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U.S. STRATEGIC BOMBING SURVEY
(PACIFIC)
C/O POSTMASTER, SAN FRANCISCO

INTERROGATION NO. (USSES NO. 257)
NAV. NO. 63

PLACE: TOKYO
DATE: 5 November 1945

Division of Origin: Naval Analysis Division.

Subject: Anti-Submarine Training and Equipment.

Personnel interrogated and background of each:

Lieutenant Commander OKAMOTO, T., Staff Officer of
First Escort Fleet, Air Squadron and General Headquarters, Grand
Escort Fleet, Naval Aviator.

Where interviewed: MEIJI Building, Room 340.

Interpreter: Lt.(jg) R.P. BROWN, USNR.

Interrogator: Commander T.H. MOORE, U.S.N.

Allied Officers present: None.

SUMMARY

Lieutenant Commander OKAMOTO discusses briefly anti-submarine training, special equipment and search and attack doctrine as applied to Japanese aircraft. For additional information refer to Interrogation number USSES 200, Nav. No. 48.



RESTRICTED

TRANSCRIPT

Q. Did the Japanese have a specific development unit whose mission was to experiment with anti-submarine devices only?

A. Yes, at YOKOSUKA, Air Group Anti-Submarine Research Section (HAN) carried out experiments with anti-submarine detector devices and radar; and also the SAEKI Air Group at SAEKI carried out experiments. At SAEKI, training was given to pilots and crew who came from various units for training with the MAD and radar. Experienced pilots who had received research study at YOKOSUKA were often sent to SAEKI to instruct others. This training began early last year in 1944 at YOKOSUKA.

Q. Were squadrons trained as units?

A. The squadrons seldom trained as a unit. The nearby bases, such as SAEKI and the other air bases, generally sent 1/3 of their pilots to this training base and others. This 1/3 would receive their training and return to the base and another 1/3 would go. However, in instances of distant bases such as SINGAPORE, a part of the pilots and crew were sent to receive such training; but this part would be only about 1/10 of the unit and this 1/10 would return to base and instruct the others. This method was used due to the difficulty in transportation and scarcity of pilots and crew.

Q. Was this research and training conducted jointly with surface force?

A. There was only one area where any practice group was given actual experience in search with convoy and that was in the BUNGO STRAITS. Joint training exercises were conducted with actual vessels using a tame submarine for a target. Experienced pilots from outlying bases were returned to JAPAN for this specialized training and later used as instructors at the outlying bases.

Q. Did pilots object to anti-submarine duty?

A. The pilots objected and much preferred active combat.

Q. Did you rotate pilots from one type duty to another?

A. At the beginning of the war when we didn't have radar and MAD devices, we rotated their duty; but later on, because of the specialization involved, the pilots and crew were fixed.

Q. When making an attack on a submarine, were pilots allowed to drop depth charges after the submarine disappeared below the surface?

A. Yes.

Q. How many seconds after the submarine disappeared from sight were they allowed to attack?

A. Within 30 seconds.

Q. What action did planes that were not equipped with MAD take after sighting a submarine that they were unable to attack?

A. The plane would drop a marker on the water and at the same time call for MAD equipped planes to come out to search. In the meantime, they would continue to circle to try and locate the submarine. The radius of the circle was approximately 20 miles.

Q. What speed did you assume that the United States submarine made submerged?

A. If a submarine knew that it had been discovered, we assumed that it was making 10 knots; if it was submerged at the time of discovery, it was making four knots.

Q. How long did you follow a contact before you abandoned it?

A. Three days and nights.

TRANSCRIPT of Interrogation (Lt. Comdr. OKAMOTO, T., I.J.N.)

Q. Did you use surface vessels to assist after making contact?
A. Yes. Surface vessels were always used to develop a contact.

Q. Were the surface vessels directed to the estimated position of the submarine by LAD planes?
A. Yes.

Q. What size of depth bombs did your aircraft use?
A. 250 kg.

Q. Did you actually use any other airborne weapon besides depth bombs?

A. We had nothing besides bombs. The bomb was a standard 250 kg bomb with a modified flat nose attachment and a special tail, a nose and tail fuse was used.

Q. What depth setting did you use?

A. We used 25 and 45 M. If the submarine was discovered nearby a convoy at periscope depth and immediately submerged, we dropped the 25 meter; if time passed and gave the submarine time to go to a lower depth, we would drop the 45 meter bomb.

Q. Did you drop more than one depth bomb at a time?

A. Generally we dropped only one, but sometimes two.

Q. When dropped two, what space was used?

A. None, the bombs were dropped simultaneously. Only experienced pilots were allowed to drop all bombs at once.

Q. At what distance from the submarine was it necessary to explode the depth charge in order to sink the submarine?

A. With the 250 kg bomb, it had to hit within 13 meters of the submarine in order to sink it. The smaller planes equipped with 60 kg bombs had to make a direct hit on the submarine to sink it.

Q. Estimate how many submarines were sunk by aircraft?

A. In the SOUTH SEA Area between FORMOSA, PHILIPPINES and SINGAPORE, seven sunk; in the JAPAN Area, we claimed four sunk. This is by joint use of LAD and surface vessels. I do not know how many were sunk by aircraft only.

Q. What method did the Japanese use in determining whether or not the submarine was destroyed?

A. One, by oil slick; second, bubbles; third, debris; and fourth, sound.

Q. Did the Japanese ever consider the use of rockets against submarines?

A. There was a time when we thought that we would like to put rockets on the planes to use against submarines, but we had to discard the plan because the planes that we were using were few. Second, we were using "secondary" aircraft, i.e., old planes.

Q. Did you ever make an attack at night with flares?

A. We never used flares against submarines but we did night attacks by radar.

Q. What means of illumination did you use?

A. There were no actual attacks made against American submarines at night by Japanese planes; they only practiced maneuvers in that respect. However, they made patrols at night.

Q. Did you attempt to mark radar contact with float lights?

A. We dropped an acetylene gas flare which made contact with the water and burned.

TRANSCRIPT of Interrogation (Lt. Comdr. OKAMOTO, T., I.J.N.)

Q. How long did it burn?

A. The small one lasted thirty minutes and the large one five to six hours.

Q. How much did the large one weigh?

A. Four kilograms.

Q. In regard to MAD gear, assume that the pilot was flying at 50 meters; what depth below the water was it expected to detect a submarine?

A. With good equipment, pilots and crew, 250 meters maximum.

Q. What is the normal radius of detection of the MAD?

A. 150 meters.

Q. When flying in formation making a MAD sweep, what was the distance between planes?

A. 50 to 100 meters.

Q. When sweeping in advance of a convoy, did you keep station on the escort vessels?

A. Yes.

Q. Is the aluminum slick automatically dropped as soon as the aircraft is within detecting distance?

A. Yes. It is automatically dropped; by the MAD gear. As soon as the contact is made, a red light is flashed on to warn the pilot and the aluminum slick is dropped immediately. The distance of the slick from the submarine depends upon the depth of the submarine and angle of approach of the aircraft. The free travelling of the slick between the aircraft and the water is computed; using a system of tables which incorporated speed and altitude.

Q. After making the second turn in the MAD pattern and reaching the 90° to the original track, is an effort made to pass directly between No. 1 and No. 2 slick? (Note: For diagram of pattern see Interrogation NAV. 48)

A. Yes, this pattern can also be executed by two planes; in which case the second plane attempts to lead the first slick at a distance of about 150 M. while flying perpendicular to the track of the first plane.

Q. Using this system could you detect submarines at speeds above four knots?

A. A single plane can not track a submarine making more than four knots; however, two planes working together can track submarines at any speed that might be used. The size of the triangle formed by the slicks depends upon the speed of the submarine.

Q. How were the MAD markers distinguished as to pattern?

A. We used three separate colors of aluminum powder.

Q. Was any effort made to drop the bomb automatically with the MAD?

A. There was no effort made to drop the bomb automatically. It was impossible to achieve accurate bombing.

Q. Were anti-submarine aircraft fitted with radar search receivers?

A. Installation was made in some units beginning December 1944. Priority was given to carrier task force planes and the anti-submarine planes were not completely equipped. I do not know the performance obtained.