such large volume. The following is a review of the methods developed at the various naval stations during the war.

The Navy operated three major cryptanalytic units. These were located at Washington, Honolulu, and Melbourne. The Honolulu and Melbourne effort was devoted exclusively to Japanese ciphers. At Washington two offices functioned under the same top management.
control but were carefully segregated on the working level, one office collaborated with Honolulu and Melbourne on Japanese systems, the other assisted London on the solution of European ciphers.

Each of these Navy groups fed its intelligence product into command headquarters in essentially the same way. Because all units operated under the control of communications rather than intelligence, the differences in methods of dissemination with which each began the war tended to disappear. All eventually organized the cryptanalysts and the intelligence experts as cooperating teams.

The crux of the matter is that the familiar term "radio intelligence" is something of a misnomer. Actually, what the cryptanalyst produces is "radio information." This information, when operational in nature, is the most reliable of all sources, particularly from the standpoint of revealing enemy plans. When it is strategic information it must usually be integrated with information from other sources for effective use. Only after such collation and interpretation can the raw message legitimately be called "intelligence."

At Washington the effort to streamline production and dissemination organization continued from February, 1942, until the end of the war. In February 1942 GNO proposed the establishment of an operational intelligence watch under CinC USFleet

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to provide for more effective coordination. Comincoh instructions on the dissemination of communications intelligence were promul-
gated in June 1942\(^1\), and were revised and reissued in March 1943\(^2\). On 14 June 1943 DNC proposed better coordination by the establishment of a Combat Intelligence Center under Comincoh. By directive, Admiral King created the Center on 26 June 1943\(^3\). In January 1944 DNC proposed that at least part of the Center work in collaboration with the cryptanalysts at the Navy Communications Annex. This proposal was ordered into effect by Admiral King in November 1944\(^4\). By then, the war was in its final months, and no further sweeping changes were found necessary, but experiment and revision of methods continued on the working level to the very end.

The creation of F-2 in June 1943 marks the relief, during the period of the war, of ONI responsibility for intelligence evaluation and dissemination. Hence forward the cryptanalysts' product flowed directly into Comincoh headquarters. Within F-2, F-21 was established to evaluate German messages. The Pacific section was designated F-22.

That art of F-21 allowed to evaluate decrypted messages consisted of three officers and a petty officer. The decision had been made at the outset to keep this group as small as possible for reasons of security. The leak concerning radio intelligence work in the Battle of Midway had taught the high

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1 See Tab A
2 See Tab B
3 See Tab C
4 See Tab D
command the need for extreme caution. Nor did this section operate on a 4 hour watch, again for a good reason. It had been found that rerouting convoys during the night entailed far too great a risk of collision between our own ships. A "summary" of highlights of decrypted messages was prepared by the cryptanalysts' watch officer, therefore, and forwarded to the Navy Department about 0600 daily. There this "summary" served as a guide to pick out the important messages. All actual evaluation and dissemination of Ultra information was performed by the three officers in F-21. The official "Plot" was maintained by F-21. The sole function of the Atlantic cryptanalytic section was to supply raw translations of German messages, which were forwarded throughout the day. It should be pointed out that, under this arrangement, the cryptanalysts were feeding their product directly to the ultimate consumer, inasmuch as Cominch had assumed direct command of the anti-submarine forces. It is interesting to know also that F-21 was in frequent direct communication each day.

Obviously, under the existing arrangement, the F-21 staff had no time to exploit strategic information. Radio intelligence is full of such strategic data. It can often be exploited only when the research man can trade bits and pieces of facts with the cryptanalyst and with the traffic.
analyst For this purpose a small group from the translating staff of the cryptanalytic unit was finally detailed to do research. Their job was to develop this strategic and technical information to the full. This rather belated experiment was highly successful: they developed invaluable intelligence on the sonic torpedo, on German radar, on the schnorkel, and on cipher compromise. All reports prepared by this group were approved and disseminated by F-21.

The Pacific office of the Washington cryptanalytic station was always very much larger than the Atlantic, the volume of its translations was far greater, but the exploitation of its intelligence product was very similar to the plan followed by the Atlantic office. Washington did not begin to decrypt Japanese messages on a current basis until shortly before the Battle of Midway. From the time decryption began translations were fed directly to all theatre command headquarters, as well as to CominCh, by a special circuit reserved solely for the exchange of radio intelligence items. All decrypts thus flowed simultaneously to CinCPac (Nimitz), to Commander South West Pacific (MacArthur), and to Commander Southern Pacific (Halsey). Prior to encoding for this circuit operational information was passed to CominCh headquarters by secure telephone, while the messages themselves were forwarded by hand.

During this early period in the war very little strategic intelligence was developed. Much was decrypted but there was

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5 See chart at Tab E.
little time for its exploitation. What work was accomplished was done by ONI. The creation of F-2 soon after the cryptanalytic group moved from the Navy Department to the Navy Communications Annex in the spring of 1943 did not alter the previous method for handling operational information. As before, it was fed to all headquarters by the special circuit for whatever dissemination each headquarters saw fit to make within its command. But strategic intelligence for the first time was given the attention it deserved. So profitable were the studies of Japanese supplies of strategic materials, of tonnage sunk, of imports, of mine fields, etc., that, as we have seen, Cominch authorized a group with F-22 dissemination authority to work at the Navy Communications Annex. Like the F-21 strategic intelligence analysts, however, this group in reality were drawn from among the Japanese translators of the cryptanalytic office. It eventually numbered more than fifty people. Their efforts were directed solely toward the development of strategic and technical information extracted from decrypted Japanese messages. F-22, like F-21, disseminated all reports, special studies, and other papers prepared at the Navy Communications Annex.

At Honolulu, the Combat Intelligence Center was established in June 1941, but for an extended period functioned only as a clearing house of collateral information to aid the cryptanalysts. No diplomatic or other current Japanese traffic was being read at Honolulu at the time of the Pearl Harbor attack. In the early spring, however, current Japanese ciphers were broken, and the Honolulu unit played a decisive role in the winning of the Battle of Midway.
The earliest arrangements for forwarding radio intelligence to command headquarters were both rapid and informal. At the outset, the cryptanalytic unit prepared a daily summary of messages which was passed by hand to Admiral Nimitz' headquarters for forwarding to Fleet units. As the volume of translations and the urgency to act upon them mounted, a secure telephone was installed connecting the cryptanalytic watch officer's desk with the desk of the Pacific Fleet Intelligence Officer on Nimitz' staff. If the translator read a "hot" message, he simply phoned its contents to headquarters. The Fleet Intelligence Officer was responsible for delivery of any intelligence to operational units. The cryptanalytic group continued to make up a daily summary for HQ, however, until the end of 1942, when the preparation as well as the dissemination of summaries was transferred to Fleet Intelligence. This change did not affect the cryptanalytic group's responsibility for exchanging translations with Melbourne and Washington. Once this special circuit—which has already been mentioned—was set up it continued in round-the-clock operation to the end of the war.

Honolulu began the development of strategic information in the summer of 1942. Within the cryptanalytic unit, studies were made of the location of Japanese naval units and many facts were learned as well about their organization. Later, Japanese air units and land forces could be spotted. From these combined studies it became possible to estimate the enemy strength in various positions throughout the Pacific. Weekly reports were prepared.
and these, together with other typed material, were delivered to the Fleet Intelligence Officer for dissemination.

There was one general exception to this system of releasing information only through or with the specific approval of the Fleet Intelligence Officer. Early in the war, before the Battle of the Coral Sea, it occasionally occurred that specific data of value to submarines on patrol was picked up by radio intelligence. Relaying this information through the Fleet Intelligence Officer took time and in some cases time was of considerable importance. Blanket authority was therefore granted by the Fleet Intelligence Officer for the cryptanalytic unit to deal directly with ComSubFor. Later, a submarine officer was stationed full time in the cryptanalytic section to obtain strategic as well as operational information. This was similar to the system, whereby representatives of operational commanders were stationed at the Intelligence Center to serve their needs directly.

In September 1942, the Intelligence Center Pacific Ocean Area came into being. It was housed in the same building with Radio Intelligence, both offices had the same officer-in-charge, and relationship was very close. The two groups, for example, used the same file of decrypts. All reports were now edited by the Intelligence Center and disseminated in accordance with the direction of the Fleet Intelligence Officer.

In September, 1943, a new shuffle created the Joint Intelligence Center Pacific Ocean Area. Under this organization the cryptanalytic section was removed from the jurisdiction of intelligence and placed
under communications. Its new name was Fleet Radio Unit Pacific.

One historian of the JICPOA unit has written:

"Complete cooperation continued between FRUPAC and JICPOA. That such was the case is a tribute to the tact, ability, and cooperation of both General Twitty and Captain Goggins. No good argument against the correctness of the decision to separate radio intelligence from other forms of intelligence, under the conditions then existing, can be advanced. Naval communications and naval communications alone had the officers with the talent necessary for the proper development of radio intelligence. It was necessary to get on with the war with the best means available and to shelve any theoretical arguments. Now that peace has returned, however, these decisions could well be reviewed. Radio intelligence needs complete cooperation with intelligence as well as communications. Its product needs to be integrated with the whole mass of intelligence. It will sooner or later need the service of a far-reaching intelligence agency to direct it toward its proper target and to govern the scope, time and area of its coverage."  

Concerning the joint effort of the Army and the Navy under the JICPOA organization, this same historian observes:

"An Army message center was finally set up at FRU PAC to handle Special Branch Communications CTC could, and frequently did, call on Special Branch War Department G-2 to check, verify, or amplify intelligence required for estimates, or to conduct...

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6 "Narrative of the Combat Intelligence Center, JICPOA"
special research for its benefit. Through the special security officer, material could be distributed to Army forces as required with complete confidence in its proper handling and security...

The importance of this combination, in one room, and under a unified direction, of all the varied requisite sources of intelligence, backed by two world wide communication services, and able to draw on the multitudinous sources of JICPOA can hardly be overestimated. When estimation of enemy strength was made it could be done with the assurance that all of the best information was available. Moreover, it was found that Army and Navy information supplemented each other in many ways and that the result was frequently much greater than the sum of its parts.”

In the spring of 1945 CinC Pac headquarters were moved to Guam. A direct communication channel was established between Frupac and the Fleet Intelligence Officer at Guam. The relationship of the two offices continued with a minimum of disturbance due to their physical separation. This transfer of headquarters to Guam was the final change in the organization of radio intelligence at Honolulu.

The method followed at Melbourne should be briefly mentioned. The Melbourne unit had been evacuated from Corregidor. Compared with the other units it was never large, and a direct partnership of cryptanalysts and intelligence analysts was never attempted, largely because of its physical separation from the 7th Fleet Intelligence Office. Melbourne, Honolulu, and Washington were

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7 Ibid
linked by special circuits for the interchange of radio intelligence information, Melbourne contributing the decrypts of its own intercept to the common pool. Until the time General MacArthur moved his headquarters to Brisbane, the Melbourne cryptanalytic unit screened all radio intelligence information originated by Honolulu and Washington, and forwarded any items of interest to the 7th Fleet to its Intelligence Officer. With the transfer of MacArthur's headquarters to Brisbane, the 7th Fleet Intelligence Center at Brisbane was cut into this special circuit. Henceforth it screened its own material, receiving Melbourne's decrypted messages as they were put on this circuit for general use.

While the Melbourne office was never able to perform collation or evaluation on a large scale because of acute lack of manpower, its very separation from 7th Fleet Intelligence headquarters forced this cryptanalytic unit to perform what research work it could. Before decrypts were transmitted they were edited, footnoted, and commented upon, thus adding to the raw text any collateral information available in the Melbourne unit's files. Thus at Melbourne as elsewhere, all preliminary collation and evaluation performed by the cryptanalytic unit filtered through the office of the headquarters Intelligence Officer before dissemination within that headquarters, or to combat units.

Based on the experience of the war, ONI assumed the functions of F-21 and F-22 when the Cominich staff was disestablished. The Melbourne and Honolulu units were decommissioned and all Navy
cryptanalysis was centered at the Navy Communications Annex. Section 322Y was set up under the control of intelligence but operating adjacent to the cryptanalysts within the same building and utilizing common files of translated messages. Again based on war experience, 322Y invited translators and others from the cryptanalytic staff to prepare special reports and to develop strategic information to the fullest extent possible with available personnel. The arrangement has been harmonious and has led to a steady flow of special studies and reports which 322Y has disseminated to the ultimate consumers along with the material prepared by its own staff.