

Scale drawing by T Goworek



ANSALDO A.1 'BALILLA'



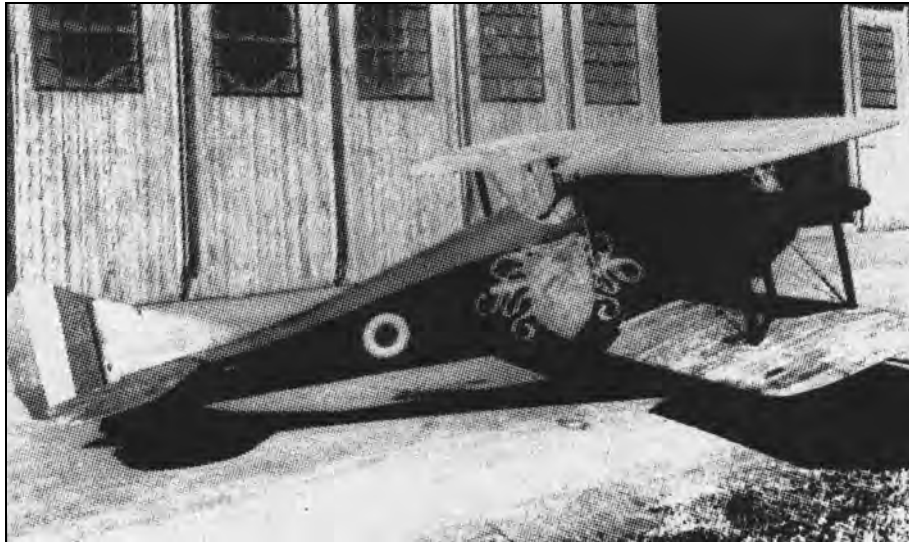
by Colin Owers

The S.V. fighter - designed by Savoia and Verduzio - was selected for large-scale manufacture by Ansaldo and the designation was changed to S.V.A. to represent the Ansaldo company's participation. The S.V.A. was a large fighter and noted for its range and endurance. *Ing.* Giuseppe Brezzi, a mechanical engineer who had been in charge of the *Ansaldo Costruzioni Aeronautiche* since 1917, modified an S.VA.5 into a two-seater for Major Gabriele D'Annunzio to fly over Vienna as an observer, and with his association with the S.V.A., it is not surprising that Brezzi's first design for Ansaldo displayed many characteristic S.V.A. construction features.

This design was the Ansaldo A.1, the first wholly original Ansaldo design. The A.1 was a small, single-bay biplane with equal-chord unstaggered wings of conventional construction; gone was the Warren truss of the S.V.A. Interplane struts were of steel tube. The most obvious S.VA. influence was in the fuselage, which was of inverted triangular section from aft of the cockpit. The fuselage was covered with thin mahogany veneer aft and aluminium panels forward. A large cut-out was made into the upper wing which was at the pilot's eye level, and view from the cockpit was good in all directions. Two fuel tanks were fitted, one of which was jettisonable by a pilot-operated cable. Endurance was about 2½ hours. The twin Vickers machine-guns were fitted on top of the front decking on the prototype, which bore the serial 16503.

The prototype was at Grosseto airfield in Tuscany in July 1917 and made its first flight in the summer of that year. Sergeant Major Mario Stappani was the test pilot. By December, Ansaldo considered the aircraft ready for production and the Italian Air Force H.Q. sent three leading 'aces' to Turin to fly and report on the A.1. These were Lt Colonel Pier Piccio, Major Francesco Baracca and Lt Fulco Ruffo di Calabria. They were enthusiastic about the aircraft's speed and climb, but not satisfied with its manoeuvrability. Baracca noted in his private diary that the A.1 was not as manoeuvrable as the SPAD VII that he was then flying in combat. This was a major blow to Ansaldo, as the A.1 was designed to be more manoeuvrable and aerobatic than the S.V.A., which latter aircraft was not suitable for the fighter-to-fighter role and was used for long-range high speed reconnaissance.

A number of minor modifications were carried out, which may have included a slight increase in wing span. Improvements were made to the air intakes of the carburettors; the frontal radiator was modified and the two Vickers machine-guns were buried under the aluminium decking. The original 200 hp SPA 6A engine was replaced by an over-compressed SPA 6A of 220 hp. In this form it was known as the A.1 Bis. On 4 March 1918, Lt Mario De Bernardi flew the A.1 Bis to Quinto di Trevino airfield, where Baracca's famous 91st *Squadriglia de Caccia* was located. De Bernardi flew his A.1 Bis operationally, although he had received orders that he was not to cross the lines at the



Ansaldo A.I. Balilla, 18552, preserved by the Caproni Museum. This was the aircraft of Captain Natale Palli. The elaborate 'St George and the Dragon' motif was the emblem of the city of Genoa and was carried on the fuselage side and the lower wing of the aircraft of the 87th *Squadriglia*.

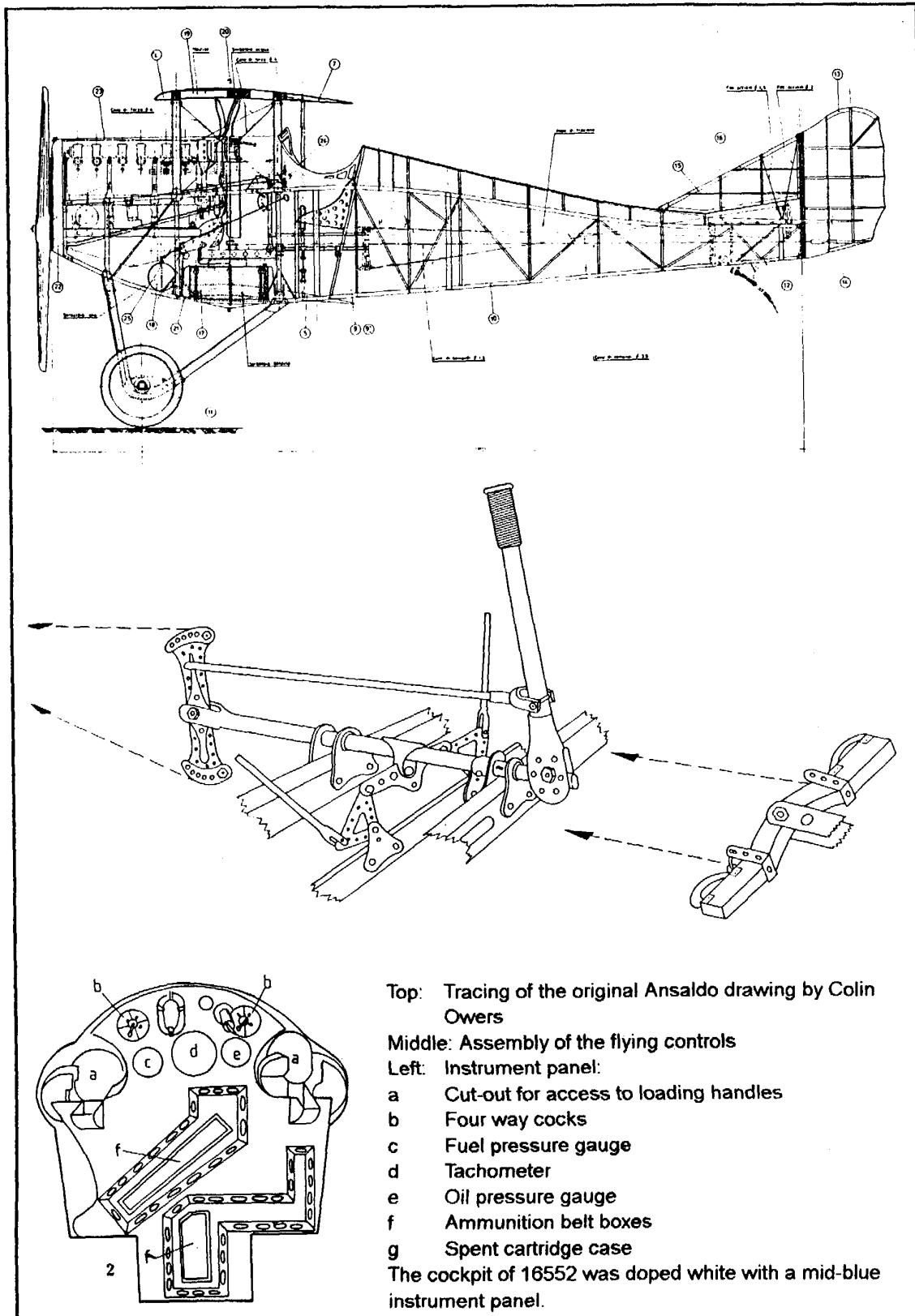
Piave River. Other pilots tried the aircraft but the SPA engine was often faulty and, although they thought it was better than the prototype, they rejected the A.I. Bis for operational service with the *Squadriglia*.

The A.I. Bis went back to Turin, where it apparently underwent a complete revision. The shortage of fighter aircraft led to the type being put into limited production, the first series of 100 aircraft being delivered between July and August, 1918. Only a few A.I. Bis were issued to frontline *Squadriglias*. Most went to flying schools or replaced Nieuport 11's for home defence duties. A few A.I. Bis were used by the 70th *Squadriglia de Caccia* at Gazzo Padovano airfield. Serial 16514 went to the 82nd *Squadriglia*; three more to the 74th *Squadriglia*. The A.I. Bis was not operationally successful, the only aerial victory of the type on the Italian front, being scored by Lt Leopoldo Eleuteri (5 victories) in 16537 on 8 October, over an Austro-Hungarian two-seater when on patrol with four Hanriots of the 70th *Squadriglia*.

On 25 August 1918, the Ansaldo company gave A.I. Bis serials 16552 and 16553 to Captain Natale Palli and Lt Antoneo Locatelli, respectively. It was apparently at this ceremony that the nickname '*Balilla*' was adopted by the Ansaldo company. The name came from the legend of the 18th Century boy hero who threw a stone at Austrian troops who were pulling a cannon through the streets of Genoa. As the Ansaldo company had its main works in Genoa the workers there apparently applied the name '*Balilla*' (Hunter) to the type - perhaps because of its small size, compared with the S.V.A. - and Italian airmen came to know it by this name.

In September, six A.I. Bis were assigned to the 241 *Squadriglia de Caccia* of the *Regia Marina* (Royal Navy) which flew Hanriot HD-I's at Santa Elisabetta airfield, at the Lido, Venice. Two of these, serials 16609 and 16610, were flown almost daily by Lt Luigi Bologna and Lt Umberto Magaldi. An A.I. Bis flown by Lt Cesare Carminiani (serial 16617) and accompanied by Lt Bologna and Ensign Luigi di Riseis, engaged Austro-Hungarian Naval Phoenix D.I fighters over Pola harbour in October 1918.

Postwar, the type was used in Soviet Russia and Lithuania, as well as being manufactured in Poland.



Top: Tracing of the original Ansaldo drawing by Colin Owers
 Middle: Assembly of the flying controls
 Left: Instrument panel:
 a Cut-out for access to loading handles
 b Four way cocks
 c Fuel pressure gauge
 d Tachometer
 e Oil pressure gauge
 f Ammunition belt boxes
 g Spent cartridge case
 The cockpit of 16552 was doped white with a mid-blue instrument panel.

ACKNOWLEDGMENTS

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