The National Aircraft Factory No.2 was built through the winter of 1917 by the Ministry of Munitions and leased by Sopwith Aviation to more than double their production capacity. The factory which stood near Ham Common on the road between Kingston and Richmond was built in 26 weeks. It was one of four huge factories in a scheme where contractors would make aircraft under licence but Sopwith leased this one to build their own products.

From April 1918 hundreds of Sopwith fighter aircraft were being built at Ham. Sopwith Snipes, Dolphins and Salamanders were built in large numbers but, when the war ended a year earlier than predicted, many orders were cancelled leaving huge stocks of unwanted components. Sopwith's offer to buy the factory was refused by the Government and it was sold for £227,000 to Leyland Motors.

In 1948 Leyland Motors sold the Ham factory to Hawker Aircraft Ltd who needed a large factory in which to build their new jet aircraft designs. By the late 1940s the Canbury Park Road Kingston Factory was unsuitable for modern aircraft design and construction and Hawker Aircraft’s Langley satellite factory was too close to the new Heathrow airport. The Company considered moving completely to a large factory in Blackpool before approaching Leyland Motors to buy the Ham Factory occupied by Sopwith Aviation 30 years earlier. The price was agreed at £585,000.

Through the 1950s Hawker Hunters were in “Super Priority” production at Ham for the Royal Air Force and other NATO forces. With the Cold War at its height the Government and NATO gave “Super Priority” status to Hunter production at the Ham factory and also at Hawker's satellite factory at Blackpool and Armstrong Whitworth's at Baginton, Coventry. In total of 1972 Hunters were built.

By 1958 Hawker Aircraft had dramatically developed the Ham factory with a new office block on the Richmond Road frontage. Managing Director John Lidbury was determined that Hawker Aircraft should have a headquarters reflecting its status in the industry. The Hawker Siddeley Board hesitated but he went ahead anyway. Funded by Hunter profits building work started in 1956. By 1958 the management, commercial and design organisations had moved in. From the imposing marble entrance hall twin staircases led to the directors' offices and the Design Department whence stairs led down to the factory behind ensuring a close working relationship with the Production Department.

The Hawker Siddeley Harrier and Sea Harrier were all built in large numbers at Ham for the RAF, the United States Marine Corps, the Royal Navy and the Spanish, Italian and Indian navies. The last structures to be built at Ham were centre and rear fuselages for the Harrier II, also for the RAF and USMC. The USMC fuselages were shipped to McDonnell-Douglas in St Louis, Missouri to be assembled with the US built front fuselages, wings and tails while the RAF Fuselages were assembled with the imported US-built units at Dunsfold.

The Mithraeum Structural Test Frame was used intensively for strength and fatigue testing airframes. Besides being where the aircraft were designed and built, the Ham factory housed a large number of test facilities, the most spectacular of which was the mighty 'Mithraeum' frame used for strength and fatigue testing of large specimens including complete airframes. Other test facilities at Ham included systems rigs - such as fuel, hydraulic, flying controls and electrical - and other special-to-type rigs such as those for Harrier reaction control system and hot gas re-ingestion model testing.

The British Aerospace Hawk was designed at Ham and 325 were built there before production was transferred to Brough in Yorkshire where it continued for more than 20 years. In 1990 after the end of the Cold War, British Aerospace announced that the Ham factory would close in 1992. Some staff moved to Farnborough and Harrier production continued at Dunsfold until 2000.