

DE HAVILLAND DH98 MOSQUITO

WORDS ROSS SHARPE
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The 'mossie' enjoyed superior performance during its service despite initial opposition from the RAF

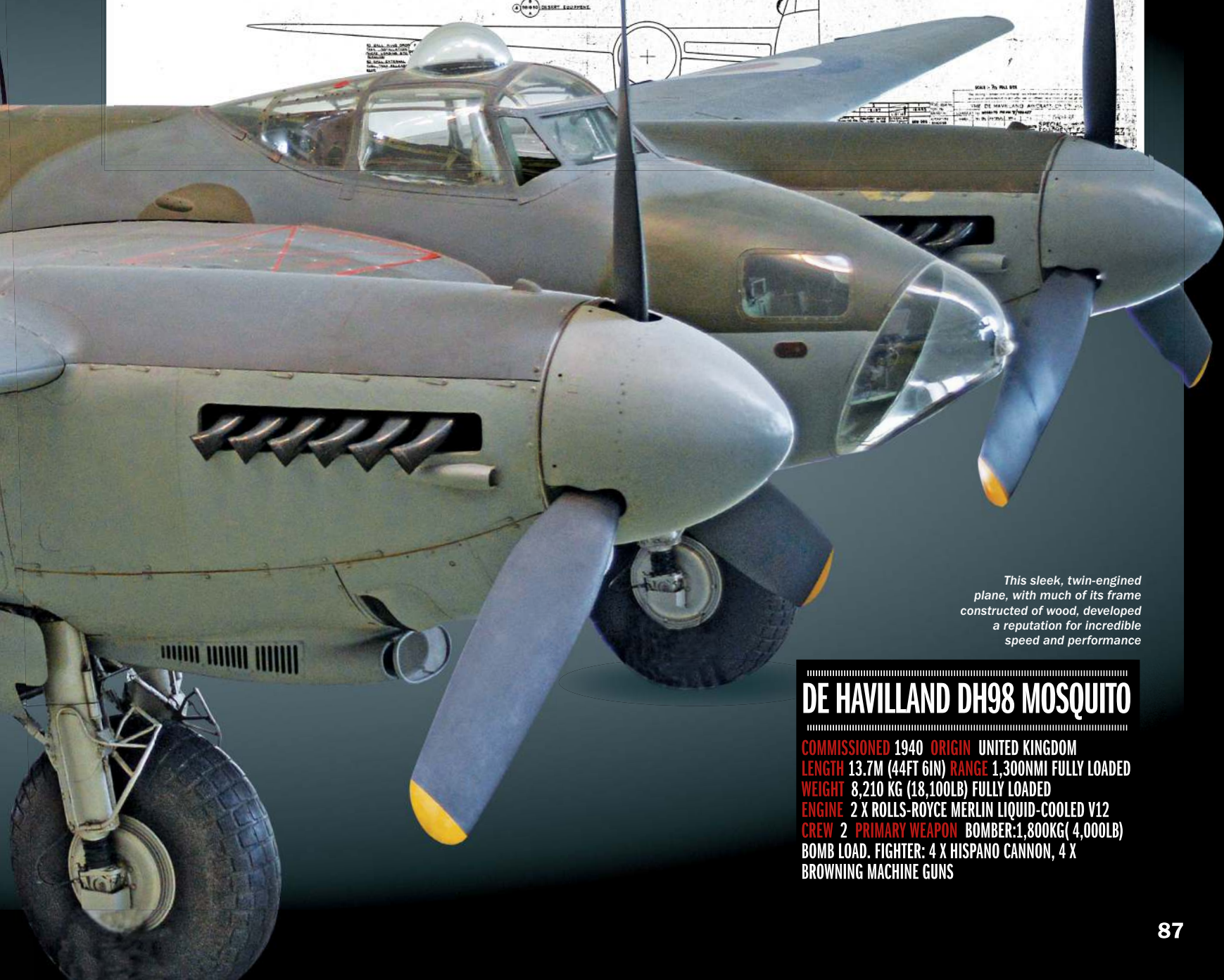
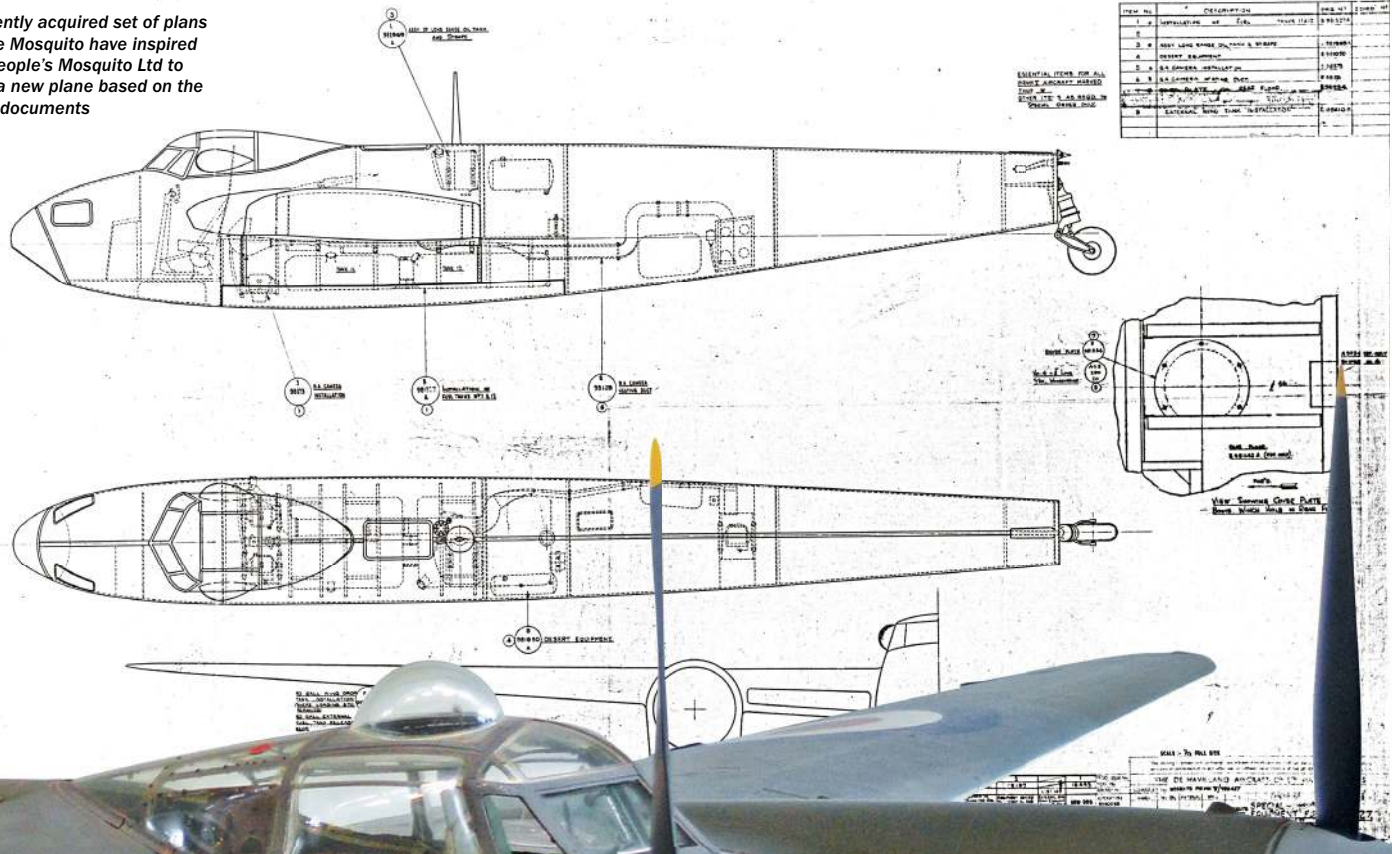
A truly iconic aircraft of WWII, when introduced in 1941 the De Havilland DH98 Mosquito's blend of blazing speed – later versions reached over 400 miles per hour – impressive load-carrying capacity and range meant that it was in demand on all war fronts. 7,781 of these sleek warplanes were built in the UK, Canada and Australia – in fighter, bomber, fighter-bomber, reconnaissance, trainer and many other versions. Unfortunately, there is no Mosquito currently flying in the UK, but The People's Mosquito Ltd, a registered charity, has now acquired over 22,000 production drawings and is beginning the process of rebuilding one.



A flight of Mosquito fighter-bombers. The Mosquito proved a swift and deadly aircraft in multiple roles during WWII

“THE DE HAVILLAND DH98 MOSQUITO’S BLEND OF BLAZING SPEED – LATER VERSIONS REACHED OVER 400MPH – IMPRESSIVE LOAD-CARRYING CAPACITY AND RANGE MEANT THAT IT WAS IN DEMAND ON ALL WAR FRONTS”

A recently acquired set of plans for the Mosquito have inspired The People's Mosquito Ltd to build a new plane based on the WWII documents

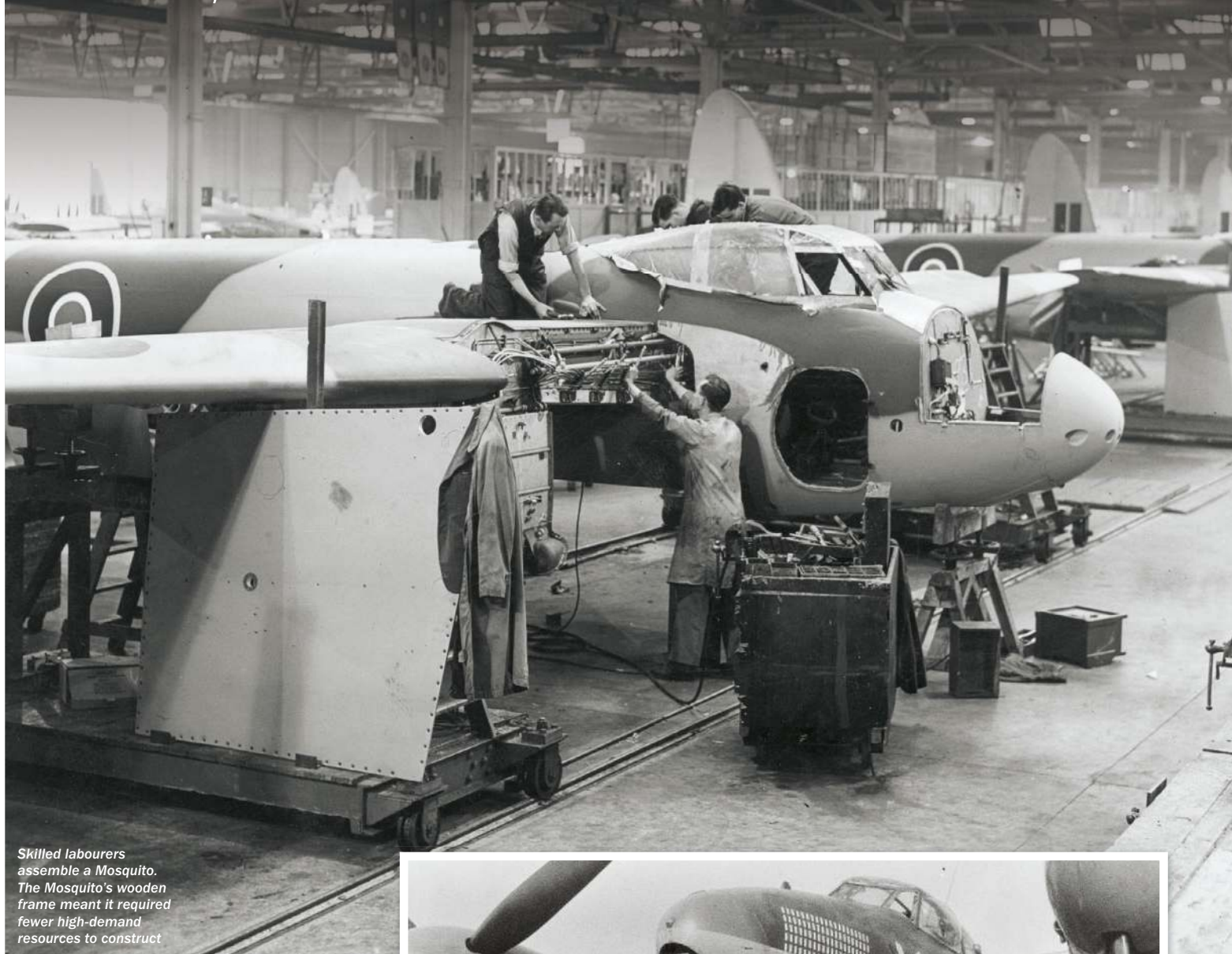


This sleek, twin-engined plane, with much of its frame constructed of wood, developed a reputation for incredible speed and performance

DE HAVILLAND DH98 MOSQUITO

COMMISSIONED 1940 **ORIGIN** UNITED KINGDOM
LENGTH 13.7M (44FT 6IN) **RANGE** 1,300NMI FULLY LOADED
WEIGHT 8,210 KG (18,100LB) FULLY LOADED
ENGINE 2 X ROLLS-ROYCE MERLIN LIQUID-COOLED V12
CREW 2 **PRIMARY WEAPON** BOMBER:1,800KG (4,000LB)
 BOMB LOAD. FIGHTER: 4 X HISPANO CANNON, 4 X BROWNING MACHINE GUNS

“DE HAVILLAND PROPOSED A RADICAL SOLUTION – TWO OF THE NEW ROLLS-ROYCE MERLIN ENGINES, A SLEEK WOODEN AIRFRAME OF SPRUCE AND BIRCH ATTACHED TO STEEL TUBING, A CREW OF TWO AND NO DEFENSIVE ARMAMENT”



Skilled labourers assemble a Mosquito. The Mosquito's wooden frame meant it required fewer high-demand resources to construct

DESIGN

Sir Geoffrey de Havilland and his design team were the masters of speed in wooden aircraft. Their tiny DH88 Comet had won the 1934 England to Australia air race, and the DH91 Albatross airliner cut the London to Paris time to one hour. In 1936 the Air Ministry issued a specification for a new bomber: in response, De Havilland proposed a radical solution – two of the new Rolls-Royce Merlin engines, a sleek wooden airframe of spruce and birch attached to steel tubing, a crew of two and no defensive armament. Born in secrecy at Salisbury Hall, outside of London, the Mosquito would change the shape of air combat in World War II. Opposed by some inside the RAF, the aircraft was championed by Air Chief Marshal Sir Wilfrid Freeman, so much so that it was known as 'Freeman's Folly'.



A pilot and crewman look on as another successful bombing run is recorded. The Mosquito was a challenge to fly at low speed and required an experienced pilot

ENGINE

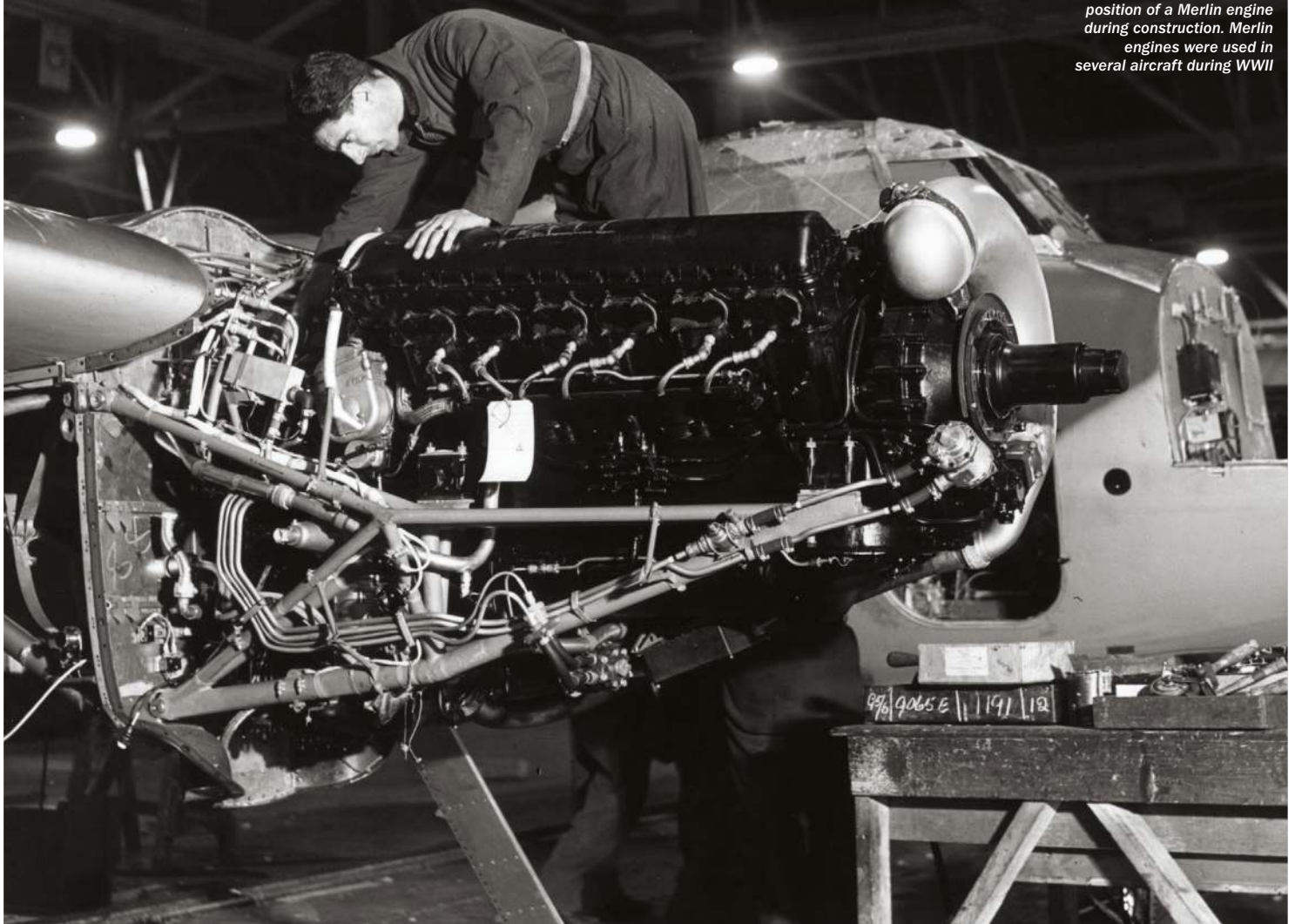
Variants of the Rolls-Royce Merlin engine were utilised throughout the production run of the De Havilland Mosquito, which spanned the decade from 1940 – 1950. The standard Merlin was a liquid-cooled V12 piston aircraft engine that was developed in the early 1930s, first run in autumn 1933 and first flown in the Hawker Hart biplane light bomber on 21 February 1935. The Merlin delivered 1,100 horsepower and powered numerous Allied aircraft during World War II in addition to the Mosquito, including RAF mainstays such as the Supermarine Spitfire and Hawker Hurricane fighters and the Avro Lancaster heavy bomber. Perhaps its most famous pairing occurred with the American-built North American P-51 Mustang fighter. Production of the Merlin ceased in 1950 after around 160,000 engines had been completed. The Packard V-1650 was a licence-built Merlin produced in the United States.

“THE MERLIN DELIVERED 1,100 HORSEPOWER AND POWERED NUMEROUS ALLIED AIRCRAFT DURING WORLD WAR II”

The exhaust pipes from one of two Rolls-Royce Merlin engines is visible in this modern photo as a Mosquito taxis before flight



A worker adjusts the position of a Merlin engine during construction. Merlin engines were used in several aircraft during WWII



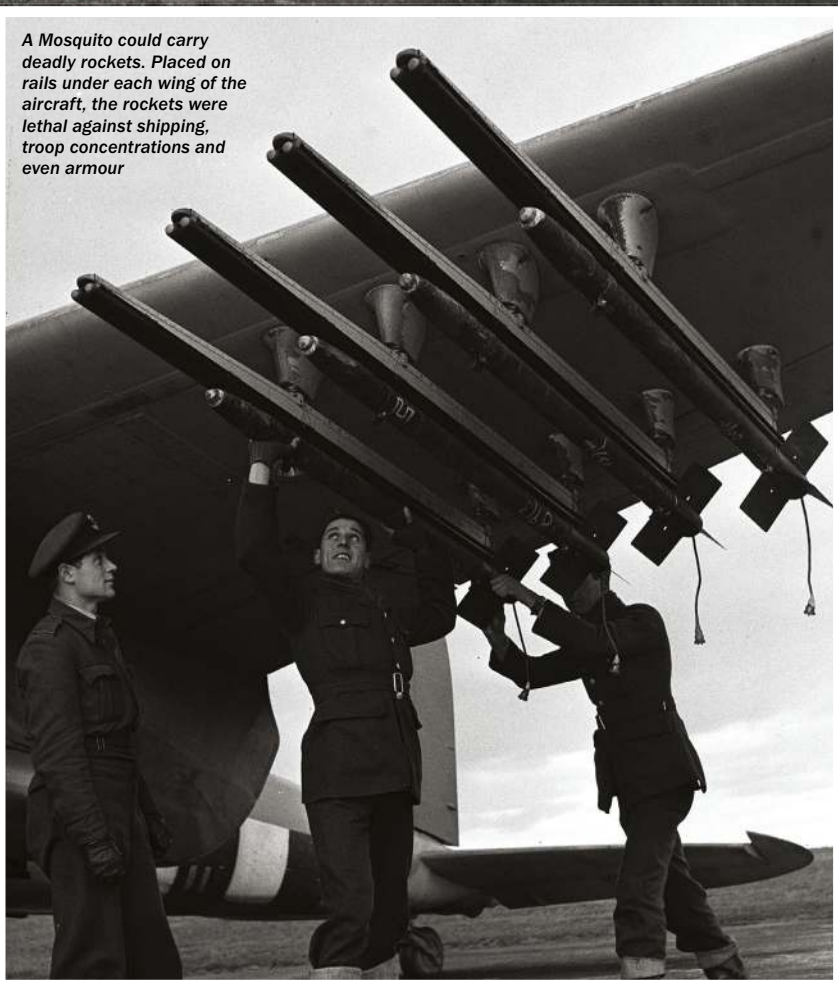
“THE FIERCEST MOSQUITO WAS THE FB.XVIII, WHICH HEFTED A MASSIVE 6 POUND GUN DESIGNED TO DESTROY U-BOATS AND OTHER TARGETS”

Right: Ground crewmen load a 'Tallboy' bomb aboard a Mosquito in preparation for a raid



During a firing exercise, possibly to 'sight' its weapons accurately, tracer bullets are fired from the nose

A Mosquito could carry deadly rockets. Placed on rails under each wing of the aircraft, the rockets were lethal against shipping, troop concentrations and even armour



ARMAMENT

Originally specified to carry a 1,000 pound bomb load, this was doubled before the aircraft entered service by cropping the tails of standard British 500 pound bombs so that four of these could fit in the bomb bay. Later, B. Mk IV bombers were given bulged bomb bay doors, allowing RAF Bomber Command to send them on night raids all the way to Berlin carrying a 4,000 pound HC bomb – the famous ‘cookie’. The initial night fighter versions carried four .303 Brownings and four 20mm Hispano cannon, but the machine guns were later omitted when bulkier centrimetric radar was fitted. The all-rounder was the FB.VI, with the ability to carry two 500 pound bombs internally, two 500 pound under the wings or eight 60 pound rocket projectiles, as well as a full gun armament. The fiercest Mosquito was the FB.XVIII, which hefted a massive 6 pound gun designed to destroy U-boats and naval targets.

THE PEOPLE'S MOSQUITO

The People's Mosquito is a registered charity with the sole aim of restoring and returning a UK-based DH98 Mosquito to British skies. Once RL249 is flying, the charity will maintain and operate the restored aircraft, funded by public donation and sponsorship, with the intention of providing many hours of flying displays every year for the people of the United Kingdom. For more information and to donate, please visit: www.peoplesmosquito.org.uk



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The yoke control of this Mosquito bomber variant is prominent in the plane's snug cockpit. The navigator/radio operator sat to the pilot's immediate right

COCKPIT

The De Havilland Mosquito operated with a two-man crew, seated side by side in the cockpit with the pilot on the left and navigator/radar operator on the right. The radar display was located on the upper right, while the pilot's controls were distributed at eye level and to his left side. The elevator trim wheel and indicator, along with the throttle and prop levers, were positioned on the left side of the fuselage. The fighter-bomber and fighter versions were controlled with a stick, while the bomber variant was piloted with a yoke. The airspeed indicator, horizon and vertical speed indicator were positioned left to right across the top of the instrument panel. The altimeter and compass were just below, while the landing gear and flap indicator were centred beneath. A trio of prominent levers to the pilot's right operated the bomb bay doors, landing gear and flaps.

SERVICE HISTORY

THE MOSSIE WAS IN HIGH DEMAND AND PROVED A HIGHLY VERSATILE AIRCRAFT IN MULTIPLE ROLES THROUGHOUT THE WAR

The unarmed Mosquito was first fielded by the No 1 Photo Reconnaissance Unit at RAF Benson in July 1941, but night fighters (NF.II) and bombers (B. Mk IV) quickly followed. No 105 Squadron and other units in Bomber Command developed pinpoint accuracy in daring, low-level strikes against German targets, including the Gestapo HQ in Oslo, and this was carried on by the FB.VI fighter-bombers of No 2

Group with attacks like the famous Amiens Prison raid on 18 February 1944. Mosquitos of 100 Group savaged the German night fighter force, while Coastal Command Mosquitoes were sinking Axis shipping off the Norwegian coast. The Mosquito would go on to serve in many other countries after the war.

Perhaps more Mosquitos were lost to accidents than enemy action during World War II. The plane was a challenge to fly – even for experienced pilots – but while it was somewhat sluggish at lower airspeeds its performance improved dramatically as the aircraft approached 350 miles per hour. In capable hands the 'mossie' enjoyed a performance advantage over other planes throughout its service life.



Mosquitos were effective at low-level strikes because of their speed and range



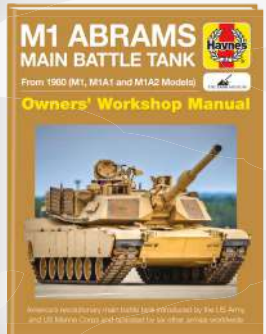
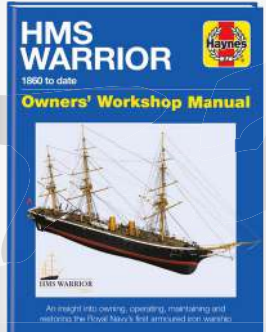
Mossies conducted strategic raids on high-value targets across Europe



The railway at Trier, Germany, under attack by six Mosquito B.IVs



The pilot of this Mosquito was able to bring his damaged aircraft home. Note the evidence of the aircraft's wood construction on the splintered wing



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