

= Hawker Hunter =

The Hawker Hunter is a transonic British jet aircraft developed in the late 1940s and early 1950s . The single @-@ seat Hunter entered service as a manoeuvrable fighter aircraft , and later operated in fighter @-@ bomber and reconnaissance roles in numerous conflicts . Two @-@ seat variants remained in use for training and secondary roles with the Royal Air Force ( RAF ) and Royal Navy until the early 1990s . The Hunter was also widely exported , serving with 21 other air forces . Sixty years after its original introduction it was still in active service , operated by the Lebanese Air Force until 2014 .

On 7 September 1953 , the modified first prototype broke the world air speed record for jet @-@ powered aircraft , achieving 727 @. @ 63 mph ( 1 @, @ 171 @. @ 01 km / h ; 632 @. @ 29 kn ) . Hunters were also used by two RAF display teams : the " Black Arrows " , who on one occasion looped a record @-@ breaking 24 examples in formation , and later the " Blue Diamonds " , who flew 16 aircraft . Overall , 1 @, @ 972 Hunters were produced by Hawker Siddeley and under licence . In British service , the aircraft was replaced by the English Electric Lightning , the Hawker Siddeley Harrier and the McDonnell Douglas F @-@ 4 Phantom II .

= = Development = =

= = = Origins = = =

At the end of the Second World War , it was apparent that jet propulsion would be the future of fighter development . Many companies were quick to come up with airframe designs for this new means of propulsion . Hawker Aviation 's chief designer , Sydney Camm , proposed the Hawker P.1040 for the RAF , but the demonstrator failed to interest them . Further modifications to the basic design resulted in the Hawker Sea Hawk carrier @-@ based fighter . The Sea Hawk had a straight wing and used the Rolls @-@ Royce Nene turbojet engine , both features that rapidly became obsolete .

Seeking better performance and fulfilment of the Air Ministry Specification E.38 / 46 , Sydney Camm designed the Hawker P.1052 , which was essentially a Sea Hawk with a 35 @-@ degree swept wing . First flying in 1948 , the P.1052 demonstrated good performance and conducted several carrier trials , but did not warrant further development into a production aircraft . As a private venture , Hawker converted the second P.1052 prototype into the Hawker P.1081 with swept tailplanes , a revised fuselage , and a single jet exhaust at the rear . First flown on 19 June 1950 , the P.1081 was promising enough to draw interest from the Royal Australian Air Force ( RAAF ) , but further development was stalled by difficulties with the engine reheat . The sole prototype was lost in a crash in 1951 .

= = = P.1067 = = =

In 1946 , the Air Ministry issued Specification F.43 / 46 for a daytime jet @-@ powered interceptor . Camm prepared a new design for a swept @-@ winged fighter powered by the upcoming Rolls @-@ Royce Avon turbojet . The Avon 's major advantage over the Rolls @-@ Royce Nene , used in the earlier Sea Hawk , was the axial compressor , which allowed for a much smaller engine diameter and provided greater thrust ; this single engine gave roughly the same power as the two Rolls @-@ Royce Derwents of the Gloster Meteors that would be replaced by the new fighter . In March 1948 , the Air Ministry issued a revised Specification F.3 / 48 , which demanded a speed of 629 mph ( 1 @, @ 010 km / h ) at 45 @, @ 000 ft ( 13 @, @ 700 m ) and a high rate of climb , while carrying an armament of four 20 mm ( 0 @. @ 79 in ) or two 30 mm ( 1 @. @ 18 in ) cannon ( rather than the large @-@ calibre gun demanded by earlier specifications ) . Initially fitted with a single air intake in the nose and a T @-@ tail , the project rapidly evolved into the more familiar Hunter shape . The intakes were moved to the wing roots to make room for weapons and radar in the nose , and a more

conventional tail arrangement was devised as a result of stability concerns .

The P.1067 first flew from RAF Boscombe Down on 20 July 1951 , powered by a 6 @, @ 500 lbf ( 28 @. @ 91 kN ) Avon 103 engine . The second prototype , which was fitted with production avionics , armament and a 7 @, @ 550 lbf ( 33 @. @ 58 kN ) Avon 107 turbojet , first flew on 5 May 1952 . As an insurance against Avon development problems , Hawker modified the design to accommodate another axial turbojet , the 8 @, @ 000 lbf ( 35 @. @ 59 kN ) Armstrong Siddeley Sapphire 101 . Fitted with a Sapphire , the third prototype flew on 30 November 1952 .

The Ministry of Supply ordered the Hunter into production in March 1950 . The Hunter F.1 , fitted with a 7 @, @ 600 lbf ( 33 @. @ 80 kN ) Avon 113 turbojet , flew on 16 March 1953 . The first 20 aircraft were , in effect , a pre @-@ production series and featured a number of " one @-@ off " modifications such as blown flaps and area ruled fuselage . On 7 September 1953 , the sole Hunter Mk 3 ( the modified first prototype , WB 188 ) flown by Neville Duke broke the world air speed record for jet @-@ powered aircraft , achieving 727 @. @ 63 mph ( 1 @, @ 171 @. @ 01 km / h ) over Littlehampton . The record stood for under three weeks before being broken on 25 September 1953 by an RAF Supermarine Swift flown by Michael Lithgow .

= = Design = =

= = = Overview = = =

The Hunter entered service with the Royal Air Force as an interceptor aircraft . It was the first jet aircraft produced by Hawker for the RAF . From the outset it was clear that the type had exceptional performance , being the first RAF aircraft capable of effectively matching the English Electric Canberra bomber . The Hunter also set numerous aviation records , including absolute speed records . The type was also lauded for its quick turnaround time , enabled by features such as its removable gun pack , pressurised fuelling system , and easy handling in flight .

The definitive version of the Hunter was the FGA.9 , on which the majority of export versions were based . Although the Supermarine Swift had initially been politically favoured by the British Government , the Hunter proved far more successful , and had a lengthy service life with various operators , in part due to its low maintenance requirements and operating costs .

As the RAF received newer aircraft capable of supersonic speeds to perform the air interceptor role , many Hunters would be modified and re @-@ equipped for undertaking ground @-@ attack and reconnaissance missions instead . Hunters deemed surplus to the RAF 's requirements were also quickly refurbished for continued service abroad . The Hunter would be procured by a considerable number of foreign nations . In addition to former RAF aircraft , roughly half of the nearly 2 @, @ 000 Hunters produced had been manufactured specifically for overseas customers . The Hunter would be in operational service with the RAF for over 30 years . As late as 1996 , hundreds were still in active service with various operators across the world .

= = = Armament and equipment = = =

The single @-@ seat fighter versions of the Hunter were armed with four 30 mm ( 1 @. @ 18 in ) ADEN cannon , with 150 rounds of ammunition per gun . The cannon and ammunition boxes were contained in a single pack that could be removed from the aircraft for rapid re @-@ arming and maintenance . Unusually , the barrels of the cannon remained in the aircraft while the pack was removed and changed . In the two @-@ seat version , either a single 30 mm ADEN cannon was carried or , in some export versions , two , with a removable ammunition tank . Later versions of the Hunter were fitted with SNEB Pods ; these were 68 mm ( 2 @. @ 68 in ) rocket projectiles in 18 @-@ round Matra pods , providing an effective strike capability against ground targets .

The Hunter featured a nose @-@ mounted ranging radar , providing automatic ranging for aiming various armaments . Other equipment included pylon @-@ mounted underwing external fuel tanks , a forward @-@ facing gun camera , and large streamlined pods for collecting expended shell cases

beneath the gun pack . It was the placing of those pods which led to the plane getting the humorous nickname " Huntress " , because they resemble breasts . Several variants were fitted with tail @-@ mounted brake parachutes . Typically , export Hunters were equipped to be compatible with additional types of missiles , such as the AIM @-@ 9 Sidewinder air @-@ to @-@ air missile and the AGM @-@ 65 Maverick air @-@ to @-@ surface missile .

= = = Layout and structure = = =

The Hunter is a conventional swept wing all @-@ metal monoplane . The fuselage is of monocoque construction , with a removable rear section for engine maintenance . The engine is fed through triangular air intakes in the wing roots and has a single jetpipe in the rear of the fuselage . The mid @-@ mounted wings have a leading edge sweep of 35 ° and slight anhedral , the tailplanes and fin are also swept . The Hunter 's aerodynamic qualities were increasingly infringed upon by modifications in later production models , such as the addition of external containers to collect spent gun cartridges , underwing fuel tanks to increase range , leading edge extensions to resolve pitch control difficulties , and a large ventral air brake .

The airframe of the Hunter consists of six interchangeable major sections : the forward fuselage ( housing the cockpit and armament pack ) , center fuselage ( including the integral wing roots and air duct intakes ) , rear fuselage , tail unit assembly , and two individually produced wings . Production was divided up so major sections could be completed individually and manufacturing of the type could be dispersed to reduce vulnerability to attack . Establishing initial full @-@ rate production for the type was difficult , as manufacturing the Hunter required the development of 3 @, 250 tool designs and the procurement of 40 @, 000 fixtures , jigs , and tools .

= = = Engine = = =

The P.1067 first flew from RAF Boscombe Down on 20 July 1951 , powered by a 6 @, 500 lbf ( 28 @. 91 kN ) Rolls @-@ Royce Avon 103 engine from an English Electric Canberra bomber . The second prototype was fitted with a 7 @, 550 lbf ( 33 @. 58 kN ) Avon 107 turbojet . Hawker 's third prototype was powered by an 8 @, 000 lbf ( 35 @. 59 kN ) Armstrong Siddeley Sapphire 101 . Production Hunters were fitted with either the Avon or the Sapphire engine .

Early on in the Hunter 's service the Avon engines proved to have poor surge margins , and worryingly suffered compressor stalls when the cannon were fired , sometimes resulting in flameouts . The practise of " fuel dipping " , reducing fuel flow to the engine when the cannon were fired , was a satisfactory solution . Although the Sapphire did not suffer from the flameout problems of the Avon and had better fuel economy , Sapphire @-@ powered Hunters suffered many engine failures . The RAF elected to persevere with the Avon to simplify supply and maintenance , since the Canberra bomber used the same engine .

The RAF sought more thrust than was available from the Avon 100 series ; in response Rolls @-@ Royce developed the Avon 200 series engine . This was an almost wholly new design , equipped with a new compressor to put an end to surge problems , an annular combustion chamber , and an improved fuel control system . The resulting Avon 203 produced 10 @, 000 lbf ( 44 @. 48 kN ) of thrust , and was the engine for the Hunter F.6.

= = Operational history = =

= = = Royal Air Force = = =

The Hunter F.1 entered service with the Royal Air Force in July 1954 . It was the first high @-@ speed jet aircraft equipped with radar and fully powered flight controls to go into widespread service with the RAF . The Hunter replaced the Gloster Meteor , the Canadair Sabre , and the de Havilland Venom jet fighters in service . Initially , low internal fuel capacity restricted the Hunter 's performance

, giving it only a maximum flight endurance of about an hour . A tragic incident occurred on 8 February 1956 , when a flight of eight Hunters was redirected to another airfield owing to adverse weather conditions . Six of the eight aircraft ran out of fuel and crashed , killing one pilot .

Another difficulty encountered during the aircraft 's introduction was the occurrence of surging and stalling with the Avon engines . The F.2 , which used the Armstrong @-@ Siddeley Sapphire engine , did not suffer from this issue . Further problems occurred ; ejected cannon ammunition links had a tendency to strike and damage the underside of the fuselage , and diverting the gas emitted by the cannon during firing was another necessary modification . The original split @-@ flap airbrakes caused adverse changes in pitch trim and were quickly replaced by a single ventral airbrake . This meant , however , that the airbrake could not be used for landings .

To address the problem of range , a production Hunter F.1 was fitted with a modified wing that featured bag @-@ type fuel tanks in the leading edge and " wet " hardpoints . The resulting Hunter F.4 first flew on 20 October 1954 , and entered service in March 1955 . A distinctive Hunter feature added on the F.4 was the pair of blisters under the cockpit , which collected spent ammunition links to prevent airframe damage . Crews dubbed them " Sabrinas " after the contemporary movie star . The Sapphire @-@ powered version of the F.4 was designated the Hunter F.5.

The RAF later received Hunters equipped with an improved Avon engine . The Avon 203 produced 10 @, @ 000 lbf ( 44 @. @ 48 kN ) of thrust and was fitted to XF833 , which became the first Hunter F.6. Some other revisions on the F.6 included a revised fuel tank layout , the centre fuselage tanks being replaced by new ones in the rear fuselage ; the " Mod 228 " wing , which has a distinctive " dogtooth " leading edge notch to alleviate the pitch @-@ up problem ; and four " wet " hardpoints , finally giving the aircraft a good ferry range . The Hunter F.6 was given the company designation Hawker P.1099.

During the Suez Crisis of 1956 , Hunters of No. 1 and No. 34 Squadrons based at RAF Akrotiri in Cyprus flew escort for English Electric Canberra bombers on offensive missions into Egypt . For most of the conflict the Hunters engaged in local air defence due to their lack of range .

During the Brunei Revolt in 1962 , the Royal Air Force deployed Hunters and Gloster Javelins over Brunei to provide support for British ground forces ; Hunters launched both dummy and real strafing runs on ground targets to intimidate and pin down rebels . In one event , several Bruneian and expatriate hostages were due to be executed by rebels . Hunter aircraft flew over Limbang while Royal Marines from 42 Commando rescued the hostages in a fierce battle . In the following years of the Borneo Confrontation , Hunters were deployed along with other RAF aircraft in Borneo and Malaya .

The Hunter F.6 was retired from its day fighter role in the RAF by 1963 , being replaced by the much faster English Electric Lightning interceptor . Many F.6s were then given a new lease of life in the close air support role , converting into the Hunter FGA.9 variant . The FGA.9 saw frontline use from 1960 to 1971 , alongside the closely related Hunter FR.10 tactical reconnaissance variant . The Hunters were also used by two RAF display units ; the " Black Arrows " of No. 111 Squadron who set a record by looping and barrel rolling 22 Hunters in formation , and later the " Blue Diamonds " of No. 92 Squadron who flew 16 Hunters .

In Aden in May 1964 , Hunter FGA.9s and FR.10s of No. 43 Squadron RAF and No. 8 Squadron RAF were used extensively during the Radfan campaign against insurgents attempting to overthrow the Federation of South Arabia . SAS forces would routinely call in air strikes that required considerable precision , and , predominantly using 3 @-@ inch high explosive rockets and 30 mm ADEN cannon , the Hunter proved an able ground @-@ attack platform . Both squadrons continued operations with their Hunters until the UK withdrew from Aden in November 1967 .

Hunters were flown by No.63 , No. 234 and No. 79 Squadrons acting in training roles for foreign and Commonwealth students . These remained in service until after the Hawk T.1 entered service in the mid @-@ 1970s . Two @-@ seat trainer versions of the Hunter , the T.7 and T.8 , remained in use for training and secondary roles by the RAF and Royal Navy until the early 1990s ; when the Blackburn Buccaneer retired from service , the requirement for Hunter trainers was nullified and consequently all were retired .

= = = Indian Air Force = = =

In 1954 , India arranged to purchase Hunters as a part of a wider arms deal with Britain , ordering 140 Hunter single @-@ seat fighters at the same time that Pakistan announced its purchase of several North American F @-@ 86 Sabre jet fighters . The Indian Air Force ( IAF ) was the first to operate the Hunter T.66 trainers , placing an initial order in 1957 . The more powerful engine was considered beneficial in a hot environment , allowing for greater takeoff weights . During the 1960s , Pakistan investigated the possibility of buying as many as 40 English Electric Lightnings , but Britain was unenthusiastic about the potential sales opportunity because of the damage it would do to its relations with India , which at the time was still awaiting the delivery of large numbers of ex @-@ RAF Hunters .

By the outbreak of the Sino @-@ Indian War in 1962 , India had assembled one of the largest air forces in Asia , and the Hunter was the nation 's primary and most capable interceptor . During the conflict , the Hunter demonstrated its superiority over China 's Russian @-@ sourced MiGs and gave India a strategic advantage in the air . India 's aerial superiority deterred Chinese Ilyushin Il @-@ 4 bombers from attacking targets within India . In 1962 , India had selected to procure its first supersonic @-@ capable fighter , the Mikoyan @-@ Gurevich MiG @-@ 21 ; large numbers of Russian @-@ built fighters had increasingly supplemented the aging Hunters in the interceptor role by 1970 .

The Hunter was to play a major role during the Indo @-@ Pakistani War of 1965 ; along with the Gnat the Hunter was India 's primary air defence fighter , and regularly engaged in dogfights with the Pakistani F @-@ 86 Sabres and F @-@ 104 Starfighters . The aerial war saw both sides conducting thousands of sorties in a single month . Both sides claimed victory in the air war , Pakistan claimed to have destroyed 104 aircraft against its own losses of 19 , while India claimed to have destroyed 73 enemy aircraft and lost 35 of its own . Despite the intense fighting , the conflict was effectively a stalemate .

IAF Hunters performed extensive operations during the Indo @-@ Pakistani War of 1971 ; India had six combat @-@ ready squadrons of Hunters at the start of the conflict . Pakistani infantry and armoured forces attacked the Indian outpost of Longewala in an event now known as the Battle of Longewala . Six IAF Hunters stationed at Jaisalmer Air Force Base were able to halt the Pakistani advance at Longewala by conducting non @-@ stop bombing raids . The aircraft attacked Pakistani tanks , armoured personnel carriers and gun positions and contributed to the increasingly chaotic battlefield conditions , which ultimately led to the retreat of Pakistan 's ground forces . Hunters were also used for many ground @-@ attack missions and raids inside Pakistan 's borders , such as the high @-@ profile bombing of the Attock Oil refinery to limit Pakistani fuel supplies . In the aftermath of the conflict , Pakistan claimed to have shot down a total of 32 of India 's Hunters .

Due to unfavourable currency conditions and conflicting pressures on the military budget , several prospective procurements of modern aircraft such as the SEPECAT Jaguar and the British Aerospace Sea Harrier were put on hold following the 1971 war ; the indigenously developed HAL HF @-@ 24 Marut had also not been as successful as hoped , thus the IAF decided to retain the ageing fleets of Hunters and English Electric Canberra bombers . After considering several foreign aircraft to replace the Hunter , including the Dassault Mirage F1 , the Saab 37 Viggen , and several Soviet models , the Indian government announced its intention to procure 200 Jaguars , a large portion of which were to be assembled domestically , in October 1978 . In 1996 , the last of the IAF 's Hunters were phased out of service , the remaining single squadron operating the Hunter converting to the newer Sukhoi Su @-@ 30MKI .

= = = Swedish Air Force = = =

In the early 1950s , the Swedish Air Force saw the need for an interceptor that could reach enemy bombers at a higher altitude than the J 29 Tunnan that formed the backbone of the fighter force . A contract for 120 Hawker Hunter Mk 50s ( equivalent to the Mk 4 ) was therefore signed on 29 June 1954 and the first aircraft was delivered on 26 August 1955 . The model was designated J 34 and

was assigned to the F 8 and F 18 wings that defended Stockholm . The J 34 was armed with four 30 mm ( 1 @. @ 18 in ) cannon and two Sidewinders . The Swedish Air Force 's aerobatic team Acro Hunters used five J 34s during the late 1950s . The J 34s were gradually replaced by supersonic J 35 Draken and reassigned to less prominent air wings , F 9 in Gothenburg and F 10 in Ängelholm , during the 1960s .

A project to improve the performance of the J 34 resulted in one Hunter being fitted with a Swedish @-@ designed afterburner in 1958 . While this significantly increased the engine 's thrust , there was little improvement in overall performance , thus the project was shelved . The last of the J 34s was retired from service in 1969 .

= = = Swiss Air Force = = =

In 1957 , the Swiss Air Force performed an extensive evaluation of several aircraft for a prospective purchase ; competitors included the North American F @-@ 86 Sabre , the Folland Gnat , and the Hawker Hunter ; a pair of Hunters were loaned to the Swiss for further trials and testing . In January 1958 , the government of Switzerland chose to terminate their independent fighter aircraft project , the in @-@ development FFA P @-@ 16 , instead choosing to order 100 Hunters to replace their existing fleet of de Havilland Vampire fighters. further development of the indigenous P @-@ 16 was discontinued . This initial order for 100 single @-@ seat Hunters consisted of 12 refurbished RAF F.6s , and 88 new @-@ built F.58s.

Swiss Hunters were operated as interceptors , with a secondary ground @-@ attack role ; from 1963 onwards , the outboard wing pylons were modified to carry two AIM @-@ 9 Sidewinder air @-@ to @-@ air missiles . In the ground @-@ attack role , the Swiss Air Force maintained an arsenal of conventional iron bombs , a number of compatible napalm bombs were also maintained for intended use by the Hunters . In the interceptor role , the Hunters were supplemented by a surface @-@ to @-@ air missile ( SAM ) defence system also procured from the United Kingdom , based on the Bristol Bloodhound . A portion of the Hunter fleet was permanently placed in reserve as " sleeper squadrons " , housed in remote mountain @-@ side hangars . It was planned that in a large @-@ scale conflict , these aircraft would fly from adjacent highways , using them as improvised runways .

The Patrouille Suisse flight demonstration team were prominent fliers of the Hawker Hunter for several decades . Squadron aircraft were fitted with smoke generators on the engine exhausts and , later on , were painted in a distinctive red @-@ and @-@ white livery . The group officially formed on 22 August 1964 , and used the Hunter as its display aircraft until it was withdrawn from use in 1994 , the team continued to perform flight display using newer aircraft .

The Hunter fleet endured several attempts to procure successor aircraft to the type ; in the case of the Dassault Mirage III this had been due to excessive cost overruns and poor project management rather than the attributes of the Hunter itself . A second attempt to replace the Hunter resulted in a competition between the French Dassault Milan and the U.S. LTV A @-@ 7 Corsair II . Although the A @-@ 7 was eventually chosen as the winner , it would not be purchased and further 30 refurbished Hunters ( 22 F.58As and eight T.68 trainers ) were purchased in 1974 instead .

By 1975 , plans were laid to replace the Hunter in the air @-@ to @-@ air role with a more modern fighter aircraft , the Northrop F @-@ 5E Tiger II . The Hunter remained in a key role within the Swiss Air Force ; like the RAF 's Hunter fleet , the type transitioned to become the country 's primary ground attack platform , replacing the Venom . While the Swiss Hunters already had more armament options than the RAF aircraft , being cleared to carry Oerlikon 80 mm rockets instead of the elderly 3 @-@ inch rockets used by the RAF , to carry bombs from both inner and outer pylons and to launch AIM @-@ 9 Sidewinder air @-@ to @-@ air missiles , the change to a primary air @-@ to @-@ ground role resulted in the Hunter 80 upgrade , adding chaff / flare dispensers , BL755 cluster bombs and the ability to carry AGM @-@ 65 Maverick missiles .

In the 1990s , the discovery of wing cracking lead to the quick scrapping of all Hunter F.58As. The end of the Cold War also allowed Switzerland to retire its Hunters earlier than expected , even before taking delivery of the McDonnell Douglas F / A @-@ 18 Hornets that had been ordered as

replacements for the type ; the Hunter was completely withdrawn from Swiss service in 1994 . Author Fiona Lombardi stated of the retirement of the Hunter , the Swiss Air Force " definitively lost the capability to carry out air @-@ to @-@ ground operations " .

= = = Republic of Singapore Air Force = = =

Singapore was an enthusiastic operator of the Hunter , first ordering the aircraft in 1968 during a massive expansion of the city @-@ state 's armed forces ; deliveries began in 1971 and were completed by 1973 . At the time , considerable international controversy was generated as Britain ( and , as was later revealed , the U.S. ) had refused to sell Hunters to neighbouring Malaysia , sparking fears of a regional arms race and accusations of favouritism . The Republic of Singapore Air Force ( RSAF ) eventually received 46 refurbished Hunters to equip two squadrons .

In the late 1970s , the Singaporean Hunter fleet was upgraded and modified by Lockheed Aircraft Services Singapore ( LASS ) with an additional hardpoint under the forward fuselage and another two inboard pylons ( wired only for AIM @-@ 9 Sidewinders ) before the main gears , bringing to a total of seven hardpoints for external stores and weapons delivery . As a result of these upgrades , they were redesignated as FGA.74S , FR.74S and T.75S. The RSAF Black Knights , Singapore Air Force 's aerobatic team , flew Hunters from 1973 until 1989 .

By 1991 , Singapore 's fleet of combat aircraft included the General Dynamics F @-@ 16 Fighting Falcon , the Northrop F @-@ 5 Tiger II , as well as the locally modernised and upgraded ST Aerospace A @-@ 4SU Super Skyhawk ; the Hunters were active but obsolete in comparison . The type was finally retired and phased out of service in 1992 , with the 21 surviving airframes being sold off to an Australian warbird broker , Pacific Hunter Aviation Pty , in 1995 .

= = = Lebanese Air Force = = =

The Lebanese Air Force operated Hawker Hunters from 1958 to 2014 . A Lebanese Hunter shot down an Israeli jet over Kfirmishki in the early 1960s ; its pilot was captured by the Lebanese Armed Forces . One Hunter was shot down on the first day of the Six @-@ Day War by the Israeli Air Force . They were used infrequently during the Lebanese Civil War , and eventually fell out of usage and went into storage during the 1980s .

In August 2007 , the Lebanese Armed Forces planned to put its Hunters back into service following the 2007 Lebanon conflict , to deal with Fatah al @-@ Islam militants in the Nahr el @-@ Bared camp north of Tripoli . The programme was delayed by lack of spare parts for the aircraft , such as cartridges for the Martin @-@ Baker ejection seats . On 12 November 2008 , 50 years after its original introduction , the Lebanese Air Force returned four of its eight Hunters to service with 2nd Squadron , based at Rayak AB : one two @-@ seater and three single @-@ seaters ? . Military exercises were conducted with Hunters , such as those that took place on 12 July 2010 . The Hunters were retired from service during 2014 .

= = = Others = = =

= = = = Africa = = = =

During the 1950s , the Royal Rhodesian Air Force was an important export customer of Britain , purchasing not only Hunters but De Havilland Vampires and Canberra bombers as well . Rhodesia later deployed its Hunter FGA.9s extensively against ZANLA and ZIPRA guerrillas during the Rhodesian Bush War in the late 1960s and throughout the 1970s , occasionally engaging in cross @-@ border raids over Zambia and Mozambique . The Zimbabwean Air Force Hunters were flown to support Laurent Kabila 's loyalists during the Second Congo War , and were reported to be involved in the Mozambican Civil War . In Somalia , the Siad Barre regime 's fleet of ageing Hunters , often piloted by former Rhodesian servicemen , carried out several bombing missions against rebel

units in the late 1980s .

===== Belgium and the Netherlands =====

The Belgian Air Force received 112 Hunter F.4s between 1956 and 1957 to replace the Gloster Meteor F.8. The aircraft were built under licence in both Belgium and the Netherlands in a joint programme , some using U.S. offshore funding . SABCA and Avions Fairey built 64 aircraft in Belgium and a further 48 were built in the Netherlands by Fokker . The Hunters were used by Nos. 1 , 3 and 9 Wings but did not serve for long ; the aircraft with 1 Wing were replaced in 1958 by the Avro Canada CF @-@ 100 Canuck , and most were scrapped afterwards .

The Belgian and Dutch governments subsequently ordered the improved Hunter F.6 , with Nos. 1 , 7 and 9 Wings of the Belgian Air Force receiving 112 Fokker @-@ built aircraft between 1957 and 1958 . Although built in the Netherlands , 29 aircraft had been assembled from kits in Belgium by SABCA and 59 by Avions Fairey , and were operated by 7 and 9 Wings . No. 9 Wing was disbanded in 1960 , and by 1963 the Hunter squadrons in 7 Wing had also been disbanded . A large number of the surviving Hunters were sold to Hawker Aircraft and re @-@ built for re @-@ export to India and Iraq , with others to Chile , Kuwait and Lebanon .

===== Middle East =====

Between 1964 and 1975 , both Britain and France delivered significant quantities of arms , including Hunters , to Iraq . The Hunters were far more effective in fighting guerrilla activity than the Russian MiG @-@ 17s then operated by Iraq . In 1967 , Hunters of the Iraqi Air Force saw action after the Six @-@ Day War between Israel and several neighbouring Arab nations . During the War of Attrition Iraqi Hunters usually operated from bases in Egypt and Syria . While flying a Hunter from Iraqi Airbase H3 , Flight Lieutenant Saiful Azam , on exchange from the Pakistan Air Force , shot down three Israeli jets including a Sud Aviation Vautour and a Mirage IIICJ . Some missions were also flown by the Royal Jordanian Air Force , but most of the Jordanian Hunters were destroyed on the ground on the first day of the Six @-@ Day War . Replacement Hunters for Jordanian service were acquired from both Britain and Saudi Arabia in the war 's aftermath . These were used with considerable success in ground attacks against Syrian Army tanks during the Black September Crisis .

===== South America =====

During the 1960s and 1970s , Chile completed the acquisition of Hunters from Britain for service in the Chilean Air Force . In June 1973 , the Liberian oil tanker Napier ran aground on Guambin Island , accidentally releasing 30 @, @ 000 tons of oil . After the rescue of the crew , the vessel was fired upon and set on fire by Chilean Hunters in an effort to burn the oil to avoid further environmental contamination .

During the 1973 Chilean coup d'état , some of the Hunters were used by military officers as part of the effort to successfully overthrow the socialist president of Chile , Salvador Allende , on 11 September 1973 . On 10 September 1973 , coup leaders ordered the Hunters to relocate to Talcahuano in preparation . The following morning , the aircraft were used to conduct bombing missions against the presidential palace , Allende 's house in Santiago , and several radio stations loyal to the government . The UK had signed contracts prior to the Chilean coup d'état for delivery of a further seven Hunters , as well as performing engine overhauls and the delivery of other equipment . The government under Prime Minister James Callaghan delayed the delivery of the aircraft , along with vessels and submarines also on order ; the trade unions took action to block delivery of refurbished Hunter engines at the East Kilbride plant until October 1978 . The action was led by Rolls Royce workers , Bob Fulton , Robert Sommerville and John Keenan , who hid the engines in the factory . The Government of Chile bestowed on 16 April 2015 , its highest civilian medal the Order Bernardo O 'Higgins Medal on the three workers for their action of solidarity . In



1982 , after the Falklands War , a number of Hunters were air freighted to Chile as part of the arrangements for providing support for UK operations in the South Atlantic .

The purchase of Hunters by Chile may have been a factor in the decision by the Peruvian Air Force to acquire Hunters of their own . Britain was keen to sell to Peru as the decision to sell Hunters to Chile became a controversial political issue for the British government following the Chilean coup ; the sale also upheld Britain 's concept of regional " balancing " .

= = Variants = =

= = Operators = =

= = = Military operators = = =

Abu Dhabi  
Belgium  
Chile  
Denmark  
Iraq  
India  
Jordan  
Kenya  
Kuwait  
Lebanon  
Netherlands  
Oman  
Peru  
Qatar  
Rhodesia  
Saudi Arabia  
Singapore  
Somalia  
Sweden  
Switzerland  
United Kingdom  
Zimbabwe

= = = Civil = = =

A number of civil organisations operate or have operated Hunters for use as aerial targets and for threat simulation under contract with the military . Other Hunters are owned and operated for public display and demonstration :

AeroGroup

The American company AeroGroup previously owned and operated 11 different Hunter aircraft for government work including F.6 , F.58 and the T.8 trainer .

Airborne Tactical Advantage Company ( ATAC )

An American company based at Williamsburg International Airport in Newport News , Virginia , the company operates 14 former Swiss F.58s on United States government contracts .

Apache Aviation

Contracted by the French Navy , Apache is based at Istres in Provence , France , with frequent deployments to Lorient and Landivisiau in Brittany , other locations as required . Operates two single @-@ seater and one two seat Hunters . Operations are associated with Lortie Aviation .

#### Delta Jets

Operated between 1995 and 2010 from Kemble Airport near Cirencester , England with three operational Hunters . The company went into liquidation in 2010 , Hunter G @-@ FFOX ( WV318 ) is now operated by the Hunter Flight academy .

#### Dutch Hawker Hunter Foundation .

Operates a Hunter T.8C two @-@ seater in RNLAf markings and a single @-@ seat Hunter F.6A in Dutch markings , based at Leeuwarden Air Base in the Netherlands .

#### Embraer

Operates an ex @-@ Chilean Air Force Hunter T.72 as a flight test chase plane .

#### Hawker Hunter Aviation .

Based at RAF Scampton , it operates a fleet of 12 Mk 58 and three two @-@ seaters ( T.7 and T.8 ) , as well as other aircraft to provide " high speed Aerial Threat Simulation , Mission Support Training and Trials Support Services " .

#### Heritage Aviation

Operates " Miss Demeanour " , a Mk.58A privately owned and flown as a display aircraft .

#### Hunter Flight Academy .

Operates a Hunter T.7a G @-@ FFOX ( WV318 ) callsign " FireFox " is a two @-@ seat Hunter in 111sqn " Black Arrows " colours and markings . The Hunter T.7a is based at North Weald Airfield in the UK .

#### Hunter Flying Ltd . ( now Horizon Aircraft Services Ltd . )

Based at MOD St Athan in Wales , Hunter Flying Ltd maintain over 15 privately owned examples of the Hunter .

#### Lortie Aviation

A Canadian company ( formerly known as Northern Lights Combat Air Support ) is based in Quebec City and owns 21 Hunters ( mainly ex @-@ Swiss F.58 variants ) that are leased out for military training duties .

#### Thunder City

Three flyable Hunters are based at Thunder City at Cape Town International Airport in South Africa . Four ( of the seven ) Hunters owned by Thunder City were up for auction in April 2013

= = On display = =

Hunter F.4 at Royal Museum of the Armed Forces and Military History , Brussels , Belgium

Hunter F.6 at Militärhistorisches Museum Flugplatz Berlin @-@ Gatow Germany

Hunter WT694 at Caernarfon Airworld Museum , Wales

Hunter WV396 at RAF Valley , Wales

Hunter GA.11 WV382 on static display at East Midlands Aeropark

Hunter F.6A XE627 at the Imperial War Museum Duxford , Cambridgeshire

Hunter FR.10 on static display at East Midlands Aeropark

Hunter T.7 XL565 at Bruntingthorpe Aerodrome , Leicestershire ( including sections of WT745 & XL591 )

Hunter XL 568 at RAF Museum Cosford

Hunter T.7 XL569 on static display at East Midlands Aeropark

Hunter T.8M XL580 at the Fleet Air Arm Museum , Somerset

Hunter T.7 XL623 mounted in the town centre of Woking , Surrey

Hunter F.51 E419 at the North East Aircraft Museum , Sunderland

Hunter F.51 E412 at the Brooklands Museum , Weybridge , Surrey

Hunter F.51 E421 at the Brooklands Museum , Weybridge , Surrey

Hunter FGA.78 N @-@ 268 at Yorkshire Air Museum , Elvington , North Yorkshire

Hunter T.7 XL572 painted blue to represent the Blue Diamonds formation teams lead

Hunter T.7 XL571 at Yorkshire Air Museum , Elvington , North Yorkshire

Hunter T.7 XL618 at Newark Air Museum , Newark @-@ on @-@ Trent , Nottinghamshire

Hunter F.1 WT651 at Newark Air Museum , Newark @-@ on @-@ Trent , Nottinghamshire

Hunter F.1 WT680 at the Anglia Motel , on the A17 East of King 's Lynn in Fleet Hargate , Lincolnshire

Hunter F.6 XF527 at Gate guard RAF Halton , Halton , Buckinghamshire

Hunter F.6A XF375 at Boscombe Down Aviation Collection , Wiltshire

= = Accidents and incidents = =

8 February 1956 ? Hawker Hunter multiple aircraft accident after a sudden deterioration in the weather during a dogfight exercise in Norfolk , England

5 April 1968 ? unauthorised flight through Tower Bridge in London

6 July 2006 ? A Hawker Hunter jet ( N58MX ) flown by pilot Robert " Bob " Guilford , crashed after takeoff . After the plane was airborne , Guilford climbed about 1500 feet into the air and made a right turn . He came back around towards the Hillsboro Airport , and after his turn and passed by the airport losing altitude and speed quickly . Soon after , the Mk.58 Hunter stalled and impacted the ground in a fireball . Four houses were damaged and the pilot died on impact , but there were no casualties on the ground . After the crash , the rest of the air show was canceled . The jet had been on static display at the show , and was not an aerial performer . The pilot had taken off to return to his home in California near the end of the show when the crash occurred .

18 May 2012 ? Hawker Hunter crash in Ventura County , California

29 October 2014 ? Hawker Hunter crash in Ventura County , California

22 August 2015 ? A Hunter T7 ( G @-@ BXFI / WV372 ) crashed onto the A27 arterial road ( dual carriageway ) between Lancing and Shoreham @-@ by @-@ Sea , West Sussex , England , while taking part in the 2015 Shoreham Airshow . Eleven people on the ground were killed and several others were injured , including the pilot of the plane . Witnesses told local TV that the jet appeared to have crashed when it failed to pull out of a loop manoeuvre .

= = Specifications ( Hunter F.6 ) = =

Data from The Great Book of Fighters

General characteristics

Crew : One

Length : 45 ft 11 in ( 14 @.@ 00 m )

Wingspan : 33 ft 8 in ( 10 @.@ 26 m )

Height : 13 ft 2 in ( 4 @.@ 01 m )

Wing area : 349 ft <sup>2</sup> ( 32 @.@ 42 m <sup>2</sup> )

Empty weight : 14 @,@ 122 lb ( 6 @,@ 405 kg )

Loaded weight : 17 @,@ 750 lb ( 8 @,@ 050 kg )

Max. takeoff weight : 24 @,@ 600 lb ( 11 @,@ 158 kg )

Powerplant : 1 × Rolls @-@ Royce Avon 207 turbojet , 10 @,@ 145 lbf ( 45 @.@ 13 kN )

Performance

Maximum speed : Mach 0 @.@ 94 , 620 kn ( 715 mph , 1 @,@ 150 km / h ) at sea level

Combat range : 385 nmi ( 445 mi , 715 km )

Ferry range : 1 @,@ 650 nmi ( 1 @,@ 900 mi , 3 @,@ 060 km ) with external fuel

Service ceiling : 50 @,@ 000 ft ( 15 @,@ 240 m )

Rate of climb : 17 @,@ 200 ft / min ( 87 @.@ 4 m / s )

Wing loading : 51 @.@ 6 lb / ft <sup>2</sup> ( 251 @.@ 9 kg / m <sup>2</sup> )

Thrust / weight : 0 @.@ 56

Armament

Guns : 4 × 30 mm ( 1 @.@ 18 in ) ADEN revolver cannon in a removable gun pack with 150 rpg

Hardpoints : 4 underwing ( 7 hardpoints on Singaporean FGA / FR.74S , essentially refurbished FGA.9 derived from F.6 ) with a capacity of 7 @,@ 400 lb ( 3 @,@ 400 kg ) and provisions to carry combinations of :

Rockets : 4 × Matra rocket pods ( each with 18 × SNEB 68 mm ( 2 @.@ 68 in ) rockets ) or

32 x Hispano SURA R80 80 mm ( 3 @. @ 15 in ) rockets

Missiles : 4 x AIM @-@ 9 Sidewinder Air @-@ to @-@ air missiles , mounted on Singaporean FGA / FR.74S ( two on Swiss Mk.58 Dutch F6 's and Swedish Mk.50 )

4 x AGM @-@ 65 Maverick Air @-@ to @-@ surface missiles , mounted on Singaporean FGA / FR.74S ( two on Swiss Mk.58 )

Bombs : a variety of unguided iron bombs

Other : 2 x 230 US gallons ( 870 l ; 190 imp gal ) drop tanks for extended range / loitering time

Avionics

Ekco ARI 5820 ranging radar

= = Notable appearances in media = =