# A16 – Lockheed Hudson



Lockheed Hudson Mk.I A16-66 in flight. Note the absence of a gun turret on this aircraft. On 28 and 29 November 1941, A16-66 had been involved with three other Hudsons from No 13 Squadron in the fruitless search for survivors of the sinking of HMAS *Sydney*. Source: RAAF

## AIRCRAFT OF THE ROYAL AUSTRALIAN AIR FORCE

uring the 1930s, Lockheed built a series of successful twin-engined light and medium transports, all featuring the characteristic twin fin arrangement. The second largest of the series was the twelve to fourteen passenger Model 14 Super Electra which first flew in July 1937, followed in 1939 by the similar but longer and heavier Model 18 Lodestar.

The Model 14 sold reasonably well with 112 built by Lockheed, but the strained economic circumstances of the 1930s inhibited sales. Ironically, the Lockheed 14 is most remembered as the type in which British Prime Minister Neville Chamberlain flew to Munich in 1938 for discussions with Adolf Hitler and famously returned claiming 'peace for our time'. Nevertheless, in the late 1930s, the British Government realised it needed to urgently re-arm its military forces as war in Europe was becoming much more likely. British production capacity would not meet the need so the decision was made to seek modern aircraft from the United States (US).

In April 1938 the British Purchasing Commission travelled to Lockheed to view a proposed military version of the Model 14. With Lockheed undertaking urgent redesign work to suit the British requirements for a maritime reconnaissance bomber—performed literally overnight by legendary designer Clarence 'Kelly' JoÚson in a hotel room—in June 1938 Britain ordered 200 of the Model 214, named the Hudson by the Royal Air Force (RAF) after the navigator who had discovered Hudson Bay in Canada.



No 2 Squadron ground crew loading bombs onto a Lockheed Hudson in the Northern Territory, circa 1942–43. Source: Argus Newspaper Collection of Photographs, State Library of Victoria



An RAAF Lockheed Hudson converted into an aerial ambulance and adorned with the red cross ambulance markings photographed in Morotai, 1944. Source: State Library of Victoria

This was by far the largest order ever received by Lockheed and the Burbank-based company had to undertake significant expansion to meet the tight delivery deadlines in the quantities required. The first Lockheed Hudson for the RAF flew on 10 December 1938. Delivered to the United Kingdom from February 1939, RAF Hudsons were in action against German shipping and maritime aircraft from October 1939, providing a dramatically improved capability when compared to the Avro Ansons they replaced.

The Hudson was a very effective but somewhat unsung hero of RAF Coastal Command. Of the 2941 built, the RAF ordered 800 and accepted a further 1170 under Lend Lease arrangements. After much debate in Australia regarding options to replace the RAAF's Avro Ansons, the Australian Government finally placed an order for fifty Hudsons in late 1938 as part of the British order, the Hudson then becoming the first American combat aircraft ordered by the RAAF. A16 serial numbers would be applied.

The order was soon doubled and the first 100 RAAF Hudsons were delivered to Nos 1 and 2 Aircraft

Depots at RAAF Laverton and RAAF Richmond respectively for assembly between February and June 1940. For unknown reasons, Lockheed painted the RAAF serials with an unauthorised dash between the A and 16, the serials thus reading A-16-1 to A-16-100. The RAAF order specified Hudsons fitted with Pratt & Whitney Twin Wasp engines and early airframes were delivered without dorsal turrets due to indecision on armament options.

Another 147 Hudsons were acquired by the RAAF under Lend Lease with the last (A16-247) delivered on 20 May 1942. By the time the Pacific war started in December 1941, the RAAF had received 152 Hudsons. RAAF Hudson designations are somewhat confusing as they differed from those used by the RAF. The RAAF fleet included Mk.I, Mk.II (differing only in their propellers) and Mk.IV, all powered by Pratt & Whitney Twin Wasp engines, while the Mk.III used Wright Cyclones. The Mk.IIIs also carried an additional ventral gun and two beam guns.

For its time, and especially for the RAAF, the Hudson was a modern and relatively advanced aircraft

to fly, a bit of a 'hot ship' by comparison with other RAAF aircraft. Six had been lost in major accidents between May and August 1940, but one accident in particular caused national headlines. Tragically and with significant political consequences, Minister for Air James Fairbairn lost his life in Hudson A16-97 on 13 August 1940, together with two other Federal Ministers, the Chief of the General Staff and six others when the aircraft stalled and crashed on approach to Canberra. The RAAF base at Canberra was subsequently renamed in honour of Minister Fairbairn.

From the outset, the RAAF intended to use Hudsons for general reconnaissance, conversion or operational training as well as passenger/ communications or freight operations. The last four of the first 100 (A16-97 to A16-100) were fitted with cabin seats and dual controls.

By August 1940, Hudsons of Nos 1 and 8 Squadrons had deployed to Malaya and, by the beginning of the Pacific war, about ninety Hudsons and a dozen Catalinas made up the RAAF's entire long-range offensive capability. Hudsons of No 1 Squadron at Kota Bharu were the first Allied aircraft to detect the approaching Japanese invasion convoy two days before hostilities started. That same force of Hudsons undertook the Commonwealth's first offensive operations of the Pacific war against that Japanese convoy very early in the morning (local time) of 8 December 1941 and sank the first Japanese ships to be lost.

With No 8 Squadron at Kuantan also heavily committed to deflecting the Japanese invasion forces, the RAAF Hudsons accounted for dozens of Japanese landing vessels and large numbers of enemy troops before overwhelming forces pushed them back to Singapore and ultimately to Java. Just three Hudsons from a total of over thirty delivered to the two squadrons were able to fly back to Australia and many squadron members were taken prisoner.

Hudsons continued to strike back during the following months of adversity and wreaked tremendous damage on enemy ships and landing forces. The squadrons were often forward-based and many Hudsons were destroyed or damaged on the ground by enemy air raids, including those in Darwin. In the Pacific theatre the Hudson served valiantly with Nos 1, 2, 6, 7, 8, 13, 14, 23, 24, 25, 32 and 38 Squadrons, while RAF-serialled Hudsons operated under RAF control in the Middle East with No 459 Squadron, an RAAF squadron formed under the auspices of Article XV of the Empire Air Training Scheme agreement. In Australia, following initial twin-engine training on Ansons or Oxfords, future RAAF bomber aircrews converted onto the Hudson with No 1 Operational Training Unit in Victoria.

Most of the RAAF's Hudsons wore green and sand or green and dark earth camouflage, but some



An RAAF Lockheed Hudson being fitted with a lifeboat able to be parachuted to a downed crew at sea, with an image of seven airmen in a lifeboat during tests off RAAF Point Cook in Port Philip Bay, Melbourne, 1945. Source: Argus Newspaper Collection of Photographs, State Library of Victoria



Crew of an RAAF Lockheed Hudson climbing aboard their aircraft prior to a mission over enemy territory in the south-west Pacific area. Circa 1943. Source: Argus Newspaper Collection of Photographs, State Library of Victoria

had different colour schemes. A16-120 was used by the Chief of the Air Staff, Air Marshal George Jones, and finished in overall natural metal; A16-122 of the Survey Flight was overall foliage green in 1945 and went to natural metal in 1946, as did the Flight's A16-112. Others also went to natural metal later in the war.

With the introduction of Beauforts from 1942, the Hudsons were gradually relegated to communication and training duties. They were all phased out of the RAAF by 1949 but, unsurprisingly given its civil origins (and certification), seventeen found commercial work after the war. Some were still in use until the early-1970s, most famously with Sydney-based Adastra Aerial Surveys. The world's only airworthy and active Hudson is ex-RAAF A16-112 flying from Temora, NSW. The Australian War Memorial has A16-105, currently on public display at Canberra Airport, while A16-199 is on display in the RAF Museum at Hendon in London.

# **TECHNICAL DATA: Lockheed Hudson Mk.III**

### **DESCRIPTION:**

General reconnaissance bomber with five crew. All metal stressed-skin construction.

**POWER PLANTS:** 

Two 895kW (1200hp) Wright R-1820-G205A Cyclone radial piston engines.

**DIMENSIONS:** 

Span 19.96m (65ft 6in); length 13.50m (44ft 4in); height 3.32m (11ft 10.5in).

**WEIGHTS:** 

Empty 5969kg (13 160lb); loaded 9072kg (20 000lb).

### **ARMAMENT:**

Two fixed 0.303in machine guns in nose, two in dorsal turret and one in ventral position, provision for two more in beam positions; max bomb load 726kg (1600lb).

### **PERFORMANCE:**

Max speed 406km/h (252mph) at 4572m (15 000ft); cruise speed 250-315km/h (155-196mph); initial climb 366m/min (1200ft/min); service ceiling 7620m (25 000ft); max range 2180km (1355 miles).