BY JOHN W. R. TAYLOR

FIRST OVER THE HIGHEST

Over Everest! The Houston-Westland P.V.3

It started out as bit of a lash-up. A makeshift development of a World War 1 aeroplane, but it eventually led to the first over-Everest flight and became one of the R.A.F's most faithful workhorses. Turn to page 20 for our Wapiti plastic project.

THE 1914-18 war was so terrible, and ended with such a complete victory for the Allies, that it was known for many years as 'the war to end wars'. Having won it, the British government saw little need to buy new military aeroplanes. So, for year after year in the 'twenties, the Royal Air Force soldiered on as best as it could with aircraft that had been designed and built during the war.

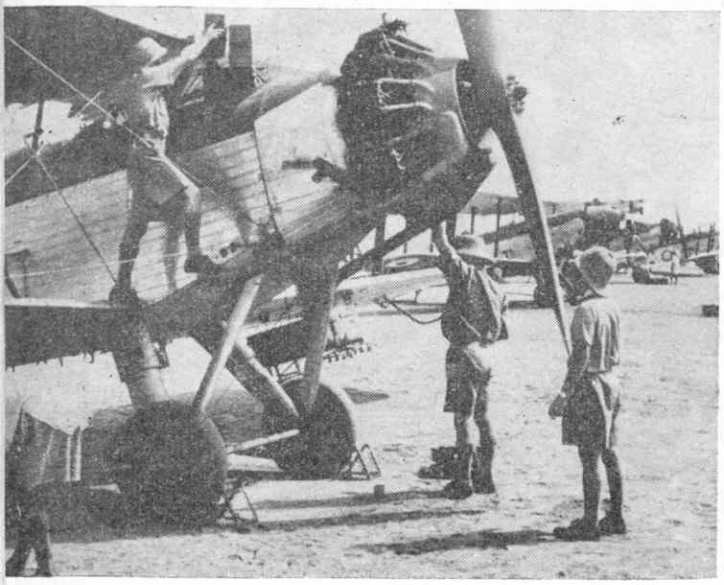
Typical of the left-overs was the D.H.9A, an open-cockpit two-seat biplane which could be, and was, used for everything from bombing and reconnaissance to army co-operation and even ambulance duties. So short of aeroplanes was the R.A.F. that if a D.H.9A crashed the wreckage was put in a box and sent to the Westland Aircraft works at Yeovil, so that the bits could be rebuilt into something that would fly again.

At last, it was clear that even the most thorough rebuilding could no longer keep the veteran aircraft in service in sufficient numbers. The Air Ministry told the British aircraft industry that it was in the market for a replacement, using as many D.H.9A parts as possible, to keep down costs.

Business was so bad that seven companies built prototypes in an attempt to win the contract. All were sent to the official flight test centre at Martlesham Heath and, in due course, Westland learned that their aircraft, known as the Wapiti, had been chosen. They received an immediate contract for 25, and went on to build a total of 517 Wapitis for the R.A.F. during the five years from 1927 to 1932. Another 38 were sold to Australia, four to China and four to South Africa, where the type was also built under licence.

As a long-suffering workhorse, that could be loaded with all kinds of equipment and weapons for overseas service, the Wapiti proved as successful as its predecessor, the D.H.9A. Yet the first flight of the prototype, early in 1927, had been anything but a success. The test pilot, Major L. P. Openshaw, dis-

Servicing No. 31 squadron Wapitis in India



The long-fuselage Wapiti V mentioned in the story

covered that the aircraft had practically no directional control and the only way in which this could be remedied was by making the tail surfaces larger.

Until this happened, the Wapiti retained almost unchanged the wings, struts, tail unit and undercarriage of the D.H.9A, introducing only a new fuselage and a 420 h.p. Bristol Jupiter VI radial engine in place of the 9A's 400 h.p. Liberty. Wind tunnel tests had suggested that the design should fly well. Unfortunately, when the structure was drawn in detail in the design office, the draughtsman left out one entire section of the rear fuselage about 30 inches long. This explained why the tail surfaces of the prototype had to be enlarged before the aircraft could be flown under proper control!

The variants

Production Wapitis had the same short fuselage as the prototype, and the last major link with the D.H.9A vanished when the Air Ministry decided to switch to all-metal construction, leading to the Wapiti Mk. II with metal wings and a 460 h.p. Jupiter VI. The other main production versions were the Mk. IIA with Jupiter VIII, for service overseas, and the Mk. VI dual-control trainer; but there were many special and experimental versions, including a two-seater equipped for the personal use of the Duke of Windsor when he was Prince of Wales.

Most interesting of all the 'specials' were the two Mk. V's, which were also the handsomest of the family as they had the longer fuselage which should have been standard from the start. The first one was included in the 'New and Experimental' enclosure at the 1930 R.A.F. Display and achieved little further fame, except that it flew for a time with a Bristol Draco diesel engine and four-blade metal propeller. The second Mk. V, registered G-AAWA, went on to earn for itself a place among the great aircraft of flying history.

In addition to its long fuselage, G-AAWA differed from other Wapitis in having a 550 h.p. Armstrong Siddeley Panther II engine, brakes, a larger rudder and a tail-wheel instead of the usual skid. It began its career by making a demonstration tour of the Argentine and Uruguay in 1931, in the hands of Westland's chief test pilot, Harald Penrose.

On its return to the U.K., it was again re-engined, this time with a 655 h.p. Pegasus 4, and its designation was changed to Wapiti Mk. VII or P.V.6. Flight tests showed that its handling qualities far exceeded those of the standard Mk. IIA and, with wheel spats fitted, it was 20 m.p.h. faster. The Air Ministry could not afford to order the new version into production, but had 55 Wapitis converted into copies of the Mk. VII prototype and gave them the name Wallace Mk. I.

Having given birth to a new service type, the prototype might well have passed into honourable retirement, but its finest hour was yet to come.

Lady Houston, whose generosity had made it possible for Britain to win the Schneider Trophy outright in 1931, had offered to put up the money to pay for an attempted flight over the 29,028 ft. peak of Mount Everest, the highest point on earth. It was to be a scientific venture, rather than a gimmick, to show that camera-carrying aircraft could photograph even the most inaccessible places for subsequent study.

Minus 61° Centigrade!

The flight had been made practicable by Bristol's new highly-supercharged Pegasus I.S.3 engine of 525 h.p. After considering many different airframes, the organisers of the expedition decided to fit these engines in the Westland P.V.3—an experimental carrier-based torpedo-bomber—and our old friend the Wapiti V G-AAWA, alias Wapiti VII, P.V.6, Wallace I prototype and now Houston-Wallace G-ACBR.

The veteran aircraft again underwent modification. The spats were removed, the tail-wheel was replaced by a skid and the rear cockpit was converted into a primitive enclosed cabin for a cameraman. Despite the need to climb to over 30,000 ft., the pilot continued to sit out in the cold. Just how cold was discovered by Harald Penrose when he took the aircraft to 37,500 ft. in December 1932, and recorded temperatures down to minus 61 degrees Centigrade.

Clearly, the Houston-Westland (P.V.3) and Houston-Wallace (P.V.6) had adequate performance for their task; but the grim record of attempts to climb Everest left little doubt that the mountain would have a few tricks up its sleeve and plenty of people predicted disaster for the expedition. Undeterred, the two crews clambered on board the aircraft in their cumbersome special flying suits on April 3, 1933, and began their long climb towards the Himalayas. Pilot of the Houston-Westland was Sqn. Ldr. The Marquess of Douglas and Clydesdale, with the man who first conceived the venture, L. V. S. Blacker, as his observer. The Wallace was flown by Flt. Lt. D. F. McIntyre, accompanied by S. R. Bonnett, a Gaumont-British film cameraman.

If the hearts of the four men sank a little when they saw ahead of them Everest's immense plume of ice particles, whipped off the summit by prodigious winds, this was nothing to what happened when they were within 150 seconds flying time of the fearsome peak.

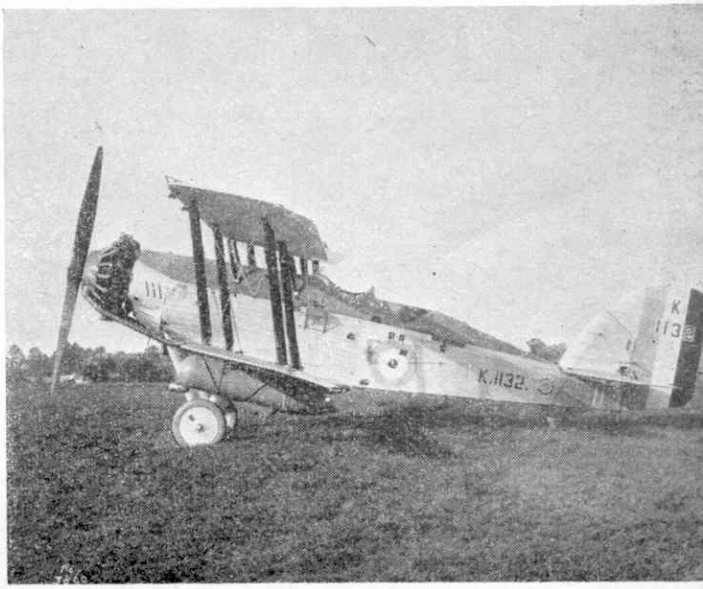
Near disaster

At the time, Blacker was taking photographs through an open hatch in the floor. Suddenly, the aircraft seemed to fall away beneath his feet as the P.V.3 was struck by a powerful downdraught. Grabbing hold of a strut, he watched goggle-eyed as the altimeter needle swung down smartly through a couple of thousand feet. The crags of the South Peak now appeared to be scraping past the open hatchway; yet he continued to photograph the jagged black rocks and the yellowy-red of Everest itself as it passed by his open window.

The two aircraft cleared Everest by a mere 100 ft. Most pilots would have had enough and returned home, as the job they had come to tackle had been done. But both crews returned to Everest on April 19, to enable better photographs to be taken from a greater height.

Where are these famous aeroplanes now? Well, the Houston-Westland was used for a time by Bristol as an engine test-bed. G-ACBR was converted back into a standard Wallace Mk. I and sold to the R.A.F. Eventually, both machines finished up in the breaker's yard. *Sic transit gloria!*

Data (Houston-Wallace): Span 46 ft. 5 in.; length 34 ft. 6 in.; height 11 ft. 6 in.; loaded weight 5,750 lb.; max. speed 158 m.p.h.; ceiling 37,500 ft. (Houston-Westland): Span 46 ft. 6 in.; length 34 ft. 2 in.; empty weight 3,580 lb.; loaded weight 4,870 lb.; max. speed 163 m.p.h.; ceiling 35,000 ft.

In new guise as the P.V.6

A Wapiti with special fuel tanks used for long distance desert patrol work