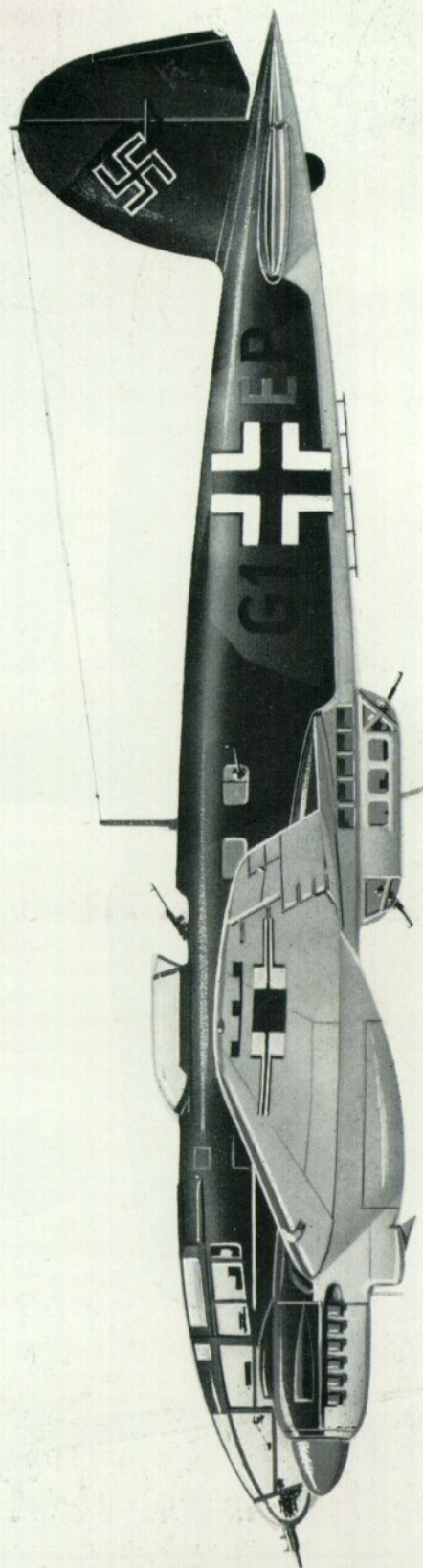


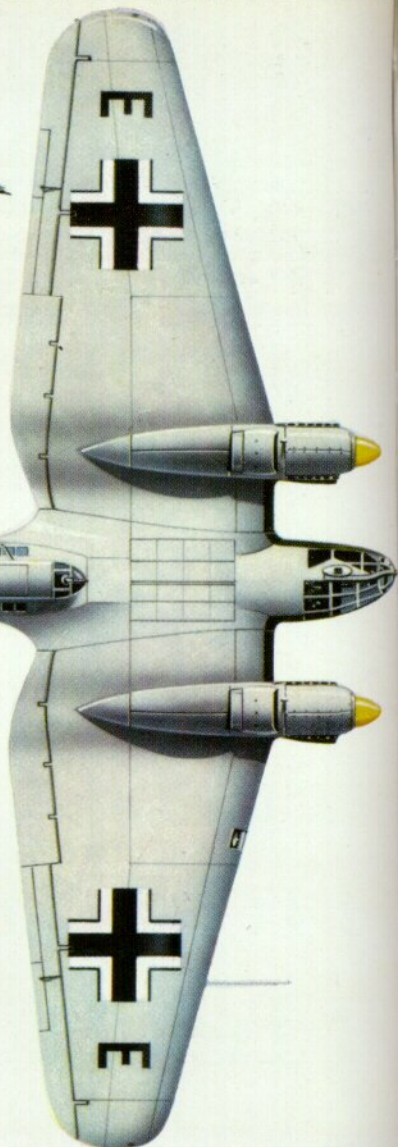
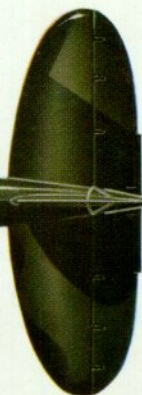
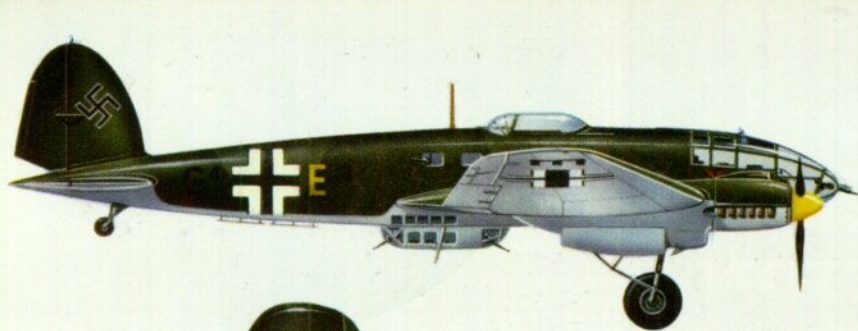
**PROFILE
PUBLICATIONS**

The
Heinkel
He 111H

NUMBER

15

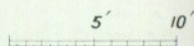
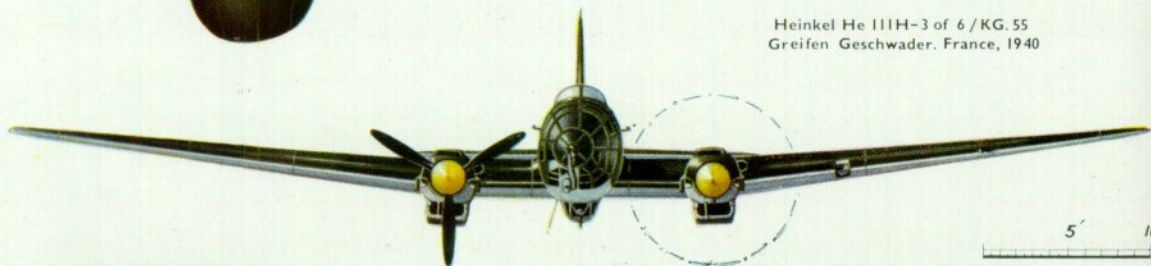




KG.55
Unit Badge



Heinkel He 111H-3 of 6/KG.55
Greifen Geschwader, France, 1940



The Heinkel He 111H



by Martin C. Windrow

HS-?, a Heinkel of KG 4 captured in Tripoli by 260 Squadron, R.A.F.

(Photo: Imperial War Museum)

The final collapse of Germany in the spring of 1945 can be attributed in great part to her inability either to effectively counter the Allied strategic bombing offensive or to mount a significant campaign of retaliation. Eight years previously, the misleading successes of the *Legion Condor* in Spain helped to persuade the leaders of the fledgling *Luftwaffe* that the fast, manoeuvrable medium bomber, used as the spearhead of *blitzkrieg*, was the means by which they would dominate Europe. When the weakness of their chosen weapon was clearly revealed in 1940 and 1941 many pressures (not least that of optimistic apathy) prevented an effective reversal of policy and the foundation of a realistic German strategic bomber force. The Heinkel He 111H and its aging contemporaries continued to roll from the factories, pitifully vulnerable in a type of war for which they had not been designed.

Born on the drawing-boards of Siegfried and Walter Günther, supposedly in response to a specification issued by *Deutsche Lufthansa* for a high-speed mail and passenger aircraft, the Heinkel He 111 displayed from the first the characteristics of a military rather than a commercial aircraft. In view of the imminent announcement of the re-birth of German military aviation, this was no coincidence. Development of the design was carried out in 1934, the first prototype being completed in the winter of 1934/35. The low-wing monoplane was of metal, stressed-skin construction, with an attractively streamlined fuselage. Power was provided by two B.M.W. VI liquid-cooled engines rated at 660 h.p. The He 111V1 made its maiden flight at Marienehe early in 1935, and initial flight trials were encouraging. With a range of 930 miles and a top speed (214 m.p.h.) comparable to those of contemporary fighter aircraft, the prototype had three provisional gun positions and a bomb-load capacity of 2,200 lbs.

The He 111V2 was the first commercial prototype with ten-seat passenger accommodation and a smoking compartment in place of the bomb-bay. The V3 was the next military machine, and the V4, publicly dis-

played for the first time at Berlin-Tempelhof in January 1936, was the second civil version. By this time the first batch of pre-production He 111A-O bombers had already been completed at Heinkel's Rostock plant.

The subsequent development history and *Luftwaffe* acceptance of the pre-war He 111 series does not fall within the scope of this work, but the participation in the Spanish Civil War by He 111B, D, E and F variants serving with *Kampfgruppe* 88 had a very real effect on the career of later sub-types. Out of the virtually unmolested operations of these aircraft over the Government lines in Spain grew the dangerous belief that fast medium bombers with a defensive armament of three rifle-calibre machine guns needed, at the most, only light fighter escort on daylight operations.

DESIGN DEVELOPMENT

The first major changes in the appearance of the basic design came with the He 111P sub-types, which began leaving the assembly lines in 1938. This series embodied the new, straight-tapered wing and streamlined, ventral gondola tested on the He 111V7 and, most striking of all, the re-designed nose-section tested on the He 111V8. Extensively glazed and off-set in the interests of pilot visibility, the new nose formed an unbroken projection of the fuselage contours and was to become the "trade-mark" of He 111s throughout the Second World War.

The He 111H-O and H-1 appeared in the summer of 1939. The prototype for this series was the He 111V19 and the only major difference between the He 111P and early H variants was the switch to Junkers Jumo 211-A engines of 1,000 h.p., for there was considerable demand for the DB 601 powerplant used in the P series for Messerschmitt Bf 109 and Bf 110 fighters. The *Kampfgeschwader* began to re-equip with the He 111H, but few had reached the *Luftwaffe* before the invasion of Poland on 1st September 1939.

During the "Phoney War" and the air battles over Norway and France, it became obvious that the defensive armament of the He 111H-1 (three 7.9 mm.



The He 111V-8, D-AQUO, which was the test-bed for the "glass-house" nose section.

(Photo: Imperial War Museum)

MG 15 machine guns) was totally inadequate. The H-2 was fitted with two further 7.9 mm. weapons mounted in the fuselage side windows for beam protection, and the He 111H-3, powered by Jumo 211D-1 engines of 1,200 h.p., sometimes appeared with the nose-cone MG 15 replaced by a 20 mm. MG FF cannon.

OPERATIONAL SHORTCOMINGS

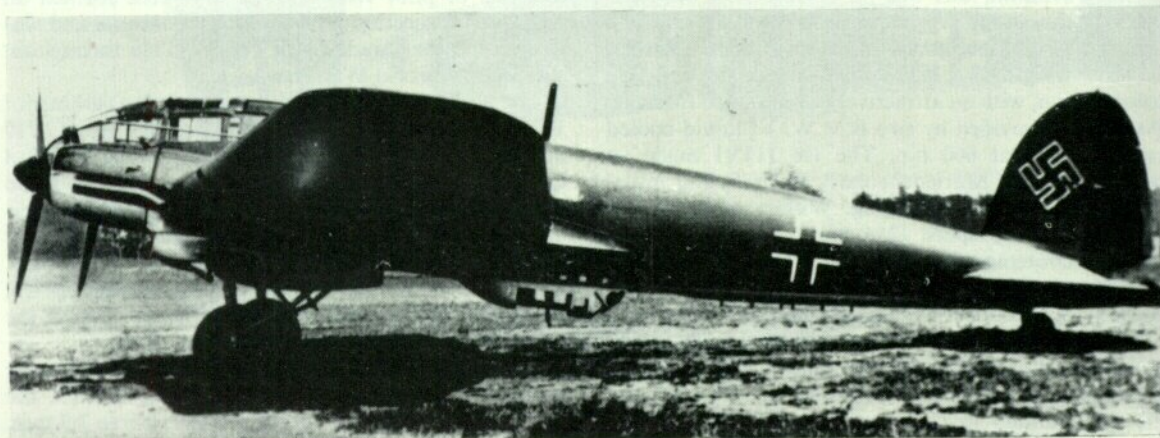
In spite of these modifications, and hard-won experience of combat with modern fighter aircraft, the Heinkel-equipped units which took part in the *Luftwaffe's* daylight offensive against the British Isles in the summer of 1940 were severely mauled. Contrary to the belief of some German schools of thought, the He 111's speed was no guarantee of safety from the attentions of R.A.F. Spitfires and Hurricanes. Losses in the *Kampfgeschwader* involved in this phase of operations (which included KG 53 "*Legion Condor*" and KG 55 "*Grieffen Geschwader*") were heavy, and a feature of this offensive was the high proportion of German bombers which returned to their French bases with dead or severely wounded aircrew. Of the five main crew positions in the He 111H, the ventral gondola was probably the most unpopular; an obvious initial target for interceptors, it earned the nick-name

"*das Sterbebett*"—the Deathbed—in at least one *Gruppe*.

German fighter protection for the bomber units during the Battle of Britain was of limited value, especially in the close support context. It was not unknown for a single under-strength *Gruppe* of Bf 109Es to be provided as escort for two bomber and one Stuka *Geschwader*. One disastrous raid was carried out by III/KG 27 "*Boelke*" without any fighter cover, and the limited range of the Bf 109 cannot be held responsible in this instance. Following the announcement that R.A.F. Fighter Command had for all practical purposes ceased to exist, the *Gruppe* was sent on a mission over several English south coast towns. Only 14 Heinkels returned, all severely damaged.

When the night assault on English cities began, He 111 crews were granted a brief respite from losses of this order. However, by the early months of 1941 R.A.F. night-fighter defences had been strengthened to provide a very real threat to raiders and the morale of *Luftwaffe* bomber crews suffered accordingly. Wireless interference sent many bombers astray, especially on flights to Midland targets when their route crossed the Bristol Channel. This estuary was a constant source of confusion to *Luftwaffe* pilots and navigators.

The Heinkel He 111H-O.





The He 111H-1 in flight.

Probably because of their greater experience in accurate navigation under difficult conditions (they provided the path-finder element in the great Coventry raid), the crews of *Kampfgruppe* (later *Kampfgeschwader*) 100 were withdrawn from night operations over the British Isles in mid-May of 1941. The battle-cruiser *Bismark* was approaching the violent end of her career in the Atlantic, and urgently required air support. The Heinkels never located her; by the time they reached the great ship's last known position she had already been sunk, and KGr. 100 was unable to find "Force H".

Many units involved in these operations flew the Heinkel He 111H-3. Popular with crews for its good handling and control qualities and first-class stability, this variant normally carried 760 Imp. gallons of fuel in its wing cells. The H-4 (Junkers Jumo 211F-2 engines) was fitted with an additional fuselage tank of 184 Imp. gallon capacity in the bomb-bay, the war-load being carried externally under a specially strengthened centre section. The He 111H-5 carried an increased external bomb-load of 5,510 lbs.

THE VERSATILE H-6

One of the most widely used versions of the He 111H was the H-6 variant. Appearing in all theatres of operation in a variety of rôles, the H-6 first proved its

A Staffel of He 111Hs over the English Channel; February 1941.

worth as a torpedo-bomber with I/KG 26 of the famous "*Löwen Geschwader*". Powered by Jumo 211F-2 engines of 1,340 h.p. the Heinkel He 111H-6 could carry two torpedoes externally. In April of 1942 the advance party of I/KG 26 arrived at the new airfields of Banak and Bardufoss on the north-west coast of Norway. In the period June–September 1942, the Heinkels carried out intensive operations against Anglo-American convoys on the "Kola run", the vital series of supply shipments to Murmansk and other North Russian ports. Considerable success was achieved, including profitable sorties against the ill-fated PQ 17, and the He 111H-6 proved itself highly suitable for the maritime attack rôle.

DESERT OPERATIONS

The North African campaign was not remarkable for the scope it offered either the Allies or the Axis for multi-engined bomber operations on a large scale. The rapidly fluctuating front lines and the absence of densely populated areas rendered such operations both wasteful and unwise. Nevertheless, at one time elements of at least three Heinkel-equipped *Geschwader* were active in this theatre.

The desert campaigns did produce at least two Heinkel operations of interest. In January 1941, II/KG

(Photo: Imperial War Museum)



26 was transferred from its base in Norway to Sicily, and at least one *Staffel* flew on to Benghazi. This formation mounted a small-scale raid on the Suez Canal, presumably with the object of mining the narrow channel. On the return flight, all but one of the Heinkels crash-landed in the desert, and several crews were never found. This raid is more significant for its audacity than for its chances of success. In January 1941 the front line lay between Tobruk and Derna, an intermediate landing for fuel was thus impracticable, and the He 111s faced a 1,200 mile round trip. This was near the upper limit of their range potential even with reduced bomb-loads, and navigational errors may well have proved disastrous.

Another imaginative mission was carried out by a Heinkel (probably seconded from KG 4 "*General Wever*") against the French stronghold of Fort Lamy, 1,200 miles south of the *Luftwaffe's* coastal airfields. The mixed German/Italian force which carried out the operation, *Sonderkommando Blaich*, was led by pre-war explorer Theo Blaich, who by Christmas of 1941 was a Hauptmann (Captain) in the *Luftwaffe*. The raid was mounted from Campo Uno, a natural firm-sand airstrip far out in the Libyan Sahara which had been discovered and mapped in 1935. One He 111H, piloted by Leutnant Bohnsack, took off from Campo Uno at 0.800 hrs. on 21st January 1942 with 1,000 gallons of fuel on board. The crew included Blaich (who almost exactly a year previously had been involved in the transport of German agents in He 111Hs of KG 26) and Major Count Vimercati, the Italian Army's desert expert. At 14.30 hrs. the Heinkel made its run-in over the perimeter of Fort Lamy, and destroyed 80,000 gallons of fuel and ten parked aircraft in the face of light and disorganised opposition.

Four hours' northward flight expended the He 111Hs fuel and the aircraft was successfully landed in the desert. After nearly a week the party was located and the Heinkel refuelled by a Junkers Ju 52/3 m of the *Wüstennotstaffel* (Desert Rescue Flight).

THE H-10 TO H-18 VARIANTS

The He 111H-10 began its service in 1943. The bomb-load was carried internally and various modifications were made in defensive armament. Nose armament was standardised at one MG FF cannon and a slightly



Many He 111H variants carried external bomb-loads on strengthened underwing centre-sections, as on this aircraft displayed in London after the war.

altered dorsal position with increased armour-glass protection mounted either one 13 mm. MG 131 machine gun or twin 7.9 mm. weapons in the MG 81 *Zwilling* combination. Few machines of the He 111H-11 sub-type reached the front; this version was an H-6 with fuselage fuel tankage and external racks for five 550 lb. bombs. Special mountings were substituted on the He 111H-12 for the launching of the Hs 293 "semi-guided" bomb, and the H-14 was a variant of the H-10 with improved radio aids for anti-shiping operations. This type served in 1944 on the much-diversified strength of *Kampfgeschwader 40* under the control of the *Fliegerführer Atlantik*.

All the above-mentioned He 111 variants were powered by Jumo 211F-2 engines, as was the next production model to appear, the He 111H-16. Cockpit layout was improved and the nose was more extensively glazed to improve visibility. Both internal and external bomb-loads were carried at various times, and two additions to the defensive firepower first tested in the

The He 111H-8 was simply an H-3 or H-5 variant with the 550 lb. balloon-cable fender/cutter installed. Note the temporary night-camouflage applied to this aircraft. (Photo: Imperial War Museum)





An He 111H-6 at the moment of take-off.

H-6 were re-introduced on some machines. These comprised a forward-firing MG FF cannon in the ventral gondola and a remote control 7.9 mm. machine gun in the extreme rear of the fuselage. The He 111H-18, a sub-type intended for night operations, was basically an H-10 with improved exhaust flame-dampers.

RUSSIAN SERVICE

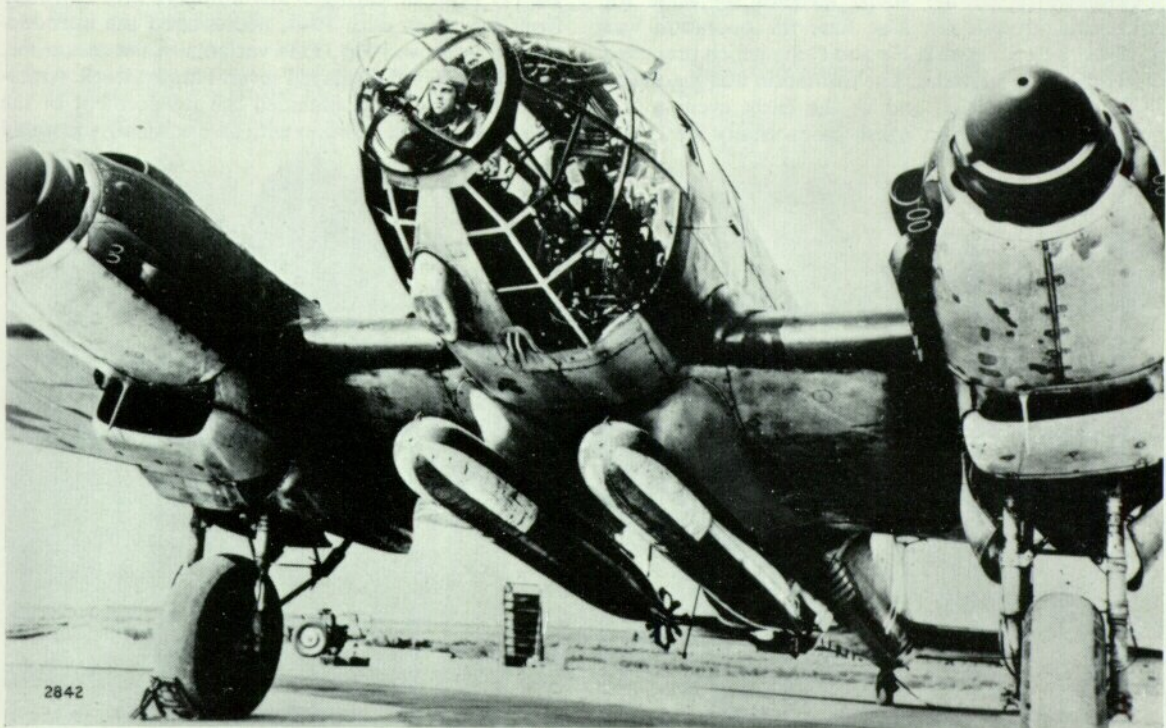
Various models of the He 111H were used in Russia by the *Luftwaffe* and the satellite air forces of Hungary, Rumania and Slovakia. *Luftwaffe* bomber operations in the Soviet Union were dictated rather by local necessity than by any all-embracing strategy. After their initial victories in the western provinces, during which period they to some extent repeated the triumphs of the European *blitzkrieg*, the unfavourable con-

ditions and stiffening resistance from the Soviet Air Force wore down the strength and effectiveness of the *Kampfgeschwader*. The most desirable targets, that is, the industrial centres of the Soviet armaments machine, had been evacuated beyond the range of the Heinkels, Dorniers and Ju 88s. Relegated to the more immediate support of the German Army, the bomber units suffered increasingly at the hands of Russian fighters which were in their element at the low altitudes essential for effective ground support.

Many units sustained heavy losses attempting to fulfil Goering's boast that von Paulus' VIth Army could be supplied exclusively by air in the Stalingrad pocket. The entire strength of KG 55's He 111Hs was employed on transport flights in this area in the mid-winter 1942/43. During and after 1943 the central

He 111H-6 of I/KG 26 "Löwen Geschwader" with practice torpedoes slung beneath the wing-roots.

(Photo: Real Photographs)





Above and Below: A captured machine of KG 26 under test by the R.A.F. Note the unit emblem and "splinter" camouflage. (Photo: Imperial War Museum)

organisation of these units tended to break down, leaving operations largely in the hands of local commanders. *Gruppen* were decimated, recalled to Germany, brought up to *Gruppe* establishment and returned to the *Ostfront*, sometimes redesignated on paper as complete *Geschwader*. Survivors were formed into composite units, and many formations lost their autonomous identity altogether.

One of the relatively few occasions on which successful strategic use was made of the *Kampfgeschwader* in the east was the Poltava raid of 22nd June 1944. Alarmed by the first "shuttle raid" between Italy and Russia carried out by Flying Fortresses and P-51s of the 15th U.S.A.A.F. early in the month as the overture to "Operation Frantic Joe", the *Luftwaffe* kept a close watch on the Soviet airfields set aside for American aircraft. On 21st June the operation was repeated by a force of B-17s and P-51s which branched off from a raid on Berlin. The formation was shadowed by an He 177 *Grief*, and in the early evening 200 bombers took off from Polish bases. Many He 111Hs

of IVth Air Corps units such as KG 4, KG 27, KG 53 and KG 55 took part in the raid, which was executed in imitation of British "bomber stream" methods. There were no German losses, and the weather was mild. Forty-three B-17s, 15 Mustangs and various Soviet machines were destroyed at Poltava, together with 300,000 gallons of fuel. The other "borrowed" airfields at Pirjatin and Migorod were raided the following day and their bomb and fuel dumps destroyed. The *Kampfgeschwader* never repeated this triumph; a new Red Army offensive on 23rd June sent them back to the aid of the ground troops.

FINAL VARIANTS

The delays in production and testing which kept the He 177 from appearing in any numbers with *Luftwaffe* front-line units until 1944, necessitated the introduction of improved He 111H variants in the meantime. The He 111H-20 displayed several innovations. Armament improvements included the replacement of the hood-type dorsal position with an electrically-operated



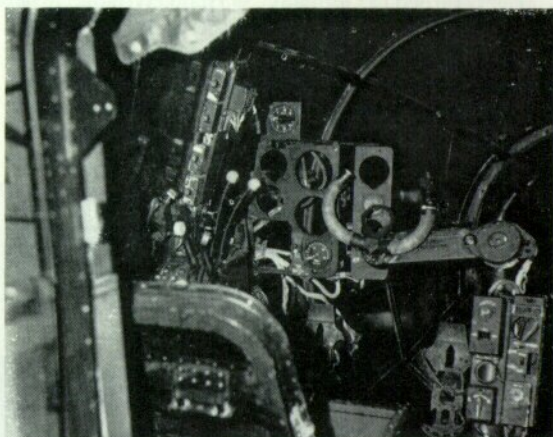
EDL turret mounting a 13 mm. MG 131 machine gun (similar to the installation employed in the Dornier Do 217J). The nose and ventral positions also mounted MG 131s, and each beam position contained twin MG 81s. The gondola carried heavier armour than previously.

Both the He 111H-20 and H-21 sub-types (the latter differed only in having flame-dampers for night operations) were eventually powered by Junkers Jumo 213E-1 engines, affording a maximum speed of 295 m.p.h. and an operational ceiling of nearly 33,000 ft. These powerplants were rated at 1,750 h.p. for take-off and 1,320 h.p. at 32,000 ft., as compared with the 1,776 h.p. take-off rating and 1,600 h.p. developed at 18,000 ft. by the Junkers Jumo 213A-1s which powered initial production models of the H-20 when quantity production commenced in 1944.

The He 111H-23 was the final production variant of

this versatile aircraft. A paratroop transport powered by Jumo 213A-1s, the H-23 carried eight *Fallschirmjäger* who dropped from a hatch in the rear of the modified ventral gondola. This variant featured the nose-section of the H-16 and the EDL turret of the H-20 and H-21.

One of the last operational tasks undertaken by the He 111H before the close of hostilities in Europe was the air-launching of V-1 flying bombs. The late summer of 1944 saw III/KG 3 "*Blitz Geschwader*" engaged in launching operations from Gilze-Rijen in Holland, and in September crews drafted from several units were formed into a re-born KG 53 for training in NW. Germany. Later in the month operations commenced from Venlo, the missiles being launched at night on a westerly course from positions over the North Sea. Tests at the Peenemünde experimental establishment had proved that the most satisfactory



Two photos of pilot's position in the He 111H, showing electrical systems panel and engine controls. (Photos: J. L. E. Maskall)

Despite the quality of this wartime photograph, the Iraqi markings on this Heinkel are discernible. The aircraft, which was used in Syria, still displays its original Luftwaffe swastikas under a thin coat of paint. (Photo: Imperial War Museum)



method was to release the bomb from an underwing carrier between the fuselage and the starboard engine of the He 111H at an altitude of 1,500 ft. More than 800 V-1s were launched in this manner before the advance of Allied troops closed the programme in December 1944-January 1945. Losses through accidents and the action of R.A.F. night-fighters were appalling.

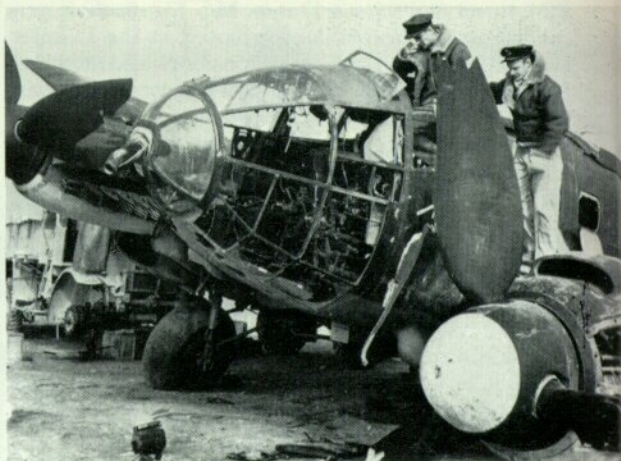
TWILIGHT OF THE HE 111

The characteristic silhouette of the He 111 did not entirely disappear from the skies of the world after the collapse of the Third Reich. Apart from two examples of the He 111H flown by the Czech Air Force well into the 1950s, the Spanish aircraft industry continued quantity production and regular overhaul of the He 111H-16 until very recently.

When hostilities ended in Spain and the *Legion Condor* returned to Germany, 58 Heinkels of the earlier types remained in Franco's service as the equipment of the 14th and 15th Regiment of the Spanish Air Force at Logrono and Zaragoza. These "Pedros" were very popular with Spanish aircrew, and when the question of new equipment arose the choice fell on the

(continued on page 12)

An He 111H-6 takes off with an external bomb-load.



(Photo: Imperial War Museum)

Royal Air Force officers inspect a wrecked He 111H of 7/KG 4 "General Wever" in Libya. This machine, 5J+ER, carried the last two letters of its identification code repeated in small white characters on the leading edge of the port wing, half way between nacelle and tip. Note the "sleeve" for the nose cannon, and the retractable windscreen for use when the pilot's seat was raised for a bad-visibility landing.

(Photo: Imperial War Museum)



LUFTWAFFE UNITS AND MARKINGS

The basic *Luftwaffe* tactical unit was the *Geschwader*. The bomber *Geschwader* (*Kampfgeschwader* or KG) consisted of three, four, or five *Gruppen*, each of which was in its turn made up of three *Staffeln*. These sub-units were numbered independently; thus I/KG 2 (the first *Gruppe* of *Kampfgeschwader* 2) consisted of 1/KG 2 (the first *Staffel* of *Kampfgeschwader* 2), 2/KG 2 and 3/KG 2. Similarly, 7/KG 2, 8/KG 2 and 9/KG 2 made up the strength of III/KG 2.

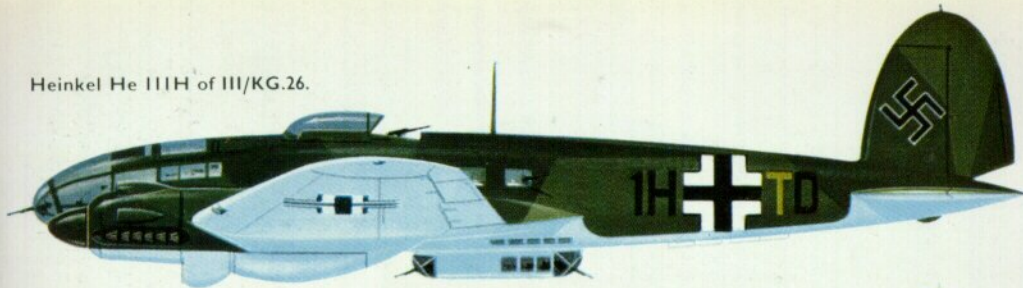
The operational strengths of these formations varied greatly, but an average *Staffel* mustered between ten and 16 aircraft, thus giving a *Geschwader* an establishment of some 110/150 machines.

Kampfgeschwader, *Stuka Geschwader*, *Nachtjagdgeschwader*, *Zerstörergeschwader*, *Transportgeschwader*, *Aufklärungsgruppen* (Reconnaissance Squadrons) and miscellaneous units used a four-symbol code on the

fuselage sides of aircraft for identification purposes. A numeral/letter code appeared on the left-hand side of the national marking, identifying the *Geschwader*; e.g., U5=KG 2. From 1943 onwards this combination either appeared in very small characters or was omitted altogether. Sometimes it was reproduced in small characters on the vertical tail surfaces of bombers, and often temporary camouflage finishes were applied in such a way as to obscure it.

On the right of the national marking two letters appeared. The first, painted or outlined in the *Staffel* colour, or in green on staff aircraft, identified the individual aircraft. The second letter identified the *Staffel* within the *Geschwader*. Towards the end of the war, it increasingly became the practice for the individual marking only to be applied to the fuselage; and this was often repeated under the wingtips.

Heinkel He 111H of III/KG.26.



III/KG.26.

Heinkel He 111H in all-white winter scheme, Norway, 1943.



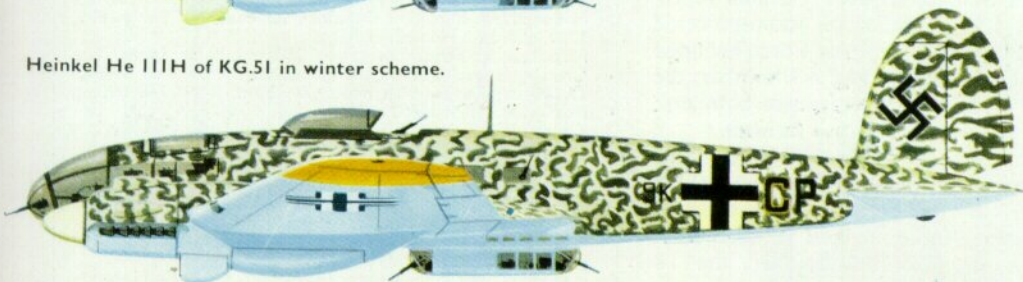
KG.4, General Wever

Heinkel He 111H in Western Desert camouflage, Benina, Cyrenaica, 1942.



He 111, communications unit, Western Desert.

Heinkel He 111H of KG.51 in winter scheme.



KG.51, Edelweis Geschwader.

Heinkel He 111H of II/KG.53 in winter scheme, North Europe, 1943-4.

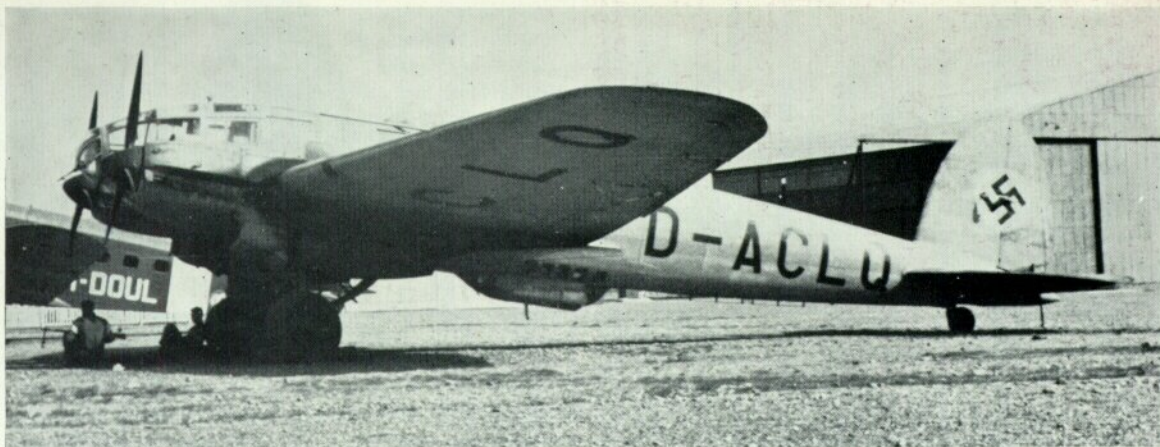


II/KG.53, Condor Legion

Heinkel He 111H of KG.100 in non-standard night bomber scheme, England, 1943.



KG.100.



A Heinkel He 111H at Algiers airport, November 1942. Despite the commercial markings, the machine gun in the nose is clearly visible. Such aircraft were used by the Franco-German Armistice Commission in North Africa. (Photo: Imperial War Museum)

latest model of the well-tried Heinkel design. The Spanish government opened negotiations with the Ernst Heinkel A.G. for the licence manufacture of a batch of He 111H-3s; but eventually it was the H-16 variant which entered production at a new plant at Tablada in Seville. The Construcciones Aeronauticas S.A. received an order for 200 aircraft, but it was not until 1945 that the first batch was ready to fly.

By this time it was apparent that no further supplies of Jumo 211F-2 engines would be forthcoming after existing stocks had been exhausted. Variants represented among the 130 examples of Jumo-powered machines delivered to the Spanish Air Force included the C.A.S.A. C.2111-A, A1, A2 and A3 bomber; the C.2111-C, C1, C2 and C3 reconnaissance bombers; and the C.2111-F and F1 dual control trainers.

It was finally decided to adapt the C.2111 series for future production with the Rolls-Royce Merlin 500-20, and an order for 173 of these powerplants was placed in April 1956. Several Merlin-engined variants were delivered, including the C.2111-B bomber, the T8 transport (with gun positions removed and accommodation for nine passengers) and the C.2111-D and D1 reconnaissance bombers. At the time of writing, more than one unit equipped with aircraft of this series is still in service with the Spanish Air Force.

© Martin C. Windrow, 1965

SPECIFICATION HEINKEL He 111H-6

Dimensions: Span 74 ft. 1½ in.; Length 54 ft. 5½ in.; Height 13 ft. 9 in.; Wing Area 942 sq. ft.
Weights: Normal loaded 25,000 lbs. Maximum 27,400 lbs.
Powerplant: Two Junkers Jumo 211F-2 twelve-cylinder inverted-Vee liquid-cooled engines of 1,340 h.p. (take-off rating) and 1,060 h.p. (17,000 ft.).
Armament: Bomb load capacity: 5,510 lbs. (mounted externally) or two torpedoes mounted externally on maritime variant. Defensive armament: One 7.9 mm. MG 15 machine gun in nose position. One 7.9 mm. MG 15 in each of two beam positions. One forward-firing 20 mm. MG FF cannon in ventral gondola. One rearward-firing 7.9 mm. MG 15 in ventral gondola. One 7.9 mm. MG 15 in dorsal position. One fixed remote-control 7.9 mm. MG 17 in extreme rear of fuselage.
Performance: Maximum speed 258 m.p.h. at 16,400 ft.; Cruising speed 224 m.p.h. at 16,400 ft.; Service ceiling 25,500 ft.; Range with maximum bomb load 760 miles; Maximum range 1,740 miles.

C.A.S.A. C.2111-D

Dimensions: Span 74 ft. 3 in.; Length 54 ft. 6 in.; Height 13 ft. 9 in.; Wing Area 931 sq. ft.
Weights: Normal loaded 26,455 lbs. Maximum 30,865 lbs.
Powerplant: Two Rolls-Royce Merlin 500-29 twelve-cylinder Vee liquid-cooled engines of 1,610 h.p. (take-off rating) and 1,015 h.p. (15,500 ft.).
Armament: Bomb load capacity: 2,200 lbs. (carried internally). (The four starboard bomb cells are replaced by a universal camera mounting.) Defensive armament: One 12.7 mm. Breda-SAFAT machine gun in nose position. One rearward-firing 7.92 mm. M-15 machine gun in ventral gondola. One 7.92 mm. M-15 in dorsal position.
Performance: Maximum speed 260 m.p.h. at 14,760 ft.; Cruising speed 245 m.p.h. at 16,400 ft.; Service ceiling 27,890 ft.; Maximum range 1,550 miles.

STAFFEL IDENTIFICATION

Staffel Colour	I Gruppe	II Gruppe	III Gruppe	IV Gruppe	V Gruppe
White	1st Stfl. = H	4th Stfl. = M	7th Stfl. = R	10th Stfl. = U	13th Stfl. = X
Red	2nd Stfl. = K	5th Stfl. = N	8th Stfl. = S	11th Stfl. = V	14th Stfl. = Y
Yellow	3rd Stfl. = L	6th Stfl. = P	9th Stfl. = T	12th Stfl. = W	15th Stfl. = Z

Thus, U5+(red F) N was machine "F" of 5/KG 2.

Staff Aircraft Identification.

These letters took the place of the fourth, or Staffel, symbol.

Geschwader Staff = A	III Gr. = D
I Gruppe = B	IV Gr. = E
II Gr. = C	V Gr. = F

Units known to have operated the He 111H during their service include:—

KG 1 "Hindenburg" (V4); KG 4 "General Wever" (5J); KG 26 "Löwen Geschwader" (1H); KG 27 "Boelke" (1G); KG 40 (F8); KG 51 "Edelweis-Geschwader" (9K); KG 53 "Legion Condor" (A1); KG 54 "Totenkopf Geschwader" (B3); KG 55 "Griefen Geschwader" (G1); KGr. (later KG) 100 (6N).