

DISSEMINATED

INDEX NO. S.17

SHIP AND RELATED TARGETS

JAPANESE SUBMARINE OPERATIONS

U.S. NAVAL TECHNICAL MISSION TO JAPAN

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U. S. NAVAL TECHNICAL MISSION TO JAPAN
CARE OF FLEET POST OFFICE
SAN FRANCISCO, CALIFORNIA

4 February 1946

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From: Chief, Naval Technical Mission to Japan.
To : Chief of Naval Operations.
Subject: Target Report - Japanese Submarine Operations.
Reference: (a) "Intelligence Targets Japan" (DNI) of 4 Sept. 1945.

1. Subject report covering Japanese Submarine Operations outlined by Target S-17, S-18, S-71, S-73, S-74, S-77, S-78 and S-79 of Fascicle S-1, of reference (a), is submitted herewith.

2. The investigation of the targets and the target report were accomplished by Capt. F. J. Foley, USN, with the assistance of Capt. S. P. Moseley, USN, Capt. Peyton Harrison, USNR, Comdr. T. H. White, USN, Lt. Comdr. J.E. Miller, USN, and Lieut. R. White, USNR, and Lieut. (jg) W. Weil, USNR, as interpreters and translators.



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Captain, USN

RESTRICTED

S-17

JAPANESE SUBMARINE OPERATIONS

"INTELLIGENCE TARGETS JAPAN" (DNI) OF 4 SEPT. 1945

FASCICLE S-17, TARGETS S-17, S-18,

FEBRUARY 1946

U.S. NAVAL TECHNICAL MISSION TO JAPAN

SUMMARY

SHIP AND RELATED TARGETS JAPANESE SUBMARINE OPERATIONS

Hampered by shortages of all kinds, assigned to a minor role with its forces dispersed in a losing war against a well-equipped enemy, the Japanese submarine force should be given credit for effort. However, in addition to its handicaps, there were several shortcomings of its own which prevented a creditable performance. Among these shortcomings were vacillating policies in building, false economy in withholding submarines for future use, failure to correct known mistakes, confusion of tactical command, poor communications, and a lack of individual caliber in many of the commanding officers. Briefly, in no particular could it be said that the Japanese submarine force excelled, while examples are many of its deficiency in strategical, tactical, research and personnel performance.

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- (C) Summary of Japanese Submarine Operations and Activities
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REFERENCES

Location of Targets:

Pearl Harbor:

(Preliminary) Joint Intelligence Center, Pacific Ocean Area (translations of documents captured prior to cessation of hostilities).

TOKYO:

1. Japanese Navy Ministry (direct written requests for documents or statistics).
2. Japanese naval officers (oral interrogations).
3. U.S. Strategic Bombing Survey interrogation reports.
4. "Preliminary Report on Japanese Submarine Force" (SubRon 20).
5. Civil Censorship Detachment, SCAP (interception of documents mailed in Japanese postal system).

SASEBO:

1. Interrogation of present commanding officers of Japanese submarines.
2. Interviews with U.S. officers attached to U.S. Submarine Squadron Thirteen, who controlled all Japanese submarines in that area.
3. Inspection of selected representative Japanese submarines of various types.
4. "Japanese Submarines and Submarine Material in Western Japan" (SubRon 13).

INTRODUCTION

The broad object of studying Japanese submarine operations is to draw therefrom any lessons based on their successes or failures. This requires that we examine uses and misuses of their submarines, with the reasons therefore, and any unusual features of their submarine operations meriting further development.

The material studies of Japanese submarine vessels and equipment are covered in three NavTechJap Reports, "Characteristics of Japanese Naval Vessels, Article 1 - Submarines," "Characteristics of Japanese Naval Vessels, Article 6 - Submarines - Supplement I," and "Characteristics of Japanese Naval Vessels, Article 7 - Submarines - Supplement II" (Index Nos. S-01-1, S-01-6, and S-01-7 respectively.) Any duplication of those studies in this report is avoided, except where the material features directly affect the tactical use of the vessels.

In attacking the problem of studying this target, as broad a background as possible in Japanese submarine activity was acquired. For this, the JICPOA and ComSubPac files at Pearl Harbor were consulted for Japanese documents captured during hostilities. The report of U.S. SubRon 20 was also used. This was followed by scanning (at Pearl Harbor and TOKYO) the available pertinent interrogations of the United States Strategic Bombing Survey. During this general study unusual or puzzling features were noted for further investigation. Then at SASEBO, the present commanding officers of surviving Japanese submarines were interviewed and interrogated, and several of their submarines were inspected. Also, at that base, Commander, U.S. Submarine Squadron 13 and the officers of that squadron contributed much general and specific information, in addition to their written report on the material features of the submarines. The above steps, of course, left certain gaps in the desired picture and introduced many new questions. The answers to these were sought by direct questioning of the Japanese officers who had operated or controlled the operations of submarines, as well as by written questions to the Japanese Naval Ministry. The final step was an endeavor to evaluate the information obtained and to sift therefrom any features worthy of development, or pitfalls to be avoided.

THE REPORT

Part I

GENERAL - EVALUATION OF THE JAPANESE SUBMARINE EFFORT

A. HANDICAPS

In order to judge the Japanese submarine effort we must first realize the handicaps under which it operated, then, from a study of the shortcomings and creditable features, draw conclusions as to how well the Japanese did with what they had.

Among the handicaps under which the Japanese worked were:

1. Shortages

Japan was ill-prepared to wage a first-class war for more than a year, although some optimists placed the limit at two years. The shortages of materials, low production capacity, and poor research facilities were appreciated. In the resultant rationing of the war-making potentialities the Navy, as a whole, was considerably cramped, and the submarine force received no more than its share of the Navy quota. The pinch was felt not only in the number of submarines but also in the development, production, and installation of radar, sonar, communication, and other equipment. Even before the actual shortage took effect, its prediction resulted in a false economy in the use of submarines. Were it not for this, many of the safer missions or limited assignments might have been unrestricted, with far better results.

2. Interference by Army

It is fairly well established that the Japanese Army was able to force the Navy to use a large portion of its submarine force for transport and supply duty. Although there was justification for a small amount of this activity, the practice was carried to extremes, even at critical times. (See Part II, paragraph C.) The result was a serious hampering of the combat effort.

3. Efficiency of U.S. Anti-Submarine Forces

We must consider the difference between the possibility of survival of a U.S. submarine and a Japanese submarine after its presence was discovered. The tremendous advancement in U.S. detection and annihilation methods was a distinct deterrence on Japanese individual audacity, as well as a strong influence on their operational planning. Enclosure (A) brings this out very clearly.

4. Loss of the Offensive

The extreme disadvantage to the side losing the overall initiative was demonstrated when the U.S. Task Forces were able to strike any of several points, or even to carry out simultaneous strikes at widely separated places. The remnants of the Japanese Submarine Force were rushed from expected points of attack to actual points of attack (usually too late and exposed on the surface), with resultant demoralization.

B. SHORTCOMINGS

Among the shortcomings of the Japanese were the following:

1. Vacillating Policies

Considerable effort and scarce material were wasted by changes of mind in construction of submarines. It seems that types and sizes of ships would be commenced, then a change of policy would result in the cessation of construction while a new program was started. This applied to equipment as well. For example, after the Philippine Operations practically all submarines were rushed to Japan for the addition of KAITEN launching gear, but when many of them were partially converted, they were hurriedly sent to participate in the defense of OKINAWA. Hence they were not only useless during the period of transit to Japan, but arrived too late and ill-equipped at OKINAWA.

2. False Economy

From the very beginning, realization that submarines were going to become scarce prompted the Japanese to "save" them for use against the U.S. Fleet, by restricting their missions to relatively safe ones and by restricting targets, even on those missions, to the more valuable. This encouraged in commanding officers what may be charitably called "caution." Its main result was that by the time the U.S. Task Forces came over to be "ambushed", their submarine forces had suffered attrition in picayune employment, and had been diverted to transportation duties to such an extent that the remainder was impotent.

3. Failure to Apply Lessons Learned

Although each phase of the war was carefully studied and "Battle Lessons" compiled which pointed out shortcomings, there seemed to be little benefit derived. Either dissemination was poor or the lessons were ignored.

After clearly ascertaining that submarine officers were absolutely unfamiliar with the principle on which we base our use of the bathythermograph, investigators were surprised to learn from Admiral AKIYOSHI, Chief of the First Section of the Navy Hydrographic Office, that the principle was not only understood but used in the production of "echo ranging" charts for anti-submarine forces. (Two such charts are reproduced in color in NavTechJap Report, "Japanese Anti-Submarine Warfare", Index No. S-24).

4. Multiple Command

It may be that an exhaustive study of Enclosure (A) will show some coherence and singleness of purpose in the orders and counter-orders of the Commander-in-Chief Combined Fleet, Com6thFleet, ComAdvanceForce and ComSubRon 7, but from the investigator's viewpoint these characteristics were lacking.

5. Restrictions on Commanding Officers

Not only were the submarines unduly restricted as to what they were permitted to attack while on individual patrol, but during large operations each was frequently restricted to an ambush station with orders not to leave it even though a valuable target appeared outside his limits, or even though the enemy he was "ambushing" had passed him by. This is particularly inefficient in view of the fact that admittedly poor communications might prevent the O.T.C. from correcting his improper stationing. In this connection, even though Enclosure (A) makes a point of

ComSubRon 7's alleged instructions correcting this shortcoming, persistent check up and conversation with two of the commanding officers involved shows that they received no such information.

6. Failure to Provide for Co-ordinated Attack

Although communications were poor, they were not bad enough to have prevented the assembling of submarines in adjacent vicinities to attack a valuable target. Yet no instance of this was found, although opportunities were frequent. In fact, they realized the value of co-ordinated attack, but based their drill on the false assumption that all submarines would be close enough for visual or sonic contact.

7. Failure to Provide Communications with Aircraft

Even during life-guard duty or on missions of co-ordination with aircraft (as at FRENCH FRIGATE SHOAL), no channel of direct communication was provided between submarines and aircraft. This source of inefficiency further emphasizes the lag in communication development.

8. Individual Shortcomings of Commanding Officers

a. Blind adherence to radio-silence was quite puzzling. Although there were many lengthy transmissions when there seemed to be no justification (as on our West Coast during the early stages), there were times when radio silence was a fatal error. There are two outstanding examples. In the Solomons episode, the contacting submarine did not immediately report, but waited until he could pull well clear of the scouting line. Also when our anti-submarine forces discovered and "rolled-up" their "NA" Ambush line (Enclosure (A)), one submarine after another was sunk without a single effort to warn the others.

b. Coupled with the above was the failure of the commanding officers (or most of them) to show any interest in radio traffic not addressed to themselves. No picture of the overall situation was obtained.

c. As for health and sanitation, any American, who boarded or passed to leeward of a surrendered Japanese submarine before the Japanese were forced to clean it up, will agree that it is a wonder they were able to do even as well as they did.

d. This investigator endeavored to form an unbiased opinion of the attack audacity of Japanese submariners. The conviction grew, through conversations, interrogations and study, that the percentage of overly discreet was large. It was frankly impossible to believe that submarines could spend weeks on the U.S. west coast "without contacts", or spend more than 40 days running among the Solomons during the Guadalcanal campaign "without seeing any targets". Even the Japanese commanding officers could not disguise their embarrassment when recounting these tales. Further enlightenment is found in the extremely large number of times the target was "too far away to attack".

C. MERITS

As opposed to the derogatory statements in Section B above, certain favorable comment should be made.

1. Self-Analysis

It must be said that the Japanese possessed the ability to see most of their own faults and the courage to admit them. This was done not only

by the "Battle Lesson Investigation Committee", but also by operating personnel. Failure to correct the faults was due partly to factors beyond the control of the Navy or, at least, of the submarine force, and partly to the failure to reach or impress their own personnel. Among the operating faults they realized and tried to correct were:

- Undue radio silence.
- Sanitation carelessness.
- Restriction of commanding officers' initiative.
- Straight-line method of deployment.
- Sending ships to sea with poorly trained personnel.
- Drop in efficiency on change of command.
- Futility of trying to outguess U.S. striking forces.

In addition, strong demands were being made to the right people for correction of those shortages beyond the control of the Submarine Force itself. Among these were demands for:

- More small submarines.
- Radar and sonic improvements.
- Development in sonic and supersonic torpedoes.
- A better torpedo for shallow waters.
- A torpedo to withstand long-flooded tubes.
- Underwater transmitting equipment.

2. Enemy Analysis

The Japanese studied U.S. methods in order to take advantage of any weakness discovered. In this connection, by the use of small subs, they were hoping soon to take advantage of our surfaced submarines on life-guard duty. They also noted the 24 hour "period of grace" after a U.S. landing (before anti-submarine measures became intolerable). They were also alert to use U.S. communications to advantage. Their radio intelligence enabled them to move the only two ships saved from the "roll-up" of their "NA" ambush line. Another example was the detection and notification to his submarines by ComSubRon 7, of several U.S. aircraft circuits (presumably plain language), in the hope that they might obtain some useful information.

3. New Developments

There is no doubt that the Japanese were anxious to use new methods and devices, whether their own or borrowed. They saw and capitalized on the advantage of carrying airplanes on submarines. When forced into transport duty they developed it well. They made good use of the inexpensive midget. They utilized their national psychological quirk which made suicide torpedoes a potent weapon. They were building amphibious tanks to place on their submarines to overcome anti-submarine nets and booms. Also, their false signal gear and anti-radar paint are good examples. (See NavTechJap Report, "Japanese Anti-Radar Coverings", Index E-06). They were also anxious to learn German methods and material, importing some German boats for study, and sending an ill-fated submarine crew to Germany for indoctrination.

4. Initiative

There were exceptions to the rule in this regard. ComSubRon 7 displayed initiative several times (see Enclosure (A)). For example, he did not hesitate to bring an extra squadron under his command when he thought (correctly) that its commander was being "neutralized" by gunfire or bombing. He also pointed out the U.S. frequencies for use.

It is also noted that one submarine on a supply run kept up with the situation, so that, when its deck cargo was washed overboard, it knew where it was needed and headed for that spot.

D. CONCLUSION

In the opinion of the investigator, the Japanese submarine force, like the Japanese Navy and the nation as a whole, was completely outclassed in all fields of warfare, material, scientific, and personnel, and was incapable of the war it undertook.

Although the handicaps of their submarine force were many, these did not justify the unsatisfactory performances which were due to strategical, tactical, and personal shortcomings. The few favorable features discovered were insufficient to alter the above opinion.

Part II JAPANESE SUBMARINE MISSIONS

A. MISSIONS WITH THE FLEET DURING OPERATIONS

1. Tactical Scouting

During strikes, it was customary to use submarines to scout and report U.S. ships and planes in bases where they could be brought into the expected operation. At MIDWAY, for example, the I-168 kept the Commander-in-Chief informed as to the air strength and (lack of) U.S. surface craft at the island.

An excellent example of combined contact and amplifying report is given in Enclosure (A) (under 19 June in the Outline of Operation, Part E).

2. Screening

The best example of screening was in the task force enroute to attack Pearl Harbor. Submarines acted as an outer screen ahead of the main body, presumably to prevent what later happened to our "Jimmy Doolittle Group", an accidental sighting.

3. Reconnaissance

Before and during fleet operations, submarines were assigned to reconnoiter the harbors or anchorages from which our fleet would sortie. Frequently, their aircraft were launched for this purpose, and the report made by radio after recovery of the plane. When the Japanese attacked Attu and Kiska, their submarines reconnoitered our bases at Dutch Harbor and Puget Sound with the aid of planes. Similarly, during the Marianas operations, movements of our invasion forces from their assembly bases were promptly reported by enemy submarines.

4. Ambush

Ambushing was, by far, the most popular employment of Japanese submarines. It amounted to placing the submarines in the expected path of the enemy force. Throughout the war, whenever a task force movement could be expected, a well-considered guess was made by the fleet commander and then all submarines that could be spared were rushed to the track. The effects of our simultaneous strikes, or failure to follow on the expected track, became evident with the Marianas operations. (See Enclosure (A).) The largest of their ambush missions is described in Part III, A, (1) of this report.

5. Fueling Planes

In order to increase the range of aircraft, submarines carried gasoline to fueling points. This was attempted during the Midway Strike. Two submarines went to FRENCH FRIGATE SHOAL to fuel the land-based planes from the Marshalls. The presence of U.S. planes, however, caused the submarines to withdraw and call off the mission. Radio was used to report the changed situation.

6. Air-Sea Rescue

As early as the Pearl Harbor attack submarines were stationed on the track to recover downed aviators. This was the normal method, being used also at Midway and Guadalcanal. It is noted that the planes could not communicate directly with the submarines. Near the close of the Marianas operation RO-48 was directed by radio to the rescue of a plane which had made a forced landing near IWO JIMA. (In view of the normal Japanese attitude toward human life, it is presumed that some important personage was in the plane.)

7. Anti-Air-Sea Rescue

Pointing out that U.S. air attacks followed the stereotyped pattern of placing surfaced submarines off shore for life-guard, the Commander (Japanese) Sixth Fleet recommended taking advantage of the fact with submarines. The surrender prevented suiting the action to the word.

8. Mine Sweeping

It was noted that submarines were directed to sweep mines at SAIPAN during the period between our air strikes and landing. This was puzzling, since they carried no paravanes and were ordered direct from their patrol stations. Consequently, two of the submarine commanding officers were questioned. Neither had received the order. One said that he would not have known how to sweep mines. The other stated that he would have paired up with another submarine and strung a cable between the two for sweeping.

B. CONTRIBUTORY MISSIONS UNDER CONTROL OF THE FLEET

1. Surveillance of Allied Ports

Pearl Harbor, SINGAPORE, San Francisco, SIDNEY, and other ports were kept under fairly constant surveillance by submarines, which reported movements by radio. In many cases, the submarine used its airplane for this purpose. It will be recalled that during the war we were quite puzzled at the scarcity of attacks made by Japanese submarines, which we knew were there (from their radio transmissions). This was due to instructions not to attack any but very large or important targets, and possibly in part due to caution. One submarine Captain (TSUKUDO), who had reconnoitered Australian and New Zealand ports, stated that he was forbidden, on that particular trip, to attack anything smaller than a cruiser, or any merchant vessel of less than 5000 tons.

It is an interesting commentary on our radar search to note, that as late as November 1944, several Japanese submarines launched their planes and reconnoitered Pearl Harbor without detection.

2. Mining

Strategic mining of the Philippine and Singapore areas was carried out at the beginning of hostilities, and about a month later the same squadron

(6) was assigned to mine Port DARWIN and TORRES STRAIT. As the war progressed, the use of submarines for mining seems to have been discontinued in favor of other missions. No evidence of tactical mining was found.

3. Attack on Supply Lines

As the U.S. lines of communication became extended with the landings in the Western Pacific, the Japanese appreciated this fine opportunity for submarines. The poor results they obtained should be attributed to the superiority of U.S. anti-submarine forces and equipment, as well as to the dwindling size of the Japanese submarine force. Quite naturally, each time a U.S. landing proved successful, the mission of the available submarines shifted from ambush of the invasion force to attack on its support lines. It is interesting to note that their analysis of U.S. methods showed a maximum "period of grace" of 24 hours after a landing, after which our anti-submarine measures improved to such an extent that their submarines could not afford to be in the vicinity.

Since the Indian Ocean proved to be an excellent hunting ground, submarines were kept there as much as possible throughout the war.

4. Attacks on Allied Ports

The Japanese state that no regular submarines entered Allied harbors. Midgets and suicide torpedoes were launched. Examples of the use of midgets are: the initial attack on Pearl Harbor, in which one of our BB's was credited to a midget; SIDNEY, where one warship was claimed; and DIEGO SUAREZ, where they claimed a QUEEN ELIZABETH and an ARETHUSA. They also used midgets in attacks on Lunga anchorage during the Guadalcanal operations.

When the suicide torpedo (KAITEN) was developed, it seemed an excellent weapon for penetrating harbors, particularly where course changes were necessary to follow a channel or to avoid obstructions. Consequently, this method was used at ULITHI, where they were elated to observe one less carrier and three less battleships on the day following the attack. This "success" led to the assignment of one submarine apiece, with KAITEN to the following anchorages: Hollandia, Ulithi, Kossol, Apra and Seaddler. The nature of the weapon prevents the reporting of results and their evaluation depended mostly on the hearing of explosions.

C. TRANSPORT AND SUPPLY BY SUBMARINE

This use of submarines was an extremely controversial issue in Japan, causing many stormy sessions in the joint discussions of the Army and Navy General Staffs. However, when the Navy was forced to divert a large number of submarines to this use, it seems to have plunged into the problem of perfecting the techniques involved. They developed special cargo tubes, watertight boxes, special gun cases, and rubber cargo bags to be carried on deck, in addition to arranging to carry oil drums on deck.

Just what percentage of the submarine force was diverted to this use for the entire war, is not known, but the loss of at least 25 submarines on transport duty indicates that it was a large fraction. It is calculated that even during the crucial operations in the MARIANAS (June and July 1944), one-third of the total submarine force was being employed in transport and supply to bases not directly involved in the operation. Losses of combatant submarines brought this fraction up to one-half by the end of the action.

It is noted that submarines operated individually on these missions and ordinarily carried a few torpedoes.

The following types of transport and supply missions were assigned:

1. To and From Isolated Bases

The following were carried to outlying garrisons:

Personnel
Food
Ammunition
Armament (including small cannon)
Aircraft
Fuel (gasoline and diesel)
Medical Supplies

Practically all isolated or besieged bases received, of the above, that which they could profitably use, until such time as the base became strategically useless. Thereafter, in some cases, important personnel were moved to a more useful location. This included air personnel and staffs. Occasionally, critical items were also withdrawn at such times. For example, when TRUK was doomed, some ammunition and freon gas containers were removed by submarine to Japan.

The largest evacuation was from Kiska in May 1943, when the entire garrison of 700 was taken by 15 submarines to PARAMUSHIRO.

Several attempts to evacuate the staffs of DesRon 3 and of Com6th Fleet (submarine force) from U.S.-occupied SAIPAN were unsuccessful. It appears that the method was devised for the first time when the occasion arose. The following is an example of the rather amateurish instructions issued: "Subs will, at an appropriate time during the night, surface near the shore and throw out a rope and establish contact with a raft from the shore. Those ashore will be alerted all night."

2. Transport of Material to Japan

a. From Germany. Japanese and German submarines engaged in blockade running. It was stated that four Japanese subs were continually allocated to this mission. Rubber and tin were carried to Germany. Plans of new devices, samples, and some unidentified arms were brought back. The only personnel known to be carried were a Japanese student submarine crew, which went to Germany for training. They were lost on the way back. It is known that a few German submarines came to Japan, but they were for use and copy.

b. Although it was not the general practice, critical materials were occasionally brought in from Malaya and Netherland East Indies by submarine. Also, the shortage of aviation gasoline in the Empire in early 1945 prompted them to salvage this item from TRUK and other bases, carrying it to Japan by submarine.

Part III
SPECIFIC INTELLIGENCE TARGETS INVESTIGATED

A. SUBMARINE OFFENSIVE TACTICS

1. Wolf Pack

The American conception of the "wolf pack" involves the co-ordination by an embarked group commander, of a number of submarines, in order that co-ordinated multiple attacks be made on the same target. This was not the Japanese conception. Groups of submarines were often used.

In all but one case investigated, they were assigned stations prior to departure or moved by shore command. A group commander was often embarked, but in most cases he made no changes in the stationing of submarines when at sea. In no case did he assemble his pack to attack a valuable target. The most popular use of submarine groups was to station them on a line or lines athwart an expected enemy track. This was, of course, during a Japanese strike or an expected U.S. strike. This mission, sometimes called "ambush", was employed during the Midway strike, the battle of the SOLOMONS, and whenever the Japanese could reasonably expect a specific attack by a U.S. Task Force, such as at TRUK and SAIPAN.

Since the co-ordinated group employed in the Solomons action was the best example achieved, it will be described herein.

The U.S. Force was expected to approach from the Southeast. A group of 16 Japanese submarines was stationed on two lines across the expected approach track. The lines were 200 miles apart. The submarines in the lines were thirty miles apart, patrolling their stations (across the expected track of the approaching enemy). In addition, the submarine aircraft were launched at dawn to scout to the flanks, increasing the coverage. The group was commanded by a Rear Admiral, who assigned the original stations, and would have shifted the entire scouting line (by radio, at night) if he had received radio notification or contact report from the Commander-in-Chief. However, when contact was actually made by two of the submarines, no report was made to the group commander, nor was any attempt made to assemble submarines to attack. One submarine made its attack (on WASP), and the other submarine drew clear of the area and made a contact report to the Commander-in-Chief. This failure of the Japanese to provide for concerted attack by groups constituted the prime weakness. Instead of providing multiple attack they merely increased coverage.

2. Degree of Reliance Placed on Sonar Equipment

From interrogations of submarine commanding officers, it appears the Japanese felt quite proud of their listening and echo ranging gear. However, this pride did not extend to the point of attempting sound shots. Averaging the estimates of all those interrogated results in a claim that they were able to take bearings with about a 5° error at 40,000 meters, and that this error decreased to about 2° at 2500 meters.

Echo ranging was considered very accurate up to a range of 3000 meters. Several officers had used echo ranging in navigation.

3. Data Computers

No actual Torpedo Data Computer was found on any of the submarines taken by U.S. Submarine Squadrons 20 or 13. Nor was any located at the various depots or yards. The equipment found was really an angle solver. It was incapable of generating the range or bearing, but merely solved the problem in accordance with the inputs. The gyro angle (with spread introduced) was instantaneously correct for the target speed, target angle, range, torpedo speed, own ship's speed and relative bearing of the target, all of which were introduced into the device.

SUBMARINE EVASIVE TACTICS

1. Maneuvering

There was nothing unconventional about the Japanese evasion policy. Early in the war, before aircraft were equipped with magnetic detectors, 40 meters was considered deep enough to avoid air sighting. With their own use of MAD they changed to 100 meters for this type of evasion.

In all but one case investigated, they were assigned stations prior to departure or moved by shore command. A group commander was often embarked, but in most cases he made no changes in the stationing of submarines when at sea. In no case did he assemble his pack to attack a valuable target. The most popular use of submarine groups was to station them on a line or lines athwart an expected enemy track. This was, of course, during a Japanese strike or an expected U.S. strike. This mission, sometimes called "ambush", was employed during the Midway strike, the battle of the SOLOMONS, and whenever the Japanese could reasonably expect a specific attack by a U.S. Task Force, such as at TRUK and SAIPAN.

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SUBMARINE EVASIVE TACTICS

1. Maneuvering

There was nothing unconventional about the Japanese evasion policy. Early in the war, before aircraft were equipped with magnetic detectors, 40 meters was considered deep enough to avoid air sighting. With their own use of MAD they changed to 100 meters for this type of evasion.

When attacked by surface craft it was customary to evade at or near test depth, using minimum speed, running silent on irregular courses. One skipper said he used his automatic depth control, all others said they did not. Quiet running was tried. There was pretty clear evidence that no device like our Depth Charge Direction Indicator was known.

Thought was given to the psychological effect on the crew and commanding officer, of running deeper than necessary. However, despite the danger of "losing the spirit to attack", actual practice gave weight to the more immediate danger of being sunk.

2. Use of Decoys

The Japanese devoted considerable thought to the development of decoys. In addition to false periscopes, which were the only decoys they actually claimed to have used, they had developed, manufactured, and at least tested, the following devices:

a. "The False Signal Gear"

This was a battery drive noisemaker, supposed to emit the noises of a submerged submarine. This was released from a deck tube and ran on random courses. The technical features are described in NavTech-Jap Report, "Japanese Sonar and ASDIC", (Index No. E-10). (Some were equipped with an explosive charge as a possible countermeasure, but this arrangement was extremely unpopular with the Japanese submarine personnel, who considered it more dangerous to themselves than to the enemy.)

b. Hydrogen Bubble Target. This decoy was similar to the German device, but the Japanese submarine officer who described it stated that they did not trust it, as their chemicals were not as good as the German, and the resulting "bubble screen" was not so effective.

c. Towed Noisemaker. This was a device without motive power, to be towed by the submerged submarine fifty to one hundred meters astern. It emitted noises "like a submarine".

3. The Bathythermograph

It was definitely established that the submariner himself did not use this instrument or understand the principle on which our use of it was based. None were installed on submarines or planned for that purpose. However, the Hydrographic Office of the Navy Ministry, which contained many learned scientists, was fully cognizant of every principle involved. The nearest approach to practical use was the preparation and distribution of "Charts for Sonic Ranging" (in late 1944). These charts were prepared from voluminous data which had previously been collected by oceanographers, and gave an evaluation of sound conditions for the Western Pacific predicted for approximately two months in advance. According to Rear Admiral T. AKIYOSHI, Chief of the First Section of the Japanese Hydrographic Office, who was personally interviewed, these charts considered the reflection and refraction of sonic waves by the density layers or gradients which were expected in the area. No thought was given to the idea of having the ship at sea measure the phenomena on the spot, although the scientists knew that the conditions were variable. One of the charts mentioned above was captured from a CHIDORI class Torpedo Boat in NAHA harbor, early in 1945. This captured copy was reproduced by CinPac-CinCpoa and widely distributed to U.S. Anti-Submarine and Submarine Forces.

4. Charging Batteries by Day Instead of Night

An interesting procedure was evolved by the Japanese ComSubRon 7 when our radar improved to such an extent that darkness was more to the disadvantage of the submarine. He directed them, "During the day, after the sun has risen, or at a suitable time before sunset, surface at a good distance from the enemy base. While maintaining a vigilant lookout you will recharge batteries" (Enclosure (A)).

5. False Damage Indicators

Although the Japanese expressed familiarity with the idea of releasing oil to falsely indicate damage or sinking, they stated that it was considered unwise, as it disclosed the exact location of the submarine. They showed no knowledge of any other means of false damage indication.

C. TRAINING TECHNIQUES AND DEVICES

1. Submarine Training Program

The Submarine School was located at OTAKE. Normally the staff consisted of 40 experienced ex-commanding officers of submarines, 100 specialists (officers) in the various subjects, and 20 warrant officers. Included in the training equipment were several operative submarines, two submarines mounted in concrete, a damage control model, three attack teachers, three diving officer trainers, three helmsman training devices, a platform which could be moved to vary the apparent range for training lookouts, a trim-manifold complete with tanks, air pump, and a practice torpedo tube which could fire water slugs. There was also a variety of radio, radar, and sound sets, as well as four complete submarine engines, three complete batteries, four main control panels, and two air compressors, all in operating condition. The following information was submitted by the Japanese Navy Ministry in reply to direct questions on (a) the entrance requirements and subject matter, (b) the length of the courses at various stages of the war, (c) the number of students in each course, (d) the training given to the crew of a newly commissioned submarine and (e) the training given in evasive tactics at the submarine school:

Submarine School Activities

a. Curriculum of the Navy Submarine School

<u>Classification of Students</u>	<u>Entrance Qualifications</u>	<u>Courses of Study</u>
Advanced Course (Ko)	Lt. Comdr. or Lieut. who is graduate of the "Higher Course" (Koto-Ka)	Acquiring knowledge and ability required of a submarine commander, especially attacking, maneuvering, and tactics, etc.
Higher Course (Koto-Ka)	Group I Lieut. or Sub-lieut. 1c. who is graduate of Group I "Ordinary Course"	Acquiring knowledge required of a submarine torpedo officer or a commander of a small type submarine, especially concerning the performance of a submarine, diving tactics, & torpedo tactics, etc.
	Group II Lieut. or Sub-lieut. 1c. who is graduate of Group II "Ordinary Course"	Acquiring knowledge required of a chief engineer of a submarine, especially the mechanism of a submarine, diving tactics and engineering. (Particulars on submarines engines management, internal combustion engines and electricity.)

Ordinary Course	Group I Sub-Lieut. or Midshipman who is graduate of the Naval College	Acquiring knowledge required of navigation, gunnery and communication officers of a submarine, especially concerning the performance of a submarine, its handling, navigation, communication, and gunnery, etc.
	Group II Sub-Lieut. or Midshipman who is graduate of the Engineering College	Acquiring knowledge required of an assistant to the chief engineer of a submarine, especially concerning the mechanism of a submarine and its engineering.
Special Service Officer's Course	Special Service Lieut., or Sub-Lieut. (Deck or Engineer)	Studies similar to those of "Higher Course".
Warrant Officer's Course	Group I Warrant Officer	Acquiring knowledge required of a chief torpedoer or submerge controller of a submarine, especially concerning the performance of a submarine, torpedo tactics, and navigating.
	Group II Machinist Warrant Officer	Acquiring knowledge required of a chief machinist or electrician, especially concerning the mechanism of a submarine and engineering. (Internal combustion engines, batteries and generators.)
Extension Course	Selected Lt. Comdr. or Lieut. who is graduate of the "Higher Course" (Koto-Ka)	Study and research on assigned topics. (Mechanism of submarine, torpedo equipment, torpedo firing, submarine radar, batteries, etc.)
Senior Specialist Course	Enlistee who is graduate of the torpedo, internal combustion engine, and electricity courses of the "Junior Specialist Course"	Acquiring knowledge on the mechanism of a submarine, and further training in specialized studies.
Junior Specialist Course. (Torpedo, internal combustion engine and electricity)	Seaman (Deck and Machinist)	Acquiring knowledge required of a submarine crew on the subject of torpedoes or internal combustion engines or electricity.
Training Course	Enlisted Specialist who is graduate of underwater sounding, communication, radar, or gunnery, etc. Specialist Course at the various technical schools.	Short term course on knowledge required of submarine crew.

b. Length of Courses from 1941 to 1944

<u>Classification of Students</u>	<u>1941</u>	<u>1942</u>	<u>1943</u>	<u>1944</u>
Advanced Course (Ko)	3 months	3 months	4 months	3 months
Higher Course (Koto-Ka)	3 months	4 months	5 months	3½ months
Ordinary Course	----	----	----	----
Special Service Officer's Course	----	----	3 months	3 months
Warrant Officer's Course	----	2 months	2 months	2 months
Extension Course	4 to 8 months	4 to 8 months	4 to 8 months	4 to 8 months
Senior Specialist Course	----	----	----	6 months
Junior Specialist Course	6 months	6 months	6 months	6 months

c. Number of Students in each grade

<u>Classification of Students</u>	<u>1941</u>	<u>1942</u>	<u>1943</u>	<u>1944</u>
Advanced Course (Ko)	4 to 6	8 to 10	10 to 15	10 to 15
Higher Course (Koto-Ka)				
Group I	10 to 15	15 to 20	30 to 40	25 to 30
Group II	10	10	10	10
Ordinary Course				
Group I	----	----	50	50
Group II	----	----	20	20
Special Service Officer's Course				
Group I	----	----	20	20
Group II	----	----	20	20
Warrant Officer's Course				
Group I	----	----	20	30
Group II	----	----	30	40
Extension Course	1 or 2	1 or 2	1 or 2	1 or 2
Senior Specialist Course	----	----	----	500
Junior Specialist Course	200	300	500	1,000

d. Course of Training for Crew of Newly-Commissioned Submarine.

There was no course of training at the Submarine School for crews of each ordinary submarine newly commissioned. However, after April 1945, a training course extending from 1 to 5 months was given to the crews assigned for duty on small type submarines (300-ton class). The students were divided into groups, each group being trained for a specific submarine. In general, the majority of the crew set aside to board a new submarine are selected approximately 2 to 3 months before the completion of their ship. Aside from the plan to speed up construction, they were made to gain knowledge on the mechanism of the submarine and its handling. Upon completion, these crews, together with the ship, join the 11th Submarine Squadron, where they receive action training for approximately three months, after which they are transferred to the operational forces.

e. Evasive Tactics of Submarines in Conjunction with Anti-Submarine Craft

The Submarine School possessed one target ship and several anti-submarine craft so that it was able, in a small way, to furnish a target ship with escorts in attacking practice, which also served as the basic training in evasive tactics.

As no anti-submarine craft was allotted to the 11th Submarine Squadron, training here was of necessity in collaboration with other forces so there was little opportunity to carry out thorough training in evasive tactics. This condition was naturally unsatisfactory to all submarine commanders.

2. Training by Operating Submarines

The period between patrols was not wasted. The Commanding Officer of RO-41 stated that even when he was in RABAU for seven days between patrols, he was given two days of torpedo practice (firing at a submarine tender in St. Georges Channel). Other commanding officers mentioned gun firing, machine gun practice, and diving and lookout training between patrols.

3. Training in Germany

One full submarine crew was sent to Germany for training. Vice Admiral Wenker, the German Naval Attache, states that they received an excellent education in German boats and in attack methods, but "unfortunately they were caught in the North Atlantic in early 1944 while returning to Japan."

D. RECORDS - SUBMARINES

1. Records in General

Although the Japanese Navy Ministry and all well-briefed naval officers claim that all official records have been burned, it has been possible to obtain certain documents as follows:

- Enclosure (A) - Intercepted in Japanese mail.
- Enclosure (B) - Produced by the individual commanding officer.
- Enclosure (C) - Allegedly reproduced from memory.
- Enclosure (D) - Found.
- Enclosure (E) - From memory.
- Enclosure (F) - From memory.
- Enclosure (G) and (H) - Found.

2. Submarine Logs, Patrol Reports, etc.

These were all reported burned. Substitutes are found in Enclosures (A) and (B). Several logs, diaries, and reports were captured or recovered by U.S. intelligence personnel during hostilities and made part of the JIGPOA reports. Any future study should include those items.

3. Reports on Submarine Operations Including Successes and Losses

The successes of Japanese submarines were not too numerous. As the "Battle Lesson Investigation Committee" so aptly phrases it (Enclosure (A)), "Don't think that just because many of our submarines were 'damaged' and we could not obtain the results of their attack, that they were not effective." Enclosure (G) of this report gives a Japanese list of Allied men-of-war damaged or sunk by their submarines. Enclosure (B) is a first-hand description of a specific success (the sinking of INDIA-NAPOLIS). The Japanese state that all records have been burned and that their success in merchant ship sinking is not known. It is felt, however, that any list they might produce in this connection would be of far less value than our own records.

The failures, on the other hand, are distinctly shown by Enclosure (D), which lists their submarines in numerical order (with very few exceptions) showing the date sunk, the method of destruction, location, and some details. Almost as clear is the picture of failure drawn in Enclosure (A) (not intended for U.S. consumption), which minutely analyzes the submarine part in the Marianas operations.

4. Submarine Operations by Dates, Areas, and Purposes

A fairly comprehensive summary of Japanese submarine operations has been submitted by the Japanese Navy Ministry. This summary divides the war into its natural phases of campaigns, and outlines, by squadrons, the part played by submarines. This document has been made Enclosure (C) to this report.

5. The organization of the Japanese Submarine Force has been submitted by the Japanese Navy Ministry for the following periods:

From 1 November 1941 to 10 March 1942.
 From 10 March 1942 to 14 July 1942.
 From 14 July 1942 to 14 April 1943.
 From 15 April 1943 to 1 January 1944.
 From 1 January 1944 to 15 August 1944.
 From 15 August 1944 to 15 August 1945.

This organization is included as Enclosure (I).

E. JAPANESE SUBMARINE TACTICS

1. Methods of Search

The method described in Part III, A, 2 of this report is the most advanced used by the Japanese. It will be noted that the two lines of submarines were 200 miles apart (to insure contact despite the darkness period). Also, in this instance, good use was made of the aircraft to widen the area covered. The individual submarine patrolled its station across the probable track of the enemy.

As a general rule, the Japanese depended more on placing their available submarines in the expected track of a U.S. task force than on searching.

The individual submarine used its sonic and radar search gear, as well as radar detectors, in the conventional manner.

2. Methods of Attack

a. Individual Submerged Torpedo Attack. For a conventional torpedo attack there were no unusual features. For combatant ships and other fast vessels they sought a firing point at a distance of 1500 meters, bearing between 45 and 60 degrees on the bow. For slow ships they considered the ideal position to be about 800 yards, near the beam. Until the magnetic exploder was available, depth settings of torpedoes were logical, being approximately three quarters of the estimated target draft. With the magnetic exploder, torpedoes were set at the estimated keel depth. The first-hand report of the sinking of the USS INDIANAPOLIS by I-58 is included as Enclosure (B) of this report. This detailed account was obtained by Captain S. A. Carlson, USN, from the commanding officer of I-58. Attention is also invited to the detailed log of an attack by the RO-115 on a carrier, west of Guam on June 19, 1944, which is included as Appendix 8 to Enclosure (A).

b. Combined Torpedo Attack. The Japanese studied an unco-ordinated combined attack by three submarines stationed close together on an ambush line. The problem was set up in Case I and Case II with instructions to be carried out without communication, as follows:

Case I: The target, a single ship, approached the center ship on a course normal to the scouting line. All three submarines were assumed to have the contact, either visually or by sound. Doctrine called for the center submarine to attack from ahead, presumably pulling out on either bow, and the other two to converge for an attack on the quarters of the target.

Case II: The target approached at an angle, still heading for the center submarine. By the doctrine, the two submarines nearest the target made direct attacks. (This amounted to practically a bow and a beam attack.) The third submarine was supposed to hurry out to a point in advance of the target, somewhat like the "safety back" in football. There was no provision for notifying each other of their intentions. Nor was any effort undertaken to bring other submarines into contact. They considered their communications too unreliable. It is pointed out that the above was a theoretical study, which merely shows that they were thinking about the subject. In actual practice the cases never occurred, primarily because the submarines were spaced too far apart on "ambush lines".

c. Launching of Suicide Torpedoes (KAITEN). The following was furnished by Commander (US) Submarine Squadron 13:

Two pairs of claw-like clamps held the KAITEN to a trunk in the mother submarine. Each pair was released separately by shafting through the submarine pressure hull. Hatches in the bottom of the trunk and the KAITEN provided access. Flood and vent lines were installed in the trunk to prevent a bubble when the torpedo was launched. Manning and launching the KAITEN required twelve minutes, the opening and closing of the hatches taking most of that time. The clamps could be released in six seconds.

Since the KAITEN test depth was 50 meters, the mother submarine could not run below that depth. KAITEN could be launched at 50 meters, but were usually released at periscope depth, 19 meters. Normal launching speeds were submarine 3 knots and KAITEN 20 knots. The desired firing range was 4500 meters.

When a target was sighted, the hatches were opened and the operator manned the KAITEN to establish telephone communications with plot. Since the CO₂ absorbent in the torpedo could provide but a four minute air supply, the hatches remained open until the decision to fire. The decision being made, the hatches were closed, trunk flooded, KAITEN engines tested at 5 knots, and the gyro set.

The initial gyro setting was provided so that the operator could make an initial deep run to reduce his bubble track and still close the target to gain sight contact. Upon sighting the target the pilot shifted to hand steering. No effort was made to recover a pilot if he missed the objective.

3. Counter-measures

The explosive decoy, mentioned in Part III, B, (2), was probably in the experimental stage at the end of hostilities, as no Japanese was found who knew of its actual use.

The Anti-Radar or Anti-Sonar paint was in actual use, however, and the Japanese were quite enthusiastic about it. Samples were taken by USS PROTEUS and USS EURYALE, and NavTechJap has shipped samples to NRL (under NavTechJap Equipment No. JE22-2008).

Thought was also given to reducing the size of the superstructure, and to giving the conning tower an inverted conical shape "to deflect the radar waves downward instead of back to the radar screen". The Schnorkel was installed on several submarines, and despite some mechanical difficulties the Japanese seemed to be advancing rapidly in this feature at the war's end.

F. SINKING OF U.S. SUBMARINES (OFFICIALLY CLAIMED BY THE JAPANESE)

Enclosure (F) is a list of 468 U.S. submarines sunk, which were "firmly confirmed". This is the Japanese version. Despite the faulty evaluation of the results of their attacks, the list is included for such comparison with the actual facts as may be desired. Dates and locations are included.

As to survivors of sunken U.S. submarines, no new information was procurable during the period of this investigation. The Japanese Liaison Office is continuing efforts to learn the fate of four survivors of USS ROBALO, who made their way to PALAWAN and were subsequently placed on a Japanese destroyer leaving PUERTO PRINCESSA, and not heard of since.

The following numbers of survivors were returned to the U.S. after the cessation of hostilities:

TANG - 9 survivors
 GRENADIER - 76 survivors
 S-44 - 2 survivors
 TULLIBEE - 1 survivor
 SCULPIN - 21 survivors
 PERCH - 27 survivors
 SEALION - 5 survivors
 S-39 - 1 survivor

G. ATTEMPTS TO SALVAGE U.S. SUBMARINES

It appears certain that the only U.S. submarine to fall into Japanese hands was DARTER whose personnel did a thorough job of destroying useful gear.

One of the Japanese officers stated that they had to swim to board her, because of the rough seas. This officer (Comdr. Tatsuo TSUKUDO, IJN) procured what appeared to have been the angle solver. He said it was very similar to the Japanese. He also stated that they found some plans or drawings in the after torpedo room. He thought they were wiring diagrams.

Another officer stated that they had particularly sought radar gear but that everything they retrieved in that connection had been effectively destroyed, and they could make nothing of it.

H. JAPANESE HOMING ON U.S. SUBMARINE RADAR

The most recent Japanese study on Aerial Anti-Submarine Search and Attack, bears out the statements of the personnel interrogated that the Japanese had not reached the stage of homing on U.S. Submarine radar. The study stressed the need for improving radar and magnetic search gear, but made no mention of radar detectors. The personnel interrogated, (who had been connected with anti-submarine patrol by aircraft) stated that the operating forces asked for such equipment but had never received it. It is known that the Japanese submarines themselves had radar detectors with directional features. Therefore, it appears that while the Japanese were acquainted with the principle of homing on radar, development and production difficulties prevented their placing it on anti-submarine aircraft before the cessation of hostilities.

Part IV RECOMMENDATIONS

A. FREEDOM FROM DOMINATION

The prime contributing factor in the Japanese submarine failure was the domination of the war strategy by non-naval personnel. It resulted in stifling the submarine readiness, and the fatal diversion of submarines to a minor role when they were critically needed in combat.

B. IMPROVEMENT BOARD

While the Japanese "Battle Lessons Investigating Committee" was a step in the right direction, it fell down because its theories were not translated into practice, and also, because it was not close enough (mentally or physically) to the operating forces to be part of them. Both of these shortcomings could have been corrected by properly locating a somewhat similar body.

It is recommended that the Readiness Section in Washington, incorporate an "Improvement Board", composed of the necessary technical and operating personnel to recognize, study, and act on all types of vessel shortcomings and problems. Such a body, through its close affiliation with the type commander, must be able to implement its findings. It would call upon the pertinent research organizations for assistance.

It would base its initial endeavors on the great mass of war experience and information gathered from our recent enemies and allies, as well as from our own forces. It would consult and be consulted by the commanding officers, and division and squadron commanders, for the solution of old and new problems. Whatever the details, there definitely should exist a permanent body for the systematic and vigorous extraction of all possible information gained from the wartime and postwar successes and failures.

Recommendations for the agenda of such a board, arising from this study, are:

1. Re-opening the question of carrying aircraft on submarines.
2. Study of the advantages of building other than a single type of sub.

3. Recommending the building of an experimental submarine of each type determined upon. In this connection, consideration should be given to a multi-purpose "hangar" capable of holding anything from planes to amphibious tanks.
4. The vigorous development of anti-escort weapons.
5. The study of non-suicide, human guided torpedoes.
6. Close affiliation with the atom-bomb experiments.
7. Consideration of carrying amphibious craft to circumvent anti-torpedo nets or booms.
8. Study of anti-lifeguard and counter-anti-lifeguard procedures.
9. Prosecution of recognition development.
10. Solution of submerged communication difficulties.

C. ENCOURAGEMENT OF INITIATIVE AND REALISM

Initiative in war is the direct product of its encouragement in peace time training. If commanding officers are bound by undue safety precautions and restrictions, faced with loss of command or court martial when their attempts at realism or originality go awry, there will be little progress. Such men could not be expected to develop initiative overnight on the out-break of war.

Therefore, a carefully-considered policy is necessary in regard to boards of investigation, courts-martial and other damaging effects on the records of officers whose efforts at realism, initiative, or the delegation of responsibility to juniors for training purposes, result in reasonable material damage.

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S-17

ENCLOSURE (A)

BATTLE LESSONS OF THE GREATER EAST ASIA WAR
Volume No. 7 (Submarines)

OPERATION "A" SUBMARINE CAMPAIGN
20 May 1944 - 19 July 1944

Published by the Submarine Division of Battle
Lesson Investigation Committee, 28 September 1944.
Copy 157 of 800. Classified "Military - Very
Secret."

(INTERCEPTED IN JAPANESE MAIL)

ENCLOSURE (A), continued

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*ENCLOSURE (A), continued*PREFACE

In this war, the submarine branch has lived up to its reputation by obtaining results which were unachievable by other branches. The losses, on the other hand, were very high, for out of 34 participant submarines, 18 were lost and 2 sustained damage which made them unfit for combat. Consequently, we were forced to make a thorough investigation of our overall submarine warfare.

This committee, after conducting a conclusive investigation, has reached approximately the same conclusion as outlined in Battle Lessons No. 6, "Submarine Warfare Off the Gilbert Islands." We, therefore, ask that special import be attached to the use of this combat training manual by the departments concerned.

It has been impossible to avoid errors in the article because of the haste with which the investigation was conducted, and the lack of material caused by the large number of submarine losses, thus necessitating the use of analogy. We, nevertheless, shall proceed immediately with distribution of this manual.

28 Sept. 1944

Chief of Submarine Dept.,
Battle Lessons Investigation Committee
DAIGO (TN: First name illegible)

ENCLOSURE (A), continued

Chapter I.

THOUGHTS ON STRATEGY AND TACTICS IN SUBMARINE WARFARE

It is important to quickly devise plans which anticipate unity of tactical theory in submarine warfare.

Operation "A" (TN: A-GO SAKUSEN) was fought with the fate of the Empire at stake, and all forces again fought with everything they had in the bitter struggle; even so, we were not able to reap the results of battle that had been expected. Finally, the Empire has been precipitated into its present dangers. The importance of these facts and the confusion in tactical thought concerning procedures to be followed in submarine warfare necessitated the formation of these plans.

Accompanying the rapid advances made in air power, actual naval operations were thought of as decisive fleet-actions focused upon the battleship, as is demonstrated in "Standard Doctrine in Naval Warfare" (Kaisen Yomurei). However, it was obvious that changes finally had to be made in the tactical methods pertaining to submarine warfare which had long been circulated throughout our Navy. In some quarters there were still those obsessed with old ideas who did not take the matter seriously at the time when Operation "A" was considered.

For example, in the offensive and defensive actions centering around SAIPAN, our submarine group was not used as though it was to be thrown into the conflict as a suicide unit at the time when the task force was engaged in decisive conflict. Rather, a line of demarcation was established west of SAIPAN and ComSubRon 7 was restricted, and was engaged in pinning down the enemy attack which was to come from the direction of the Admiralties. This disposition was ordered, in an effort to increase enemy losses in the battle of pursuit, when the results of the task-force engagement were reported.

It is regrettable and pardonable, when we look at the actual facts of how the enemy, in contrast with the action just described, considered the special characteristics of the task force and of the submarine group, and skillfully integrated them in their attack on important targets. We recognize the necessity of immediately striving to draw up plans which effect unity of tactical thought with regard to submarine warfare, of measuring the applicability of these methods, and of improving battle results.

Extracts From the Battle Experiences of SubRon 7 Headquarters

"Anti-submarine methods used by the American Navy in the area of main attack, at the present stage of the war, are ferocious and thorough. No matter how strong spiritual valor may be, it is pointless to return to a reliance upon it. Submarines are now unable to fulfill their missions with complete success by using the group-submarine methods, which are in accord with former tactical concepts.

"Limiting the discussion to Operation "A," the principal items considered necessary in the revision of tactical thought in regard to the methods of the submarine group are as follows: In operations in the vicinity of enemy bases, which have been strengthened in anti-submarine methods, it is difficult to carry out reconnaissance by means of submarines with their present equipment and training. Modifications have not been effected in radio equipment, which can counter-act the enemy's anti-submarine devices, magnetic-detection planes, and epoch-making sonar equipment. It is difficult to carry

ENCLOSURE (A), continued

out operations with the submarines that we now have.

(TN: Four lines defaced.)

Reasons:

"With our present small number of submarines it is impossible to maintain an extended line (of operation).

"When compared with former conditions, it is now difficult to predict the appropriate time and place for the artificial construction of barriers.

"A formation in which a large number of submarines is arranged in a straight line, and in which each submarine occupies a fixed position, is very likely to be discovered if it is in the vicinity of enemy air bases which have been specially strengthened in anti-submarine devices. Once discovered, they receive a thoroughly neutralizing attack from the enemy and incur crippling damage. Therefore, there is considerable difficulty in organizing means of searching out the enemy, and in constructing barriers against the enemy."

Extract from Battle Lessons Authored by Air Plot 3

"There is a certain amount of superiority on both sides in their capacity to carry out anti-submarine patrol and attacks. Although there are some difficulties in the operation of our own submarines, it is to be recognized that submarines are still able to exercise independent power, regardless of air and sea supremacy, because they are the least susceptible to detection. When we consider that the opposite of this can be expected in the present situation in the actual utilization of submarines, there has been too much consideration of other things; vigor is lacking in the use of submarines. It is most regrettable that we have been prohibited from operating in areas to the west of the Marianas.

"In view of the fact that the forthcoming tactical situation will depend for its decision upon the submarine, if our submarine activity is not to be on a large scale, we should immediately make (the necessary) changes.

"It is important to bring the independent capacities of the submarine into full play and to select the opportune moment for combat.

"It is not unexpected that, at the climax of forthcoming actions, our carriers will receive repeated attacks from enemy submarines. Actually, we can only say that it is extremely regrettable that the outcome of future actions will rest, not on serial combat, but on submarine activity, which will determine the general trend.

"At least, with regard to submarines, no measures have been devised to discover every submarine before it strikes, since they lead an independent existence when submerged. Similarly, no measures have been found to ensure 100% safety when the submarines do attack. A submerged submarine is virtually undiscoverable, and can be regarded as almost unsweepable mines.

"For this reason, we often pride ourselves on the efficiency of anti-submarine watches and evasive movements, and give insufficient

ENCLOSURE (A), continued

attention to the vicinity of submarine contacts. At such times, we will meet unforeseen disaster sooner or later.

"The necessity for general dissemination of accurate information regarding anti-submarine warfare within the service, then, is great."

Chapter II

THE USE OF SUBMARINES

It is unreasonable to use presently operating submarines in localities where the enemy keeps very strict patrols. Also, it is difficult to acquire satisfactory results unless cooperation among our forces is obtained. (The above mentioned has been recorded in Volume 6 of Sento Kunren (Battle Lessons).) If the submarine force is completely thrown into the fray from the beginning, at the time expected for counter-attacks by our air forces and guard units on land against the enemy, to prevent his occupying strategic points, this will be recognized as a successful calculation.

In the present operation, the fact is that submarines were disposed in the "NA" line of deployment (from 130 miles to 300 miles northeast of the Admiral ties), and were intercepted by (enemy) radio intelligence, etc. While enroute to the area of disposition and immediately upon disposition, they were exposed to neutralizing attacks by enemy patrol boats, and we finally lost five submarines. In the operation around SAIPAN, from 11 June..... (TN: part of page missing)...until the end of the operation (about 22-23 June), our base...unit and guard division on land, had considerable power to counter-attack. Since our task force was in combat, the enemy fleet was put under restraint. This was certainly a good opportunity for the submarine force to pull many feint attacks. It is especially so in the case of reinforcing land action, support, etc. On 19 June, submarine RO-115 penetrated into the ring-shaped position of the enemy task force and sank a carrier. Off the shores of Guam, submarine RO-114 (it is thought) sank an IOWA class battleship which had been bombarding the shore.

However, the enemy, in this invasion it has been recognized, has taken the first step toward success. Air power has completely fallen into the enemy's hands, and the enemy's anti-submarine warfare has been strengthened markedly. The exaltation of success by the submarine force, subsequent to the close of the operation in which our task force participated, has become difficult. The rescuing of personnel on SAIPAN, TINIAN, GUAM, etc., and moreover, the transport missions, have been unsuccessful and submarine losses have increased.

Extract from Battle Lessons, 6th Fleet Headquarters

"In defensive action in strategic areas, it would be more expeditious to send all submarines into local areas at the expected time of counter-attacks by our air forces and guard unit on land."

Extract from Battle Lessons, ComSubRon 7

"At the beginning of the invasion of the islands by the enemy, the outcome of close quarter combat by the submarine forces had been extremely favorable and we had anticipated great results. In cases like the above, DO NOT set up a line of deployment, or adhere to the prescribed zone, and do not wait for the passage of enemy task forces or invasion forces. As carried out in the present operation, going around the island from a certain direction and the use of

ENCLOSURE (A), continued

pincer strategy are the new plans for the use of submarine forces in local areas. Such methods afford attacks from both sides on ever-changing enemy forces. In such operations, according to tactical opportunity, the submarine commander makes the decision. Flexibility and efficiency in the activity of our submarines, minimizes losses and boosts morale. Thus it is possible to obtain effectiveness in close-quarter combat.

"Upon seeing the enemy take the first step toward success by invading an island, that is, subsequent to the use of air bases, improvement in the enemy's anti-submarine methods should be anticipated. By any chance, should this be under-estimated and should the submarine warfare continue around islands aimlessly, as in the past, it is very clear that the submarine force will be subject to destructive blows within a day's time or less.

"In a local action near an enemy base, which has improved anti-submarine defenses, (TN: torn)...

"Although the submarines, which have been dispersed in various areas for strategical use, are diverted quickly to a strategical point for its defense, it is difficult to expect satisfactory results. Therefore, it is necessary to consider the tactical situation beforehand and to lay in wait for the enemy at required stations. (The above is recorded in Volume 6 of "Battle Lessons.") However, when considering our submarine strength and mission, the operation at present is extremely difficult. As a result, a method is recognized to make up this deficiency by carrying out mass production of small type submarines, for example, Type A midget submarines, or special equipment for those already built.

"The present submarine battle is similar to the submarine battle off the shores of the Gilbert Islands. All submarines on patrol in the Marshall Islands and at sea north of New Guinea, and those which are being repaired in Japan, as well as submarines which are being transported overseas, have been ordered to assemble in the Saipan area subsequent to attack by enemy invasion forces in this area. In the Marianas, there are only three submarines, RO-36, RO-43, and RO-114. The whereabouts of each submarine is shown in the following table, and both enemy and our own losses are as indicated in supplements No. 6 and No. 7, respectively. The most excellent tactical opportunities obtained were during only one period. It is recognized that to display originally the movement and assembly of submarines of inferior power skillfully in words is simple, but to bring this into operation is very difficult." (See tables on following pages.)

Extract from Battle Lessons of Com6th Fleet

"To display the actual effectiveness of submarine forces when used in defensive warfare in strategic areas, one must have a clear insight to the future so that subs may be stationed in areas where enemy attacks are expected. However, this is very difficult to carry out because our naval forces are limited, and we are now engaged in operations defending our inner defense line. Therefore, it is necessary to counter-act this defect by constructing at least small Type A standard submarines."

ENCLOSURE (A), continued

Name of Submarine	Date of Sortie from Advanced Base (Japan)	Movements on 11 June	Movements at 1719 on 16 June	Date of Arrival at Station in Marianas	No. of Days Required as of 11 June to Go to the Marianas	No. of Days Required as of 15 June to Go to the Marianas	Remarks
I-10	9 May	Left station (bearing 70° south of MAIO-ELAP) preparing for air reconnaissance over MAJURO	Left station; advancing eastward of Marianas in search of the enemy	20 June	9	5	On 12 June successfully carried out air reconnaissance over MAJURO
I-38	18 May	Patrolling at station (bearing 70° north of MAOLELAP)	Same as above	21 June	10	6	
I-53	16 May	Patrolling at station (K patrol sector) (north of New Ireland)	Left station; advancing southward of Marianas in search of enemy	20 June	9	5	
I-41	15 May	Patrolling at station (C patrol sector) (northeast of New Guinea)	Same as above	19 June	8	4	
I-5	15 June	Patrolling south of TRUK	Violently attacking enemy task force at station (south of TRUK)	18 June	7	3	
I-6	15 June	Preparing for combat at YOKOSUKA	Left YOKOSUKA; advancing westward of Saipan	20 June (pre-sumption)	9	5	
I-185	10 June	Left KURE; being transported overseas to Wewak	Advancing westward of SAIPAN	16 June (pre-sumption)	5	1	

ENCLOSURE (A), continued

Name of Submarine	Date of Sortie from Advanced Base (Japan)	Movements on 11 June	Movements at 1719 on 16 June	Date of Arrival at Station in Marianas	No. of Days Required as of 11 June to Go to the Marianas	No. of Days Required as of 15 June to Go to the Marianas	Remarks
I-84	20 May	Left YOKOSUKA; being transported overseas to Mille	Left station (L patrol sector) (Marshall's); advancing eastward of SAIPAN	19 June (pre-sumption)	8	4	On 12 June successfully completed voyage to Mille
RO-47	14 June	Preparing for combat at KURE	Left KURE; advancing westward of SAIPAN	22 June	11	7	
RO-41	24 May	At station (M patrol sector) (Marshall's Area) for patrolling	Same as above	21 June	10	6	
RO-44	23 May	At station (vicinity of 100' NE of ENIWETOK) for patrolling	Same as above	Unknown			Made successful reconnaissance while submerged around ENIWETOK on 10 June and on 13 June
RO-42	15 May	At station (vicinity of 180' NE of KWAJALEIN) for patrolling	Left station - headed east of SAIPAN - searching for enemy	Unknown			
RO-114	5 June	Proceeded toward SAIPAN from SAEKI	At station (north-east of SAIPAN) intercepting enemy striking force	12 June (pre-sumption)	1		
RO-36	11 June	Same as above	At station (East of SAIPAN) - intercepting enemy striking force	12 June	1		

ENCLOSURE (A). continued

Name of Submarine	Date of Sortie from Advanced Base (Japan)	Movements on 11 June	Movements at 1719 on 16 June	Date of Arrival at Station in Marianas	No. of Days Required as of 11 June to Go to the Marianas	No. of Days Required as of 15 June to Go to the Marianas	Remarks
RO-43	11 June	Preparing for combat in SAIPAN area (on same day left SAIPAN and intercepted enemy striking force)	At station (south-east of SAIPAN) intercepting enemy striking force	12 June	1		
RO-113	6 June	Patrolling at station (patrol sector) (north of New Ireland)	Left station - headed toward Southern Marianas searching for enemy striking force	21 June	10	6	
RO-109	12 June	Same as above	At station (from 60°-110°, from 60°-205°) intercepting enemy striking force	20 June	9	5	
RO-112	12 June	Making combat preparations at TRUK	At station (from 0°-60° and 60°-200° TRUK) intercepting Enemy Striking Force 1	18 June	7	3	
RO-117	4 June	Patrolling at station (F patrol sector) (north of New Ireland)	Same as above	Unknown			
RO-111	4 June	Patrolling at station (G patrol sector) (north of New Ireland)	Same as above	Unknown			
RO-115	6 June	After searching for flight personnel who made forced landing on flight from PALAU, advanced toward area south of SAIPAN	Departed from station - headed toward Southern Marianas searching for enemy striking force	17 June	6	2	

ENCLOSURE (A), continued

Extract from Battle Lessons, ComSubRon 7

"When the enemy attacks and has air supremacy, submarine maneuverability is markedly reduced. Consequently, when enemy attacks are anticipated, submarine forces should be deployed beforehand about the island where the attack is expected to take place.

"However, it is necessary to hold part of the force in reserve at our nearest base to be used in the event of tactical opportunities.

"In the event that the enemy plans an air attack in a key spot, we should take advantage of the situation by using small type, or Type A, subs (TN: midget subs) to attack numerous enemy submarines which rescue pilots shot down in that area."

Extract from Battle Lessons, Com6thFleet

"In the current air attack, as against the Marianas, enemy submarines on the surface bravely waited offshore at distances up to 10 nautical miles during air raids and picked up downed pilots. By taking advantage of this opportunity, if we had stationed our submarines and Type A submarines in that area, we would have been able to attack and sink them comparatively easily."

Extracts from the "Report of Investigation After I-41 Sub Operations."

"The enemy generally follows a similar pattern on invading a base, that is, always in conjunction with a powerful air attack, and at such times they usually dispatch several submarines to be used for rescuing enemy pilots in the vicinity of the base. If, at this time, we should send out one or two submarines we would undoubtedly lower the enemy's general success in the maneuver. (In the present air attacks on SAIPAN and GUAM, the enemy stationed between seven and ten submarines about ten kilometers from shore, and they were surfaced during the raids.)

"In assigning operational duties to submarines, efficiency and training must be considered. It is important that we designate their deployment and operation, giving serious consideration to whether they are new submarines built after the completion of training of SubRon 11, whether they are submarines which have been in homeland waters for a long time for repair purpose, or whether they are submarines which have had important changes in command.

"Those submarines which participated in Operation "A" which (1) were built after the completion of training SubRon 11, and (2) had changes in command are as follows:

Subs by Classification	Subs Built After Training of SubRon 11	Submarines With Recent Changes in Command
Subs not yet returned 18	4	6
Subs returned 16	4	1

ENCLOSURE (A), continued

Of the 89 submarines lost since the beginning of the Greater East Asia War, 40 were sunk because of these reasons."

Chapter III

SUBMARINE WARFARE METHODS

As for submarine strategy, in view of the present pattern of naval operations, the method of disposition and arrangement, and tactics used in a line of deployment are worthy of consideration. When the next submarine campaign is considered, it is recognized that the situation which is covered in Volume 6 of "Combat Lessons" is applicable. When the commanding officer of SubRon 7 took over command of the Advance Force on the 16th of June, he gave instructions that each submarine, taking into consideration the special characteristics of mobile warfare with its constant changes, in addition to distinguishing friendly and enemy forces, "share in battles, and make attacking the enemy its prime objective, without staying at previously fixed stations at any set time. By seizing favorable opportunities and making raiding attacks, demonstrate the true value of submarine units and carry out your mission." He again ordered on the 17th of June, "Repeatedly attack the enemy which is confined to the waters surrounding SAIPAN and ROTA. Each sub will circle with the island to port, and after exhausting its torpedoes, will take its place in the outer patrol sector." Even though each submarine commander was given freedom to act as he believed best in the exigencies of battle, and thus temporarily change the disposition of the submarines as had been ordered by Combined Fleet Headquarters, the battle ended unsuccessfully.

Extract from Battle Lessons, ComSubRon 7

"When trying to intercept and force an attack on enemy ships, following a successful enemy invasion of an island, there is no alternative but to select a flexible interception patrol sector without depending on a line of deployment. Furthermore, submarines capable of operating in strategic areas should carry out attacks whenever possible.

"When enemy units are discovered, especially units including aircraft carriers, it is necessary to consider the time of day and direction and velocity of the wind, and to pursue the enemy tenaciously. Even though the opportunity to attack is temporarily lost, it is important not to abandon the attack prematurely.

"The successful attack and sinking of an enemy aircraft carrier by the submarine RO-115 was due to the fact that it attacked with our own air force, took advantage of a false attack, even though the enemy task force was maintaining a careful watch while taking on and sending off aircraft, and also the fact that it attacked at dusk (13 minutes after sundown). In addition, the captain and the whole crew, even after having been spotted and bombed by enemy aircraft, burned with a desire to meet the enemy. Bearing up under difficult conditions, with the temperature 36° in the conning tower and 45° in the motor room, and an internal pressure of 940 millimeters, they dashed into the center of the enemy task force. Cruising at periscope depth from beginning to end, they gained success in a desperate fight which lasted about six hours.

"We must follow a plan of active attack, with no thought of fleeing in the face of enemy anti-subcraft, and we must not permit the enemy

ENCLOSURE (A), continued

to gain the upper hand. Our submarines have quite a few weak points when engaging the enemy, both with respect to his tactics and anti-submarine ordnance, but we are gradually improving and correcting these defects. It is necessary to make an active attack in addition to following the protective methods used now, in order to revive a submarine's chance to escape."

Chapter IV

INDEPENDENT DECISIONS AND ACTIONS OF THE SUBMARINE CAPTAIN

The fact that fierce submarine battles demand initiative on the part of the submarine captain is more and more certain; therefore, it is possible that operational orders given to a sub commander may not outline the details of execution. The sub commander, along with endeavoring to exercise his own initiative as circumstances demand, appreciating the gravity of his task, must not fall into the error of acting wilfully. In intercepting operations, such as the present one, the outline of the operations of the SubRon is announced by the high command. Even though definite orders based on this outline are customarily issued by the commanding officers of SubRons, there is a considerable lapse of time which cannot be helped. Hence, submarine commanders must recognize opportunities for battle, and while taking action in keeping with the fundamental outline of the orders, grasp such an opportunity. The following are examples of a sequence of orders of the Combined Fleet:

ComCombinedFleet DesOpOrd (DesOpOrd 150 T.O.O. 131835)

ComAdvanceForce transfer submarines stationed in the Marshalls and south of Carolines as much as possible to seas north of Eastern Carolines.

ComAdvanceForce DesOpOrd (DesOpOrd 150)

Time of reception of ComCombinedFleet DesOpOrd not clear.

ComAdvanceForce DesOpOrd T.O.O. 142250

Submarine I-10, east of GUAM; Submarine I-41, south of GUAM.
Unless other orders received by 17 June, the above disposition to be carried out by ComSubRon 7.

ComSubRon 7 DesOpOrd (DesOpOrd 23)

Combined Fleet DesOpOrd received 140055, Advance Force DesOpOrd received 151125.

ComSubRon 7, prior to receiving the above Advance Force DesOpOrd, at 150900, based on its own estimation of the situation, sent independently DesOpOrd 23. (See below.)

SubRon 1 and SubRon 7 will proceed towards SAIPAN quickly and join forces while making a reconnaissance of the enemy.

ENCLOSURE (A), continued

Name of Sub	I-38	I-53	I-43	RO-41	RO-43	RO-109	RO-115	RO-113	RO-112
Time Combined Fleet DesOpOrd Received	132047		132000	131845		140940		141920	
(Elapsed Time)	(0-2-12)		(0-1-25)	(0-0-10)		(0-5-05)		(1-0-45)	
Time Advance Force DesOpOrd Received	151645	152015	151920	151825		151930	151520	151630	
(Comb Fleet DesOpOrd Sent)	(1-22-10)	(2-1-40)	(2-0-45)	(1-23-50)		(2-0-55)	(1-20-45)	(1-21-55)	
Time SubRon 7 DesOpOrd Received	161845	152100	151840	151835		160345	151900	151300	160250
(Elapsed Time Since Comb. Fleet DesOpOrd Sent)	(3-0-10)	(2-2-25)	(2-0-15)	(2-0-0)		(2-9-10)	(2-0-25)	(1-18-25)	(2-8-15)

ENCLOSURE (A), continued

Also, submarines on the "NA" line of deployment, should naturally make their movements as secret as possible, but when once having received an enemy attack and perceiving that their position has been disclosed, they should plan their own escape after promptly sending an informative dispatch on the situation. It is regrettable that the submarine RO-109, on 25 March, when it suspected that it had been discovered, recognized the necessity of changing its station but failed to dispatch a message.

Extract from Battle Lessons, Com6thFleet

"It is necessary that submarines, not letting opportunities escape, take action in accordance with the orders outlined by the high command to seize such opportunities.

"When enemy air and surface patrol craft become active, and there is a suspicion that the position of the submarine (on the line of deployment) has been discovered, in addition to not losing a chance to send a dispatch, it is essential to move off a considerable distance."

Chapter V

THE SUBMARINE CAPTAIN AND COMMUNICATIONS COMMAND

It is imperative that the submarine captain should have a clear conception of the situation, so that he can exercise appropriate control of communications.

In whatever operation he is engaged, whether it is an operation to destroy communications, a transport operation, or a raid, it is essential that the submarine captain have suitable control of communications, basing his considerations on the current conditions of battle.

It is natural that submarines stationed on patrol line "NA" would keep their presence a secret as long as possible, but once they had received a thorough attack from enemy anti-sub boats and aircraft, since their positions were then discovered, they should have sent a message concerning their present condition. However, none did so. The high command, on the other hand, learned this through enemy radio intelligence and ordered the patrol line moved.

Also, when expecting the enemy to attack in the Marianas area, the submarines at dispersed stations were ordered to gather in the same area. ComSubRon 7 in overall command of the operations, ordered the submarines to report their call sign, upon arriving on station. When it was believed that the report had not gotten through, submarine commanders were cautioned against their passive attitude of not transmitting because they might give away the situation.

Moreover, in a large operation such as Operation "A", communications are complicated due to the rapid change in battle conditions. Considering the failures, errors, and tardiness, it is essential for sub commanders to draw their own conclusions about the tactical situation by endeavoring to collect information through the use of communications. Data on submarine communications in Operation "A" are given in the tables following on the next two pages.

ENCLOSURE (A), continued

RECEIVING SECTION

Division		Results of Signals Received by Submarines from ComAdvanceForce	Results of Signals Received by Submarines from ComSubRon 7
Submarines Concerned		16	16
Total Signals Sent		354	396
Signals Received		307	373
Percent of Signals Received		87%	94%
Elapsed Time	From Origin to Reception	Max. 34 - 15 Min. 2 - 47 Average 9 - 39	33 - 15 1 - 12 7 - 17
	From Reception to Decoding	Max. 5 - 12 Min. 0 - 13 Average 1 - 01	9 - 49 0 - 19 1 - 32
	From Origin to Decoding	Average 10 - 55	8 - 47
	A (ComAdvanceForce)	30%	C.3%
B (ComSubRon 7 Trans)		17%	64 %
D (Tokyo Comm Units, Super long wave broadcast) (was located in Navy Dept.)		47%	26.7%
Percentage of Signals Received on Different Wave Lengths			
T1 (Comm Unit 4½) (Broadcast No. 1)		2%	5 %
Others		4%	4 %

RESTRICTED

S-17

ENCLOSURE (A), continued

TRANSMISSION SECTION

Division	Results of Signals Received by ComSubRon 7 from subs	Results of Signals Received by ComAdvForce from subs
Submarines Concerned	16	15
Total Signals Sent	68	56
Total Signals Received	55	50
Percent of Total Signals Received	85%	89%
Elapsed Time		
From origin to transmission	Max. 3 - 38 Min. 0 - 41 Average 1 - 52	9 - 09 0 - 28 3 - 14
From transmission to final decoding	Max. 10 - 55 Min. 2 - 26 Average 5 - 46	4 - 30 0 - 29 2 - 26
From origin to final decoding	9 - 36	5 - 37
A (ComAdvForce Broadcasts)		3
B (ComSubRon 7 Broadcasts)	14	
C (Submarine Wave Length)	41	87
D (Tokyo Comm Unit Superstrong Wave Relay)	9	
Percentage of Signals Received on Different Wave Lengths.		
TL (Comm Unit 4½) (broadcast No. 1)	36	3
Others		7

ENCLOSURE (A), continued

Chapter VI

IMPROVING THE PERFORMANCE OF THE INDIVIDUAL SUBMARINE

In the present operation the submarine flotillas have shown their real value from the outset, having fought energetically. Although they have obtained battle results which no other units can surpass, they have suffered tremendous losses. (Out of 34 submarines taking part, 18 were lost.) Only a few submarines remain, and the demand for an increase in strength is even greater during this present emergency.

The cause of so great a loss of submarines is the fact that our submarines, with their present capabilities, display weaknesses against the enemy's underwater weapons and technique, and recognizing this fact, it can be seen that it is important to bring about a rapid improvement in their capabilities. As this matter has been reported often previously as lessons taught by combat experience, the following few paragraphs are a summary of these battle lessons, and a demand for greater efforts from the various units concerned.

The rapid installation of radio equipment and the establishment of regulations for its functioning, use, and policy are given in the following paragraphs.

Although the Type 13 Radar does not meet the demands of the units which operate it, it can fill the submarine's greatest demand in the present operation, when it is used efficiently and the dawn of the establishment of an anti-aircraft defense plan can be seen. For example, submarines I-41, RO-43, and RO-46 have put this to practical use during the present operation, and have gained successes, especially RO-46 which definitely contacted an enemy patrol plane at over 30 kilometers, and was able to replenish her power without apprehension. As there are still many defects in the manufacture of this radar, it is essential to devise a plan quickly.

Although the sound detector, like the radar, is a long way from meeting the demands of the units which operate it, submarine RO-41 has used it efficiently in the present operation. A plan for the rapid correction of fatal mechanical defects in this sound detector is essential.

Extract from Battle Lessons, 6th Fleet Headquarters

"It is essential to devise a plan quickly to forestall enemy search equipment (radar and sonar devices) and magnetic detection devices (MAD).

"The realization of attacks in which the enemy is wiped out has been demanded many times in the past Battle Lessons. From the viewpoint of (improving) the submarine's ability in direct attack, it is essential to further a practical plan of so equipping them in view of the impending problem.

"We must find an immediate solution to the following problems concerning submarine torpedoes.

- (a) Firing of Type 95 Torpedo at shallow depths and firing when water soaked for long periods.
- (b) Obtaining best efficiency from Type 2 Primer.
- (c) Sound-directed torpedo.
- (d) Super-sound-wave torpedo."

ENCLOSURE (A), continued

Chapter VII

SUBMARINE WARFARE BATTLE RESULTS

We have learned that very often a submarine itself, cannot report on the actual results of an operation (for instance, the sinking of an enemy naval vessel). Therefore, one must take into consideration the fact that there are many results yet unknown before one can reach a fair appraisal of submarine warfare. In addition, when an attack is launched against an extremely vigilant enemy force or when an attack is made by enemy anti-sub craft and planes, if our submarines could, while submerged, report results of the attack and the condition of the enemy, it would help greatly in the command of the operation and raise the morale of the crew. Therefore, it is necessary to carry on research in regard to this special type equipment.

The battle results in Operation "A" are shown in Appendix VI. When you consider the sinking of a battleship, a light cruiser and another ship of unknown classification (observations made from land) by sub I-31 in the waters off Attu during the Attu operation; the sinking of a heavy cruiser by sub RO-39 off Wotje in the Marshalls operations (observation made from land); the sinking of the Yorktown by the I-168 in the Midway operation; the sinking of a large carrier by sub I-173 in the Gilberts operation (the latter two being very hazardous operations), you can see that accurate reporting of the sinking of enemy ships is very difficult. And judging from the above it is not inconceivable that as subs yet unreturned, will bring in favorable battle results.

Extracts from Battle Lessons, Com6thFleet

"Cases in which a submarine itself cannot report battle results are many (eg., sinking of enemy warships). Therefore, don't think that just because many of our submarines were damaged and we could not obtain the results of the attack, that they were not effective."

Chapter VIII

RECOGNITION OF FRIENDLY SUBMARINES

It is essential to carry out research and to equip friendly submarines with devices with which they may be recognized under varying conditions. ComSubRon 7 took command of both SubRon 1 and 7 on 16 June. When ordering the disposition of our submarines in the SAIPAN area, he bore in mind the problem of recognition of friendly submarines. Furthermore, bearing in mind the same problem, Commander in Chief Combined Fleet ordered the movement of submarines to be limited in the seas west of SAIPAN. From the point-of-view of sub strategy, it is well known that recognition devices for friendly submarines are essential in local operations where it is expected that enemy and friendly ships will be pitted against each other. This committee demands these weapons. Further talk is unnecessary. We desire immediate research and installation of this type of equipment.

Chapter IX

HEALTH AND SANITATION AMONG THE SUBMARINE CREW

It is essential that submarine commanders pay more attention to the health and sanitation of the crew. The submarine commander must remember that the problems of health and sanitation are very important in maintaining and raising the ability to fight. It is absolutely essential that the commander limit the

ENCLOSURE (A), continued

crew to the ship's capacity, that he use the proper judgement in using blowers, coolers, and air purifiers, and that he make the proper use of medicines and food. Reference is made to the case of the I-41 in which 26% of the crew contracted beri-beri either because only one-half the required amount of vitamin pills were used, or because the pills had lost their value because of age; and to the case of the I-38, in which, after 39 hours of underwater cruising, various measures for purifying the air were taken.

It is essential to devise equipment other than blowers to purify the air in the submarines.

When the enemy is launching an attack it is always necessary to proceed underwater without making a noise but the present air-purifying equipment is not suitable for underwater travel.

Since the coolers exert such a great influence on the physical strength of the crew, it is essential to increase and maintain their cooling power.

In this operation the RO-46 was underway not more than 16 days. At that time, four people suffered from sunstroke and almost all of them were afflicted with prickly heat. Furthermore, fatigue among the crew was great.

By contrast, the RO-41, a submarine of the same class, was underway for a period of 4 months (it was at anchor only 15 days during this period). On its last trip it was underway for 40 days, (the standard limit for one trip is 30 days) and in this period only a few were afflicted with prickly heat and not one showed symptoms of fatigue. The main reason for the different results in the two ships of the same type was that in the former, because the cooling system was not efficient enough, the average temperature in living quarters was 37° centigrade, while in the latter they were able to maintain a temperature of about 31° centigrade.

Chapter

MORALE OF THE CREW

An excellent mental state, that is, an awareness of the important nature of one's duties, which makes for unity and harmony from the submarine commander on down, is important in passing through a crisis, and in the perfect execution of one's duties.

The sub RO-115, after the TRUK sortie, on 29 May slipped through the tight enemy patrol, traveled under water continuously for 6 days, and completed its WEWAK transport duties. On 3 June arrived at PALAU, without taking time for maintenance or rest. On 6 June it was assigned the duty of searching for a plane from Air Flot 61 which had made a forced landing, and of reconnoitering the enemy in the water north of New Guinea. During this time, because of some defect in the cooling system, the temperature within the submarine rose to 35° - 38° centigrade, and even though the fatigue of the crew reached the breaking point, upon hearing the words, "Operation 'A' moves toward a decisive battle," and "the fate of the empire depends upon this one battle; each member must give forth with all he has!" the vitality of every member of the crew rose one hundred fold and fighting spirit rose until it seemed to reach the sky. On 19 June the RO-115 discovered an enemy task force. It ran the risk of a bomb and depth-charge attack and for six hours maneuvered for a position of attack. Even though the temperature in the conning tower reached 36° and in the engine room 45°, and the air pressure inside the sub reached 940mm the crew kept calm, their morale remained high, and they achieved the brilliant result of sinking a WASP-class carrier.

ENCLOSURE (A), continued

The subs RO-109 and RO-112 were neutralized by the enemy, and after being on the "NA" line of deployment for about 10 days were the only ones among the seven stationed there who were able to return. On 5 and 9 June respectively, they arrived at TRUK. On 11 June, while they were engaged in repairing the engines and weapons and resting the sub, the enemy attacked SAIPAN. Aware of the seriousness of the situation, they departed from TRUK in a rage on the 12th, even though both ships had one engine that had not yet been repaired. When they arrived at their patrol sector they suffered hardships under enemy attack, and severe heat. Finally, the crew completed the repairs and they took part in the battle around SAIPAN, performing their duties well.

* * * * *

APPENDIX I

OUTLINE OF CONDITIONS AT BEGINNING OF THE OPERATION

- A. The enemy, which seized strategic points in the Solomons and Bismarck archipelago, progressively extended and strengthened the power of its air bases and won complete control of the air in Eastern New Guinea, the Solomons, and then the Bismarck area. Also, acting in unison with air attacks on TRUK and the Saipan area, which were our main bases from which we launched attacks, the enemy opened a westerly advance up the north coast of New Guinea. In the latter part of April, it launched a heavy offensive against AITAPE and HOLLANDIA, and at the same time, as it progressively increased the air attacks which were made from Eastern New Guinea and the Solomons, they gathered the principal elements of their fleet in the Marshalls area and with unremitting hostility struck at our main lines of protection.
- B. The Combined Fleet directed its principal operations in the area extending from the southern Central Pacific to the north coast of New Guinea, and joining forces with the army, mustered its strength in that area for a decisive battle. It was engaged in operations endeavoring to generally disrupt the plans for the enemy's counter-attack by destroying at one stroke the enemy's offensive power, and above all, its task force.
- C. The Advance Force, in accordance with the plans of the Combined Fleet, formed its line of deployment with the greater part of its strength to the south of the Eastern Carolines and engaged in surprise attacks and patrol activity against the enemy task force and occupation forces. At the same time a portion of its strength was busy with transport operations to Buin, Buks, WeWak and Kusaie, and another part was patrolling the waters east of the Marshalls and reconnoitering Majuro, Kwajalein and Brown Islands.
- D. ComSubRon 7 was in the position of being unable to carry out the pre-arranged dispositions because there was not over 500 tons of fuel in storage at the Truk submarine base, and part of its submarines had been sent to SAIPAN for fuel (For this reason ComSubDiv 51 was sent to SAIPAN).

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APPENDIX II

BASIC ORDERS FOR ALL FORCES PARTICIPATING IN THE OPERATIONS

- A. Basic Orders For Combined Fleet (Combined Fleet OpOrd No. 76)

ENCLOSURE (A), continued

Basic orders for the Combined Fleet, under which it will endeavor to disrupt generally the plans for the enemy's counter-attack by destroying at one blow the enemy's offensive strength, and above all, its task force, and by joining with Army in mustering its strength for a decisive battle, which will have its principal operation in the area extending from the south central Pacific to the north coast of New Guinea, will be as follows:

1. Plan of Operations

(a) It will deploy quickly, in the main operational area, the entire strength of the fleet, for decisive battle.

(b) It will utilize fully our advanced key positions, and overcoming all obstacles, endeavor to forestall enemy reconnaissance and intelligence.

(c) It will take every precaution against sudden attack and will strive vigorously to reduce the strength of the enemy.

(d) It will assemble the entire strength of the task force and the greater part of the land-based planes within the circumference of the decisive-battle sea area, and luring the enemy into this area, it will take advantage of a favorable opportunity for an all-out decisive battle and will attack and completely destroy the enemy task force.

(e) The first decisive-battle sea area will be in waters adjacent to PALAU, and Second area in the waters of Western Carolines.

(f) Until the enemy has been enticed into the decisive-battle sea area, make every effort to secure intelligence of the enemy. Avoid intermittent attacks with insufficient forces.

(g) In case the enemy plans an attack on our strategic bases in the Western Carolines, it will move out to give battle in accordance with (d) above. That is, after first overpowering and destroying the enemy carriers, it will direct the full force of its attack on the transport groups.

(h) In case the enemy should move in the Marianas area, or should at the same time move against the Western Marianas and the Carolines, the enemy in the Marianas area shall be attacked with the land based air force in that area, an all-out decisive battle shall be launched against the enemy task force with all the strength that can be mustered, in accordance with (d).

(i) As soon as a heavy attack has been made upon the enemy in the decisive battle, utilizing as soon as possible all the land-based air power which can be employed in a running battle, an unrelenting day and night air attack shall be begun. With the sea and advance forces cooperating, the final outcome of the battle will be awaited. Further, the annihilation of the remnants of the enemy fleet shall be continued, the enemy supply routes cut, and its advanced air bases attacked.

2. Outline of the Operations

(a) Outline of operations of each force with reference to each

ENCLOSURE (A), continued

tactical opportunity. (Only the section which applies to Advance Force is set forth.)

<u>Occasion</u>	<u>Order</u>	<u>Advance Force Operation Summary</u>
Upon the completion of decisive battle preparations	Begin "A" Operation	1. Reconnaissance of every strategic area. 2. Carrying out sudden-attack strategy. 3. Stationing part of the force in the Carolines - South Sea area.
In case of probability of the appearance of the enemy	Prepare for decisive battle of "A" Operations	Same as above: Quickly station part of the force in the Carolines - South Sea area.

(b) Sudden Attack Operation

(1) Carry out sudden attack operation with the greater part of the Advance Force.

(2) Omitted

(3) Omitted

(4) If Operation "A" is ordered, a reconnaissance of important bases will be conducted with part of the Advance Force and the Air Force (prior to sudden attack operation mentioned above).

(5) Omitted

(c) Omitted

(d) Omitted

(e) Present Operation

(1) Omitted

(2) Omitted

(3) With part of the Advance Force, they will cut off the line of retreat of the enemy task force and sweep the area of remaining enemy units. In case of the above, the following standard deployment will be effected:

"A" Between 2°0' N - 134°0' E and 4°30' N - 134°0' E

"KA" Between 1°0' N - 141°0' E and 3°0' N - 143°0' E

"SA" Between 1°0' S - 140°0' E and 1°0' N - 142°0' E

"TA" Between 1°0' S - 149°0' E and 1°0' N - 149°0' E

"NA" Between 0°30' S - 148°30' E and 1°30' N - 150°30' E

"HA" Between 1°0' N - 150°0' E and 3°30' N - 150°0' E

"MA" Between 2°0' S - 151°0' E and 0°0' N - 153°0' E

ENCLOSURE (A), continued

"MA" Between 0°00' - 153°00' E and 2°30' N - 153°00' E

B. Essentials of Advance Force Orders (Secret No. 141810; DesOpOrd No. 122, 14 May).

1. All Submarines will carry out Operation "A" as follows:
 - (a) I-41, despatched from KURE on 15 May, will undertake the reconnaissance of the enemy between the Admiralties and WEWAK; I-44 and I-53, despatched from KURE as soon after the 15th of May as possible, will engage in reconnaissance of the enemy along line of deployment "MA".
 - (b) RO-42 and RO-44 left YOKOSUKA and KURE on 15 May. RO-42 will reconnoiter the enemy within an area of a 100-mile limit northeast of BROWN. By special orders, RO-42 will undertake reconnaissance of KWAJALEIN and RO-44 of BROWN.
 - (c) RO-47, leaving KURE about 15 May, will operate along line of deployment "KA".

I-38, at last leaving KURE with preparations completed, on arrival in the waters east of the Marshalls, will engage in reconnaissance of the enemy, and by special order will conduct aerial reconnaissance of strategic locations. The I-38 will operate in waters in the eastern Marshalls north of a line 70° from the southern extremity of Maloelap, and the I-10 south of such a line.

(Note: The I-10 has already departed and is engaged in observation in the Marshalls area.)

C. Essentials of SubRon 7 Orders (SubRon 7 Secret OpOrd No. 2).

1. SubRon 7, under Operation "A", will assemble the greater part of its submarines (Submarine Force A) in waters south of the Carolines and engage in patrol, reconnaissance, and surprise attacks on the enemy task force and occupation forces. At the same time, with part of its strength (Submarine Force B), it will continue to carry on transport operations to the northeastern and northern parts of New Guinea.
2. Submarines now at anchor at SAIPAN, under orders of ComSubForce A, and submarines now at anchor at TRUK, under special orders of ComSubForce B, shall deploy in line of deployment "NA" in search of the enemy (from position U-RI-MO 23 (1°30' N, 150°30' E) to position YU-RI-MO 41 (0° - 30' S, 148° 30' E).
3. Deploying order, from the north: RO-106, RO-104, RO-105, RO-116, RO-109, RO-112, RO-108. Deployment distance 30 miles. Direction of search for enemy 135°.

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APPENDIX III
STRENGTH AND DEPLOYMENT OF LEAD FORCE AT BEGINNING OF OPERATION

A. Organization of all submarine divisions is as follows:

ENCLOSURE (A), continued

1. SubDiv 7:

I - 5	I - 6
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2. SubDiv 12:

I - 176	
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3. Independent SubDiv 1:

I - 16	I - 41
I - 26	I - 44
I - 36	I - 45
I - 38 (Flag)	I - 53
4. SubDiv 22:

I - 177	I - 184
I - 183	I - 185 (Flag)
5. SubDiv 34:

RO - 36	RO - 43
RO - 41	RO - 44 (Flag)
RO - 42	RO - 47
6. SubDiv 51:

RO - 104	RO - 112
RO - 105 (Flag)	RO - 113
RO - 106	RO - 114
RO - 108	RO - 116
RO - 109	RO - 117
RO - 111	

(Explanation: As of 20 May there is no news about the following submarines mentioned above: I-16, I-176, I-183).

B. Summary of Changes in Organization During Operation:

25 May	I-12, I-361, I-362	Attached to SubRon 11
1 June	I-33	Attached to SubRon 11 (sunk in training accident in Inland Sea on 13 June.)
8 June	I-56	Attached to SubRon 11
14 June	I-364	Attached to SubRon 11
23 June	RO-46	Detached from SubRon 11 and attached to SubDiv 34
2 July	RO-48	Detached from SubRon 11 and attached to SubDiv 34
8 July	I-363	Attached to SubRon 11

ENCLOSURE (A), continued

1. SubDiv 7:

I - 5	I - 6
-------	-------
2. SubDiv 12:

I - 176	
---------	--
3. Independent SubDiv 1:

I - 16	I - 41
I - 26	I - 44
I - 36	I - 45
I - 38 (Flag)	I - 53
4. SubDiv 22:

I - 177	I - 184
I - 183	I - 185 (Flag)
5. SubDiv 34:

RO - 36	RO - 43
RO - 41	RO - 44 (Flag)
RO - 42	RO - 47
6. SubDiv 51:

RO - 104	RO - 112
RO - 105 (Flag)	RO - 113
RO - 106	RO - 114
RO - 108	RO - 116
RO - 109	RO - 117
RO - 111	

(Explanation: As of 20 May there is no news about the following submarines mentioned above: I-16, I-176, I-183).

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2 July	RO-48	Detached from SubRon 11 and attached to SubDiv 34
8 July	I-363	Attached to SubRon 11

ENCLOSURE (A), continued

10 July	I-47	Attached to SubRon 11
10 July	I-54, I-55	Detached from SubRon 11 and attached to 6th Fleet.

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APPENDIX IV
OUTLINE OF EVENTS IN THE CAMPAIGN

14 May: SubRon 7 DesOpOrd 11 - (T.O.O. 141743): Sub Force A anchored at SAIPAN. On receipt of SubRon 7 DesOpOrd No. 2, will sail forth as soon as possible and, even though late, will take the "NA" line of deployment until 210000.

18 May: Orders From Commander Advance Force to all Advance Force Commanders (T.O.O. - 182115): In the coming operation, as the speed of our submarines in spotting the enemy task force and reporting them will largely influence the success or failure of our air operations, the subs posted north of New Guinea and subs in all lines of deployment, by skillful use of their search equipment and by appropriate scouting, are expected not to let the enemy escape. By having message texts prepared and reports made immediately, accurate and swift reports of the sighting of the enemy will be expected.

19 May: 1. Combined Fleet DesOpOrd No. 92 - (T.O.O. 192356): At 200000 - commence Operation "A"

2. RO-115 left TRUK as transport to WEWAK

20 May: 1. Enemy Task Force (nucleus 2 CV's, 4 BB's) make raid on Marcus Island.

2. I-184 left YOKOSUKA as transport to MILLE.

3. RO-114 transferred to SubRon 7 (Advance Force DesOpOrd No. 127 T.O.O. 202123)

4. Orders from Commander-in-Chief Combined Fleet to all Combined Fleet commanders (T.O.O. - 201024): As the fate of the Empire hangs on the coming battle, airforces, sub forces, and suicide forces especially, must lead the way to certain victory. Each area force must strengthen its strategic position and form them into iron walls of support. Each man must vow to do his best according to his duty and all must strive mightily to attain certain success in the battle.

21 May: 1. RO-113 left KURE for SAIPAN.

22 May: 1. Advance Force DesOpOrd No. 128 (T.O.O. 221635)
I-5 Operational transport destination changed from WOTJE to PONAPE.

2. RO-111 left SASEBO for TRUK.

3. RO-112 reached station.

ENCLOSURE (A), continued

4. Submarines assigned to "NA" line of deployment are being attacked by the enemy. It is certain that they will find difficulty in arriving as expected and will be delayed.

- 23 May:
1. According to radio intelligence, RO-104 while turning on the "NA" line of deployment was spotted by an enemy patrol plane in the vicinity of 80 miles northwest of its station.
 2. Advance Force DesOpOrd No. 129 (T.O.O. 231542): ComSubRon 7 will secretly transfer three subs from the northern portion of the "NA" line of deployment to positions 60 miles along course 135°.
 3. SubRon 7 DesOpOrd No. 12 (T.O.O. 231959): RO-104, RO-105, RO-106 transfer secretly to "A" line of deployment (135°, 60 miles) (according to Advance Force DesOpOrd No. 129)
 4. RO-44 left SAIPAN for station (scheduled to arrive 180 miles northeast of Brown Islands 20 June).
 5. RO-109 reached station.
 6. RO-41 will return to SubRon (on or after 24 May)
 7. Advance Force DesOpOrd No. 130 (T.O.O. 231629):
Notes:
 - a. On a line from 2° to 3° N. latitude, there is a dark squall front.
 - b. Because there is oil on the surface of the sea now, the "NA" line of deployment is very disadvantageous to make periscope observations and use the short-wave mast. (According to returning submarines.)

- 24 May:
1. Enemy task force raid on Marcus Island.
 2. RO-117 arrived SAIPAN.

- 25 May:
1. RO-109, realizing that there was likelihood of discovery, withdrew 60 miles on a bearing of 360°.
 2. Note (Imperial Headquarters Report): Enemy task force appeared on 24 May in the vicinity of Marcus Island and attacked the island by air. Air forces there attacked them and shot down thirty enemy planes and damaged two. Our losses were extremely light.

- 26 May:
1. I-5 left SASEBO for SAIPAN.
 2. RO-117 left SAIPAN for TRUK.
 3. While heading towards the line of deployment north of New Ireland, at 1855, I-44 sighted 4-motored enemy bombers and was bombed as it submerged (1 near miss).
 4. RO-41 left TRUK for KUSAIE (operational transport duties).

- 27 May:
1. Enemy landing beginning on Biak Island.

ENCLOSURE (A), continued

2. Advance Force DesOpOrd No. 131 (T.O.O. 272200):
I-44 must return to KURE to repair damages (Received by I-44, 281932)
3. RO-115 successfully completed unloading at WAKE.
4. I-44, proceeding as on the day previous, received attacks from an enemy patrol plane and patrol boat. Encountering difficulties in submerging while escaping, it took advantage of a squall which came up at 1055. While preparing for air attack, the I-44 escaped northward on the surface.

(Condition report):

Having heard the sound of an airplane at 0315 the I-44 took evasive action and submerged. While submerging automatically, when the hydrophone volume reached "Four," simultaneously she received depth charge attack (8 charges). Remained stationary until 2235.

- 28 May:
1. According to radio intelligence, an enemy patrol plane attacked a class "B" enemy sub but missed.
 2. SubRon 7 DesOpOrd No. 13 (T.O.O. 281457):
 - a. Sub Force A on "B" line of deployment will take this order: RO-106, RO-104, RO-105, RO-116, RO-109, RO-112, RO-108, starting from the north.
(NO-YA-MO 32, 1° - 29' N, 148° - 42' E;
YU-FU-RI 32, 0° - 32' S, 146° - 44' E)
 - b. On "B" line of deployment, await the enemy to shift the course of patrol to an east-west direction.
 3. RO-43 left MAIZURU for SAIPAN.
- 29 May:
1. Advance Force DesOpOrd 132 (T.O.O. 290001):
ComSubRon 7 may shift, at will, submarines on the "NA" line of deployment. Subs which have reached the limits of their cruising range should be returned to TRUK immediately.
 2. I-41 reached "E" patrol sector (left KURE 15 May)
 3. RO-113 arrived SAIPAN.
- 30 May:
1. SubRon 7 DesOpOrd No. 14 (301603):
 - a. RO-106 and RO-109 will, at 311800, withdraw from positions and return to TRUK.
 - b. On and after 010000, "B" line of deployment will be in the order RO-104, 105, 106, 112, 108, from the north.
 2. RO-109 arrived "B" line of deployment.
 3. RO-113 left SAIPAN for TRUK.
 4. RO-41, engaged in operational transport at KUSAIE ran aground while taking evasive action when entering that harbor. While exerting utmost efforts to get off the reef, RO-41 spotted 1

RESTRICTED

S-17

ENCLOSURE (A), continued

enemy destroyer and 2 subchasers. By blowing the No. 2 main tank she extricated herself, submerged, and waited on the bottom.

- 31 May:
1. RO-109 left station and started for TRUK.
 2. RO-112 reached "B" line of deployment.
 3. RO-41, after it unloaded successfully at Kusaie Harbor, being within 2000 to 3000 meters of the enemy ships, withdrew and lay on the ocean floor.
 4. Note (Imperial Headquarters Report):
On 28 May, a strong enemy force landed at Biak Island and our defending forces on that island and our air forces in that area intercepted them. During the battle our air forces inflicted the following battle losses on the enemy:
Sunk - 1 cruiser, 1 transport, and 6 or 7 other ships near TRUK.
Damaged & set afire - 3 warships (1 of them a large type) and 3 ships near TRUK

- 1 June:
1. Advance Force DesOpOrd No. 133 (T.O.O. 011449):
 - a. RO-41 will patrol in the vicinity of Jaluit Island, bearing 270°, 150 miles distant. There will be special orders for the reconnaissance of MAJURO.
 - b. RO-42 and RO-44 will move to favorable positions in accordance with enemy's situation.
 2. Advance Force DesOpOrd No. 134 (T.O.O. 012315):
Operations transport destination of I-3 changed to POMAPE.
 3. RO-41 left KUSAIE for station in the Marshall Island area. (Enemy on lookout duty at the harbor entrance passed at a great distance.)
 4. RO-114 left KURE.
 5. RO-117 reached TRUK.

- 2 June:
1. RO-111 reached TRUK.

- 3 June:
1. Results of 2nd air attack force reconnaissance at MAJURO revealed 3 CV's, 2 CVE's (or CVL's) and 1 BB. Signs of activity were numerous.

2. SubRon 7 DesOpOrd No. 15 (032150):
 - a. RO-111 and RO-117 transferred to Sub Force A. RO-111 will take the position NO-NE-CAI 49 (0° - 0', 147° - 20' E) and RO-117 position NO-TA-NO 55 (0° - 50'N 148° - 10' E) until 2100 on the 9th.
 - b. RO-108, 112, 116, at 50000, and RO-104, 105 at 80000 will leave their positions and return to TRUK.
3. I-5 arrived SAIPAN.

ENCLOSURE (A), continued

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 4. RO-114 left KURE.
 5. RO-117 reached TRUK.

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1. Results of 2nd air attack force reconnaissance at MAJURO revealed 3 CV's, 2 CVE's (or CVL's) and 1 BB. Signs of activity were numerous.
 2. SubRon 7 DesOpOrd No. 15 (032150):
 - a. RO-111 and RO-117 transferred to Sub Force A. RO-111 will take the position NO-NE-CAI 49 (0° - 0', 147° - 20' E) and RO-117 position NO-TA-NO 55 (0° - 50'N 148° - 10' E) until 2100 on the 9th.
 - b. RO-108, 112, 116, at 50000, and RO-104, 105 at 80000 will leave their positions and return to TRUK.
 3. I-5 arrived SAIPAN.

ENCLOSURE (A), continued

4. RO-115 arrived PALAU.

5. Fierce battle terminated (called "Battle of Biak Island, Diving Operation A"). (Combined Fleet DesOpOrd No. 115032025)

4 June:

1. Enemy task force (2 aircraft carriers) 60 miles off Wakde at 1120.

2. Fierce battle recommenced.

3. Advance Force DesOpOrd No. 136 (T.O.O. 031248):
ComSubRon 7 will command I-41 and I-53 from 060000 until special orders are given.

4. Advance Force DesOpOrd No. 137:
As soon as preparations can be completed, I-185 and I-6 will proceed to SAIPAN. (Remainder of order omitted.)

5. SubRon 7 DesOpOrd No. 16 (T.O.O. 40837):
RO-115, as soon as preparations are completed, will leave PALAU. After RO-115 has acted in accordance with the following, she shall return to TRUK.

a. Reconnoiter the enemy situation in the waters north of New Guinea. (Pass through the "SA" deployment line at its northern end)

b. Pass near the position NO-HI-RE 55 (20° - 30' N, 141° - 10' E) to search for and rescue a plane crew which was forced down and reported by Air Plot 61 Secret Dispatch, at 031212.

6. RO-113 reached Truk.

7. SubRon 7 DisOpOrd No. 17 (T.O.O. 042303):
At 041557, (at a speed of 15 knots) 4 enemy destroyers sighted on northerly course at position "U-TO-SU" 55 (10° - 50' N, 150° - 10' E). Expect attack on TRUK at dawn of the 5th. All submarines by special order on "K" line of deployment will pass from positions "U-ME-RO 00" (60° - 20' N, 152° - 20' E) to "U-RI-HA 17" (50° - 40' N, 150° - 30' E) in the following order from east to west; RO-117, RO-113, RO-109, and RO-106.
(Note:)

The enemy ships sighted were not a task force, but, as it was discovered later, it was a unit coming to rescue the crew of a B-24 shot down while attacking TRUK.

8. RO-36 left MAIZURU for SAIPAN.

9. RO-11 left TRUK for station.

10. RO-114 left SAEKI for SAIPAN.

5 June:

1. 65th Base Force patrol discovered four enemy large-type carriers in "M" patrol sector.

2. Results of 2nd Air Fleet reconnaissance at MAJURO:
There are 14 CV's, 6 BB's and other warships and transports in great numbers at anchor, and signs of mobilization are many.

ENCLOSURE (A), continued

3. Advance Force DesOpOrd No. 139 (T.O.O. 052325)
Cancel I-185's trip to SAIPAN, and as soon as preparations are completed, return her to KURE. She will embark with army materials chiefly, and transport them to WEWAK.
4. Combined Fleet DesOpOrd No. 120 (T.O.O. 052215)
 - a. Discontinue submarine operational transport for the time being in the Buka and Bougainville Island areas.
 - b. Com6thFleet orders I-185 to transport ammunition for anti-tank guns, medical supplies, spare parts for army radio equipment, etc., to Wewak area as quickly as possible.
5. RO-117 left TRUK for station.
6. RO-109 arrived TRUK.
7. RO-112 left station for TRUK.
8. I-5 left SAIPAN (on transport duties) for KUSAIE
9. I-44 arrived at KURE. Engaged in repairs to damaged sections.
- 6 June:
 1. 2nd air attack force reports following reconnaissance results at Majuro:
 - a. 6 aircraft carriers, 8 auxiliary aircraft carriers, 10 large transports, 10 medium transports and numerous small craft. There is great activity inside the harbor and signs of departure are evident!
 - b. At 1705 enemy task force, consisting of 1 carrier, 1 battleship, and, 4 destroyers was cruising at 10 knots on a bearing of 230°, 400 miles from TRUK.
 2. Combined Fleet DesOpOrd No. 121. (T.O.O. 061609):
At early dawn, British and American forces, by air and sea, began landing operations on the shores of continental Europe.
 3. Combined Fleet OpOrd 76 - Top Secret.
Addendum 1. Standard of deployment of Advance Force submarines and standard patrol sectors are established as follows:
 - a. Patrol Sector Positions:
 - (1) Position NO-KA-MO 00(10 - 40° N, 146° - 40° E)
 - (2) Position NO-N-CHI 00(00 - 20' N, 146° - 20' E)
 - (3) Position YU-TA-NA 00(00 - 40' S, 145° - 20' E)
 - (4) Position CHI-NU-CHI 00(00 - 20' N, 178° - 00° E)
 - (5) Position YU-TSU-MA 00(30 - 0' S, 145° - 20' E)
 - (6) Position RI-MI-CHI 00(00 - 20' N, 153° - 4' E)
 - (7) Position ME-TSU-KO 00(10 - 20' S, 135° - 00° E)
 - (8) Position RI-HA-NU 00(20 - 40' N, 159° - 00° E)
 - (9) Position U-TSU-CHI 00(00 - 20' N, 160° - 20' E)
 - (10) Position CHI-TO-KI 00(50 - 0' N, 165° - 0' E)
 - (11) Position CHI-NE-KU 00(14° - 0' N)
 - b. The radius of each patrol sector, using each position (1 to (4) and (5) to (11) as center, is 40 miles (60 miles)

ENCLOSURE (A), continued

c. One or two submarines are required for each patrol sector.

4. Combined Fleet Chief-of-Staff Dispatch (T.O.O. 061615):
Reference: Combined Fleet DesOpOrd No. 13.

a. In view of security measures to be taken against the enemy in the "TA" deployment line area, suitable action should be taken to move the submarines in that area to (1), (2), and (3) patrol sectors and (6) and (7) patrol sectors. Furthermore, one submarine should be stationed in the (5) patrol sector in the future.

b. The main force of the enemy is at MAJURO, according to the results of the advance patrol of the air group. On 8 June, the third patrol is to be made over MAJURO. Therefore, it is requested that the reconnaissance by subs in the Marshalls area be made according to the following plan:

- (1) I-10, RO-42, RO-44 will carry out a reconnaissance about 10 June as previously planned.
- (2) I-38 will make a reconnaissance of MAJURO the middle of June.

5. Instructions from ComCombined Fleet to advanced expeditionary force (T.O.O. 061625):

The hardships of the advance forces engaged in patrol, transport, and reconnaissance of strategic areas under the enemy's vigilant anti-sub patrol for long periods, is beyond imagination. Greater combat opportunities arise as the hardships increase, and the success or failure of Operation "A" depends upon the submarine's daring insight into various situations. Whether it be during combat or maintenance, they should endeavor to comply with their missions, and devise schemes so as not to lose any combat opportunity.

6. SubRon 7 DesOpOrd No. 18 (T.O.O. 060736):
Transfer RO-113 to SubRon A.
RO-113 will report to point NO-YA-YA 00(1°-20' N, 148°-40' E) by 2400 on the 10th.
RO-113 will leave TRUK and proceed to station.

7. RO-115 departed from PALAU.

8. ComSubRon 7 ordered RO-109 to make immediate preparations for a patrol against the enemy task force southwest of TRUK.

Note: Reports on enemy situation unavailable since that time; alert of 0830 on the 7th cancelled.

- 7 June:
1. Radio intelligence picked up following message in plain text.
"(02° - 20' N, 150° - 28' E) At 2000 enemy submarine sighted. Did not attack."
 2. ComAdvanceForce raised his admiral's flag at SAIPAN.
 3. I-185 departed from SASEBO for KURE.

ENCLOSURE (A), continued

4. RO-41, RO-111, and RO-117 arrived at stations.

5. Combined Fleet DesOpOrd No. 124 (T.O.O. 09 2123):

According to today's reconnaissance, the enemy task force in MAJURO has already begun to sortie. The Advanced Force will quickly carry out a strict reconnaissance, as well as patrol the Marshall area as quickly as possible according to schedule.

6. I-41 left patrol sector (5) and proceeded to sector(3).

7. RO-112 arrived TRUK.

8. RO-41 proceeded to patrol sector (11).

9. RO-41 discovered a convoy west of JALUIT but had no chance to attack it.

8 June: 1. At 1340, 4 battleships, 4 cruisers, and 8 destroyers were at YU-ME-TO 55 (0° - 10' S, 137° - 30' E)

2. AdvExpForce DesOpOrd No. 139 (T.O.O. 081710):

I-41 and I-53 detached from command of SubRon 7 at 0000 on the 9th.

3. I-185 arrived at KURE.

4. RO-104 ordered to return to TRUK.

5. RO-115 commenced search for survivors of crashed plane.

6. ComSubDiv 22 transferred to I-185.

9 June: 1. Enemy task force which was at MAJURO is making a sortie.

2. ComAdvForce, finding that the "NA" line of deployment and "D" patrol sector was known to the enemy, issued orders as follows:

a. Com SubRon 7 for the present cancel stations along the "NA" line of deployment and station submarines in the (6) & (7) patrol sectors. (One or two submarines in each patrol sector.)

b. I-41, I-53, and RO-41 will patrol in (3), (9), and (11) patrol sectors respectively, and I-184 will patrol (10) sector after making the transport run to MILLE.

10 June: 1. Advance Force (EB) DesOpOrd No. 141 (T.O.O. 100216):

a. According to reconnaissance on the 9th, the enemy's task force in MAJURO has already rallied for attack and its movements have not been observed. Every posted submarine shall maintain a strict patrol and promptly report any information on the enemy.

b. The commander of SubRon 7, (755B) on receiving news of the enemy, shall lie in wait for them in force.

ENCLOSURE (A), continued

- c. I-10-42 and RO-44, shall cease as soon as possible reconnaissance already ordered and I-38, reconnaissance of KWAJALEIN, and all carry out reconnaissance of MAJURO on 15 June.
2. SubRon 7 DesOpOrd No. 19 (T.O.O. 100533):
- a. RO-113, RO-117, and RO-11 proceed according to foregoing orders (Advance Force (EB) DesOpOrd No. 141) from the north pursuant to line of deployment "F" and "G".
3. Advance Force (EB) DesOpOrd No. 142 (T.O.O. 101230):
- a. I-6, as soon as it can prepare, will leave YOKOSUKA and proceed to SAIPAN.
4. I-85 (with ComSubDiv 2 (255g) aboard) will leave KURE for WEWAK.
5. I-5 will engage in ambush attack on enemy task force in vicinity of TRUK (60 to 200 mi, south of TRUK).
6. RO-43 and RO-36 arrived at SAIPAN.
7. RO-44 will reconnoiter BROWN.
8. RO-113 start for "F" - "G" deployment.
9. RO-115 will abandon search for missing airmen and seek intelligence of the enemy in waters north of New Guinea.
10. From ComSubRon 7 to SubRon 7 Submarines (T.O.O. 100648):
- a. RO-109 and RO-112 will carry out joint reconnaissance of enemy during their present patrol.
- (1) RO-109
About 20 bomb explosions in northeast sector of deployment area about 1000 on 24th.
At 2022 at position NO-NU-V 31, sound of plane motor. On 29th at 1414, at position NO-MU-MU 24, flight of 2 medium bombers. On 3rd, at 0903, at position NO-MO-TSU 19, 1 sea plane.
- (2) RO-112
On 24th about 1050, around 30 bomb explosions at distance southwest of its station.
- b. Enemy night planes are believed to have been active at 2200 or 2300 and 0300 in the "NA" deployment line area.
- c. Since reception of radio waves used by enemy planes is very strong, be vigilant for intelligence of the movements of the enemy.
- (1) For North of Australia Air Army network - 7420 - 4275 - 6050 (Telephone)
- (2) Southern Air Army network - 7785 - 3050.

ENCLOSURE (A), continued

(3) For attack - B34 network - 4575; B35 Network -- 7785.

11. RO-104, RO-105, RO-106, RO-108, RO-116 unreported.

11 June: 1. 1315 Saipan area attacked by planes of enemy task force. 1150 location of enemy task force.

2. EB DesOpOrd No. 143 (T.O.O. 111015):
Enemy task force probably will attack Marianas area.

RO-36 Position NO-RE-NA 60 (14°-20' N, 147°-40' E)
RO-43 Position NO-NE-KO 00 (13°-40' N, 147°-0' E)
RO-114 Position NO-MU-TO 00 (15°-0' N, 147°-20' E)

Maintain a mobile patrol over an area 40 miles north and south with reference to the respective starting points.

3. EB DesOpOrd No. 144 (T.O.O. 111700):
After repairing leak in oil line, I-5 will perform transport duty to PONAPE and return to SAIPAN.

4. EB DesOpOrd No. 145 (sent 111925):
RO-47 after completion of preparations will proceed to SAIPAN.

5. ComAdvanceForce (EB) to RO-114, (T.O.O. 112000): Today an enemy task force attacked the MARIANAS and the general situation is still confused. Every submarine will prepare for attack by the enemy tomorrow and if it encounters the enemy tonight, make report of any intelligence concerning the enemy.

6. RO-43 and RO-36 departing from SAIPAN, RO-114 enroute from KURE to SAIPAN take positions to ambush the enemy task force.

12 June: 1. Position of enemy task force

1st group - 35°. 100 miles from TINIAN (0500)
2nd group - (3CV, 1BB) 50°, 186 miles from GUAM (0550)
3rd group - (5CV, 6 DD)

2. Result of reconnaissance of Seeadler Harbor, Admiralty Islands revealed 4 CV, 2 KCV, 10 BB, 25 CV-CL, 10 DD, and 90 transports.

3. Result of reconnaissance by plane from I-10 (plane destroyed and abandoned) off MAJURO revealed one transport a number of small ships, and numerous signs of activity.

4. Advance Force (EB) DesOpOrd No. 146 (T.O.O. 121900) to RO-36, RO-43, and RO-114:

The enemy task force, in addition to other attacks on the morning of the 13th, will probably shell important positions in the Saipan area.

RO-36 at position NO-FU-NA 00 (14°-20' N, 146°-40' E)
RO-43 at position MI-MU-CHI 00 (15°-20' N, 147°-20' E)
RO-114 at position NI-HO-CHI 00 (15°-20' N, 145°-20' E)

Maintain patrol and report intelligence of the enemy over an area 20 miles north and south of the respective starting points

ENCLOSURE (A), continued

and if opportunity arises, engage the enemy.

5. Advance Force (EB) DesOpOrd No. 147 (T.O.O. 121950):

- a. Date for reconnaissance of MAJURO by I-38 is changed to 18 to 20 June.
- b. RO-42 and RO-44 will return to SAIPAN after completion of reconnaissance.

6. SubRon 7 DesOpOrd No. 20 (T.O.O. 120837):

RO-113, RO-117, RO-111 are assigned to patrol sectors "V", "F" and "G".

7. SubRon 7 DesOpOrd No. 21 (T.O.O. 121814):

- a. Enemy task force will probably attack TRUK on morning of 13th.
- b. RO-112, for sector 60° from TRUK, and RO-109, for 60° to 110° sector (from TRUK), shall each within area of from 60 to 300 miles from TRUK take opportune action and attack the enemy.
- c. Operations area for I-5 shall be south of the foregoing.

Note:

ComSubRon 7 is of the opinion that the enemy task force which attacked SAIPAN will probably attack TRUK on its way back. In spite of the fact that RO-109 and RO-112 are undergoing repairs after long operations, they must rally to attack at once.

I-5 departed, with original cargo aboard. (Entered port on way to PONAPE on transport duty because of leak in fuel-oil tanks.).

- 8. RO-43 reached station.
- 9. I-184 completed unloading at MILI successfully.
- 10. RO-41 reached station.
- 11. RO-109 and RO-112 left TRUK for patrol sectors.
- 12. RO-113 reached "F" - "G" patrol sector. Leaving this sector, it headed for "V" patrol sector.
- 13. RO-114 arrived at Saipan area station. (Verified by message sent at 2100 on 11th.)
- 14. RO-117 reached "F" patrol sector (position U-MI-CHI 38 (0°-0', 153°-40' E)).
- 15. RO-36 observed what appeared to be several white parachute flares. Position NO-NE-TO 34 (14°-45' N, 147°-0' E). (Mes- sent at 0245 on 12th)
- 16. I-5 arrived at TRUK to repair leakage in storage batteries.

ENCLOSURE (A), continued

Departed from TRUK same day seeking intelligence of the enemy.

13 June: 1. The enemy task force has begun to shell SAIPAN and TINIAN and five destroyers are sweeping mines off Saipan coast.

2. Combined Fleet DesOpOrd No. 146 (sent 131727):

Prepare for decisive battle Operation "A".

3. Combined Fleet DesOpOrd No. 150 (T.O.O. 131835):

Commander Advance Force (EB) will be in wait for enemy forces on the move in the waters north of the eastern CAROLINES with all available submarines (except those on transport duty) stationed between the MARSHALLS and the area south of the CAROLINES.

4. Advance Force (EB) DesOpOrd No. 148 (T.O.O. 131042):

ComSubRon 7 will station east of SAIPAN, all available strength (not already disposed). RO-36, RO-114 and RO-43 will attack the enemy forces from the following positions:

RO-36 east of north-south line through Saipan lighthouse.

RO-114 west of above line and north of line 270° from Saipan lighthouse.

RO-43 south of above line.

5. From ComSubRon 7 to Commander Combined Fleet and Commander 6th Fleet (T.O.O. 131621)

Subject: Advance Force (SENKEM BUTAI) Despatch No. 131042 (TN: Date time group)

a. This squadron has no submarines available to station east of SAIPAN.

b. RO-109 and RO-112 have rallied to attack in waters of eastern Truk group, each with one engine still in need of overhauling.

c. RO-104, RO-105, RO-106, RO-108 and RO-116 are still on duty on "NA" line of deployment, there is no communication with them, and they have not yet returned.

6. I-41 arrived at "C" patrol sector.

7. I-184 successfully completed unloading at MILI.

8. I-5 arrived at TRUK.

9. RO-36 observed white light (position NI-NE-CHI 28 (15°-10' N, 147°-15' E)). Discovered what seemed to be shadows of 2 warships (position NI-NE-CHI 47 (15°-0' N, 147°-13' E)).

10. RO-43 dispatched to 155°, 30 miles south of coast of SAIPAN.

11. RO-44 reconnoitered BROWN while submerged.

12. RO-113 arrived at "V" patrol sector.

ENCLOSURE (A), continued

13. Combined Fleet DesOpOrd No. 147 (sent 131733):

Cease temporarily KON Operations.

14. Task force left TAWI-TAWI.

15. Commander of Task Force to Every Commander of Force and to Combined Fleet (sent 130125). Task Force DesOpOrd No. 19: Conduct of task force operations in preparation for decisive battle under Operation "A" will be as follows:

- a. 14th - reached GUIMARAS and anchor.
15th - leave for battle.
16th - at 1800 "E" point (12°-0' N, 131°-0' E).
After completing loading of supplies by evening of 17th, decisive battle is scheduled for the 19th.
- b. ComBatDiv 1 will take command of BatDiv 1 (IS) CruDiv(5s) DesRon 2 (25d) (less one unit), DesDiv 4 (4dg) (less one unit), and ASAGUMO and proceed in advance to point "A" (10°-40' N, 130°-0' E) and early on the 16th join the 1st Supply Force and take on supplies.

- 14 June:
1. SubRon 7 DesOpOrd No. 22 (T.O.O. 140647):
RO-111, RO-117, RO-113, RO-115 proceed northward rapidly.
 2. Advance Force (TN:EB) DesOpOrd No. 150 (T.O.O. 142250):
I-10, I-38, I-84, RO-41, RO-42, RO-44 proceed at full speed to east side of GUAM. I-41, I-53, and remaining strength of SubRon 7 proceed at full speed to west side of SAIPAN. SubRon 7 will carry out the foregoing dispositions on 17 June, at a time not yet ordered.

(Note:) Communications of ComAdvForce, which is under enemy fire and bombing in the Saipan area, are not good.
 3. I-5, postponing Ponape transport run (landing material temporarily), ordered to leave TRUK on 15th and undertake reconnaissance of enemy situation east of SAIPAN (SubRon 7 Top Secret Despatch 141240).
 4. Order for R-47 to go to SAIPAN was error in transmission.
 5. RO-45 attempts to proceed to attack in Saipan area, but, because of accident to steering compass, mistakes course.
 6. RO-113, RO-115 begin to proceed northward. (Note:) It is being ascertained whether RO-111 and RO-117 had not already been sunk by enemy attacks.
 7. I-185 transport cargo washed overboard by heavy weather.
 8. Task Force arrived at GIMANISU and refuelled.
(Note:) Imperial Headquarters Despatch:
A strong enemy task force carried out air attacks on our bases on SAIPAN, TINIAN, and GUAM, from the afternoon of 11 June to the morning of the 13th. Our forces there, sank one enemy warship and shot down over 121 enemy planes, while losing 3 planes.

ENCLOSURE (A), continued

- 15 June:
1. Enemy invasion force (strength about 2 divisions) began landings on SAIPAN near Cape SUSUBE. Enemy task force carried out air strikes on CHICHI JIMA.
 2. ComAdvForce Directive (T.O.O. 150715):

This is the crucial time when the decisive battle which is imminent will directly determine victory or defeat for the Empire. We must work for the preservation of the Empire, displaying the full strength of our submarines, which will without fail when they attack, with all hands sacrificing themselves boldly.
 3. Combined Fleet DesOpOrd No. 154 (T.O.O. 150717):
 - a. The enemy began landings in the Saipan-Tinian area with a strong force on the morning of the 15th.
 - b. The Combined Fleet will attack and wipe out the enemy task force attacking the Marianas area and will then annihilate the enemy invasion forces.
 - c. Execute Decisive Battle of Plan "A".
 4. CinC Combined Fleet Directive (T.O.O. 150800):

The fate of the Empire hangs on this one battle. Each man will do his utmost.
 5. SubRon 7 DesOpOrd No. 23 (T.O.O. 150900):

SubRon 1 (in Marshalls area) and SubRon 7 will proceed rapidly towards SAIPAN, sweeping for mines and searching for the enemy and will rendezvous. Dispositions at SAIPAN will be ordered later.

(Note:) ComSubRon 7, judging that in view of the situation ashore at SAIPAN, communications of ComAdvForce were unreliable, decided to order the combination of SubRon 1 and SubRon 7.

Order 150830 was received, on the afternoon of the 16th, he sent out SubRon 7 DesOpOrd No. 24.
 6. Combined Fleet DesOpOrd No. 161 (T.O.O. 151923):

I-36 will make preparations and sortie from Japan for TRUK with full load of submarine fuel, expendable supplies, torpedoes, etc. (Rest Omitted)
 7. ComAdvForce to AdvForce (T.O.O. 150830):

SubRon 1 and SubRon 7 are placed under command of ComSubRon 7.
 8. I-41 and I-53 will leave their patrol areas and proceed to south side of GUAM.
 9. I-185, having had all its cargo which was carried on the upper deck, washed overboard by a storm on the 14th, learned the situation, abandoned the Wewak transport run, and proceeded to the west side of SAIPAN.
 10. I-5 left TRUK for the east side of SAIPAN.
 11. I-6 left YOKOSUKA.

RESTRICTED

ENCLOSURE (A), continued

12. RO-41 proceeded to east side of GUAM.
13. RO-115 proceeded to vicinity of SAIPAN.
14. RO-109 left its patrol sector and headed for Saipan area.
15. 5th Base Air Force began attacks.
16. Our task force sortied from GIMARASU.
17. Chief-of-Staff, Combined Fleet to All (Ship and Unit) Commanding Officers, Combined Fleet (T.O.O. 150932):

In concert with opening the Second Front in Europe, the enemy is beginning a major offensive against Japan on all fronts, in addition to attacking the key Mariana Islands.

- a. Air reconnaissance reveals that a powerful invasion force is in the Admiralties, presumably for an attack on Truk (TN: ?) area or Carolines area.
- b. In view of communications intelligence and the pre-dawn attack on the 14th on Matsuwa To Airfield, invasion of the Kuriles area is likely. It is not unlikely that a task force may begin operations in the Indian Ocean area.

In addition to the foregoing it is extremely likely that the task force supporting the Marianas invasion is planning air attacks on the Ito Jima, Yap, and Palau areas. Therefore, all these areas must maintain a strict alert.

16 June: 1. Collated Intelligence of Enemy.

- a. The enemy invasion forces are continuing to land units in the rear for reinforcements.
 - b. An enemy force, with a nucleus of carriers or battleships, is active west and east of TINIAN and north and northwest of GUAM.
 - c. In addition to the foregoing:
Morning of 15th, "A" and "B" Groups (TN: Planes?) at position NO-YA-NA 55 (14°-10' N, 149°-30' E)
Afternoon of 15th, "A" Group at position NO-YA-KO 55 (13°-30' N, 148°-50' E)
(TN: position UNANA 55 (14°-10' N, 150°-50' E) is also given without designation of unit there.)
 - d. Enemy task force made air strike on IO JIMA.
2. Chief-of-Staff Combined Fleet to all Ship and Unit Commanders, Combined Fleet (T.O.O. 162220):

Strength and activity of enemy task forces attacking MARIANAS are evaluated as follows:

- a. First-line carriers are the nucleus of the attacking force. The force supporting the landings, which consists of CV's, CVE's, BB's, CA's, CL's, DD's, etc., plus the landing

ENCLOSURE (A), continued

forces, seem to include most of the U.S. Navy's first-line carriers and battleships.

- b. The task force is composed of four groups, each with a nucleus of 2 CV's (but one with 1 CV), supported by 3 CA's or CL's. On the 11th, 12th, and 13th, three groups carried out air attacks on SAIPAN, TINIAN, and GUAM, while the other striking force, about 300 miles east of SAIPAN, probably protected the landing forces and sent up replacements. After the 15th, one group remained near SAIPAN and GUAM, while one or two groups carried out the air attacks on IO JIMA and CHICHI JIMA. The other one or two groups stood by as reserves or prepared for our task force.
- c. On the 13th, the support force for the landing appeared around SAIPAN. It shelled SAIPAN the following day and GUAM on the 16th. This force appears to be capable of supporting a landing operation, as it includes a fairly large number of CVE's. Part of the battleships which were in the task force until the 12th, have been added to it.
- d. The strength of one division will land on SAIPAN, thereafter forces will probably arrive from the Marshalls area (none from the ADMIRALTIES) and will probably land on GUAM around the 17th.
- e. Be prepared for a possible neutralizing of YAP or PALAU around the 18th, as the enemy task force has assembled, knowing the movements of our striking force.

3. SubRon 7 DesOpOrd No. 24 (T.O.O. 161719):

a. This flag assumes command of SubRon 1 and SubRon 7.

b. Distribution of strength:

- (1) "A" Sub Force (SubDiv 15): I-38, I-10, I-84, I-53, I-6.
- (2) "B" Sub Force (ComSubDiv 34): RO-42, RO-44, RO-41, RO-47.
- (3) "C" Sub Force (ComSubDiv): I-185, I-5, I-41.
- (4) "D" Sub Force (directing attd): SubRon 7, RO-36, RO-43.

c. Dispositions while waiting to attack (movements during patrol will be about half the distance to the boat on patrol areas):

- (1) "A" Sub Force: "C" deployment line
- (2) "B" Sub Force: "D" deployment line
- (3) "C" Sub Force: "E" deployment line
- (4) "D" Sub Force: patrol Saipan area

- (a) RO-113: Position NNOMUKU 17 (13°-50'N, 147°-25'E)
- (b) RO-117: Position NOFUYU 42 (12°-50'N, 146°-50'E)
- (c) RO-111: Position NONISA 41 (12°-10'N, 146°-10'E)
- (d) RO-112: Position NONITO 43 (14°-50'N, 146°-20'E)
- (e) RO-109: Position NOKIKU 41 (13°-50'N, 146°-10'E)
- (f) RO-115: Position MOTSUSU 38 (13°-0'N, 145°-25'E)

ENCLOSURE (A), continued

- (g) RO-36: Position NITSUNO 47 (15°-40'N, 145°-30'E)
(h) RO-114: Position KOTEKU 00 (14°-0'N, 144°-40'E)

d. Each submarine, in view of possible changes in the on-coming battle, will take special care to distinguish friends and enemies. Do not cling to the ready line during the decisive battle. The vital consideration is to destroy the enemy. Display the true value of the sub force by preceding the others in attacking if the opportunity offers.

(Note:) Activities and positions of submarines as known to ComSubRon 7 at time of issuing this order:

(1) "A" Sub Force:

I-10 had left its station (south of MALOLAEP 70° line) and was proceeding to eastern SAIPAN, sweeping mines, scouting and attacking the enemy.

I-38 had left its station (north of MALOLAEP 70° line)

I-53 had left its station (K) point.

(2) "B" Sub Force:

RO-47 had left KURE on the 14th for western SAIPAN to attack.

RO-42 had left its station (100° area northeast of KWAJALEIN) and was heading for eastern SAIPAN sweeping mines, and attacking enemy ships.

RO-44 had left its station (100° area northeast of ENIWETOK).

RO-41 had left its station (M).

RO-43 at its station (southwest of SAIPAN) attempting to intercept the enemy task force.

(3) "C" Sub Force:

I-6 had left YOKOSUKA on the 15th and was heading for western SAIPAN to attack.

I-185 had passed through position NIUSU 31 (28°-10' N, 149°-20' E) at 2200 on the 15th to western SAIPAN to attack.

I-184 had left its station (L), heading for eastern SAIPAN, sweeping mines, scouting, and attacking.

I-5 on station (position NOTEMA 00 (12°-0' N, 144°-40' E) to intercept task force.

I-41 had left its station (C) for southern SAIPAN to sweep mines, scout, and attack.

ENCLOSURE (A), continued

(4) "D" Sub Force:

RO-112 on station (TRUK 60°-60'200) (TN: unintelligible) to diversion in Truk area.

RO-109 diversion in Truk area on station (TRUK 60°, 110° - 60', 200')

RO-114 on station (northwestern SAIPAN) to intercept the enemy task force.

RO-113 had left its station (P) and was proceeding to southern SAIPAN to sweep mines, scout, and attack.

RO-117 had left its station (F) and heading for southern SAIPAN to sweep mines, scout, and attack.

RO-111 had left its station (G)

RO-115 had passed position NO-NL-TSU 25 at 0000, 16 June and was proceeding (4°-35'N, 146°-15'E) and was proceeding to southern SAIPAN to attack.

RO-36 on station (eastern SAIPAN) to intercept the enemy task force.

4. Combined Fleet DesOpOrd No. 166 (T.O.O. 161825):

ComSubRon 7 will assign submarines of the Advance Force at the following stations to scout and raid the enemy:

- a. About half of the total strength on "X" deployment line (from position HORIU 00 to position NOMOMI 00), and "Y" deployment line (position USUNA 00 to position URIYO 00).
- b. Most of the remaining strength will be placed in the Saipan-Guam area.
- c. The rest will be placed on "Z" deployment line (from position USOSU 00 to position USHIYO 00)

Note: Position HORIU 00 (15°-40'N, 150°-20'E)
 Position NOMOMI 00 (11°-20'N, 149°-0'E)
 Position USUNA 00 (14°-20'N, 151°-40'E)
 Position URIYO 00 (11°-0'N, 150°-20'E)
 Position USOSU 00 (13°-20'N, 157°-40'E)
 Position USHIYO 00 (11°-0'N, 157°-0'E)

5. CinC Combined Fleet to Advance Force (T.O.O. 161315):

Submarines active in the Marianas area will not enter the zone north of the line between SAIPAN and ULITHI and west of 145°E long, from 1800, 18 June, until otherwise ordered.

(Note:) This order was issued at the request of Com Central Pacific Area Fleet and Com 1st Mobile Fleet.

ENCLOSURE (A), continued

- a. I-185's run to WEWAK is postponed.
- 6. Combined Fleet DesOpOrd (T.O.O. 16132):
 - a. ComSubRon 7 will have the above named submarine take part in his operations until 25 June, then send it back to PALAU where it will once again serve as transport to WEWAK.

7. SubRon 7 DesOpOrd No. 25 (T.O.O. 162317):

SubRon 7 DesOpOrd No. 24 is revised as follows:

- a. Distribution of strength:
 - I-184 and I-6 detached from "A" SubForce and attached to "C" SubForce.
 - RO-43 detached from "D" SubForce and added to "B" SubForce.
- b. Stations:
 - I-10, I-38 and I-53 from "A" SubForce at north of "Z" deployment line. RO-47, RO-42, RO-41 and RO-43 from "B" SubForce, at north of "Y" deployment line. I-6, I-185, I-184, I-5, and I-41, from "C" SubForce, at north of "X" deployment line.

Note: ComSubRon 7 upon receiving Combined Fleet DesOpOrd No. 166 immediately after issuing SubRon 7 DesOpOrd No. 24, made a revision by issuing SubRon 7 DesOpOrd No. 25

- 8. At 2144, RO-43 planned to enter the Saipan anchorage from the west on the surface when an enemy destroyer fired at it from the dark. After submerging, it was attacked until the 19th at 1350. A total of 180 depth charges were counted.
- 9. RO-115 head for its new patrol area, position NO TSU SU 38 (13°-0'N, 145°-25' E).
- 10. One of our submarines (probably RO-114) attacked and sank an IOWA class BB, 25 km off the coastline of GUAM (observed by Commander Guard Unit 54th from land).
 - Note: Commander 54th Guard Unit to Commander of "A" Tactical Force (T.O.O. 161452).

(Note:) Imperial Headquarters announcement:

On the morning of the 15th the enemy invading the MARIANAS, tried twice to land on SAIPAN but was repulsed each time at the water's edge. At noon of the same day he tried for the third time. A fierce battle is taking place.

- 11. The enemy task force made air assaults on CHICHI JIMA, IO JIMA, and OGASAWARA-GUNTO, on the afternoon of the 15th. More than 17 enemy planes were shot down in that sector. Our losses were extremely light.

17 June: 1. CinC Combined Fleet to Combined Fleet (T.O.O. 172129):

ENCLOSURE (A), continued

The following message is transmitted through the Navy Chief-of-Staff, Imperial Headquarters:

Since this imminent battle will affect greatly the fate of the empire, I do hope to encourage our task force to attain a result as famous as the battle in the Japan Sea (TN: Russo-Jap War).

2. Towards evening, our Base Air Force in a strong strike, destroyed and set fire to three or four enemy carriers in the Saipan area.
3. At SAIPAN, four enemy flying boats landed on the water. Our fighters immediately went to attack them but the enemy put up a smoke screen to conceal the planes.
4. "KA" operation (a special operation expected to be carried out in middle of July) rescinded.
5. ComSubRon 7 to Advance Force (T.O.O. 100624):
 - a. Each submarine will report clearly its station and the time of arrival there.
 - b. Wait for signal "B" over the radio on the 18th at 1800 and thereafter. The flagship will broadcast 3 SENTSU during the day (hourly) and when necessary, at night (1600 to 0400); summarized broadcasts given at 1800, 2200, 2300 with wave-lengths of 7165 and 14330 and others, wave lengths same as usual.
6. SubRon 7 DesOpOrd No. 26 (T.O.O. 171634):
 - a. Enemy fleet appearing within observation range near SAIPAN, ROTA, and GUAM.
 - b. "D" SubRon will attack the enemy repeatedly.

Take following stations:

- (1) 18th and 19th: SAIPAN - TINIAN, RO-36, RO-112, RO-114; GUAM, RO-115.
 - (2) After 20th: SAIPAN-TINIAN, RO-113, RO-109, RO-117; GUAM, RO-111.
 - (3) All boats will circle the islands keeping them on the port hand. When they exhaust their torpedoes they will proceed to patrol duty in other areas (to be ordered subsequently).
7. SubRon 7 DesOpOrd No. 27 (T.O.O. 172116):
 - a. Saipan Area Patrols
Base point: East tip of ROTA. Divide sectors as follows: within radii of 100' (TN: minutes?) and 200', divide every 30°, starting from 0°. Sectors will be designated in "I, RO, HA" (TN: Japanese "A,B,C") order, starting in the inner circle and proceeding counter-clockwise, as far as

ENCLOSURE (A), continued

"U" (TM: English equivalent "X").

- b. SubForce "D" will, as it exhausts its torpedoes, proceed to the following patrol sectors for reconnaissance of the enemy situation: RO-36 to Sector "WA" ("M"), RO-114 to sector "KA" ("N"), RO-112 to sector "TE" ("T").
8. RO-115 commenced attacks on the enemy in the vicinity of GUAM.
9. RO-113 was bombed by an enemy medium bomber at position UNAMI 36.
10. I-41 headed for line of deployment "X".
11. Friendly planes, using Guam airfields at night, carried out dusk and dawn attacks with fair success.

- 18 June:
1. ComSubRon 7 (SSB) to Advance Force (T.O.O. 181723):
 - a. I-6 and RO-57 will take a short cut and assume stations immediately.
 - b. Submarines from the Marshalls Area will speed their arrival at stations.
 2. RO-112 commenced a search for the enemy to attack in Saipan area.
 3. RO-115, in accordance with enemy situation estimate, went north of GUAM (OMIYA JIMA) to meet the enemy.
 4. About 1800, sank one enemy carrier about 15 kilometers from SAIPAN (acknowledged by telegram 6th Fleet Staff ashore on SAIPAN ? July 1745)
 5. 1500 our striking force air search planes discovered a large force containing enemy carriers.
 6. ComSubRon 7 (SSB) to Advance Force (T.O.O. 181718):

Of the submarines which are not approaching the Saipan area, those ships which have not yet reported arrival at stations shall report immediately.

- 19 June:
1. 1000 position of enemy striking force (point of origin, GUAM):
 - a. Group 1, 323°, 150' - 3 CV's, 2 XCV's; 1 BB.
 - b. Group 2, 282°, 95' - 4 CV's; 4 BB's.
 - c. Group 3, 226°, 80' - 3 CV's; 6 BB's; 9 CA's or CL's.
 - d. Group 4, 320°, 47' - 8 XCV's; 9 BB's or CA's.
 - e. Group 5, 45°, 100' - 3 XCV's.

Carrying out continuous air attacks against GUAM.

2. From ComSubRon 7 (SSB) (T.O.O. 0308):

I-53 assumed new position (south end of line of deployment "Z", USHI-YO 00) (Explanation) I-53 was so ordered because it had not yet known of the new line of deployment due to a breakdown

ENCLOSURE (A), continued

in communications.

3. Combined Fleet DesOpOrd No. 182 (T.O.O. 190151):

- a. Position of enemy striking force evening of 18th, NO-KARI 55 (14°-30'N, 141°-50'E).
- b. SubRon "D" (SSB TEI) will immediately move to the following positions: Line of deployment "P" (from NO-SHI-YO 00 to NO-KI-YO 00). Starting from the east, the submarines will take their positions in the order of RO-112, RO-36, RO-114, RO-115. Line of deployment "Q" (from NO-KA-WA 00 to NO-TE-WA 00). Starting from the east, RO-113, RO-109, RO-117, RO-111 will assume their positions.

Note:

NO-SHI-YO 00	(11°-0'N, 142°-0'E)
NO-KI-YO 00	(11°-0'N, 145°-20'E)
NO-KA-WA 00	(10°-0'N, 151°-40'E)
NO-TE-WA 00	(10°-0'N, 144°-40'E)

4. The lines of deployment "P" and "Q" have been ordered for the following reasons:

- a. To cut off the fleeing enemy striking force after the successful operation of our striking force.
- b. To guard against flanking attacks on our striking force due to lack of knowledge of movement of enemy striking force in the ADMIRALTY ISLANDS.
- c. To supplement insufficient air power on TINIAN and PALAU.

5. SubRon "D" because of this order had to discontinue its maneuvers according to SubRon 7 DesOpOrd No. 26.

6. From ComSubRon 7 (SS) to CinC Combined Fleet; Commander 1st Mobile Fleet; etc. (T.O.O. 190613):

- a. Even though the SubRon moves as fast as possible on the surface toward the lines of deployment "P" and "Q", considering the communication power and maneuverability of small type submarines, only half (4) can be counted on to arrive by 1800 on the 20th.
- b. "X" and "Z" lines of deployment were formed, for the most part, by 201200. When "Y" line of deployment will be formed is unknown.

7. Combined Fleet DesOpOrd No. 185 (T.O.O. 192030):

SubRon "IG" will press home the attack between the areas MI-U-MU 00 (15°-40'N, 147°-20'E) and NO-NI-MU (12°-0'N, 146°-0'E).

8. The RO-115 has attacked and sunk a WASP class carrier west of ROTA. (Considered sunk according to radio intelligence.)

Explanation:

RO-115 to ComCombined Fleet; Com 1st Mobile Fleet; ComSub-

RESTRICTED

ENCLOSURE (A), continued

Ron 7, etc. (T.O.O. 192215)

- a. Enemy carriers and battleships engaged in launching and recovering ship-borne aircraft 50 miles west of ROTA from about 1200 to sundown of 19th.

Strength: 1st carrier group - 4 carriers (2 ENTERPRISE class; 2 converted cruiser class); 2nd carrier group - 3 carriers (2 WASP class; 1 converted cruiser class); Battleship group - 3 NORTH CAROLINA class; 2 IDAHO class; 3 cruisers; several destroyers.

- b. Omitted.

- c. At 1807 this ship attacked a SARATOGA class (carrier) with unknown results and although we were bombed and attacked with depth charges, damage was slight aside from inundation of the watertight compass.

9. The following submarines moved to their designated respective stations at time indicated:

RO-112	1400) to line of deployment "P"
RO-115	2325	

RO-109	0600	other submarines moved to their respective stations
RO-113	2015	

10. I-36 left KURE for TRUK on operational transport duties.
11. I-41 arrived line of deployment "X".
12. I-185 station, NO-CHI-KO 31 (13°-20'N, 149°-50'E) (presumed).
13. 0730 our striking force commenced attack on enemy striking force.

20 June: 1. Combined Fleet DesOpOrd No. 190 (T.O.O. 210215):

Ships of limited movement in all SubRons will return to TRUK. Others will proceed with utmost speed from their lines of deployment to the Saipan and Guam area.

2. Com Combined Fleet (T.O.O. 201205):

The sphere of movement of our submarines in the Marianas area, according to TOP SECRET dispatch No. 161315, will be unlimited from 23 June.

3. SubRon 7 DesOpOrd No. 23 (T.O.O. 202207):

I-10 underwent air search attack on way to SAIPAN. After arrival at SAIPAN it will go on special duty (special orders).

Explanation:

The special duty consists of evacuating the headquarters

ENCLOSURE (A), continued

of DesRon and 6th Fleet and others from SAIPAN.

4. RO-115 and RO-112 arrived at line of deployment "P".
5. RO-109 and RO-113 arrived at line of deployment "Q".
6. I-53 arrived at station on line of deployment "Z".
7. I-41 withdrew from line of deployment "X" and left for new line of deployment.
8. I-10 arrived at station on line of deployment "Z".
9. SubDiv 15 formed with I-26.
10. I-6 arrived at station (HO-RI-U 00) (presumed) (TOP SECRET No. 182045)

Explanation:

Imperial Headquarters Announcement:

- a. The enemy which attacked SAIPAN succeeded in occupying one portion of the island on the afternoon of 15 June. Since then, while they have strengthened their own positions, our garrison forces have continued attacks and inflicted heavy losses on them.
- b. The enemy force which appeared in the Marianas area is composed of a great number of CV's and BB's, and represents a concentration in that area of a large part of the P.O.A. fleet. Our air force has participated for several days in the attack on this task force.
- c. The known results of the operation from 12 June until today are as follows:

Sunk:	1 Battleship; 2 Cruisers; 1 destroyer; 1 submarine
Damaged:	4 or more Carriers; 2 battleships; 4 Cruisers; 6 transports; 1 unknown type.
Shot Down:	More than 300 planes.

We suffered considerable damage to our shipping and planes.

- 21 June:
1. According to an intercepted enemy message the enemy carrier BUNKER HILL has been sunk.
 2. Combined Fleet DesOpOrd No. 197 (T.O.O. 212238):

The Commander of SubRon 7 shall dispatch immediately one large type submarine, which is in the area to CUAM to transport as many air personnel as possible to the western part of the Inland Sea (Oita Air Base).
 3. RO-41 arrived at station.
 4. I-38 arrived on station at U-SHI-SA 29 (12°-10'N, 157°-20'E).
 5. From Chief-of-Staff 1st Air Fleet to Combined Fleet, Chief-of-

ENCLOSURE (A), continued

Staff 6th Fleet. (T.O.O. 210727) (Reference: Combined Fleet DesOpOrd No. 197):

I should like to have as many of the submarines as possible which are connected with this operation, despatched to the vicinity of Saipan harbor and the enemy transport areas to the east.

6. From Com Mobile Fleet to all commanders Mobile Fleet, Operation "A" (T.O.O. 211545 Mobile Fleet DesOpOrd No. 27):

- a. All units of this force shall enter the anchorage at NAKAGUSUKU WAN.
- b. The Diversion Attack Force shall be prepared to proceed to the Central and Southern Philippines.
- c. The diversion attack force shall be formed with FUSO (BB) and the 1st and 2nd Supply Forces.

22 June: 1. Estimate of situation in Saipan area.

- a. No. 1 air strip at SAIPAN is gradually being strengthened and six carrier-borne bombers have landed.
- b. According to an enemy dispatch, anti-sub patrol planes are in action around SAIPAN and are equipped with non-explosive rockets and anti-sub bombs.
- c. Five battleships, 25 cruisers and destroyers, and 25 transports are within a radius of 20 miles of SAIPAN.

2. SubRon 7 DesOpOrd No. 29 (T.O.O. 220155):

On the 24th (or 25th) the I-41 will arrive at Apra Harbor, GUAM, (2nd plan-Uma Takku Harbor; 3rd plan-Agana Harbor) and will evacuate about 100 air personnel for transport to Oita Air Group in accordance with Combined Fleet DesOpOrd No. 197 (T.O.O. 212238). Details of execution will follow later.

3. SubRon 7 DesOpOrd No. 30 (T.O.O. 221003):

- a. SubRon A ("KO") (plus I-6 and RO-47, less I-10) is under special orders in the Saipan patrol sector to attack the enemy.
- b. The remaining ships will proceed as follows:
 - (1) I-10 and I-41 shall proceed according to previous orders.
 - (2) SubRon "D" ("TEI") plus I-5, RO-42, and RO-44 shall proceed to TRUK.
 - (3) I-185 and I-184 shall proceed to PALAU for provisioning and repairs as directed by the commander. In addition, the I-184 shall be alerted and the I-185 shall perform operational transport.
 - (4) The RO-41 shall proceed to the western part of the Is-

ENCLOSURE (A), continued

land Sea, and, upon instructions from the Commander of TSUKUSHI MARU, will be provisioned and repaired.

- c. All ships shall make action reports and reports of amount of fuel on hand as soon as possible.

4. Combined Fleet DesOpOrd No. 200 (T.O.O. 221737):

ComSubRon 7 shall have I-26 transport special type provision tubes to SAIPAN.

5. SubRon 7 TOP SECRET Order (T.O.O. 221523):

I-45 is to proceed to SAIPAN as soon as preparations are completed.

6. SubRon 7 DesOpOrd No. 31 (T.O.O. 221650):

- a. The Saipan patrol area has been revised as follows:

With the southern tip of SAIPAN as the base point, the area between two circles, one with a radius of 100 nautical miles, and the other a radius of 200 nautical miles is to be divided into 12 parts, 30° each ("A"- "L"). Outside the larger circle 12 sectors are to be established ("M"- "W").

- b. SubRon "A" ("KO") is to attack the enemy in the following patrol sectors:

Patrol Sectors A-B-C, I-38; D-E-F, I-53; G-H-I, I-6; and J-K-L, RO-47.

7. SubRon 7 TOP SECRET Order (T.O.O. 222102):

I-53 is to return to TRUK and repair the Kingston valve of the negative-buoyancy tank.

8. RO-111, RO-113, RO-115, RO-109 discontinued patrol and proceeded toward TRUK.

9. RO-47 arrived at its station, position U-SU-CHI 00 (0°-20'N, 151°-40'E).

10. RO-41 left its station position and proceeded homeward.

23 June:

1. Enemy Situation Around SAIPAN.

- a. During the day, principally on the west coast of SAIPAN There were 5 battleships, 2 cruisers, 9 destroyers and a number of patrol ships, and while a group of transports were unloading their troops, they guarded them and shelled the shore, and on the east side two cruisers and a number of destroyers carried on a patrol and shelled the shore.

- b. There were 4 converted aircraft carriers and 6 destroyers on the east side of SAIPAN and they were bombing us every day, beginning early in the morning.

ENCLOSURE (A), continued

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ENCLOSURE (A), continued

- c. During the night, one heavy cruiser and one or two destroyers, on the east shore, set up flares all night long. The enemy ships' lookouts were comparatively relaxed and there was no change in movement throughout the night.
 - d. The enemy planes patrolled from 0500 to about 1730 but did not fly during the night; surface anti-submarine patrol unknown.
 - e. There were about 70 enemy carrier planes and bombers which bombed GUAM. Our land based units carried out an air attack on the enemy task force in the area of the same island.
2. RO-46 will sail from KURE to SAIPAN and will be attached to SubRon 1 (SubDiv 34) (Advance Force DesOpOrd No. 151 (T.O.O. 202300):
 3. I-10 received many enemy attacks.
 4. Imperial Headquarters Report:

On the 19th, in the area west of the MARIANAS a part of our Combined Fleet contacted an enemy task force, which consisted of three groups, and opened an attack. The battle continued until the next day (the 20th) and we sank one battleship and five aircraft carriers and shot down more than a hundred enemy planes during that time. However, we did not deal them a decisive blow. We lost one aircraft carrier, two fleet oilers and 50 planes.

24 June: 1. General Enemy Situation at SAIPAN:

There were 8 converted aircraft carriers and 50 destroyers within a radius of 30 miles east of SAIPAN; 1 battleship, 42 destroyers, 40 transports and 24 flying boats within a radius of 25 miles west of SAIPAN.

2. Enemy task force carried out air attack at IO JIMA.
3. Enemy planes continually attacking SAIPAN, TINIAN, ROTA, GUAM, PALAU, and TRUK.
4. The enemy on SAIPAN moved northward with their tanks under a furious barrage. We met their attack maintaining our lines on Mt. Tapotchau and in the greater part of the town GARAPAN.
5. Combined Fleet DesOpOrd No. 204 (T.O.O. 242018):
 - a. The I-41 will take on 106 passengers outside Apra Harbor.
 - b. RO-47 will enter TA-RU-WO patrol sector.
6. I-184, I-185, RO-111, RO-114, RO-117, RO-36, RO-42, and RO-44 were called but there was no answer.

25 June: 1. General Enemy Situation:

At 0500, NI-NI-CHI 32 (15°-10'N, 140°-10'E) 4 converted

ENCLOSURE (A), continued

aircraft carriers, 4 battleships; 0900 NO-RA-RI 46 (14°-30'N, 143°-15'E), 4 aircraft carriers 4 battleships, 7 cruisers; 1150, NI-NO-TE 19 (20°-10'N, 149°-10'E), task force, including 4 aircraft carriers.

2. SubRon 7 TOP SECRET Order No. 251547:

I-45 and I-26 after transporting small-type cannon and cargo tubes, respectively, will be ordered to their position off SAIPAN.

3. SubRon 7 TOP SECRET Order No. 25149:

I-54 and RO-48, after their sortie, will be ordered to their position in the Saipan interception patrol sector.

4. RO-112 and RO-115 arrived at TRUK.

5. RO-43 arrived at western part of Inland Sea, departed immediately for MAIZURU.

6. I-10 unsuccessful in evacuating Headquarters of ComDesRon 3 and of 6th Fleet from SAIPAN.

26 June: 1. General Enemy Condition:

There were 5 aircraft carriers and 5 destroyers about 35 miles east of southern tip of SAIPAN.

2. SubRon 7 DesOpOrd No. 32 (T.O.O. 260903):

I-45 will transport small-type cannon to TINIAN and I-26 will take cargo tubes to SAIPAN. Will notify later about landing point, etc.

3. Combined Fleet TOP SECRET Order No. 261209:

a. The submarines returning to their base in the Truk area, in preparing for their next operation, will carry out their organization according to the following policies:

(1) As long as there is no outbreak of urgent matter, avoid becoming engaged in military operations. (This applies particularly to Class 100 subs.) With this in mind, immediately make the possibility of an all-out attack about 15 August your aim and hasten your preparations.

(2) In case of an outbreak of urgent matters, make suitable plans for an emergency procedure so that, if you must, you may attack quickly.

b. Based on the above policy we would like to be notified of the possible time of each ship's anticipated sortie.

4. I-184, I-185, RO-36, RO-42, RO-44, RO-111, RO-117, RO-114 were called but did not answer.

5. I-10 unsuccessful in evacuating ComDesRon 3 and Headquarters

ENCLOSURE (A), continued

6th Fleet from SAIPAN.

6. RO-109 and RO-113 arrived at TRUK.
7. RO-43 arrived at MAIZURU.
8. RO-47 received one hit in an attack of ten carrier planes near AGRIGAN (?) Island.

27 June:

1. General Enemy Situation:

NI-NI-CHI 55 (15°-10'N, 146°-10'E): 5 aircraft carriers, 5 destroyers. 0700 Around ROTA - 10':3 cruisers, 6 destroyers shelling ROTA. 1100 Around GUAM - 10':2 battleships, 3 cruisers, 6 destroyers shelled airfield No. 1.

2. SubRon 7 DesOpOrd No. 33 (T.O.O. 271157):

I-45 after transporting small type cannon to TINIAN will take about 100 flight personnel back to Japan.

3. SubRon 7 DesOpOrd No. 34 (T.O.O. 271338):

I-38 (Reserve I-6) according to the following, will take on board ComDesRon 3 and Hqs. of 6th Fleet (about 60 men).

- a. The point on SAIPAN will be HANACHIRUZAN on the east coast.
- b. I-38, 28th (Reserve 29th); I-6, 30th (Reserve 1st).
- c. Subs, at an appropriate time during the night, will surface near the shore and throw out a rope and establish contact with a raft from the shore. Those ashore will be alerted all night.
- d. Omitted.
- e. Omitted.

4. SubRon 7 DesOpOrd No. 35 (T.O.O. 272243):

- a. RO-46 will join Sub Group "A".
- b. RO-46 patrol sector: I-RO-HA WA-KA-YO

5. From ComSubRon 7 to I-26, I-54, I-55, and RO-48 (T.O.O. 272259):

- a. With the enemy patrol ships becoming more vigilant around SAIPAN and with land based anti-submarine planes recently appearing which carry magnetic detector radar with which they patrol, and because of the fact that they use depth charges, be careful of attacks around that area on dark nights when visibility is poor.
- b. While patrolling under water at times other than "up periscope" it is necessary to cruise at considerable depth.
- c. During the day, after the sun has risen and when visibi-

ENCLOSURE (A), continued

lity is not good, or at a suitable time before sunset, surface at a good distance from the enemy base; while maintaining a vigilant lookout you will recharge batteries.

d. I-26 will leave KURE for GUAM.

28 June: 1. General Enemy Situation:

0315 NO-NI-YU 16 (12°-05'N, 146°-05'E) convoy (more than 10 transports).
0900 2 medium aircraft carriers north of SAIPAN, 2 battleships, 71 GARAPAN.
1000 NO-CHI-RI 35 (14°-25'N, 149°-45'E). 6 battleships, 3 aircraft carriers 4 cruisers, 7 destroyers. Course North - Destroyers shelling TINIAN.

2. Combined Fleet OpOrd No. 212 (T.O.O. 280723):

SubRon 11 will have I-54 and I-26 take orders from SubRon 7 after 30 June.

3. 7th SubRon DesOpOrd No. 36 (T.O.O. 280443):

I-10 will join SubRon "A".
I-10 will engage in patrolling in the NI-HO-E sector and will try to attack the enemy.

4. I-45 left YOKOSUKA (for TINIAN).

29 June: 1. I-38 unsuccessful in evacuating ComDesRon 3 and Hq. of 6th Fleet.

Note: From ComSubDiv 15 (I-38) to SubRon 7 of 6th Fleet and others (T.O.O. 010012):

a. I-38 neutralized by the enemy on 28th June and unable to follow plan. On the 29th at 1800 we tried as best we could to proceed to the previously designated landing point, but met enemy patrol ships and planes. Because there was a reverse tide of about two knots northeast of SAIPAN, our ship could hardly move underwater. At 0000 on the 30th with our bearing 50°, 10 miles off the north tip of SAIPAN, it appeared completely impossible to carry out our plan before daybreak so we gave it up.

b. Immediately after that we were contacted by more than two enemy patrol ships and at 0200 we received seven depth charges. Although our damage was not severe, there was no doubt that we were leaving oil and air traces as we were chased all day. After being chased for 40 hours into the following day we found it very difficult to breathe.

c. With the enemy patrol thirty miles around SAIPAN being very regular it appeared extremely difficult to approach secretly.

d. Omitted.

30 June: 1. General Enemy Situation:

ENCLOSURE (A), continued

Patrol planes in SAIPAN area - PB's: 4 during day, 2 at night.

2. I-41 arrived KURE.
3. I-54 left KURE for YOKOSUKA.
4. RO-47 50 miles northwest of SAIPAN sighted DD (or small class cruiser), but could not attack.
5. I-6 unsuccessful in evacuating ComDesRon 3 and 6th Fleet.
Note: Imperial Headquarters Report.
 - a. Our Air Force on 24 June south of the BONINS contacted an enemy task force heading north and attacked them severely, sinking two aircraft carriers, two ships type unknown, and shot down more than 55 enemy planes. On our side 46 planes have yet to return.
 - b. Our air force came to the assistance of the MARIANAS Defense Force and together with intercepting and shooting down the enemy planes which were attacking all day, attacked the enemy bases on SAIPAN and their ships in the area. The battle results from the 29th to the 30th of June are as follows:

Sunk: 1 battleship, 2 cruisers, 2 destroyers, 2 transports.
 Damaged: 2 aircraft carriers, 2 destroyers, 5 transports.
 Shot down: 211 planes.

2 July: 1. General Enemy Situation:

1000 NO-NI-TO 55 (14°-50'N, 145°-10'E). 4 converted carriers, 6 destroyers heading south.
 1242 NO-KI-TO 55 (13°-30'N, 145°-10'E).
 1700 NO-SO-RI 55 (14°030'N, 142°-50'E). 3 aircraft carriers, 2 cruisers and a number of destroyers.
 2140 3 DDs Attacking Guam Airfield No. 1

Because of the valiant fighting of all our forces on SAIPAN there have been no major changes in our lines and the enemy has announced their losses to be about 10,000 men since the landing.

2. SubRon 7 DesOpOrd No. 37 (T.O.O. 22032):

- a. RO-48 to be added to SubRon "A" and RO-46 to be detached.
- b. I-38 will start operating in patrol sector I-RO-HA and RO-48 after the 7th will operate in sector NU-RU-WO and both will try to attack the enemy.
- c. I-10 and I-38 will attack the special class aircraft carriers operating near patrol sector I-RO-HA, and will then resume their original patrol as follows:
 - 3rd and 4th - I-10
 - 5th and 6th - I-38

ENCLOSURE (A), continued

- d. RO-46 will proceed to the western shore of the Inland Sea and carry on repair operations under the direction of the TRUKUSHI MARU.

3. Combined Fleet Circular (T.O.O. 021158):

Advance Expeditionary Force since the opening of Operation "A", under very difficult circumstances, for a long time has been engaged in patrolling and transport work. While engaged in this work they were attacked and fought off the enemy with good results and fulfilled their regular duties but many submarines were unable to report results and the fact that we have lost track of them before they could do so is indeed regrettable. In the near future the majority of the subs will return to Japan and therefore we will do our utmost in equipping and training them to do their utmost in their operations.

4. ComAdvance Force TOP SECRET Order No. 031815:

With the enemy patrolling all sectors vigilantly and the possibility of success being small, all submarines will give up their work connected with SAIPAN and concentrate on attacking the enemy.

5. Combined Fleet TOP SECRET Order No. 021528:

ComAdvance Force (ComSubRon 7) will carry out emergency preparations to prevent damage to submarines and carry out the following operation:

- a. The intercepting battle with the enemy fleet that is in the MARIANAS will be carried out mainly by the subs that are stationed there (including RO-48) and by medium type subs that are ready, and those presently stationed there which have completed their operation will return to Japan and be outfitted.
- b. The submarines (I-54 and I-55) that are engaged in special transport work in the MARIANAS will return to Japan when their duty is finished.
- c. All subs in the Truk area will return to Japan.
- d. Submarines anchored in Japan will immediately begin damage control measures.

6. I-53 arrived at TRUK.

7. I-55 arrived at YOKOSUKA.

8. RO-46 while about 60 miles northeast of SAIPAN at 2000 hours discovered at a considerable distance bearing 260° a great glow like the setting sun. Further at 2030 they saw a great pillar of red fire which they thought to be an explosion.

9. From RO-46 to ComSubRon 7 and ComAdvance Force (T.O.O. 20830): Notes taken while patrolling:

- a. In the area with a radius of 30 miles of SAIPAN patrol-

ENCLOSURE (A), continued

ling was very vigilant. During the day from 5 to 6 planes appeared in the sky. Large type planes generally took off at 0500 and 1700 and the former made it a practice to return at 1900. The altitude of the patrol planes was from 50 meters to 300 meters.

b. Omitted.

c. Omitted.

3 July: 1. General Enemy Situation:

1150 2-PBY patrol planes appeared.
1130 NI-NU-WO 39 (20°-20'N, 148°-10'E). Task force including carriers.
1235 four aircraft carriers, 5 destroyers.

2. I-54 arrived YOKOSUKA.

3. I-46 departed station.

4 July:

1. 1715 Tinian area 5 cruisers, 8 destroyers, 25 patrol boats. All day long NO-NI-TO 55 (14°-50'N, 146°-10'E). Four converted carriers, 6 submarines.
Aslito Airfield - 1 large plane, 73 small. Day and night engaged in enlarging airfield. Destroyer shelling west coast of GUAM. Total of 176 attack planes on the 4th.

2. SubRon 7 DesOpOrd No. 38 (T.O.O. 040507):

a. I-5 will leave TRUK on the 5th and return to YOKOSUKA via PONAPE and TRUK.

b. I-36 will leave TRUK on the 5th and take the following materials and personnel (rest of paragraph is omitted).

3. RO-41 arrived and departed Western Inland Sea.

Note: Imperial Headquarters Announcement.

Our forces on SAIPAN are presently engaged in battle with the superior enemy on a line running through GARAPAN, MT. TAPOTCHAU, and DONNI.

5 July:

1. General Battle Situation:

1100 Bearing 210°, 40 miles off SAIPAN: 1 cruiser, 3 subs.
1200 Twenty-seven pursuit planes and bombers attacked No. 1 Airfield on GUAM.
1150 to 1230 Pursuit planes and bombers attacked No. 1 Airfield on GUAM.

2. From Com6thFleet (T.O.O. 051800):

I will defend SAIPAN to the last and am very happy to have observed the excellent results obtained by the subs under my command. I shall lead the entire 6th Fleet personnel and mid-geet submarine crews stationed on this island in a "BANZAI" attack.

ENCLOSURE (A), continued

3. SubRon 7 DesOpOrd No. 39 (T.O.O. 050828):

- a. On the 7th at 0000 SubRon "A" will be deactivated and at that time I-38 will sail for the Western Inland Sea and I-10 will return to TRUK. I-47 will operate around SAIPAN within a radius of 200 miles until 0000 on the 8th and will attack any enemy ships that appear; then return to the Western Inland Sea area.
- b. I-54 and I-55, on completion of preparations, will leave Japan and take small type cannon to GUAM. Debarkation point will be given in a later order.
- c. SubDiv 51 will leave TRUK on the 6th and proceed to the Inland Sea to take over repair duties.

4. Combined Fleet DesOpOrd No. 230 (T.O.O. 050910):

I-26 will take cargo tubes to GUAM and the I-55 will land small type cannon on TINIAN.

5. SubRon 7 DesOpOrd No. 40 (T.O.O. 051637):

- a. I-26, I-45, I-54, and I-55 after making their respective rendezvous will each take on board 100 air personnel and return to Japan.

6. Chief of Staff 6th Fleet to ComSubRon 7 (T.O.O. 051745):

Results observed from Saipan shore are as follows: (time, distance, and position of target).

- a. 28 June at about 1800 about 15 kilometers off shore one aircraft carrier sunk.
- b. 30 June at about 2000 20 kilometers off shore a ship that appeared to be a carrier set afire and sunk.

7. RO-48 will leave KURE for its assigned operational area.

8. I-55 left YOKOSUKA.

9. I-36 left TRUK.

10. RO-41 left SASEBO.

Note: Imperial Headquarters Announcement.

The superior enemy, shelling and bombing with the aid of planes and ships, gradually advanced in tanks into our lines in the northeast part of the island. The battle lines became confused and fighting was severe. Our forces, both Army and Navy as a single unit, are fighting bravely in hand to hand battle.

6 July: 1. SubRon 7 DesOpOrd No. (T.O.O. 060659):

The I-45, after finishing the loading of small cannon and after transporting to DAVAO 100 of the headquarters of the 1st Air Fleet will return to Japan.

ENCLOSURE (A), continued

2. SubRon 7 DesOpOrd No. 42 (T.O.O. 061918):

- a. The I-38 will cancel its return to Japan which was set forth in SubRon 7 DesOpOrd No. 39, and will proceed along the south coast of SAIPAN, cruise to the north and wait. The I-45 after loading gun barrels will transport to DAVAO about 100 members of the Tinian garrison, it will return to Japan.
- c. The I-5 will sail for PONAPE and the RO-109, RO-112, RO-113 and RO-115 will leave TRUK and head for Japan.

Note. Report from Imperial Headquarters:

The enemy task force which penetrated the IWO JIMA Bonin group of islands was ambushed by our forces stationed there and they fled on the afternoon of 4 July. The enemy had 74 planes shot down or damaged; our side lost 30 planes and 5 ships.

7 July: Nothing out of routine.

8 July:

- 1. RO-46 arrived at KURE.

2. SubRon 7 DesOpOrd No. 43 (T.O.O. 80847):

- a. (Omission) The place of rendezvous for the I-45 will be changed to GUAM.
- b. The I-38 will cancel receiving of personnel at TINIAN and will return to Japan.

9 July:

1. SubRon 7 DesOpOrd No. 44 (T.O.O. 91428):

- a. The destination of the I-54 will be changed to TINIAN. The landing point, etc., will be given in later orders.
- b. The I-55 and I-54 after finishing loading of small cannon will quarter not over 150 passengers and will transport them to DAVAO.

2. The I-26 successfully made port at GUAM.

3. The I-5 successfully made port at PONAPE.

4. The RO-43 will withdraw from its assigned patrol area and proceed to the western part of the Inland Sea.

10 July:

The RO-48 will proceed to the rescue of a plane which has made an emergency landing near IWO JIMA.

11 July:

The I-5 landed at TRUK.

12 July:

- 1. Newly assigned Flag 6th Fleet was raised on the CHIKUSHI MARU.

2. Order of ComAdvance Force to the Advance Force (T.O.O. 121315):

After 0000, 13 July ComSubRon 7 will be relieved of command over SubRon.

ENCLOSURE (A), continued

3. Advance Force DesOpOrd No. 152 (T.O.O. 121035):

The Fleet of the Advance Force will take action as follows:

- a. SubRon 11 will carry out scheduled training and be completely equipped.
- b. SubRon 7 Headquarters (including all except a proper complement of the 85th Sub. Base Unit) after finishing important duties at TRUK will leave TRUK and join the 6th Fleet Headquarters in the western part of the Inland Sea.
- c. The I-10, I-53, and I-5 according to what is established by the Commander of SubRon 7 after finishing their present duties, will leave TRUK and will sail back to SASEBO and YOKOSUKA respectively.
- d. The I-26 will act as was established by SubRon 7 DesOpOrd No. 42.
- e. I-54 and I-55 will carry out duties assigned by SubRon 7 DesOpOrd No. 44.
- f. I-45 and I-38 will carry out duties assigned by SubRon 7 DesOpOrd No. 43.
- g. RO-48 will carry out assignments established by SubRon 7 DesOpOrd No. 45.

4. SubRon 7 DesOpOrd No. 45 (T.O.Q. 120653)

The RO-48 will attack the enemy which is taking opportune action about 200° from SAIPAN and after 2400 on the 19th will maneuver to place itself in the 150° area, south-east of TINIAN, and in addition, in case of an emergency, it will be designated to take aboard TINIAN personnel.

13 July: Advance Force DesOpOrd No. 153 (T.O.O. 131815).

ComSubRon 7 will command the I-53 until it leaves the Inland Sea.

14 July: 1. Advance Force DesOpOrd No. 155 (T.O.O. 152300) referring to combined Fleet DesOpOrd No. 249:

- a. The I-55 from on or about the 15th, until the 18th according to prearranged plan will be engaged in the work of evacuating those of TINIAN.
- b. The I-54 will await commands to act outside the area where the enemy is on guard.
- c. The I-26 and the I-45 will return to YOKOSUKA.

2. The ComSubRon 7 will turn over the flag to the I-53, and will leave TRUK for KURE.

16 July: 1. The I-36 arrived at KURE.

ENCLOSURE (A), continued

2. SubDiv 15 (I-38) arrived at SASEBO.
ComSubDiv 15 to Com6thFleet, comSubRon 7 and Com Combined Fleet.

In the area east and northeast of SAIPAN many enemy patrol ships and boats are cruising and engaged in anti-submarine sweeping and are traveling at night within an area 250 nautical miles from SAIPAN and in a 500 nautical mile radius, and when you are recognized by an airplane or are reported by a submarine, after several hours you will always be pursued tenaciously for a long time by more than two patrol ships and (omissions below).

3. The RO-115 and the RO-112 arrived at YOKOSUKA.
4. The RO-109 arrived at SASEBO.
5. The RO-47 arrived at MAIZURU.

17 July: ComSubDiv 51 (RO-113) arrived at SASEBO.

18 July: Imperial Headquarters Communique.
Our forces on SAIPAN all died bravely in battle.

19 July: From ComAdvance Force (T.O.O. 191620):
(Corresponds to Combined Fleet DesOpOrd No. 252) The I-55 and I-54 will stop their loading work and return to YOKOSUKA.

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APPENDIX V RESULTS

A. Attacks.

With the end of the important "A" - Submarine Operation, repeated instructions were received from the high command which deeply impressed us. On 17 June we received a message from the Emperor which made us burn with intense patriotism and convinced us we could utilize the special qualities of submarines to the utmost and fight fearlessly to the end.

However, we were not able to learn much about the results of the attack, since many of the submarines did not return, and we were only able to learn the details of the attack made by the RO-115. (Yet, the RO-115, after making the attack, was itself counter-attacked by the enemy and could not witness the results of the engagement.) Aside from this one case, no submarines sent in messages giving any reports on results. Though we cannot be definite, basing our conclusions on observation of the operational area from ashore, on radio intelligence intercepted by our front line, Comm Units, (whose communications were poor), and taking into consideration the anticipated movements and positions of our submarines, and the results of our own air force's attacks, we were able to conclude the following:

ENCLOSURE (A). continued

Date and Time	Name of Sub.	Results	Circumstances	Source
June 30 about 2000	Thought to be I-6	Ship like an aircraft carrier sunk	20 KM east of SAIPAN, carrier-like ship caught fire and sank.	Witnessed by Staff of 6th Fleet on SAIPAN.
June 19 1807	RO-115	1 CV sunk	(1) RO-115 discovered enemy task force (1 BatDiv, 2 carriers) in vicinity 50 miles west of ROTA. Attacked WASP class carrier, results unknown because we were neutralized. (2). Intercepted enemy comm. (6520KC) about 1855, sunk beyond doubt.	RO-115 action report and radio intelligence from special duty squad of the 4th Comm. Unit.
June 18 about 1800	Either I-185 or RO-36	1 CV sunk	Sank one carrier 15 KM off coast of SAIPAN.	6th Fleet Staff on SAIPAN witnessed.
June 16 1100	Thought to be RO-114	1 BB sunk	Sank one - IOWA class BB - 25 KM from the coast of GUAM.	Witnessed by 754th Guard Unit Hq.
June 16 0536	Either RO-111 or RO-117	1 CV damaged	1 ENTERPRISE class carrier leaving 80 m oil slick behind. Discovered 2 carriers, 2 BB's, 2 KK's - 201° 340 miles off THOK.	2nd Air force despatch.

ENCLOSURE (A), continued

The submarine RO-44 on 6-10 conducted a periscope patrol, the result - discovered enemy conditions within reef. The patrol target was ENIWETOK (Brown). She did the same thing on 6-13.

The submarine I-10 on 6-12 conducted a plane patrol at MEJIRO the result was - one transport at anchor, traces of movement of small unidentified ship. Airplane badly damaged and abandoned.

B Reconnaissance (patrol)

On 7-2 about 2000 a submarine thought to be I-10 (observed by RO-46) in vicinity of 70 miles northeast of SAIPAN, observed a great pillar of fire which was thought to be induced explosions with a flash of light like the sun at intervals of about 30 minutes, seen below the horizon. One warship sunk.

C. Transports.

The RO-115 departed from PALAU on the 19th of May and arrived at WEWAK on 27 May. Transported materials.

The I-184 departed from YOKOSUKA on 20 May and arrived at WILLE on 12 June. Transported materials.

The RO-41 departed from TRUK on 26 May and arrived at KUSAIE on 31 May. Transported materials.

The RO-115 departed from WEWAK on 27 May and arrived at PALAU on 3 June. Transported important documents and Army personnel.

The I-36 departed from KURE on 19 June and arrived at TRUK on 30 June. Transported 450 tons crude oil, torpedoes, MG ammunition, and waste.

The I-41 departed from GUAM on 22 June and arrived at OITA on 30 June. Transported 106 rescued air personnel back to Japan.

The I-36 departed from TRUK on 5 July and arrived at western part of Inland Sea on 15 July. Transported personnel aboard (86) of which 70 were air personnel. Cartridges, freon gas bottles, mail etc. In all about 20 tons.

The I-5 departed from TRUK on 6 July and arrived at PONAPE on 11 July. Transported materials.

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APPENDIX VI
LOSSESA. Submarines Which Failed to Return.
(Ref: 34 submarines participated)

1. Admiralty operations:

RO-104
RO-105 (Flag)

RO-106
RO-108

RO-116

ENCLOSURE (A), continued

2. Marianas operations:

I-5	I-184 (Flag)	RO-44
I-6	I-185	RO-48
I-10	RO-36	RO-111
I-55	RO-42	RO-114
		RO-117

B. Breakdowns Caused By Damage.

The I-44 on 26 and 27 of May in vicinity of 230 miles NNE of MUSSO Island. On 26 May 1855 received a near miss in low level bombing from large enemy aircraft and could not surface because enemy was searching all the night. On 27th at 0342, at depth of 35 meters, while submerged with all engines stopped received depth charge attacks.

1. Direct damage of exhaust tubes in the fuel tanks, aboard; crude oil seeped inside the sub.
2. No. 1 and No. 2 periscopes blurred.
3. Battery-power, control panel, and master switch contacts became loose and caught fire.
4. Impossible to use the 15cm waterproof binoculars.
5. Many glass gauges were damaged.

The RO-43 from 16 to 19 June vicinity of 20 miles bearing 314° off ROTA to 65 miles west of ROTA. On 16th at 2144, after the sub tried to penetrate the anchorage at SAIPAN from the west, while cruising on surface, was attacked and shelled by enemy destroyer. After submerging until 17th, 1731, was neutralized and received about 80 enemy depth charges. On the evening of the 18th, surfaced. While retreating westward on the 29th, from 0458 to 1350, received about one hundred depth charges. The main breakdowns were: Leakage from fuel tank, leakage from No. 1 air reservoir of the 4th division, breakdown occurred to one part of the hydrophone, No. 2 periscope blurred, no insulation to short wave mast, leakage of water from the inner cover fitting of the No. 1 exhaust valve box of the main engine.

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APPENDIX VII
ATTACKS

As already stated in Appendix No. V, it is to be regretted that the RO-115 was the sole one of the submarines which obtained any great results to return and the circumstances of the attacks by other submarines cannot be known.

Report on the RO-115's encounters with the enemy and attacks delivered (19 June)

A. Development Of The Attack

ENCLOSURE (A), continued

- 19 June Proceeded in daylight on the surface in search of the enemy to the west of GUAM. Sighted a small plane in the early morning. Took evasive action and submerged three times. Surfaced each time after 35 minutes to one hour. Advanced to attack on 220° course.
- 1225 Sighted a squadron of more than 50 small enemy planes 20 kilometers ahead. Also sighted at 10 kilometers distance 130° to starboard several formations of small carrier planes. Took evasive action and submerged. 11 bombs were dropped at depths varying from 45 to 75 meters.
- 1240 Speed reduced to minimum.
- 1242-44 One or two bombs each at a depth of 75 meters. Total of 7.
- 1257 Changed course to 310°
- 1300 Between 60° to port and starboard several sounds of unknown origin were heard. Sensitivity 1.
- 1312 6 bombs. Received one depth charge.
- 1320 Sound detected at between 60° to port or starboard and clearly identified as that of a turbine. Sensitivity 3.
- 1325 6 bombs.
- 1330 Picked up the sound of turbine forward from port and starboard beam. Sensitivity 3.
- 1350 Sighted two cruisers at 104° to port (torpedo attack).
- 1353 Altered course to 280°. Sighted a group of battleships. (5 battleships, 3 cruisers, several destroyers.) Bearing 30° port, distance about 6000 meters.
- 1353 (TN Sic) Altered course to 260°.
- 1358 Altered course to 210°. Enemy altered course to south.
- 1402 Altered course to 180°. (Ready to fire.)
- 1408 Altered course to 190°. Enemy altered course to west. No chance to fire.
- 1415 Altered course to 220°
- 1428 Altered course to 280°. Enemy altered course again to north.
- 1455 Altered course to 40°. Sighted group of enemy aircraft carriers to north-east (3 carriers, 1 cruiser, several destroyers). Advanced toward them.
- 1518 Altered course to 270°. Aircraft carriers at long range (nearest at 3000 meters). Withheld fire.
- 1615 Altered course to 130°. Sighted a mast to the south-east but it gradually disappeared from view.

ENCLOSURE (A), continued

1625 Altered course to 310°. Sighted several masts to the north-west.

1715 Altered course to 40°. Sighted aircraft carriers to the north (4 carriers, 1 battleship, 2 cruisers, several destroyers). Distance about 4000 meters. No chance to fire.

1735 Altered course to 270°. Sighted more aircraft carriers to the south (identified these as the same group sighted at 1455). Proceeded towards them.

1745 Saw the enemy open AA fire from the carriers as if being attacked by our planes.

1750 Altered course to 320°.

1745 Sunset.

1807 Made a torpedo attack on a carrier of the WASP class (fired four torpedoes). Ship still afloat. Unable to establish through the periscope whether the torpedo hits would result in the immediate sinking of the ship. Result of the attack uncertain. (Enemy radio messages seem to establish the sinking with certainty.)

1812 At 75 meters depth and proceeding at minimum speed, 12 depth charges were dropped. Thereafter received neutralizing attack by 3 destroyers.

1930 Altered course to 220°.

2100 Sound of enemy destroyers no longer heard.

2323 Surfaced.
(Comments)
Weather: fair, but half-clouded.
Visibility: good.
Wind direction: 110°.
Wind velocity: 5-10 meters.
Height of waves: about 1 meter, no swell.

B. Details of Firing.

1. Point of fire - Bearing: starboard 35° (In error the director setting was starboard 50°) Distance 1000 meters.
2. Enemy speed: 15 knots.
3. Angle of sight: starboard 1--5°. (The figure is questionable since a space appears between 1 and 5.) Direction of bow: 323°.
4. Gyro: starboard 20° 40".
5. Angle of spread: Center only 2°. Remainder 3°.
6. Method of fire: 3 seconds inverse salvo.
7. Torpedoes: Type 95 Model 2. Depth setting: 6 meters.

ENCLOSURE (A), continued

C. Ordnance.1. Torpedoes.

On account of transportation duties only four torpedoes were carried. These were Type 95 Model 2, and all four were fired. They were overhauled in the KURE shop at the end of February, and loaded in the first part of March. After leaving Japan and carrying on operations, they were serviced at end of April while at TRUK anchorage for a month. Thereafter the submarine engaged in transportation duties around WEWAK, and for three months there was no opportunity for servicing the torpedoes before the mission began on 6 June. On 12 - 13 June they were serviced and supplied with air.

2. Torpedo Tubes.

On account of serious leakage in the air escape valve of the main torpedo tubes, the air pressure in the ship reached 940 millimeters within three hours of preparing the torpedoes for action. The depth gauge indicated a depth of about one meter less than was actually the case. Therefore difficulty was experienced in observation at periscope depth. From the time of sighting the enemy until immediately prior to firing, the air pressure was of necessity kept lowered for a two hour period.

* * * * *

APPENDIX VIII
TABLE SHOWING DURATION OF CRUISES

Ship Name	No. of Days Cruised	Submerged Total Time	Cruising Time Average	(Hour-Minutes) Maximum
RO-41	40	424-00	11-13	16-25
RU-43*	23			22-00
RO-46	16	84-00	2-48	12-10
RO-47	33	225-00	8-29	13-00
RO-109	55	313-00	6-00	12-42
I-36	22	196-00	14-00	15-00
I-38**	66	742-00	13-30	39-15
I-41	46	576-00	12-30	21-00
I-44	22	122-00	4-48	18-00
I-53	58	880-29	8-25	22-47

*Since neither the cooling system nor the air purifier system were used, during the 22 hours of submerged cruising, the ship rose. In the room with the electric engines the temperature rose to over 50° and the CO₂ content in the air reached 4.8%.

**With 39 hours of continuous submerged cruising, the crew reached the limit of their endurance.

ENCLOSURE (A), continued

APPENDIX IX
RADAR

Ship Name	Conditions Under Which Used During Campaign "A"		Limit of Performance of Set					Conditions of Breakdowns and Methods to Prevent Breakdowns
	Condition When Used	Method of Use	Stationary Target (Km)	Large Ships (Km)	Medium Ships (Km)	Small Ships (Km)	General (Km)	
I-26	Not used							A grease cap was attached between the driveshaft bearing seats to prevent breakdown of rotating mechanism.
I-36	Used twice about 2 hours (daytime)		12		15	5		1. The rotor pen of the rotating mechanism broke off. 2. The magnetic "RAPPA" severely corroded.
I-38	Dark night picked up even though used 4 times for 4-5 hours	1. 3 watches every 2 hours. 2. When visibility is bad and when not sure whether enemy is near- by a search was carried on 2-3 times at 5 min. intervals	15			2		1. The magnetic "RAPPA" severely corroded. 2. There was a little water on the ebonite parts.
I-41	Not used							
I-44	Not used		30-40		14			1. From the time of the receiving set broke down (no static no JP flowed) unable to use even though tried to repair equipment. 2. Rotor broke.
I-45	Not used	1. Used when visibility bad. 2. 5 watches	21		9			Rotating mechanism broke down.

ENCLOSURE (A), continued

APPENDIX II
RADAR (Cont)

Ship Name	Conditions Under Which Used During Campaign ^{WA}		Limit of Performances of Set					Conditions of Breakdowns and Methods to Prevent Breakdowns
	Condition When Used	Method of Use	Stationary target (Km)	Large Ships (Km)	Medium Ships (Km)	Small Ships (Km)	General (Km)	
I-53	Not used		53	10		6.5		Because of rise in voltage receiving tubes went bad and could not be used.
I-54	Not used	Used when visibility bad - made a search on all frequencies once at 0 min., 10 min., 20 min., 30 min., and 50 min. past hour.	30		20		Could not detect small type ships	Because of the plating, (TN not legible) was very small. There was no decrease in volume according to text after each operation.
I-55	Not certain because has not yet re-turned	Tried to use to fullest extent when enemy contacted and visibility bad.	40-60		8-15		4-6	

ENCLOSURE (A), continued

APPENDIX IX
RADAR (Cont.)

Tabulated Results:

A. Since the equipment was not steady, adjustments were difficult, and the radar crews lacked experience and training, etc., the efficiency was not up to standard. All ships could not detect for certain small surface ships.

B. Efficiency.

Even though lacking battle experience, if we judge from the results of these ships, the capabilities should be as follows:

Fixed Target	4 km (TN: SIC ?)
Medium Ships	15 km
Small Ships	5 km

C. When equipment was operable and used properly, the efficiency of the radar increased while surfaced in the South Seas campaign. Also considerable reliance could be placed on the radar; for detection of formations of planes at 100 km, and single planes at 30 km it was generally accurate.

D. The efficiency of the radar exposed at 13 meters depth (RO-Type) and at 16 meters depth (I-type) was found to differ little from that achieved when surfaced.

E. Many ships could not use their radar because the insulation of the short wave mast was faulty.

F. Many ships could not use their radar because of poor regulations for handling and adjustment and unsuitable commands given for use of their radar on the part of those in charge.

ENCLOSURE (A), continued

EFFICIENCY OF TYPE 13 RADAR (Km)
RESULTS OF USE IN "A" CAMPAIGN

Ship Name	Aircraft						Stationary Target						Conditions When Radar Exposed	
	Formation		Singly		Number of Times Range Located				Max Range (Km)	Accurate Range (Km)	Number of Times Range Located			
	Max Range (Km)	Accurate Range (Km)	Max Range (Km)	Accurate Range (Km)	Over 100 Km	Over 50 Km	Under 50 Km	Total						
I-36	65	65	20	20		1	3	4	70					
I-38	(Used but no volume)													
I-41	210	120	87	35	12	7	1	20	170	120	11	4	15	
I-44	(Used but no volume)												A depth of 16m range of 70km- volume 3 (2 planes)	
I-45	52	15	15			1	2	3						
I-53	(Used but no volume)													
I-54	(Used but no enemy to detect)													
RO-43	163	126	35	10	4	6	4	14					Not much difference in conditions between 13m depth and at surface	
RO-45	160	160	80	50	7	11	9	27	30	30		3	3	
RO-47	80						1	1	30	10		2	2	
RO-113		100		25										
Average	120	90	45	30	23	27	19	69						

Not much difference in conditions between 13m depth and at surface

ENCLOSURE (A), continued

EFFICIENCY OF TYPE 13 RADAR (Km) (Cont.)

Ship Name	Results of Use in Japan			Fixed Target	Regulations for Use
	Medium Attack Plane Formation	Single Medium Attack Plane			
I-36		11	70		Used mainly while submerged during May. Use only while surfaced from 5 June.
I-38		(Official test) 9km	(Official test) 70 km		Transmitted 10 sec at 20 sec intervals for 45 min out of the hour.
I-41					Used constantly while surfaced.
I-44					No volume.
I-45	20km	9km	102km		
I-53		9km	45km		Used constantly while surfaced.
I-54		15-20km	120km		No targets detected during this period.
RO-43					While surfaced and at condition 3 - was used mainly at night by a continuous watch.
RO-46	27km	small type 15 large type 17	63km		Used constantly from time of surfacing until diving.
RO-47	20km	12km	75km		Used mainly during day.
RO-113	70km	25km			Used only when surfaced and during squalls.
Average	20km	15km	60km		

ENCLOSURE (A), continued

EFFICIENCY OF TYPE 13 RADAR (Km) (Con't)

Ship Name	Notes Regarding Special Activeness	Steps Followed on Detection of Enemy	Causes of Breakdowns
I-36			Poor antenna insulation. Water leaked into lower part of short wave mast.
I-38			Filament transformer for the transmitter burned out. Transmitter grid circuit resistance R28 burned out. Insulation of antenna low.
I-41	Knowing presence of enemy planes we submerged.	Detected, we dived.	Poor insulation of short wave mast.
I-44			Receiver R12 (operated poorly) "ELKON" tube R30 Transmitter Relay Oscillating Tube Bill.
I-45		Dived immediately when reflected waves showed signs of approaching enemy.	Poor insulation of short wave mast.
I-53			No insulation because of moisture in short wave mast. 8 receiving tubes (UN 954) went bad.
I-54			No breakdowns.
RO-43	If detected by lookouts immediately dived.	When approaching, dived.	
RO-46	Detected at 60km; dived when approach to 20km.	Used against enemy at long range. If area nearer than 20km, dived.	
RO-47		When volume above 3, submerged at once.	
RO-113			Short wave mast poorly insulated.

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ENCLOSURE (A), continued

DETECTOR (TN: DEMPY HOSHINKI)
EFFICIENCY OF DETECTION
RESULTS OF USE IN "A" CAMPAIGN

Name of Ship	Surface Ships		Submarines		Aircraft		Shore Targets		Total No.
	Frequency	No. Times	Frequency	No. Times	Frequency	No. Times	Frequency	No. Times	
I-26			330MC	1	175MC 316- 220MC	1 1			3
I-36							97-100 MC	5	5
I-38			375MC	1	75MC	1	100MC	1	3
I-41	(Used - But no volume)								
I-44	(Used - But no volume)								
I-45	(Used - But no volume)								
I-53		378MC 373MC	1 1	(TN: Probably should be one column to left.)					2
I-54	(Used - But no volume)								
HO-41	185MC 195MC 203MC	1 1 1			175MC	1			4

ENCLOSURE (A), continued

DETECTOR (TN: DEMPA HOSHINKI) (Cont.)

Name of Ship	Degree of Reliability of Detector	Whether Able to Distinguish Target	Regulation for Use
I-26		J1-J1- sound distinguished enemy subs.	A continuous watch at night, while surfaced during the day. Watch maintained by special order.
I-36	Reliable		1300 19 June set to watches. 1000 30 June discontinued watches.
I-38	Reliable		Used constantly during night.
I-41			Used when Type 13 Radar broke down.
I-44			Waited but did not receive from sunset to sunrise without orders.
I-45			Continuous watch while surfaced.
I-53	Fairly reliable		Used constantly while surfaced.
I-54	Reliable		Used almost constantly at night.
RO-41	Fully reliable		

ENCLOSURE (A), continued

Steps Taken when Detected

Submarine submerged

0800 - 5 July set up watches

0500 - 15 July discontinued

+ watch

Submerged at volume 5

Received volume once; after order to submerge tried to pick it up again.

Details of Breakdown

Vacuum tubes operated poorly
Poor insulation of antenna

Poor insulation of antenna

1722 - 15 July watches stopped when equipment could not be used because of the break in the primary line of output transformer.

Insulation of antenna gradually became poor from long periods of operation.

Non-director (directional) antenna could not be used due to damage from depth charge.
The director antenna's insulation was damaged.

Antenna insulation poor.

ENCLOSURE (A), continued

DETECTOR EFFICIENCY

Ship	Frequency	No. Times	Freq.	No. Times	Freq.	No. Times	Freq.	No. Times	Reliability	Method Of Use
RO-43	30MC	1	148MC	6			98MC	6	Fully reliable	
RO-46			1270MC						detected once only - not reliable	Waited, but did receive almost continuously while surfaced.
RO-47	210MC	1	120MC 135MC 150MC	6 3	140MC 150MC 175MC	16 3			Fully reliable	As a rule used continuously at night
RO-109	(Used-but no volume)									Waited to receive from sunset to sunrise. Waited to receive according to special order whenever visibility bad during days
RO-113	318MC 280MC	2	94MC 290MC 110MC 120MC	4						Maintained watch while cruising on surface during the campaign
RO-115	(Used-but no volume)									

Tabulated Results:

At night and when visibility was poor its use was of great practicable value.

Generally there were almost no breakdowns in equipment, but because the insulation of the antenna was poor, most sets were reduced in efficiency or could not detect at all.

ENCLOSURE (A), continued

APPENDIX X
ENEMY ANTI-SUBMARINE SECURITY MEASURES

A. Enemy procedure observed at the time of the attack on the WASP class carrier on 19 June.

(Taken from the detailed report of the submarine RO-115 attack)

1. Battleship Formation

(a) Strength: 3 NORTH CAROLINA class battleships, 2 IDAHO class battleships, 3 cruisers, several destroyers.

(b) Formation: Circular disposition with battleships in center.

(c) Maneuvers: The formation moved westward at 13-15 knots, zigzagging approx. 90° every 10 minutes.

A NORTH CAROLINA class battleship was closest to us, her range about 3600 meters.

(d) Conspicuous forms on ships.

(e) BBs and cruisers were equipped with search radar equipment on the top of the forward masts.

(f) DDs were equipped with radar on the top of their forward masts.

(g) On the NORTH CAROLINA class BBs, there were plane davits aft and a single wing plane was carried.

(h) One of the NORTH CAROLINA class was camouflaged. The others were painted a color which resulted from mixing a grey and dark green paint.

(i) Escorting DDs were observed to have two types of double stacks. The destroyers equipped with Type A stacks were quite large and it was obvious that they were equipped to act against air attacks. Both forward and aft they carried two AA guns.

2. 2nd Carrier Formation

(a) Strength: 2 WASP class carriers, 1 carrier (judged to be a converted cruiser), 2 cruisers, several DDs.

(b) Circular disposition with carriers in center.

(c) Maneuvers: They were cruising at a slightly higher speed than the BB division and were launching and receiving aircraft. About 20 minutes before our attack, the enemy formation, in order to dodge the attack from our planes, cruised north for 5 minutes, then east.

The closest range was when the carrier was cruising westward:

ENCLOSURE (A), continued

approx. 3000 meters. When cruising east, we attacked.

3. 1st Carrier Formation

(a) Strength: 2 ENTERPRISE class carriers, 2 carriers (judged to be converted from cruisers), 1 IDAHO class BB (may have been a cruiser), 2 cruisers (one may have been DD), several DDs.

(b) Maneuvers: Taking on aircraft while cruising into the wind - closest range 5000 meters.

(c) Appearance: It was slightly smaller than standard carriers and had sleek lines. The WASP class carriers and converted carriers in the 2nd formation had their bridges and stacks on the starboard side of the ship.

4. In addition to the above formation there were two DDs cruising independently.

B. Conditions of enemy convoy encountered by RO-41 on 7 June (taken from research notes following the cruise of RO-41).

At about 1300 a group of sounds were picked up on the hydrophone at volume

2. At 1223 two masts were spotted and even though we did our best to make contact we finally were forced to give up the attack. (Closest range 6000 m.)

1. Formation of the enemy.

The convoy was following a zig zag course similar to our "I"- "J" course, only it was more complicated. We observed two formations of land based planes (3 planes each) on anti-submarine patrol at a great distance away from us. Except when exposed we cruised submerged at a depth of 35 meters. Twice we picked up on the hydrophones escort planes flying directly over us. This sound rose and fell abruptly and so we were able to distinguish it definitely. Even though we lost eight of the convoy at 1600 at a bearing of 200 we again picked up the sound on the hydrophone at 1620.

A division of six DD's was following a main course of generally 20°. Thinking there would be larger targets following, we passed underneath the ships and waited, but we weren't able to discover anything.

In this area our hydrophone conditions were very good and were accurate up to 30,000 meters. Judging from previous conditions, the DD division was following behind the convoy about 30 nautical miles and it was observed that they were to destroy submarines following the convoy (?) (TK: badly torn).

C. Excerpts from notes of the meeting following "A" campaign in regard to submarine I-41.

Enemy patrol boats carry on neutralizing attacks which are complete and carefully planned in areas where our submarines are known to be lurking. But, if undetected, they will pass overhead without noticing them. This submarine once observed in its periscope four patrol boats approaching head on and by our proceeding at intervals, the enemy slowly passed di-

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ENCLOSURE (A), continued

rectly overhead without detecting us. (It was observed that they did not attack because they were mainly concerned with patrolling duties). Moreover, each ship's efficiency is thought to be generally decreasing. Thus, even though our submarines receive as many as two neutralizing attacks by several ships, they can easily escape by submerging to a depth of more than 70 meters.

ENCLOSURE (B)

SINKING OF USS INDIANAPOLIS BY JAPANESE SUBMARINE I-58

(From the Japanese Commanding Officer's Action Report)

At about 1400, 28 July, in vicinity of position 410 miles from Palau, bearing 20 degrees, launched KAITEN against one large oil tanker and one destroyer, then moved westward cruising on the surface. At 1952, 29 July, submerged because visibility was poor and carried out careful listening watch, but heard nothing. After moonrise, carried out periscope observation without sighting a target. Immediately after surfacing at 2305 (moonrise at 2156, moon entering in third quarter), sighted with ten power binoculars to the eastward in the path of the moon what at a quick look appeared to be a surfaced submarine with a high midship section. Submerged immediately (depth 19 meters). Bearing of target at the time was zero degrees and distance 10,000 meters. Immediately after submerging, picked up target with night periscope. At 2308 ordered "Prepare to fire torpedoes" and "Prepare to launch KAITEN." Rudder was put to left and ship headed toward target. The moon was behind the target, this giving us the advantage. The target was kept in view at all times, but the type of ship could not be determined.

At 2309, "Firing Method #6" (prepare to fire six torpedoes), "Torpedo Combat," "Captain of #6 boat (KAITEN) man your boat" orders were issued.

At 2318, orders were issued for "Captain of #5 boat (KAITEN) man your boat." During this time, personnel not concerned with KAITEN were ordered to: "Take depth charge defense measures."

The target continued to approach us bearing about zero degrees, but we failed to pick up any radar signals on our radar search receiver.

Apparently the target had no intention of attacking us. At about 3000 meters, the target was bearing to right. Judging from the masts, we estimated that it was a heavy cruiser or heavier ship. At 2326, ordered firing and completed firing six torpedoes at 2332.

Data concerning firing of torpedoes: Target bearing 60 degrees to right; distance, 1500 meters; lead angle, 28 degrees; spread, three degrees; time elapsed between firings, three seconds; depth setting, four meters; torpedoes, Type 95, Model 2; war heads, one Model 2, five Model 5; speed of target, 12 knots, on a straight course.

At 2333, the scoring of one torpedo hit was seen in the periscope. The hit caused a fire to break out in the vicinity of No. 1 Turret. Three water spouts were also observed. At 2334, heard sounds of four hits. Shortly thereafter propeller sounds diminished, and the ship was observed to stop. At 2351, a flash was seen amidship. At about this same time, sounds of 10 induced explosions were heard (of these, four or five were louder than the sound of the torpedo hits). Also at about this time, radar signals were picked up, and fearing a counterattack, turned away from the target and increased the range. At 0000, 30th, while preparing for the next firing, the radar signals weakened. We made periscope observations but could not sight target so we surfaced at about 0030. Moon was up and visibility good. Few waves. Although no debris was noted, judging from the various circumstances, we believe that sinking was definite. Considering the possibility of attacks from escorting vessels and aircraft, the decision was made to withdraw as speedily as possible. We withdrew to the northeast on the surface at 13 knots. About two hours later encountered enemy aircraft so we submerged and proceeded on to the northwest.

While on the surface, at 0115, 1 August, the following action summary was dispatched: "Sank (definite) one battleship of the IDAHO class in position --

ENCLOSURE (B), continued

at 2333, 29th. Three torpedo hits were scored."

The underwater listening device was not in good order at the time. It picked up sounds for the first time at 3000 meters.

We received no effective counterattack and the submarine suffered no damages. The KAITEN were prepared, but were not used.

ENCLOSURE (C)

SUMMARY OF JAPANESE SUBMARINE OPERATIONS AND ACTIVITIES

Prepared by Japanese Navy Ministry

Since at the close of the war the operational plans and orders of all force commanders and the battle reports of all submarines were all burned, an account which endeavors to give the substance of these principal operational tasks and activities must of necessity be based on memory.

A. OPERATIONS FROM 8 DECEMBER 1941 TO EARLY MARCH 1942-PRINCIPAL OPERATIONS

In Hawaiian Waters (8 December 1941)

In Waters Off Malaya (10 December 1941)

General Invasion Operations for the Rich South Sea Areas and Central Pacific Strategic Points.

1. In Hawaiian Waters

Three submarines of SubRon 1 went along with the task force and were assigned to patrolling the forward lanes. All of the remainder of the SubRon 1 plus SubRon 2 and SubRon 3 (approximately 27 subs) were assigned to attack the enemy fleet guarding and patrolling the Hawaiian area. Some of the submarines had midget subs on board which were used for the task force attack on Pearl Harbor and which attacked ships anchored there. In addition, some of the submarines were assigned to observe and make reconnaissance in the Lahaina (TN: Maui, T.H.) Anchorage.

2. Operations of the 6th Fleet After the Operations in Hawaiian Waters

a. SubRon 2 (8 subs) successively was assigned to the Hawaii area and to watch the enemy fleet. Around the end of January of the following year it withdrew to Kwajalein. During that period, in addition to achieving noteworthy results in disrupting communications and destroying enemy strong points, it was instrumental together with SubRon 1 in locating LEXINGTON in waters southwest of Hawaii. Finally on 12 January, the I-6 apprehended, attacked and inflicted a good deal of damage on this vessel.

b. After operating in Hawaiian waters, SubRon 1 (13 subs) was active along the western coast of the United States, and receiving orders to destroy communications, operated until about 28 December.

On its way back to Japan, it came upon LEXINGTON, and along with SubRon 2 (8 subs) kept on its trail.

Furthermore, the I-23 attacked and sank an American vessel, supposed to be LANGLEY, southwest of Johnston Island on 8 January.

In addition to three submarines delivering supplies to French Frigate Shoal to some flying boats which had attacked Hawaii on 4 March, a great many submarines were assigned to servicing duties. Furthermore, some submarines were active in destroying communications along the eastern shores of Australia, and along the western coast of the United States.

c. SubRon 3 (9 subs) returned to Kwajalein immediately after the Hawaii naval action. In the middle of January, after making repairs and taking on supplies, it departed, and again participated in

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ENCLOSURE (C), continued

2. Coral Sea Naval Action

While six submarines of SubRon 8 were proceeding in the area off the east coast of Australia to cooperate in the Moresby operation, the Coral Sea Naval action developed. They concentrated south of the Solomon Islands to attack the enemy task force, but failed to obtain noteworthy results.

3. Special Attack Units (Midget Submarines). Attacks on Diego Suarez and Sidney

Our offensive operations proceeded smoothly, and our strategic situation had been strengthened and expanded; nevertheless, the enemy fleet still survived. Therefore, in order to wipe it out, surprise attacks with midget submarines were planned. On 31 May simultaneous raids were carried out on Diego Suarez and Sidney, which were powerful bases in the Indian Ocean and Australia.

As for results, it is believed that one British warship of the QUEEN ELIZABETH class and one of the ARETHUSA class were damaged at Diego Suarez, and that one warship was sunk at Sidney.

4. Midway Naval Action

Two vessels of Submarine Division 13 were assigned to supplying Type 2 Large Flying Boats at French Frigate Shoal, and two vessels of SubRon 3 were charged with picking up flight personnel in the Hawaiian area. There were plans to carry out a reconnaissance of Pearl Harbor before the invasion of Midway, that is to say, about the end of May. However, when the submarines arrived at French Frigate Shoal, the enemy was already using that place as a seaplane base, and our plans could not be carried out.

In order to cooperate in the Midway invasion operation, the main strength of SubRon 3 (approximately 7 subs) was posted on reconnaissance in the Hawaiian area, and SubRon 5 (approximately 8 subs) was posted between Midway and Hawaii. Although they lay in wait for the enemy, they were unable to detect the enemy fleet before the beginning of the battle. Immediately after the naval action, the I-168 (SubRon 3), which was near Midway, received orders to attack a damaged enemy aircraft carrier, and discovered her. On 7 June she sank YORKTOWN, which was being towed by a destroyer.

5. Aleutian Invasion

The bulk of SubRon 1 and SubRon 2 (about 13 subs maximum total) cooperated in the Aleutian invasion, and were assigned to reconnaissance in the eastern area of the Aleutians.

Immediately after the completion of the Aleutian operation, they carried out a campaign to disrupt communications on the west coast of the American mainland.

6. Warfare to Disrupt Communications

a. East of Australia and the South Pacific Area. A part of SubRon 1 and SubRon 8 (about 13 subs) from about April on, carried out warfare to disrupt communications in the area of the eastern coast of Australia and in the Fiji area; they stopped about June. After about the end of June, SubRon 3 (7 subs) took their place, and

ENCLOSURE (C), continued

operated in that area until the early part of August. During that time, they achieved brilliant results.

b. Indian Ocean Area. The bulk of SubRon 8, immediately after attacking Diego Suarez with midget submarines, carried out a campaign to disrupt communications, and their results surpassed expectations.

C. OPERATIONS FROM MIDDLE OF JULY 1942 TO END OF SEPTEMBER 1943-PRINCIPAL OPERATIONS

Guadalcanal Operation (began in early part of August 1942)

South Pacific Naval Action (26 October 1942)

Guadalcanal Moving-up Operation (early part of February 1943)

Attu Island Operation (began in middle of May 1943)

Rendova Operation (began end of June 1943)

1. Operations in the Solomon and New Guinea Areas

a. When the enemy attacked Guadalcanal, SubRon 6 (5 subs) was placed in the vicinity of the island of Guadalcanal; in addition to attacking the enemy, it participated in the campaign to disrupt communications on the east coast of Australia and South Pacific Areas. SubRon 3 (10 subs) was massed and placed suitably for interception in the vicinity of the Solomons and in the ocean to the southeast. As the offensive and defensive battle between us and the enemy became more violent, submarines which had returned from the west coast of the American mainland, and submarines from Japan which had completed their training and refitting, were continuously assembled in this area. They were assigned to reconnaissance and petrol with our fleet, searching out and attacking the enemy and his supply lines to Guadalcanal. They achieved moderate success.

Moreover, from the first part of November to the first part of December, a number of surprise attacks against Lunga anchorage were carried out by midget submarines.

When our garrison forces on Guadalcanal came to have supply difficulties, part of the submarines were used for supply transport.

b. When the advance on Guadalcanal came to a halt, the greater part of the submarines used in that area (probably 10-15 subs) were once again assigned to destroy communications. They gave a good accounting of themselves along the eastern coast of Australia, and in the South Pacific area.

c. From early May 1943, the greater part of the large type submarines were diverted to the northern area. SubRon 6 (5 subs) constituted the main strength in the Solomons and New Guinea areas, and was employed with a portion of SubRon 5 (TN: Not clear; may be eight (10 total in SubRon 8)) in that area for attacks against the enemy's line of supply and reinforcement.

In June, when the enemy attacked Rendova, the submarines were of no great aid even though the greater part of them were assembled for use.

ENCLOSURE (C), continued

Chief results achieved in the above period are as follows:

31 Aug.	One torpedo hit on a CV SE Solomons	(I-26)
6 Sept.	Two torpedo hits on a CV SE Solomons	(I-11)
15 Sept.	CV sunk SE Solomons	(I-19)
20 Oct.	Two torpedo hits on a TEXAS class BB SE Guadalcanal	(I-176)
27 Oct.	One torpedo hit on a COLORADO class BB SE Solomons	(I-21)
13 Dec.	Two torpedo hits on a SAN FRANCISCO class cruiser SE Solomons	(I-26)

2. Campaign to Destroy Communications

During the operations in the Guadalcanal area, the greater part of the submarines were concentrated in that area, but from around June 1943, a portion of the submarines carried on a campaign to destroy communications along the eastern coast of Australia and in the SE Solomons area. Later, when the northern operation came to a halt, the greater portion of the submarines were used to strengthen the campaign to destroy communications in the South Pacific and Hawaii areas, where they gave a good accounting of themselves.

Moreover, the campaign to destroy communications in the Indian Ocean was continued constantly by SubRon 8 (10 subs).

3. Operation in the North

When the enemy attacked Attu, the small number of submarines operating in that area raided them, but reinforcing Attu and supplying Kiska became a difficult problem, and it was inevitable that the submarines should be assigned to it. However, in the withdrawal of the Kiska garrison, submarines were for the time employed. From the beginning of June until the middle of July, a large number of submarines were employed in this (withdrawal). During that period they effected considerable damage.

D. OPERATIONS FROM THE BEGINNING OF NOVEMBER 1943 UNTIL THE END OF APRIL 1944-GENERAL OPERATIONS OF ALL SUBMARINES

Raids in the Bougainville, Eastern New Guinea, and Admiralty Island Areas.

Gilbert Operations (commenced latter part of November 1943)

Marshall Operations (commenced latter part of January 1944)

1. Basic Elements of Operation Plans for Submarine Forces

a. In the Solomon and Admiralty, as well as in the E. New Guinea area operation, small-type submarines were used mainly for scouting and raiding. At the same time, supply by surface vessels became difficult, and large-type submarines transported supplies for advance

ENCLOSURE (C), continued

bases in these areas.

- b. In the Solomons and New Guinea areas, large and medium-type submarines were used to attack extended supply lines.
- c. A portion of the large-type submarines were assigned to observe movements of the enemy fleet, and to attack it. They were posted throughout the Hawaii, Fiji, and Espiritu Santo areas.
- d. On the commencement of the Gilbert operation, the majority of the large and medium-type submarines were concentrated, and they attacked enemy task forces and occupation forces.
- e. In the Marshalls operation, only a very few submarines could be used, as the majority of them were awaiting repairs and outfitting for future operations.

2. Outline of the Progress of Operations

- a. Operations in the SE area. Small submarines of SubRon 7 (3 subs) continued their duties of observation and raiding in the Solomons and E. New Guinea areas, but due to the pressure of improved observation by enemy land-based planes, their movements were restricted and results were poor.

There was an ever-increasing need for transporting food and ammunition to our strategic key points isolated by the enemy's "stepping-stone" operations, and it was necessary that large-type submarines should be employed in this. But for a time we could use only small-type submarines capable of carrying only about ten tons.

With the development of the enemy's radar equipment, the business of transport became increasingly difficult, and damage to submarines continued to mount. Even though it was estimated in about April 1944 that successful transport would amount to scarcely 10% of the official requirements and though there were innumerable difficulties, we went on with it.

- b. The Campaign to Destroy Communication and to Observe and Attack the Enemy Fleet. Large and medium-type submarines operated around Espiritu Santo, the Fijis and the NE coast of Australia to attack the enemy's extended supply lines in the E. Solomons and New Guinea areas, and were fairly successful. Moreover, among these submarines there were a few which carried aircraft, and they carried out some observation in the Fiji and Espiritu Santo areas. From about the end of October 1944, several submarines were dispersed in the Hawaii area; in addition to observing the enemy fleet they scouted Pearl Harbor with their aircraft, and imparted valuable information to friendly forces.

- c. Gilbert Operations. At the time of the enemy attack on the Gilberts, all the above mentioned submarines operating in the Hawaii, Fiji, and Espiritu Santo areas, as well as all available submarines at the Truk base, were sent out. They attacked the enemy occupation forces around Makin and Tarawa, and the I-175 sank a CVE. About ten submarines, concentrated for an attack on the enemy task force, sustained great damage when forming the line of deployment, or when orders were confused. Only a few were able to return, so the results are uncertain.

ENCLOSURE (C), continued

d. Marshalls Operation. There were many submarines lost in the Gilberts operation, and since in the overall strategic policy, the defense of the Marshalls was not a campaign in which total military strength was to be mustered, the number of submarines used was only two. Though it appears from the reports of our garrison forces in the Marshalls that these two submarines sank a cruiser and a destroyer, neither has yet returned, and the details are unknown.

e. Destruction of Communications in the Indian Ocean Area. The Indian Ocean is as ideal as ever, as a field of battle for the destruction of communications, and even though the number of submarines engaged in operations is few, each submarine achieves splendid results, no matter whether it seeks out the coast of Africa, the Gulf of Aden, or the Arabian Gulf as a hunting ground.

E. OPERATIONS FROM EARLY MAY 1944 TO EARLY OCTOBER 1944-MAJOR OPERATIONS OF ALL SUBMARINES

Biak Island Operations	(May 1944)
Sea Battle off the Marianas	(19-20 June 1944)
Palau Operation	(Sept. 1944)
Morotai Operation	(Sept. 1944)

1. Basic Elements of Operations Plans of Submarine Force

a. Enemy task forces are active and swift of movement and in addition the enemy's aggressive spirit is excellent. On the other hand, inasmuch as our military strength is insufficient to seal off and crush the enemy, one part of the submarine force which is in the Indian Ocean area will be detailed to be used in ambush operations.

b. In order to supplement our lack of military force and our deficiency in reconnaissance strength, reconnaissance patrols of important sectors will be made by our submarines.

c. When the enemy attacks in the future, as many submarines as possible will be concentrated in the forward area to attack the enemy task force and occupation forces.

2. Summary of Progress of Operations

a. Marianas operation

(1) Before the opening of the Marianas operation, the submarine forces, in accordance with Operation Plan "A" (NavTechJap Note: See Enclosure (A)), quickly completed its battle preparations. Except for a small number of submarines which were in Japan for special repairs, the majority were assigned to the following important areas by the end of May:

The majority of SubRon 7 (about 12 small-type submarines) to the sea area between New Guinea, the Bismarck Archipelago, and the Carolines.

The majority of the submarines under the direct control of 6th Fleet (about 15 subs) to the Marshalls and the eastern Carolines sector.

ENCLOSURE (C), continued

Before the opening of the Marianas operation, SubRon 7 (13 subs) was assigned to the southern sector of the Carolines where the small-type submarines took the full brunt of the enemy's force and in an engagement lasting approximately ten days lost most of its submarines. Inasmuch as only two or three destroyers were sighted, our battle gains were nil.

The submarines which were assigned to the Marshalls sector conducted a reconnaissance of Kwajalein and Brown Islands, besides which the plane-carrying submarines conducted an air reconnaissance of the Mejuro anchorage, and provided valuable intelligence for our forces.

When the enemy began his attack on the Marianas, we hurriedly concentrated SubRon 7 (13 subs) submarines in the seas east of the Marianas to prey on the enemy. Thereafter, we maintained a supply transport for the Marianas by means of part of our submarine force, in addition to continuing our offensive operations, until the first part of July.

During this period our submarine losses were heavy, and it is difficult to determine the results, because even if there were submarines which were successful, they did not return.

(2) When the Palau operation was begun, only a part (about 4 subs of SubDiv 34) of the submarine force, which was to have been used, was dispatched to take part in the operation, because our general plan of operations did not involve using our full strength for the defense of Palau, and because repairs were being made following the Marianas operation. The submarine RO-41 sank one CVE and damaged another east of Halmahera on 3 October.

b. Communications destruction warfare. In addition to the waging of communications destruction warfare in the Indian Ocean area, the supplying of the Biak Island sector by means of one part of the submarine force was planned, but because of breakdowns which occurred in the course of this operation, it was not completed.

F. OPERATIONS FROM MID-OCTOBER 1944 TO EARLY MARCH 1945-GENERAL SURVEY OF MAJOR OPERATIONS

Air Battle off Formosa (12-14 Oct. 1944)

Philippines Operation (began in mid-Oct. 1944)

Sea Battle off the Philippines (24-26 Oct. 1944)

Iwo Jima Operation (began in late Feb. 1945)

Okinawa Operation (began in late March 1945)

1. Basic Elements of Operation Plans of Submarine Force

a. To make surprise attacks with KAITEN (piloted suicide torpedo) on enemy warships at anchor, and thus gradually decrease their number.

b. To use as many submarines as possible for ambush operations, and attack enemy occupation forces as well as fleets.

ENCLOSURE (C), continued

c. In the intervals between ambush operations, to make attacks on the enemy's supply lines to forward areas.

2. Summary of the Progress of Operations

a. Philippines operation. After the Marianas operation, a portion of our submarines were used for the Palau operation. The majority of the others were either under repair or being fitted to carry KAITEN, which had been perfected as a weapon about this time; training in the use of these (KAITEN) was being carried on. But in the middle of October, with the attack of an enemy task force on the NANSEI SHOTO and Formosa areas, the use of the KAITEN was suspended. All available submarines were sent out to attack the enemy's quick striking task force.

Though a number of the subs first sent out met the enemy task force off the coast of Formosa, most of the other submarines were too late. During that time, enemy landing operations on Leyte had begun, and all submarines were dispatched to waters east of Leyte. They were to attack enemy transport routes, as well as to cooperate with our own surface forces, and in the sea battles off the Philippines they were used in concentration to the east of Leyte.

Thereafter, part of the submarines were posted to the east of Luzon, and the others were posted between Palau, Hollandia, and Leyte. They were to attack enemy task forces and transport routes.

At the beginning of January, when the enemy landed at Lingayen, a portion of the submarines were posted SW of Lingayen.

Probable results in the above period are as follows.

24 Oct.	One transport sunk	East of Leyte	(I-56)
25 Oct.	One CV sunk		
25 Oct.	One DD sunk		
27 Oct.	Three transports sunk		
3 Nov.	One CV (ESSEX class) sunk 600 miles east of Manila		(I-41)
25 Nov.	One CV sunk One DD sunk	East of the Philippines	(RO-50)
12 Jan.	Two direct torpedo hits on a BB	55 miles east of IBA	(RO-49)
30 Jan.	Two transports sunk	15 miles east of IBA	(RO-46)
10 Feb.	One transport sunk	300 miles ESE of SURIGAO	(RO-50)
17 Feb.	Two direct torpedo hits on CV Two direct torpedo hits each on a cruiser and on a destroyer	60 miles west of Lingayen	

ENCLOSURE (C), continued

In the latter period of the Philippine operations, a number of submarines were used for bringing in supplies and aircraft personnel to Luzon, but a large portion of them were lost.

b. Making surprise attacks on anchorages with KAITEN

(1) Initial operations: Although preparations were speeded to enable us to carry out the aforementioned Philippine operations, they were too late. Consequently, it was decided to use three submarines which were too late for the Philippine operations, to attack Ulithi and Kossol Channels where powerful enemy forces were anchored. The presence of these large enemy naval forces at Ulithi was ascertained by air reconnaissance flown from Truk on 7 November. And, according to reports from our forces on Palau, powerful surface forces were frequently coming and going through Kossol Channel and it was adjudged advisable to attack these at anchor. Therefore, both places were attacked on 20 January.

The I-47 and I-36, which carried out the attack at Ulithi, succeeded in sending out KAITEN, and from outside the reef heard the sound of explosions and saw the flames. Air reconnaissance on 23 November, by comparison with reconnaissance before the attack, indicated that the operation attained considerable success (one CV and three BB sunk).

Since the I-37, which was to attack Kossol Channel, is missing, it is not known what success it achieved.

(2) Secondary operation: Things did not go favorably in the Philippine operations, but since the destruction at that time of enemy sea power would facilitate future operational progress, it was decided to use KAITEN again in surprise attacks against anchorages. At the same time, it was decided to make available even submarines returning from the Philippine operations, with the consequence that as many submarines as possible were in use. Furthermore, it was not possible to carry out adequate reconnaissance of the anchorages of the enemy task force.

In addition, since there were technical difficulties involved in bringing together and using large numbers of submarines at one strategic point, it was decided to distribute them in several places as follows:

12 January

ULITHI	I-36
HOLLANDIA	I-47
KOSSOL	I-53
GUAM (APRA Harbor)	I-58
ADMIRALTIES	I-56

About 21 January

ULITHI	I-48
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Actually, except for the I-56 which was unable to carry out an attack (because, while bound for the Admiralties it was intercepted and disabled by the enemy), everything went according to plan. However, there were no certain results reported. Merely, that the submarines had heard explosions and nothing more.

ENCLOSURE (C). continued

However, it is believed that in view of the amount of training of the pilots and the capabilities of the KAITEN, some successes were scored.

With the exception of the I-48, which is missing and has not been heard from, the damage suffered by the submarines was slight.

c. Warfare against communications. Even the units which were assigned the job of destruction of communications in the Indian Ocean area gradually came to be utilized in the Pacific theater. In the middle of the Philippine operations, that is to say, in January 1945, communications warfare in the Indian Ocean area came completely to an end.

However, the value of destruction of communications could still not be overlooked. Consequently, in accordance with plans to utilize such small forces as were available to the utmost, the I-12 ranged wide ocean areas east of Hawaii, the Fiji Island sector, etc., in October of 1944 and destroyed communications. Although it was able to achieve considerable success in this enterprise, it was believed to have eventually been sunk in the Fiji sector.

d. IWO JIMA operation. When the enemy attacked IWO JIMA, submarines which were in the midst of training in Japan were hurriedly dispatched to the forward areas. Almost all these submarines carried KAITEN. They were ordered to attack enemy vessels in the vicinity of IWO JIMA.

The I-368 and I-370, which sortied for the first time, presumably arrived at the target area and attacked with KAITEN; however, since they have not returned, the details are not known. The I-44, I-36, and I-58, which sortied later, were judged to have had meager success in attacks with KAITEN on war vessels in the vicinity of IWO JIMA. Therefore, they were ordered to return by the Commander in Chief of 6th Fleet.

OPERATIONS FROM MIDDLE OF MARCH 1945 TO MIDDLE OF AUGUST 1945--MAIN OVER-ALL OPERATION

OKINAWA Operation (began in latter part of March 1945)

1. Essentials of Operational Plans for Submarine Force

a. As many submarines as possible shall be used in the OKINAWA operations; enemy vessels shall be attacked with KAITEN.

b. After the end of the OKINAWA operation, laying emphasis on warfare to disrupt communications, lines of reinforcement and supply will be attacked, chiefly with KAITEN.

c. Attacks shall be made on the enemy fleet at its advance bases to destroy it with planes carried by submarines.

d. Emphasis shall be placed on transportation and supply, especially on transportation of aviation fuel to Japan.

2. Summary of the Progress of the Operation

a. OKINAWA operation. As signs of an attack by the enemy on OKINAWA became more apparent, from the early part of March a number of submarines were placed in the area east of KYUSHU and the NASEI SHOTO. While they were engaged mainly in patrolling for enemy task forces and at the same time, the servicing of all submarines in Japan

ENCLOSURE (C), continued

was being hastened, the enemy attack on OKINAWA materialized. Submarines were quickly dispatched to that area, but two submarines received damage from mines laid by the enemy in the Inland Sea area, and were greatly impeded.

Since many submarines sent to the OKINAWA area have not yet returned, details of their successes are unknown.

b. Campaign to destroy communications. The OKINAWA campaign became gradually unfavorable for us, and the enemy eventually surrounded the island. Since the movement of submarines in the OKINAWA area was more and more restricted, the submarine cordon was greatly extended from the OKINAWA area, and we turned to attacks in the lines of communication from the MARIANAS to OKINAWA, from the Philippines to OKINAWA, and from Hawaii or the Marshalls to the MARIANAS.

Regarding the use of KAITEN up until this time, attacks on moving vessels were most difficult, but because these were believed feasible with proper training of the pilots, it was decided to use KAITEN mainly to destroy communications.

We continued with this until the end of the war.

Conclusion as to ~~the~~ results obtained in the above operation are as follows:

- 1 May Two ships of unknown class sunk by torpedo 100 miles, 170° off OKIDAITO SHIMA (I-47)
- 2 May One hit each with KAITEN on a DD and a transport 160 miles SW OKIDAITO SHIMA (I-47)
- 7 May One hit with KAITEN on a CVE S of OKIDAITO SHIMA (I-47)
- 15 June One hit with KAITEN on a transport SE of OKINAWA (I-363)
- 21 June One tanker torpedoed and sunk 400 miles NE of Truk (I-36)
- 28 June One hit with KAITEN on a transport 400 miles NE of Truk (I-36)
- 24 July One hit each with KAITEN on two vessels 400 miles E of Formosa (I-53)
- 28 July Two hits with KAITEN on a convoy 300 miles N of Palau (I-58)
- 29 July IDAHO class BB torpedoed and sunk 200 miles N. of Palau (I-58)
- 29 July One hit with KAITEN on a convoy E of Formosa (I-53)
- 4 Aug. Two hits with KAITEN on a patrol boat 400 miles SE of Formosa (I-58)
- 11 Aug. Three hits with KAITEN on a convoy 720 miles SE of OKINAWA (I-58)

c. Transport operations. Two large-type submarines were used to transport aircraft fuel as well as to transport supplies to Wake, Marcus, and the NANSEI SHOTO. Both vessels are missing while on their second transport mission from Malaya and Formosa.

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ENCLOSURE (C), continued

In addition, the I-13 and I-14 were used to transport reconnaissance planes to Truk. The I-14 completed its mission, but the I-13 is missing en route.

d. Offensive operation by sub-carried aircraft. The I-400 and the I-401 with a total of six planes, were under orders at end of August to attack powerful enemy naval forces in Ulithi anchorage. But the war ended while they were en route, and they failed to reach their objective.

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ENCLOSURE (D)

TABLE OF LOSSES OF IMPERIAL JAPANESE NAVY SUBMARINES

31 Oct., 1945

<u>Sub</u>	<u>Displace-</u> <u>ment</u>	<u>Method</u> <u>Destroyed</u>	<u>Location</u>	<u>Date Sunk</u> <u>(Official Date)</u>	<u>Details</u>
I - 1	2000	Gunfire	Off KAMINBO (GUADALCANAL)	29 Jan 43 (Mar 43)	Sunk by combined gunfire of 2 patrol boats and 1 torpedo boat
I - 2	2000	---	Between TRUK and RABAU	12 Apr 43 (Apr 43)	On way from RABAU to TRUK
I - 3	2000	Torpedo attack by torpedo boat	Off KAMINBO (GUADALCANAL)	9 Dec 42 (Dec 42)	Sunk by torpedo while escorting transports
I - 4	2000	---	NEW IRELAND	(Jan 43)	While on transport duty to BUNA
I - 5	2000	---	MARIANAS area	(July 44)	---
I - 6	2000	---	MARIANAS area	(July 44)	---
I - 7	2200	Gunfire	KISKA	(May 43)	Sunk by patrol boat gun- fire while on transport duty to KISKA
I - 8	2200	---	In waters SE of NANSEI SHOTO	(Apr 45)	---
I - 9	2200	---	ALEUTIANS area	(May 43)	Missing on transport duty to KISKA
I - 10	2200	---	MARIANAS area	(July 44)	---
I - 11	2200	---	FUNAFUTI area	5 Feb 44 (Missing) (Feb 44)	Missing on transport duty to FUNAFUTI
I - 12	2200	---	Central Pacific	Mid-Jan 45 (Missing) (Mar 45)	---
I - 13	2700	---	Central Pacific	(July 45)	Missing while on trans- port duty to TRUK
I - 15	1800	---	SE SOLOMONS area	(Dec 42)	---
I - 16	1800	---	SOLOMONS area	(Aug 44)	Missing on transport duty to BOUGAINVILLE
I - 17	1800	---	ESPIRITU SANTO IS. area	(Oct 43)	---
I - 18	1800	---	---	9 Feb 43 (Missing) (Feb 43)	---

ENCLOSURE (D), continued

<u>Sub</u>	<u>Displace- ment</u>	<u>Method Destroyed</u>	<u>Location</u>	<u>Date Sunk (Official Date)</u>	<u>Details</u>
I -19	1800	---	GILBERTS area	(Dec 43)	Missing while stationed SE of TARAWA
I -20	1800	---	ESPIRITU SANTO ISLAND	(Oct 43)	Missing while stationed SW of ESPIRITU SANTO
I -21	1800	---	GILBERTS area	(Dec 43)	While stationed in vicinity of MAKIN
I -22	1800	---	SOLOMONS area	(Oct 42)	---
I -23	1800	---	HAWAII area	(Mar 42)	Lost while watching HAWAII
I -24	1800	---	N Pacific area	(June 43)	Missing on reconnaissance off ATTU. Left PARAMUSHIRO for ATTU. June-July.
I -25	1800	---	SAMOA IS. area	(Oct 43)	Missing on duty in SW MALEKULA area
I -26	1800	---	E PHILIPPINE area	(Nov 44)	Waylaying a task force
I -27	1800	---	INDIAN Ocean	(May 44)	---
I -28	1800	Submarine torpedo?	Waters to North of RABAU	(May 42)	Missing after arrival in waters north of RABAU on return from north of Australia to TRUK
I -29	1800	Submarine torpedo?	LUZON STRAIT	(July 44)	On way from SINGAPORE to KURE
I -30	1800	Struck a mine	Outside SINGAPORE Harbor	(Oct 43)	---
I -31	1800	---	ALEUTIAN area	(May 43)	Successfully completed transport to KISKA, met enemy class B cruiser on 14th and scored torpedo hit. (Seen from shore)
I -32	1800	---	In South Seas area	Apr 44	Missing, transporting supplies to WOTJE
I -33	1800	Accident	IYO NaDA	13 June 44 (June 44)	Sunk accidentally on practice run
I -34	1800	Sub torpedo	West of MALAYA	13 Nov 43 (Nov 43)	Sunk while on way to PENANG from SINGAPORE
I -35	1800	---	GILBERTS area	(Dec 43)	Vicinity of TARAWA

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ENCLOSURE (D), continued

<u>Sub</u>	<u>Displace- ment</u>	<u>Method Destroyed</u>	<u>Location</u>	<u>Date Sunk (Official Date)</u>	<u>Details</u>
I -37	1800	---	Vicinity of PALAU	(Dec 44)	Missing after leaving KURE to attack PALAU
I -38	1800	---	Waters to the south of W CAROLINES	(Dec 44)	Attacking task force
I -39	1800	---	GILBERTS area	(Dec 43)	On duty to SE of TARAWA
I -40	1800	---	GILBERTS area	(Dec 43)	On duty to SE of TARAWA
I -41	1800	---	Waters to the east of the PHILIPPINES	(Dec 44)	Attacking task force
I -42	1800	---	BISMARCK IS. area	(Apr 44)	Failed to arrive while on transport duty to RABAU
I -43	1800	---	In South Seas area	(Mar 44)	Proceeding from INLAND SEA to TRUK
I -44	1800	---	Waters to SE of NANSEI SHOTO	(May 45)	While making KAITEN attacks on OKINAWA blockade vessels in mid April
I -45	1800	---	Waters to east of PHILIPPINES	(Nov 44)	Attacking task force
I -46	1800	---	Waters east of PHILIPPINES	(Dec 44)	Attacking task force
I(Blank)	1800	---	Vicinity of ULITHI	(Jan 45)	Left INLAND SEA 9 Jan. Failed to rendezvous for special attack on ULITHI
I -48					
I -52	1800	---	ATLANTIC	(Aug 44)	Missing on way to Germany
I -54	1800	---	Waters to east of PHILIPPINES	(Dec 44)	Attacking task force
I -55	1800	---	MARIANAS area	(July 44)	Missing on transport duty to MARIANAS
I -56	1800	---	Waters to SE of NANSEI SHOTO	(Apr 45)	While making KAITEN attack on OKINAWA blockade vessels in mid-April
I -60	1800	---	SUNDA STRAITS	(Jan 42)	---

ENCLOSURE (D), continued

<u>Sub</u>	<u>Displace- ment</u>	<u>Method Destroyed</u>	<u>Location</u>	<u>Date Sunk (Official Date)</u>	<u>Details</u>
I -70	1800	---	HAWAII area	(Dec 41)	PEARL HARBOR entrance on 9th - since missing
I -73	1800	---	HAWAII area	(Jan 43)	Missing since radio report on leaving HAWAII
I-122	1300	Sub torpedo	Vicinity of NOTO Pen. (Japan Sea)	10 June 45 (June 45)	Torpedoed and sunk on way to ANNAM BAY from MAIZURU
I-123	1300	---	SOLOMONS area	(Aug 42)	---
I-124	1300	---	Port DARWIN	(Jan 42)	Missing at PORT DARWIN
I-164	1800	Sub torpedo?	SE of KYUSHU	(May 44)	---
I-166	1800	---	INDIAN Ocean	(Aug 44)	---
I-168	1800	---	Between TRUK and RABAU	(Aug 43)	Missing on way from TRUK to RABAU
I-169	1800	Accident	TRUK	(Apr 44)	Sunk by accident while submerging during air raid
I-171	1800	---	BISMARCK area	(Mar 44)	---
I-172	1800	---	SOLOMONS area	(Oct 42)	---
I-174	1800	---	Central Pacific	(Apr 44)	---
I-175	1800	---	Central Pacific	(June 44)	---
I-176	1800	Sunk by mine	Vicinity of BUKA	(June 44)	Failed to reach BUKA on transport duty from TRUK
I-177	1800	---	Waters W of PALAU	(Nov 44)	Believed sunk by des- troyer 4 km W of PELELIEU 2 Oct
I-165	1800	---	Central Pacific	(July 45)	---
I-178	1800	---	SOLOMONS area	(Aug 43)	---
I-179	1800	Accident	INLAND SEA	(July 43)	---
I-180	1800	---	North Pacific area	(May 44)	---
I-181	1800	---	NEW GUINEA	(Mar 44)	Missing on transport duty to RABAU
I-182	1800	---	SOLOMONS area	(Oct 43)	---

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ENCLOSURE (D), continued

<u>Sub</u>	<u>Displace- ment</u>	<u>Method Destroyed</u>	<u>Location</u>	<u>Date Sunk (Official Date)</u>	<u>Details</u>
I-183	1800	Sub torpedo?	Central Pacific	(June 44)	Failed to reach SAIPAN on way from SASEBO to TRUK via SAIPAN
I-184	1800	---	MARIANAS area	June 44)	---
I-185	1800	---	MARIANAS area	(June 44)	---
I-351	2700	---	CHINA SEA	(July 45)	Missing on transport duty between Japan and SINGAPORE
I-361	1700	---	Central Pacific	(Apr 45)	---
I-362	1700	---	Central Pacific	(Feb 45)	Missing on way to WOLEAI operation
I-364	1700	---	Central Pacific	(Oct 44)	Missing on transport duty on way from YOKOSUKA to WAKE
I-365	1700	---	South Seas area	(Dec 44)	Missing on way from YOKOSUKA to TRUK
I-368	1700	---	IWO JIMA Blockade	(Mar 45)	Left KURE 20 Feb for KAITEN attack on IWO JIMA blockade vessels
I-370	1700	---	IWO JIMA Blockade	(Mar 45)	Left KURE 20 Feb for KAITEN attack on IWO JIMA blockade vessels
I-371	1700	---	Central Pacific	(Mar 45)	Missing on transport duty to TRUK and WOLEAI
I-372	1700	Bombing attack	YOKOSUKA	1 Aug 45 (Aug 45)	---
I-373	1700	---	E CHINA Sea	(July 45)	Missing on transport duty between Japan and FORMOSA
Ro-33	900	---	E NEW GUINEA area	(Sept 43)	---
Ro-34	900	---	SOLOMONS area	(May 43)	---
Ro-35	900	---	SOLOMONS area	(Oct 43)	---
Ro-36	900	---	MARIANAS area	(June 44)	---
Ro-37	900	---	ESPIRITU SANTO IS. area	(Feb 44)	---
Ro-38	900	---	GILBERTS area	(Jan 44)	---

ENCLOSURE (D), continued

<u>Sub</u>	<u>Displace- ment</u>	<u>Method Destroyed</u>	<u>Location</u>	<u>Date Sunk (Official Date)</u>	<u>Details</u>
Ro-39	900	---	MARSHALLS area	(Mar 44)	Destroyed by a power- ful force east of KOTJE
Ro-40	900	---	In South Seas area	(Mar 44)	---
Ro-41	900	---	Waters SE of NANSEI SHOTO	(Mar 45)	Missing while stationed to SE of NANSEI SHOTO
Ro-42	900	---	MARIANAS area	(June 44)	---
Ro-43	900	---	IWO JIMA area	(Mar 45)	---
Ro-44	900	---	MARIANAS area	(June 44)	---
Ro-45	900	---	South of TRUK	(May 44)	---
Ro-46	900	---	Waters SE of NANSEI SHOTO	(May 45)	---
Ro-47	900	---	Waters to SE of PALAU	(Nov 44)	Sank 1 transport (TN:? Tx1) south of PALAU 5 Oct. Observed from shore
Ro-48	900	---	MARIANAS area	(July 44)	---
Ro-49	900	---	Waters to SE of NANSEI SHOTO	(May 45)	---
Ro-55	900	---	Waters to W of PHILIPPINES	(Feb 45)	---
Ro-56	900	---	Central Pacific	(May 45)	---
Ro-60	900	Accident	HIROSHIMA Wan	(Dec 41)	---
Ro-61	900	---	ATKA Island	(30 Aug 42)	Missing after sinking a class A cruiser in NAZAN BAY
Ro-64	900	Struck a mine	HIROSHIMA Wan	12 Apr 45 (May 45)	Struck a mine while at practice in HIROSHIMA Wan
Ro-65	900	---	KISKA	(May 43)	Sank by error at KISKA avoiding air attack
Ro-66	900	Collision with ac- companying vessel	WAKE ISLAND area	(Dec 41)	---
Ro-100	700	---	SOLOMONS area	(Oct 43)	---
Ro-101	700	---	SOLOMONS area	(Oct 43)	---

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ENCLOSURE (D), continued

<u>Sub</u>	<u>Displace- ment</u>	<u>Method Destroyed</u>	<u>Location</u>	<u>Date Sunk (Official Date)</u>	<u>Details</u>
Ro-102	700	---	NEW GUINEA area	(May 43)	---
Ro-103	700	---	SOLOMONS area	(Sep 43)	---
Ro-104	700	---	South of TRUK	(June 44)	---
Ro-105	700	---	South of TRUK	(June 44)	---
Ro-106	700	---	South of TRUK	(June 44)	---
Ro-107	700	---	NEW IRELAND area	(July 43)	---
Ro-108	700	---	S of TRUK	(June 44)	---
Ro-109	700	---	Waters SE of NANSEI SHOTO	(May 45)	---
Ro-110	700	---	INDIAN Ocean	(Mar 44)	---
Ro-111	700	---	S of MARIANAS	(June 44)	---
Ro-112	700	---	Waters N of PHILIPPINES	(Feb 45)	Missing while on trans- port duty from TADAO to BATORINAO (TN: ?)
Ro-113	700	---	Waters N of PHILIPPINES	(Feb 45)	Missing while on trans- port duty from TADAO to BATORINAO (TN: ?)
Ro-114	700	---	MARIANAS area	(June 44)	Sank IOWA class BB 25 miles off GUAM 16 June (Seen from shore)
Ro-115	700	---	NW of PHILIP- PINES	(Jan 45)	---
Ro-116	700	---	S of TRUK	(June 44)	---
Ro-117	700	---	MARIANAS area	(June 44)	---
Ro-501	700	---	ATLANTIC	(Mar 44)	Enroute from Germany

Notes: 1. Where no entry had been made under "Method Destroyed," it is assumed that the cause was loss in battle.

2. Ro-30, Ro-32, I-152 (Apr 42) Became obsolete and
Ro-31 (May 45) unfit for use

Ro-67 July 45 Main engines unfit for
service after damage
by air attack

Above named ships decommissioned and scrapped.

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ENCLOSURE (E)

JAPANESE TRANSPORT SUBMARINES

(Submitted by Comdr. MORI, IJN, to U.S. Strategic Bombing Survey)

1. Types and Number of Submarines Assigned as Transportsa. Number of combat submarines especially converted for transport use:

No submarines were converted especially for transport use.

b. Number of submarines built especially for transport use:

I-361 Type 13

I-351 Type 1

HA-101 Type 10

c. Numbers of submarines allocated from the Navy to the Army: None.d. Number of submarines with crews made up of Navy personnel: Submarines constructed by the Navy were all manned by Navy personnel.2. Munitions and Personnel Transported by Submarines

a. Types of munitions (types loaded on decks): Provisions (chiefly rice, wheat and canned goods), Ammunition (shells smaller than 8cm cannon), Fire arms (smaller than 8cm cannon), Medical supplies, Clothing, Fuel (crude oil, gasoline). (Cannon and some provisions were loaded on deck).

b. Methods of water-proofing loads on deck: Watertight rubber bags or drums were used for provisions. Cargo tubes or fire arms shipping tubes which were especially built so that they could be loaded on deck. After the materials were packed in them, they were made waterproof.

c. Main routes and amount of munitions and personnel transported on respective routes: See Table I(E).

3. Number of Transport Submarines Lost and Cause

See Table II(E).

4. Quantity of Munitions and Number of Personnel Lost Through the Sinking of Transport Subs

See Table II(E).

5. Were Torpedoes Carried in Order to Attack Enemy Shipping Encountered?

Submarines built for transport duties did not have torpedo tubes, but since it was necessary to attack enemy ships while engaged in transport duties, the submarines were refitted with torpedo tubes. Generally, submarines which were outfitted with torpedo tubes carried a few torpedoes even though they were engaged in transport.

6. Views Regarding Comparative Advantages and Disadvantages of Using Submarines in Combat or in Transport

Only submarines can be used for transport, when one thinks other ships cannot get through successfully against the enemy. Originally, the general rule was

ENCLOSURE (E), continued

for using submarines as a weapon. Because of the enemy's blockade, surface ships could not be used for transporting supplies, and submarines had to be used for this purpose. The following is an outline of the purposes of transport and to this has been added our views on the subject.

a. The maintenance of fighting strength of our forward garrison forces which face the enemy: That which transport accomplishes, is the maintenance of fighting strength of our garrison units which are engaged in combat with enemy ground forces. The use of a fairly large number of submarines is based on the fact that one can then defend strategic areas to the last man, initiate offensives when situations present themselves, and even under unfavorable conditions prolong the battle as long as possible. The best example of this is shown in the early stages of the enemy's invasion of GUADALCANAL and Eastern NEW GUINEA. Submarines were able to fulfill their mission of transport with some success in the early stages of both battles, but as the attacks became larger, and the enemy ground forces fought more fiercely, more and more supplies were consumed, finally becoming insufficient, as they could not be replaced by submarines. However, it is recognized that this did delay to some extent, the retreat of our garrison forces when conditions were favorable.

b. Evacuation of isolated garrison forces: When there is no more hope of supplies, and there is no other way than self-destruction, as a last resort submarines have been used to evacuate garrison forces to rear areas. They have succeeded in transporting a few people, but even though many large submarines were used, it was impossible to transport a large unit. Therefore, this is only a supplemental use of a submarine. Examples of this are the evacuation of GUADALCANAL and KISKA.

c. Supply line to isolated islands: If there is no way to evacuate a garrison force or if it is better to continue having a garrison force stationed on an isolated island, if possible, submarines can transport food and medical supplies to sustain life. This affects both the physical and mental characteristics of the garrison force by sustaining its strength and by raising its morale.

By combining the above effects of submarine transport, one can see that considerable strategic results can be obtained, but there are many occasions when submarines engaged in transport duties face more difficulties than those engaged in combat. Therefore, many submarines are lost while engaged in transport duties.

In short, in contrast to a submarine's being an extremely effective combat weapon, it is an extremely poor transport ship. When choosing between these two duties on a mathematical and scientific basis, the conclusion that it was more useful as a combat weapon is the same now as it was during the war. But, it was impossible to see one's forces left to face self-destruction because supplies were cut off, and so submarines were used for transport in order to carry supplies to the very last, to the officers and men who were exhausting their strength. In other words, this "super" strategy resulted from a combination of sympathetic love of one's forces and the magnanimity of the supreme command.

7. Operational Doctrine for Transport Submarines

- a. Singly or in groups.
- b. No escort.

ENCLOSURE (E), continued

8. To What Degree Were Transport Submarines Used to Fulfill the Following Aims
- a. Evacuation of isolated guard units: Used more submarines in evacuation of KISKA and GUADALCANAL than in any other transport operation.
 - b. Evacuation of wounded: Submarines were rarely used for this purpose specifically, but frequently, as a secondary duty, they evacuated wounded on return trips after transporting supplies.
 - c. Transport of raw materials to Japan: In 1945, two submarines transported gasoline and other raw materials from TAIWAN and MALAYA. This was not carried out on a large scale by using many submarines.
9. Were Submarines Used for Transport Because of the Shortage of Surface Vessels or in Order to Maintain Supply to Cut-off Units?

For the latter.

10. Reasons for Stopping the Transportation of Supplies to Specially Designated Areas
- a. The first reason is that so many submarines were lost while engaged in transport duties to these areas, that it became impossible to continue.
 - b. Secondly, there were too few submarines.

ENCLOSURE ()

Table I(E)
PRINCIPAL ROUTES OF TRANSPORT SUBMARINES AND AMOUNT OF SUPPLIES AND PERSONNEL TRANSPORTED

Main Routes	Time Period	Amt. Transported		Notes
		Personnel	Supplies	
RABAU, GUADALCANAL, BUKA and return.	Latter part of Dec., 1942 - latter part of Jan. 1943	Approx. 1000 T.	Approx. 300 T.	Transported mostly supplies to and personnel from the island.
RABAU, LAE, BUNA and return.	Last part of Dec. 1942 - last part of Feb. 1943	Approx. 1000 T.	Approx. 500 T.	Transported mostly supplies to and personnel from the island.
PARAMUSHIRO, KISKA, ATTU and return.	Middle part of April 1943 - latter part of June 1943.	Approx. 1000 T.	Approx. 1000 T.	Transported mostly supplies to and personnel from the island
RABAU, BOUGAINVILLE, TRUK and return.	First part of Feb. 1943 - first of April 1944.	Unknown	Approx. 2400 T.	Not accurate
RABAU, NEW GUINEA and return.	Last of March 1943 - first of April 1944	Unknown	Approx. 5000 T.	Not accurate
YOKOSUKA, WAKE, MARSHALL, MERTON and return.	First of Feb. 1944 - middle of Aug. 1945	Unknown	Approx. 900 T.	
KURE, HIGASHIOGARI SHIMA, A-AMI OSHIMA and return.	June 1945	Unknown	Approx. 60 T.	
SASEBO, TAKAO and return.	July 1945		200 T. Gasoline, other supplies unknown.	
SASEBO, SINGAPORE and return.	June 1945	Unknown	Approx. 400 T. Gasoline, 300 T. additional supplies.	
"TSUGEGAFUO" TAKAO (North Philippines) and return.	1945	Approx. 50		

Note: Since there were no records, information is not exact.

ENCLOSURE (E), continued

Table II(E)
THE NUMBER OF TRANSPORT SUBMARINES LOST AND CAUSES, INCLUDING AMOUNT OF
SUPPLIES AND NUMBER OF PERSONNEL THEREBY LOST

No. of Sub.	Date Lost	Cause	Transported Material Lost	
			Personnel	Supplies
I-1	28 January 1943	Shelling and Depth Charge of enemy patrol boat.		About 30 T.
I-2	April 1943	Unknown	About 50	
I-3	9 Dec. 1942	Depth Charge by PT boat.		About 30 T.
I-4	Jan. 1943	Unknown	Unknown	
I-7	May 1943	Shelling by Patrol		About 60 T.
I-9	May 1943	Unknown		About 60 T.
I-13	July 1945	Unknown		About 20 T.
I-16	Aug. 1944	Unknown		About 50 T.
I-24	June 1943	Unknown		
I-29	July 1944	Sub torpedo attack	Unknown	Unknown
I-30	13 Oct. 1943	Mine	Unknown	Unknown

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ENCLOSURE (F)

EXTRACT FROM INTERROGATION OF CMDR. YASUO FUJIMORI, IJN

by Captain H. Falcon-Stewart, R.N.

The purpose of this interrogation was to ascertain the proposed use of Japanese submarines against Allied invasion forces.

At the close of the war the Japanese submarines were divided into two groups, fleet submarines and coastal defense submarines. The latter were included in the organization for the Special Attack Forces; this interrogation refers to the Fleet Submarines.

ORGANIZATION:

The organization for submarines is set out in tabular form. All fleet submarines to be used for defense of KYUSHU were part of the 6th Fleet commanded by Vice Admiral DAIGO at KURE.

SUBMARINE FORCE AVAILABLE:

The number of fleet submarines available was 50, formed in five divisions. All except the First Division were to be used for the defense of KYUSHU. The First Division, consisting of the large submarines carrying aircraft, was to be used for attacks at ULITHI and LEYTE during Allied mounting period. On completion, the First Division was to proceed to SINGAPORE for supplies and fuel and then return to Japan.

DIVISIONS FOR DEFENSE OF KYUSHU:

15th Division included submarines carrying 5 "human" torpedoes each, and was to establish patrol positions 1000 miles from KYUSHU extending down to OKINAWA where KAITEN attacks were to be carried out.

16th Division was comprised of cargo carrying submarines. Being unarmed, this Division was to establish patrol positions about 600 miles from KYUSHU and carry out reconnaissance duties only.

52nd Division operating from KURE, SASEBO and KAGOSHIMA was to establish patrol positions 100 to 300 miles from KYUSHU. After the Allied forces had effected a landing, submarines of this Division were to attack shipping in transport areas.

The majority of submarines of 34th and 52nd Division would not have sailed for patrol positions until Allied forces had been reported by reconnaissance aircraft.

The principal targets for submarines were to be transports.

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ENCLOSURE (G)

LIST OF ALLIED MEN-OF-WAR CLAIMED BY JAPANESE TO HAVE BEEN SUNK OR DAMAGED
BY THEIR SUBMARINES

(Submitted by Japanese Navy Ministry in reply to direct questions.)

Type	Sunk or Damaged	Place	Date	Submarine
Battleship*	Sunk	Pearl Harbor	Dec. 8, 1941	Midget
LANGLEY	Sunk	Southwest of Johnston Is.	Jan. 8, 1942	I-25
LEXINGTON	Damaged	Southwest of Hawaii	Jan. 12, 1942	I-6
Warship	Sunk	Sydney	May 31, 1942	Midget
YORKTOWN	Sunk	East of Midway	June 7, 1942	I-168
Cruiser*	Sunk	Vicinity of Atka Is.	Aug. 31, 1942	Ro-61
Aircraft Carrier	Damaged	Southeast of Solomon Is.	Aug. 31, 1942	I-26
Aircraft Carrier	Damaged	Southeast of Solomon Is.	Sept. 6, 1942	I-11
WASP	Sunk	Southeast of Solomon Is.	Sept. 15, 1942	I-19
TEXAS Type BB	Damaged	Southeast of Guadalcanal	Oct. 20, 1942	I-176
COLORADO Type BB	Damaged	Southeast of Solomon Is.	Oct. 27, 1942	I-21
SAN FRANCISCO Type Cruiser	Damaged Damaged	Solomon Is. Solomon Is.	Nov. 13, 1942	I-26
Cruiser	Damaged	West of New Hebrides	July 20, 1943	I-11
Aircraft Carrier	Sunk	Vicinity of Maloelap Is.	Oct. 25, 1943	I-175
Cruiser*	Sunk	Vicinity of Wotje Is.	Feb. 3, 1944	Ro-39

ENCLOSURE (G), continued

<u>Type</u>	<u>Sunk or Damaged</u>	<u>Place</u>	<u>Date</u>	<u>Submarine</u>
Aircraft Carrier	Damaged	South of Marshall Is.	Apr. 16, 1944	I-36
IOWA Type BB*	Sunk	West of Guam	June 16, 1944	Ro-114
Aircraft Carrier**	Damaged	Southwest of Guam	June 19, 1944	Ro-115
Aircraft Carrier*	Sunk	East of Saipan	June 30, 1944	I-6
Aircraft Carrier	Sunk	East of Molotai Is.	Oct. 3, 1944	Ro-41
Aircraft Carrier	Damaged	East of Molotai Is.	Oct. 3, 1944	Ro-41
Aircraft Carrier	Sunk	East of Leyte	Oct. 25, 1944	I-56
Aircraft Carrier	Damaged	600 miles east of Manila	Nov. 3, 1944	I-41
3 Battleships**	Sunk	Ulithi	Nov. 20, 1944	I-47
Aircraft Carrier**	Sunk	Ulithi	Nov. 20, 1944	I-36
Aircraft Carrier	Sunk	East of Philippines	Nov. 25, 1944	Ro-50
Battleship	Damaged	55 miles east of Iba	Jan. 12, 1945	Ro-49
Aircraft Carrier	Damaged	60 miles west of Lingayen	Feb. 17, 1945	Ro-109
Aircraft Carrier***	Sunk	South of Oki Daito Is.	July 7, 1945	I-47
INDIANAPOLIS	Sunk	300 miles north of Palau	July 29, 1945	I-58
Seaplane Carrier***	Sunk	320 miles 150 Brg., Okinawa	Aug. 12, 1945	I-58

*Presumption

**Presumption and credited to KAITEN Attack.

***KAITEN Attack

ENCLOSURE (H)

LISTS OF ATTACKS ON U.S. SUBMARINES AND POSSIBLE SINKINGS

(From "Preliminary Report on Japanese Submarine Force" - SubRon 20)

Notes

1. This list consists of two parts, both translations. The first gives the date and place of attacks made on U.S. submarines; the second is an amplifying report which gives further information on each attack. This second list was compiled after receipt of the first list and numbered to correspond with it. The numbers in parentheses are corresponding attack numbers.
2. The dates given in the first list are according to the Japanese system. The year 16 is 1941, 17 is 1942, and so on. Months are numbered consecutively with January being number one. Days of the month are numbered as in our system.
3. As an example: (4) 16-12-17 on the first list would be attack Number Four made on December 17, 1941. Further information on this attack will be found under (4) in list Number Two.
4. It will be noted that the data grew more complete as the war progressed. Where a question mark is inserted, the Japanese have no record available as to the details of the attack reported.

ENCLOSURE (H), continued

List No. 1

RECORD OF ANTI-SUBMARINE ATTACKS

The attacked submarines could not be identified but were estimated sunk judging from the condition before and after the attacks.

DATE	PLACE
(1) 16-12-8	Outside PALAU HARBOR
(2) 12-13	50M North of VIGAN (NW side of Philippines)
(3) 12-16	4°-24'N 127°-47'E
(4) 12-17	31° 585M off Marcus Island (MINAMITORSHIMA)
(5) 12-17	Entrance of West Channel - North of Palau Bay
(6) 12-18	SE 5M off PALAU Lighthouse
(7) 12-18	Near VIGAN
(8) 12-19	196° 8M off TOSU Lighthouse, Hainan Island
(9) 12-19	6° 20M off KATABARU Lighthouse
(10) 12-19	117° 94M off DAVAO
(11) 12-23	323° 19M off JAPAYAN Lighthouse
(12) 12-24	Off KUCHING (KOETJING)
(13) 12-25	2°-30'N 109°-30'E
(14) 12-25	267° 28M off SAN FERNANDO Lighthouse, LINGAYAN Bay
(15) 12-25	280° 23M off SAN FERNANDO Lighthouse
(16) 12-25	12M outside CAMRANH Bay
(17) 12-25	CAVITE (MANILA Bay)
(18) 12-26	283° 19M off SAN FERNANDO Lighthouse, LINGAYAN Bay
(19) 12-26	MANILA Bay
(20) 17- 1-10	97° 16M off BARUT Island
(21) 1-11	186° 6M off DAVAO Lighthouse
(22) 1-11	Off KIYO Channel (New Britain)
(23) 1-14	Inside DAVAO Bay
(24) 1-19	Two Boats (LINGAYAN Bay)
(25) 1-24	Off BALIKPAPAN
(26) 1-26	13° 35'N 105°-28'E
(27) 1-28	51° 117M off HANKATE Lighthouse (outside CAMRANH Bay)
(28) 1-31	Off BALIKPAPAN
(29) 2-1	78° 22M off ARU Point, southeastern coast of Borneo
(30) 2-2	Off BALIKPAPAN
(31) 2-2	55° 65 KM off LENBIS Island (near MENADO)
(32) 2-6	90° 5M off SOUTH SAPONDA (near KENDARY)
(33) 2-10	Near EROKONDAR Lighthouse (South of SAIGON)
(34) 2-10	Near MAKIN (Gilbert Island)
(35) 2-11	East of MENADO
(36) 2-13	275° 50M off IAN POINT (North of LINGA)
(37) 2-14	West of SINKEP (South of LINGA Island)
(38) 2-17	36° 72M North of KENDARY
(39) 2-17	270° 10M off MESHIMA Lighthouse (GOTO Island)
(40) 2-18	266° 65M off MESHIMA Lighthouse (GOTO Island)
(41) 2-18	280° 70M off MESHIMA Lighthouse (GOTO Island)
(42) 2-19	219° 3M off GRANOTE Island (SUTIC Bay)
(43) 2-19	265° 27M off NUMOZAKI
(44) 2-21	45° 7M off GORON Point (SE of KENDARY)
(45) 2-21	320° 28M off AWARUAWARU Point {AWARUAWARU Point 220° 50M off SURABAYA}
(46) 3-1	266° 7M NICHOLAS Point (Northwest of Java)
(47) 3-1	West of Java
(48) 3-1	Near BARVEAN Islands (North of SURABAYA)
(49) 3-2	0° 7M NICHOLAS Point

ENCLOSURE (H), continued

	DATE	PLACE
(50)	17- 3-2	320° 10M MERAKU
(51)	3-2	West MADARA (Near SURABAYA)
(52)	3-2	NW 90M BAWEAN Island
(53)	3-3	North of - kan Anchorage (not clear)
(54)	3-3	W 60M BAWEAN Island
(55)	3-5	300° 18M BAWEAN Island
(56)	3-5	N 10M BALI Island
(57)	3-8	N 60M BALI Island
(58)	3-13	NW 40M BAWEAN Island
(59)	3-21	30° 28M GREENWICH Island
(60)	3-25	290° 11M (South Seas Island)
(61)	3-28	North of SIKO Island
(62)	3-28	Off KONPANG (TIMOR Island)
(63)	3-28	Off west of KYUSHU
(64)	3-31	3° - 59'S 151° - 58'E
(65)	3-31	Near CHRISTMAS Island (south of Java)
(66)	4-1	347° 4M CHRISTMAS Island
(67)	4-6	0° - 33'S 119° - 15'E
(68)	4-10	East of SAMARIDA (North of BALIKPAPAN)
(69)	4-18	268° 25M HISURU
(70)	4-20	300° 5M SAMASAKI (entrance of TOKYO Bay)
(71)	4-23	196° 170M Club Point (PAROMUSHIRO)
(72)	4-29	290° 170M KAVIENG (New Ireland)
(73)	5-17	254° 38M North Channel of TRUK Island
(74)	5-19	E 27M MOEN Island Lighthouse, TRUK
(75)	5-23	255° 16M ICHIEZAKI Lighthouse (KII Channel)
(76)	5-23	215° 55M AMBON Lighthouse
(77)	5-24	246° 53M WILLIAM Lighthouse
(78)	5-26	0° - 13'N 118° - 45'E (Celebes Islands)
(79)	5-30	8° - 3'S 121° - 52'E
(80)	5-31	30° - 37'N 126° - 52'E
(81)	6-3	282° 10M SHIONOSAKI (KII Channel)
(82)	6-8	140° 690M WAKE Island
(83)	6-9	0° - 32'N 118° - 44'E
(84)	6-9	4° - 36'S 116° - 1'E
(85)	6-11	255° 10KM WAKE Island
(86)	6-12	4° - 39'S 116° - 1'E
(87)	6-13	Near 258° 18' CORREGIDOR Island
(88)	6-16	30° - 33'N 128° - 42'E
(89)	7-1	248° 10M TULAGI (Solomon Island)
(90)	7-4	12° - 30'N 109° - 33'E
(91)	7-4	3° - 15'N 99° - 52'E
(92)	7-6	135° 16M SHIRIYAZAKI Strait (TAUGARU Channel)
(93)	7-6	E 1.3 KM LITTLE KISKA Point (KISKA)
(94)	7-6	Near MALOERAP (Marshall Island)
(95)	7-7	E 25M RED (West of New Guinea)
(96)	7-8	10° 55KM LITTLE KISKA 14
(97)	7-14	260° 30M SHIONOMISAKI
(98)	7-15	235° 19M off ICHUZAKI
(99)	7-18	MAKASSAR Straits
(100)	7-21	8° - 27'S 148° - 19'E
(101)	7-21	220° 21M off WINTER Island, TRUK
(102)	7-23	6° - 29'S 118° - 21'E
(103)	7-29	Off PINANG
(104)	8-1	5° 14M SSW off SHIRIJA Point
(105)	8-11	70° 36M MUSSA Island
(106)	8-11	North Entrance of STESHEN Straits, New Britain
(107)	8-11	306° 28M off KAVIENG

ENCLOSURE (H), continued

	DATE	PLACE
(108)	17- 8-12	2° - 4°S 151° - 13°E
(109)	8-18	7° - 0°S 119° - 0°E
(110)	8-19	225° 55M off CHICHIJIMA
(111)	8-20	2° - 0°S 150° - 31°E
(112)	8-22	180° - 3M off KASHINOZAKI Lighthouse, KII Peninsula
(113)	8-24	90° 2M off Japan
(114)	9-2	North of LOMBOK Strait
(115)	9-4	11° - 34°N 109° - 17°E
(116)	9-5	35° 3M off ISHIJIMA (KUJI Bay, IWATE Prefecture)
(117)	9-5	81° 125M off LUOT Island (?)
(118)	9-5	150° 34M off SAMIKAKU, IWATE Prefecture
(119)	9-11	202° 735M off SUMERA Island, TRUK
(120)	9-12	60° 480M LUOT Island (?)
(121)	9-18	20° 10M off ABUYUZAKI, HOKKAIDO, North of TARU
(122)	9-19	211° 150M off SUMMER Island, TRUK
(123)	9-23	110° 112M off OSCILDMERE Island (?)
(124)	9-26	180° 25M off ICHIZAKI
(125)	10-3	155° 43M off SUMMER Island, TRUK
(126)	10	167° 44M off SUMMER Island, TRUK
(127)	10-7	Off TARAWA (Gilbert Island)
(128)	10-11	350° 18M off TUKOY (?)
(129)	10-12	NORTH AMBON Bay
(130)	11-3	10M South of TOMORA (?)
(131)	11-7	65° 22M off BUKI Island (?)
(132)	11-7	210° 36M off SUMMER Island, TRUK
(133)	11-12	152° 92M off TONGUE Island
(134)	11-17	20° 26M off SUMMER Island, TRUK
(135)	11-20	7° - 10°S 153° - 47°E
(136)	11-25	278° 38M off SUMMER Island, TRUK
(137)	11-30	201° 22M off ST. GEORGE POINT, New Ireland
(138)	12-3	243° 9M off MONOLA (south of BOUGAINVILLE)
(139)	12-9	22° - 10°N 139° - 10°E
(140)	12-22	16° - 25°N 119° - 44°E
(141)	18- 1-3	30° - 32°N 141° - 46°E
(142)	1-8	31° - 51°N 132° - 43°E
(143)	1-10	5° - 40°S 152° - 2°E
(144)	1-14	225° 35M off TSUKUZAKI Lighthouse
(145)	1-15	1° - 16°S 112° - 17°E
(146)	1-15	6° - 29°S 112° - 2°E
(147)	1-17	1° - 16°S 117° - 5°E
(148)	1-19	163° 12M off DAIOZAKI
(149)	1-23	7° - 42°S 134° - 8°E
(150)	1-25	1° - 17°S 117° - 6°E
(151)	1-26	220° - 16M off AMBON
(152)	1-27	10° 6M off URATON (RABAU) (?)
(153)	1-28	5° - 10°S 154° - 25°E
(154)	1-29	6° - 38°S 112° - 7°E
(155)	1-30	5° - 10°S 154° - 29°E
(156)	1-30	37° - 49°N 141° - 8°E
(157)	2-16	5° - 5°S 152° - 39°E
(158)	2-18	4° - 55°S 152° - 24°E
(159)	2-19	5° - 4°S 152° - 18°E
(160)	2-19	313° - 12' off BAIKAI Bay (South China)
(161)	2-23	230° 15' off CORREGIDOR
(162)	2-25	0° - 25°S 140° 57'E
(163)	3-6	1° - 37°N 145° - 30°E
(164)	3-6	6° - 20°N 123° - 11°E
(165)	3-7	3° - 5°N 141° - 44°E

ENCLOSURE (H), continued

	DATE	PLACE
(166)	18- 3-9	27° - 5'N 121° - 16'E
(167)	3-11	22° - 4'N 120° - 31'E
(168)	3-11	7° - 45' 134° - 13'E
(169)	3-6	103° - 13' off KAMAISHI
(170)	3-7	26° - 50'N 122° - 27'E
(171)	3-15	5° - 4'S 152° - 18'E
(172)	3-19	5° - 4'S 152° - 18'E
(173)	3-20	16° - 0'N 143° - 19'E
(174)	3-23	26° - 10'N 121° - 45'E
(175)	3-24	9° - 5'N 123° - 16'E
(176)	3-25	4° - 39'S 118° - 0'E
(177)	3-25	5° - 41'S 114° - 0'E
(178)	3-27	9° - 50'S 162° - 55'E
(179)	3-29	11° - 49'N 121° - 46'E
(180)	4-3	55° - 35' off SHINANUKA Lighthouse near GOSHIRIYAZAKI
(181)	4-6	Off WAKE Island
(182)	5-3	351° - 105M off DAULON, TRUK
(183)	5-4	125° - 5' off SHIROMIKA Lighthouse
(184)	5-5	130° - 7' AZON Point, HOKKAIDO
(185)	5-5	220° - 33' off NASO Point, PENANG
(186)	5-8	205° - 52' off CEBU Island
(187)	5-11	312° - 161M GUNKON, SAIPAN
(188)	5-11	210° - 7.4' off AYARIZAKI Point, IWATE Prefecture
(189)	5-24	54° - 5' off SHIRANUKA Lighthouse
(190)	5-28	1° - 42'S 150° - 18'E
(191)	5-29	240° - 10' off KAKAZUKA Point, SHIZUOKA Prefecture
(192)	5-30	33° - 20'N 128° - 40'E
(193)	5-31	31° - 34'N 128° - 46'E
(194)	5-31	122° - 5M off SHIRANUKA Lighthouse
(195)	6-5	172° - 74M off MIZUNOKO Lighthouse
(196)	6-6	143° - 17M off Cape LOPATKA
(197)	6-6	60° - 7' off SHIRYEZAKI Point
(198)	6-11	52° - 7.4' off MLAYO Point Lighthouse
(199)	6-15	120° - 5' off south channel of JALUIT Island
(200)	6-17	2° - 0'S 154° - 3'E
(201)	6-19	32° - 45'N 126° - 27'E
(202)	6-22	100° - 17.5' off DAIOZAKI Point
(203)	6-22	80° - 11.5' off ANZON Lighthouse
(204)	6-25	286° - 7.5' off TATAZAKI Point
(205)	7-5	352° - 19' off TATAZAKI Point
(206)	7-5	352° - 19' off TATAZAKI Point
(207)	7-5	40° - 01'N 142° - 03'E
(208)	7-6	165° - 52M off south point of JALUIT Island
(209)	7-8	9° - 24' off TATAZAKI Point
(210)	7-8	9° - 24' off TATAZAKI Point
(211)	7-16	196° - 22' off SHIRINKI
(212)	7-20	8° - 15'N 149° - 50'E
(213)	7-26	187° - 30'
(214)	7-31	277° - 9M off KAKUZAKA Lighthouse
(215)	8-11	40° - 12'N 100° - 17'E
(216)	8-13	185° - 15' off MAKIZAKI Point
(217)	8-14	132° - 9' off Mt. MOKARA OSHIMA Island
(218)	8-14	8° - 8'N 107° - 30'E
(219)	8-15	275° - 25' off PAROMUSHIRA Island
(220)	8-18	25° - 18'N 120° - 33'E
(221)	8-20	24° - 23'N 120° - 11'E
(222)	8-20	120° - 4' off MANKARIBOB Lighthouse
(223)	8-23	5° - 5'N 134° - 42'E

ENCLOSURE (H), continued

	DATE	PLACE
(224)	18- 8-25	9° - 53'N 133° - 42'E
(225)	8-26	260° - 9' off West channel of PALSO Island
(226)	8-27	1° - 21'S 148° - 41'E
(227)	8-27	12° - 51'N 121° - 42'E
(228)	8-29	5° - 15'N 136° - 10'E
(229)	8-30	350° 18' off KATAJAZON near mouth of HONGTU River
(230)	9-1	Near mouth of TENRYN River
(231)	9-11	SWAREA off PALAU Island
(232)	9-15	East of CHUSAN Archipelago
(233)	9-15	SE 15' off BISHIS Point
(234)	9-17	320° - 2' off TAZIRI Lighthouse (?)
(235)	9-18	20° - 10' off ABUYU Point
(236)	9-22	0° - 05'S 144° - 17'E
(237)	9-24	180° - 15' off AYAMA (entrance ISE Bay)
(238)	9-24	28° - 0'N 146° - 10'E
(239)	9-25	15° - 24'N 145° - 29'E
(240)	9-28	9° - 37'N 121° - 44'E
(241)	9-30	95° - 39' off MUSASKI Bay, PARAMUSHIRO Island
(242)	10-6	195° - 16' off KANIESIG
(243)	10-7	13° - 24'N 113° - 5'E
(244)	10-11	200° - 9.5' off NIJOGAN (SOYA Strait) (?)
(245)	10-19	0° - 28'S 118° - 50'E
(246)	10-19	39° - 3' off BENTEN Point KUJI Bay
(247)	10-19	130° - 10.5' USHI Island (KUJI Bay)
(248)	10-20	1° - 24'S 117° - 35'E
(249)	10-20	0° - 22'N 118° - 38'E
(250)	10-23	143° - 8K off KALETUKA Lighthouse (?)
(251)	10-31	29° - 52'N 131° - 35'E
(252)	11-1	29° - 22'N 134° - 48'E
(253)	11-2	110° - 28.5' off ZYONRU Island
(254)	11-5	315° - 15' off West channel PALAU Island
(255)	11-8	0° - 25'N 119° - 45'E
(256)	11-9	285° - 20' MIRE
(257)	11-16	5° - 50'N 151° - 10'E
(258)	11-17	0° - 5'N
(259)	11-17	1° - 45'N 148° - 35'E
(260)	11-19	22° - 04'N 148° - 20'E
(261)	11-23	60° - 20' of HALMAH
(262)	11-26	5° - 45'N 138° - 02'E
(263)	12-5	6° - 28'N 138° - 09'E
(264)	12-9	16° - 05'N 148° - 20'E
(265)	12-10	1° - 34'N 123° - 07'E
(266)	12-15	23° - 04'N 124° - 35'E
(267)	2-17	272° off NICOBAR (?)
(268)	1-4	0° - 24'N 119° - 45'E
(269)	1-11	27° - 32'N 127° - 25'E
(270)	1-16	3° - 50'N 148° - 44'E
(271)	1-18	2° - 4'S 116° - 56'E
(272)	1-17	200° 9M off MIKIZAKI
(273)	1-25	6° - 55'N 126° - 56'E
(274)	1-28	30M NE of SHIOSZAKI
(275)	1-31	Mouth of TENRYN River
(276)	2-1	4° - 43'N 100° - 04'E
(277)	2-3	28° - 43'N 123° - 40'E
(278)	2-12	5° - 46'N 99° - 52'E
(279)	2-13	7° - 55'N 148° - 30'E
(280)	2-16	343° - 31.4M off GYARICK Island
(281)	2-18	7° - 55'N 93° - 35'E

ENCLOSURE (H), continued

	DATE	PLACE
(282)	18- 2-24	176° 16M off GYARICK Island
(283)	2-24	4° - 23'N 129° - 05'E
(284)	2-25	7° - 12'N 121° - 53'E
(285)	2-26	25° - 47'N 126° - 45'E
(286)	2-28	95° - 30M off TINIAN Island North Edge
(287)	2-29	25° - 49'N 130° - 21'E
(288)	3-3	4° - 16'N 125° - 02'E
(289)	3-9	14° - 38'N 120° - 02'E
(290)	3-15	43° - 08'N 146° - 30'E
(291)	3-16	4° - 19.5'N 100° - 14'E
(292)	3-21	24° - 42'N 120° - 40'E
(293)	3-22	25° - 20'N 126° - 51'E
(294)	3-29	0° - 52'S 134° - 02.5'E
(295)	3-30	7° - 51'N 151° - 32'E
(296)	4-3	45° - 13'N 150° - 47'E
(297)	4-4	3° - 25'N 99° - 50'E
(298)	4-7	5° - 06'N 126° - 12'E
(299)		19° - 03'N 142° - 37'E
(300)	4-8	321° - 25' off GUNKON Island, SAIPAN
(301)	4-12	28° - 08'N 128° - 57'E
(302)	4-12	276° - 10K off CHICHIJIMA
(303)	4-12	182° - 58' off Cape MUKA
(304)	4-12	33° - 26'N 135° - 37'E
(305)	4-6	13° - 46'N 136° - 15'E
(306)	4-16	6° - 52'N 123° - 47'E
(307)	4-17	26° - 01'N 142° - 14'E
(308)	4-18	13° off YUOK Island (?)
(309)	4-27	27° - 03'N 128° - 36'E
(310)	4-27	8° - 34'N 134° - 53'E
(311)	4-27	28° - 24'N 129° - 16'E
(312)	4-30	19° - 47'N 120° - 22'E
(313)	5-4	44° - 08'N 147° - 48'E
(314)	5-10	15° - 41'N 117° - 28'E
(315)	5-10	19° - 27'N 140° - 0'E
(316)	5-12	15° - 15'N 145° - 30'E
(317)	5-13	32° - 41'N 127° - 34'E
(318)	5-14	13° - 43'N 144° - 42'E
(319)	5-22	4° - 45'N 128° - 05'E
(320)	5-23	39° - 17'N 142° - 5.4'E
(321)	5-24	1° - 48'N 121° - 04'E
(322)	5-30	20° - 32'N 123° - 21.5'E
(323)	6-1	South 2K off Point TAGON of MATSURA Island, (CHISIMA Island)
(324)	6-1	18° - 35'N 141° - 35'E
(325)	6-2	20° - 14' off TATAZAKI
(326)	6-4	19° - 45'N 138° - 15'E
(327)	6-6	287° - 20.4M off GUNKON Island, SAIPAN
(328)	19- 6-11	7° - 0'N 151° - 53'E
(329)	6-10	4° - 41'N 119° - 50'E
(330)	6-12	31° - 28' 130° - 55'E
(331)	6-13	Near ZUM Island (?)
(332)	6-14	41° - 0.43'N 141° - 30.4'E
(333)	6-16	Mouth of DAVAR Bay (?)
(334)	6-17	Southern - Off TRUK Island
(335)	6-23	30° - 58'N 129° - 44'E
(336)	6-23	33° - 15'N 128° - 53'E
(337)	6-25	320° - 9' off NOMOZAKI
(338)	6-29	27° - 41'N 129° - 06'E
(339)	6-29	27° - 38'N 129° - 18'E

ENCLOSURE (H), continued

	DATE	PLACE
(340)	19- 6-30	27° - 44'N 129° - 04'E
(341)	7-1	10° - 45'S 128° - 55'E
(342)	7-15	29° - 40'N 139° - 02'E
(343)	7-16	20° - 13'N 122° - 39'E
(344)	7-18	3° - 0'N 119° - 20'E
(345)	7-18	28° - 40'N 139° - 26'E
(346)	7-17	5° - 56.5'N 95° - 17.4'E
(347)	7-19	27° - 95'N 141° - 54'E
(348)	7-22	38° - 44.7'N 121° - 34'E
(349)	7-25	5° - 52.5'N 95° - 28.5'E
(350)	7-27	5° - 25'N 121° - 42'E
(351)	7-27	1° - 04'N 125° - 06'E
(352)	7-29	25° - 10'N 120° - 53'E
(353)	7-29	1° - 42'N 125° - 18'E
(354)	8-3	1° - 28'N 124° - 21'E
(355)	8-5	5° - 53'N 125° - 41'E
(356)	8-6	24° - 36'N 141° - 0'E
(357)	8-6	30° - 52'N 129° - 40'E
(358)	8-7	32° - 10'N 129° - 45'E
(359)	8-7	21° - 51'N 120° - 43'E
(360)	8-7	1° - 14'N 121° - 30'E
(361)	8-8	14° - 22'N 120° - 17'E
(362)	8-12	26° - 18'N 122° - 43'E
(363)	8-13	33° - 34'N 129° - 07'E
(364)	8-16	31° - 35'N 128° - 37'E
(365)	8-21	13° - 20'N 120° - 23'E
(366)	8-21	13° - 29'N 120° - 19'E
(367)	8-24	15° - 50'N 119° - 43'E
(368)	8-25	18° - 34'N 120° - 32'E
(369)	8-25	220° - 6' off MIKIZAKI
(370)	8-26	1° - 09'N 126° - 02'E
(371)	8-27	16° - 28'N 119° - 44'E
(372)	8-31	21° - 40'N 121° - 23'E
(373)	8-31	13° - 24'N 119° - 50'E
(374)	9-1	21° - 33'N 119° - 06'E
(375)	9-1	21° - 08'N 118° - 46'E
(376)	9-3	21° - 15'N 121° - 30'E
(377)	9-3	33° - 26'N 136° - 18'E
(378)	9-3	33° - 37.5'N 136° - 35'E
(379)	9-5	17° - 05'N 120° - 16'E
(380)	9-5	21° - 22'N 121° - 55'E
(381)	9-6	16° - 20'N 119° - 33'E
(382)	9-6	22° - 01'N 120° - 14'E
(383)	9-10	32° - 20'N 128° - 39'E
(384)	9-11	24° - 28'N 124° - 04'E
(385)	9-15	Around PELLILUI
(386)	9-19	24° - 50'N 122° - 18'E
(387)	9-25	21° - 37'N 118° - 36'E
(388)	9-30	18° - 58'N 120° - 23'E
(389)	10-2	18° - 26'N 120° - 32'E
(390)	10-5	15° - 02'N 120° - 02'E
(391)	10-6	17° - 29'N 120° - 21'E
(392)	10-8	14° - 17'N 115° - 52'E
(393)	10-8	5° - 33'S 112° - 29'E
(394)	10-10	16° - 09'N 119° - 42'E
(395)	10-22	29° - 20'N 129° - 46'E
(396)	10-24	20° - 41'N 118° - 27'E
(397)	11-2	4° - 03'S 119° - 00'E

ENCLOSURE (H), continued

	DATE	PLACE
(398)	19-11-6	6° - 7'S 112° - 01'E
(399)	11-7	Off KEIZON Point (?)
(400)	11-11	33° - 38'N 141° - 00'E
(401)	11-14	30° - 56'N 122° - 50'E
(402)	11-16	32° - 10'N 139° - 30'E
(403)	11-16	29° - 21'N 141° - 30'E
(404)	11-17	33° - 10'N 124° - 40'E
(405)	11-17	33° - 52'N 125° - 25'E
(406)	11-17	33° - 30'N 124° - 38'E
(407)	11-18	32° - 56'N 123° - 38'E
(408)	11-18	33° - 20'N 124° - 40'E
(409)	11-19	2° - 17'N 107° - 09'E
(410)	11-22	2° - 03'N 102° - 14'E
(411)	11-22	7° - 15'S 115° - 25'E
(412)	11-28	32° - 21'N 129° - 36'E
(413)	11-30	18° - 06'N 111° - 18'E
(414)	12-2	30° - 10'N 128° - 17'E
(415)	12-4	13° - 12'N 116° - 39'E
(416)	12-11	34° - 33'N 138° - 21.5'E
(417)	12-19	23° - 06'N 126° - 31'E
(418)	12-22	34° - 33'N 138° - 02'E
(419)	12-22	29° - 2'N 134° - 01'E
(420)	12-26	31° - 36'N 128° - 61'E
(421)	12-31	33° - 2.7'N 128° - 49.2'E
(422)	12-30	33° - 6.5'N 127° - 58'E
(423)	20- 1-5	29° - 35'N 141° - 07'E
(424)	1-11	5° - 50'N 98° - 41'E
(425)	1-21	29° - 01'N 126° - 24'E
(426)	1-23	34° - 23'N 130° - 15'E
(427)	1-25	29° - 37'N 130° - 21'E
(428)	1-31	28° - 16'N 128° - 55'E
(429)	1-31	7° - 30'N 116° - 20'E
(430)	1-31	14° - 59'N 109° - 09'E
(431)	2-1	6° - 27'S 110° - 39'E
(432)	2-1	7° - 40'N 116° - 10'E
(433)	2-2	4° - 11'N 104° - 35'E
(434)	2-4	7° - 49.5'N 116° - 47.5'E
(435)	2-12	34° - 27'N 130° - 18'E
(436)	2-13	31° - 25'N 140° - 08'E
(437)	2-15	10° - 07'N 108° - 55'E
(438)	2-19	31° 20'N 124° - 10'E
(439)	2-21	7° - 30'N 116° - 05'E
(440)	2-23	12° - 44'N 109° - 29'E
(441)	2-25	34° - .2'N 136° - 19'E
(442)	2-27	14° - .6'N 109° - 16'E
(443)	2-28	12° - 46.5'N 109° - 32.5'E
(444)	2-28	14° - 28'N 109° - 10'E
(445)	2-28	34° - 11.5'N 130° - 41'E
(446)	3-12	12° - 40'N 110° - 02'E
(447)	3-17	25° - 41'N 120° - 14'E
(448)	3-20	4° - 54'S 111° - 38'E
(449)	3-23	35° - .35'N 125° - 15'E
(450)	3-28	12° - 40'N 109° - 30'E
(451)	3-28	32° - 16.5'N 132° - 05'E
(452)	4-6	32° - 31'N 131° - 56'E
(453)	4-8	6° 34'S 113° - 13'E
(454)	4-11	33° - 27'N 129° - 11'E
(455)	4-12	32° - 11'N 132° - 25'E

ENCLOSURE (H), continued

	DATE	PLACE
(456)	20- 4-12	6° - 28'S 111° - 23'E
(457)	4-14	41° - 34.5'N 141° - 41'E
(458)	4-14	38° - 05'N 122° - 57'E
(459)	4-16	33° - 30'N 139° - 35'E
(460)	4-23	38° - 42'N 144° - (?)
(461)	4-28	33° - 32'N 127° - 7'E
(462)	6-11	43° - 46'N 140° - 58'E
(463)	6-11	40° - 56'N 141° - 28'E
(464)	6-18	37° - 15'N 137° - 27'E
(465)	6-22	67° - 29'N 132° - 25'E
(466)	6-26	39° - 23'N 142° - 51.5'E
(467)	7-4	38° - 2'N 137° - 36'E
(468)	7-8	41° - 16.5'N 141° - 30'E -

Note

1. Eliminated those for which dates or locations are uncertain.
2. Since about July 1943 more strict investigations have been gradually instituted to confirm sinkings, but the reports of sinkings prior to this date are listed here without further investigations.



ENCLOSURE (H), continued

List No. 2

RECORD OF ANTI-SUBMARINE ATTACKS

The attacked submarines could not be identified, but were estimated sunk judging from condition before and after the attacks.

Method and Circumstance of Attacks

- (1) D. C. (Depth Charge)
- (2) 
- (3) Bombing
- (4) Bombing
- (5) ?
- (6) D.C.
- (7) ?
- (8) D. C.
- (9) Cannonading
- (10) Bombing - Discovered U.S. sub, carried out a salvo while escorting the HIYOSHI MARU
- (11) ?
- (12) D. C.
- (13) ?
- (14) Discovered floating sub, D. C.
- (15) D. C.
- (16) ?
- (17) Bombing - Inflicted severe damage
- (18) ?
- (19) Repeated attack
- (20) ?
- (21) 
- (22) Big pool of oil was observed as the result of the first attack; second attack was done by D. C.
- (23) ?
- (24) Touched a defensive mine.
- (25) Rode over U.S. sub which came invading our anchorage; attacked with D. C.
- (26) The sub had been afloat, but started diving upon discovery by our side, who attacked by means of D. C.
- (27) D. C. Oil kept on gushing still at 31-1150.
- (28) Caught a floating sub. Bombs hit it right; saw air bubbles gushing during afternoon patrol.
- (29) D. C.
- (30) ?
- (31) Cannon gave a sure hit. We began to dive at the distance of 600 meters; attacked with D. C. Identified the result by means of fathometer.
- (32) D. C. was thrown right upon the sub.
- (33) The KISOGAWA MARU fought against two floating U.S. subs.
- (34) Bombed by our patrol planes. Bomb No. 25 put an end to the sub.
- (35) D. C.
- (36) Two sure shots hit the U.S. sub quickly diving
- (37) Two sure shots hit a floating U.S. sub.
- (38) Suffering D. C. of U.S. sub our side continued attack. Enemy shot D. C. again without effect. Finally we sank the U.S. sub.
- (39) Cannonading and D. C.
- (40) We suffered U.S. D. C., and our engineering branch was destroyed. During the standstill, however, we shot out a torpedo and hit the mark. The next morning, our plane found pool of oil on the water.

ENCLOSURE (H), continued

- (41) D. C.
- (42) D. C.
- (43) Bomb No. 16 hit a diving sub. Near-miss one.
- (44) Discovered a floating U.S. sub at the distance of 1200 meters, and attacked. Discovered U.S. sub-tender. Plenty of oil gushed out. (D. C. 10)
- (45) ?
- (46) a. The KAMIKAWA MARU detected and attacked U.S. sub.
b. The SANYO MARU, airplane and destroyer attacked. (Direct hit: one plenty of oil.)
- (47) Attacked with D. C. (36), induced by our plane. Sinking was certain.
- (48) Fired at a floating sub with an illuminator. Some shots hit it right.
- (49) Discovered a U.S. periscope. A shot hit it directly but did not explode. Attacked with D.C. near the spot of our first attack, led by our destroyed.
- (50) Our plane discovered U.S. periscope. Attacked with (72) D.C. induced by our destroyer.
- (51) ?
- (52) ?
- (53) ?
- (54) ?
- (55) D. C. (92)
- (56) ?
- (57) ?
- (58) ?
- (59) A shot hit a conning tower of the U.S. sub, navigating to the south.
- (60) The sub shot out a D.C. at the SUWA MARU, whale boat, but no damage.
- (61)
- (62) Observed oil gushing out till 1730.
- (63) ?
- (64) Fought U.S. sub four times, sank same at 1745.
- (65) ?
- (66) Attacked by means of detector. Oil gushed out.
- (67) D. C.
- (68) ?
- (69) Bombing. Plenty of oil and air-bubbles gushed out.
- (70) ?
- (71) ?
- (72) ?
- (73) Attacked by battery and D. C.
- (74) D. C. attack, aiming at the whirlpool caused by diving sub.
- (75) D. C.
- (76) D. C.
- (77) ?
- (78) ?
- (79) ?
- (80) D. C. attack four times.
- (81) D. C.
- (82) D. C. (20) (The date may be May 30, 1942)
- (83) Bombing. Oil gushed out.
- (84) D. C. (10)
- (85) ?
- (86) Attacked by detector.
- (87) D. C. attack by torpedo boat. D. C. attack by SHONAN MARU No. 11, TAIHEI MARU No. 1 and INARI MARU No. 2 who cooperated with each other in bringing pressure to bear upon the enemy.
- (88) D. C.
- (89) D. C. Attacking by detector of hydrophone.

ENCLOSURE (H), continued

- 88) Detection and D. C. attacking. Bombarding and D. C. attack.
 89) Bombarding and D. C. attack. Detection and D. C. attacking.
 90) First bomb from our scouting plane gave a direct hit. EIFUKU MARU
 gave repeated D. C. attacks right upon the sub.
 91) Same as (90)
 92) D. C. Discovered the sub which shot a torpedo from 300 meter-distance.
 This side avoided it, counterattacked and sank it for certain.
 93) Caught the sub by detector and attacked. Avoided attack from the enemy
 sub and counterattacked by D. C.
 94) ?
 95) Detector.
 96) Heard the sub and attacked. D. C. attack and torpedoed the enemy.
 97) Discovered the re-floating sub and sank it in cooperation with our
 Naval Defense Force.
 98) Discovered sub navigating under deep water; dropped three bombs which
 hit the bridge deck. Later with the cooperation of aeroplane and
 other warships sank the enemy.
 99) D. C.-ed upon discovery of the re-floating enemy sub.
 100) Discovered the sub by detector and gave attack.
 101) —————→
 102) D. C.
 103) —————→
 104) —————→
 105) D. C. 14 charges.
 106) —————→
 107) —————→
 108) Observed a wide pool of oil.
 109) Twenty-eight D. C.'s were released in the attack. Discovered the re-
 floating sub, which dived at 3,000 meters. Reaction to detector
 vanished. Discovered the floating sub and subsequently gave an
 attack.
 110) —————→
 111) —————→
 112) Repeated attacks in close cooperation with (?)
 113) D. C.
 114) ?
 115) A big pool of oil for seven days.
 116) ?
 117) ?
 118) D. C. Bombarding. Five shots surely hit the sub. Then, D. C.-ed by
 HATSUSHIMA MARU. D. C. Big pool of heavy oil.
 119) Sank the sub in cooperation with f/20 plane.
 120) D. C.
 121) ?
 122) Detector
 123) D. C.
 124) Attacked the sub in cooperation with several ships. A pool of oil for
 four days.
 125) ?
 126) Cooperative attack.
 127) Two direct hits; following shot hit the conning tower which had been
 slanting into the water.
 128) ?
 129) Cooperative attack.
 ?
 ?
 130) This side got three torpedoes without damage during fight with the sub
 which we attacked with D. C.
 131) Discovered torpedo traces and swept away the sub.
 132) Detected the sub and pursued it. ?

ENCLOSURE (H), continued

- (133) ?
- (134) Fourteen D. C. attacks
- (135) D. C. Observed pillars of water approximately five meters in diameter and three meters in height.
Cannonading
- (136) Detected the sub and attacked it with D. C. four times.
- (137) Direct hits.
- (138) D. C. Black-brown oil-like liquid, air bubbles and buoy were seen floating.
- (139) ?
- (140) ?
- (141) Fifteen torpedo attacks. Recognized torpedo traces soon after we heard a sound by detector.
- (142) Fifty-nine D. C. attacks. Enemy shot a torpedo in vain.
- (143) D. C.
- (144) Discovered the sub while escorting three ships.
- (145) Attacked the sub thrice with 11 D. C.'s. Discovered diving sub. Two No. 6 hit the stern. Destroyed top of the sub. Floated. Our YAMASHIMO MARU got two torpedoes, but attacked with D. C. in cooperation with our patrol plane. A great deal of oil gushed.
- (146)
- (147) Detected a dispatch-sound of the sub and attacked same.
- (148) Confirmed the detection and attacked with D. C. in cooperation with the YOSHIDA MARU, one chg. and three chg.
- (149) Received two torpedoes during escort of our ships. Attacked twice with 20 D. C.'s in cooperation with our planes. Detected the sub and attacked. Discovered the floating sub close to us; threw D. C. four times.
- (150) Detected, caught and attacked once.
- (151) Detected the sub, caught and attacked it twice.
- (152) Attacked with 15 D. C.'s.
- (153) Enemy shot torpedoes while escorting the SOYA and while the CH28 was sweeping. Attacked the sub with 10 D. C.'s. Saw a big pool of oil the following day.
- (154) Accurately detected and caught the sub D.C. 59.
- (155) Attacked the sub which had attacked SOYA MARU. Suffered two torpedoes, but discovered an enemy sub-tender and gave attack to it.
- (156) —————> Struck against the sub and sank it.
- (157) Direct escort plane of NOSHIRO MARU attacked the sub and gave it a serious damage. COZURU MARU and CH18 gave cooperative attacks.
- (158) During convoying of KEIYO MARU, which was attacked and hit by two torpedoes, CH18 attacks.
- (159) Discovered a diving sub and attacked it.
- (160) Found a floating sub. Attacked it and gave a direct hit.
- (161) Found the traces of torpedoes. D. C. attack.
- (162) Sighted a submarine 40 degrees to the starboard at 3000 meter distance. Attacked with six D. C.'s. Sighted it again 40 degrees to the starboard at 2000 meter distance and attacked it with nine D.C.'s. Pillar of water caused by gushing out of oil bubbles. Plenty of oil in the neighborhood.
- (163) KIRIBA MARU and MITO MARU suffered torpedo attacks. D. C. attacks were made repeatedly to the spot of shooting. (20 D. C.'s) Plenty of oil gushed out.
- (164) Found a floating sub and dropped two No. 6's.
- (165) Found a floating sub and gave artillery attack. Attacked with five D. C.'s immediately after its submerging.
- (166) Dropped 10 D. C.'s during convoy of ASAMA MARU.
- (167) Detected, caught and attacked with D. C. Air bubbles and heavy oil gushed out.
- (168) Detected the sub. D. C. attacks were repeated twice using 14 D. C.'s

ENCLOSURE (H), continued

- in cooperation with airplane.
- (169) Found a diving sub No. 6x2. Immediately after the great explosions of near-miss bombs, the sub exposed one part of the hull, and submerged. The investigation of the following day revealed a big pool of oil (20 meters wide, 20 km long) on the same spot.
- (170) TANGO MARU suffered a torpedo attack. A cooperative sweeping operation was effected.
- (171) Detected and attacked enemy sub. A great quantity of oil, pieces of wood, corks and manufactured goods bearing marks of "Made in U.S.A." were seen floating.
- (172) Attacked twice a diving sub. (Confirmed the following day by CH16).
- (173) Found a floating sub. Attacked twice immediately after its diving.
- (174) Offered an attack to the sub, which may be the same one that attacked the TAKACHIHO MARU.
- (175) Judged the sub as SARGO type. Attacked it thrice with 17 D. C.'s.
- (176) Found a floating sub. Bombed it immediately after its submerging (No. 6X1). Hit the bow. The bow scattered. Slanted greatly to the starboard. Sank it certainly. Oil gushed out profusely.
- (177) Found a floating sub. Bombed the sub in an attempt of diving quickly. While the sub was still on the surface, two bombs hit near the conning tower. Bubbles and oil gushed out.
- (178) Attacked one of the two floating subs with No. 6x6 bombs, one of which hit it directly.
- (179) Found shooting and traces of torpedoes during convoy of ships. Sixteen D.C.'s were given up. Water column rose. Broken articles and oil gushed out.
- (181) Attacked the sub which had attacked the SUWA MARU (No. 6x6).
- (182) During convoy duty of indirect nature.
- (183) Our plane found a sub gushing oil bubbles. Attacked it in cooperation with ships. D. C. 53. Bombs 23. Plenty of oil gushed out. No echoing sound. Oil was still seen gushing out in the morning of the 5th.
- (184) Plane found a sub diving and attacked it. In the afternoon of the 6th oil was still seen gushing out.
- 185) Found a floating sub. After 14 minutes found a sub-tender near the bow. Artillery and torpedo attacks. (The sub-tender must have been the one that attacked and sank KAMAKURA MARU.) Plenty of oil bubbles. Intense stench. No echo. The following day saw the oil still gushing out.
- (186) Found a floating sub at a distance of 1500 meters from the bow. Artillery attack. One bomb out of three hit it. Projected thrice (18) after diving. Ten meter water pillar arose. Gave attacks twice. Oil gushed out. The evening saw the oil still gushing.
- (187) Attacked a floating sub. A 250kg bomb hit the bridge. The sub inclined to the left by five degrees, lifted the bow high up into the air and sank. Large bubbles came twice. Plenty of oil.
- (188) Attacked eight times the sub tender as reported by the ETOROFU MARU during its voyage. Again attacked 12 times and saw on the 12th heavy oil and bubbles still gushing out.
- (189) Scouting plane found the sub. Attacked it continuously for two days and nights. Oil gushed out in a wide area.
- (190) Attacked the sub which had attacked the SHINSEI MARU.
- (191) Found a sub during convoy of ships and attacked it. Soon found trails of oil and attacked it again (D. C. 68). Oil was still gushing out on the spot of final attack on the 30th.
- (192) This side received enemy attacks during convoy of six ships. We attacked the sub by detector. Saw oil bubbles after 10 hours.
- (193) Returning after salvaging the AKATSUKU MARU, we found traces of torpedoes and shot 52 D. C.'s.
- (194) Found sailing sub with oil leaking. Attacked it. After six hours of

ENCLOSURE (H), continued

- pursuit, the sub came to a standstill. Plenty of oil gushed out.
- (195) Bombed a sub-tender. Our first bomb was a near-miss at 10 meters distance. Bubbles 50 meters in diameter came out following the second bomb. Our two planes attacked it alternately.
- (196) NAGASHIGE MARU No. 2 was attacked, bombarded and sunk. A sub was attacked near the spot.
- (197) The following day we bombed the spot where oil was gushing out. No. 25x4 D. C. 25. Oil was still gushing out after two days. After eight days oil was still floating.
- (198) Our plane found a diving sub. Attacked it in cooperation with CH40. Found plenty of oil bubbles after one day and night.
- (199) Found trace of sailing ship at 500 meters distance and attacked it. Oil covered areas 100x1000.
- (200) Attacked (D. C. 16) the sub which had attacked MYOKO MARU. Pool of oil was estimated to be as large as 5000x1000.
- (201) Found a floating sub. Artillery attack from 1000 meter distance. Direct hit. Flames rose as high as 150 meters.
- (202) D. C. (20) attack by detector. Dense oil gushed out.
- (203) Found and attacked sub-tender. Plenty of oil was still gushing out in the morning of the 24th. Found a floating sub while convoying GENYO MARU. Artillery and D. C. attacks from 3000 meters. (Six bombs and 32 D. C.) Two of the bombs hit the center between the conning tower and bow. Oil pillar of 200x1500 gushed out from two spots.
- (204) Found the sub which had sunk the IBURI MARU. Hit by No. 6x2 was fatal to the sub. Continued attack on the following day.
- (205) Found a sub trying to attack our ships. Oil was still gushing out two days after our counterattack. Sinking of two subs certain.
- (206) ?
- (207) —————→
- (208) ?
- (209) Found floating oil. Bombed (11 bombs. D. C. 40). Oil was still gushing out after four days. Sinking of two subs certain. ?
- (210) ?
- (211) Found a sub-tender. Approached to 100 meters distance and shot 16 D. C.'s. Oil gushed out.
- (212) Two torpedoes from 10,000 meters distance behind the larboard. Avoided them. Found a sub-tender at 150 meters distance behind the starboard and D. C.-ed. A shock, water pillar and gushing oil immediately after the sound of underwater explosions.
- (213) Our plane found and attacked (No. 6x3) a sub (which had attacked OTOBAYAMA MARU in vain). The same sub seemed to have attacked later TAKASHIMA MARU and KATEI MARU (D. C. 58). After sound of explosions followed by black smoke, part of the bridge showed itself. Could not detect the sub even as late as the 27th.
- (214) During convoy duty, attacked a sub in cooperation with planes; discharged 14 bombs and 65 D. C.'s. After three days, heavy oil still gushed out.
- (215) Attack by detector (6). Clear sound of detection. Heavy oil like river two miles long floated. Dropped buoy.
- (216) Found the sub which had given ineffective attacks to Japanese ships. Bombed it. Dense oil gushed out after three days.
- (217) Our plane discovered traces of sub oil and bombed it. The following day UKISHIMA MARU in cooperation with planes attacked it, using 31 bombs and 65 D. C.'s. Air bubbles gushed out for 40 minutes. Oil was floating in the evening of the 18th.
- (218) HIODA MARU found a sub. TAGUNE audiphone office caught the report. RYUTO MARU found the sub. Oil was still gushing out on the 19th.
- (219) Found a sub-tender. Attack was made by No. 6x3. Two bombs hit the center of the hull. Plenty of oil.

ENCLOSURE (H), continued

- (220) Detected and caught a sub. Forty-two attacks. Plenty of oil came floating up and water columns.
- (221) Found a diving sub gushing oil. Attacked with 24 bombs and 32 D. C.'s, air bubbles gushed out, and scraped off paint looking rust with them.
- (222) Attacked five times the sub which had attacked HARUYAMA MARU. Sub sunk.
- (223) Caught by detector and attacked twice. CH16 was used for the first attack. Japanese ships were not damaged.
- (224) Found a sub attacked thrice by D. C. (26). Oil gushed out. Could not detect or catch the sub any more.
- (225) Detected the sub which had attacked TSURUMI MARU (undamaged), and attacked with nine D. C.'s.
- (226) Attacked thrice (20) the sub which had attacked YAMAGIRI MARU. Used 18 D. C.'s for the last time. No echo. Could not identify whether the gushing oil was from YAMAGIRI MARU or the sub.
- (227) Pursued and attacked in full speed the sub which had attacked MEIZAN MARU. The following morning saw dense oil floating in pool in the neighborhood. Found oil as well as drifting articles.
- (228) D. C. (?) attack by detector. Just before the shooting confirmed the sub. Again attacked with 13 D. C.'s.
- (229) Our plane found traces of oil and attacked. Detected something like a sub. Swept the waters nearby to check the freedom of the sub. Divers are investigating the sub.
- (230) Cooperative attack with planes. No. 25x2. D. C. 26.
- (231) While on escort duty SHOBU MARU detected and attacked two subs.
- (232) Attacked seven times with 31 D. C.'s. (YAMATO MARU was attacked and sunk).
- (233) Rifle-shooting and bombing at the three subs.
- (234) Army plane found a sub. Water reconnaissance plane made sortie and pursued traces of oil. Discovered the oil was coming out from one fixed spot. The oil was still gushing out on the 18th.
- (235) Found oil of diving sub and attacked it. Caught the sub on the following day. Attacked it also on the 20th. Though the waves were high on 20th, we saw oil profusely gushing out.
- (236) Detected and caught the sub during convoy duty. Attacked by the enemy, we avoided it and attacked it again. The group of ships was safe. Oil gushed out in great quantity accompanied by a sound of explosion.
- (237) Found traces of oil. Cooperative attack with planes.
- (238) D. C. attacks. Air bubbles of 100 meters in diameter were seen.
- (239) Found a floating sub at a distance of one km. Attacked from the distance of 13 meters. D. C.'s hit it right. Pillars of water, black smoke, and gushing oil. Oil pool 200 meters wide gushed out after the second attack.
- (240) Found a sub trailing oil. Bombing. Ships cooperated with us. The oil continued to gush out even on the 10th of October.
- (241) Found a floating sub. Attacked it when it started diving. One bomb hit it. Oil was seen gushing out for a long time.
- (242) Attacked the diving sub from which oil was gushing out as the result of the first attack from our side. (D. C. 34). Found a floating sub at a distance of three km. Engaged in an artillery duel from 1536 to 1846. Sank it. Two prisoners were taken and were interned. U.S. Submarine S44.
- (243) Immediately after the explosive sound of D. C. felt a big shock with sounds of explosion and saw plenty of air bubbles.
- (244) Our plane found a floating sub and attacked it with 36 D. C.'s.
- (245) A group of our ships were attacked, but were intact. We counter-attacked the sub and air bubbles and oil gushed out. No echo.
- (246) Found a trace of oil and attacked. Oil gushed out profusely after two

ENCLOSURE (H), continued

- days and nights.
- (247) Found traces of oil. D. C. 74. No. 6x22.
 - (248) Found a sub-tender. Attacked by detector thrice. D. C. 15. Sound-arrester was found scattered and afloat; gas and oil gushed out in the neighborhood. Shot D. C. at the spot but no echoes came.
 - (249) Detected and shot at the whirlpool after diving of enemy sub. (4)
 - (250) Our planes found traces of oil. The fourth bomb hit the sub direct.
 - (251) ? Bombarded the enemy sub which pursued us, attacking. We turned round and rode over the enemy sub. Dropped two D. C.'s.
 - (252) Found a floating sub. Caught it and shot D. C. (25).
 - (253) Caught and attacked the sub by detector. Plenty of oil gushed out.
 - (254) Our plane discovered and bombed a sub with D. C. (12). Plenty of oil gushed out.
 - (255) Discovered torpedo marks in the distance of 400 meters. Attacked twice with 19 D. C.'s.
 - (256) Caught and attacked the sub.
 - (257) Discovered a floating sub; shot out three torpedoes. Two of the torpedoes hit the sub. Heard a great explosion.
 - (258) ?
 - (259) Detected a diving sub. No. 25(1) hit the mark 15 meters behind the bridge.
 - (260) Discovered a sub-tender at a distance. Though we received torpedoes thrice, received no damage. Threw 22 D. C.'s; heard a dull noise. Fragments of articles and air bubbles gushed and floated. Detected a large size sub; attacked it. Again detected and attacked a floating sub, which was sunk. Captives - four. Name of sub - Sculpin. Fired and sank one which was disabled from diving.
 - (261) During the escort duty of our ships, discovered a sub. We received direct hits twice from the enemy. OGAMI MARU was sunk by the sub but it caught and attacked it. Discovered a floating sub; attacked it with D. C. First shot was a near-miss close to the bridge and stern. For the second time we fired at the bridge and near-missed the mark in front of bow. The sub sank by the stern.
 - (262) U.S. sub shot at us with torpedoes but we counterattacked the sub.
 - (263) Detected a sub and attacked it with 30 D. C.'s.
 - (264) Detected a U.S. sub.
 - (265) Detected a sub. Caught and attacked it, but stopped the attack (off 200x1000).
 - (266) Detected a U.S. sub which fired on the HAKOZAKI MARU, attacked it with 20 D. C.'s.
 - (267) Discovered a floating sub.
 - (268) Our planes discovered sub trace and attacked it. Oil gushed out and floated on a wide area, about as wide as 250 meters in diameter.
 - (269) Fired at the floating sub which attacked the ASUKA MARU and the
 - (270) The UMIKA MARU got U.S. torpedoes, so we attacked the sub with D. C.
 - (271) Attacked with D.C.'s. The GOYO MARU discovered a sub and part of conning tower. We attacked it with D. C.'s. Oil pool of 200x2000m appeared in the neighborhood. We searched with detector after sunset, in vain.
 - (272) Discovered bubbles and marks of U.S. torpedoes; we immediately attacked the spot with D. C.'s (42). Heavy oil gushed out throughout the neighborhood 400 meters wide.
 - (273)
 - (274) Our planes found out oil traces and bombed them.
 - (275) Discovered enemy torpedo marks, attacked them.
 - (276) During sweeping of enemy sub CHOKO MARU found a sub and attacked it. Oil gushed out.
 - (277) Heard echo of sub and carried out D. C. attacks. Found oil pool of two miles wide. At the edge of the pool we heard a clear echo.

ENCLOSURE (H), continued

- (278) CHOKO MARU found a sub. CHOKO MARU suffered torpedo attacks during the fight, but she was intact. The sinking of the CHOKO took place while she was attacking the sub in cooperation with planes. After the sinking of the CHOKO, we found the sub again and attacked it.
- (279) Found a floating sub. Oil belt of 20,000 meters long was seen gushing at the spot of attack on 13th. Oil and bubbles continued gushing out. Attacked the sub pursuing and tracing the oil and bubbles. Repeated attacks after the sub came to a standstill. Oil pool of 500x1000. Also discovered scattered pieces of articles..
- (280) Detected again a sub and attacked with six D. C.'s. Felt an unusual stench. Oil pool as big as 200x1000 meters. The pool widened to 200x2000 meters after D. C. attacks.
- (281) Immediately after EIFUKU MARU suffered torpedo attacks, we began D. C. attacks at the sub. Bombarding was also carried out. Bubbles and oil gushed out profusely. We also sighted paints.
- (282) Found a sub sailing afloat. We turned round the sub at once, but after turning we suffered one torpedo attack, which we avoided. Riding across the sub, we gave five D.C.'s. Dense oil gushed out.
- (283) Found a sub in the neighborhood of the spot where the OGURA MARU No. 3 was sunk. Dropped four bombs. Two of them hit the sub directly. According to report by scouting planes, at the spot of 160 degrees, 1500 meters from the sinking spot of the OGURA, another dense oil pool was created, which covered areas as wide as six miles.
- (284) KASAGI MARU was attacked, but suffered no damage. The group of ships avoided the danger and went to ZAVANGA. D. C. attack (14). Plenty of oil and bubbles gushed out.
- (285) Found a floating sub at 80 degrees, 2 minutes from KURUME Island; D. C. attacks. A carrier plane gave a direct hit at the sub which exploded and sank immediately. We continued attacks at the point of the bubbles. The oil pool expanded to 100x250 meters.
- (286) Found a diving sub (No. 6x4). Planes in the total of eight successively bombed (37) the sub. Oil and air bubbles gushed out profusely.
- (287) Found a floating sub. Artillery attack (shooting range 2000 meters). One cannon hit the conning tower, the other hit the hull. Later used D. C. to be on the safe side, after which no echo came.
- (288) During convoy duty of ships we bombed a sub attempting to dive (No. 6x2). Dense oil gushed out making a pool of 70x600 meters.
- (289) Water scouting plane found a sub sailing in full speed. Dropped No. 6 15 meters ahead of the steerage, immediately after the sub dived. After the attack, carrier fighter plane found a oil pool of 150x2000. D. C. attack, led by airplane (17 D. C.'s). Oil and bubbles gushed out from three spots.
- (290) Found and attacked two subs.
- (291) A reconnaissance plane during its sub sweeping found a diving sub. Sub sweeping corps also discharged seven D. C.'s. Oil pool of 50x5000 meters was created.
- (292) Detected a sub and discharge D. C.'s. Plenty of oil gushed out. Again dropped five D. C.'s.
- (293) Heard the echo of a sub during convoy duty. Offered D. C. attacks thrice and dropped 18 D. C.'s. The sub sank from the bow. Sighted an oil pool of 150x1000 meters.
- (293)' Found a sub at 21 degrees, 2000 meters. Gave D. C. attacks twice, dropping 20 D. C.'s immediately upon the start of diving. While attempting to halt its movement, took as prisoner a crew member of the sub two knots east of the spot of fight. (TULLBEE)
- (294) Found a sub. Plane and sweeping boat carried out cooperative attacks. Airplane (No. 6x8). After two days plenty of oil was still seen gushing out. (Received report of its sinking to be certain).
- (295) ?
- (296) A carrier bomber during convoy duty found a sub approaching the Japa-

ENCLOSURE (H), continued

- nese ships. Dropped four bombs. Direct hits went to the rear (about 15 meters) of the conning tower. The sub sank from the bow. We again dropped three bombs at the spot of sinking. Four D. C.'s were also dropped.
- (297) By the bombing and induction of a reconnaissance plane, we also bombed and attacked the sub repeatedly. Large bubbles and heavy oil gushed out profusely.
- (297) Attack by detector (22). Then dropped effective D. C.'s three times, 10 in all. Heard sound of screw before second attack. After the fourth attack no sound of screw in the neighborhood of the spot until 1200.
- (298) Found a floating sub (No. 6x1). Direct hit on the rear of the bridge and near-missed the side. A dense oil pool was created, measuring 300x4000 meters. Air bubbles. The sub sank wriggling to the left.
- (299) TOMATSU MARU No. 4 found the sub-tender attempting to attack ships. We gave D. C. attacks twice, 10 D. C.'s in all. Again nine were dropped. An oil pool was created in the neighborhood over 2km wide.
- (300) Two of our planes attacked a sub.
- (301) The TAICHU MARU suffered U.S. torpedoes. We counterattacked the sub with D. C.'s in the neighborhood. (32 D. C.'s; R attacks)
- (302) Attacked a sub by detector. For about two hours plenty of oil gushed out. (10x70 meters)
- (303) Discovered an oil pool about 50 meters in diameter. We put on 3.5 knot speed. Threw down bombs, and No. 25 D. C.'s, and successively offered attacks. A dense oil pool 20 meters in diameter could be seen. Discharged No. 6 (2) and No. 25 (5) D. C.'s.
- (304) Detected a sub by detector. Attacked it with D. C. (18 of them). We made a second attack again with 18 D. C.'s.
- (305) ?
- (306) The YAMAGATA MARU suffered a U.S. torpedo. Later we heard the sound of cannon and explosion in the water. Discharged four torpedoes to give scare. We saw the sub going down, 500 knots ahead of us, and immediately attacked with 17 D. C.'s. An extraordinary great sound, water pillars, and black smoke could be seen.
- (307) Discovered top of a sub at 20 degrees, 600m to the left. Rushed on to the spot. Attacked with four D. C.'s. Oil and a dull sound of explosion. To check the sub from diving we hurriedly dropped bombs, No. 25x2. First bomb hit bow, the second bomb direct on the bridge. The center of the sub burst open and oil pillars rose. Dense oil pool was created 150 meters in diameter.
- (308) ?
- (309) The KAMOME MARU suffered three U.S. torpedoes. However, she was undamaged. The GENBU MARU got 13 torpedoes in all and sank. Our plane swept the sub. The KAMOME again got a torpedo and sank. Other planes discovered the oil traces of the sub and immediately bombed it. Oil gushed out. Our ships attacked with 26 D. C.'s.
- (310) Discovered a floating U.S. sub at a distance of 1000 meters; attacked with D. C. (30). Bubbles and oil gushed out over a wide area.
- (311) Discovered U.S. sub-tender which had been escaping from an attack of our three fishing boats; threw down seven D. C.'s. Moreover, the TSUBAME discharged D. C.'s (19). Oil pool 200x4000 meters.
- (312) During escort of our ships No. 59 discovered a sub-tender. Made an attack. Again discovered a sub and attacked with D. C. (19). A huge oil pool.
- (313) Detected a diving sub and bombed it. First bomb hit stern directly. Second bomb hit conning tower. The sub sank and heavy oil gushed out. We further threw down No. 6(x5) and No. 25(x1). Plenty of oil gushed out.

ENCLOSURE (H), continued

- nese ships. Dropped four bombs. Direct hits went to the rear (about 15 meters) of the conning tower. The sub sank from the bow. We again dropped three bombs at the spot of sinking. Four D. C.'s were also dropped.
- (297) By the bombing and induction of a reconnaissance plane, we also bombed and attacked the sub repeatedly. Large bubbles and heavy oil gushed out profusely.
- (297) Attack by detector (22). Then dropped effective D. C.'s three times, 10 in all. Heard sound of screw before second attack. After the fourth attack no sound of screw in the neighborhood of the spot until 1200.
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- (299) TOMATSU MARU No. 4 found the sub-tender attempting to attack ships. We gave D. C. attacks twice, 10 D. C.'s in all. Again nine were dropped. An oil pool was created in the neighborhood over 2km wide.
- (300) Two of our planes attacked a sub.
- (301) The TAICHU MARU suffered U.S. torpedoes. We counterattacked the sub with D. C.'s in the neighborhood. (32 D. C.'s; R attacks)
- (302) Attacked a sub by detector. For about two hours plenty of oil gushed out. (10x70 meters)
- (303) Discovered an oil pool about 50 meters in diameter. We put on 3.5 knot speed. Threw down bombs, and No. 25 D. C.'s, and successively offered attacks. A dense oil pool 20 meters in diameter could be seen. Discharged No. 6 (2) and No. 25 (5) D. C.'s.
- (304) Detected a sub by detector. Attacked it with D. C. (18 of them). We made a second attack again with 18 D. C.'s.
- (305) ?
- (306) The YAMAGATA MARU suffered a U.S. torpedo. Later we heard the sound of cannon and explosion in the water. Discharged four torpedoes to give scare. We saw the sub going down, 500 knots ahead of us, and immediately attacked with 17 D. C.'s. An extraordinary great sound, water pillars, and black smoke could be seen.
- (307) Discovered top of a sub at 20 degrees, 600m to the left. Rushed on to the spot. Attacked with four D. C.'s. Oil and a dull sound of explosion. To check the sub from diving we hurriedly dropped bombs, No. 25x2. First bomb hit bow, the second bomb direct on the bridge. The center of the sub burst open and oil pillars rose. Dense oil pool was created 150 meters in diameter.
- (308)
- (309) The KAMOME MARU suffered three U.S. torpedoes. However, she was undamaged. The GENBU MARU got 13 torpedoes in all and sank. Our plane swept the sub. The KAMOME again got a torpedo and sank. Other planes discovered the oil traces of the sub and immediately bombed it. Oil gushed out. Our ships attacked with 26 D. C.'s.
- (310) Discovered a floating U.S. sub at a distance of 1000 meters; attacked with D. C. (30). Bubbles and oil gushed out over a wide area.
- (311) Discovered U.S. sub-tender which had been escaping from an attack of our three fishing boats; threw down seven D. C.'s. Moreover, the TSUBAME discharged D. C.'s (19). Oil pool 200x4000 meters.
- (312) During escort of our ships No. 59 discovered a sub-tender. Made an attack. Again discovered a sub and attacked with D. C. (19). A huge oil pool.
- (313) Detected a diving sub and bombed it. First bomb hit stern directly. Second bomb hit conning tower. The sub sank and heavy oil gushed out. We further threw down No. 6(x5) and No. 25(x1). Plenty of oil gushed out.

ENCLOSURE (H), continued

- (314) The KEIYO MARU suffered a U.S. torpedo but she attacked a U.S. sub sailing eight knots ahead. Bubbles and black smoke gushed out. Further we dropped D. C. on the stern which was fast disappearing into the sea.
- (315) After our ship Mine 3 suffered a U.S. torpedo, our plane bombed and attacked the sub with D. C.'s in cooperation with our ships nine times. Water pillars and much oil.
- (316) Detected a U.S. sub-tender. Immediately threw down 10 D.C.'s. Result was not identified. We lodged further attacks in cooperation with ships using D. C.'s.
- (317) Our plane detected a U.S. sub and bombed it. The first bomb made a direct hit. We further attacked it with four bombs in cooperation with our sweepers. The first sweeping corps attacked with D. C.'s (28) again. In the afternoon, 1400, oil pool of 100x2000 meters appeared.
- (318) The KORI MARU suffered a U.S. torpedo and the IKI kept the sub at a standstill. Our planes detected a sub and bombed it. One of the bombs hit right on the mark. Further attacks were carried out by means of 55 D. C.'s and three bombs. An oil pool about 2 km wide appeared.
- (319) Our ships, H26, detected a diving U.S. sub 40 knots behind. A bomb, No. 25, hit the sub at a distance of 10 meters from the center of the starboard but near-missed the mark. No. 6 hit the bow. Oil gushed out.
- (320) During convoy duty, we detected trails of oil like that of a U.S. sub; bombed it. Our ships successively attacked with four D. C.'s, 25 No. 25's and 33 D. C.'s. Until after 10 days an oil pool of 100x5000 meters was seen.
- (321) Detected a diving sub and attacked it. The first shot hit the front of a conning tower; the second, the rear of the conning tower. The sub showed a stern and suddenly sank. Our plane recognized heavy oil floating over the area as wide as five Japanese Ri. (Approximately 15 miles)
- (322) The SHISEN MARU suffered a U.S. torpedo and sank. The MANZURU MARU, having discovered trails of a U.S. sub attacked it with 37 D. C.'s. Oil pool of 300x4000 meters appeared. Later it enlarged itself to 1000x10,000 meters.
- (323) During convoy duty, the NIPPONKAI MARU and the TOHO MARU, having suffered torpedoes were sunk. While our ships were sweeping the sub, the CH48 attacked the sub by detector and threw 15 D. C.'s. Bubbles covered area about 5 meters wide, and heavy oil covered area of approximately 1500x3000 meters wide.
- (324) Oil trails were discovered. A great explosion sound was heard after the third bomb was thrown down.
- (325) Our plane detected oil trails like that of a moving U.S. sub and attacked it with 15 bombs. Further while escorting our ships, attacked the sub with D. C.'s and detector, led by our plane for four successive days.
- (326) The SHOSEN MARU suffered a U.S. torpedo, while escorting our ships. The CH50 surely sank a U.S. sub.
- (327) Discovered 15 torpedoes, 90 degrees, 4000 meters to the left of the ships we were escorting. We immediately bombed the spot where the torpedoes were shot with No. 25:2x2 and No. 25:2x1 (direct hit). After an hour heavy oil covered the area for about 3000x5000 meters.
- (328) Discovered a U.S. sub and fired directly. Bubbles gushed out.
- (329) Attacked with D. C.'s in cooperation with our planes. A great quantity of oil and pieces of broken articles were floating over a wide area.
- (330) (D. C. 32). The MIRO 7 ships discovered a diving U.S. sub and bombed it with five D. C.'s. Bubbles gushed out.

ENCLOSURE (H), continued

- (331) We shot two?
- (332) Upon report of SAGAMIGAWA MARU suffering a U.S. sub attack, we started for counterattack with ships and planes. On the spot of fighting we later discovered corks, rafts, etc., and heavy oil pool of 50x5200 meters.
- (333) Discovered a floating U.S. sub and attacked it, pursuing it, successively during 16th and 17th.
- (334) In cooperation with our planes and ships we attacked the U.S. sub seemingly on its way to the rescue of the crew of enemy planes after air raid on TRUK Island. Saw on the spot of fight later bubbles and oil gushing out.
- (335) We suffered a U.S. torpedo, but got no damage. Attacked the sub with six D. C.'s for the first time and with six D. C.'s the second time. The third attack was made also with six D. C.'s. Bubbles and oil were gushing out and an oil pool of about 100x2000 meters appeared.
- (336) The HAKURAI MARU discovered two trails of torpedo. Concurrently, the No. 16 CHOUN MARU detected a U.S. sub by detector and our sweeper attacked the sub desperately 10 times. Bubbles and oil.
- (337) The HORO 2 ships suffered U.S. torpedo attack and during sweeping of the sub, we detected something like a sub which we attacked by detector five or six times and discharged 66 D. C.'s five times. Oil pool extended to the Cape of NOBO.
- (338) The TOYAMA MARU suffered a U.S. torpedo. We therefore sank the sub in cooperation with the ARAIZAKI MARU and other ships.
- (339) Salvo attack. Oil pool of about 100x4000 meters and gushing oil could be seen to the north.
- (340) Attacked a diving sub, discharged D. C.'s. Heavy oil pool could be seen in the neighborhood.
- (341) Discovered a floating U.S. sub and bombed it. A bomb of 100 kg. hit the bow. The sub was sunk, gushing plenty of bubbles and oil.
- (342) Bombed a U.S. sub which dived swiftly. A bomb hit a spot 20 meters ahead of the stern. After 50 minutes, a great deal of foam which measured 50 meters in diameter and after 80 minutes, 20 meter (diameter) bubbles gushed out. Later trails of thin oil were seen floating.
- (343) Our plane discovered a U.S. sub diving, and attacked it in cooperation with our ships. Marks of oil were seen extending as far as five Japanese Ri (about 15 miles) in length and next morning oil was still gushing.
- (344) We detected a sub. After it dived completely, we attacked it by giving a direct hit to its stern. The sub showed its top but suddenly sank from the stern. After four days plenty of oil still gushed and floated over the water.
- (345) Attacked the sub following the torpedo trails with 30 bombs. Later we caught the sub by detector and attacked with 20 shots. After six hours, a great quantity of heavy oil was seen gushing out, covering a wide space over the water.
- (346) Swept a sub detected by our guard and attacked it in cooperation with our ships. In the neighborhood, an oil pool. The next morning saw oil pool as big as 500x5 meters.
- (347) Discovered a U.S. sub trail 500 meters ahead of our bow. Immediately we made an attack on the spot with 28 D. C.'s. Plenty of oil.
- (348) After attack, we saw dense oil gushing. Bubbles covered the area 30x100 meters until five days later.
- (349) Detected a floating U.S. sub and attacked it with six No. 6's. They made direct hits. Plenty of oil gushed out.
- (350) Attacked as soon as the sub dived. Plenty of heavy oil (10x4 Japanese Ri) and bubbles.
- (351) Discovered a diving U.S. sub; bombed it with two No. 6's. The first

ENCLOSURE (H), continued

- bomb hit starboard of the conning tower; the second, near helm of the stern. It sank inclining to the right.
- (352) Detected a sub and D. C.-ed it and continued attack until two days later. Dense, heavy oil pool (1000 meters x 5 Japanese Ri) and foam.
- (353) Bombed a diving sub twice. One bomb hit it right and the other near-missed. The sub stood upright and sank. Plenty of oil and bubbles.
- (354) Detected a U.S. sub about 15 meters deep in water and bombed it. The first bomb hit a spot 10 meters to the left of the sub. The second, the sub's portquarter. Our planes and ships attacked it. Oil gushed out. The oil pool measured 30 meters in diameter and was gradually enlarging itself.
- (355) Made a thorough going attack over a sub with a fathometer in cooperation with our planes and ships for 24 hours.
- (356) Bombed a floating U.S. sub with three No. 6's. They hit starboard, and center of rear deck. The sub sank after one to two seconds. We saw fire and brown tinge on the water.
- (357) Attacked a U.S. sub with three No. 6's. Bubbles. Again attacked the sub in cooperation with our plane and ships. Oil pool of 200 x 3000 meters.
- (358) Caught a U.S. sub by detector. Our ships and planes attacked it. Bubbles and fragments of broken articles.
- (359) Detected a U.S. sub with a fathometer and attacked it with 15 D. C.'s. Oil and gas gushed out. Oil pool did not disappear even after two days.
- (360) When the U.S. sub showed its top we attacked its bow. Oil spurted out high up, and floated as far as 10 Japanese Ri.
- (361) Our ships detected and attacked a U.S. sub with D. C.'s five or six times. Oil pool of 100 meters x 3 miles appeared and stayed till following morning.
- (362) Our plane discovered oil marks and attacked the U.S. sub by detector, cooperated by our ships. Oil continued to gush out till the following morning.
- (363) Our plane discovered oil trails of a U.S. sub and bombed the sub with six No. 25's and six No. 6 D. C.'s. Induced by our plane, we attacked it seven times. After seven hours, various articles and much oil floated on the water.
- (364) Discovered a diving U.S. sub and bombed it with six No. 6's. Two direct hits and three near-miss. Oil and bubbles. Floating oil pool 1200x4100 meters.
- (365) Detected a U.S. sub-tender in the distance of 400 meters; attacked it with D. C.'s (16) and sank it. Much oil.
- (366) Rushed over the U.S. sub rapidly diving; discharged D. C.'s three successively. The D.C.'s burst with an extraordinary, terrifying sound. Oil, bubbles, fragments of various articles.
- (367) Detected a periscope of a U.S. sub at the distance of 2000 meters. Attacked with two D. C.'s. Much oil, wood chips and cork floated in the neighborhood.
- (368) Our plane detected and bombed a U.S. sub with nine No. 25's. The HATO successively attacked it with 12 shots. Much oil. Oil pool (500x3000 meters) stayed for two weeks.
- (369) ?
- (370) Discovered a U.S. sub on the water and bombed it. The first bomb gave a direct hit and the sub sank from its stern, gushing oil. The second bomb hit the bow. Oil and bubbles.
- (371) Our plane detected a U.S. sub and attacked it with more than seven bombs. Oil pool, 4x10 km big.
- (372) Detected a U.S. sub in the distance of 1700 meters. Caught and attacked it from a distance of 300 meters. Oil and corks and wood chips, covering a wide area.

ENCLOSURE (H), continued

- (373) During sweeping operation of U.S. subs throughout the night, we found one and bombed it. Oil pool, 400x2000 meters, wood chips, and broken things.
- (374) Discovered a diving sub and attacked it. Oil gushed from the rear starboard and many fragments of wood and articles floated over the water.
- (375) ?
- (376) Our plane discovered a U.S. sub and bombed it. Our ships successively attacked it with D. C.'s (37) twice. Ten minutes later an oil pool, 1500x200 meters big, appeared.
- (377) Detected a U.S. sub-tender. Attacked it with D. C.'s. Oil and bubbles. Again, we attacked another sub which had been escaping our attack for three successive days. We attacked it by detector. Oil covered an area of approximately five miles square.
- (378) Our plane detected the sub and immediately attacked it with two No. 25's and 12 No. 6's. Oil pool, 1000 meters x 5 miles big, appeared, and stayed until after nine days.
- (379) Bombed a diving U.S. sub with No. 25, which hit a spot 70 meters ahead of the bow. Went on with attack in cooperation with our planes and ships with 40 shots. Bubbles, wood chips, etc., gushed out twice.
- (380) Our plane detected and attacked a U.S. sub with one No. 25. Our ships attacked it further. Two hours later, an oil pool, 2000x100 meters big, appeared.
- (381) Detected a U.S. sub periscope, bombed it. The first bomb hit it direct; the second, near-miss, hit a spot 10 meters away. Oil gushed.
- (382) Attacked by detector 15 times. Oil pool, 1000x2000 meter big, appeared two hours later. Oil continued to gush out over the area 3x5 miles until 21 hours later.
- (383) The ITO detected and attacked a U.S. sub four times. Oil gushed out three times. The No. 16 CHOUN MARU attacked with 16 torpedoes, and oil continued to gush out until the following day.
- (384) Found traces of U.S. torpedoes and our plane attacked the sub with two No. 25's and four No. 16's. Our ships continued attacks and after two days the oil pool widened itself to 2x4 km and kept on still widening.
- (385) Attacked U.S. sub by detector (with two No. 25's). Oil kept on gushing out until two weeks later.
- (385)' Sank a sub with a submarine mine.
- (386) Our ships suffered a U.S. torpedo. We attacked the sub therefore, in cooperation with planes and ships. At our first attack, much oil gushed out. We continued attack and oil pool enlarged until it was 800x4000 meters. Again we attacked the spot where the oil was gushing up.
- (387) Detected a U.S. sub periscope, attacked it with D. C.'s (11). Lodged further attacks, by detector, and by discharging 11 D. C.'s. Bubbles and oil. No trace of the sub in the neighborhood thereafter.
- (388) Attacked a sub with three bombs. Some oil. Our ships detected and attacked a sub with 24 D. C.'s. Much oil. Bombed another U.S. sub about to make its escape, ejecting much oil. The sub soon came to a standstill. Much black smoke and oil. The next morning the pool measured 10x4000 meters. No sound of a screw.
- (389) Detected a sub periscope and attacked it with near-miss (1), direct hit (1). Water pillars rose as high as 30 meters. Fragments of articles and wood chips. Plenty of oil. Oil pool, two miles x 400 meters big, appeared six hours later.
- (390) Detected and attacked a sub with D. C.'s, 15. Oil. Repeated attack tracing the oil eight times. Oil pool measured 1x10 miles six hours later.
- (391) Discovered a diving U.S. sub attacked it. Sub exploded in the water

ENCLOSURE (H), continued

- after receiving a direct hit. White water pillars of 20 meters high. Oil and wood chips. We immediately threw down another No. 25.
- (392) Caught a sub at a distance of 200 meters and attacked it with D. C.'s, 28. A dull sound of explosion in the direction where much oil was gushing.
- (393) Discovered a diving U.S. sub and enforced a precision bombing. Fragments of broken articles and oil.
- (394) Detected a U.S. sub at a distance of 1300 meters and attacked it with 18 D. C.'s. Oil and gas kept on gushing up for over four hours, until the pool became 3500x2000 meters wide.
- (395) Our C.D. 30 discovered oil and discharged D. C.'s continually, in cooperation with the W15, No. 16 and the SHONAN MARU. D. C. gave direct hits and huge water pillar rose up to 20 meters in the air. Plenty of oil, bubbles and cork chips. U.S. sub ran upon a sunken rock and the crew escaped. The ship was burnt. Its name, DARTER.
- (396) Our ships suffered U.S. sub torpedo. We offered counterattacks 17 times at a distance of 150 meters. Bubbles and heavy oil, clothes, cork, etc. We certainly detected a diving U.S. sub and sank it. We captured its crew, including the captain. Name of the sub, TARG.
- (397) Our plane bombed a sub tracing its oil marks. Twenty two bombs were used. The plane continued attack in cooperation with the SHONAN MARU. Bubbles and oil pool (4000x500 meters) stayed until after four days.
- (398) Our plane detected marks of oil and bombed it twice. Three hours later, oil pool as big as 100x3000 meters appeared. Twenty four hours later we again bombed the sub twice. The W12 which had been led by our plane, detected and attacked the sub six times. Fragments of broken articles began to flow.
- (399)
- (400) Our patrol plane bombed marks of oil. The C. D. 4 which was led by the said plane, offered an attack also. As the result of 20 shots by the first attack and 30 shots by the second attack, heavy oil gushed out. And by the third attack of 20 shots an oil pool, 2000x500 meters big, appeared.
- (401) C.D. 54 detected a U.S. sub, approached to 100 meters and attacked it (19). We confirmed its effect six times. At the same place we detected and attacked another U.S. sub, as the result of which an oil pool of 300x3000 meters appeared.
- (402) Fought a floating sub. FUSA MARU escaped and the enemy sub pursued it. The distance between the two was 150 meters. By the timely discharge of D. C.x2 the sub stuck its head high up in the air and went to the bottom from the stern.
- (403) Detected a sub while convoying ships. Attacked twice (28). Great explosive sounds came as the result of the next attack. Plenty of oil. We discharged D. C.'s, four of them, to the spot where the oil was gushing up.
- (404) Detected an enemy sub and attacked. Oil and bubbles. We repeated attack twice. Even after two hours, oil and bubbles were gushing up from the same spot.
- (405) Detected a sub and immediately heard a sound of motor. D. C.-ed (27). Large pillars of water rose several times. Oil. Detected a sub again and lodged a second attack (26), and the whole area was transformed into a sea of oil.
- (406) - Caught a sub by detector. Confirmed it to be a floating sub. Attacked it from the left side. Caught a sub by detector, D. C.-ed. Saw water pillars of 10 meter high rise up.
- (407) Detected a sub. Remained quiet until we were 100 meters from its head. D. C.-ed (15). Repeatedly hunted for the sub around the neighborhood but caught no echo.

ENCLOSURE (H), continued

- (408) Detected a sub by electric detector, saw the conning tower of the floating sub. Continued with the detection until we approached within 200 meters, and attacked it. Bubbles and oil.
- (409)
- (410) Found a floating sub lodged a precision firing. The sub attempted to dive, ejecting black smoke. We discharged D. C.'s repeatedly.
- (411) Found oil marks and then a diving sub. Bombed it (No. 21x1, No. 6x4). Oil. The next morning the oil pool had expanded to 150 meters x 18 kilometers big. Oil continued to gush up. Caught enemy sub. D. C.-ed, five times, bubbles. Oil gushed up by our second attack. Ten enemy crew escaped from the sub, of which eight were taken prisoners. The sub was British, Strat Jane (900 tons class).
- (412) A reconnaissance plane found oil of moving enemy sub. The plane started bombing. Our ships, led by the plane, gave attack by detector. The sub began to escape with oil leaking. Before long it came to a standstill. On the third of December oil was still gushing up.
- (413) Found large size sub sailing afloat. Began bombing it (No. 6x4). The sub sank in a moment.
- (414) Detected a sub. Heard screw sound at a distance of 900 meters. Began attack (D. C. 21). Oil kept on gushing up for five hours.
- (415) Found bubbles of torpedo tube, then traces of six torpedoes. Began united attack with planes. Forty-four D. C.'s. Oil gushed up for five hours.
- (416) Following the bombing by the plane, we attacked, aiming at the oil mark. Oil pool 40x3000 meters. Oil and bubbles kept on gushing up.
- (417) Our plane saw the sub from an altitude of 1500 meters and began bombing it. Front of the conning tower was hit. Bubbles and oil.
- (418) Attacked a sub led by planes. Heavy oil gushed up from two spots. Our ships attacked the sub also. Oil gushed up and the sub stood still. The oil pool remained for several days. It is certain that the oil is different from that of the CHIDORI MARU, the wrecked ship.
- (419) Following the diving of the sub bombed its oil marks (No. 25). Direct hit. Oil from six spots. Oil kept on gushing up from the same spot the next day.
- (420) Found a diving sub and attacked it (No. 6x4). Large black water pillar rose. Led by ships, we began cooperative sweeping. Our TSUBAME started D. C. attacks (17). The next day, Dec. 27, we found oil pool 4x30 kilometers big.
- (421) Caught a sub by hydrophone. Offered cooperative attacks with planes. (D. C. 46 No. 6x2). Blue-black colored bubbles and light oil of 300 meters square gushed up and kept on gushing up for five and a half hours.
- (422) Caught a sub by magnetic detector. Closely traced it. Cooperative attacks by planes and ships were started. (D. C. 56 No. 25x16). In 15 minutes bubbles gushed up. Investigated the result of the attacks the next day, several times.
- (423) Following attack on our group of ships, we detected a sub. At a distance of 150 meters we caught it (D. C. 27). After the explosion of torpedoes, we heard an extraordinarily big sound of explosion followed by oil and scraps of various articles. We again attacked with D. C.'s (21) the spot where the oil and other things were gushing up.
- (424) Attacked a floating sub (No. 6x2). One shot near-missed. The other hit the sub about to dive. After seven hours we again attacked the diving sub which was gushing up heavy oil and made it unable to move. Three hours later we attacked the same spot (No. 6x6), and oil and bubbles gushed up. The oil pool quickly enlarged to 1400 meters.

ENCLOSURE (H), continued

- (425) NAGAYAMA MARU, by the use of detected the sub 300 meters away. D. C.-ed. Also C.D. 22 detected the sub until 300 meters off. Found big pillars of water, heard explosive sounds and heavy oil gushed up. C.D. 58 attacked the sub by detector till 350 meters off for three days.
- (426) When C.D. 130 detected the sub and attacked it, we saw the sub-tender passing on at a distance of 100 meters, leaking and gushing bubbles and oil. Attacked again. Water patrol plane bombed it. We heard underwater explosion thrice. Oil started to gush up furiously.
- (427) Found a floating sub. Attacked it twice after it dived, and during our sweeping operation. Water pillar 20 meters high, and oil pool 200x600 meters wide. Every ship repeated attack aiming at the spot where the oil gushed up.
- (428) Our plane found an enemy sub. Bombed immediately (No. 6x2). The first bomb near-missed. The second bomb was a direct hit at the front deck of the water-logged sub. (Confirmed it started fire). Oil pool four meters one mile.
- (429) Found a floating sub No. 25x1, hit it. Oil gushed up. Oil pool the next day.
- (430) By discovery and induction of airplane, our ships caught at a distance of 900 meters a sub which was sailing under the water. Flying-boat, with cooperative attacks with the ships, bombed it and brown dense oil and air bubbles, 150x400 meters covered the surface of the water. Later the oil pool enlarged itself to 300x1500 meters.
- (431) Found a floating sub. Bombed it (two bombs were used). They hit the bow. Water pillars, caused by explosion of torpedoes. Oil pool Size of the pool one hour later, 1000x2500 meters.
- (432) Found a sub at a standstill. Bombed just before it started diving (No. 25x1). The sub was sunk by the direct hit at the stern.
- (433) After a group of our ships were attacked, we detected and heard the sub in hot pursuit of our ships. D. C.-ed (34 of them). Oil pool 200x3000 meters.
- (434) Found a floating sub. Bombed it (No. 25x2). Direct hit near the bridge.
- (435) Detected the head of sub till 200 meters off. Caught accurately the movement of the sub and attacked it (D. C. 27). Oil and bubbles. The sub came to a standstill. Oil pool after one hour, (500 x 1500 meters).
- (436) Found a sub. D. C.-ed five times (38). Oil pool appeared. We D.C.-ed (28) at the spot in our second and third attacks. The pool was enlarged to 50x1000 meters. By the fourth attack, the pool was enlarged to 100x2000 meters (we used three D. C.'s).
- (437) Accurately detected a dived sub. Heard the screw at a distance of 900 meters. Ten torpedoes were discharged at the first attack.
- (438) As soon as the plane found the marks of oil of the sub we began bombing by detector, three times by the aid of magnetic detector (No.25x1) Then attacked with D. C. (15). Oil and cork gushed up.
- (439) Found a sub under the water. Bombed (No. 25x2). One of the bombs hit the sub and sank it.
- (440) After a group of our ships were attacked by the sub we began attacks. Found hydrobarometer, traces of oil and air bubbles. Repeated attacks by D. C. (42). Oil pool and air bubbles, 60x2000 meters.
- (441) After our ships were attacked by the enemy, we shot C. D. 50 during our sweeping operation by planes and ships. Heard the screw, followed by the sound of echo, D. C. attack (30). Oil and air bubbles. Twelve D. C.'s were discharged. Oil pool, 10x3000 meters.
- (442) By magnetic detector we detected the sub and attacked it. Oil gushed up. We made attacks by C.D. 81 and D.C.(15) at the spot. Oil, and fragments of various articles. Size of oil pool was 100x4000 meters.

ENCLOSURE (H), continued

- (443) The sub was detected by electric detector. Found a floating sub which dived at once. Soon after, an airplane attacked it and checked its movement. (No. 6x2). A plane while sweeping the sub in the vicinity found oil pool and threw bomb at it. (No. 6x2). Then ships attacked the same spot by D.C. (49) and the pool was enlarged to 30x5000 meters.
- (444) Heard accurately the screw sound. D. C.-ed. Oil and air bubbles. Re-attacked the same spot. Heavy oil gushed up covering area two miles wide. As we examined the bottom of the water close by the spot where the oil was gushing up, we discovered that the height of the sunken sub was eight meters.
- (445) During sub-sweep operation, ASAHI MARU heard the enemy sub and chased it. Attacked the sub by D. C. twice; oil bubble and air bubbles covered the surface of the water.
- (446) By electric detector we caught a sub at a distance of five km. We continued to approach the sub secretly. Detected it accurately enough at a distance of 1.5 kilometers by the aid of sub microphone. Confirmed the figure of the sub at a distance of 1.2 kilometers and fired. Lots of bullets hit the conning tower. The sub was forced to dive. We D. C.-ed (30). Air bubbles and a big sound of explosion.
- (447) Found a sub. Continued fire from the distance of 2500 meters until within 300 meters. Each shell of the main battery hit the sub's front and back and lower part of the conning tower. Slowly the sub came to a standstill, then sank inch by inch inclining to the left. D. C.-ed twice. Searched by hydrophone, but heard nothing.
- (448) Attacked a sub moving under the water. Oil pool of 610x80 meters appeared. The sub came to a halt. By our attack the following day, wood chips and cork appeared on the water. Air bubbles. Oil pool was 36,000x3000, which appeared the next day.
- (449) Oil pool of 4x2500 at the spot of attack. After an elapse of two days and nights the oil still was gushing up.
- (450) Finding torpedo traces, we started attacks, during which we found a sub at a short distance off. D. C.-ed. Oil gushed up, life-preservers, etc., floated up.
- (451) Detected a sub over eight times and bombed it (No. 6x24). Ships also detected it. D. C.-ed. Found oil pool of 1x5 miles in size the following day.
- (452) By magnetic detector, caught the sub. Attacked in cooperation with ships. During the sweeping operation continuously D. C.-ed and the sub gushed up oil. And the planes and ships alternately attacked the spot. Fifteen hours later oil pool measured 200x1500 meters. Bombed again. Fresh oil and air bubbles.
- (453) Bombed immediately upon finding the sub. Again bombed the spot where oil was gushing up, with the total of five planes. Plenty of oil. (Bombs: No. 25x6).
- (454) Detected a sub. Noticed its movement. Then heard its screw. Attacked. Oil. Continued attacks for five times (432). After these attacks, the sub did not seem to be moving at all, judging from the way the oil gushed up. Size of oil pool two hours after the attack: 400x4000 meters. Oil still kept on gushing up.
- (455) Found a sub underwater. Bombed (No. 6x2). Later found oil pool, 200x3000 meters in size and wood chips. The following day discovered oil pool of 30,000 meters lying thinly to the east.
- (456) Found a floating sub. Bombed it from the height of 100 meters (No. 6x4). All hit the front of the bridge directly. The sub which was diving, inclined to the right. Two-thirds of the bow was out of the water. Suddenly it started sinking. Oil pool: 500x3000 meters.
- (457) Detected a sub. Heavy oil gushed up after first attack. Repeated attacks four times. Gushing of oil increased. Size of the pool:

ENCLOSURE (H), continued

- 125x3000 meters. Then the sub came to a standstill. Attacked twice. Oil was still gushing up the following morning.
- (458) Found a floating sub. Attacked it (No. 6x6). Attacked the following morning by detector. (No. 25x2; No. 6x6). Oil pools were seen in several spots on 19th. Oil still gushing up - eight meters wide, eight meters deep, and 90 meters long, according to survey.
 - (459) After our ships were attacked, we detected the sub. Caught it at 150 meters. D. C.-ed (24). Heard a big explosion. Size of oil pool: 700x1500 meters. Oil kept on gushing up the next morning.
 - (460) Began the attack confirming the clear response on the detector. Size of oil pool: 100x4000 meters after the second attack. (D. C.-ed thrice 27). Size of the pool the next morning: 100x4000 meters. Confirmed by fathometer a protuberant spot, six meters wide at the bottom. Discharged D. C. right above it. (6) Oil gushed up. Heard echo.
 - (461) Detected a sub accurately three times. Attacked (No. 25x1; No. 6x4). Oil gushed up to the spot of attacks.
 - (462) Caught a floating sub by electric detector, then by fathometer. Approached within 70 meters. D. C.-ed (24). Approached within 180 meters for the second time. Attacked (21). Size of oil pool: 200x4000 meters.
 - (463) Found trace of torpedoes. Detected and caught a sub. D. C.-ed (20). Pool of muddy bubbles mixed with oil extended over three miles from south to north.
 - (464) Detected a sub and D. C.-ed. As soon as C.D. 63 torpedo shooting point was found, we D. C.-ed. We made 93 D. C. attacks at OKINA-WA. Size of oil pool: 1 kilometer wide and over 10 kilometers long.
 - (465) Led by a plane we attacked a sub (D. C. 32). Plane bombed (2). Again D. C.-ed (13). C.D. 22 heard the screw; wood chips floated on the water. Size of oil pool the next morning: 500x3000 meters. Bubbles and oil still kept on gushing.
 - (466) Planes bombed the vicinity of the spot of torpedo shooting. Ships in cooperation with planes attacked the point by magnetic detector. Oil pool: 200x7000 meters. The next day: 2000x5000 meters. The spot where KAMITSU MARU was sunk was apart from the spot where the sub was sunk, and the KAMITSU MARU had loaded only one ton of heavy oil.
 - (467) Detected and caught a sub. Then heard its motor. D. C.-ed (28). Stench of heavy oil was felt while sweeping. On the fifth day after the attack, a dense oil pool, one kilometer in diameter, and pieces of cork, etc., were found on the spot.
 - (468) Detected a sub five degrees to the left at a distance of 1200 meters. Caught it at 150 meters. Then heard the motor. D. C.-ed (15 the first time, 18 the second time, and 27 the last time). Found oil pool, 500x3000 meters in size, in the direction of 60 degrees from the spot of attack.

REMARKS

1. The above record lists only the submarines whose sinkings were firmly confirmed. Submarines which were either seriously or slightly damaged are not included.

2. The records of April 1943 are imperfect.

172

ENCLOSURE (I)

THE ORGANIZATION OF JAPANESE SUBMARINES BY SQUADRONS THROUGHOUT THE WAR

Note:

1. Kure Submarine Division was engaged in training under Naval Submarine school.
2. Eleventh Submarine Squadron was a training division.
3. Submarine Divisions attached to Naval Stations were being engaged in training or experimental researches.
4. Submarines attached to Defence Corps or to Fls were being engaged in anti-submarine training.

1 November 1941 to 10 March 1942

SIXTH FLEET

First Submarine Squadron

First Submarine Group (I-15, I-16, I-17): Decluded on January 1942 and belonged to Sixth Fleet.

Second Submarine Group (I-18, I-19, I-20): Reorganized on 1 February 1942 as follows- (I-15, I-17, I-19).

Third Submarine Group (I-21, I-22, I-23): Included on January 1942 in Sixth Fleet.

Fourth Submarine Group (I-24, I-25, I-26): Reorganized on 1 February 1942 as follows- I-26 had been included in Fourth Submarine Group on 6 November 1941- (I-23, I-25, I-26).

I-9

YASUKUNI-MARU

Second Submarine Squadron

Seventh Submarine Group (I-1, I-2, I-3)

Eighth Submarine Group (I-4, I-5, I-6)

I-7

I-10

SANTOS MARU

Third Submarine Squadron

Eleventh Submarine Group (I-74, I-75)

Twelfth Submarine Group (I-68, I-69, I-70): I-70 went down on 15 January 1942, and decluded.

Twentieth Submarine Group (I-71, I-72, I-73): I-73 went down on 10 March 1942, and decluded.

I-8

TAIGEI

ENCLOSURE (I), continued

Addenda

First Submarine Group (I-15, I-16, I-17): Included on January 1942. Reorganized on 1 February 1942 as follows: (I-16, I-18, I-20).

Third Submarine Group (I-21, I-22, I-23): Included on January 1942. Reorganized on 1 February 1942 as follows: (I-21, I-22, I-24).

I-10: Included on January 1942.

I-28: Included on 6 February 1942.

Fourteenth Submarine Group (I-27*, I-28*, I-29**, I-30***)

KATORI

GRAND FLEET

Fourth Submarine Squadron: Demobilized on 10 March 1942.

Eighteenth Submarine Group (I-53, I-54, I-55): Included on 10 March 1942 in Kure Naval Station.

Nineteenth Submarine Group (I-56, I-57, I-58): Included on 10 March 1942 in Fifth Submarine Squadron.

Twenty-First Submarine Group (Ro-33, Ro-34): Included on 10 March 1942 in Sixth Submarine Squadron.

KINU: Decluded on 10 March 1942 from Sixteenth Submarine Squadron

Fifth Submarine Squadron

Twenty-Eighth Submarine Group (I-59, I-60, I-62): I-60 went down on 10 March 1942, I-62 included on 10 March 1942.

Twenty-Ninth Submarine Group (I-62, I-64): Demobilized on 10 March 1942, I-62 included in Twenty-Eighth Submarine Group, I-64 included in Thirtieth Submarine Group.

Thirtieth Submarine Group (I-65, I-66, I-64): I-64 included on 10 March 1942.

YURA

THIRD FLEET

Sixth Submarine Squadron: Attached to Grand Fleet on 10 March 1942.

Ninth Submarine Group (I-123, I-124): Demobilized on 25 February 1942, I-24 went down.

Thirteenth Submarine Group (I-121, I-122, I-123)

CHOGEI

*Included on 24 February 1942.

**Included on 27 February 1942.

***Included on 10 March 1942.

RESTRICTED

S-17

ENCLOSURE (I), continued

FOURTH FLEET

Seventh Submarine Squadron

Twenty-Sixth Submarine Group (Ro-60, Ro-61, Ro-62): Ro-60 ran aground and declared on 15 January 1942. Reorganized on 10 February 1942 as follows--(Ro-61, Ro-62, Ro-65, Ro-67).

Twenty-Seventh Submarine Group (Ro-65, Ro-66, Ro-67): Ro-66 went down and declared on 15 January 1942. Demobilized and included in Twenty-Sixth Submarine Group on 1 February 1942.

Thirty-Third Submarine Group (Ro-63, Ro-64, Ro-68)

JINGEI

KURE NAVAL STATION

Sixth Submarine Group (Ro-57, Ro-58, Ro-59)

I-52

Ro-31: Repaired and restored in service from superannuated condition.

10 March 1942 to 14 July 1942

SIXTH FLEET

First Submarine Squadron

Second Submarine Group

Fourth Submarine Group (I-23, I-2, I-26): I-23 went down on 10 April 1942 and declared.

I-9

HEIAN MARU

Fifteenth Submarine Group (I-31, I-32, I-33): I-31 and I-32 were organized on 10 May 1942; I-33 was included on 10 June 1942.

Second Submarine Squadron

Seventh Submarine Group (I-1, I-2, I-3)

Eighth Submarine Group (I-4, I-5, I-6)

SANTOS MARU

Third Submarine Squadron

Eleventh Submarine Group (I-174, I-175)

Twelfth Submarine Group (I-168, I-119, I-171, I-172): I-171 and I-172 were included on 20 March 1942.

Twentieth Submarine Group (I-171, I-172): Demobilized on 20 March 1942. Included on same day in Twelfth Submarine Group.

I-8: Declared on 5 February 1942. Included on 5 February 1942 in Fifth Submarine Squadron.

ENCLOSURE (I), continued

I-11: Included on 16 May 1942.

YASUKUNI MARU

Eighth Submarine Squadron

First Submarine Group (I-16, I-18, I-20)

Third Submarine Group (I-21, I-22, I-24)

Fourteenth Submarine Group (I-27, I-28, I-29, I-30): I-28 went down on 15 June 1945 and decluded.

I-10

HIE MARU

Addenda

Thirteenth Submarine Group (I-121, I-122, I-123): Included on 10 April 1942. Decluded on 14 July 1942 in Seventh Submarine Squadron.

VATORI

GRAND FLEET

Fifth Submarine Squadron: Demobilized on 10 July 1942.

Twenty-Eighth Submarine Group (I-159, I-162): Demobilized on April 1942 and decluded.

Thirtieth Submarine Group (I-164, I-165, I-166, I-162): I-164, I-165, and I-166 were included in GKF on 10 July 1942; I-162 was included on 10 April 1942.

YURA: Decluded on May 1942. Included on May 1942 in Fourth Submarine Division.

I-8: Included on May 1942. Included on 10 May 1942 in GKF.

Nineteenth Submarine Group (I-156, I-157, I-158, I-159): I-159 was included on 10 April 1942. I-156, I-157 and I-158 were included in Kure Naval Station on 10 April 1942.

RIO DE JANEIRO MARU

Sixth Submarine Squadron: Demobilized on 10 April 1942.

Thirteenth Submarine Group (I-121, I-122): I-121 and I-122 were included in Sixth Fleet on 10 April 1942.

I-123: Included on 10 April 1942 in Sixth Fleet

Twenty-First Submarine Group (Ro-33, Ro-34): Included on 10 April 1942 in Seventh Submarine Squadron.

CHOGEI: Included on 10 April 1942 in Kure Naval Station

FOURTH FLEET

Seventh Submarine Squadron: Included on 14 July 1942.

Twenty-Sixth Submarine Group (Ro-61, Ro-62, Ro-65, Ro-67): Ro-61, Ro-62, and Ro-65 were included on 14 July 1942 in Fifth Fleet.

ENCLOSURE (I), continued

Thirty-Third Submarine Group (Ro-63, Ro-64, Ro-68): Included in Fifth Fleet on 14 July 1942

Twenty-First Submarine Group (Ro-33, Ro-34): Included on 10 April 1942.

JINGEI

Addenda

Thirteenth Submarine Group (I-164, I-165, I-166, I-162): Included on 10 July 1942; I-164 went down and excluded on 14 July 1942.

I-8: Included on 10 July 1942.

RIO DE JANEIRO MARU

FORCE OF KURE NAVAL STATION

Eighteenth Submarine Group (I-153, I-154, I-155)

Sixth Submarine Group (Ro-57, Ro-58, Ro-59)

I-152: Decluded on 14 July 1942 (Preparatory ship for old age).

Ro-31: Decluded on 14 July 1942. Included on the same day in Yokosuka Naval Station.

Nineteenth Submarine Group (I-156, I-157, I-158, I-159): Included on 10 July 1942.

Note: I-153 to I-75 changed their name I-153 to I-175 (the new number is added to 100 in the old).

14 July 1942 to 14 April 1943

SIXTH FLEET

First Submarine Squadron

Twenty-Fifth Submarine Group (I-15, I-17, I-19): I-15 went down and decluded on 24 December 1942.

I-25, I-26: I-25 included on 10 August 1942.

Forty-Fifth Submarine Group (I-25, I-26): Demobilized on 10 August 1942.

Fifteenth Submarine Group (I-31, I-32, I-33): I-33 went down by accident and decluded on 10 November 1942

I-36: included on 15 December 1942

I-34, I-35: I-34 included on 1 April 1943.

I-9

HEIAN MARU

Second Submarine Squadron: Demobilized on 20 August 1942.

Seventh Submarine Group (I-1, I-2, I-3, I-4, I-5, I-6): These were directed by the Commander-in-Chief on 20 August 1942. I-4, I-5, and I-6 were included on 20 August 1942.

ENCLOSURE (I), continued

Eighth Submarine Group (I-4, I-5, I-6): Demobilized on 20 August 1942 (Seventh Submarine Group).

I-7: Directed by the Commander-in-Chief of Sixth Fleet.

SANTOS MARU: On 20 August 1942 (Kure Naval Station).

Third Submarine Squadron

Eleventh Submarine Group (I-174, I-175, I-176): Demobilized on 15 March 1943 (Twelfth Submarine Group). I-176 was included on 4 August 1942.

Twelfth Submarine Group (I-168, I-169, I-171, I-172, I-174, I-175, I-176). I-172 went down and declared on 15 December 1942, I-174 was included on 15 March 1943.

Twenty-Second Submarine Group (I-177, I-178, I-180): Included on 15 March 1943.

I-11

YASUKUNI MARU

Eighth Submarine Squadron

First Submarine Group (I-16, I-18, I-20, I-21, I-24). I-18 went down and declared on 1 April 1943. I-21 included on 15 December 1942.

Third Submarine Group (I-21, I-22, I-24): Demobilized on 15 December 1942 (First Submarine Group). I-22 went down and declared 15 December 1942.

Fourteenth Submarine Group (I-27, I-29, I-30): I-30 went down and declared on 10 November 1942.

I-8: Included on 1 April 1943.

Addenda

Seventh Submarine Group (I-1, I-2, I-3, I-4, I-5, I-6, I-7): Declared on 15 April 1943. I-1 went down and declared on 1 April 1943. I-3 went down and declared on 31 December 1942. I-4 went down and declared on 1 March 1943. I-7 included on 31 August 1942.

I-7: Included on 20 August 1942. Declared on 31 August 1942 (Seventh Submarine Group).

I-8: Included on 20 August 1942. Declared on 1 April 1943 (Fourteenth Submarine Group).

KATORI

EIGHTH FLEET

Seventh Submarine Squadron: Belongs to the fleet in the direction of east and south.

Thirteenth Submarine Group (I-121, I-122, I-123): I-123 went down and declared on 5 October 1942.

Ro-100: Included on 15 December 1942.

Ro-101, Ro-103, Ro-102: Included December 1942.

Ro-106, Ro-107: Included on 15 March 1943.

ENCLOSURE (I), continued

Twenty-First Submarine Group (Ro-33, Ro-34): Demobilized on 5 October 1942. Ro-33 went down on 5 October 1942.

JINGEI: Decluded on 15 January 1943 (Kure Naval Station).

CHOGEI: Included on 15 January 1943.

FIFTH FLEET

Twenty-Sixth Submarine Group (Ro-61, Ro-62, Ro-65, Ro-67): Went down and decluded on 20 October 1942.

Thirty-Third Submarine Group (Ro-63, Ro-64, Ro-68): Decluded on 25 September 1942 (Kure Naval Station).

I-34, I-35: Included on October 1942. Decluded on 1 April 1943 (→Fifteenth Submarine Group).

GKF

Thirtieth Submarine Group (I-165, I-166, I-162).

I-8: Decluded 20 August 1942 (→Sixth Fleet).

RIO DE JANEIRO MARU

FORCE OF KURE NAVAL STATION

Kure Submarine Squadron: Organized on 1 September 1942. Decluded on 31 March 1943 (→First Fleet) and became Eleventh Submarine Squadron.

I-34, I-35, Ro-100: Included on September 1942. I-34 and I-35 were decluded on October 1942 (→Fifth Fleet). Ro-100 was decluded on 15 December 1942 (→Seventh Submarine Squadron).

I-36: Included on 30 September 1942. Decluded on 15 December 1942 (→Fifteenth Submarine Squadron).

Ro-101, Ro-102, Ro-103: Decluded on December 1942 (→Seventh Submarine Squadron). Ro-101 was included on October 1942, Ro-102 was included on October 1942, and Ro-103 was included on September 1942.

I-177, Ro-106, Ro-107: Included on December 1942. I-177 was decluded on 25 February 1942 (→Twenty-Second Submarine Group). Ro-106 and Ro-107 were decluded on 15 March 1943 (→Seventh Submarine Squadron).

I-185, I-38: Included on 15 January 1943. I-180 was decluded on 25 February 1942 (→Twenty-Second Submarine Group).

Ro-104: Included on February 1943.

Ro-105: Included on 5 March 1943.

Ro-35: Included on 25 March 1943.

I-37: Included on 10 March 1943.

Twenty-Second Submarine Group (I-177, I-178, I-180): Organized on 25 February 1943 and decluded on 15 March 1943 (→Third Submarine Squadron).

ENCLOSURE (I), continued

SANTOS MARU: Included on September 1942 (Navy Department).

CHIKUSI MARU: Included on 25 March 1943.

Addenda

Eighteenth Submarine Group (I-153, I-154, I-155).

Nineteenth Submarine Group (I-156, I-157, I-158, I-159).

Ro-31: Included on 15 January 1943.

Sixth Submarine Group (Ro-57, Ro-58, Ro-59): Decluded on 15 January 1943 (Yokosuka Naval Station).

I-34, I-35, Ro-100: Included on 31 August 1942 and decluded on September 1942 (*Kure Submarine Squadron).

Thirty-Third Submarine Group (Ro-63, Ro-64, Ro-68): Included on 25 September 1942.

Twenty-Sixth Submarine Group (Ro-62, Ro-65, Ro-67): Included on 15 November 1942. Ro-65 went down and decluded on 20 November 1942.

CHOGEI: Decluded on 15 January 1943.

JINGEI: Included on 15 January 1943.

FORCE OF YOKOSUKA NAVAL STATION

Sixth Submarine Group (Ro-57, Ro-58, Ro-59): Included on 15 January 1943.

Ro-31: Decluded on 15 January 1943 (Kure Naval Station).

15 April 1943 to 1 January 1944

SIXTH FLEET

First Submarine Squadron

Second Submarine Group (I-17, I-19, I-25, I-26, I-16, I-20, I-21, I-40): I-17, I-25, and I-20 were excluded from First Submarine Squadron (by sinking) on 1 December 1943. I-26 was excluded from First Submarine Squadron (included in Eighth Submarine Squadron) on 25 November 1943. I-16, I-20, and I-21 were included in Second Submarine Group on 25 September 1943. I-40 was included in Second Submarine Group on 31 October 1943.

I-39: Included in First Submarine Squadron on 25 November 1943.

I-9: Excluded from First Submarine Squadron (by sinking) on August 1943.

HEIAN MARU

Fifteenth Submarine Group (I-31, I-32, I-34, I-35, I-36, I-38, I-41): I-31 was excluded from First Submarine Squadron (by sinking) on 1 August 1943. I-34 was excluded from First Submarine Squadron on 15 November 1943 (included in Eighth Submarine Squadron). I-38 was included in Fifteenth Submarine Group on 30 April 1943. I-41 was included in Fifteenth Submarine Group on 20 December 1943.

First Submarine Group (I-16, I-20, I-21): Included in Sixth Fleet on August 1943, and then disbanded (included in Second Submarine Group) on 25 September 1943.

I-11: Included in First Submarine Squadron on September 1943.

ENCLOSURE (I), continued

Third Submarine Squadron: Disbanded on 15 September 1943.

Twelfth Submarine Group (I-168, I-169, I-171, I-174, I-175, I-176): Under the direct command of Sixth Fleet on 15 September 1943. I-168 was excluded from Third Submarine Squadron (by sinking) on 15 August 1943.

Twenty-Second Submarine Group (I-177, I-178, I-180, I-181, I-182): Under the direct command of Sixth Fleet on 15 September 1943. I-178 was excluded from Twenty-Second Submarine Group (by sinking) on 1 September 1943. I-181 was included in Twenty-Second Submarine Group on 20 August 1943. I-182 was included in Twenty-Second Submarine.

Group on 10 August 1943.

I-11: Included in First Submarine Squadron on 15 September 1943.

YASUKUNI MARU was under the direct command of Sixth Fleet on 15 September 1943.

Eighth Submarine Squadron

First Submarine Group (I-16, I-20, I-21, I-24): Excluded from Eighth Submarine Squadron on August 1943 (included in First Submarine Squadron). I-24 was excluded from First Submarine Group (by sinking) on 1 August 1943.

I-10: Excluded from Eighth Submarine Squadron on 1 January 1944 (included in First Submarine Squadron).

HIE MARU: Excluded from Eighth Submarine Squadron on October 1943 and then under the direct command of Sixth Fleet.

I-8: Included in Eighth Submarine Squadron on 25 May 1943.

Fourteenth Submarine Group (I-27, I-29, I-8, I-37, I-39): I-29 was excluded from Eighth Submarine Squadron on 15 September 1943. I-8 was excluded from Fourteenth Submarine Group on 25 May 1943. I-37 was included in Fourteenth Submarine Group on 23 May 1943. I-39 was included in Fourteenth Submarine Group on 20 July 1943 and then excluded from Fourteenth Submarine Group on 30 November 1943 (included in Second Submarine Group). I-27, I-29, I-8, and I-37 were disbanded on 15 December 1943.

I-29 and I-34: Included in Eighth Submarine Squadron on 15 September 1943.

I-34: Excluded from Eighth Submarine Squadron (by sinking) on 1 January 1944.

I-26: Included in Eighth Submarine Squadron on 25 November 1943.

Thirtieth Submarine Group (I-162, I-165, I-166, Ro-111, Ro-110, Ro-112): I-162, I-165 and I-166 were included in Thirtieth Submarine Group on October 1943. Ro-110 was included in Thirtieth Submarine Group on 10 November 1943. Ro-111 was included in Thirtieth Submarine Group on 31 October 1943. Ro-112 was included in Thirtieth Submarine Group on 25 December 1943.

Addenda

Ro-35: Included in Sixth Fleet on 20 July 1943.

Ro-36: Included in Sixth Fleet on 20 August 1943.

Ro-37: Included in Sixth Fleet on 24 September 1943.

Twelfth Submarine Group (I-169, I-171, I-174, I-175, I-176): Included in Sixth Fleet on 15 September 1943.

RESTRICTED

ENCLOSURE (I), continued

Twenty-Second Submarine Group (I-177, I-180, I-181, I-182, I-185): I-177, I-180, I-181 and I-182 were included in Sixth Fleet on 15 September 1943. I-182 was excluded from Twenty-Second Submarine Group (by sinking) on 1 December 1943. I-185 was included in Twenty-Second Submarine Group on 20 December 1943.

Thirty-Fourth Submarine Group (Ro-35, Ro-36, Ro-37, Ro-38, Ro-39, Ro-42, Ro-44): Ro-35, Ro-36, Ro-37, and Ro-38 were formed on 31 October 1943. Ro-42 was included in Thirty-Fourth Submarine Group on 30 November 1943. Ro-39 and Ro-44 were included in Thirty-Fourth Submarine Group on 25 December 1943. Ro-35 was excluded from Thirty-Fourth Submarine Group (by sinking) on 1 December 1943.

YASUKUNI MARU: Included in Sixth Fleet on 15 September 1943.

Twelfth Submarine Group (I-169, I-171, I-174, I-175, I-176): Included in Sixth Fleet on 15 September 1943.

Twenty-Second Submarine Group (I-177, I-180, I-181, I-182, I-185): I-177, I-180, I-181 and I-182 were included in Sixth Fleet on 15 September 1943. I-182 was excluded from Twenty-Second Submarine Group (by sinking) on 1 December 1943. I-185 was included in Twenty-Second Submarine Group on 20 December 1943.

KATORI

NTF

Seventh Submarine Squadron

Thirteenth Submarine Group (I-121, I-122): Disbanded on 31 May 1943 and then excluded from Seventh Submarine Squadron on 15 August 1943 (included in Eighteenth Submarine Group).

Ro-107, Ro-34, Ro-100, Ro-101, Ro-102, Ro-103, Ro-104, Ro-105, Ro-106, Ro-108, Ro-109

Ro-107: Excluded from Seventh Submarine Squadron (by sinking) on 1 September 1943.
 Ro-34: Excluded from Seventh Submarine Squadron (by sinking) on July 1943.
 Ro-102: Excluded from Seventh Submarine Squadron (by sinking) on July 1943.
 Ro-104: Included in Seventh Submarine Squadron on 5 June 1943.
 Ro-105: Included in Seventh Submarine Squadron on June 1943.
 Ro-108: Included in Seventh Submarine Squadron on 1 August 1943.
 Ro-109: Included in Seventh Submarine Squadron on 15 August 1943.

CHOGEI

Fifty-First Submarine Group (Ro-100, Ro-101, Ro-103, Ro-104, Ro-105, Ro-106, Ro-108, Ro-109): Ro-100, Ro-101, Ro-103, Ro-104, Ro-105, and Ro-106 were formed on 20 August 1943. Ro-101 was excluded from Fifty-First Submarine Group (by sinking) on 1 December 1943. Ro-103 was excluded from Fifty-First Submarine Group (by sinking) on 1 November 1943. Ro-108 and Ro-109 were included in Fifty-First Submarine Group on 1 September 1943.

FIFTH FLEET

Seventh Submarine Group (I-2, I-5, I-6, I-7): I-7 was excluded from Seventh Submarine Group (by sinking) on 1 August 1943.

GKF

Thirtieth Submarine Group (I-162, I-165, I-166): Excluded from GKF on October 1943 (included in Eighth Submarine Squadron).

RIO DE JANEIRO MARU: Excluded from GKF on 15 September 1943 (included in Navy Department).

ENCLOSURE (I), continued

FIRST FLEET

Eleventh Submarine Squadron

I-37, I-38, Ro-35, Ro-104, Ro-105, Ro-108, I-39, Ro-109, I-181, I-182, Ro-36, I-179, CHIKUSHI MARU, Ro-37, Ro-110, Ro-111, Ro-38, I-40, Ro-42, I-185, Ro-39, Ro-44, Ro-112, I-41, Ro-40, I-183, I-184, Ro-113, I-42, I-43, Ro-41, Ro-43, Ro-114, Ro-115, I-52, I-45

I-37: Excluded from Eleventh Submarine Squadron on 23 May 1943 (included in Fourteenth Submarine Group).

I-38: Excluded from Eleventh Submarine Squadron on 30 April 1943 (included in Fifteenth Submarine Group).

Ro-35: Excluded from Eleventh Submarine Squadron on 20 July 1943 (included in Sixth Fleet).

Ro-104: Excluded from Eleventh Submarine Squadron on 5 July 1943 (included in Seventh Submarine Squadron).

Ro-105: Excluded from Eleventh Submarine Squadron on June 1943 (included in Seventh Submarine Squadron).

Ro-108: Included in Eleventh Submarine Squadron on 20 April 1943 was excluded from Eleventh Submarine Squadron on 1 August 1943 (included in Seventh Submarine Squadron).

I-39: Included in Eleventh Submarine Squadron on 22 April 1943 was excluded from Eleventh Submarine Squadron on 20 July 1943 (included in Fourteenth Submarine Group).

Ro-109: Included in Eleventh Submarine Squadron on 30 April 1943 was excluded from Eleventh Submarine Squadron on 15 August 1943 (included in Seventh Submarine Squadron).

I-182: Included in Eleventh Submarine Squadron on 10 May 1943 was excluded from Eleventh Submarine Squadron on 10 August 1943 (included in Twenty-Second Submarine Group).

I-181: Included in Eleventh Submarine Squadron on 24 May 1943 was excluded from Eleventh Submarine Squadron on 20 August 1943 (included in Twenty-Second Submarine Group).

Ro-36: Included in Eleventh Submarine Squadron on 31 May 1943 was excluded from Eleventh Submarine Squadron on 20 August 1943 (included in Sixth Fleet).

I-179: Included in Eleventh Submarine Squadron on 18 June 1943 was excluded from Eleventh Submarine Squadron on 1 September 1943 (sinking by accident).

Ro-37: Included in Eleventh Submarine Squadron on 30 June 1943 was excluded from Eleventh Submarine Squadron on 24 September 1943 (included in Sixth Fleet).

Ro-110: Included in Eleventh Submarine Squadron on 10 July 1943 was excluded from Eleventh Submarine Squadron on 10 November 1943 (included in Thirtieth Submarine Group).

Ro-111: Included in Eleventh Submarine Squadron on 30 July 1943 was excluded from Eleventh Submarine Squadron on 31 October 1943 (included in Thirtieth Submarine Group).
Ro-38: Included in Eleventh Submarine Squadron on 31 July 1943 was excluded from Eleventh Submarine Squadron on 31 October 1943 (included in Thirty-Fourth Submarine Group).

I-40: Included in Eleventh Submarine Squadron on 31 July 1943 was excluded from Eleventh Submarine Squadron on 31 October 1943 (included in Second Submarine Group).

ENCLOSURE (I), continued

Ro-42: Included in Eleventh Submarine Squadron on 20 August 1943 was excluded from Eleventh Submarine Squadron on 30 November 1943 (included in Thirty-Fourth Submarine Group).

I-185: Included in Eleventh Submarine Squadron on 23 September 1943 was excluded from Eleventh Submarine Squadron on 20 December 1943 (included in Twenty-Second Submarine Group).

Ro-39: Included in Eleventh Submarine Squadron on 12 September 1942/ was excluded from Eleventh Submarine Squadron on 25 December 1943 (included in Thirty-Fourth Submarine Group).

Ro-44 and Ro-112: Included in Eleventh Submarine Squadron on 12 September 1943 were excluded from Eleventh Submarine Squadron on 25 December 1943 (included in Thirtieth Submarine Group).

I-41: Included in Eleventh Submarine Squadron on 18 September 1943 was excluded from Eleventh Submarine Squadron on 20 December 1943 (included in Fifteenth Submarine Group).

Ro-40: Included in Eleventh Submarine Squadron on 28 September 1943.

I-183: Included in Eleventh Submarine Squadron on 30 September 1943.

I-184 and Ro-113: Included in Eleventh Submarine Squadron on 15 October 1943.

I-42 and I-43: Included in Eleventh Submarine Squadron on 31 October 1943.

Ro-41: Included in Eleventh Submarine Squadron on 1 November 1943.

Ro-43, Ro-114, and Ro-115: Included in Eleventh Submarine Squadron on 25 November 1943.

I-52: Included in Eleventh Submarine Squadron on 18 December 1943.

I-45: Included in Eleventh Submarine Squadron on 28 December 1943.

KURE NAVAL STATION

Kure Submarine Squadron: Formed on 1 December 1943.

Eighteenth Submarine Group (I-153, I-154, I-155, I-121, I-122): I-121 and I-122 were included in Kure Submarine Squadron on 15 August 1943 and excluded from Kure Submarine Squadron on 25 August 1943 (included in Eighteenth Submarine Group).

Nineteenth Submarine Group (I-156, I-157, I-158, I-159).

Thirty-Third Submarine Group (Ro-63, Ro-64, Ro-68, Ro-62, Ro-67): Ro-62 and Ro-67 were included in Thirty-Third Submarine Group on 1 December 1943.

JINGEI

Twenty-Sixth Submarine Group (Ro-62, Ro-67): Disbanded on 1 December 1943 (included in Thirty-Third Submarine Group).

Ro-31

Ro-500: Included in Kure Submarine Squadron on 16 September 1943.

YOKOSUKA NAVAL STATION

Sixth Submarine Group (Ro-57, Ro-58, Ro-59).

ENCLOSURE (I), continued

1 January 1944 to 15 August 1944

SIXTH FLEET

First Submarine Squadron: Demobilized on 1 January 1944. Commanded corps was directed under Sixth Fleet.

Second Submarine Group (I-16, I-19, I-21, I-39, I-40): I-16 was excluded on 5 March 1944 and included in Fifteenth Submarine Group on 5 March 1944. I-19, I-21, I-39, and I-40 went down and were excluded on 4 April 1944. Demobilized on 30 April 1944.

Fifteenth Submarine Group (I-32, I-35, I-36, I-38, I-41, I-42, I-43, I-16, I-45, I-44, I-26, I-53, I-54, I-55, I-29): I-32 went down and was excluded on 10 June 1944. I-35 went down and was excluded on 30 April 1944. I-42 was included on 31 January 1944 and went down and was excluded on 30 April 1944. I-43 was included on 11 April 1944 and went down and was excluded on 30 April 1944. I-16 was included on 5 March 1944. I-45 was included on 25 March 1944. I-44 was included on 28 April 1944. I-26 was included on 20 June 1944. I-53 was included on 19 May 1944. I-54 and I-55 were included on 10 July 1944. I-29 was included on 5 August 1944.

I-111: Went down and excluded on 30 April 1944.

HEIAN MARU: Went down and excluded on 31 March 1944.

Addenda

Twelfth Submarine Group (I-169, I-171, I-174, I-175, I-176): Demobilized on 10 July 1944. I-169 went down and was excluded on 10 June 1944. I-171 went down and was excluded on 30 April 1944. I-174 went down and was excluded on 10 June 1944. I-175 went down and was excluded on 10 July 1944.

I-10

Twenty-Second Submarine Group (I-177, I-180, I-181, I-185, I-184, I-183): I-177 was excluded and included in Thirty-Fourth Submarine Group on 1 August 1944. I-180 went down and was excluded on 10 July 1944. I-181 went down and was excluded on 30 April 1944. I-185 went down and was excluded on 10 August 1944. I-184 was included on 31 January 1944; went down and was excluded on 10 August 1944. I-183 was included on August 1944; went down and was excluded on 10 August 1944. Demobilized on 10 August 1944.

Thirty-Fourth Submarine Group (Ro-36, Ro-37, Ro-38, Ro-39, Ro-42, Ro-44, Ro-40, Ro-41, Ro-43, Ro-45, Ro-47, Ro-46, Ro-48, Ro-177).

Ro-36: Went down and excluded on 10 August 1944.

Ro-37, Ro-38, and Ro-39: Went down and excluded on 30 April 1944.

Ro-42 and Ro-44: Went down and excluded on 10 August 1944.

Ro-40: Included on 15 January 1944, went down and excluded on 30 April 1944.

Ro-41: Included on 5 April 1944.

Ro-43: Included on 10 March 1944.

Ro-45: Included on 15 April 1944, went down and excluded on 10 June 1944.

Ro-46: Included on 23 June 1944.

Ro-47: Included on 14 May 1944.

Ro-48: Included on 3 July 1944.

I-177: Included on 1 August 1944.

YASUKUNI MARU: Went down and excluded on 10 March 1944.

Seventh Submarine Group (I-2, I-5, I-6): I-2, I-5, and I-6 were included on 1 February 1944. I-2 went down and was excluded on 10 June 1944.

TUKUSHI MARU: Included on 20 July 1944.

ENCLOSURE (I), continued

KATORI: Excluded and included in Training Submarine on 15 February 1944.

Thirtieth Submarine Base Corps: Included on 25 April 1944.

Eighty-Fifth Submarine Base Corps: Included on 25 April 1944. Excluded and included in Fourth Fleet on August 1944.

Thirty-First Submarine Base Corps: Included on 5 July 1944.

Seventh Submarine Squadron: Included on 1 March 1944.

Fifty-First Submarine Group (Ro-104, Ro-105, Ro-106, Ro-108, Ro-109, Ro-115, Ro-110, Ro-111, Ro-112, Ro-113, Ro-114, Ro-116, Ro-117): Demobilized on 15 August 1944.

Ro-104, Ro-105, Ro-106, Ro-108, and Ro-109: Included 1 March 1944.

Ro-104, Ro-105, Ro-106, and Ro-108: Went down and excluded on 10 August 1944.

Ro-109: Excluded and included Kure Submarine Squadron on 15 August 1944.

Ro-115: Included on 10 March 1944. Excluded and included on 15 August 1944.

Ro-110, Ro-111, and Ro-112: Included on 20 March 1944.

Ro-110: Went down and excluded on 30 April 1944.

Ro-111: Went down and excluded on 10 August 1944.

Ro-112: Excluded and included in Kure Submarine Squadron on 15 August 1944.

Ro-113: Included on 25 March 1944. Excluded and included in Eighth Submarine Squadron on 15 August 1944.

Ro-114: Included on 25 March 1944; went down and excluded on 10 August 1944.

Ro-116: Included on 4 May 1944; went down and excluded on 10 August 1944.

Ro-117: Included on 14 May 1944; went down and excluded on 10 August 1944.

I-36 and I-362: Included on 15 August 1944.

Eighth Submarine Squadron

Thirtieth Submarine Group (I-162, I-165, I-166, Ro-110, Ro-111, Ro-112, Ro-113, Ro-114) I-162, I-165, I-166, and Ro-110 were demobilized on 25 March 1944 and taken independent.

I-162: Excluded and included in Kure Submarine Division on 25 March 1944.

Ro-110: Excluded and included in Fifty-First Submarine Group on 20 March 1944.

Ro-111 and Ro-112: Excluded and included in Fifty-First Submarine Group on 20 March 1944.

Ro-113: Included on 31 January 1944. Excluded and included in Fifty-First Submarine Group on 25 March 1944.

Ro-114: Included on 20 February 1944. Excluded and included in Fifty-First Submarine Group on 25 March 1944.

I-8:

I-26: Excluded and included in Fifteenth Submarine Group on 20 June 1944.

I-27: Went down and excluded on 10 July 1944.

I-29: Excluded and included in Fifteenth Submarine Group on 5 August 1944.

I-57:

I-52: Included on 10 March 1944.

Ro-113 and Ro-115: Included on 15 August 1944.

Ro-501: Included on March 1944.

Eleventh Submarine Squadron

I-42: Excluded and included in Fifteenth Submarine Group on 31 January 1944.

I-43: Excluded and included in Fifteenth Submarine Group on 11 February 1944.

I-45: Excluded and included in Fifteenth Submarine Group on 25 March 1944.

I-52: Excluded and included in Eighth Submarine Squadron on 10 March 1944.

I-183: Excluded and included in Twenty-Second Submarine Group on 28 April 1944.

ENCLOSURE (I), continued

I-184: Excluded and included in Twenty-Second Submarine Group on 31 January 1944.
Ro-40: Excluded and included in Thirty-Fourth Submarine Group on 15 January 1944.
Ro-41: Excluded and included in Thirty-Fourth Submarine Group on 5 March 1944.
Ro-43: Excluded and included in Thirty-Fourth Submarine Group on 10 March 1944.
Ro-113: Excluded and included in Thirtieth Submarine Group on 31 January 1944.
Ro-114: Excluded and included in Thirtieth Submarine Group on 20 February 1944.
Ro-115: Excluded and included in Fifty-First Submarine Group on 10 March 1944.

I-53: Included on 24 January 1944. Excluded and included in Fifteenth Submarine Group on 19 May 1944.

Ro-45: Included on 11 January 1944. Excluded and included in Thirty-Fourth Submarine Group on 15 April 1944.

I-44, Ro-47, Ro-116 and Ro-117: Included on 31 January 1944.
I-44: Excluded and included in First Submarine Group on 28 April 1944.
Ro-47: Excluded and included in Thirty-Fourth Submarine Group on 14 May 1944.
Ro-116: Excluded and included in Fifty-First Submarine Group on 4 May 1944.
Ro-117: Excluded and included in Fifty-First Submarine Group on 14 May 1944.
I-46: Included on 26 February 1944.

Ro-46: Included on 11 February 1944. Excluded and included in Thirty-Fourth Submarine Group on 23 June 1944.

Ro-48: Included on 31 March 1944. Excluded and included in Thirty-Fourth Submarine Group on 3 July 1944.

I-55: Included on 20 April 1944. Excluded and included in Fifteenth Submarine Group on 10 July 1944.

I-12, I-361, and I-362: Included on 25 May 1944. Included in Seventh Submarine Squadron on 15 August 1944.

I-33: Included on 1 June 1944 (repair completed). Went down according to the accident and excluded on 10 July 1944.

I-56: Included on 8 June 1944.

I-54: Included on 31 March 1944. Excluded and included in Fifteenth Submarine Group on 10 July 1944.

I-364: Included on 14 June 1944.
I-363: Included on 8 July 1944.
I-47: Included on 10 July 1944.
Ro-50: Included on 31 July 1944.
I-365: Included on 1 August 1944.
I-366: Included on 3 August 1944.
Ro-49: Included on 15 August 1944.
I-367: Included on 15 August 1944.

TUKUSHI MARU: Excluded and to be directed by Sixth Fleet.

CHOGEI

NTF

Fifth Submarine Squadron: Excluded and included in Sixth Fleet on 1 March 1944.

Fifty-First Submarine Group (Ro-100, Ro-104, Ro-105, Ro-106, Ro-108, Ro-109): Ro-100 went down and was excluded on 5 February 1944. Ro-104, Ro-105, Ro-106, Ro-108, and Ro-109 were excluded and included in Sixth Fleet on 1 March 1944.

ENCLOSURE (I), continued

FIFTH FLEET

Seventh Submarine Group (I-2, I-5, I-6): Excluded on 1 February 1944.

KURE NAVAL STATION

Kure Submarine Squadron

Eighteenth Submarine Group (I-121, I-122, I-153, I-154, I-155): Demobilized on 31 January 1944 and included in Nineteenth Submarine Group. (I-153 and I-154: Transferred to the reserve vessels.)

Nineteenth Submarine Group (I-156, I-157, I-158, I-159, I-121, I-122, I-155, I-162), JINGEI

I-121, I-122, and I-155: Included on 31 January 1944.
I-162: Included on 1 July 1944.

Thirty-Third Submarine Group (Ro-62, Ro-63, Ro-64, Ro-67, Ro-68, Ro-49, Ro-500): Ro-68 was excluded and included in Kure Submarine Division on 15 August 1944. Ro-49 was included on 19 May 1944. It was excluded and included in Eleventh Submarine Squadron on 15 August 1944. Ro-50 was included on 20 May 1944. It was excluded and included in Kure Submarine Division on 1 July 1944.

Ro-31: Excluded on 31 January 1944 and transferred to the repair vessels.
Ro-500: Excluded and included in Thirty-Third Submarine Group on 20 May 1944.
Ro-109 and Ro-112: Included on 15 August 1944.

Kure Submarine Division

I-162: Included on 25 March 1944. Excluded and included in Nineteenth Submarine Group on 1 July 1944.

Ro-500: Included on 1 July 1944.
Ro-68: Included on 15 August 1944.

YOKOSUKA NAVAL STATION

Sixth Submarine Group (Ro-57, Ro-58, Ro-59)

15 August 1944 to 15 August 1945

SIXTH FLEET

Fifteenth Submarine Group (I-36, I-38, I-41, I-44, I-45, I-53, I-54, I-55, I-16, I-26, I-29, I-37, I-56, I-46, I-47, I-58, I-48, I-361, I-362, I-363, I-366, I-367, I-368, I-370, I-371, I-351, I-373, I-202).

I-26, I-41, and I-45: Excluded on 10 March 1945 (sinking).
I-44: Excluded on 16 June 1945 (sinking).
I-54: Excluded on 10 March 1945 (sinking).
I-55, I-16, and I-29: Excluded on 10 October 1944 (sinking).
I-37: Included on 12 September 1944 and excluded on 10 March 1945 (sinking).
I-56: Included on 20 September 1944 and excluded on 10 June 1945 (sinking).
I-46: Included on 30 September 1944 and excluded on 10 March 1945 (sinking).
I-47: Included on 8 October 1944.
I-58: Included on 4 December 1944.
I-48: Included on 7 December 1944 and excluded on 10 May 1945 (sinking).
I-361: Excluded on 10 August 1945 (sinking).
I-362: Excluded on 10 April 1945 (sinking).
I-363, I-366, I-367, and I-368: Included on 20 March 1945.
I-370 and I-371: Excluded on 10 April 1945 (sinking).
I-351: Included on 4 April 1945 and excluded on August 1945 (sinking).

ENCLOSURE (I), continued

I-373: Included on 20 June 1945 and excluded on August 1945 (sinking).
I-202: Included on 15 August 1945 (sinking).

Thirty-Fourth Submarine Group (I-177, Ro-41, Ro-43, Ro-46, Ro-47, Ro-48, Ro-109, Ro-112, Ro-50, Ro-55, Ro-56, Ro-113, Ro-115, I-156, I-162, I-165, I-157, I-158, I-159, Ro-49, I-201, Ha-103, Ha-105).

I-177: Excluded on 10 March 1945 (sinking).
Ro-41: Excluded on 25 May 1945 (sinking).
Ro-43: Excluded on 10 April 1945 (sinking).
Ro-46: Excluded on 10 June 1945 (sinking).
Ro-47: Excluded on 10 March 1945 (sinking).
Ro-48: Excluded on 10 October 1944 (sinking).
Ro-109: Included on 20 October 1944 and excluded on 10 June 1945 (sinking).
Ro-112: Included on 20 October 1944 and excluded on 10 May 1945 (sinking).
Ro-50: Included on 5 November 1944.
Ro-55: Included on 4 January 1945 and excluded on 10 May 1945 (sinking).
Ro-56: Included on 10 February 1945 and excluded on 25 May 1945.
Ro-113 and Ro-115: Included on 20 February 1945 and excluded on 10 May 1945 (sinking).
I-156 and I-162: Included on 1 April 1945.
I-165: Included on 1 April 1945 and excluded on August 1945.
I-157, I-158, and I-159: Included on 20 April 1945.
Ro-49: Included on 10 November 1944 and excluded on 25 May 1945 (sinking).
I-201: Included on 15 June 1945.
Ha-103 and Ha-105: Included on 1 January 1945.

The Thirtieth Submarine Base Corps: Demobilized on 1 September 1944.
The Thirty-First Submarine Base Corps: Excluded on 5 August 1945.
The TSUKUSHI MARU: Excluded on 20 January 1945 (→Kure Naval Station).

Seventh Submarine Group (I-5, I-6, demobilized on 10 September 1944; I-10, I-12, I-8, I-13): Excluded on 10 September 1944 (sinking).

I-10: Excluded on 10 October 1944.
I-12: Included on 4 October 1944 and excluded on 10 August 1944 (sinking).
I-8: Included on 5 November 1944 and excluded on 10 August 1945 (sinking).
I-13: Included on 16 December 1944 and excluded on 30 December 1944 (→First Submarine Group).

First Submarine Group (I-13, I-400): Formed on 30 December 1944. (I-401, I-14, I-402).

I-13: Excluded on August 1945 (sinking).
I-401: Included on 8 January 1944.
I-14: Included on 14 March 1945.
I-402: Included on 24 July 1945.

Sixty-Third Fighter Group (aircraft SEIRAN 18) formed on 15 December 1944.

Sixteenth Submarine Group (I-369, I-372, Ha-101, Ha-102, Ha-104): Formed on 20 March 1945. (Ha-105, Ha-103): Excluded on 1 July 1945 (→Thirty-Fourth Submarine Group).

I-372: Excluded on 1 August 1945 (sinking).
Ha-105: Included on 17 May 1945.
Ha-103: Included on 15 April 1945.

Fifty-Second Submarine Group (Ha-201, Ha-202, Ha-205): Formed on 20 July 1945. (Ha-207, Ha-208, Ha-209, Ha-210).

Ha-207: Included on 14 August 1945.
Ha-208 and Ha-209: Included on 4 August 1945.
Ha-210: Included on 11 August 1945.

ENCLOSURE (I), continued

Seventh Submarine Squadron: Demobilized on 20 March 1945. (I-361, I-362, I-363, I-364, I-365, I-366, I-367, I-368, I-370, I-371, I-369, I-372, Ha-101, Ha-102, Ha-104)

I-361 and I-362: Excluded on 20 March 1945 (→Fifteenth Submarine Group).

I-364: Included on 6 September 1944 and excluded on 10 December 1944 (sinking).

I-365: Included on 30 September 1944 and excluded on 10 March 1945 (sinking).

I-363: Included on 15 September 1944

I-366: Included on 2 October 1944

I-367: Included on 15 October 1944

I-368: Included on 2 November 1944

I-370: Included on 4 November 1944

I-371: Included on 6 December 1944

I-369: Included on 13 December 1944

I-372: Included on 8 January 1945

Ha-101: Included on 27 January 1945

Ha-102: Included on 10 February 1945

Ha-104: Included on 5 February 1945

Excluded on 20 March 1945
(→Fifteenth Submarine Group)

Excluded on 20 March 1945
(→Sixteenth Submarine Group)

Eighth Submarine Squadron: Demobilized on 20 February 1945.

I-8: Excluded on 5 November 1944. (→Sixth Fleet)

I-37: Excluded on 12 September 1944 (→Fifteenth Submarine Group).

I-52: Excluded on 10 December 1944 (sinking).

I-165: Excluded on 15 December 1944 (→Nineteenth Submarine Group).

I-166: Excluded on 10 September 1944 (sinking).

Ro-113 and Ro-115: Excluded on 20 February 1945 (→Thirty-Fourth Submarine Group).

Ro-501: Excluded on 10 October 1944 (sinking).

Eleventh Submarine Squadron

I-12: Excluded on 4 October 1944 (→Sixth Fleet).

I-46: Excluded on 30 September 1944 (→Fifteenth Submarine Group).

I-47: Excluded on 8 October 1944 (→Fifteenth Submarine Group).

I-56: Excluded on 20 September 1944 (→Fifteenth Submarine Group).

I-363: Excluded on 12 September 1944 (→Seventh Submarine Squadron).

I-364: Excluded on 6 September 1944 (→Seventh Submarine Squadron).

I-365: Excluded on 30 September 1944 (→Seventh Submarine Squadron).

I-366: Excluded on 2 October 1944 (→Seventh Submarine Squadron).

I-367: Excluded on 15 October 1944 (→Seventh Submarine Squadron).

Ro-49: Excluded on 10 November 1944 (→Thirty-Fourth Submarine Group).

Ro-50: Excluded on 5 November 1944 (→Thirty-Fourth Submarine Group).

I-368: Included on 25 August 1944 and excluded on 2 November 1944 (→Seventh Submarine Squadron).

I-370: Included on 4 September 1944 and excluded on 4 November 1944 (→Seventh Submarine Squadron).

The CHOGEI and the YAGUMO: Included on 1 August 1945.

I-48: Included on 5 September 1944 and excluded on 7 December 1944 (→Fifteenth Submarine Group).

I-58: Included on 7 September 1944 and excluded on 4 December 1944 (→Fifteenth Submarine Group).

Ro-55: Included on 30 September 1944 and excluded on 4 January 1945 (→Thirty-Fourth Submarine Group).

ENCLOSURE (I), continued

I-371: Included on 2 October 1944 and excluded on 8 December 1944 (→Seventh Submarine Squadron).

I-372: Included on 8 November 1944 and excluded on 8 January 1945 (→Seventh Submarine Squadron).

I-369: Included on 9 October 1944 and excluded on 15 December 1944 (→Seventh Submarine Squadron).

Ro-56: Included on 15 November 1944 and excluded on 10 February 1945 (→Thirty-Fourth Submarine Group).

Ha-101: Included on 22 November 1944 and excluded on 27 January 1945 (→Seventh Submarine Squadron).

Ha-104: Included on 1 December 1944 and excluded on 5 February 1945 (→Seventh Submarine Squadron).

Ha-102: Included on 6 December 1944 and excluded on 10 February 1945 (→Seventh Submarine Squadron).

Ha-106: Included on 15 February 1945 and excluded on 30 December 1944 (→G. E. B.).

Ha-107: Included on 7 February 1945 and excluded on 20 March 1945 (→Thirty-Third Submarine Group).

I-351: Included on 28 January 1945 and excluded on 4 April 1945 (→Fifteenth Submarine Group).

Ha-103: Included on 3 February 1945 and excluded on 15 April 1945 (→Sixteenth Submarine Group).

Ha-105: Included on 19 February 1945 and excluded on 17 May 1945 (→Sixteenth Submarine Group).

Ha-107: Included on 7 February 1945 and excluded on 20 March 1945 (→Thirty-Third Submarine Group).

Ha-109: Included on 10 March 1945 and excluded on 20 March 1945 (→Tenth Submarine G).

I-202: Included on 10 April 1945 and excluded on 15 August 1945 (→Fifteenth Submarine Group).

I-203: Included on 15 June 1945.

I-373: Included on 14 April 1945 and excluded on 20 June 1945 (→Fifteenth Submarine Group).

Ha-205: Included on 3 July 1945 and excluded on 20 July 1945 (→Fifty-Second Submarine Group).

Ha-207: Included on 7 July 1945 and excluded on 14 August 1945 (→Fifty-Second Submarine Group).

GRAND FLEET

Tenth Submarine G

Ha-109: Included on 20 March 1945.

Ha-111: Included on 13 July 1945.

ENCLOSURE (I), continued

KURE NAVAL STATION

Kure Submarine Squadron

Nineteenth Submarine Group (I-156, I-157, I-158, I-159, I-162, I-121, I-122, I-155:
Demobilized on 20 April 1945.

I-156: Excluded on 1 April 1945 (→Thirty-Fourth Submarine Group).
I-157, I-158, and I-159: Excluded on 20 April 1945 (→Thirty-Fourth Submarine Group).
I-162: Excluded on 1 April 1945.
I-121, I-122, and I-155: Excluded on 20 April 1945 (→Thirty-Third Submarine Group).

I-165: Included on 15 December 1944 and excluded on 1 April 1945 (Thirty-Fourth Submarine Group).

CHOGEI: Included on 10 November 1944 (sinking).
Ro-109 and Ro-112: Excluded on 25 September 1944 (→Thirty-Third Submarine Group).

The NACHI MARU: Included on 20 January 1945.

Thirty-Third Submarine Group (Ro-62, Ro-63, Ro-64, Ro-67, Ro-109, Ro-112, I-201, I-202, Ha-106, Ha-107, I-121, I-22, I-155, Ha-108, Ha-201, Ha-202, Ha-208, Ha-204).

Ro-62: Excluded on 10 October 1944 (→Kure Defence Squadron).
Ro-64: Excluded on 10 August 1945 (sinking).
Ro-67: Excluded on 20 July 1945 (scrapped ship).

Ro-109 and Ro-112: Included on 25 September 1944 and excluded on 20 October 1944 (→Thirty-Fourth Submarine Group).

I-201: Included on 2 February 1945 and excluded on 15 April 1945 (→Eleventh Submarine Squadron).

I-202: Included on 14 February 1945 and excluded on 10 April 1945 (→Eleventh Submarine Squadron).

Ha-106: Included on 10 March 1945.

Ha-107: Included on 20 March 1945.

I-121: Included on 20 April 1945.

I-122: Included on 20 April 1945 and excluded on 15 August 1945 (sinking).

I-155: Included on 20 April 1945 and excluded on 20 July 1945 (→reserved ship).

Ha-108: Included on 6 May 1945.

Ha-201 and Ha-202: Included on 31 May 1945 and excluded on 20 July 1945 (→Fifty-Second Submarine Group).

Ha-208: Included on 20 June 1945.

Ha-204: Included on 25 June 1945.

Kure Defence Squadron

Ro-500 and Ro-68: Excluded on 5 May 1945 (sinking).

Ro-62: Included on 10 October 1944 and excluded on 12 April 1945 (→Thirty-Third Submarine Group).

Addenda

I-503 and I-504: Included on 10 July 1945.

ENCLOSURE (I), continued

YOKOSUKA NAVAL STATION

Sixth Submarine Group (Ro-57, Ro-58, Ro-59): Demobilized on 1 May 1945 (→reserved ship).

MAIZURU NAVAL STATION

Fifty-First Submarine Squadron: Formed on 5 May 1945.

Ro-500 and Ro-68: Included on 5 May 1945.

GEB

Ha-106: Included on 30 December 1944 and excluded on 10 March 1945 (Thirty-Third Submarine Group).

FIRST KF

I-501 and I-502: Included on 15 July 1945.

SECOND KF

I-505 and I-506: Included on 15 July 1945.