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COMMAND FILE  
WORLD WAR II

JAPANESE AIRCRAFT COMBAT PERFORMANCE

Excerpts From  
Aircraft Action Reports and Battle Narratives  
February-May 1944

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JAPANESE AIRCRAFT  
COMBAT PERFORMANCE.

Action Reports of U. S. Navy and Marine Pilots  
Against Various Enemy Types.

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OPERATIONS AGAINST BOUGAINVILLE, 3 FEB 1944

VMF-222

Pilot's Comments:

F4U vs. Zeke

"Once again the Corsair demonstrated its greater speed but found it impossible to pull up at all with the Zeke in a climb. Although using a large proportion of incendiary ammunition, it was found harder to make the Zekes burn."

OPERATIONS AGAINST THE MARSHALLS, 29 JAN - 4 FEB 1944

Task Group 58.1

USS ENTERPRISE

Air Group 10, W. R. Kane, Cdr., USN:

Pilots' Notes

"F6F is faster and can out-dive Zeke. Zeke has better climb and turn. F6F 6-.50 cal. guns much more effective than Zeke's firepower."

"Action took place at 5,000 to 10,000' at which altitude F6F seemed faster and had no difficulty staying on tail of Zeke. Zeke outclimbed F6F."

"I caught Zekes while in twisting dive and F6F overhauled them easily. Zekes very maneuverable."

"Zekes climbed faster at slower speeds. F6F turns with them at medium to high speeds. F6F can out-dive them and get more altitude at end of dive by pulling up. I believe F6F can turn a lot tighter than most people think."

Task Group 58.2

USS CABOT

C.O. Air Group 31, R. A. Winston, Lt. Cdr., USN:

Comparison of F6F-3 and Zeke

"The Zeke is much more maneuverable than the F6F-3 and has a higher rate of climb at low and medium altitudes. However, the F6F-3 can dive away from the Zeke at will. The 7.7 M/g does very little damage but the Zeke is very vulnerable to



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cal. M/g fire. Speeds of F6F-3 and Zeke about equal on level but F6F-3 closed rapidly on Zeke in a 30° dive at 2450 RPM at 40" manifold pressure. The Zekes burned rapidly when hit by bursts of concentrated .50 cal. fire. One exploded in mid-air and another shed its left wing when hit by our fire. Two others burned before crashing."

#### OPERATIONS AGAINST TRUK AND SAIPAN, 12-22 FEB 1944

##### Task Group 53.2

##### USS INTREPID

C.O. VT-6, W. G. Fawcette, Lt. Cdr., USNR:

##### Oscar vs. F6F-3

"The Oscar ....., was firing four fixed wing guns. The inboard guns showed a small flame in firing, appearing to be .30 caliber machine guns, while the outboard guns showed a very large flame and appeared to be 20-mm. cannon.

"Oscar had a radial engine, fixed tail wheel, and long thin fuselage. It was painted a very dark blue with deep red (not scarlet) discs on the top side of the wings and on both sides of the fuselage (about half-way aft of the cockpit). Its belly was painted a light grey.

"Its pilot appeared experienced and capable. He was reluctant to attack the three (3) plane formation from the rear. He concentrated upon the section leader.

"Oscar's turning capacity is considered remarkable. It appeared better than the F6F-3 in climbing capacity and its equal in speed.

"The pilot kept the cockpit canopy closed.

"The plane had a very clear, 'spic and span' new appearance. The paint seemed to be waxed or lacquered."

##### Task Group 53.3

##### USS BUNKER HILL

C.O. Air Group 17, A. McB. Jackson, Cdr., USN:

##### Zeke vs. F6F-3

"The Zekes were much inferior in speed and climb at the altitudes of this combat, 500-4000 feet. Their only chance was when they had the altitude advantage and element of surprise and 'jumped' us. When their superior maneuverability allowed them to quickly get in a 'tail shot' position the F6F-3 could out-dive them. With a Zeke on its tail, an F6F cannot turn inside the Zeke enough to keep from getting hit. It can get away by diving and twisting with the ailerons. When an F6F-3 has the tail position it can turn with the Zeke enough to get in a good burst, but cannot stay there for over 90° of turn. The Zekes still burn very readily. The rugged construction of the F6F-3 tail stands up well under enemy 20-mm. and 7.7-mm. gunfire. The 6-50 cal. guns of the F6F-3 shoot down the Zekes with a relatively small expenditure of ammunition. The F6F-3 is a vastly superior fighter to the Zeke in all features except maneuverability."



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C.O. VF(N) 76, M. P. Aurand, Lt. Cdr., USN:

Zeke's Still Explode

"Zeke's performance on this occasion was typical of that reported in encounters by other squadrons. It can turn inside of the F6F-3N. At the altitudes of the encounters, 1000' to 5000', the F6F has greater speed in level flight and can dive away from the Zeke. Best method of breaking off an engagement is to turn toward him and dive under - dive into a cloud if one is handy as in this case.

"Zeke still explodes on getting even a short burst of .50 cal.. The F6F took 10 hits of Zeke 7.7-mm. and 2 of 20-mm. without appreciable loss of operating efficiency except that hydraulic system was knocked out, wheels and flaps had to be pumped down manually."

OPERATIONS AGAINST KAVIENG, 20 MAR 1944

Task Group 36.3

USS MATOMI BAY

C.O. USS MATOMI BAY, H. L. Meadow, Capt., USN:

FM2s vs. Tony

"The most effective angles of attack (on the Tony) were highside runs from either quarter. Tony's best defense was the use of violent skids and turns just over the surface of the water. The final attack was successful because the Jap pulled up into a climb to the left, giving both FM2s a wide-open chance for good shots.

Jap Tactics

"The Jap pilot apparently thought he was fighting F4Fs, and that he had a vastly superior edge in speed as well as maneuverability. In the tail chase he gave no indication of concern over his ability to out-run his pursuers, maintaining his original course of 035°, and only when the FM2s began closing at sea-level did he drop his wing-tank and commence evasive tactics.

Tony's Performance

"After dropping his wing-tank Tony appeared to slow up rather than increase his speed, the cause unknown, although black smoke trails from his engine indicated a very rich gas mixture. Tony ... dropped what seemed to be magnesium streamers, which left cylindrical smoke trails.

"Tony may have had armor around pilot as 50 cal. hits in the cockpit splintered the enclosure, and caused engine to smoke, but the pilot apparently was not hit.

Comparative Plane Performance

"FM2 is considerably more maneuverable than FM1, but still not as maneuverable as Tony."



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VC-63 Pilots' Report:

Fifty-Mile Chase to Catch Tony

After the bombardment, during the retirement of the task force, the four FM2s on combat air patrol were vectored out to intercept a bogey reported 45 miles ahead. Planes flew at 180 knots, climbing to 9500 feet. A Tony was sighted and overhauled after a 50-mile chase. Using full throttle, the FM2s descended from 9500 feet to 400 feet in a shallow dive at 330 knots. Closing was gradually made at sea level at indicated air speed of 275 to 280 knots. The Tony made extremely sharp turns at full speed, turning inside the FM2s and leaving distinct vapor trails in turns at all altitudes. The Jap was bracketed by the fighters which made passes and head-on runs. Two more FM2s approached from above and behind and fired on his tail. Practically on the water by this time, the Tony made a turn to the left and received hits on the engine from the FM2 on the starboard quarter. The Jap then pulled up into a climb to the left and was finished off in a final attack which sent him spinning into the water in flames.

OPERATIONS AGAINST PALAU, 30 MAR - 1 APR 1944

Task Group 58.2

USS MONTEREY

C.O. Air Group 30, J. G. Sliney, Lt. Cdr., USN:

Zekes and Oscars

"The pilots engaging the enemy VF on this mission state that the F6F-3 is almost as maneuverable as the Zeke and Oscar at fast speed; the F6F-3 could out-dive the Zeke and Oscar and was almost as fast at lower altitudes, but could not climb as fast or as steeply. The Zekes and Oscars were not aggressive and did not work together; when our pilots turned into them, they would break off and pull up. Nothing unusual in the way of armament or protection was noticed."

USS CABOT

C.O. Air Group 31, R. A. Winston, Lt. Cdr., USN:

Recognition Features of Judy

1. "Fast single-engine bomber - in-line engine with air scoop below fuselage.
2. "Very clean lines - fuselage round with bomb carried in internal bay.
3. "Long cockpit enclosure raised above fuselage with open rear cockpit for gunner.
4. "Mid-wing or low-mid-wing with average dihedral from fuselage, wing tips tapered.
5. "Speed very high - greater than 300 MPH at sea level.
6. "From a short distance one of these planes might easily be mistaken for a Zeke or Tony, because of its extremely clean lines."



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Jap-5

#### Judy's Performance

"Our pilot estimated the F6F-3 has more speed than the Hamp or Zeke. He could close quite rapidly particularly when closing with the enemy in a power dive. During this combat the enemy did not use any violent evasive tactics. Our plane was able at all times to turn inside the enemy.

"..... A second pilot spotted two Judys flying low on the water at a 90° bearing to the task group. He and another pilot gave chase for over 40 miles at full throttle but were not able to close to firing range. Two other Hellcats from another CAP also joined in the chase but were unable to overhaul the two Judys.

"He finally opened fire at extreme range (1000 yards) hoping to force the Japs to turn, whereupon they jettisoned a total of at least four bombs and pulled ahead even further, until they were out of sight in the gathering dusk; .... clocked these planes at 260 knots indicated air speed at 50 feet above the water, which corrects to at least 310 miles per hour. Their speed was about equal to or slightly more than the F6F-3. ....

"The evasive tactics employed by the Judys in this section seemed to consist mostly of weaving and skidding. Great reliance seemed to be placed in their speed but while the enemy planes were fast the F6F-3 could close slowly on them at altitudes where low blower could be used. At low altitudes in neutral blower the Judy was a little faster.

"At high speeds the Judy appeared to have very little lateral maneuverability their pilots evidently depending mainly on the plane's speed for protection. These planes pushed over into a shallow dive when attacked to pick up speed. They did not attempt to make any use of the available cloud cover. They seemed to be completely absorbed with the endeavor to get into the task force with their bomb load, like the third plane which was shot down just as it started a steep glide-bombing run on our picket destroyer. Ship's gunners shooting at approaching planes of this type should be warned to expect speeds of at least 300 MPH and to lead them accordingly."

USS HORNET

C.O. VF-2, W. A. Dean, Lt. Cdr., USN:

#### F6F-3 Outclasses Betty

"The Betty was outclassed in speed and maneuverability. The Jap returned fire with his 20-mm. as our pilot made his run.

"The Zeke attempted to turn from the attack, without success, despite the fact that the F6F carried a belly tank while the Jap did not. The F6F had no trouble overtaking the enemy and our six .50's proved more than adequate to destroy him."



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Task Group 58.3

USS LEXINGTON

C.O. Air Group 16, H. M. Snowden, Cdr., USN:

F6F vs. Zeke and Tony

"Zekes were more maneuverable than F6F and seemed to have edge in climbing performance at the low altitudes (1000'-4000') where they were encountered on this strike. F6F seemed to have edge in speed.

"Two Tonys for some reason failed to close range on TBF-1c in 40 to 50-mile chase 50 feet above the water. TBF was indicating 195 knots air speed and jinking. TBF-1c is considerably faster than Jake, and was able to climb to 500 feet altitude advantage ahead of Jake in five separate runs made in space of 25 to 30 miles while chasing Jake into Peleliu Island. TBF was carrying a Mark 10 Model 6 aircraft mine at the time and was indicating 180 knots. The Jake was jinking about 10 to 20 feet above the water.

"On the basis of one brief encounter, Tony seemed slightly faster than F6F-3 at low altitudes; maneuverability and climbing ability of both planes seemed about equal. Several pilots felt that F6F could dog-fight Tony successfully."

OPERATIONS AGAINST HOLLANDIA, 21-28 APR 1944

Task Group 58.1

USS COMPENS

C.O. Air Group 25, R. H. Price, Lt., USN:

Helen, Oscar, Nick and Hamp

"F6F pilots believe they could overtake the Helen. In the case of the one destroyed, our planes had marked altitude advantage with the Jap showing 200 knots I.A.S. at sea level.

"The F6F is considerably faster than the Oscar, but on one occasion Oscar turned inside and escaped by diving away.

"A Hellcat, with slight altitude disadvantage, had great difficulty in overtaking a Nick, at indicated sea level speed of 260 knots. Our plane only closed when the Jap appeared to ease off throttle.

"An F6F encountered a Hamp and overhauled him quickly at I.A.S. of 200 knots. The Hellcat, at I.A.S. of 180 knots, followed Hamp through one tight Split 'S', but greyed out while attempting to follow the Jap through the same maneuver a second time. Toward the end of the engagement, Hamp descended to the tree tops and executed continual tight flipper turns at slow speed which our fighter could not follow.

"One of the Hellcats was jumped by a Nate but dove away and quickly out-distanced him."



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Task Group 58.3

USS PRINCETON

C.O. Air Group 23, H. L. Miller, Lt. Cdr., USN:

Notes on Betty and NickBetty:

1. Possible leak-proofing because numerous hits around wing roots caused no fires.
2. Speed in 15°/20° dive estimated 225/230 kts. Betty held 220-230 kts. indicated for several miles in level flight over the water after dive.

Nick:

1. Firing from rear cockpit turret resulted in white puffs around F6Fs, indicating shells (20-mm.) rather than bullets.
2. In shallow dive (15°) Nick's speed estimated at 240 kts. F6F doing 280 kts. to overtake. In 45° dive Nick's speed estimated at 330 kts.
3. Despite many hits from astern around cockpit and wings, Jap pilot probably not killed, indicating armor plate, and plane did not catch fire until near the end of the action, indicating some leak-proofing."

## USS LEXINGTON

C.O. Air Group 16, E. M. Snowden, Cdr., USN:

Oscar, Sally, Nick, Dinah and Betty

"Oscar was much more maneuverable and could easily out-turn F6F at the low altitudes where engagements were fought (2500'-1000'). F6F appeared faster, and could out-dive Oscar. Jap pilots did not fight their planes with much skill and appeared of comparatively low caliber. Leak-proof tanks of Oscar appeared reasonably efficient, as none of 3 Oscars engaged was set on fire, although all were hit hard by long bursts.

"None of the Sallys attempted any significant evasive tactics, other than diving to sea level; one rocked its wings from side to side. Defensive fire from the Sallys was weak and entirely ineffective. Only one of the four Sallys burned - and it not heavily - although hit hard by long bursts, indicating reasonably efficient leak-proof tanks. The Dinah and Nick relied simply on straight away speed to escape our VF. The Nick had about a 700-yard edge on 3 F6Fs carrying belly tanks, when tallyhoed. The F6Fs pursued the Nick for about 30 miles at an altitude of 3000'-4000' and at an indicated speed of about 230 knots without being able to close. One F6F then dropped its belly tank and was able to close slightly, hitting the Nick at extreme range and shooting it down at the end of a 35-36-mile chase. The Nick did not return fire, and did not burn. The Dinah was shot down after a 5-mile chase and appeared to be indicating about 200 knots at 2100'. It burned freely. No defensive fire encountered.



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"Both Bettys went down close to the water when attacked and tried to outrun F6Fs. When overhauled, one Betty turned into attacking VF; also used violent skids. The other Betty 'fish-tailed' in evasive action as fighters made runs from astern. Speed of Betty at sea level estimated at about 220 knots. F6F carrying belly tank closed at 235-240 knots indicated. F6F, which dropped belly tank and started from 10,000', indicated 265 knots on level and closed Betty in 10 minutes (Betty had 7-10-mile lead). Defensive fire of Betty entirely ineffective. Both Bettys were shot down in flames, indicating continued lack of leak-proof tanks."

OPERATIONS AGAINST TRUK, 29 APR - 1 MAY 1944

Task Group 58.2

USS CABOT

C.O. Air Group 31, R. A. Winston, Lt. Cdr., USN:

Kate and "Probable" Tony

"The Kate shot down by a CABOT VF was flying low over the water in the center of TG 58.2 after dropping a stick of four bombs at the USS MONTEREY. The F6F pilot climbed to 1500 feet to avoid the heavy A/A fire directed at the Kate and used this fire as a guide to keep the enemy plane in sight until clear of the screen. He then dived, firing one short burst into the Kate which made a sudden pushover and burst into flames."

\* "The (possible) Judy was encountered at 1000 feet, climbing to take cover clouds at 4000 feet and flying at approximately 170 knots. The F6F closed on it, indicating 205 knots and caught the enemy at 3500 feet. One short burst was enough to send the Jap crashing down in flames. In neither of the above cases did the enemy use evasive tactics. The Kate was flying a straight course and the Judy tried to outclimb the F6F. In each case the F6F was faster, indicating that, while the Judy can outrun the F6F in level flight at sea level, the F6F can catch it in a high speed climb."

\*(Note: The identification of this plane as a Judy is questionable. Since the pilot reported that it was a fighter and closely resembled a P-40, the Jap aircraft was probably a Tony.)

USS YORKTOWN

C.O. VF-5, R. C. Jones, Lt., USNR:

F6F-3 vs. Jill

"The F6F-3 caught the Jill at sea level in a surprisingly short time. Other performance comparisons not available, except that protection for the fuel tanks (if installed) appeared completely ineffective against .50 caliber incendiary ammunition. Pilots reported Jill burned as readily as Japanese planes known to have no fuel tank protection."

Task Group 58.3

USS LEXINGTON

C.O. Air Group 16, E. M. Snowden, Cdr., USN:

Judy and Zeke

"One Judy shot down flying just above the water appeared to be indicating no more than 190-200 knots during stern chase and attack. Repeated attacks



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Jap-9

were necessary to down another Judy, possibly indicating effective armor and leak-proof tanks. Neither Judy burned. Comparative performance of the Zeke and F6F unchanged: Zeke can out-turn F6F, is generally more maneuverable and can probably outclimb F6F at low altitudes. F6F has more speed and can outdive Zeke. It is still not recommended to dogfight Zekes at low altitudes. The Zeke seems as vulnerable as ever, burning readily.

#### Notes on Air Combat with Zeros over Truk

"Zero pilots encountered on this and succeeding strikes appeared individually more skillful and experienced than any hitherto seen by this Squadron, and inflicted on the Squadron its heaviest air combat losses to date (3 lost over Truk - 2 of whom were new pilots - as compared to 2 previously lost in shooting down 70 Jap planes). However, the Jap pilots continued for the most part to fight as individuals and without team work; and as long as our planes held to their section, team and division organization, comparatively little trouble was experienced in shooting the Zeros down. (Two of the 3 pilots lost by the Squadron were lost in individual dogfights.) Occasionally, Zero pilots attempted some form of team work: In one instance, a section of Zekes was engaged, and the 2 planes attempted to defend themselves by crossing over in what was apparently the beginning stages of an attempted 'Thach weave'. Both planes were shot down, however, before the weave was completed. On another occasion, 10-12 Zekes came out of the clouds in column and peeled off on VT and an escorting team of VF. The VF turned up into the Zeros, whereupon all the Zeros but 2 appeared to break off the pass and pull up. The remaining 2 Zekes continued the pass at the VT and were promptly attacked by 2 of our VF. The Zeros above them resumed the pass and heavily attacked our 2 VF.

#### TBF vs. Zeke

"The Japanese plane started a beam run, and the pilot recognized it as a Zeke. The torpedo pilot turned into the enemy plane, which slow rolled and dove under the TBF while the turret gunner fired, hitting the Zeke along the after part of the fuselage. When the Zeke came into view under the TBF's starboard wing, the pilot of the latter dove and opened fire with his wing guns, also hitting the Zeke abaft the cockpit in the fuselage. When the TBF had closed to less than 200 yards the Zeke went into a spiralling dive from 1500 feet and the TBF broke off. At the same moment a second Zeke came in from a six o'clock position and followed the TBF for 20 miles while the latter was on his way to rejoin the other torpedo planes. The second Zeke made four runs from five, six and seven o'clock positions, firing on two runs, but was prevented from closing to effective range by the timely fire of the TBF turret gunner on each run. The TBF was not damaged by either of the Zekes. VF were called by the TBF, but could not locate the plane and hence were not able to contact the Zekes. The only air opposition encountered by our VF was a Hamp which made a highside run out of the sun on a 3-plane team of F6Fs 10 miles NNE of Moen, while they were escorting some of the SBDs. This Zero hit 2 of the F6Fs, but was promptly shot down. This was the last enemy plane encountered by our VF during the 2-day strikes against Truk. Five planes were damaged but none were lost on this strike."



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Jap-10

USS ENTERPRISE

C.O. VT-10, W. I. Martin, Lt. Cdr., USN:

TBF vs. Hamp

"Four Hamps headed on opposite course turned, but apparently were unable to close .... (on the TBFs) ....; a Zeke broke away when fired upon."

OPERATIONS OF PBL4Y SEARCH PLANES IN CAROLINE ISLANDS, 30 MAY - 10 JUN 1944

VB-109 Based at Eniwetok

C.O. VB-109, N. M. Miller, Cdr., USN:

Encounter with "Possible" Irving

"PBL4Y on routine search north of the Caroline Islands sighted what he believed to be a Betty  $\frac{1}{2}$  mile distant off the starboard beam, and started to pursue. He made a 180° turn to starboard and the enemy also began a 180° turn, jettisoning two large objects which may have been bombs or droppable tanks.

"The turn of the enemy plane was sharp and well inside that of the PBL4Y, and placed the planes again on opposite courses. Weaving up from below and a little on the starboard bow of the PBL4Y the enemy plane pulled up sharply (vapor streamers observed from wings) just ahead of the PBL4Y to fire and then dove, passing below the tail, before pulling up steeply again into the clouds 1000 feet above. The bow turret of the PBL4Y got hits on the nose of the enemy plane, as it came up from below; and drew smoke from the underside of the fuselage between the nose and the wing, but the tail turret failed to reach as the enemy flashed past. The enemy opened fire at about 200 yards, and fire was observed from two cannon and 2 x 12.7-mm. in the nose, but the fire was inaccurate and passed PBL4Y harmlessly.

Jap Fire Inaccurate

"PBL4Y, having since altered the tentative identification from Betty to Nick, (Pilot later identified plane as Irving rather than Nick.) jettisoned bombs and went down to 300 feet altitude, turning to port to keep the enemy in sight. The Jap plane made another 180° turn and returned on the same course as the PBL4Y, 1000 feet above, and overtaking very slowly (210 MPH indicated by the PBL4Y). While still out of range, the Nip dove toward the PBL4Y, coming in from the port quarter above at about the PBL4Y's 8 o'clock position. PBL4Y turned to starboard to keep the tail to the enemy, and the tail and top turrets opened fire as the range closed to 400 yards, hitting the nose and forward fuselage of the Jap as he closed to 200 feet. The enemy was apparently discouraged by the aggressiveness of the PBL4Y's tail and top turrets, and his fire, which should have been most effective in this run, was again inaccurate and harmless. It is to be noted the enemy at no time used tracers.

"Passing the PBL4Y, the enemy pulled away in a climbing turn to port. The port waist gunner of the PBL4Y raked the enemy's belly aft of the wing but no damage was observed, and the enemy broke off the engagement and headed west at 3000 feet altitude.



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Jap-11

#### Enemy Well Armored

"No fire was observed at any time from the enemy's rear cockpit, and the greenhouse canopy did not extend as far back as the trailing edge of the wing or seem to include any rear cockpit gun position. The two cannon were high in the nose and close together, the 2 x 12.7-mm. near the bottom of the fuselage and widespread. The plane seemed well-armored, as the fire of the PBL4Y, though accurate and well-directed, drew slight smoke and resulted in no observable damage where much might have been expected."

#### PBL4Y Destroys Kate

On 6 June 1944, while on search through the Northern Caroline Islands and within sight of Truk, a PBL4Y of VB-109 destroyed a Kate. The action as described by the squadron commander follows:

"While still two miles away, the enemy plane, shortly identified as a Kate, apparently sighted the PBL4Y and nosed over, still headed for Truk. The PPC nosed over as well and the PBL4Y's bow turret opened fire at 1200 feet range, with the Kate below and slightly to port.

"The first burst hit the Kate's engine and the fuselage by the starboard wing root, and flame appeared about the cowl flaps on the port side, streaming up over the cockpit. The second burst at 800 feet range went under the Kate. The third burst at 500 feet distance squarely hit the enemy plane's tail, and the bow turret gunner held it directly in his fire, following as far through as he was able. As the PBL4Y passed, the Kate was to port and directly under the port wing.

"The port waist gunner picked the enemy up under the wing at 300 feet range and fired all the way back to his own 7:30 position, riddling the rear cockpit and then the engine as the PBL4Y banked slightly to port. The rear cockpit gunner of the Kate had pushed his canopy back and was standing up preparatory to bailing out as the Liberator's port waist gun opened. As our gunner later observed 'He suddenly sat down again'.

.....

"About 500 feet from the water, the Kate jettisoned two bombs (apparently depth bombs) and then fell off on the port wing and struck the water without bouncing. The explosion of the depth bombs coincided with the plane explosion. The entire action had taken some five or six minutes. When the Kate was sighted, the navigator started to remove the astro-hatch to allow the top turret to fire; when he finished removing it, the action was over."

#### Betty Quickly Downed

The value of a two-plane interception patrol at differing altitudes is well illustrated by the action against a Betty on 10 June by a PBL4Y of VB-109. Two Navy Liberators were on special patrol some 400 miles east of Saipan, at respective altitudes of 8,000 feet and 1,000 feet, when contact was obtained on an enemy plane. The PBL4Y at the higher level maneuvered to attack. The entire attack took less than 1½ minutes, with an expenditure of 275 rounds of .50 cal. ammunition. The following was included in the squadron commander's report of the action:



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Jap-12

"Fire was opened by our bow turret at a range of 1500 feet. The initial burst was extremely accurate, incendiaries splashing over the starboard wing root and fuselage of the Betty. The top turret fired a short burst, scoring accurate hits along the fuselage and in the cockpit area. When the range was closed to 1000 feet, Betty broke away in a vertical power dive, smoke pouring from the starboard wing just outboard of the engine nacelle. The Betty continued its dive straight into the water, suggesting the pilot may have been killed by the gunfire of the PBLY. The Liberator dived briefly after the enemy to insure the kill, indicating 265 knots (325 knots T.A.S.) for a few seconds. .... Fourteen minutes from the position, the PBLY encountered our Carrier Task Force, the existence of which was the search plane's mission to keep from enemy snoopers."

VB-108 Based at Eniwetok

C.O. VB-108, E. C. Renfro, Cdr., USN:

PBLY Destroys Unidentified Twin-Engine Aircraft

A Navy Liberator of VB-108 on patrol about 170 miles east of the Marianas, on 10 June 1944, sighted a twin-engine plane. It was flying at 2000 feet, at an estimated speed of 165 knots. The PBLY went down to pick up speed, then started climbing and swung around to port to get on the enemy's tail. The Jap began to climb before the turn was completed. The Liberator was doing 230 knots at 2200 feet altitude and closing slightly on the enemy who was 200 feet above.

At range of 1200 feet, the bow, top turret and waist port turret guns opened, the enemy returning fire. The squadron commander reported:

"Our tracers seemed to be going into the starboard engine and fuselage from the start. First, the starboard engine flared up, the flame went out, and then flared up again after more .50 cal. were poured into it. Meanwhile, the Jap was firing from twin guns in a turret at the after end of the greenhouse. They winked like 20-mm. This caused the bomber pilot to pull directly behind the fighter's tail. After the starboard wing flared up, fire was concentrated on the port engine and it soon started to burn. The PBLY gained rapidly from this point, while the twin-engine plane started down, not out of control, however. It was apparent that its pilot intended making a water landing. In this he was not successful. He hit the water with such force that the fuselage tore off from the wings and broke up and sank at once. The wings continued to float all in one piece, as did part of the tail. No survivors were seen.

"The forward end of the cockpit was nicely faired into the fuselage, and the turret at the after end of the greenhouse was set forward of the trailing edge of the wings. Wing tanks were under both wings. The engines were radial.

"The time from sighting to kill was four to seven minutes and the actual shooting seemed a matter of seconds. PBLY personnel tentatively identified the plane as an Irving. (T.A.I. Comment: Definitely not Irving. This plane is possibly the new Y-20 (G6ML 'Ginka'))"



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OPERATION OF PB2Y-3 SEARCH PLANE, 18 MAY 1944

VP-13 Based at Eniwetok

PB2Y-3 vs. Betty

While on routine patrol out of Eniwetok, a PB2Y-3 of VP-13 sighted a Betty, flying at 2000 feet and one mile distant. The Coronado reversed course to close with the enemy and, on entering a cloud, began instrument let-down from 6500 feet with 210 knots IAS. (225 knots in slight turbulence was the maximum speed attained.)

After leaving the clouds, the Betty was sighted four or five miles ahead. It soon became evident that the PB2Y was losing ground in the chase, so the bomb load of two 325# depth bombs and three 100# bombs was jettisoned. The Coronado then nosed over to 50 feet above the water and gained rapidly on the Betty with between 175-180 knots IAS at 2600 RPM and 47 inches manifold pressure. Betty's speed was judged to be between 150-160 knots. Approach was made slightly to port and from 1700 feet below.

The chase lead through numerous light rain squalls and 19 minutes after it had begun, the Coronado reached a point directly under and probably unnoticed by the Betty.

The P.P.C. put the PB2Y into a steep climb towards the enemy. On reaching 900 feet altitude, the bow turret, top turret and starboard waist gunners opened fire, concentrating on the port wing root and evidently puncturing the gasoline tanks. Flame trailed from the port wing after only a few bursts had been fired. Within 20 seconds after fire was opened, the Betty plunged into a vertical dive, hit the water and exploded. There were no survivors.

At no time was there any return fire from the Betty, nor did it take any evasive tactics. When directly beneath the Japanese plane, Coronado's personnel reported it was possible to see directly through the tail blister and that the station appeared to be unmanned. No side blisters were noted on the Betty and the subsequent study of photographs taken during its crash indicate the use of four-bladed propellers. (Note: This aircraft has been identified as being a probable Type Betty Model 12 G4M2.)