

HEADQUARTERS  
U.S. STRATEGIC BOMBING SURVEY  
(Pacific)



INTERROGATION NO. 110.

Division of Origin: Military Analysis

Subject: Distribution and loss of JAAF Aircraft

Personnel interrogated and background of each:

Major TAKAHASHI, C. Aircraft supply section of Rikugun Koku Hombu (Army Air Headquarters) since July 1944; for 2 years prior to July 1944, an instructor in the Army Air Technical School at Tachikawa.

Captain TAKEUCHI, T. In charge of statistical control in the supply section of Rikugun Koku Hombu since October 1944; previously with Koku Shinsabu (Research Department) at Tachikawa, and with the aircraft maintenance and supply section of the Osaka Kokusho (Air Depot) .

Where interviewed Air Headquarters; Meiji Building

Interrogator Lt Comdr Aikin, USNR

Interpreter Lt Comdr Nichols, USNR; Lt Oyama, AUS

Allied Officers Present Major McElwain, Major Braucher, Captain Logan, Captain Haskins, Lt Garred USNR.

Summary:

Interrogations covered general problems in the replacement program for the JAAF. Special emphasis was placed on the methods of testing aircraft prior to acceptance, ferrying and ferry losses, allocations, and overall serviceability rates.

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These interrogations were conducted over a period of three days. Major Takahashi was present at all three interrogations, Captain Takeuchi at the last two only. All replies to questions were made by Major Takahashi unless otherwise indicated.

I

Q. Who had the responsibility for allocation of Army aircraft to tactical units?

A. Overall requirements were decided upon by a joint committee composed of representatives of Koku Hombu (Air Headquarters), the Gunjika of Rikugun Sho (War Ministry), and the Sambo Hombu (General Staff). Allocation to units was determined by Koku Hombu and responsibility was originally vested in the late Colonel KOBAYASHI, subsequently in his deputy, Lt Col IWATA. I worked under the latter.

Q. How many planes were allocated to Koku Sogun (Air General Army) in March 1945?

A. Allocations were made to Kokugun (Air Armies) separately, rather than to Koku Sogun.

Q. Can you prepare allocation figures month by month to all the Kokuguns for 1944-1945?

A. That is very difficult without records, but I can develop some approximate figures. (See Exhibit 1).

Q. What other officers of Koku Hombu would have information on these matters?

A. Lt Col FUJII, Kazumi was formerly in my department and was the predecessor of Lt Col IWATA. Lt Col FUJII is now on the staff of 6 Kokugun (See Interrogation No. 341). Previously the officer in charge was Col NAGAISHI, who subsequently went to 8 Hikoshidan (Flying Division).

Q. What were your ferrying losses?

A. Of the planes sent overseas, we reckoned losses at 50%. The heaviest losses incurred were on the route between Kyushu and Formosa. Of those damaged, one half could be repaired.

Q. Was this 50% figure applicable to any particular period?

A. I would say it was an average figure throughout the war. (Note: Major TAKAHASHI was only in Koku Hombu from July 1944 to the end of the war).

Q. Were any planes ferried via Iwo?

A. Yes, there was a route from the depot to Iwo-Truk-Rabaul, but this was primarily a Navy route. A few Army planes went this way, however, and some 300 planes were shipped down to the Java area by tankers. These were mostly trainers, although about 50 were Ki 61 (Tony). This 300 figure applies to the whole war and all arrived safely.

Q. Were Navy planes used to lead Army planes being ferried on the Iwo route?

A. Yes, in most cases, but not on the other (Okinawa) route. Less than 10% of the planes for Rabaul and New Guinea went via Iwo; the vast majority went via Okinawa.

II

Q. Do I understand that the heaviest ferrying losses were incurred on the route from Kyushu to Formosa?

A. Yes, that is correct; this was the first over-water flight. These losses were largely due to engine failure.

Q. What was the testing schedule?

A. At the factory engines were subjected to a 2-hour test in two parts. First the engine was run in for about  $1\frac{1}{2}$  hours, after which it was torn down and examined for defective parts. Then it was reassembled and run in for an additional  $\frac{1}{2}$  hour. These were average times; fuel was allocated on the basis of a 2-hour run for each engine and what was saved by cutting down the run-in time on some engines might be used for additional time on others.

Q. What flying time was put on these new planes?

A. After assembly a plane was subjected to a 2-hour flight test at the factory. Subsequently it was delivered to an Army Depot, where it received an additional 3-hour flying time. Planes were then turned over to the Transport Dept for the 3-hour flight to Kyushu.

Q. Then up to this point the engines only had been run for 10 hours?

A. Yes, and it was our experience that if engine difficulties were to develop they would occur after that time.

Q. Did these run-in and test schedules obtain throughout the war?

A. No, at the beginning of the war the run-in time for engines was 5 hours and the flying test was 10 hours. The times were gradually reduced as necessitated by the fuel shortage. Of course when the early time-standards prevailed the engine breakdowns were very infrequent.

Q. Who gave the order to reduce these test times?

A. The Chief of Koku Hombu after consultation with representatives of the Technical, Supply and General Affairs Departments. All were opposed to the reduction, but there was no other remedy.

Q. What other factors were responsible for these over-water ferrying losses?

A. Weather played a large part. The planes being ferried were guided by a lead plane and if anything happened to this lead plane, the others were naturally in difficulty.

Q. You have stated that ferrying losses averaged 50% throughout the war. Was the figure really this high during the early stages?

A. Yes. Early in the war the haul down to the southern areas was much longer and any number of things occurred enroute. Later, when the haul became shorter, engine failures between Kyushu and Formosa accounted for heavy losses. Another factor was the decline in effectiveness of maintenance personnel. Virtually all the best technicians were sent to forward areas, got stuck there and could not return.

Q. Were regular plane availability reports sent to Koku Hombu from the Kokugun in the field?

A. (Capt Takeuchi). Yes. Aircraft status reports were submitted weekly and personnel reports monthly. In addition reports on losses were sent in whenever they occurred, daily if necessary, for example, during an operation.

Q. What form of report was used?

A. (Capt Takeuchi). Status reports were submitted in these categories:

A - Planes serviceable

B - Planes under repair at airfields

C - Planes sent back to depots for major repairs

These reports were submitted by Kokuguns which had collected them from their subordinate units. There really was not very much system about them and while the reports came in weekly, each Kokugun chose whatever day it liked to make the report. Frequently the incoming message would be garbled and only part of it would be received, so that in March 1945 a fourth category was introduced: Planes able to sortie, that is, crewed serviceability. This was an important concept particularly since declining aircraft production eventually resulted in field units having crews far in excess of serviceable aircraft.

When I was assigned to Koku Hombu in October 1944, the records were in a state of considerable confusion, part of which was caused by the fact that at the beginning of the war there were no technical people in the field and non-technical officers made up the status reports in such form as they chose.

The personnel reports were submitted in these categories:

- 1 - Pilots qualified for night and day flying
- 2 - Pilots qualified for day flying only
- 3 - Pilots without combat experience

While status reports were usually submitted weekly and personnel reports monthly, reports were rendered at more frequent intervals just prior to or during an operation.

Q. Do you have a file of these status reports?

A. (Capt Takeuchi). No, they were all burned on 15 August.

Q. Have you any statistical compilations, or can you remember any of the figures you worked on?

A. (Capt Takeuchi). These also were burned, but I recall that for the period March to July 1945 serviceability of all planes assigned  $\left(\frac{A}{A+B+C}\right)$  averaged 50%, while serviceability of planes actually on hand in the units  $\left(\frac{A}{A+B}\right)$  averaged 71%.

Q. Concerning the table of production, losses, and allocation figures (Exhibit 1), have you any figures on losses prior to September 1944?

A. No, these figures are, of course, approximations, based on my recollection. Colonel Matsuzawa, however, would know the figures on losses - if he had the records.

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Q. Who reported losses of planes en route?

A. The airfields concerned.

Q. Did 4 Kokugun or any other Kokugun ever send combat pilots to Japan to pick up planes owing to pressing demands for replacements?

A. No, as a rule, the Koku Yusobu (Air Transport Department) pilots did the ferrying, with two exceptions: (1) planes very difficult to fly were picked up by combat pilots, and (2) when all planes of a unit were destroyed, but the unit still had pilots available, the unit was returned to Japan for re-equipping.

Q. Do you refer to losses on the ground?

A. Yes, caused by strafing.

Q. Was there any breakdown in the loss figures between combat and non-combat losses?

A. Yes, the reports would state the cause of each loss.

Q. Who in a Kokugun would know about combat and non-combat losses?

A. Either the Shunin Sambo (Senior Staff Member) or the Saku sin Sambo (G-1).

Q. Was there any exchange of information as to strength between the Army and Naval Air Forces?

A. Absolutely not. They were completely separate entities and no liaison whatsoever existed up until May 1945, when they did get together on certain technical aspects. The junior officers were all in favor of cooperation between the services, but the senior officers were opposed. In my opinion that is one of the chief reasons why we lost the war.

### III

Q. Why are allocation figures higher than production figures on the table you submitted? (Exhibit 1)

A. The allocation figures include planes left over from the previous months. They also include planes sent back from the field to Shirisho (Field Air Repair Depot) and Kokusho (Air Depot) for major repairs. On completion of such repairs, the planes were reassigned by Koku Hombu. The production figures are really numbers of new planes delivered to the Army.

Q. Were there any planes tested and serviceable which were held in stored reserve and not assigned to units?

A. We had planes in a pool. It varied by types. In 1943 the pool was quite large. I believe it was held for any planned operations. Sometimes we did not have enough to supply the demand; it depended on the numbers of deficient aircraft and on the requirements of units. In 1943 the pool might have amounted to 500 or 600 planes at the most including trainers. The figure would vary from month to month. Thus a change over from Ki 9 (Spruce) to Ki 86 (Cypress) would result in the withdrawal of the older type into the pool. Of the 500-600 peak, more than 50% would probably be trainers.

Q. At the beginning of 1945 photographs indicated about 1500 planes at Tachikawa, Utsonomiya, Osaka, Kagamigahara, Tachiarai. To whom did they belong?

A. Probably those were planes being produced and assigned. In December 1944 there was a big earthquake in the Nagoya Hamamatsu area. That and the bombing almost completely stopped the supply of electrical parts, and planes were lined up waiting for parts. Another smaller earthquake came in January 1945 and production dropped way down in February. Planes held up for electrical parts were mostly Ki43 (Oscar) and Ki 84 (Frank). The landing gear plant at Nagoya for Ki 84's was also destroyed by the earthquakes. Parts supplies lasted into January, and the results of the earthquake were not really felt until February.

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Q. What was the normal time-lag between acceptance of a plane by the Army and delivery to a ferry unit for transportation?

A. It varied, but normally they would be delivered immediately after testing. The minimum would be a week, the average about 10 days and the maximum about a month. Toward the end of the war, the delay became longer, because the efficiency of the test pilots supplied by the Transport Department went down, and more accidents occurred in testing.

Q. Were planes found defective on test repaired by the manufacturer or the Kokusho (Air Depot)?

A. The Army Kokusho.

Q. Did maintenance personnel deteriorate so as to cause delay in repair?

A. The very best maintenance personnel were sent to the front lines and lost. However, the Army began using civilians, engineering students, who turned out to be better because of their engineering training than Army personnel even though these civilians were younger. About May 1945 the civilians were taken into the Army. Thus there was no delay in repairs. The civilians were also more efficient because they had only one job, no military duties like cooking their own food etc. The use of civilians began about three years ago. Output and efficiency did decrease, however, because parts did not fit. The design was good, but manufactures did not follow the plans. In test factories, with the best personnel, good planes were made, but mass-produced planes were inferior. Tachikawa Shinsabu (Air Experimental Department) would have very high standards; but mass-produced planes sometimes were so inferior that models had to be withdrawn. Thus Tachikawa Shinsabu made Ki 46 mark 3 (Dinah) with 635 KM per hour maximum speed at 10,000 meters; the standard set for mass-produced planes of this model was only 590 KM. When these planes had less than 590 KM, the Army Shinsabu had to send man to Mitsubishi at Nagoya to remedy the defect. On Ki 46 mark 2 this differential did not exist, since there was no mass-production. This applied from the beginning to many types: Ki 67 (Peggy), 61 (Tony), 84 (Frank), 46 (Dinah) all had similar differentials. The differential of efficiency in mass-production was less in the beginning; it gradually increased and became serious about September 1944. One reason was inferior materials. Efficiency on production lines was originally good enough so that only spot testing of parts was done on the assembly lines; beginning in September 1944, thorough testing of all parts was begun.

Q. Were planes from overseas returned to Japan for repair?

A. In very few instances, but generally they were not. Repair was done in the Yasen Koku Shurisho (Field Air Repair Depot).

Q. Did Yasen Koku Shurisho ever have shortages of spare parts?

A. It depended on the type of plane. Certain types might be more difficult to get parts for. This was true even in Japan, and parts would have to be used from other planes.

Q. Who else besides you kept records of Japanese Army aircraft strength?

A. Captain Takenchi kept such records on his own. There was no statistical section in the Army. Reports of strength from the field went only to our section. This section sent monthly reports on strength and losses to other departments. Distribution as follows:

- (1) Rikugun Sho (War Ministry) - Lt Col Hamatani in Gunjika (available)
- (2) Sanbo Hombu (General Staff) - Major Ogata (probably available)
- (3) Koku Hombu:
  - a. Hokyubu (Supply Section) Col Matsuzawa (available)
  - b. Somubu (General Affairs Section) Lt Col Murata (available)
  - c. Somuka (Staff Sub-Section) Major Nakayawa (available)

These sections made no practical use of the reports, although they did use them to find out who needed planes.

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## EXHIBIT I

JAPANESE ARMY AIRCRAFT STATISTICS

1944	<u>Production</u>	<u>Losses</u>	<u>Allocation</u>
April	1,000		1,300
May	1,000		1,100
June	1,100		1,200
July	1,200		1,400
August	1,200		1,300
September	1,300	700	1,400
October	1,100	1,000	1,100
November	1,200	1,000	1,300
December	<u>1,100</u>	<u>1,000</u>	<u>1,000</u>
TOTAL	10,200	3,700	11,100
1945			
January	800	1,000	900
February	500	300	500
March	700	500	600
April	700	800	1,000
May	600	600	900
June	<u>600</u>	<u>600</u>	<u>500</u>
TOTAL	3,900	3,800	4,400