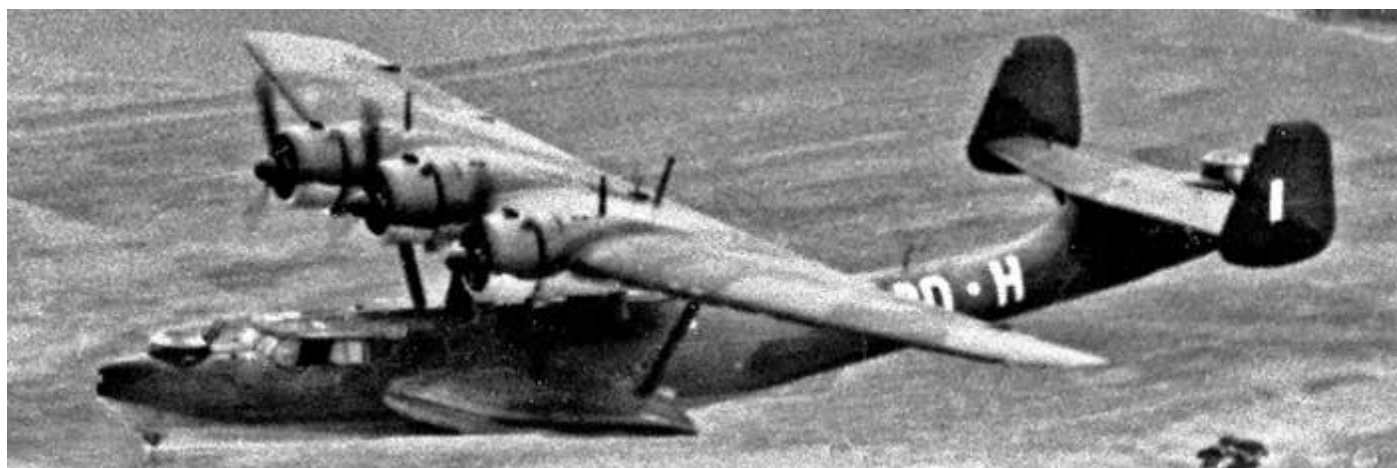


AIRCRAFT PROFILE

THE DORNIER DO-24K IN RAAF SERVICE

By Robin Shaw



Introduction

The Dornier Do-24K flying boat is one of the less remembered aircraft to fly with the RAAF in World War 2. 6 of the type served but as we shall see, had a chequered history of serviceability.

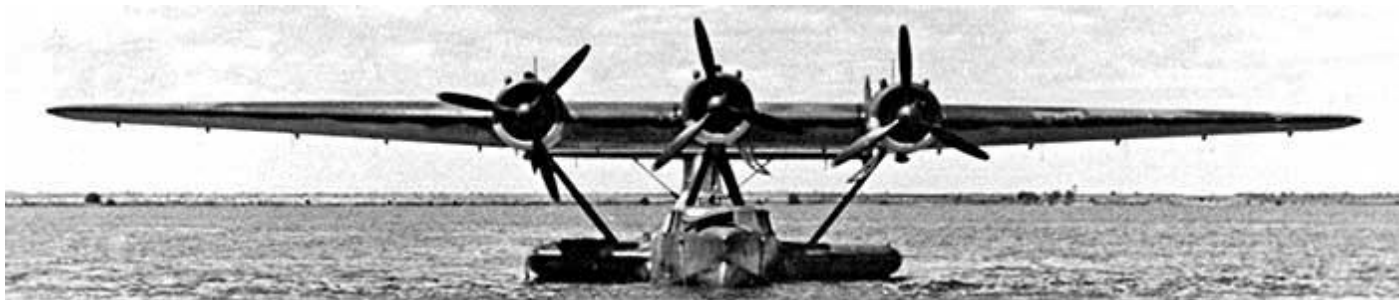
The Do-24 was designed in the 1930s by German manufacturer Dornier in response to a request by the Netherlands Navy to replace the Dornier Wal. In 1936 the German War Ministry refused to make domestic production capacity available to non-German customers, so the Do-24s were ordered from a Dornier subsidiary in Switzerland, Aero-Metall AG. The aircraft was a three-engine parasol wing flying boat powered by 3 1,000hp Wright R-1820 Cyclone radial engines. 6 examples were initially ordered from Dornier, after which a further 90 were built by the Dutch under licence and identified by the Do-24K designation. 30 Do-24s were sent to the Netherlands East Indies (NEI)ⁱ.

World War 2 RAAF service

As the Japanese advanced into the NEI in 1942, many of the Do-24s were destroyed. Others retreated to Australia, some of which were destroyed in the Japanese air attack on Broome on 3 March 1942ⁱⁱ. The 6 survivors were eventually taken on strength by the RAAF, 5 by 41Sqn RAAF at Townsville using the A49-1 to 5 designation and 1 designated A49-6 served Dutch intelligence on clandestine operations to the NEI.

Below - Dornier Do 24K A49-5 DQ-H of 41 Squadron at Lake Boga. This aircraft was later destroyed by fire in Darwin.





Keeping the Do-24s flying proved to be very difficult. They were in poor condition when they arrived in Australia, with frequent electrical and engine problems and hull leaks. Spare parts, documentation, beaching gear and specialised tools were practically non-existent. Maintenance and repairs were mostly carried out at Lake Boga in Victoria. Typical of the degree of unserviceability was the history of A49-1 which served a total of 219 days with 41Sqn between October 1943 and May 1944 and was unserviceable for 133 days or 60% of the time, and A49-4, which served a total of 278 days with 41Sqn between August 1943 and May 1944 and was unserviceable for 172 days or 68% of the time.ⁱⁱⁱ So risky was the electrical condition of the aircraft that orders were made in August 1942 to not arm them until repairs could be made.



Above – an unidentified Do-24K under maintenance at Lake Boga, circa 1943

A49-5 DO-H was destroyed in Darwin when an overnight fire broke out while undergoing minor electrical repairs in preparation for a mission. It seems likely that the fire had its origins in the faulty electrical system.

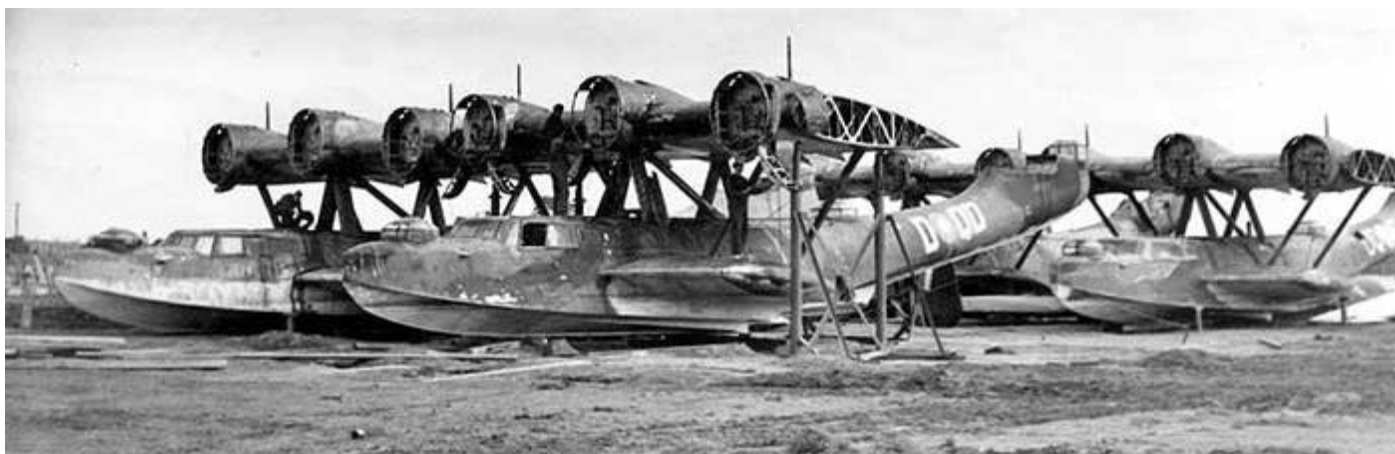
On 8 June 1942, A49-6, the aircraft used by Dutch Intelligence, flew to Wissel Lake in Dutch New Guinea to pick up a Dutch naval officer, Commander A.J. de Bruin, and return him to Australia to form a Dutch special duties unit that was to operate out of the covert seaplane base on Wissel Lake. The unit operated until June 1943 and A49-6 made many flights between Rathmines and Wissel Lake carrying agents and equipment. Flights were also made to Tanibar, Kai and Aroe in the NEI^{iv}. The photo below shows 2 Dutch Do-24Ks taking off from Roebuck Bay, Broome circa 1941, probably before the war began.



AUSTRALIAN WAR MEMORIAL

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By mid-1944, all of the remaining RAAF Do-24s had been withdrawn from service and were scrapped at Lake Boga (below).



The exception was an unidentified forward hull that was converted to a houseboat (below seen at Echuca on the Murray River in the 1990s^y).



The hull is reportedly now on display at the Lake Boga Flying Boat Museum alongside Catalina A24-30.

Lest the impression be left that the Do-24s were more trouble than they were worth to the RAAF, the [ADF Serials website](#) provides the following data on the work they did in their brief careers in RAAF colours (excluding A49-6):

Aircraft	Hours flown	Passengers carried	Freight carried (lbs)
A49-1	236.45	168	57,821
A49-2	62.25	45	14,049
A49-3	516.45	733	259,882
A49-4	463.4	700	289,888
A49-5	418.33	322	147,230
Total	1,696.88	1,968	768,870

Among other things, the aircraft carried close to 350 metric tonnes of freight and nearly 2,000 passengers in total, a decent contribution for a type that served less than 3 years and was unserviceable more than half of the time.

I have not been able to locate any RAAF pilots' descriptions of the Do-24's handling qualities, so we don't know what it was like to fly back then. The lack of any total losses to flying accidents among the 6 aircraft suggests that it did not have any really nasty vices, especially so since there would have initially been no formal conversion training available other than *ad hoc* lessons from Dutch aircrew who escaped with the aircraft.

The model Do-24K below shows the camouflage pattern worn by the RAAF Do-24Ks (*source – imodeler.com*).



Surviving aircraft

There is one airworthy Do-24, (designated the Do-24ATT), still surviving. It was built in 1944 and was used for air-sea rescue in Spain until 1971. It was put on display in a museum and after 10 years was returned to airworthiness with PT-6A turboprop engines and retractable amphibian undercarriage by Iren Dornier (grandson of the aircraft manufacturer Claude Dornier)^{vi} and flown extensively around the world.



Another, potentially airworthy Do-24T-3 is on static display at the Dutch National Military Museum, Soesterberg Air Base Park, Netherlands (below)^{vii}.



Two other Do-24T-3s are on static display at [Flugwerft Schleißheim branch of the Deutsches Museum](#) in Oberschleißheim and at the [Museo del Aire, Cuatro Vientos](#), Madrid, Spain^{viii}.

ⁱ *Australian Military Aircraft*, David Coles, Green Hill Publishing 2022 page 121

ⁱⁱ The majority of sources say that the number of Dorniers destroyed at Broome was 5. Coles states that 2 were lost. [Wikipedia asserts that 5 were lost](#). The [Broome Museum](#) also states that 5 were destroyed. [Zero Hour in Broome](#) by Lewis and Ingman agrees - 5 Dorniers were destroyed on 3 March 1942. Another had force-landed and ran aground on a reef south of Broome that same day. Of the six that served with the RAAF, five had evacuated to Australia with the Dutch naval flying school in February. What matters is the number that survived to serve the RAAF - 6.

ⁱⁱⁱ <http://adf-serials.com.au/2a49.htm>

^{iv} <http://adf-serials.com.au/2a49.htm>

^v [GEOFF GOODALL'S AVIATION HISTORY SITE](#)

^{vi} <http://iren-dornier.com/en/aircraft/iren-do24.html>

^{vii} <https://www.landmarkscout.com/nmm-national-military-museum-soesterberg-air-base-park-netherlands/>

^{viii} https://www.liquisearch.com/dornier_do_24/survivors