

Atlas deutscher und ausländischer Seeflugzeuge.

RUSSISCHES BEUTE-FLUGBOOT

GRIGOROVICH M-9

Compiled by Paul Leaman

ONE OF THE FINAL AIRCRAFT listed in the 'Atlas' is named as the *Russisches Beute-Flugboot*, in English, the 'Booty (or captured) Russian Flying Boat'. A close look at the drawing that appears on the page of technical details reveals that this machine was a Grigorovich M-9 flying boat; not surprising really as this model was the most numerous of the flying boats used by the Russian navy over a long period of time. Further examination of available 'facts' reveals that one such aircraft was captured by the Germans on 18 May 1917 and it is most likely that this machine is the one examined and reported upon by the staff of the *Seeflugzeug-Versuchs-Kommando* at Warnemünde in 1917.

Dmitry Pavlovich Grigorovich was born in Kiev in the Ukraine in 1883.¹ From an early age, Grigorovich had an enquiring mind and a fascination with the solution of mechanical problems. When he was old enough, he was admitted to the Kiev Polytechnic Institute and, after studying a wide range of subjects that included both French and German languages as well as mechanics and aeronautics, he graduated from there in 1910. His first employment was in Kiev, as an aviation journalist, but in 1913 he moved to St Petersburg to work in the design office of the newly formed aeronautical department of the Shchetinin company.²

At this time, the company's aeronautical involvement was mainly the result of contracts that they had been awarded for the construction of small batches of French Nieuport and Farman designed aircraft for the Russian army but this changed when they were tasked to repair a badly damaged Donnet-Leveque flying boat belonging to Commander D.N. Alexandrov of the Russian Imperial navy. This had been badly damaged in a flying accident and, after tendering the lowest price for its repair, Shchetinin won the contract.³ Study of the machine's design and construction led Grigorovich to the design of a new flying boat that, although based closely upon the Donnet-Leveque, incorporated a number of his own improvements. As a result of this success, Shchetinin built a number of flying boats during the 1914-1918 period all designed by Dmitry Grigorovich and his team.

The first of these was the M-1,⁴ in some sources known as the Shch-1,⁵ which was closely based on what he had learned from the damaged Donnet-Leveque. While the M-1⁶ was a close copy of the Donner-Leveque original it differed in a number of

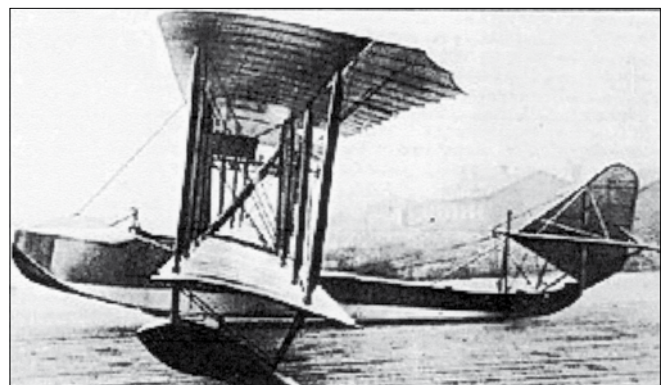
ways. It had a much shorter nose, the single step under its hull was shallower and it had totally redesigned wings that used an airfoil section based upon that of the Farman F.16. First flown in 1913, the M-1 proved to have greatly improved flying abilities over the Donnet-Leveque original. The Russian navy was pleased with this result and placed an order with the company for a second, similar, machine. Based on the M-1 design which had flown in 1914, this became the M-2. It featured a further improved planing bottom with a triangular section rear end that was lifted to raise the tail assembly away from the water. Its lower wing was mounted on the engine support frame, one metre above the fuselage. The engine, a rear facing 100hp Clerget rotary engine driving a pusher propeller, was carried just below the upper wing. It met the navy's requirements and four of the type were ordered, built and delivered to that service.

This design was followed by two more types, the M-3 and M-4. There appears to be no mention of these in the navy's records so it is probable that they were built as prototypes and retained by the company for flight testing and experimental purposes. Grigorovich's next design was of the M-5. This was nominally a three seat flying boat – but was usually flown with a crew of just two – a pilot and an observer/gunner.

It was similar in most ways to his earlier designs with three-bay, biplane wings. It was of all wood construction with its boat shaped hull built on a frame of ash longerons and vertical struts covered with plywood of thicknesses that varying from 6mm in the high impact areas of the planing surfaces to 3mm

The Grigorovich M-2 and M-3.

:CCI Archive



The M-1/Shch-1.

:CCI Archive

