

VINTAGE WINGS OF CANADA

SUPERMARINE

SPITFIRE MK XVI

COMPILED BY VWC HISTORIAN DON MACNEIL



INTRODUCTION

The Spitfire is a British national symbol of their triumph over a superior German air force during the early days of the Second World War. With its streamlined fuselage and elliptical wings, the "Spit" was recognized and loved by all. Flown by British and Commonwealth pilots, many of whom were trained in Canada, Spitfires were the most successful single engine fighter of the war



The Vintage Wings Spitfire is the “low level” Mark XVIe model powered by a Rolls Royce 266 Merlin engine. This aircraft is restored in Royal Canadian Air Force (RCAF) camouflage and the squadron markings of 421 Squadron, the only Canadian Squadron to fly the Mark XVI Spitfire. 421 Squadron markings include the McColl-Frontenac oil company logo, a “Red Indian” head motif. McColl-Frontenac were corporate patrons of 421 Squadron, and their logo was on all squadron aircraft.

The letters “AU” on the fuselage are code letters for RCAF Squadron 421 followed by the Royal Air Force roundel which was worn by all RCAF aircraft throughout the war. Finally, the letter “J”, identifies a Spit which was flown by Flt. Lt. William Harper of Niagara Falls, Ontario.

On 12 April, 1945, while bombing ground targets, Harper’s Spitfire was hit by German 40 millimeter anti-aircraft fire. His Spitfire damaged beyond repair, Harper was very lucky to get back to his base alive.

Harper’s replacement Spitfire, was a Mk. XVIe. He had wanted the McColl-Frontenac oil company “Red Indian” logo on his aircraft. However, with the war coming to a close the supply of decals had run out.

This Vintage Wings aircraft is flown as a tribute to Flt. Lt. Harper and the hundreds of Canadian Spitfire pilots such as him who flew dangerous combat missions in the service of their country.

Spitfire Origins

Supermarine, a small British aircraft manufacture, became famous as the builders of air racers in the 1920’s & 30’s. Designed by the legendary R. J. Mitchell, these float-equipped aircraft captured the admiration of the British public by winning the Schneider Trophy four times and breaking successive world speed records. In 1928 Vickers (Aviation) Ltd. took over control of the Supermarine Aviation Works Ltd. and began the design of their first land plane, the Spitfire.

The prototype Spit took flight in November 1936.

From that time until the advent of the “jet age” in the late 1940s, it underwent a continuous evolution until Supermarine ceased production in 1948. Over 22,000 Spitfires were built in twenty-nine different versions including a naval version known as the Seafire. Spitfires served a legendary role with commonwealth and other air forces throughout the world during both war and peace. These highly capable and much loved fighters were flown by Canadian pilots of both the RCAF and the Royal Canadian Navy.



Photo: DND

Dimensions: Imperial Metric

Wing Span:	36’ 10”	(11.3 m)
Fuselage Length:	31’ 4”	(9.5 m)
Height:	12’ 7”	(3.8 m)

Weight:

Empty:	5,739 lbs	(2603 kg)
Fully Loaded:	7,500 lbs	(3402 kg)

Performance:

Maximum Speed:	408 mph	(656.5 kph)
Stalling Speed:	75 mph	(120.7 kph)
Range:	450 miles	(724.2 km)
Max Climb:	4,800 feet/minute	(1,463 meters/minute)
Max Altitude:	43,000 feet	(13,106 m)

Armanment:

- 2 – 20mm Hispano cannons wing mounted
- 2 – .50 Caliber Browning machine guns wing mounted

Optional Armanment:

- 1 – Centerline mounted 500 lb bomb
- 2 – 250 lb bombs wing mounted



Origins of Vintage Wings Mark XVIe Spitfire

Assigned serial number SL721 by the manufacturer, the Supermarine works of Vickers-Armstrong Ltd., SL721 was delivered to the RAF 27 August, 1945. Too late to see war action, it was stored until selected to become the personal aircraft of Air Chief Marshall Sir James M. Robb in 1947.

Sir James, a four star Air Chief Marshall, was Commander-in-Chief of Air Forces in Western Europe. Sir James shared equal command of the Supreme Headquarters Allied Expeditionary Force (S.H.A.E.F - which later became NATO) with American five star General Dwight Eisenhower.

In 1954, SL721 was saved from the scrapper's torch by an automotive engineer named Michael Wilcock, who begged the RAF to let him save a Spitfire. He carefully preserved SL721 for display in front of the Swandean, England automobile engineering business he owned.

In 1958 SL721 was moved to RAF Thorney Island for temporary display and later to Lord Montagu's

Montagu Motor Museum in Beaulieu, England for permanent display where it became known as the "*Rose Garden Spitfire*"

In June 1965 Michael Wilcock traded SL721 for a rare Bentley owned by his friend M.D. "Mony" Thackray.

Thackray sold SL721 to Bill Ross of Chicago, USA in March 1966.

Doug Arnold of England acquired the aircraft in 1973 and had it shipped back to her homeland.

In 1977 SL721 was purchased by Woodson K. Woods an Arizona land developer and shipped back to the USA. When Mr. Woods died in 1992, SL721 was then passed on to his son, Chris Woods.

SL721 was acquired by Mr. Potter in 2000 and registered in Canada as "C-GVZB".

Mk XVIe Design and Specifications

Mark XVIe Spitfire design was driven by combat experience in the Middle East where the Commanding Officer of fighter squadrons in the area observed that most enemy aircraft interceptions were taking place at low level. The Spitfire Mark XVIe was developed in response to this requirement. Mk XVIe's are essentially Mk IX model Spitfire airframes fitted with the American Packard-built Merlin 266 engine, equivalent to the British-built Merlin 66. The "e" designates the armament options of this model. Both marks of Spitfires were manufactured on the same production line at Castle Bromwich, England and 1,054 Mk XVIe's were built.

This "low-altitude" fighter and fighter-bomber, originally with clipped wing tips (for improved rate of roll), was also fitted with a "bubble" or "rear-view" cockpit canopy (Model 963) to provide better pilot visibility. A larger pointed rudder was required to compensate for the "low back" rear fuselage reduction required to accommodate the larger canopy. An additional fuel tank was also added behind the cockpit.

Fuselage – All-metal monocoque with flush riveted "Alclad" skin.

Tail Unit – Cantilever monoplane type. All metal tailplane with smooth skin covering. Elevators and rudder have light alloy frames and fabric covering.

Landing Gear – Retractable main gear. Consists of two Vickers cantilever oleo-pneumatic shock-absorber legs with hydraulic retraction outwardly into the wings. Fully-castoring non-retractable tail wheel.

Power Plant – One 1,750 horsepower, Packard built, Merlin model 266, V-12 liquid cooled engine with 2-stage supercharger (original SL721 engine is in place).

Propeller – Dowty Rotol, constant speed, four blade, laminated wood (Hoffmann/Rosenheim blades replace original Dowty Rotol blades) blades.