Atlas deutscher und ausländischer Seeflugzeuge.

THE HANSA-BRANDENBURG SEAPLANES PART 1

THE EARLY LETTERED DESIGNATIONS

Compiled by Paul Leaman

The Hansa und Brandenburgische Flugzeugwerke – more commonly known as 'Hansa-Brandenburg' came into being in May 1914, when Camillo Castiglioni bought the *Brandenburgische Flugzeugwerke* and moved its factory from Libau to Brandenburg am Havel, acquiring, in the process, the services of Ernst Heinkel who had been the chief designer of the original company.

Heinkel had served a production engineering apprenticeship and, by part time study at Stuttgart's Technical College, added technical qualifications to his practical knowledge. Inspired by early Zeppelin flights and then the 1909 Frankfurt flying display, he became fascinated by aviation. In 1910 he built his own aeroplane, based on the Henry Farman design. Although he crashed this and injured himself in the process, he had established his credibility as an aircraft designer. His first employment in this field was with the newly formed LVG company (*Luftverkehrsgesellschaft GmbH*) in Berlin. Gaining experience, he moved to the Albatros company (*Albatros Flugzeugewerke GmbH*) where he became chief designer; Amongst his designs here was the Albatros B.II. From Albatros, he moved to Hansa Brandenburg where he remained until the company was dissolved at the end of the war. He then started his own electrical engineering company and this became an aircraft manufacturing company as soon as permitted by Treaty of Versailles. His subsequent career is beyond the scope of this article.

While Hansa-Brandenburg did build some landplanes, the company was best known for the seaplanes that it designed and built for both the German and Austro-Hungarian navies.

The two-seat single engine W was an unarmed three-bay biplane floatplane of pre-war design, in which the pilot sat in the rear cockpit and the observer in front. It had a Benz BZ.II 150hp engine. The first was delivered in December 1914 and twenty-seven of the type were eventually built. They were used for maritime reconnaissance by the German navy.

The AE was a two seat single engine unarmed floatplane, used mainly by the Austro-Hungarian navy for marine reconnaissance and only one of the type was delivered to the German navy.

The NW was an updated version of the original W, built in 1915. It was powered by a Mercedes D.III 160hp engine. Originally intended for use on maritime reconnaissance and patrol work, lacking armament, they were eventually used for training purposes.

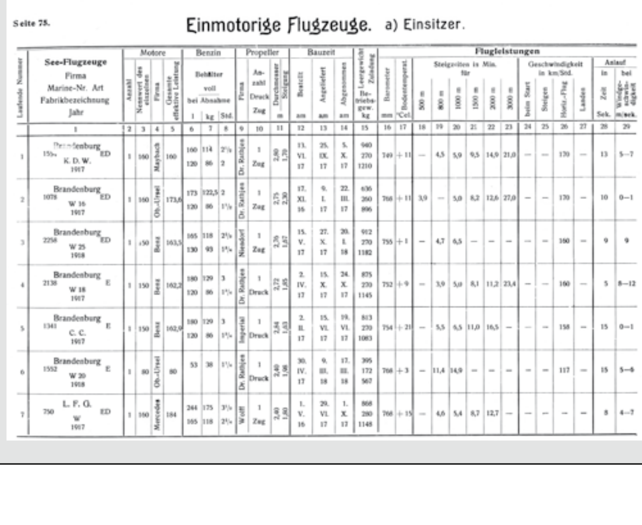
The FB was a three-seat, single engine flying boat designed for maritime patrol and reconnaissance. This was Ernst Heinkel's first flying boat design. Six of the type were built for the German navy and saw extensive service. Many more were built for the Austro-Hungarian navy which favoured flying boats and these saw widespread service in the Adriatic.

The GW was a large twin engined floatplane, designed as a torpedo strike aircraft during 1916. The prototype, built in early 1916, was fitted with frontal radiators, just above each of the two 160hp Mercedes D.III engines, and three vertical tail surfaces. It was designed to carry and launch a 725kg torpedo. The type went into production and a further twenty-five machines were built. These differed in detail from the prototype and also amongst themselves. In all cases, the radiators were moved to the top wing where they were fitted flush with the upper surface. GW aircraft saw service with *1 Torpedostaffel*, based on the Angersee (now Lake Engure), in Latvia, and were employed against Russian ships in the Gulf of Riga and the Baltic. Others were based elsewhere on the Baltic coast and also on the North Sea coast.

The ambitiously-titled ***Atlas Deutscher und Ausländischer Seeflugzeuge*** was published by the Seeflugs-Versuchs-Kommando at Warnemünde in two Top Secret (*Ganz geheim!*) volumes in 1917 and 1918. The page numbering, seen only in photographic copies, appears somewhat idiosyncratic, giving a total of 80 printed sides in Vol 1 and 93 in Vol 2. The page size is 24×31cm.

After the usual preliminaries and abbreviations, Vol 1 has three sections: the drawings, as reproduced in this series of articles; *Stabilitätsblätter* giving information on loading and balance in the form of graphs; and *Tabellen*, double page spreads of technical specifications such as engine type, fuel capacity and performance figures. This section is divided into sub-sections: single-engined single-seater; single-engined two-seater; twin-engined, and so on.

Vol 2 contains in addition to these sections, *Statistische Blätter über Bestellung und Ablieferung aller Seeflugzeuge in der Zeit vom 1. August 1919 bis 1. Juli 1918 – Statistical Pages on the ordering and delivery of all seaplanes in the period 1 August 1914 to 1 July 1918*. Only a very small number of foreign seaplanes actually appear in these volumes: a captured Russian machine of unnamed type, a Benoist, a Sopwith and an FBA. Perhaps further volumes were planned but never completed. The two that were produced appear to be extremely rare. *BH*



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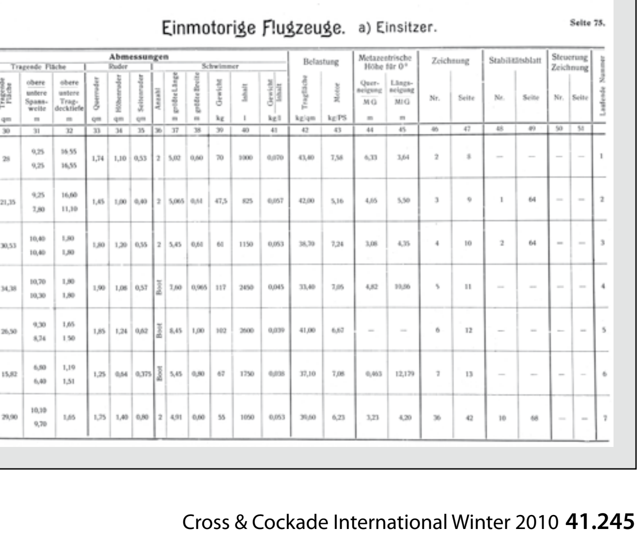
Einmotorige Flugzeuge. a) Einsitzer.

Laufende Nummer	See-Flugzeuge: Firma, Marine-Nr. Art, Fabrikbezeichnung, Jahr	Motore: Anzahl	Motore: Nennwert des einzelnen	Motore: Firma	Motore: Gesamte effektive Leistung	Benzin: Behälter voll bei Abnahme l	Benzin: kg	Benzin: Std.	Propeller: Firma	Propeller: Anzahl Druck Zug	Propeller: Durchmesser / Steigung m	Bauzeit: Bestellt am	Bauzeit: Angeliefert am	Bauzeit: Abgenommen am
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Brandenburg 155[illegible] ED K. D. W. 1917	1	160	Maybach	160	160 120	114 86	2½ 2	Dr. Rathjen	1 Zug	2,80 1,70	13. VI. 17	25. IX. 17	5. X. 17
2	Brandenburg 1078 ED W 16 1917	1	160	Ob.-Ursel	173,6	173 120	122,5 86	2 1½	Dr. Rathjen	1 Zug	2,75 2,30	17. XI. 16	9. I. 17	22. III. 17
3	Brandenburg 2258 ED W 25 1918	1	150	Benz	163,5	165 130	118 93	2½ 1½	Niendorf	1 Zug	2,20 1,67	15. V. 17	27. X. 17	20. I. 18
4	Brandenburg 2138 E W 18 1917	1	150	Benz	162,2	180 120	129 86	3 1½	Dr. Rathjen	1 Druck	2,72 1,85	2. IV. 17	15. X. 17	24. X. 17
5	Brandenburg 1341 E C. C. 1917	1	150	Benz	162,0	180 120	129 86	3 1½	Imperial	1 Druck	2,84 1,63	2. II. 17	15. VI. 17	19. VI. 17
6	Brandenburg 1552 E W 20 1918	1	80	Ob.-Ursel	80	53	38	1½	Dr. Rathjen	1 Druck	2,40 1,98	30. IV. 17	9. III. 18	17. III. 18
7	L. F. G. 750 ED W 1917	1	160	Mercedes	184	244 165	175 118	3½ 2½	Wolff	1 Zug	2,40 1,80	1. V. 16	29. VI. 17	1. X. 17

Laufende Nummer	Leergewicht / Zuladung / Betriebsgew. kg	Flugleistungen: Barometer mm	Bodentemperat. °Cel.	Steigzeiten in Min. für 500 m	800 m	1000 m	1500 m	2000 m	3000 m	Geschwindigkeit in km/Std.: beim Start	Steigen	Horiz.-Flug	Landen	Anlauf: in Zeit Sek.	bei Windgeschwindigkeit m/sek.
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	940 270 1210	749	+11	—	4,5	5,9	9,5	14,9	21,0	—	—	170	—	13	5—7
2	636 260 896	768	+11	3,9	—	5,0	8,2	12,6	27,0	—	—	170	—	10	0—1
3	912 270 1182	755	+1	—	4,7	6,5	—	—	—	—	—	160	—	9	9
4	875 270 1145	752	+9	—	3,9	5,0	8,1	11,2	23,4	—	—	160	—	5	8—12
5	813 270 1083	754	+21	—	5,5	6,5	11,0	16,5	—	—	—	158	—	15	0—1
6	395 172 567	768	+3	—	11,4	14,9	—	—	—	—	—	117	—	15	5—6
7	868 280 1148	768	+15	—	4,6	5,4	8,7	12,7	—	—	—	—	—	8	4—7



Einmotorige Flugzeuge. a) Einsitzer. Seite 75.

Abmessungen: Tragende Fläche: Tragende Fläche qm	obere / untere Spannweite m	obere / untere Tragdecktiefe m	Ruder: Querruder qm	Höhenruder qm	Seitenruder qm	Schwimmer: Anzahl	größte Länge m	größte Breite m	Gewicht kg	Inhalt l	Gewicht / Inhalt kg/l	Belastung: Tragfläche kg/qm	Motor kg/PS	Metazentrische Höhe für 0°: Querneigung MG m	Längsneigung MG m	Zeichnung: Nr.	Seite	Stabilitätsblatt: Nr.	Seite	Steuerung Zeichnung: Nr.	Seite	Laufende Nummer
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	
28	9,25 9,25	16,55 16,55	1,74	1,10	0,53	2	5,02	0,60	70	1000	0,070	43,40	7,58	6,33	3,64	2	8	—	—	—	—	1
21,35	9,25 7,80	16,60 11,10	1,45	1,00	0,40	2	5,065	0,61	47,5	825	0,057	42,00	5,16	4,05	5,50	3	9	1	64	—	—	2
30,53	10,40 10,40	1,80 1,80	1,80	1,20	0,55	2	5,45	0,61	61	1150	0,053	38,70	7,24	3,08	4,35	4	10	2	64	—	—	3
34,38	10,70 10,30	1,80 1,80	1,90	1,08	0,57	Boot	7,60	0,965	117	2450	0,045	33,40	7,05	4,82	10,06	5	11	—	—	—	—	4
26,50	9,30 8,74	1,65 1,50	1,85	1,24	0,62	Boot	8,45	1,00	102	2600	0,039	41,00	6,67	—	—	6	12	—	—	—	—	5
15,82	6,80 6,40	1,19 1,51	1,25	0,64	0,375	Boot	5,45	0,80	67	1750	0,038	37,10	7,08	0,463	12,179	7	13	—	—	—	—	6
29,90	10,10 9,70	1,65	1,75	1,40	0,80	2	4,91	0,60	55	1050	0,053	30,60	6,23	3,23	4,20	36	42	10	68	—	—	7