



## A/S Nielsen & Winther



The fourth Danish company to venture into aircraft construction was a civilian company “**A/S Nielsen & Winther**” a large machine building factory situated in Copenhagen also on the island of Amager as the three first ones. On August 1<sup>st</sup> 1916 an “Aeroplanafdeling” (aeroplane Section) was established with the Director being 1<sup>st</sup>LT J.B. Ussing from the Army, who had been a leading force in establishing production of the first army aircraft. As Manager of the department Engineer H. Funch-Thomson, who had been working for the German Hansa-Brandenburg factories was hired. Soon a very narrow working relation was established with the Swedish engine factory “Thulin” which delivered the engines for the first design. This was the fighter **Type Aa**, which first flew on January 24 1917 powered by a 90HP Thulin engine (a copy of the Le Rhone engine). This was the first fighter type aircraft ever designed and built in Denmark and it also became the last! Type Aa was armed with a single 8mm Madsen machinegun placed on the upper wing. Later this was to be replaced with a synchronized gun firing through the propeller and many tests were made to accomplish this. Six of the fighters were ordered by the Army and all were delivered in 1917. The type however, suffered its teething problems and three were lost in crashes mainly due to the unreliable engines. In 1919 when the War Ministry prohibited flying with aircraft with unreliable engines (included were all Thulin manufactured engines) two aircraft were relegated as ground rolling trainers. In 1918 two examples of a two-seater version the **Type Ab** intended as a reconnaissance plane was flown and after the war in 1918 one was sold to the Danish Argentinean pilot A. Jarfeldt who had been assigned the duty of organizing a Bolivian Air Force in 1917. He brought it with him

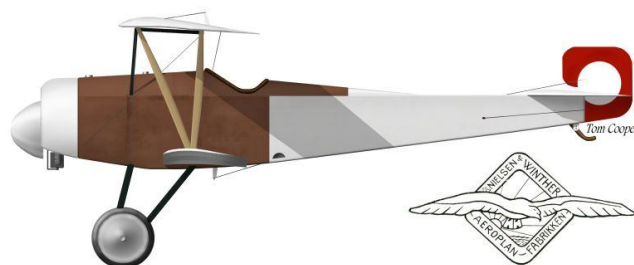
to Argentina where it later crashed on its way to Bolivia. A two-seat floatplane version of the Aa the **Type Ac** was built and tested as a prototype in 1918. N & W became the first Danish aircraft exporter in the autumn 1918 when they delivered a single **Type Bd** two-seater floatplane aircraft for the Norwegian Navy. It was equipped with a 110HP Scania-Vabis engine which was a copy of a Mercedes engine. In Norwegian service it was used as a trainer, but crashed already on 30 April 1919. At this time N & W had developed a 170HP inline water-cooled engine called **M.A.J** and for this a 4-person "Tourist-aircraft" (maybe called the Type Da) was designed and built. It was probably never flown and the project shelved. The next design was more successful being a one-seater trainer intended for non-flying rolling training (probably designated Type Ca). Several of these planes served with the N & W Flying School which among many others gave training to the later Piper Cub producer Chr. Bohnstedt-Petersen. The last design to take to the air was the so-called "Sports Flying Boat" **Type Fa** powered with a 90HP Thulin-A engine (20 of which were built by N & W) two were built, one delivered to a Danish flying circus operator the other to Norway where it became the first civilian aircraft registered as N.1. Despite all the energy the company could not cope with the influx of very cheap aircraft put on the market after the end of the World War and ceased operation in the summer of 1919.

**A/S Nielsen & Winther-Aeroplanafdeling (1916- summer 1919)(14 aircraft)**

Aa 1917 N&W.1	1-seat fighter with 90HP Thulin engine. Del.15jan17, 31mar19 wfu
Aa 1917 N&W.2	17dec17 crashed
Aa 1917 N&W.3	19mar19 crashed
Aa 1917 N&W.4	31mar19 converted to ground trainer, 1924 scrapped
Aa 1917 N&W.5	31mar19 converted to ground trainer, 1924 scrapped
Aa 1917 N&W.6	17oct18 crashed
Ab 1918 N&W.70	sold to A.Jarfeldt Danish/Argentinian pilot, exported to Argentina/Bolivia
Ab 1918 N&W.71	completed but not delivered
Ac 1918 N&W	2-seat float-plane version of Aa (prototype) crashed Øresund
Bd 1918 N&W	2-seat float plane 110HP Scania-Vabis, exported to Norwegian Navy
C 1918 N&W	Bi-plane ground rolling trainer used by N & W flying School
C 1918 N&W	"
D 1918 N&W	4-seater "Tourist-biplane" 170HP N&W M.A.J. engine. probably never flown
E 1919 N&W	planned Cargo aircraft 170HP N&W M.A.J. engine, not built
Fa 1918 N&W	Sports flying-boat. Sold to C.Hundinghouse Jensen
Fa 1918 N&W.21	Sports flying-boat exported to Norway, registered as N1 to Einar Juell



Line-up of four N&W fighters, the only fighter type in service by the Danish Army in the 1st World War.





Aa



### N&W Aa fighters with the Danish Army



N&W.1



N&W.2



N&W.3



N&W.5



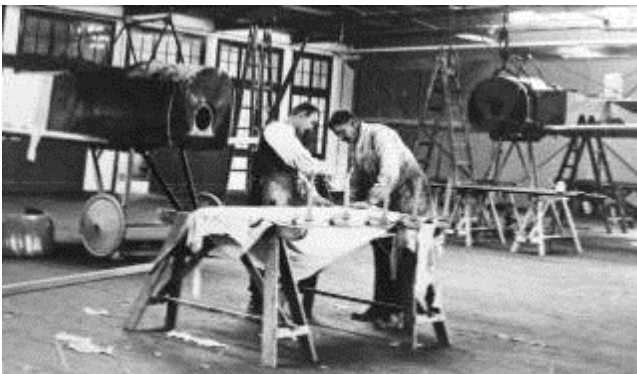
N&W.4



N&W.6



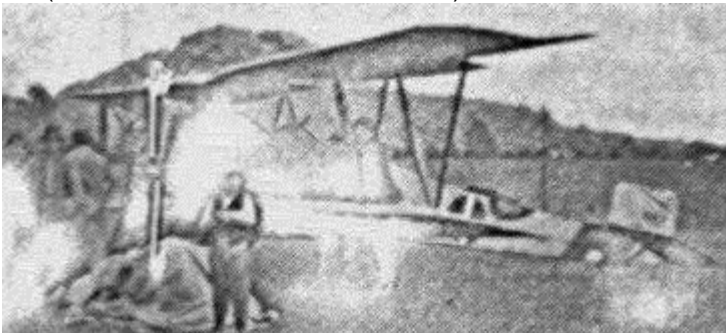
N&W.4, one of two N&W Aa's converted as a ground trainer



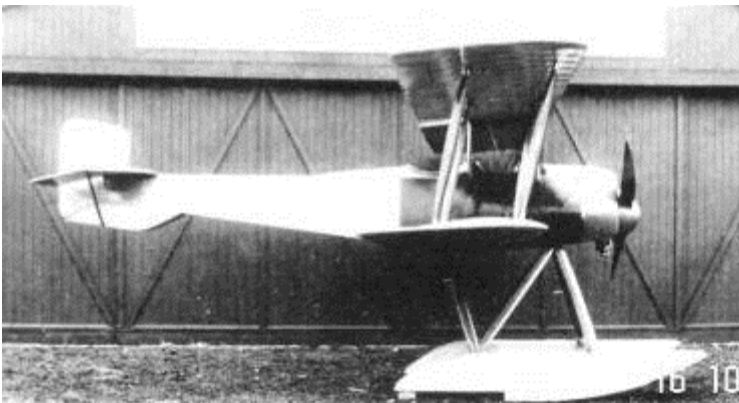
Ab (the two aircraft ordered for Bolivia)



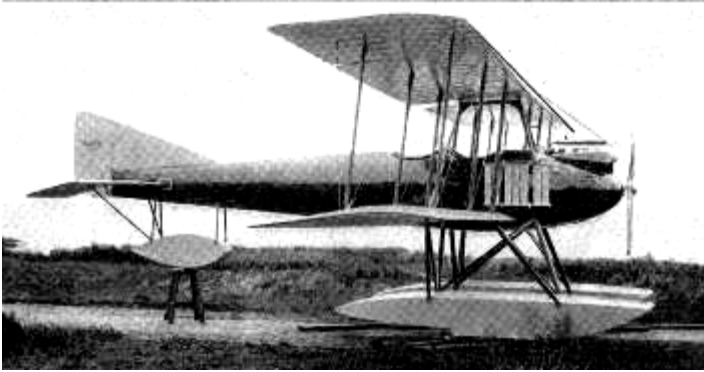
Ab in Argentina with Jarfeldt in front



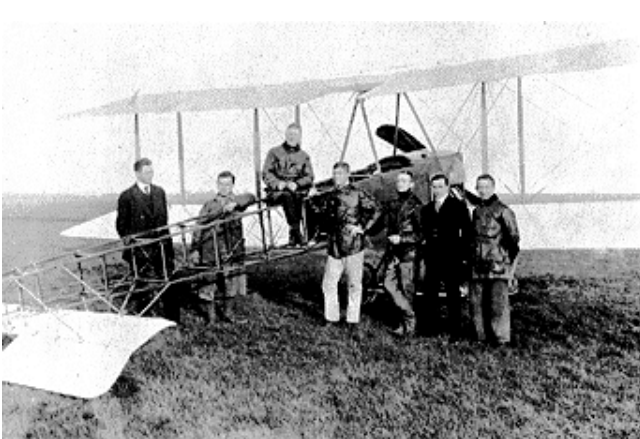
The Ab in Bolivian Air Force colours (cocarde is red with a white cross)



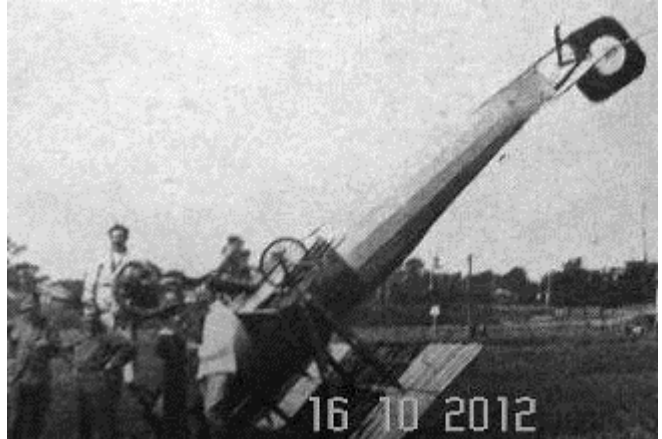
Ac two-seater photographed in front of the NW hangar. It was testflown by Henry Erlind who had learned to fly at the factory school in the summer of 1917. The aircraft was a total write off during a landing in Øresund on which occasion Erlind had the actrice Stella Lind with him as a passenger.



**Bd** with the 110HP Scania-Vabis engine and new fuselage



**C** with the N&W Civilian flying School



**C** a N&W ground trainer with Bd type fuselage



**Fa** Sold to C.Hundinghouse Jensen



**Fa** registered as N.1 in Norway