



# Atlas deutscher und ausländischer Seeflugzeuge.

## THE GOTHA SEAPLANES: PART I

Compiled by Paul Leaman

THE NAME 'GOTHA' is usually associated with the series of large twin-engined biplane bombers that were used by the German air force to attack London and other cities in the south of England from the spring of 1917 onward. The impact of these raids on the minds of the British public was to lead them to think of all of Germany's large bombers simply as 'Gothas' – whoever had designed and built them. But large bombers were not the only aircraft produced at the works of *Gothaer Waggonfabrik AG*; they also produced a series of some eighteen different floatplanes. Mostly, these designs were single prototypes but a number were successfully developed into production aircraft for use by either the *Marine-Luftschiff-Abteilung*, the German navy's air arm, or the Turkish government's equivalent (German support for the Turkish forces included the secondment of 'advisors' to both that country's army and navy).

As a consequence Gotha seaplanes could be found in the Baltic and North Sea areas, the Eastern Mediterranean, the Adriatic and the Black Sea. All of the Gotha floatplanes were identified by a type number preceded by the initials WD; *Wasser-Doppeldecker* – water-biplane. Engineers involved in the design of Gotha floatplanes include Oscar Ursinus; Karl Rosner (responsible for the WD2) and A. Klaube.

*Gothaer Waggonfabrik AG* was based in Thuringia, in central Germany. With no nearby rivers or lakes, testing of seaplanes was limited to flotation tests on an especially built tank before the completed aircraft were shipped to Warnemünde for acceptance tests.

In the autumn of 1913, after strong recommendations by *Kapitan* Schultz of the German navy, the German government purchased an Avro 503. After a number of visits to the Avro factory while the Avro 503 was being built, Schultze was allowed to fly it. The machine was dismantled and shipped to Wilhelmshaven. Re-assembled on 13 September, it was flown by Lt W. Langfeld the 40 miles from there, across the North Sea, to the Island of Heligoland. On 15 September it was flown on to Cuxhaven. This aircraft became the pattern upon which the first Gotha seaplane design, the WD1, was based. All of the following Gotha seaplanes were mounted on a pair of floats.

Three aircraft, given the Marine Numbers 59 to 61, but without type designation, appear on the Atlas listing before

the WD1 is shown. Unlike the WD1, they are shown to have had 100hp Gnome engines and so it is probable that they were, in fact, Gotha-built direct copies of the Avro 503.

The WD1 was virtually an Avro 503 with some slight modifications that included the use of an unspecified German-built engine. A total of five machines of the type were built and these saw service on coastal patrol work in the early days of the war.

The WD2 was a new design, a two-seat, single-engine biplane that was intended for coastal patrol and reconnaissance work. Ten unarmed aircraft of the type were delivered to the German navy for use on coastal patrol work. A further unspecified number was delivered to the Turkish navy. This version (known in Germany as the *Türken-Flugzeug*) differed in that it was equipped with a single Parabellum machine gun, on a flexible mounting on the centre section of the top wing. This arrangement allowed it to fire forward over the propeller arc and around a 360° field of fire. To operate it, the observer (who was seated in front of the pilot) stood on his seat with his upper body through an aperture in the upper wing. The number of these supplied to Turkey is not known.

The WD3 was a novel departure from the previous designs. It was a twin boom, two-seat, single pusher engine biplane with a central nacelle. The observer/gunner sat in the nose and was armed with a single Parabellum machine gun on a flexible mounting. The WD3 was fitted with a transmission-only radio set. Some sources say that only one aircraft was produced, but the Atlas gives production dates and serials for six machines. There is no indication of the type's employment but it can be assumed that it again was intended for coastal reconnaissance and patrol work.

There is no record of a WD4 on the Atlas listing and the next design to appear was the WD5. This machine was modified from WD2 Marine Number 118 and had its wingspan reduced from three to a two-bay format. Only the one machine was produced and *Kapitan* Langfeld retained this for his personal use – even after he had left the command of the *Haltenau* and transferred to Constantinople.

There is also no record of a WD6 in the Atlas or elsewhere, so the next machine was the WD7. This was produced to meet the navy's requirement for a twin-engine biplane capable

A rear view of the first Avro 503 at Shoreham during 1913, showing the basic geometry of the type. The slab-sided fuselage was relatively narrow, necessitating bulges in the forward aluminium panelling to accommodate its rotary engine. The unequal span wings had ailerons on the upper mainplanes only and the floats were of the pontoon type.

:Eric Harlin

