

U.S.S. SKATE (SS 305)

This historical resumé is dedicated to:

- o The fighting men who manned USS SKATE and contributed so much to her brilliant achievements throughout World War II.
- o The wives and families who contributed so much to the morale of their men by their faith, understanding and patience during SKATE's long and dangerous patrols in enemy waters, and without whom victory would have had little meaning.
- o All those in the shipyards, tenders, bases and staffs who contributed their skills and efforts to making SKATE a marvelously effective war machine.

FOREWORD

Time passes rapidly and our memories blur. The strenuous times of World War II are worth recalling - our successes and our failures, our friends and shipmates, the numerous and the sad incidents. It was a good war and a bad war but we won and that's what counted at the time, and it still means much to me and I hope to each of you and your families.

USS SKATE (SS 305) entered World War II on September 25th, 1943 when she departed Submarine Base, Pearl Harbor on her first patrol. By the time of the Japanese surrender on 14 August 1945 SKATE had established a remarkable war record which is frequently unrecognized even by those of you who participated in one or more of her seven war patrols. You created this success by becoming a member of the SKATE team. The success of a mission can never be attributed to one or a few individuals. As you all found out, a submarine crew is a very closely knit organization of skilled individuals, welded together in a common cause - to destroy the enemy and to survive for another battle. It is the joint team effort that counts. In preparing this document I have attempted, by summarizing SKATE achievements, to reinforce the pride which I know all of you have in your World War II service in SKATE. Perhaps this will give you pause to remember when you belonged to that best of all crews, the SKATE's.

With deepest affection for all of you,

Sincerely,



William P. Gruner
Commanding Officer SKATE's 3rd, 4th
and 5th patrols

HISTORY OF THE UNITED STATES SUBMARINE SKATE (SS 305)

SKATE'S DESIGN

The outstandingly successful design of the SKATE evolved over a ten year period. In the early 1930s, performance requirements for a fleet submarine were established by a board convened by the Chief of Naval Operations. Among its members was Charles A. Lockwood, later to serve under Fleet Admiral Chester W. Nimitz, as Commander Submarine Force, Pacific Fleet. The requirements called for a submarine capable of operating on the surface with fleet units at a speed of 21 knots. It was to have long endurance and be armed with a large number of new 21 inch torpedoes.

The first boats of this new design were CACHALOT (SS 170) built in 1932 by Portsmouth Navy Yard, and CUTTLEFISH (SS 171) built a year later by the Electric Boat Company. These new submarines were powered with two high speed Winton Diesels and a large auxiliary diesel. They were capable of making about 16 knots on the surface in a flat sea, and were a significant improvement over ARGONAUT, NAUTILUS, and other post World War I submarines. However, they did suffer from frequent breakdowns of the new high speed main engines and a speed lower than desired. This sparked the development of more reliable and more powerful main engines, an effort that was aided by the adoption of high speed diesels for railroad locomotive propulsion. By the early 1940s both General Motors and Fairbanks Morse had developed engines which proved suitable for submarine use, and which enabled four main engines to achieve the desired submarine surface speed of 21 knots. An efficient electric drive was selected over a variety of other propulsion arrangements, and other design improvements evolved. The torpedo tube installation was increased from 6 to 10 tubes; 6 forward and 4 aft. The hull plating was heavied up to provide a deeper safe diving depth and greater protection against Japanese depth charges. By late 1943 SKATE was equipped with a silent Gould multi-stage deepwell oil field pump as a replacement for the noisy reciprocating trim pump. SD, SJ and periscope radars had become standard equipment. Thus, when SKATE departed on her first war patrol, she was the last word in U. S. submarine design.

Although the initial design requirements had been based on submarine operations with the fleet, these same requirements proved ideal for the long range, long endurance independent patrols in the Pacific which so characterized most of our World War II operations. Data on SKATE's characteristics and performance capabilities are:

Length	307 feet
Beam	27 feet
Displacement, Surface	1850 tons
Submerged	2400 tons
Speed	
Surface, 4 engine, full power, calm sea	21 knots
2 engine 80/90 calm sea	15 knots

Submerged, $\frac{1}{2}$ hour battery rate	9 knots
6 hour battery rate	6 knots
24 hour battery rate	3 knots
Range, Surface, at 15 knots	10,000 nm

Engineering Data

Main Engines-

Four Fairbanks-Morse 9 cylinder opposed piston,
8 $\frac{1}{8}$ inch bore, 10 inch stroke, 720 RPM diesel
engines.

Auxiliary Engine:

One Fairbanks-Morse 7 Cylinder opposed piston,
5 $\frac{1}{4}$ inch bore, 7 $\frac{1}{4}$ inch stroke, 1200 RPM diesel
engine.

Batteries:

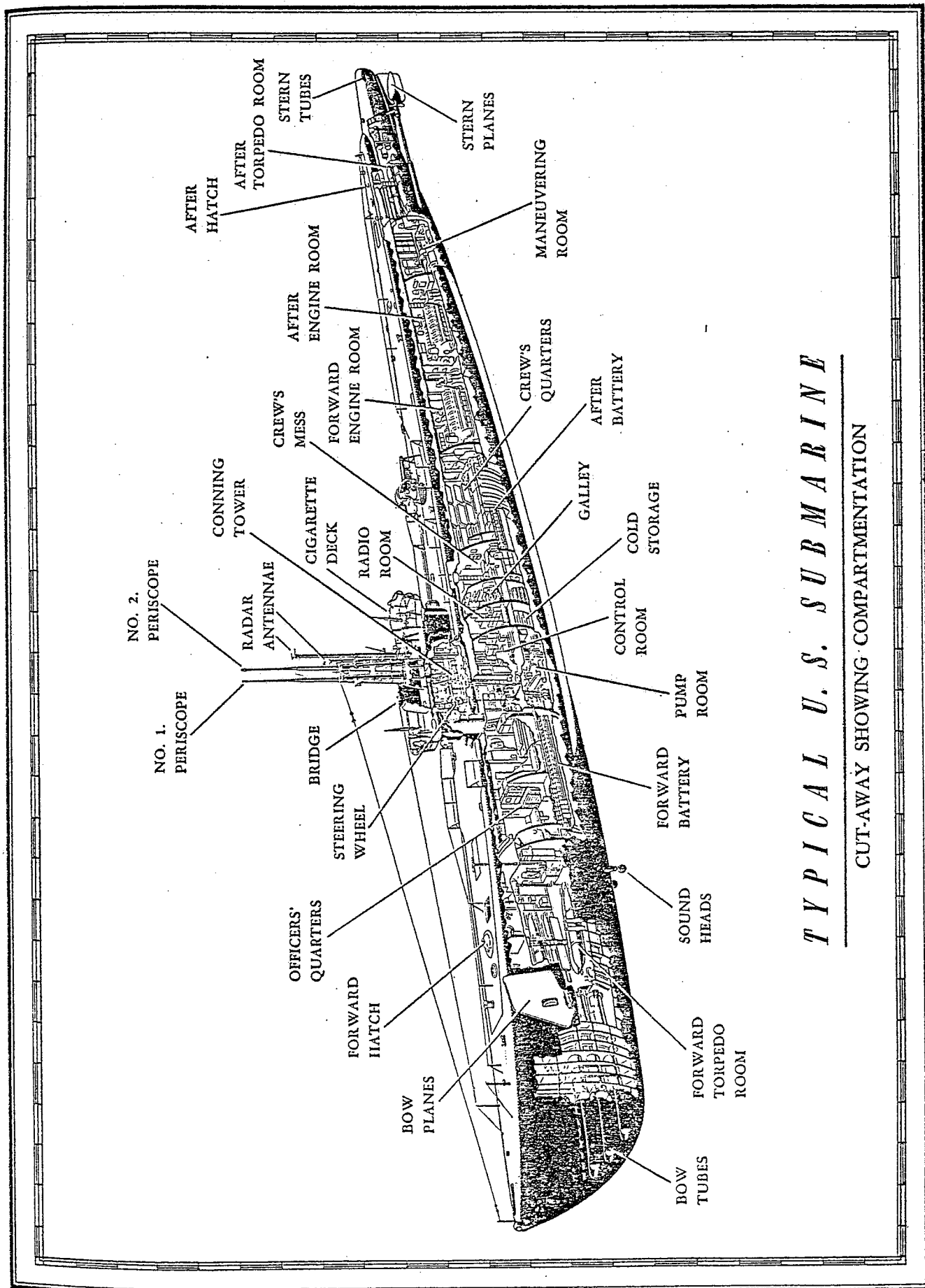
Two 126 cell lead-acid batteries.

Armament

Torpedo Tubes, 21 inch	6 forward, 4 aft
Torpedo Capacity	24
Torpedo Types:	
Steam	Marks 14 and 23
Electric	Mark 18
Guns-	
Deck Gun	1 3"; Later 1 4"
Heavy Machine Guns	20 MM and 40 MM
Light Machine Guns	50 Cal.

Crew Size, Approximate

8 Officers, 75 Enlisted Men



TYPICAL U. S. SUBMARINE

CUT-AWAY SHOWING COMPARTMENTATION

SKATE WAR PATROL CHRONOLOGY

Commissioned:	15 April 1943, Cdr. Eugene B. McKinney, Commanding	<u>Official Designation</u>
First War Patrol Eugene B. McKinney	25 September 1943 to 29 October 1943 Wake Island Area	Successful
Second War Patrol Eugene B. McKinney	15 November 1943 to 7 January 1944 Truk Area	Successful
Third War Patrol William P. Gruner	5 February 1944 to 17 March 1944 Truk-Palau-Ulithi	Successful
Fourth War Patrol William P. Gruner	11 April 1944 to 31 May 1944 Bonin Islands Area	Successful
Fifth War Patrol William P. Gruner	23 June 1944 to 7 August 1944 Okhotsk Sea	Successful
Sixth War Patrol Richard B. Lynch	9 September 1944 to 11 November 1944 Ryuku Islands Area	Successful
Seventh War Patrol Richard B. Lynch	28 May 1945 to 4 July 1945 Sea of Japan	Successful
Eighth War Patrol Richard B. Lynch	5 August 1945 - Incomplete. War ended on 14 August 1945 while enroute to Guam.	
	6 September 1945 Arrived San Diego. Engaged in local operations	

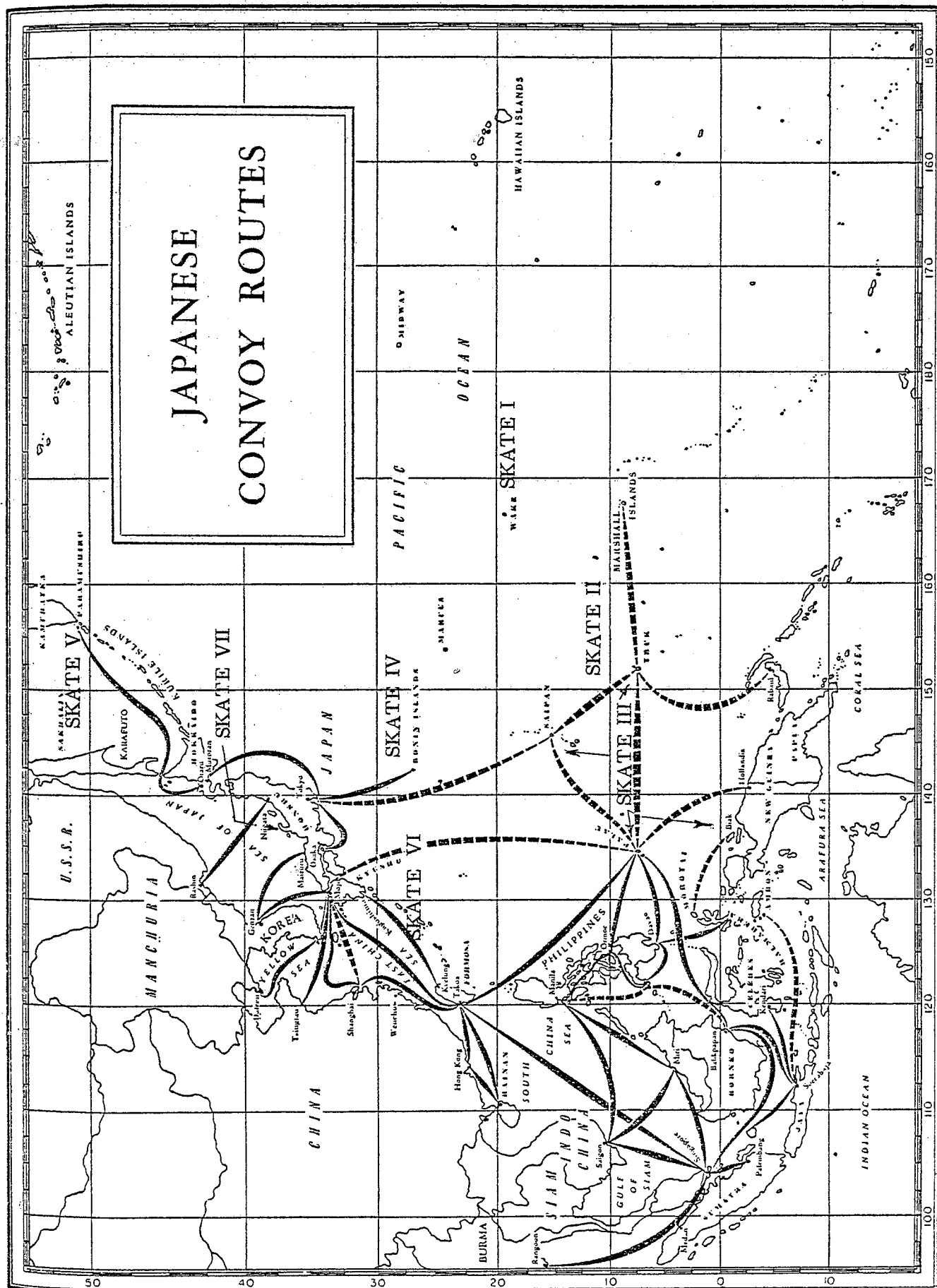
All war patrols were conducted as a task unit under the operational and administrative control of Vice Admiral Charles A. Lockwood, U. S. Navy, Commander Submarine Force, Pacific Fleet.

June - July 1946

A-Bomb Test Target, Bikini Atoll, a Unit of Joint Army-Navy Task Force One.

First Test - Air detonation on 1 July 1946

Second Test - Underwater detonation on 25 July 1946. SKATE survived but her A-Bomb battered hull was deliberately destroyed and sunk off the southern California coast.



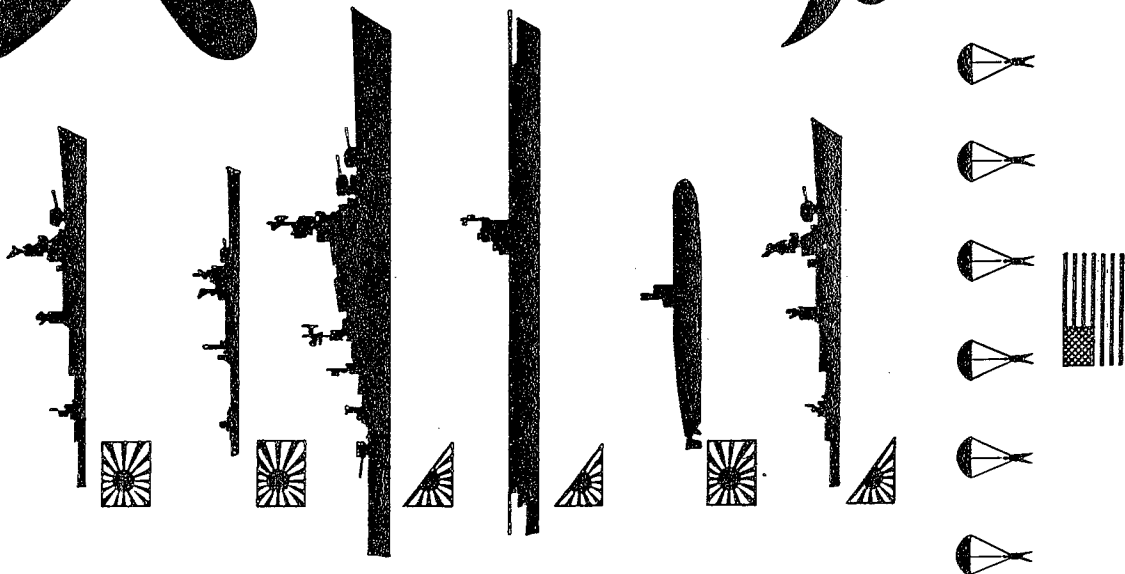
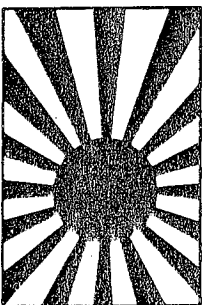
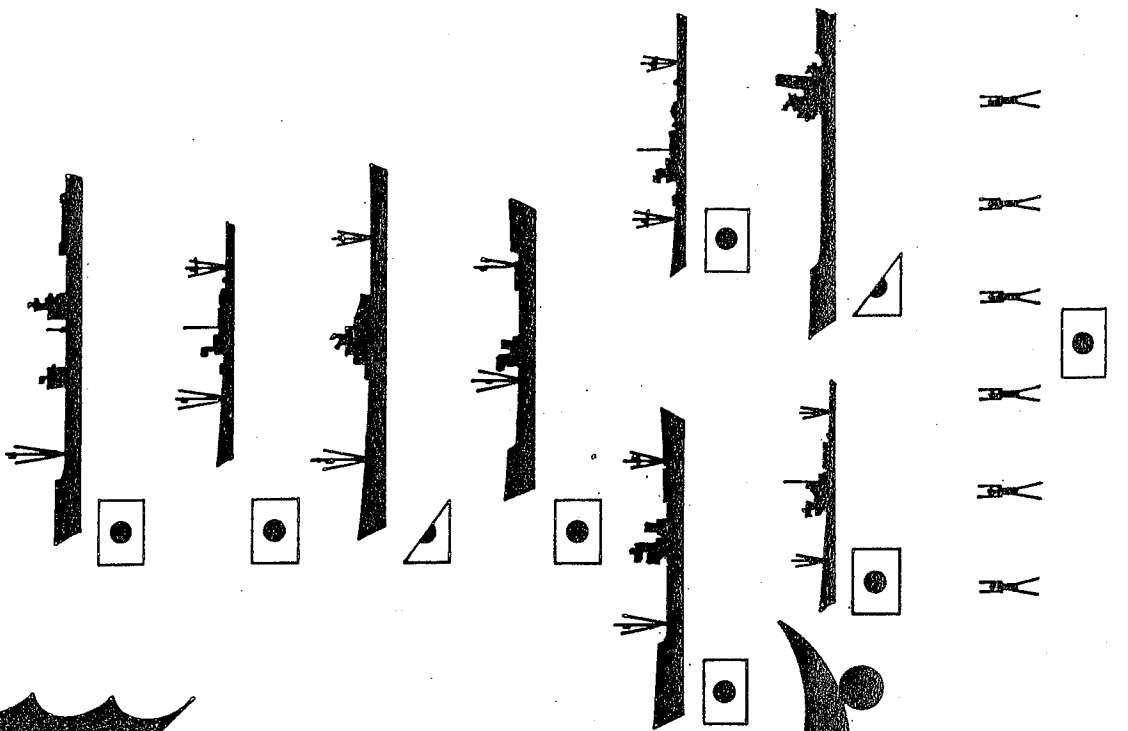
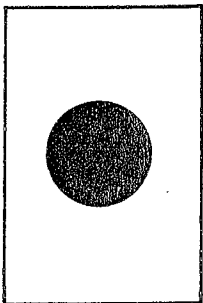
OFFICIAL SINKINGS CREDITED TO SKATE

(Compiled by Joint Army-Navy Assessment Committee)

<u>Date</u>	<u>Patrol</u>	<u>Name of Vessel</u>	<u>Type</u>	<u>Tonnage</u>	<u>Captain</u>
21 Dec. 1943	II	TERUKAWA MARU	Cargo	6,429	E. B. McKinney
16 Feb. 1944	III	AGANO	Light Cruiser	7,000	
7 July 1944	V	USUGUMO	Destroyer	1,950	W. P. Gruner
15 July 1944	V	MIHO MARU	Cargo	515	
16 July 1944	V	NIPPO MARU	Cargo	1,942	
29 Sept. 1944	VI	EKISAN MARU	Cargo	3,690	R. B. Lynch
10 June 1945	VII	I-122	Submarine	1,142	
12 June 1945	VII	YOZAN MARU	Cargo	1,227	
12 June 1945	VII	KENJO MARU	Cargo	3,142	
12 June 1945	VII	ZUIKO MARU	Cargo	887	
Total				27,924	

On the 13th of June 1945, SKATE sank another freighter not included in the above list. The reason for this omission is unknown as three survivors were taken who were later set adrift in a small boat. In addition to these large ship sinkings, a Japanese fishing sampan was sunk off the Bonin Islands on 19 May 1944, during the fourth patrol. Three survivors, 2 Japanese and 1 Korean were taken prisoner. These prisoners were turned over to base personnel for delivery to Naval Intelligence upon arrival at Midway Islands. Information obtained from them "aided considerably in the first Navy task force raid against the Bonins". (See reference 2). Three more prisoners were taken from the sunken MIHO MARU during the fifth patrol.

SKATE's battle flag has been lost. A replica has been reconstructed based on a photograph taken during the war. The battle flag was prepared patrol by patrol and does not agree in detail with the official assessment, but it is generally the same. The battle flag includes ships damaged as well as those sunk. These damaged ships (indicated by half flags) include, notably, the new and mighty 63,000 ton battleship YAMATO, a large aircraft carrier and a light cruiser.



SKATE'S FIRST PATROL

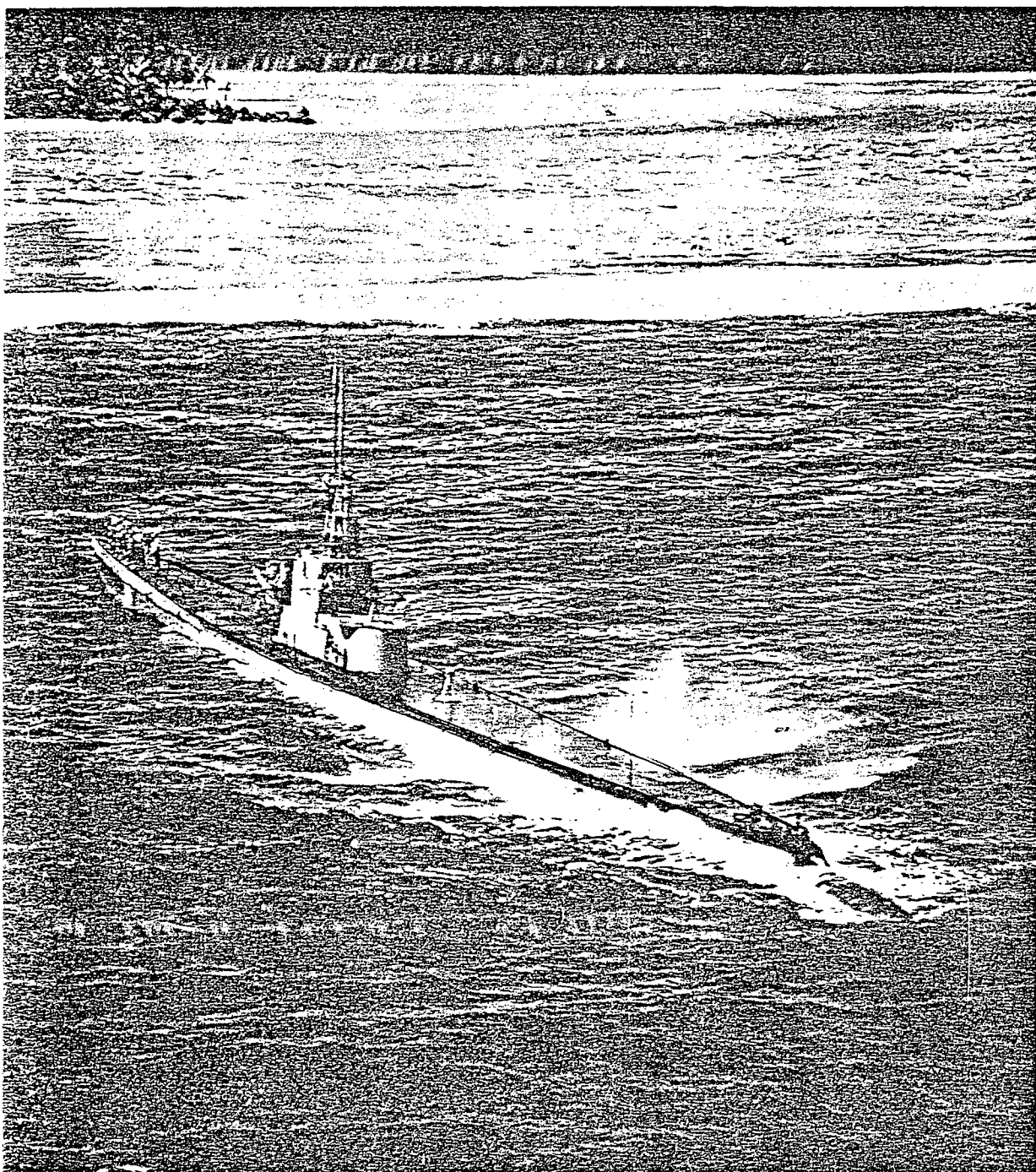
Late in 1943 Rear Admiral Charles A. Pownall, Commanding Carrier Task Force Fifteen, requested that COMSUBPAC assign submarines to patrol off the Japanese held Wake, Marcus and Gilbert Islands during forthcoming air strikes. The objective was to rescue U. S. airmen forced or shot down at sea. Although this would divert submarines from their major task of sinking Japanese ships, Admiral Lockwood agreed, and assigned three submarines to what became known as lifeguard duty. SKATE was one of these three. Her instructions were to patrol close to Wake Island during a carrier strike on that Japanese held outpost.

SKATE's lifeguard patrol did not begin happily. At dawn on October 6th, the day of the first carrier strike, she was strafed by an enemy plane while on the surface and Lieut. (jg) Willis E. Maxon was seriously wounded. Early in the morning of October 7th, SKATE directed several squadrons of American planes to the island target. At 1043 while observing the strike from a surface position about six miles offshore, heavy shells from Wake landed close by and SKATE submerged. Upon surfacing at 1128, she received word that three airmen were down. Trimmed down low in the water, SKATE headed shoreward. Amid shell fire from the beach, two airmen were brought aboard before further rescue efforts were interrupted by a Jap dive bomber attack. While submerging, a near miss damaged the bow buoyance vent-operating mechanism, but repairs were quickly made and SKATE soon surfaced.

Meanwhile Lieut. Maxon's condition had worsened and in accordance with instruction, SKATE headed for Midway where medical help was available. The return was interrupted by orders to return to Wake to rescue nine airmen adrift in the open sea. Unfortunately, Lieut. Maxon succumbed to his wounds on the morning of the 8th, two days before SKATE could have reached Midway had she proceeded directly there. Willie Maxon did not lose his life in vain. On the 9th of October, SKATE picked up a third aviator and on the next day three more were recovered, to bring the total to six. After these successful rescues, the Commanding Officer of USS LEXINGTON radioed SKATE, "Anything on LEXINGTON is yours for the asking. If it is too big to carry away, we will cut it up in small parts." It was thus that SKATE, in the first operation of its kind, opened a new chapter in submarine operations. From that day until VJ day, no important carrier strike was made without one or more lifeguard submarines on station. Three weeks after these rescues and after slightly more than a month on patrol, SKATE returned to port on 29 October 1943.

SKATE'S SECOND PATROL

During December 1943 Vice Admiral Raymond A. Spruance, Commander Fifth Fleet, was in charge of "Operation Galvanic". His main objective was the capture of Tarawa in the Gilbert Islands to the east of Truk. This mission was successfully accomplished by Fifth Fleet forces. Fifth Fleet at that time was composed of 118 warships, including 13 battleships and 19 carriers, plus transports, supply ships and auxiliaries. With this success and force in-being plans were made to accelerate the drive westward.

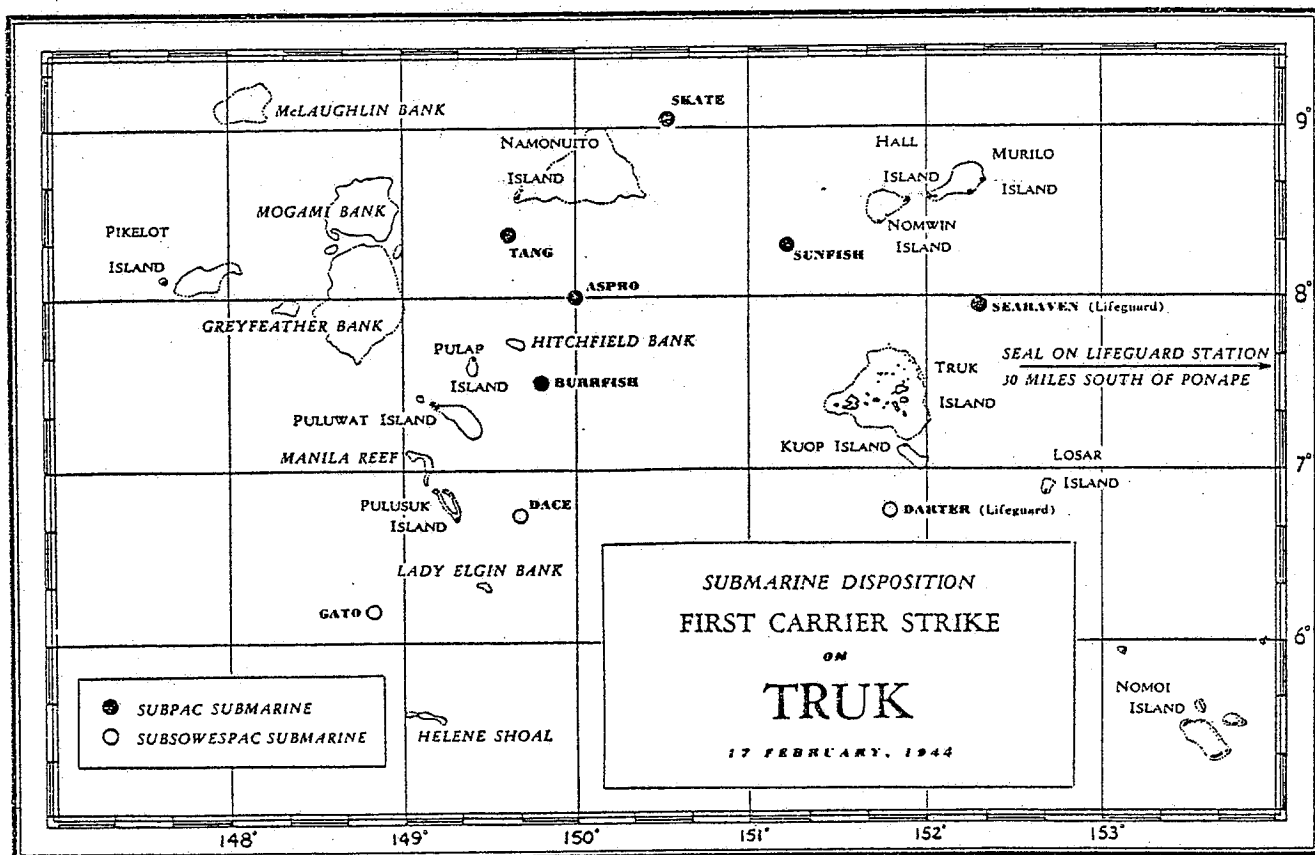


SKATE RESCUED SIX AIRMEN OFF WAKE ISLAND
DURING HER FIRST PATROL - THE FIRST LIFEGUARD
OPERATION CONDUCTED BY A U.S. SUBMARINE

During the late fall and early winter of 1943 U. S. submarines were active in waters surrounding Truk, the Japanese stronghold in the central Pacific. While Fifth Fleet was preparing for further strikes, SKATE, on 21 December encountered and sank TERUKAWA MARU, a 6429 ton freighter off Truk. Later, reconnoitering submerged off one of the entrances to Truk lagoon, two heavily escorted carriers were sighted standing out to sea. In spite of strong air and destroyer cover, SKATE closed the range and fired her torpedoes, three of them hitting one of the carriers before concentrated depth-charging and depth-bombing forced the submarine to retire. On Christmas Day 1943 SKATE encountered the new Japanese battleship YAMATO proceeding toward Truk. Quoting from "Submarine Operations in World War II", "this 63,000 ton monster was game of overwhelming size. Packing 18.1 inch guns, vitals shielded by a "torpedo proof" underwater protection system, she and her twin sister, MUSASHI, were the worlds biggest battleguns . . . Now off Truk, the pride of the Imperial Navy was damaged by a torpedo. SKATE - a submarine David, indeed - was unable to down this mighty Goliath. But the big BB's "torpedo proof" underbelly was not quite so invulnerable as her sponsors had hoped. Staggering away, she lived to fight another day, but her time would come". In 1945 YAMATO, the light cruiser YAHAGI and four destroyers were sunk by carrier aircraft while sortieing through the Bungo Suido.

SKATE'S THIRD PATROL

The third patrol started off with a bang. Orders were to proceed to a station near Truk in support of "Operation Hailstone", a planned carrier strike. SKATE's mission was to intercept and destroy Japanese ships fleeing from the atoll toward the Empire, following the strike by Admiral Spruance's Fifth Fleet. The strike was to be delivered on February 17th 1944. Ten submarines were placed on stations surrounding Truk, SKATE's station being about 150 miles to the northwest of the atoll. On February 16th, the day before the strike, SKATE had not arrived on station. She had encountered bad storms after departing Midway and it was now necessary that she run at high surface speed to prevent being caught in a blind bombing zone during the planned air strike. If caught in that zone after midnight of the 16th, she would be fair game for U. S. aircraft. At 1555 on the 16th, SKATE dove to avoid detection by an aircraft reported by the SD radar operator to be at a range of 13 miles. This dive, although resulting in a further delay in reaching station, presented an opportunity to adjust trim for the first time in several days. Forty minutes later the submarine surfaced, and within a few minutes a lookout sighted the tops of an unidentified ship at an estimated range of 12 miles. Simultaneously the SD radar operator reported an aircraft closing from a range of 13 miles. At 1647 SKATE again submerged to escape detection by the aircraft and to close the target for torpedo attack. As the range closed, the target appeared to be a heavy cruiser escorted by two destroyers, one on each bow. At 1743 four MK 14 -3A torpedoes, set for contact explosion, were fired at the cruiser. The torpedo run was less than 1200 yards. Three good torpedo explosions were heard, and from SKATE's position about 500 yards dead ahead of the starboard escort, a look through the periscope showed the cruiser enveloped in a smoke pall from her bridge to her stern and the starboard escort closing rapidly. Almost simultaneously sonar reported her screw beat quickening as she started her run. As SKATE headed down, depth charges began exploding all around. SKATE went deep



SCENE OF SKATE'S THIRD WAR PATROL



SUBMARINE CAPTIVE. Blindfolded Jap prisoner is hoisted from hatch by Marines. He will go ashore for searching interrogation.

PRISONER'S WERE TAKEN ON SKATE'S 3rd, 5th AND 7th PATROLS

and rigged for silent running. Forty-five minutes later the escorts appeared to have lost contact, and at 2115 SKATE surfaced to charge batteries, pump bilges, repair the SJ radar and restart the master compass which had been secured for silent running. Meanwhile, the cruiser was rapidly dying from water and fire damage and internal explosions. Survivors were transferred to the escorting destroyers. Flames and smoke and occasional explosions were observed as SKATE circled the scene to close from a down moon position for the kill. At about 0325 on the 17th, the cruiser, later determined to be AGANO, sank. The following day the destroyer MAIKAZE with AGANO's survivors was attacked and sunk by the guns of Task Force Fifty-Eight.

AGANO was a new light cruiser which had been previously bombed, torpedoed and repaired. She was the second light cruiser downed by U. S. submarines. It was this action, following the wounding of YAMATO and the carrier during her second patrol that established SKATE's fame as one of the "big game hunters of the war".

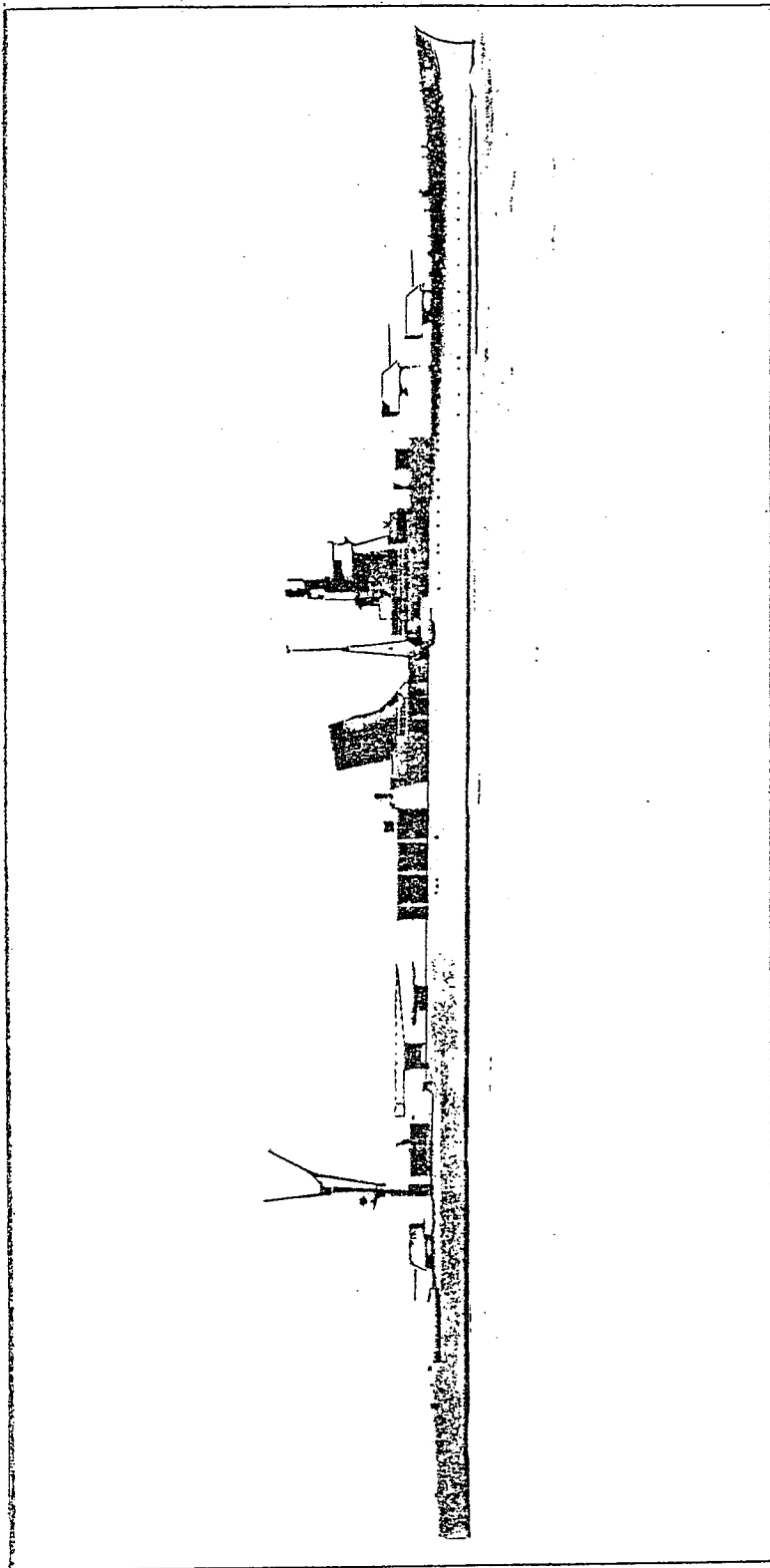
SKATE'S FOURTH PATROL

The next round between the SKATE and the Jap war machine took place in the Bonin Islands area. This was featured by a brilliant submerged attack during daylight on an 8,600 ton freighter. The freighter was severely damaged and possibly sunk. Later, SKATE engaged a sampan on the surface, holing it immediately with her guns. Three survivors were picked up who later provided Naval Intelligence with information which aided considerably in providing information for the first Navy task force raid against the Bonins.

SKATE'S FIFTH PATROL

SKATE departed Midway on June 23, 1944 to conduct a patrol in the bleak and ice cold waters of the Okhotsk Sea which lies to the north of Hokkaido. This was a decided change of area and climate from her earlier patrols in the central Pacific. Thirty one of the forty-five days at sea were actually spent patrolling the shipping lanes between La Perouse Strait and the southern tip of Paramushiru. In his patrol report endorsement COMSUBRON FOUR stated, "The Commander Submarine Squadron FOUR congratulates the Commanding Officer and the crew of the SKATE on another of her unbroken string of victories over the enemy." COMSUBPAC added, "SKATE covered its areas well and made correct estimates of the enemy's traffic lanes, thus enabling her to inflict severe damage on the enemy. Within nine days, the SKATE made three enemy contacts. Each of these was aggressively and successfully attacked. Particularly outstanding was the attack on the five ship convoy that was escorted by three FUBUKI destroyers. The sinking of one of these destroyers was well done. Three Russian ships, properly marked, were also contacted."

The destroyer sinking was SKATE's contribution to the open season on destroyers which had been declared by COMSUBPAC in April 1944. During that spring and summer a dozen Japanese destroyers were sent to the bottom. SKATE's victim was HIJMS USUGUMO, a 1950 tonner sunk during the early evening of July 7th.



HIJMS AGANO

7000 TON, NEW LIGHT CRUISER. SUNK BY USS SKATE AT 0252 (K), 17 FEBRUARY 1944, 165 MILES NORTH OF TRUK. AT THE TIME OF THE ATTACK AGANO WITH TWO ESCORTS WAS PROCEEDING FROM TRUK TO THE EMPIRE.

An additional three torpedoes were fired three minutes later at a large freighter in the convoy. SKATE was detected during her attack. The freighter turned away and commenced firing her stern gun in the general direction of the disappearing periscope. (The patrol report endorsement by COMSUBPAC gave SKATE credit for damaging a large freighter of 7,500 tons.) As to the results of the attack on the destroyer, the patrol report stated, "The target (USUGUMO) emerged from a large smoke cloud 180° from his heading at firing. He had a 75° port list and a broken back. I could look down his after funnel and could see fires still burning."

The other two destroyers, hidden by the smoke pall, were greatly annoyed by this torpedoing of their companion and started a coordinated depth charge attack. This attack commenced six minutes after the first torpedo was fired and lasted for almost three hours. It was the worst depth charging SKATE had yet experienced, the charges being heavier and set deeper than ever before. The depth charge direction indicator showed that at least 16 of the 55 explosions went off below 430 feet. Upon surfacing at 2135 that night, a contact report was sent out on the area frequency in the hope that SUNFISH, stationed off Paramushiru, could intercept the remaining ships of the convoy. SUNFISH did and sank TAIHEI MARU, a 6,284 ton cargo ship.

The two merchant ships sunk during this patrol were the MIHO MARU, 515 tons, and NIPPO MARU, 1942 tons. They were torpedoed in night surface attacks in heavy fog late on the 15th and early on the 16th of July. Two MIHO MARU survivors, chilled by the 31° sea water, were rescued from their swamped life boat. These survivors indicated that another ship was trailing them. This information aided in locating the second victim, NIPPO MARU.

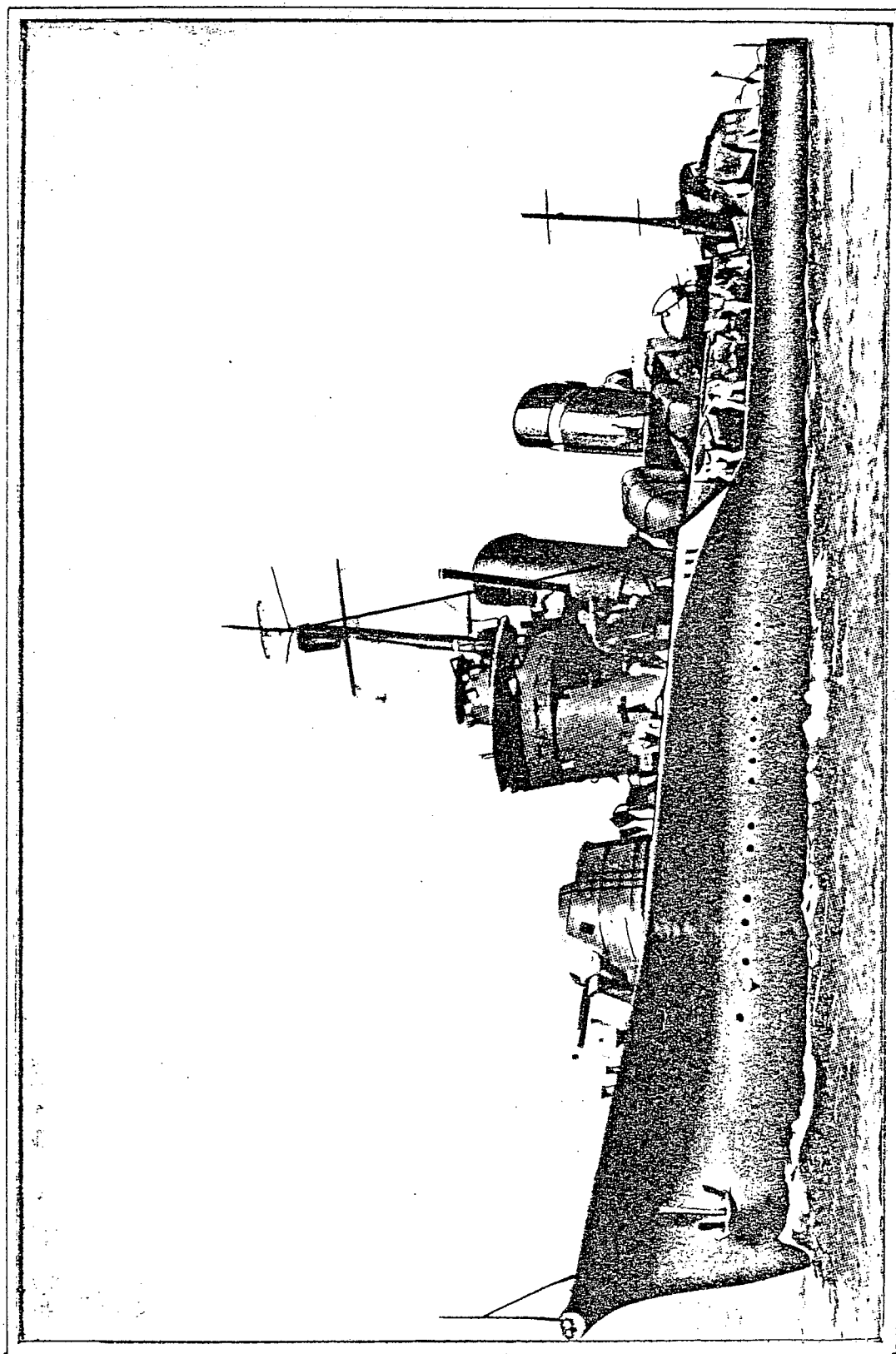
SKATE'S SIXTH PATROL

Commander Richard B. Lynch took command of SKATE for her sixth patrol. On 9 September 1944 SKATE departed Pearl to patrol in the waters of the Nansei Shoto, or Ryuku Islands. Her photographs of beaches and activities on the island of Okinawa Shima aided greatly in the success of American landings there the following April. Among the maze of small islands in the group, SKATE came upon EKISAN MARU, an unlucky 3,690 ton Jap freighter, and promptly scratched it from the rapidly dwindling list of Jap merchant tonnage. Later she managed to score a possible hit on a speeding Jap light cruiser. On 11 November she returned to base.

Following this patrol, SKATE returned to San Francisco for a well-earned rest and sorely-needed overhaul at the Hunter's Point Naval Shipyard. The job was completed in March 1945.

SKATE'S SEVENTH PATROL

By May 1945 there were very few Japanese ships to torpedo in the open seas. Replete with all the latest equipment, SKATE headed out on what was termed by Vice Admiral Lockwood, COMSUBPAC, as "the most daring operation in the history of submarines", an operation whose objective was to enter a dense shipping area not previously exploited.



HIJMS USUGUMO

1700 TON DESTROYER, COMPLETED 1928. SUNK BY USS SKATE AT 1715 KI, 7 JULY 1944, IN THE OKHOTSK SEA. AT THE TIME OF HER SINKING USUGUMO AND TWO OTHER DESTROYERS WERE ESCORTING A SMALL CONVOY FROM LA PEROUSE STRAIT TO PARAMUSHIRU.

SKATE and eight other submarines equipped with special mine detection sonar gear were at or near Guam in mid May 1945. These submarines - SKATE, FLYING FISH, SPADEFISH, BONEFISH, TUNNY, BOWFIN, CREVALLE, TINOSA and SEA DOG - were designated as the Hellcats of Operation BARNEY. This operation was named for Barney Siegfloff who was responsible to Admiral Lockwood for all the planning and training for a break through into the Sea of Japan. Commander Earl F. Hydeman, Commanding SEA DOG, was senior officer of the group and had the responsibility of leading the Hellcats into and out of the inland sea.

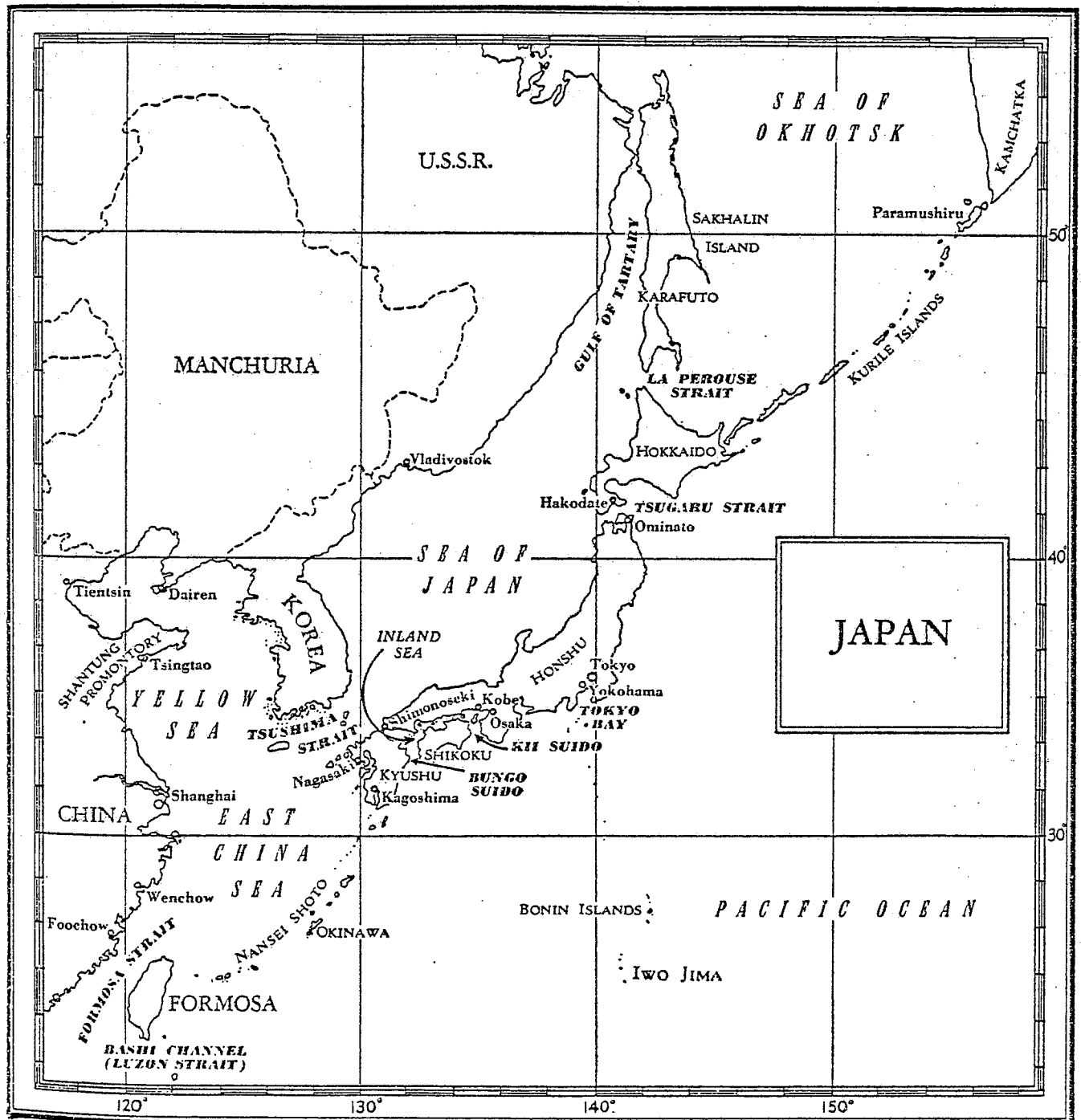
The nine submarines were divided into three groups: Hydeman's Hepcats, George Pierce's Polecats and Bob Risser's Bobcats. SKATE was one of the Polecats. Operation Barney's objective was to enter the Sea of Japan through the minefields blocking Tsushima Straits, and at a preselected time commence simultaneous shipping attacks in what until then had been the Emperor's private sea. Despite analyses which warned of the great risk of unusually heavy losses of men and ships, Admiral Lockwood gave the go-ahead. On May 27th 1945 Hydeman's Hepcats departed Guam for the Straits of Tsushima, 1600 miles to the northwest. On the 28th SKATE and her fellow Polecats departed, to be followed on the 29th by the Bobcats.

The Polecats operating independently made the run through Tsushima Straits on June 2nd. As Ozzie Lynch reported, "The FM sonar equipment was working fine, and very soon we got some contacts which were definitely on mines. We finally hit an area with so many on the screen that it looked impossible to get through. We managed to scrape a mine mooring cable down the side of the ship." With the transit safely made, the Hellcats proceeded to take station in order to be ready to commence firing at sunset on June 9th. Their orders were to attack anything they found: freighters large and small, sea trucks, fishing sampans, whatever, by torpedo or gun. The objective was quantity, not quality, to show the Japanese that all their sea approaches were subject to devastating attack.

SKATE's initial station was in the area of the Noto Peninsula which lies about half way up the west coast of Honshu Island. This peninsula forms a large bay which houses several ports used extensively for Korea bound and coastal shipping. At 1120 on June 10th while patrolling submerged SKATE sighted a large Jap submarine zigzagging through a glassy calm sea. At 1144 at a firing range of about 800 yards four torpedoes were fired. A minute later I-122, a new large submarine of about SKATE's size, made her last dive. An oil slick was all that remained as a temporary marker of the event.

This completed SKATE's bag of Japanese naval vessels during World War II: a battleship, carrier, and cruiser damaged, and a cruiser, destroyer and submarine sunk.

During the morning of June 12th, SKATE submerged and crept into Matsugishita Byochi (cove) looking for a freighter that had sought refuge there the previous night. Four ships were actually found anchored in the 60 to 120 foot depths of the bay. Six torpedoes were fired from the bow tubes. One medium sized AK



THE SEA OF JAPAN-- SCENE OF SKATE'S SEVENTH WAR PATROL

sank to rest on the shallow bottom, and two AKs of about 1000 tons were damaged in the attack. With only 12 feet of water beneath the keel, course was reversed to head for deeper water. The stern tubes were readied and three torpedoes were fired at close range amid shell fire from the targets. The AK already resting on the bottom suffered another hit, what appeared to be a small tanker was hit, and the third torpedo struck a small AK. Army Air Corps photo reconnaissance taken a day or two after this attack confirmed three sunken and one damaged ships in Matsugashita Byochi. The ships sunk were KENJO MARU (3,142 tons), YOZAN MARU (1,227 tons) and ZUIKO MARU (887 tons).

On the following day, June 13th, SKATE sighted a freighter. Taking station ahead, she submerged and sank her as she approached, with one hit in the middle of the target. (This sinking is not credited in "United States Submarine Operations in World War II", but is described by Admiral Lockwood in "Hellcats of the Deep".)

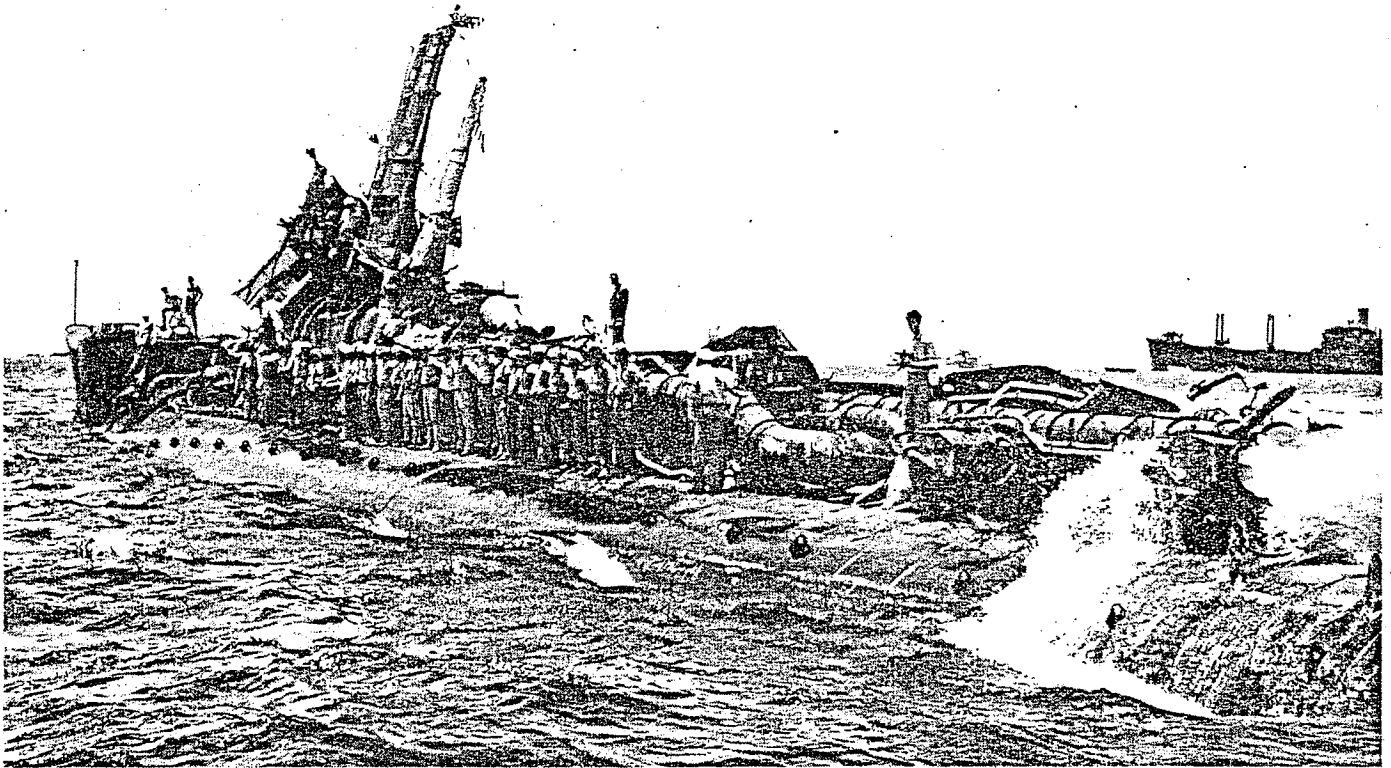
Although a good number of contacts were made after this attack, SKATE's supply of torpedoes had been exhausted. On June 24th the Hellcats departed the Sea of Japan via La Perouse Strait, and the Seventh Patrol ended on the Fourth of July 1945 upon SKATE's return to Pearl for refit.

SKATE'S EIGHTH PATROL

On the 5th of August 1945 SKATE departed Pearl to conduct her eighth patrol. While enroute to Guam, the Japanese surrender on the 14th of August brought a conclusion to SKATE's successful war efforts. Touching at Guam, SKATE received orders back to Pearl, and subsequently to San Diego where she arrived on September 6, 1945.

As part of Joint Army-Navy Task Force One, SKATE subsequently proceeded to Bikini Atoll in the Marshalls for tests of the atomic bombs as used against naval vessels. In the first test on 1 July 1946 a bomb was exploded in the air. SKATE suffered heavy damage to her superstructure, but was not damaged internally. She was among the ships which also participated in the second (underwater) test on 25 July. Surviving both tests intact, SKATE was able to get under way within Bikini Lagoon under her own power, but departed Bikini for Pearl Harbor with the assistance of a tow. She was subsequently intentionally sunk and buried at sea off the coast of southern California, thus bringing to a fitting close her illustrious career.

During her brief lifetime SKATE was credited with sinking or damaging 129,000 tons of enemy shipping, including every major type of naval vessel in the Japanese Imperial Fleet. Every one of her seven patrols was designated "successful", and members of her crew were issued Combat Insignia Pins or stars for them. SKATE was awarded the Navy Unit Commendation for her first, second, third and seventh patrols. She was the first submarine to engage in the rescue of friendly aviators. She was among the first group of submarines to enter the Sea of Japan, and one of eight submarines to withstand successfully two explosions of the atomic bomb.



SKATE SURVIVES TWO A-BOMBS

EPILOG

As a submariner you are probably interested in the overall effect of submarines on the Japanese ability to carry on her war effort. As an island nation Japan was dependent upon imports from overseas and exports to her off-lying military bases and commercial activities. Providing for this flow of goods was the task of the Japanese merchant marine. Of the 2,259 merchant ships sunk, over half were sunk by submarines. The final score was:

	<u>Number</u>	<u>% of Total</u>
Total merchant ships sunk	2,259	100.0
Sunk by submarines	1,150	50.9
Sunk by aircraft	750	33.2
Sunk by mines	210	9.3
Sunk by surface gunfire	17	0.8
Sinkings from marine casualties	116	5.1
Cause unknown	16	0.7

Japanese merchant marine personnel losses due to U. S. submarine action totaled 16,200 dead or missing, and 53,400 wounded or otherwise incapacitated.

The inability of the Japanese merchant marine to feed the home island industry and distribute its products in the face of continuing losses to U. S. submarines is the major reason for the economic crash of Japan.

U. S. submarines also sank or damaged a respectable number of Japanese warships. 214 combatant ships totalling 577,626 tons went down including:

- 2 Heavy Cruisers
- 1 Battleship
- 8 Light Cruisers
- 4 Aircraft Carriers
- 4 Escort Carriers
- 36 Destroyers
- 23 Submarines
- 4 Ex-Light Cruisers
- 10 Old Destroyers
- 41 Frigates
- 18 Subchasers

This list does not include the mixed bag of about 45 aircraft ferries, minesweepers, minelayers, landing craft, torpedo boats, gunboats, tenders and repair ships also sunk by submarines.

This decimation of the Japanese navy and merchant marine was accomplished by 189 U. S. submarines. Thirty-eight of our submarines did not return from patrol in the Pacific.

REFERENCES

If you are interested in reading more about the SKATE and the related war time operations, you may be interested in the following:

1. U. S. Submarine Operations in World War II, Theodore Roscoe, published by Naval Institute Press, Annapolis, Maryland
2. History of The USS SKATE (SS 305), Ships Section, Office of Public Information, Navy Department
3. Battle Report, The End of an Empire, Capt. Walter Karig, USNR, L.Cdr. Russel L. Harris, USNR and Lt. Comdr. Frank A. Manson, USN, Rinehart and Co. Inc., 1948. (See pp. 134 and 147)
4. Hellcats of the Sea. Charles A. Lockwood, V. Adm. USN (Ret) and Han Christian Adamson, Col. USAF (Ret), Greenberg: Publisher, New York (This book includes SKATE's sailing list for her Seventh War Patrol).
5. Pigboats, Theodore Roscoe, A Bantam Book published by arrangement with the U. S. Naval Institute (Originally published under the title of U. S. Submarine Operations in World War II - Abridged)