A6M3 MItsubishi "Zero" = Fear!

Category: Scale Articles
Created on Saturday, 18 February 2012 23:15
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Hits: 575

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Historically, fighter aircraft, perhaps more than any other warplane have had a powerful grip on our imagination and on just about every Nations military planning since WWI. Fighters embody both beauty and terror – flying and fighting spark primal aspirations as well as its most loathsome capacities.

Among the fighters having a particularly strong hold on us is the Japanese Mitsubishi A6M2 through A6M5 Reisen carrier based fighter given the U. S. code name “Zero”. The original Japanese name was Rei-sen (rei for”zero” and sen for sentoki, or “fighter”. The plane became known as “Zero”.

In 1937 Jiro Horikoshi, a Japanese aeronautical engineer, was tasked with designing a new fighter with astounding capability. With only a 1000 HP engine, it had to outperform every known fighter of the day in top speed, range, endurance, and firepower. To succeed, he had to use extremely lightweight construction, leaving out armor plate for the pilot and self-sealing fuel tanks. The result was a low wing loading and a highly maneuverable craft that could outmaneuver any current aircraft of the time. Unfortunately, it could absorb little damage during dogfights.

With first units put into combat in early 1940 the Zero, in it’s first combat, shot down 27 Chinese and Soviet fighters without a single loss. These conflicts were little noticed in the West and the U.S. Air Corps had poor reporting and no real understanding of a new design fighter until it burst upon the scene at Pearl Harbor in December 1941. Over the next few years some 10,938 Zeros in a number of configurations and models were manufactured and serve until being proven obsolete in 1943 with the debut of the F6F Hellcat which was more than equal to the Zeros. During Battle of Midway Zeros were employed as Kamikazi attackers. The remaining craft were forced to serve out the rest of the war because no new designs had been put forth.

At the beginning of WWII there was so little known about the now legendary Japanese “Zero” facing U. S. fighter pilots, they were told that “if challenged by Japanese Zeros, do not engage because you are not likely to survive. If attacked the best defense is a high speed dive because the Zero is difficult to fly at high speeds”.

At the time, this was probably good advice. The Grumman F4F Wildcat, the most numerous and most advanced U.S. fighter in the Navy arsenal, was no match in turning, or top speed. The Zero’s two wing mounted 20mm cannon, and two 30 cal machine guns, were far more destructive than the four 50 cal machine guns mounted in the Wildcat.

Although the Wildcat was an inferior design compared to the Zero, the better trained and experienced American pilots developed tactics that eventually led to a kill ratio of almost 7:1 against Japanese fighters. The Americans developed the “Thatch Weave” using a two-man team that would ‘weave’ back and forth protecting each other and forcing attacking aircraft into vulnerable firing range and position.

That, and the far superior armor and self-sealing fuel tanks, gave the Wildcats another advantage over the Zero. If the Wildcats could get in just a few rounds in the fuel tank, or hit the pilot, the plane was often brought down. The Zero did not have bulletproof glass in the front windshield of the Zero to save weight, further putting the pilot at risk.

The American Wildcat, and later F6F Hellcat could absorb a huge amount of damage and get the pilot back to his base or carrier safely.

Today, there are only three known flyable Zeros in existence. One is here at the Planes of Fame Air Museum in Chino, CA. One Zero is owned by the Commemorative Air Force unit in Camarillo, CA, and the last is flown in New Zealand according to available sources today (2012). The Planes of Fame Zero uses its original Japanese engine and the Camarillo uses a more powerful Pratt & Whitney American engine with about 1200 HP.

A considerable number of captured Zeros were returned to the U.S. and have been put on display. There is one at our local San Diego Aerospace Museum in Balboa Park, San Diego, CA. Another is at the U.S. Air Force Museum at Dayton, OH.

A You tube video clip of a flyable Zero can be found at youtube.com/watch?V=jLOov_rEmX8

Numerous other bits of information are available by Goggling A6M3 Mitsubishi.

As an RC Scale model the Zero is a good subject with one possible exception. If you try to simulate the sheet metal clad wing skin you would have to show the weathering and wrinkles put in almost every square inch of the surface by the riveting of the very thin wing skins. Not sure any judge would accept that and the work to get the effect would be huge. Otherwise the cowl hides a lot of the engine chosen, depending on the scale. The plane has flaps and retractable landing gear, and is a tail dragger. Droppable fuel tanks and/or bombs can add extra points. Numerous kits have been offered, even more ARFs, and multiple sets of plans can be had. This popularity just shows how much modelers have enjoyed the fine flight characteristics of the Zero. A 1:5 scale model would come pout at 94.5inch span.

I have excellent three views available if you need them

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Feb 2012