



VEXED VISION

GERMAN MANUFACTURER JUNKERS WAS ALREADY CONTEMPLATING A REPLACEMENT FOR ITS JU 88 WHEN THAT TYPE ENTERED SERVICE. ITS ANSWER WAS THE JU 188, AS CHRIS GOSS REVEALS

With the Luftwaffe pressing ahead with production of the Ju 88, the Junkers Flugzeug- und Motorenwerke Dessau (JFM – Junkers Aircraft and Engine Works) began studying concepts to satisfy the Reichsluftfahrtministerium (RLM – Reich Air Ministry) Bomber B programme.

Having been unsuccessful with its design for the Bomber A heavy platform project (which was won by Heinkel's He

177), the RLM sought proposals for an improved bomber that would replace those currently in or about to enter service. Using better available engines, the new aircraft was expected to be faster, have greater range and carry a larger payload. This is where the issues started.

The JFM hoped Bomber B would use the Jumo 222

engine, but the prototype was plagued with unreliability, lower-than-expected power output and component problems. The project was abandoned after three years, but in the meantime, the RLM had decided that the preferred powerplant would be the BMW 801. The issue in part was the demand for types such as the Focke-Wulf Fw 190 and later variants of the Ju 88. As a result, the number of engines obtainable was likely to be low, especially with priority given to the '190. Knowing this, the JFM formed the idea of modifying the Junkers Ju 88 by adding a bulbous, egg-shaped 'full vision' cockpit.





A CAUTIOUS APPROACH

Designated Ju 88B, the design was based around the Ju 88A-1 and subsequent versions called for different engines; the B-1 was to be powered by the Jumo 211, the B-2 using Jumo 213, while the B-3 would utilise the BMW 801. However, following the successful introduction of the Ju 88A into service, the programme was sidelined while priority was given to it and the A-5, the latter an A-1 modified to A-4 standard.

For the time being, work on the Ju 88B was shelved in favour of the winning Bomber B design, the Ju 288... albeit for a short time. Due to the breakdown of the Jumo 222 initiative, including major design problems, it was soon evident the Ju 288 plan was noticeably faltering. Mindful of the Ju 88B, focus soon returned to what would become the Ju 188.

Registered D-AUVS, the prototype Ju 88V26 gained the modified nose and two BMW 801 engines, but retained the A-1's fuselage and tail. Ten development airframes were flown between June 1940 and early 1942, including the Ju 88E and Ju 88D-1 used to assess various roles.

The 88E satisfied the bomber role, while the D-1 was employed for reconnaissance use.

With the resulting machine renamed Ju 188

and showing promising results during trials, production began in October 1942 with an initial batch of 20 aircraft, Werk Nummer 10001 through 10020.

As seemed to be the norm with fast-paced Luftwaffe projects, problems ensued. In particular, the power source was causing numerous headaches. The RLM wanted the new aircraft to be powered by the Jumo 213 or BMW 801, but it also wanted minimal changes to the airframe. As a result, the Ju 188A bomber would be Jumo-powered while the Ju 188E recce variant would use the BMW option.

PROBLEM SOLVED

Deliveries were slow due to complications with the Jumo 213. In February 1943, the first three Ju 188E-1s were delivered to Erprobungsstaffel (Erp.St) at Rechlin, 62 miles (100km) northwest of Berlin, for operational evaluation. This number rose to 18 by the end of April and two months later the unit moved to Chièvres in Belgium, to begin converting I./Kampfgeschwader 6 (I./KG 6) to the new type. Having previously operated the Ju 88A-14 under the command of experienced bomber pilot Maj Helmut Fuhrhop in the Mediterranean, Oblt Karl von Manowarda was now in charge. Following its conversion, 1 Staffel would help 2 and 3 Staffel (led by

Oblt Rudolf Barz and Hptm Helmut Waldecker respectively) adopt the new type.

The new aircraft proved popular, as a I./KG 6 pilot later wrote: "It was much better than the Ju 88 as it had a roomier cockpit, better visibility and an improved instrument panel. It was advanced, faster and climbed quicker than the Ju 88. It didn't

swing to port on take-off and it was steadier in flights at slow speed."

Karl von Manowarda's logbook records his first Ju 188E-1 flight on July 26, 1943 under instructor Hptm Hans Mader. Flying twice that day, he was assessed as being proficient to go solo with his crew. He would fly another 34 training sorties before being considered suitable as an instructor in August.

In May 1943, I./KG 66, commanded by Maj Hermann Schmidt, formed at Chartres, southwest of Paris, as a specialised pathfinding unit equipped with a mix of types/sub-types alongside the Ju 188, including the Ju 88S-1, Do 217M-1 and Heinkel He 111H-6.

On August 18, the first operational Ju 188 raid was flown with three of the KG 66 machines undertaking a nocturnal raid on the Ruston and Hornsby factory in Lincoln, led by Lt Hans Altrogge. Although deemed successful, one of the aeroplanes, Werk Nummer 260176, suffered a landing accident on its return to Chartres.

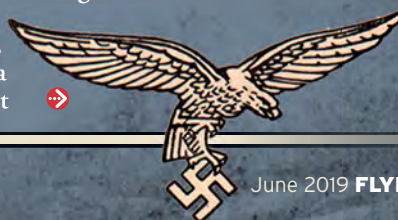
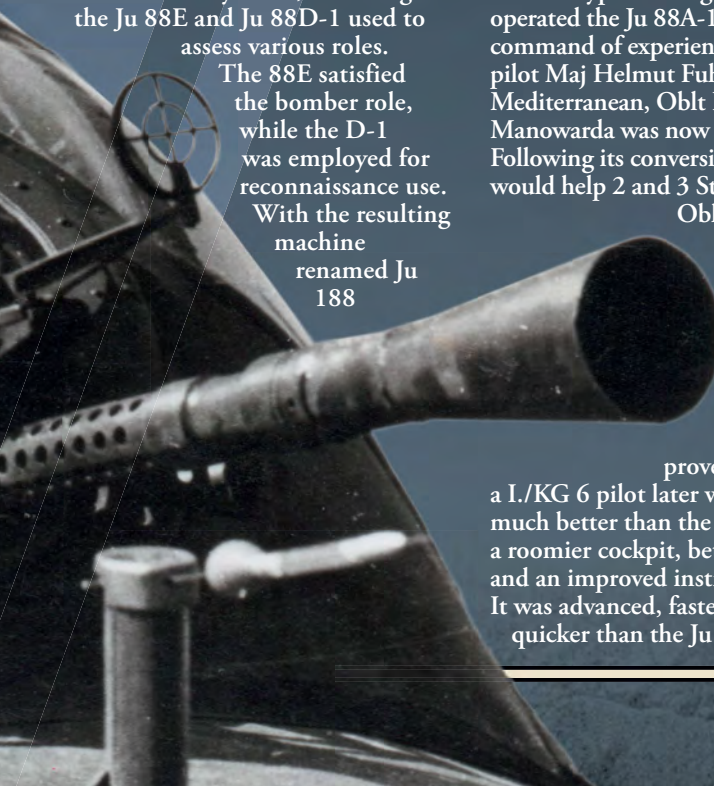
It wasn't until three months later that the first '188 was lost in combat. On October 2, Ju 188E-1 Z6+GK (Werk Nummer 260175) of Hptm Walter Schmitt's II./KG 66 was illuminated by searchlights off Spurn Head in Yorkshire. While taking evasive action, the aircraft hit the sea killing Lt Günther Beubler and his crew. Some of the wreckage was recovered, including the BMW 801 engines and numerous defensive weapons, such as the MG 151/20 nose cannon and an MG 131 machine gun.

Recovery efforts also found several hardpoints for 50kg (110lb) bombs, a long-range fuel tank in the bomb bay, plus two carriers for 1,000kg bombs under the wings, between the fuselage and engines.

That same night, Manowarda flew his first

Above
Junkers Ju 188E-1 GB+CE (Werk Nummer 10001) displays the type's 'full vision' cockpit and the BMW 801 engines' rounded cowlings.
ALL CHRIS GOSS

Below left
The Ju 188's rear-facing, electrically powered turret comprised an MG 131 machine gun and another hand-operated example.





Right
This Ju 88V44 (Coded NF+K0) was one of ten development aircraft flown by Junkers between June 1940 and early 1942, while refining the Ju 188's design.



Above
German groundcrew load a 1,000kg bomb onto a Ju 188A-2 of I./KG 6. The A-2's engines featured a methanol-water injection system, giving them a different look overall.

Right
Obt Hans Mader arrived at Rechlin, Germany, on November 19, 1942 to evaluate the Ju 188 operationally. He was killed in action while flying the type on July 3, 1944.

operational mission, dropping two 1,000kg mines in the Humber Estuary, on Northern England's east coast.

NIGHT-FIGHTER QUARRY

Thirteen days later, two Ju 188s were shot down over Britain by a pair of 85 Squadron de Havilland Mosquitos, proving they were easy pickings for night-fighters. The first loss was a III./KG 6 aircraft flown by Staffelfkapitän Hptm Helmuth Waldecker, shot down near Ipswich, Suffolk, by Sqn Ldr Bill Maguire and Fg Off Bob Jones. Waldecker and his observer were taken prisoner. The rest of the crew members were killed.

An hour later, Lt Karl Geyr of I./KG 6 was shot down by Fg Off Hugh Thomas and WO Charles

Hamilton. Geyr relates what happened: "One of the crew shouted 'Night-fighter!' and I immediately dived. However, the aircraft was hit by a burst of gunfire, setting the fuel tanks on fire and wounding all [of] the crew apart from me... I could hear the bullets hitting the back of



my armour-plated seat. I ordered the crew to bale out and the gondola hatch was jettisoned [and] they all jumped out. However, my observer had failed to fold away his seat and I was finding it difficult to get out through the hatch.

"The aircraft then went into a

spin and I eventually baled out... I dived head first into the open hatch and hoped for the best. I knew that I was close to the ground, so I immediately pulled the rip-cord. I could see that I was about to land in a field with small bushes in it and on landing, gathered up my parachute. I then noticed that I was surrounded by burning Junkers 188." Geyr was the only survivor.

While deliveries of the Ju 188A were still falling behind those of the Ju 188E-1, the F-1 variant was arriving at recce units. Essentially a Ju 188E-1, it carried additional fuel tanks to increase range. The first unit to accept it was 4.(F)/11 (4 Staffel/Aufklärungsgruppe 11). The aircraft, Werk Nummer 10019, suffered serious damage in a landing accident at Gutenfeld, East Prussia on September 13, 1943.

Werk Nummer 280010 coded NK+ZG, became the first F-1 variant lost in combat. Flying with the Fw 200 Condor-equipped 9./KG 40 Sonderkommando Rastedter, the aeroplane was reported missing over the Atlantic on December 4, 1943. Flown by Obfw Otto Langner, the aircraft carried a crew of five, including two KG 40 radio operators tasked with monitoring and jamming radio traffic.



By early 1944, deliveries of the Ju 188A finally started, but due to its engines being modified to include a methanol-water injection system, those arriving at frontline units became the Ju 188A-2; II./KG 66 received its first examples in January 1944, I./KG 6 a month later and I./KG 2 in April. At the same time, Ju 188D-2s were delivered to numerous recce units.

MOUNTING LOSSES

The first operational loss of a Ju 188A-2 came on February 29, 1944. That afternoon, Maj Helmut Fuhrhop of I./KG 6 took off from Chièvres together with another '188 flown by Uffz Wilhelm Mayer. Each carried five aircrew and a handful of groundcrew. The pair was heading for Dreux, 50 miles east of Paris, in preparation for a mission later that day. Meanwhile, nine Hawker Typhoon Mk.1b aircraft of 609 Squadron lifted off from RAF Manston, Kent,

at 11:20hrs to carry out fighter sweeps across northern France. Led by SqN Ldr Johnny Wells, they attacked barges and tugs, before spotting the two Ju 188s flying southwest past Cambrai at about 1,000ft. The combat report detailing what happened next no longer exists, but one Belgian pilot flying that day, Fg Off Charles De Moulin, wrote soon after: "Suddenly, two shadows cross our path, just above us, and then disappear to our left into broken cloud. Not fast enough to prevent me from identifying two fat, juicy Ju 188s.

"The three of us [Flt Lt Lawrence Smith and Fg Off Georges Jaspis were the other two pilots], at great risk of collision, make a sharp turn without waiting for the other Typhoons to give chase. It is a free for all. Full throttle, screaming engine and fingers on the gun button, we go flat out after the Ju 188s and within a few seconds



come across them in a clear patch of sky.

"In front of me, multi-coloured ribbons stream towards my Typhoon and I can see the gunner of the second bomber throwing tracer at me. A little rudder to correct and his turret becomes mute as the gunner crumples in his seat."

The combat was a slaughter and, with the other seven Typhoons finally joining in, both bombers were sent down in flames. Meyer crashed at Bohain-en-Vermandois while Fuhrhop's aeroplane came down three miles further south at Seboncourt. Everybody on board, as well as Fuhrhop's two dogs that were flying with him, were killed.

HOPEFUL HINDRANCE

Other variants of the Ju 188 were planned, despite the war turning against Germany. The Ju 188A-2's successor would be the '188G, a bomber powered by the Jumo 213 with an increased stores capacity. ➔

Above left
The forward view in the cockpit of Ju 188A-3, 1H+AT. The box to the right is the console for the Hohentwiel sea-search radar.

Above
Hohentwiel aerials are sported by this Ju 188A-3, 1H+AT. The aircraft was flown to the Royal Aircraft Establishment at Farnborough for evaluation, but later scrapped along with the majority of Luftwaffe types assessed.

Below
An early Ju 188F-1 wearing wellenmuster (wave pattern) camouflage.

"I could hear the bullets hitting the back of my armour-plated seat"





Above, left to right The Ju 188C/G-2 was designed to have twin MG 131 machine guns at its rear. It never made it past the prototype stage, being superseded by the Ju 388 Störtebeker, which itself was too late to make an appearance in the war.

Pictured here, Lt Karl Geyr recalls hearing bullets hitting the back of his armour-plated seat during the combat that led to his capture in October 1943. While flying one of two Ju 188s shot down that night, he was the only survivor of his crew.

Maj Helmut Fuhrhop (right) with GenFeldm Erwin Rommel at Chièvres, Belgium, during the winter of 1943-44. On February 29, 1944 Fuhrhop died in a Ju 188 over Northern France along with his crew and two dogs.

Below right A Ju 188E-1 of I./KG 6 in late 1943. Three of the sub-variants were delivered to Rechlin, Germany, for operational testing.



The H-model was intended for long-range recce, the J a heavy or night-fighting aircraft, while the K was to be a Schnellbomber (fast bomber). Other variants were the L (a high-altitude recce asset), the R (another night-fighter), the S (an additional high-speed bomber) and the T (an alternative high-altitude platform). However, production was switched to the Ju 388 Störtebeker and the concepts did not progress further than the drawing board.

The Ju 188 was involved in Operation Steinbock, the so-called 'Baby Blitz' against targets in Britain starting in January 1944. In the Mediterranean, the Ju 188D and F continued to be used for recce. However, attrition was high and among the pilots killed was Hptm Hans Mader who had been instrumental in bringing the Ju 188 into service. On the night of July 3-4, 1944 his Ju 188A-2 (Werk Nummer 180445, coded 3E+CB) was shot down by a night-fighter and crashed at Cricqueboeuf in northern France, killing him and his radio operator. Although it has never been confirmed, it is thought a Mosquito from 264 Squadron may have downed the bomber. Over Normandy in the summer of 1944, the Luftwaffe's bomber force suffered such high losses both in the air and on the ground that many units were grounded and disbanded.

The last recorded Ju 188 combat loss was a KG 6 A-2 variant coded 3E+ML (Werk Nummer 170491)

flown by Oblt Hans Albrecht. Flying near Mézidon in northwest France, the aircraft was attacked at 00:25hrs on August 20, 1944 by an unknown night-fighter, possibly a 410 Squadron Mosquito in the hands of Flt Lt Jim Fullerton. Shortly after, KG 6 was withdrawn to eastern France, too late to make an impact on the war, and started converting to single-seat fighters including the Messerschmitt Me 262 jet.

THE PRICE OF WAR

Apart from various Ju 188 recce units, III./KG 26 – with anti-shiping tasks – would continue to carry out offensive operations until the war's end. The unit had been flying the Ju 88 until August 1944 when heavy losses prompted conversion to the Ju 188A-3 in Germany. This variant was based on the A-2 but fitted with FuG 200 Hohentwiel sea-search radar and was capable of dropping torpedoes.

Commanded by Maj Ernst Thomsen and then Hptm Wolf Harseim, the Gruppe moved to Trondheim-Værnes, Norway, in October 1944 in the hope it could recommence torpedo attacks on allied shipping. However, weather, lack of fuel and spares, poor serviceability, questionable intelligence plus an urgent need for experienced crews meant that any torpedo missions were a shadow of those flown the year before. The final nail in the coffin for KG 26 and the Ju 188 came on the evening

of April 21, 1945 (see *FlyPast* March issue). While conducting an anti-shiping strike off the Scottish coast, the unit was intercepted by 37 RAF Mosquitos, escorted by 24 North American P-51 Mustangs. At least seven Ju 188s were shot down with the deaths of 28 aircrew, including Oblt Fritz Dombrowski who was leading II./KG 26, Oblt Friedrich Ebert the Staffelkapitän of 6./KG 26 and Knight's Cross holder Obfw Herbert Kunze of 9./KG 26.

Following the end of hostilities, a larger number of Ju 188s were found abandoned, the vast majority of which were ultimately scrapped. Britain's Royal Aircraft Establishment made use of at least six examples, including E-1, A-2, A-3, D-1 and D-2 variants. Of those, one was both evaluated and photographed thoroughly, being Ju 188A-3 1H+AT (Werk Nummer 190335), an ex-9./KG 26 machine.

On May 2, 1945, Oblt Rolf Kunze and his crew took off from Bardufoss, Norway, with the aim of defecting. Landing in Fraserburgh, Scotland, the aeroplane was later flown to Farnborough, but like all other captured assets, airworthy or not, was soon scrapped. The French Navy operated several captured Ju 188s, the airframes being reassembled and refurbished by Aérosudest at Villacoublay near Paris between 1946-48. It is believed they were withdrawn from service in the mid-1950s. There are no examples of the Ju 188 extant today. ●

