

RESTRICTED
HEADQUARTERS
U.S. STRATEGIC BOMBING SURVEY
(PACIFIC)

INTERROGATION ON. 496

DIVISION OF ORIGIN: Military Analysis

SUBJECT: Japanese Naval Air Combat Aircraft & Tactics.

PERSONNEL INTERROGATED AND BACKGROUND OF EACH: Lt. IWASHITA, KUMAJIN



Entered Nayb College in 1938. Graduated in 1941. Duty on the cruiser Aoba, November 1941 enter the Navy Officers' Air School. Became a pilot at the end of August 1942. Went to OITA for fighter plane combat training. Became a JG Lt Member of 301st Kokutai attached to YOKOSUKA Naval Base until June of 44. Flew a Raiden interceptor. Went to IWO JIMA in May of 1944 where unit was destroyed in June of 1944 by U.S. carrier task force. Returned to YOKOSUKA in June. Became squadron leader of 701st KOKOTAI (Shiden) at YOKOSUKA and then went to the Philippines (Clark Field) the first of December 1944. January 1945 went to field south of APPARI. Unit at Clark Field was destroyed and then he returned to YOKOSUKA where he joined the Kokutai and became a test pilot.

WHERE INTERVIEWED: Rm. 238, Meiji Bldg.

INTERROGATOR: Maj. J. G. Driscoll

INTERPRETER: Lt. Richard Sneider

SUMMARY

Lt. IWASHITA has 1500 hours of flying time. He gives a relative evaluation of Jap and American aircraft based on his combat experience. He also presented his notes on pending Japanese Navy developments, and future combat requirements re aircraft and special equipment.

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Q. How many combat hours do you have?

A. About 100 hours.

Q. How many encounters?

A. About 20 encounters. I shot down one Gruman and one B-29. During encounters my fighter was always damaged. I had no aerial combat in the Philippines.

Q. What types of planes did you engage?

A. I had two encounters with P-38's in the Philippines. I was on the defensive both times as I was attacking a B-29 formation.

Q. What did you think of the P-38?

A. It is a very good plane, strong and maneuverable. I think the P-38 is the very best American fighter.

Q. What encounters did you have with the P-51's?

A. I never really fought the P-51 as I was going after the B-29's with a rocket plane. The P-51 has a fast rate of climb, but its maneuverability is not too good. If I did a half roll, I could easily avoid a P-51 when it was diving on me. However, its speed is very high. The big point of the P-38 is that it is much more maneuverable than the P-51.

Q. What engagements did you have with the F6F?

A. I met the F6F three times. I think it is a very good plane. Its maneuverability is fine. But I think the Shiden was a better plane in combat when it used the combat flaps (wing flaps). These flaps were smaller than landing flaps and were used only in combat. The Shiden was most effective when in operation at heights up to 6,000 meters. At higher altitudes the F6F is better than Japanese planes. It has longer firing range.

Q. What about the F4U?

A. I met the F4U once.

Q. The B-29?

A. Four or five times.

Q. Any other bombers?

A. None.

Q. The P-47?

A. I engaged P-47's twice in the Philippines.

Q. The P-40?

A. None.

Q. Any others?

A. No, no others. Against the B-29's I flew the Shiden, the Raiden, the Zero 52 and 62, the Gkk and the Tenrai.

- Q. What was the best one, of the group which you flew against B-29's?
- A. The modification of the Shiden Kai (Judy).
- Q. Which did you use against B-24's?
- A. The Zero 52 and the Shiden #11.
- Q. What did you fly when engaging the P-38's?
- A. The same planes.
- Q. When engaging the P-47's?
- A. The same. The Zero 52 was the best. The Shiden engine was bad.
- Q. Which planes did you use against the P-51?
- A. The Raiden and Zero 52, Shiden 21 and I think the Shiden was the best. However, I flew the Raiden the most. I never feared the P-51.
- Q. What did you fly when engaging the F6F?
- A. The Shiden 21, the Zero 52 and 62. I think the Shiden 21 the best.
- Q. What did you use against the F4U?
- A. The Zero 52.
- Q. Name the three U.S. planes you think the best - in the order you rank them.
- A. I think the P-38 the best, F6F second, and the P-51 third. The P-47 is fourth in my estimation.
- Q. What was the best anti-bomber armament you ever carried?
- A. The Fireball.
- Q. What was the official name of that? Did you call it the Fireball?
- A. It was the MARK 3 Bomb (SANGO: not a rocket shell). It weighed 60 KG; length was 30 centimeters and diameter 10 centimeters. The rocket shell was different from the Fireball.
- Q. How does it differ from the rocket?
- A. The rocket has a flat trajectory and the sighting is much simpler. Effectiveness of the two is about the same.
- Q. Why was it called the Fireball?
- A. That was what the Americans called it.
- Q. How did you know that?
- A. We learned it from the newspapers before the surrender. We used it in B-29 attacks and at Rabaul.
- Q. How was it launched?
- A. It drops from the wing of the plane?
- Q. How many did you carry on one plane?
- A. The Zero carried two at the beginning, and at the end of the war carried four.

Q. Did you have a special sight?

A. No.

Q. How did you aim? How did you estimate the elevation?

A. GuesSED - 150 meters height - had a three second fuse.

Q. How many attacks did you make?

A. I used the rockets against the B-29's.

Q. How many of these Fireball attacks did you make?

A.. Ten times at Kyushu, and I used the SANGO in fighting the B-29 I shot down in April of this year.

Q. When did the Navy first use rockets?

A. Against B-29's, we first used rockets at the beginning of June 1945.

Q. Did you use rockets for anything else?

A. At OKINAWA we used rockets against ground targets and against torpedo boats.

Q. What model rocket was that?

A. The MARK 27 (Kayaku) rocket, the same one used against the B-29's.

Q. What were the tactics for the rocket against bombers?

A. We used two - one was the same as for the SANGO - the other was a rear attack.

Q. What's the fuse setting?

A. The right one is a 4.5 second fuse and the left is 4 seconds. We used them this way because they would cover a bigger area. Firing from behind the B-29 was very dangerous. The 29 was very fast at high altitudes and we would dive at the tail.

Q. How high did you start your dive?

A. At about 500-1000 meters above the 29.

Q. At what range did you release the shell?

A. About 750 meters for a tail attack. 1750 meters for a nose attack.

Q. How did you sight from the tail?

A. One and a half degrees above the target from the tail and also one and a half degrees from the front. The speed of the bomb was the same.
(Draws image of 3-ring gunsight & B-29's)

Q. But at 1750 meters the 29 looks less than half the size it appears to be at 75 meters. How do you explain the same sighting process?

A. We used 1.7 degrees for this sighting.

Q. Was it difficult with the ordinary sight to estimate .7?

A. Yes, very difficult.

Q. Was the sight modified?

A. Yes, we had a new reticle.

Q. Did it have special size rings?

A. Yes, it was a variable sight.

Q. What was the number of the sight?

A. Type #4 shooting and bombing sight - modification #1.

Q. Was it only used for rockets?

A. Also for regular firing.

Q. Did you use it for the SANGO also?

A. Yes.

Q. How many rings were there in the sight?

A. One ring.

Q. Did you use this for ordinary machine guns? Was this the only sight used in combat?

A. Yes, we used it for machine guns. We used it in the Philippines. Used this and the modifications of it.

Q. Did the basic model have variable rings?

A. No variable sight in the basic model. We used a radio range finder.

Q. What was the model number?

A. It was just an experimental model. It was only ground tested and never used in the air.

Q. Did you use any radio models in combat?

A. No.

Q. How successful was this - what percentage of attacks were successful?

A. It wasn't very successful.

Q. Out of 10 attacks, how many B-29's were shot down?

A. Three out of ten.

Q. Were these nose or tail attacks?

A. One by nose attack; two by tail attack. (These were my own attacks.)

Q. How many would you say was the average?

A. There were two bombs on one plane, and when shooting, both bombs went at the same time.

Q. In the entire Navy Air Force, what was the percentage of 29's destroyed (out of 100)?

A. I do not know the number.

Q. How did your score compare with the others?

A. Most had three out of ten.

Q. What percentage of the B-29's were kills and what percentage damaged?

- A. One destroyed to seven damaged was the average.
- Q. Would you rather use these or rockets?
- A. I would rather use rockets. They were the best. There were less chances of getting hits with rockets, but they were the best.
- Q. What were the best guns you ever carried?
- A. 20 mm.
- Q. Which do you think would have been better - which would you have preferred?
- A. I think a 20 mm is the best in general use. I think that the rate of fire should be increased to 850.
- Q. Which 20 mm did you use?
- A. Type #2 - MARK 2.
- Q. What about 30 mm?
- A. Yes, we used them, but only a little. We used 70 rounds in the 30 mm and I think the 30 mm is the best.
- Q. How many rounds in each gun?
- A. 150.
- Q. What type of magazine - belt or drum?
- A. 150 rounds in a belt.
- Q. Which type of ammunition did you use, long or short?
- A. Long.
- Q. What armament did the F6F have, do you think?
- A. I think it carried 13 mm cannon. I think it also carried a 20 mm cannon.
- Q. Did you have armor plate?
- A. Yes, however, in normal use, we took it off as it was too heavy.
- Q. You never flew with it into combat - you always took it off?
- A. Yes, it was too heavy.
- Q. When did you first have self-sealing gasoline tanks?
- A. From the beginning of the war.
- Q. What type? Were they all rubber or rubber-covered aluminum?
- A. The cover had CO/2.
- Q. Do you mean that the air space in the tank was CO/2?
- A. No, there was a tank of it carried in the fuselage. When a fire was started in the tank, a line fed it into the tank cover and the fire was extinguished. This tank was only capable of being used one time; however, it must be repaired after each use. The gum covering of our tanks wasn't good; it leaked.

- Q. What did you use after that, all metal?
- A. The outside was covered with gum. We only tested the inside covering.
- Q. Did bombers ever hit you?
- A. Yes.
- Q. When, where, and what kind of bomber?
- A. It was a B-29. I was making a tail attack.
- Q. How far were you when you were hit?
- A. About 800 meters. The bomber didn't fire often enough to shoot me down.
- Q. The B-29 should have shot more times?
- A. Yes.
- Q. How many guns were firing at you?
- A. Only the tail guns.
- Q. 13 or 20 mm?
- A. Probably 20 mm.
- Q. How large holes did they make in your aircraft?
- A. They hit the engine - 20 mm, I think - the shell went through the engine and out through the wing leaving a large hole.
- Q. Only one shell hit you?
- A. Yes. They did not fire often enough. They only fired at me for a few seconds.
- Q. Were there no other B-29's firing at you?
- A. I attacked a formation of five and they all fired at me.
- Q. Did you ever attack a bomber and not be fired upon?
- A. They always fired at me.
- Q. What was the most successful method of attacking B-29's?
- A. The nose attack, coming in from a dive. It was best to come in a little low and off a little to the side. Another way was to come down at about 80 degrees from above - half roll and shoot when on back. The tail attack was no good - there was too much firing from that section.
- Q. Did you ever hit a B-24?
- A. No.
- Q. Why not?
- A. Our early warning radar was not good enough to warn us of the attacking bombers. Also, the escorting P-38's were very strong.
- Q. Did you ever carry any bombs other than the two mentioned?
- A. No, only those two.

Q. Ever hear of such a thing as a parachute bomb being in use?

A. No.

Q. Did you know of the Cable Bomb?

A. We heard of it, but did not use it.

Q. What did you think of it?

A. I should think that the air resistance would be very great and that it would cut down the maneuverability of the aircraft. The chief defect of it, though, is that it would enable the enemy to find the fighter's range too easily. I think that bombing and radar bombs were the best way to down B-29's.

Q. What do you think the next best method?

A.. A rocket bomb with a radio range finder. We also investigated the "death ray" which would stop the engines. I have these notes I have made as to how to combat planes in the future.

- (1) Electrical range finder in plane.
- (2) Radio bomb from plane.
- (3) Chemical substance (powder) which would stop engine. Powder would be dropped on it.

Q. What were the proposed aircraft developments?

- A.
- (1) To increase the performance of fighters.
 - (2) To increase the high altitude performance of the engine.
 - (3) To substitute pure alcohol for gasoline.
 - (4) To supercharge the engine in two stages.
 - (5) To increase the maneuverability and to use combat flaps (on Reppu). (I think the Reppu is the best Japanese Navy airplane and I think it is the best combat airplane in the world.)
 - (6) To increase the rate of climb of fighters.
 - (7) To increase the high altitude performance of bombers.
 - (8) To increase the use of radar on fighters.
 - (9) Improve special bombing against bombers.
 - (10) Rocket development (this was in a rough stage and personnel were not sufficiently trained to develop this program.)
 - (11) Protect the pilot against gravity, (I used a G-Suit, but it wasn't good.)
 - (12) Install mirrors in order to see behind.
 - (13) De-icing mechanisms for wings. (I consider this very important.)
 - (14) Testing of Shindan (the push prop). (This was a very difficult thing to develop as prop hits the pilot if he bails out.)
 - (15) Development of the Reppu fighter.
 - (16) Development of a rocket fighter for the future which would employ a rocket for an engine.
 - (17) Development of a night fighter. (We used off-set guns for night fighting; guns were fired at a 45 degree angle, but we tested them for 70 degrees.)

Q. Did you use 45 degrees?

A. No, but I knew some pilots who did.

Q. At what range were the guns fired?

A. About 800 meters - shooting from under was very effective as the bomber burns very easily from underneath. (Continues listing points)

- (18) To protect parked planes from enemy bombing. (The carpet bombing was very effective and we had no way to protect planes on the ground.)

(19) Development of a long range, high altitude fighter such as the P-51 (which we admired very much.) We needed such as this for use in bad weather. (I think the P-38 was very good as it shot down Japanese fighters very easily.)

Q. Did you ever fly an American plane?

A. No, but I think the F6F is the second best type. I admire the strong wings of the American planes. (Continues listing points)

(20) Mounting of machine guns. (I think we should spread the angle of fire out instead of building a concentration of fire, especially for young pilots.

Q. At how many meters would you expect hits this way?

A. At 100-200 meters for veteran pilots a concentration of fire is good, but for young pilots, a spread of fire would be better.

(21) Education of pilots. The use of aerial cameras in aerial fights would have been good as it would have enabled us to have moving pictures to use in training. We used bicycles for ground training in some cases as this helped in the development of formation flying.

(22) Development of fighter flying formation practices. We admired the American fighter flying formations very much, but our young pilots could not fly these formations. How to train these pilots for this type of flying is an important question.

(23) The HOMARE engine. In theory it was very good - light and compact and the air resistance was small. But there were many difficulties to solve. It was not a durable engine, and we also had difficulty with the proper mixture of fuel. Also, leaks caused by vibration (due to oscillation) affected the sparking of the engine as the oil got on the sparkplugs. Another difficulty was that the oil temperature ran too high and the engine could not go more than 800 meters at full power.