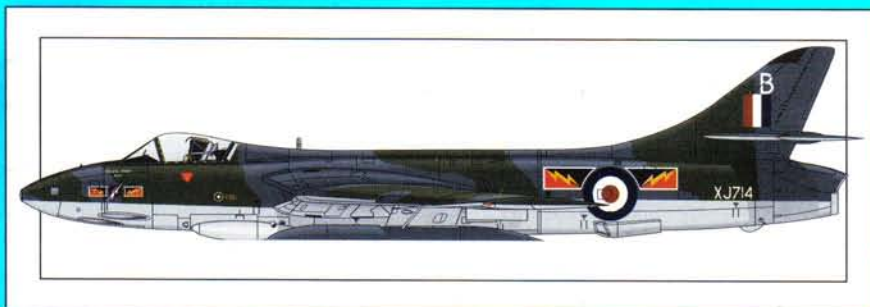




**WARPAINT SERIES No. 8**

# HAWKER HUNTER

BY ALAN W. HALL

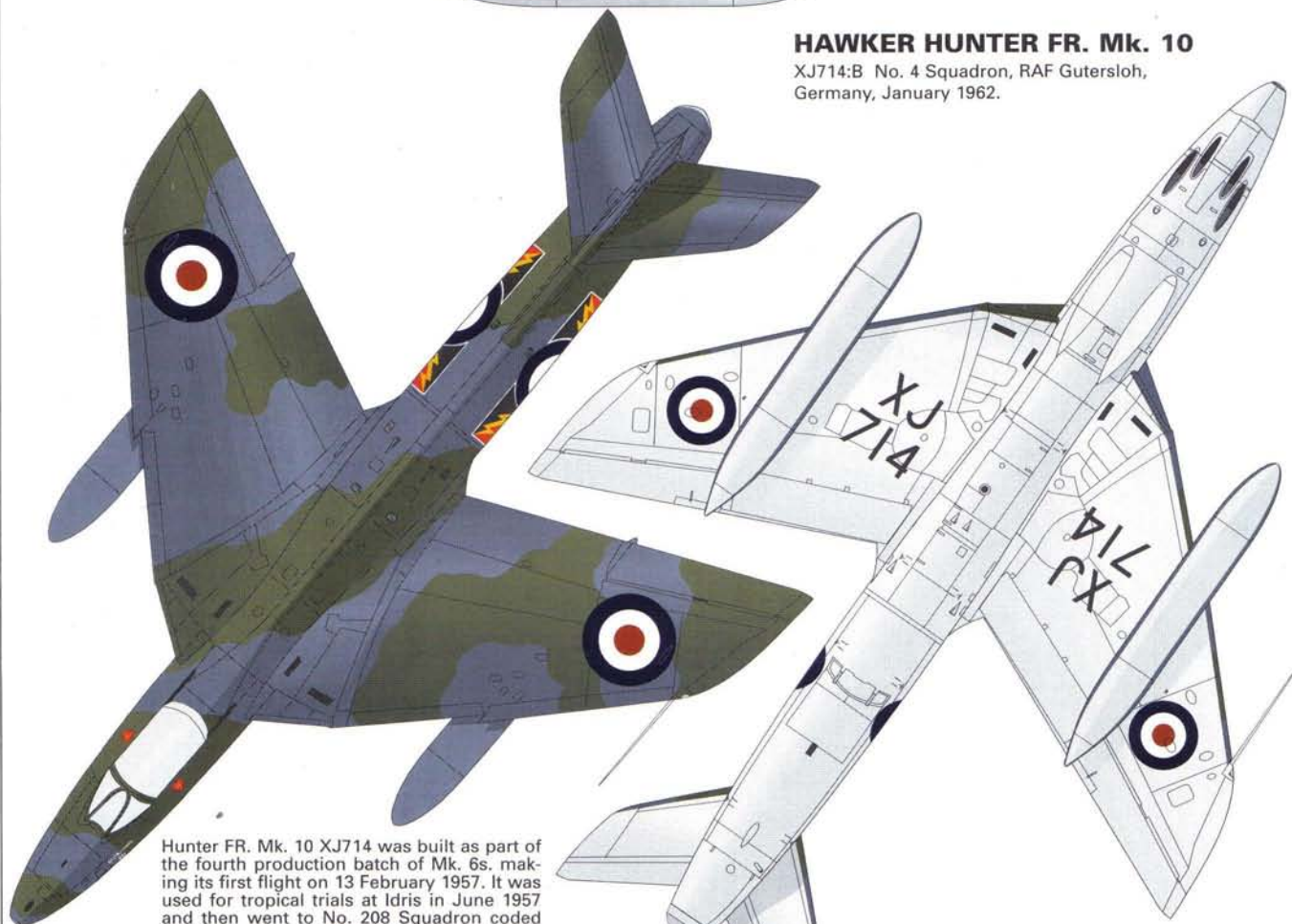
These five Hunter FGA. 9s belonged to No. 1 Tactical Weapons Unit at Brawdy. The variety of markings in use can be seen; most have tail numbers, one has the letter 'O'. Two have No. 79 (Shadow) Squadron markings whilst the others have the TWU badge on the nose. The Hunters were replaced by Hawks in 1984. (Geoff Lee)





# **HAWKER HUNTER FR. Mk. 10**

XJ714:B No. 4 Squadron, RAF Gutersloh,  
Germany, January 1962.



Hunter FR. Mk. 10 XJ714 was built as part of the fourth production batch of Mk. 6s, making its first flight on 13 February 1957. It was used for tropical trials at Idris in June 1957 and then went to No. 208 Squadron coded 'B'. Returned to Hawkers it was converted to FR. Mk. 10 standard by November 1969 and used by No 4 Squadron as seen here. In 1971 it was bought back and converted again to an FR. Mk. 74B for use by the Singapore Air Force serialised 531 in January 1973.



**DRAWING BY DAVID HOWLEY**



# HAWKER HUNTER

By Alan W. Hall

## Introduction

AMONGST the numbers of post-World War 2 RAF fighter aircraft there have been few that have captured the imagination quite like the Hawker Hunter. Its sleek outline, multiplicity of purpose and contribution to the British war material export market has not been exceeded apart from, perhaps the Gloster Meteor which it followed into front line service. As a second generation full scale production fighter it filled the need for a heavily armed, near supersonic, interceptor during the period in which the Cold War between the Western Allies and the Soviet Union reached its climax.

During the Hunter's relatively long service in the RAF it equipped, in its various marks, a total of 30 RAF fighter squadrons and was exported to no less than 19 other nations including Belgium, Denmark and the Netherlands within NATO.

**Hunter WT555 was the first production aircraft. It made its first flight on 16 May 1953 and subsequently was used for handling and performance trials by Hawkers and at A&AEE Boscombe Down between 1953 and 1954. It is now preserved in the RAF Museum, Cosford, as 7499M.**

Total production of Hunter aircraft of all marks did not exceed 2,000 but interestingly many of these had double lives. Aircraft that were declared surplus by one country or another were bought back by Hawker Aircraft Limited and either turned into two-seat trainers or refurbished as strike-fighters and resold to third world countries.

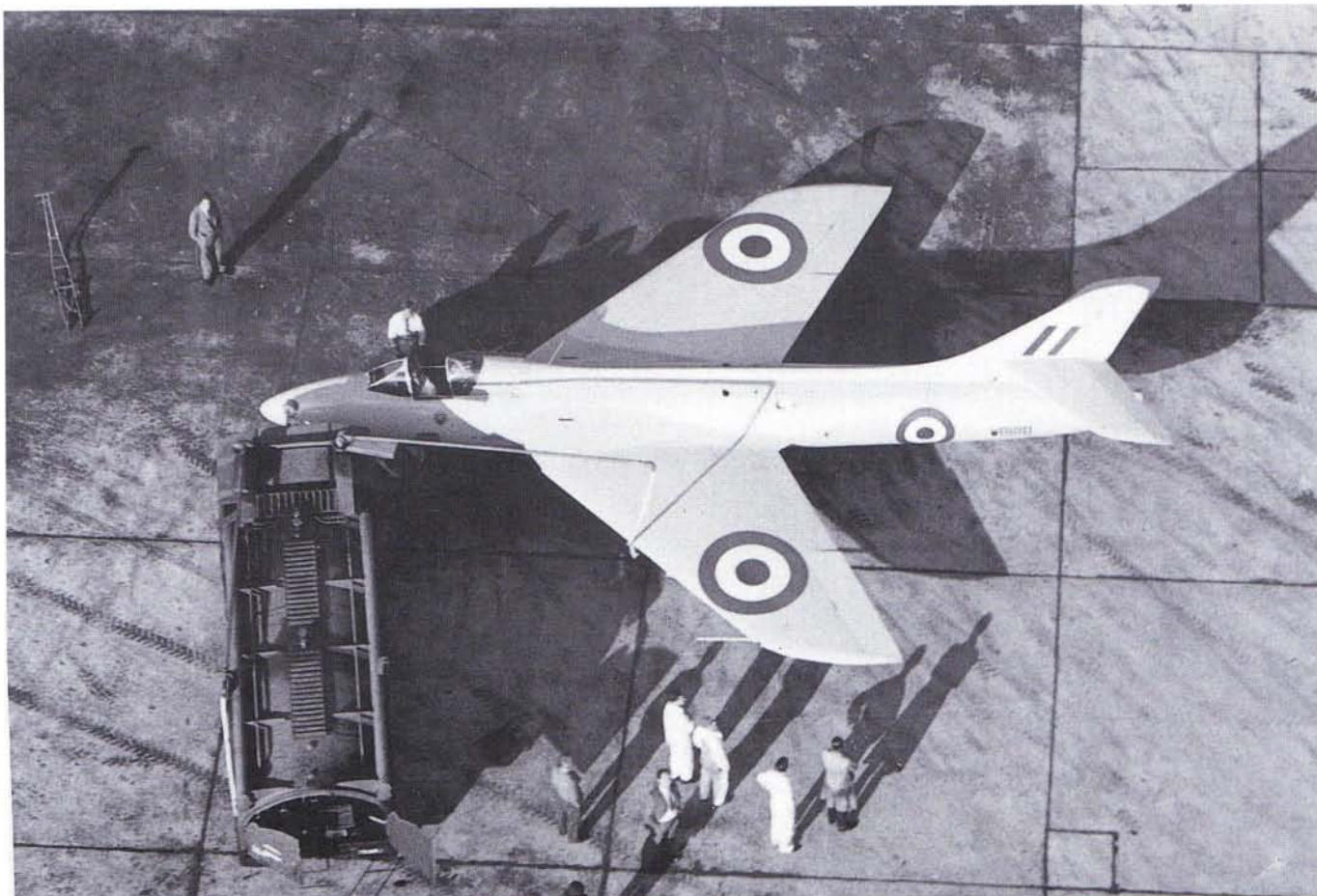
During the peak production period there were no less than four production centres established at the Hawker works, Kingston-upon-Thames, a second line at Squires Gate airfield, Blackpool and an assembly and flight test facility at the Hawker airfield at Dunsfold, Surrey. Later a production line was established at the Armstrong Whitworth

**The first of the many. Hunter prototype WB188 with Neville Duke at the controls seen on one of its early test flights. It was painted a pale duck-egg green overall and fitted with a spin recovery parachute in the tail.**

factory, Baginton, Coventry with a flight test airfield at Bitteswell some 20 miles to the north.

As far as pure fighter variants were concerned the RAF was to receive five versions of the Hunter. Two different engine types were used on the first variants, the Mk. 1 being powered by the Rolls Royce Avon and the Mk. 2 by the Armstrong Siddeley Sapphire. Subsequently the Mk. 4 was Avon-powered and the Mk. 5 by the





**Above:** Taken during the preliminary taxiing trials at Boscombe Down, Hunter prototype WB188 suffered a nose wheel collapse before making its first flight on 20 July 1951.

Sapphire but in both cases the engines installed were of greater power.

The best of the Hunter fighter variants was the Mk. 6. This Avon-powered variant which had an all-flying tail, 'saw-toothed' leading edge and improved flying controls was the mount chosen by one of the world's most renowned aerobatic display teams, the celebrated Black Arrows of No. 111 Squadron who were followed, when they re-equipped with the Lightning, by the Blue Diamonds of equally-famous No. 92 Squadron.

Photo-reconnaissance and fighter-bomber variants followed and the Hunter was adapted for advanced training purposes in addition to the T.Mk.7 which was a two-seater side-by-side version which remained in RAF service longer than any others of the Hunter family.

Overseas the different RAF aircraft were echoed by identical versions but given different Mark numbers starting with the Swedish Mk. 50 and continuing with some gaps to the Mk. 80 and 81 which were single and two-seat versions for the Kenyan Air Force.

Almost all of the prominent RAF fighter squadrons flew the Hunter at some time in

**Right:** The first prototype Hunter was modified to become the only F. Mk. 3. This picture shows test pilot Neville Duke in the cockpit of the all-red painted aircraft which gained the world's air speed record of 727.6 mph over a three kilometre course near Littlehampton on the south coast. It was the only Hunter to have reheat.



# Hawker Hunter camouflage and markings

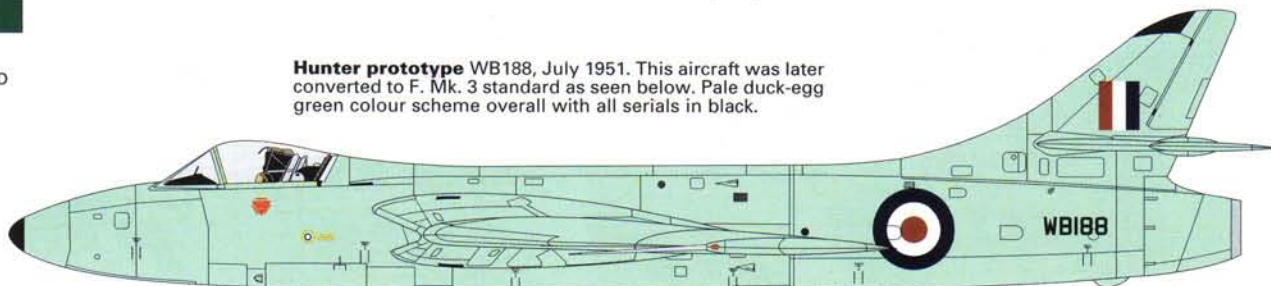
**Drawings by  
David Howley**

## HAWKER HUNTER COLOUR KEY

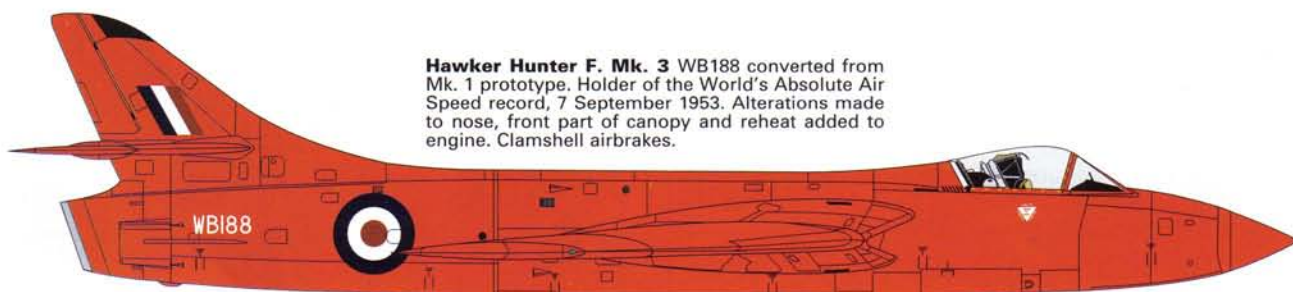
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|---------------|-------------|-----------|-------------|---------------|------------------|---------------|-------------------|--------------------|--------------------|-------------|--------------------------|------------------|
|               |             |           |             |               |                  |               |                   |                    |                    |             |                          |                  |
| Black         | White       | Yellow    | Roundel Red | Roundel Blue  | Dark Green       | Dk. Sea Grey  | Ex. Dark Sea Grey | Lt. A/c Grey       | Dark Earth         | Light Stone | Mid-East Blue u/surfaces | Blue-Grey Sweden |
|               |             |           |             |               |                  |               |                   |                    |                    |             |                          |                  |
| Blue Diamonds | Red-Belgian | Freen RAE | Maroon RN   | Purple 34 Sqn | Mid Bronze Green | Lt. Grey Oman | Dk. Grey Oman     | Pale Green (Proto) | Pale Blue (FAA ID) | Dayglo Red  | Nat metal                | Aluminium        |

Green  
Saudi ID

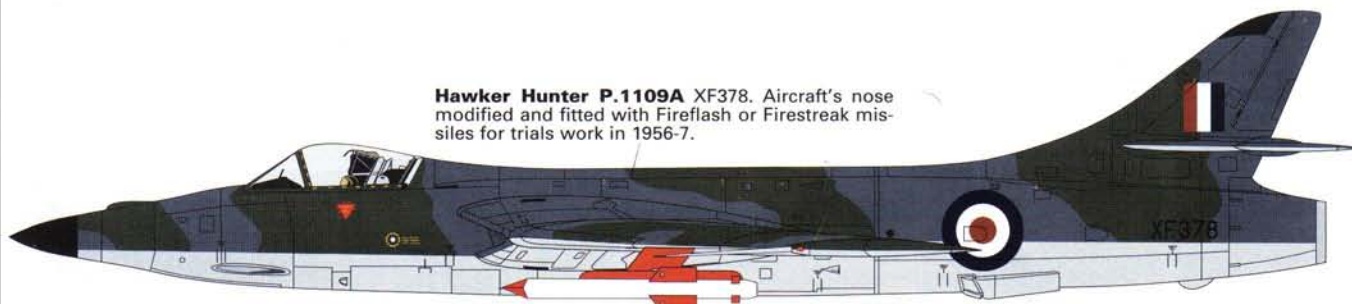
**Hunter prototype** WB188, July 1951. This aircraft was later converted to F. Mk. 3 standard as seen below. Pale duck-egg green colour scheme overall with all serials in black.



**Hawker Hunter F. Mk. 3** WB188 converted from Mk. 1 prototype. Holder of the World's Absolute Air Speed record, 7 September 1953. Alterations made to nose, front part of canopy and reheat added to engine. Clamshell airbrakes.



**Hawker Hunter P.1109A** XF378. Aircraft's nose modified and fitted with Fireflash or Firestreak missiles for trials work in 1956-7.



No 1 Squadron  
badge, Tower  
Bridge insignia and  
crew name detail

**Hawker Hunter FGA.9** XE624:B of No. 1 Squadron, West Raynham, September 1963. Flt Lt. Pollock's flight *under* Tower Bridge commemorated by small white badge on nose.



**Hawker Hunter FR. Mk. 10** WW596:N of No. 2 Squadron, RAF Gutersloh, Germany in mid-1960s.



**No. 54 Squadron at Odiham was the last to be re-equipped with the Hunter F. Mk.1 and converted to F.4s after only seven months. Making a formation loop over the Hampshire countryside are WW636:Q, WT659:U, WT696:O and WT692:S Note the lightning flash on each fin and rudder.**

their post-war careers, praising it as a thoroughbred aircraft with positive response and forgiving qualities. It is therefore surprising to learn that its conception was uneasy and its gestation period decidedly fraught.

## RAF fighter versions

Like many good RAF aircraft that preceded it, the Hunter was a private venture. In the immediate post-war period the government of the day was far more concerned with disarmament than with building up a strong air arm. This was soon to change as with the establishment of the Iron Curtain, the building of the Berlin Wall after the blockade and the advent of the war in Korea, policies rapidly changed. Previous to this there had been no immediate desire to change from the established fighter squadrons of Meteors and Vampires but it was obvious that both were soon to come to the end of their operational lives and replacements had to be sought. Specification F.43/46 was issued by the Air Ministry which called for a fighter powered by an axial flow jet, then in its infancy, in preference to the well-proven but outmoded centrifugal power plants used by the early jet fighters.

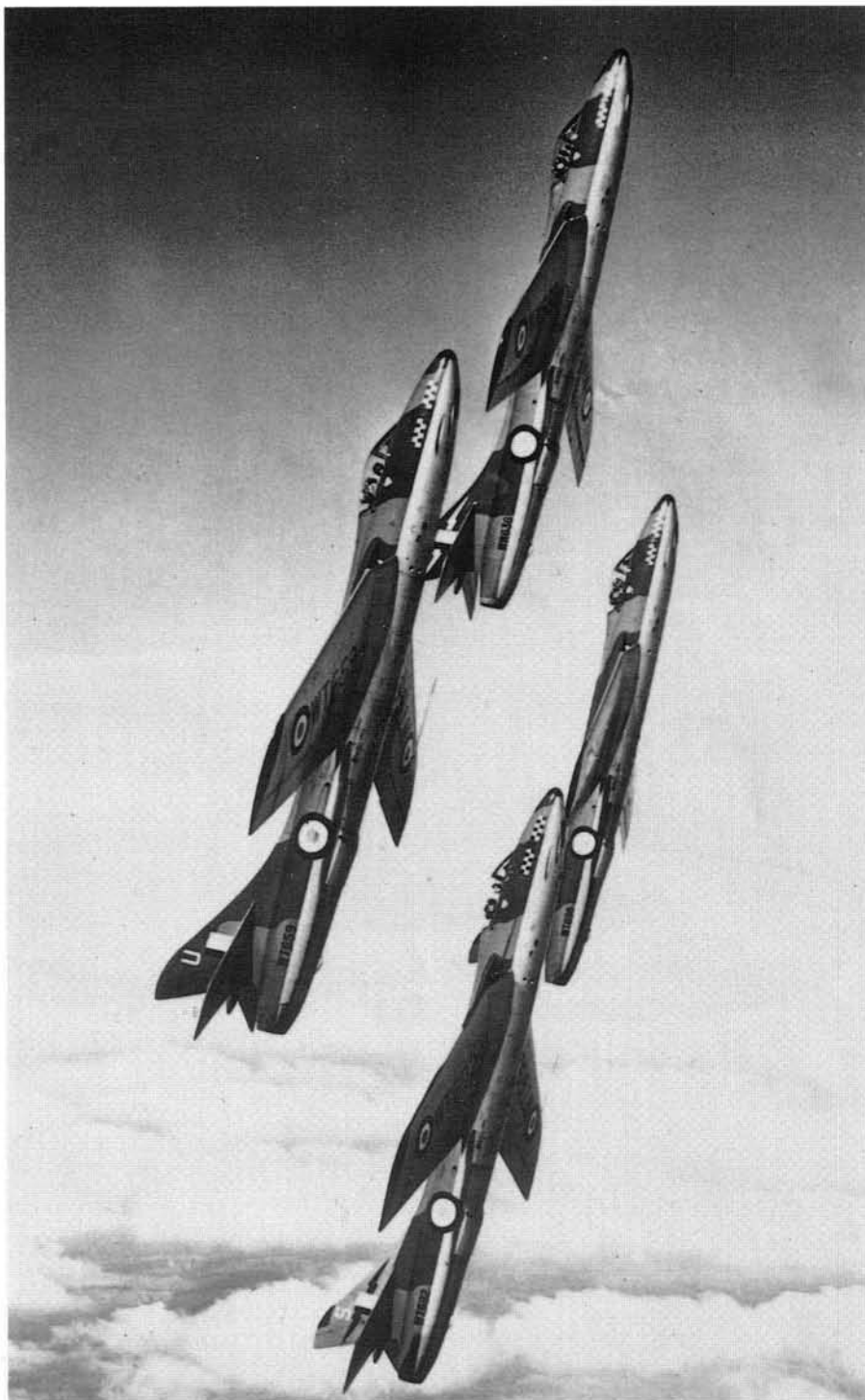
Sir Sydney Camm, Hawker's chief designer, looked at the Specification's requirements and decided that many were impractical and therefore set about his own design which was given the Hawker design number of P.1067.

Designed to be fitted with either the Rolls Royce AJ.65 (which later became the Avon) or the Metrovick F.9 (later known as the Sapphire when taken over by Armstrong-Siddeley) the original conception had a nose intake. These ideas were submitted to the Ministry of Supply in January 1948 and a new Specification, F.3/48, written around them and the original Specification dropped.

Three prototypes were ordered but Camm revised his ideas about a nose intake and decided that the P.1067 should have a bifurcated intake in the wing roots such as that already designed for the Sea Hawk and the research aircraft that bridged the two, namely Hawker's P.1040 and P.1052.

It was also decided that out of the three prototypes, the first two were to be Avon-powered and the third by the Sapphire.

Another innovation was the P.1067's armament. Camm designed a single unit that incorporated not only four 30mm Aden cannon but also the breeches and 150 rounds of ammunition for each gun that could be removed and replaced in the field in less than five minutes. Weighing almost 2,000lbs the unit was to be winched into position thus giving the fighter an extremely quick turn-round time. Of equal importance, a single pressure input refuelling point was provided in the port undercarriage bay giving the



**Right: Compare this picture of the Hunter F.3 with that on the previous page and it will be seen that it was taken before the forward part of the canopy was modified.**



Detail of Wing Commander's pennant and nose bars for Nos. 2, 3, and 234 Squadrons

**Hawker Hunter F. Mk. 4** XF990:K of No. 3 Squadron, RAF Geilenkirchen, Germany, May 1957. Flown by Wing Commander Flying.



Detail of No. 4 Squadron nose marking

**Hawker Hunter F. Mk. 4** WV266:T of No. 4 Squadron, RAF Jever, Germany, January 1956.



**Hawker Hunter FGA. Mk. 9** XG128:Q of No. 8 Squadron, Khormaksar, Aden, January 1966.



**Hawker Hunter FGA. Mk. 9** XE550:X of Nos. 8 and 43 Squadrons, Tactical Wing, Khormaksar, Aden, January 1966.



potential of a complete turn round of the aircraft in an almost unheard of eight minutes.

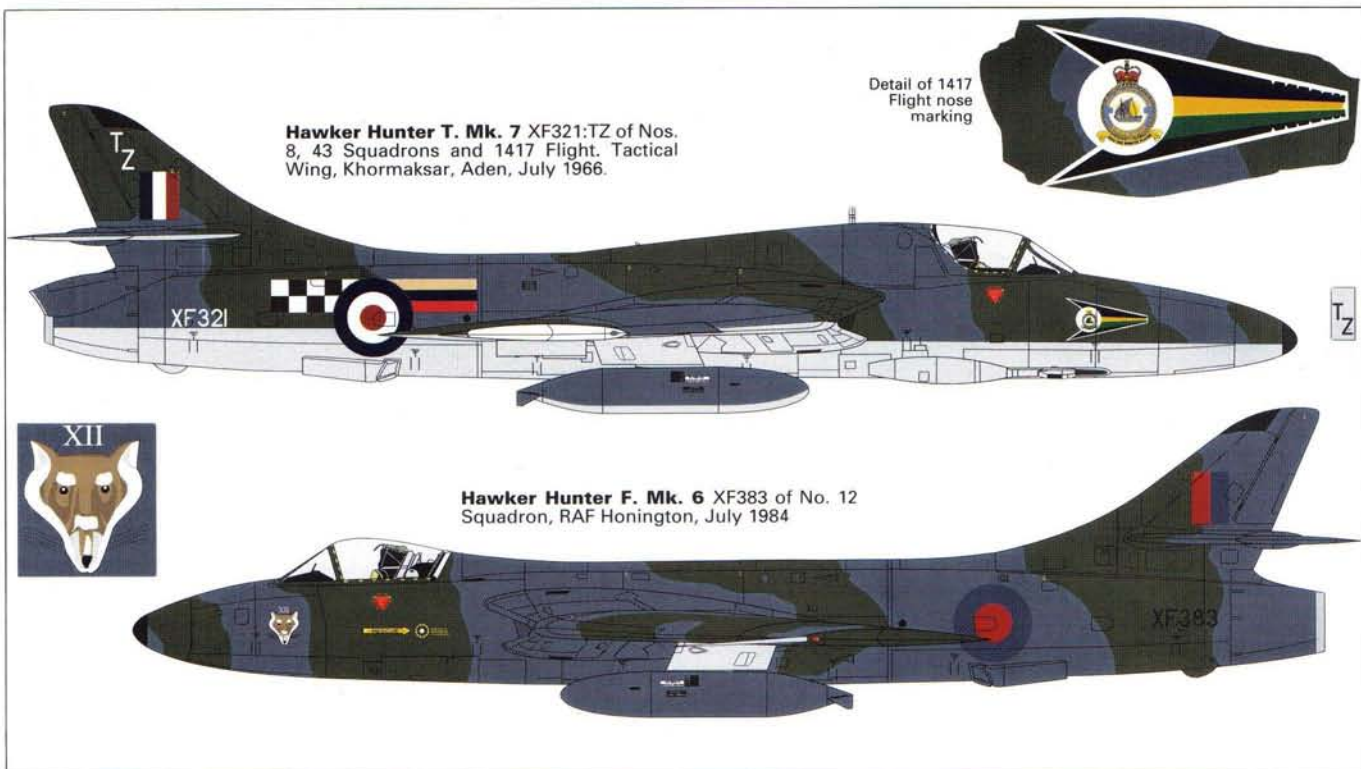
## PRODUCTION PROBLEMS

A mock up of the P.1067 was begun in September 1948 and by the end of 1949 construction of the jigs for the first prototype was in hand. By the spring of 1950 Hawkers had received the Instruction to Proceed with production planning for 200 Avon-powered aircraft while a further 200 Sapphire-powered machines were scheduled to be built at Armstrong Whitworth, Coventry.

Early in 1951 the first prototype P.1067 now officially named the Hunter, was having the wings, wiring, control system, fuel system and engine installation completed.

**The green and yellow checks on each side of the roundel of Hunter F. Mk. 2 WN915:T indicate that this aircraft belonged to No. 257 Squadron when based at Wattisham in 1957. The aircraft later served with No. 263 Squadron. (RAF Museum)**





**Hunter F. 2 WN907:H in the markings of No. 257 Squadron which used the type between September 1954 and March 1957 when based at RAF Wattisham. This picture may have been taken at Colerne when the aircraft was retired in 1968.**

in April 1952.

The first prototype, painted a pale duck-egg green overall, was cleared to appear at the SBAC Show, Farnborough in September 1951.

The second prototype, again an Avon-powered variant, serialised WB195, joined the test programme with its first flight on 3 May 1952. It differed from WB188 by having the Aden gun pack fitted and was equipped with the production standard gun ranging radar. By this time the Hunter had become a super-priority project for the RAF and Hawkers received orders, on 14 March 1951, to obtain materials for the first 113 aircraft.

The third prototype F. Mk. 2 WB202 was the first to have the Sapphire engine. This was built at Kingston but preparations were in an advanced state for production to con-

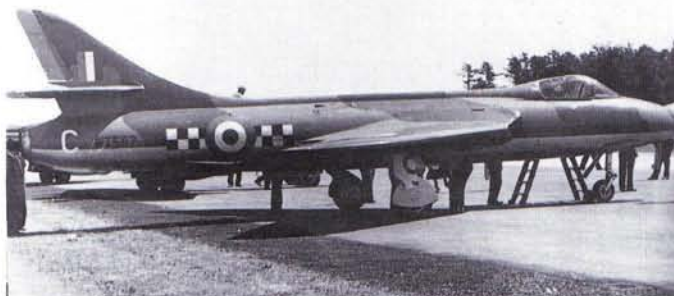
In the meantime, sadly, Hawker's chief test pilot Squadron Leader T.S. 'Wimpy' Wade was killed flying one of Hawker's other prototypes and his successor was the now well-known Squadron Leader Neville Duke.

It was he who undertook the first taxiing trials of the Hunter. The prototype serialised WB188 was moved from Kingston to A&AEE Boscombe Down for the early trials and first flight as the 3,000 ft runway at the Establishment was one of the longest in the UK and the facilities there were ideal for the preliminary tests. Engine running tests were satisfactorily concluded and the first taxi trials in which Duke moved progressively

faster down the runway were put in hand. On one of these where the nose wheel was lifted resulted in Duke having to brake sharply thus slewing the aircraft round onto the perimeter track. All of the tyres burst and the brakes were completely burned out, but this setback did not delay the first flight and WB188 was airborne for the first time on 20 July 1951 for one hour during which Duke tested the aircraft's paces up to 20,000ft.

Some six more test flights were made from Boscombe Down before the prototype returned to Dunsfold where the matter of development flying was set in hand culminating in the Hunter's first supersonic flight

**Lower left: Hunter F. 1 WT687:A when in service with No. 54 Squadron, based at Odiham, to whom it was delivered in December 1954. Below: Another famous fighter squadron, No. 43, used Hunter F. 1 WT587:C flying from Leuchars. The unusual position of the aircraft's code letter on the rear fuselage is noteworthy. (MAP)**





tinue at Coventry. The original order for 200 was cut to 150, 105 of which were eventually built as Hunter F.5s.

The first production F.Mk. 1 WT555 flew on 16 May 1953 but this machine, known at Dunsfold as 'State Express' after the 555 symbol used by the cigarette manufacturer, was retained by Hawkers for handling trials. The next four off the line went to Boscombe Down for pre-service evaluation, WT556 being used for familiarisation, WT557 for radio trials, WT558 for gun firing development and WT559 for a number of tests connected with the canopy emergency release. In all some 23 of the first production aircraft were used for accelerated trials purposes either by Hawkers or A&AEE before going on to RAF use.

It was at this point that the first problems arose particularly with regard to the use of the flaps as wing mounted air brakes. It was found that when actuated these gave the aircraft a marked nose down attitude change under rapid deceleration conditions and several methods were tried to overcome this. Eventually a rather crude but equally effective 'barn door' air brake was installed under the rear fuselage which could be electrically selected and used under any speed conditions. It was also tied into the undercarriage system so that when the wheels were down the brake could not be operated.

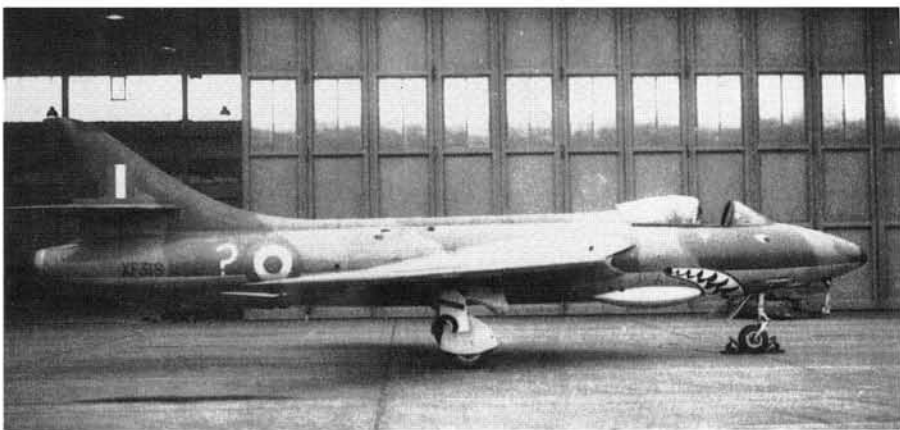
Another serious problem encountered was the tendency for the Avon 113 engine to surge and flame out when the cannon were fired at high altitude. The cause was the result of gun fumes entering the air intakes

thus reducing oxygen to the engine. Rolls Royce found an answer to the problem by fitting a fuel-dipping system but it was not entirely effective and when the aircraft first entered service a restriction was placed on the altitude at which the cannons could be fired.

Further problems were encountered with firing the guns at West Raynham where three aircraft WT576, WT577 and WT578 were allocated for the Air Fighting

**Another picture of No. 54 Squadron's WT687:A showing the absence of link collector 'Sabrinas' and no underwing fuel tanks. The upper surface camouflage scheme is well illustrated. Squadron markings were later added to the nose. (RAF Museum)**

Development Squadron to carry out their own trials. At that time a major RAF exercise named 'Dividend' was about to take place and the Hunters were used operationally for the first time.



**Above right: The only sharkmouthed Hunter F.4s were those belonging to No. 112 Squadron based at Bruggen in 1957. The question mark code's origin is not clear. Right: Hunter F. 4 WT795:A of No. 247 Squadron. The absence of wing tanks and link collectors is significant on an aircraft that was built well after these were introduced. (RAF Museum)**



**Hunter F.4 WV387:Q came from the second production batch of this version and was delivered to No. 43 Squadron in September 1955. It also served with Nos. 67 and 71 Squadrons before being broken up at Kemble in September 1958. (RAF Museum)**

A disconcerting feature came to light when it was discovered that the cartridge cases and links which were ejected from the aircraft as the guns were fired, were causing damage to the rear fuselage. This was overcome by a simple remedy involving four bulged fairings, known as 'Sabrinas' being added to catch the links as they were ejected.

### RECORD FLIGHTS

Mention has already been made of the Hunter Mk. 1, 2, 4 and 5 but the Mk. 3 was something different. The original prototype WB188 was re-engined with an afterburning Avon RA.7R and given this designation. This developed 7,130 lbs st and 9,600 lbs st with reheat. The aircraft was given a new sharply pointed nose, new canopy, clam-shell type jet pipe nozzle and rear fuselage

**Ground crew working on a Hunter F. 4 of No. 130 Squadron at RAF Bruggen. This unit was one of the short-lived Hunter squadrons in RAF Germany only having their aircraft for 13 months.**

air brakes as well as a bright red colour scheme.

Neville Duke flew the F.3 on several world record attempts starting with a three-kilometre course off Rustington on the Sussex coast. It was here that he set a new World Absolute Speed Record of 727.6 mph on 7 September 1963. On the 19th of that same month he followed this up by taking the aircraft round a 100 km closed circuit at an average speed of 709.2 mph setting up yet another world record.

WB188 then returned to trials work with Hawkers and was eventually sold to the

Ministry of Supply in 1955. It has always been the subject of conjecture that, had the Ministry decided to go ahead with further reheat trials of the Hunter, and had this entered production, then the aircraft would have stayed in production for longer and increased its export potential overseas.

### SQUADRON ENTRY

After three years of trials the Hunter F.1 entered service with No. 43 Squadron at RAF Leuchars in July 1954. This squadron converted from Meteor F.8s and being one of the most famous RAF fighter squadrons rather naturally formed an aerobatic team shortly after receiving their aircraft which was to set the pattern for things to come. Displays were given in Norway and Sweden in October 1955 in addition to participating in a number of UK air shows.

No. 43 was joined at Leuchars by No. 222 Squadron in October 1954 who again con-

**Hunter F. 4 WV275:D of No. 4 Squadron. This unit made sure that their aircraft were recognised by putting the squadron markings both on the nose and in the roundel position. WV275 also served with No. 111 Squadron and 229 OCU before being broken up in June 1961. (RAF Museum)**

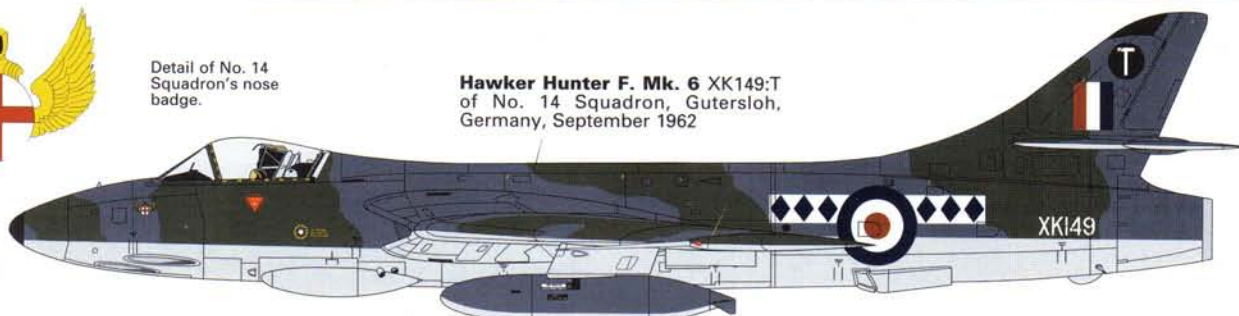




Detail of No. 14 Squadron's nose badge.

**Hawker Hunter F. Mk. 6** XK149:T of No. 14 Squadron, Gutersloh, Germany, September 1962

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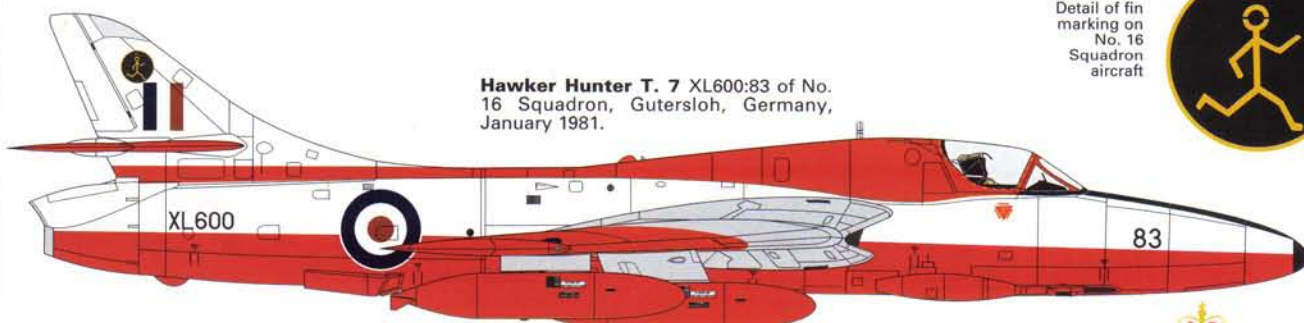
**Hawker Hunter T.7B** WV318:XV of No. 15 Squadron, Laarbruch, Germany 1983



Detail of fin marking on No. 16 Squadron aircraft



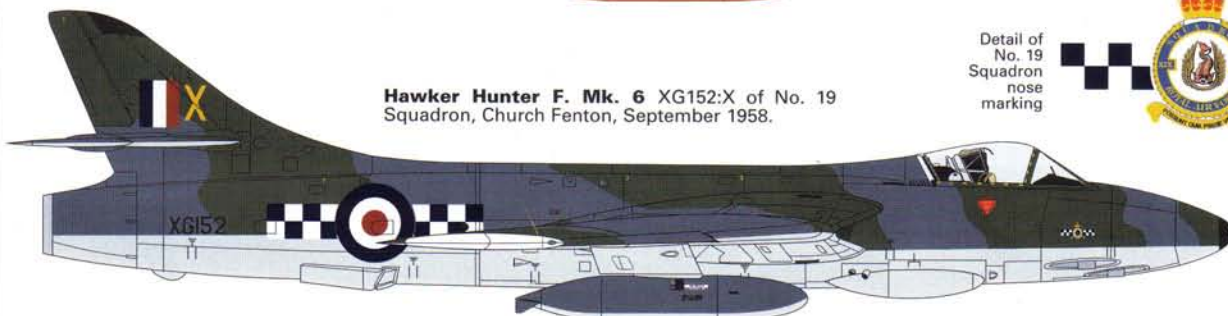
**Hawker Hunter T. 7** XL600:83 of No. 16 Squadron, Gutersloh, Germany, January 1981.



Detail of No. 19 Squadron nose marking



**Hawker Hunter F. Mk. 6** XG152:X of No. 19 Squadron, Church Fenton, September 1958.



Detail of No. 26 Squadron's nose markings

**Hawker Hunter F. Mk. 6** XF419:J of No. 26 Squadron, Gutersloh, Germany, January 1961

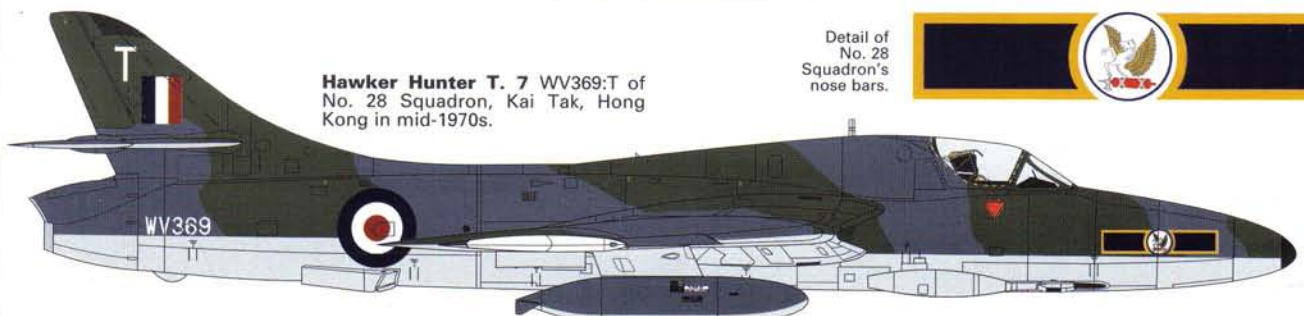
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Detail of No. 28 Squadron's nose bars.



**Hawker Hunter T. 7** WV369:T of No. 28 Squadron, Kai Tak, Hong Kong in mid-1970s.





**Wattisham line-up. Five Hunter F.2s of No. 263 Squadron. As production of this version was limited, the squadron also received a number of F.5s to make up their strength. (RAF Museum)**

verted from Meteor F.8s. The only other F.Mk. 1 squadron was No. 54 which established itself at RAF Odiham in February 1955. A total of 25 Hunter F.1s were also allocated to No. 229 Operational Conversion Unit at Chivenor which by 1955 was well into its stride in qualifying a steady stream of pilots for the rapidly growing number of squadrons converting to the type. So great was the demand that a second Hunter OCU, No. 233, was formed at Pembrey in South Wales in 1956 to assist in coping with the large number of Hunter pilots that were needed.

The first two F.Mk. 2 squadrons were Nos. 257 in November and 263 in January 1955 forming the Wattisham Wing. As related earlier Sapphire-engined Hunter production was cut back and only 45 F. Mk. 2s were built, all of them going to these two units. This version was not prone to engine flame outs when the guns were fired at altitude giving cause for conjecture about the limited numbers that were actually produced.

Both the Hunter Mk. 1 and 2 were very

**Below: Stream landing of Hunter F. Mk. 5s belonging to No. 41 Squadron at Biggin Hill, their base in August 1955. Right: The distinctive markings of No. 34 Squadron shown on a Hunter F.Mk. 5 with which they took part in the Suez operation in 1956**

limited in range which hindered their operational use - a fault frequently found in British manufactured fighter aircraft. On the plus side both versions, although interim, helped to initiate the RAF into supersonic flight at high altitude before the advent of later improved versions.

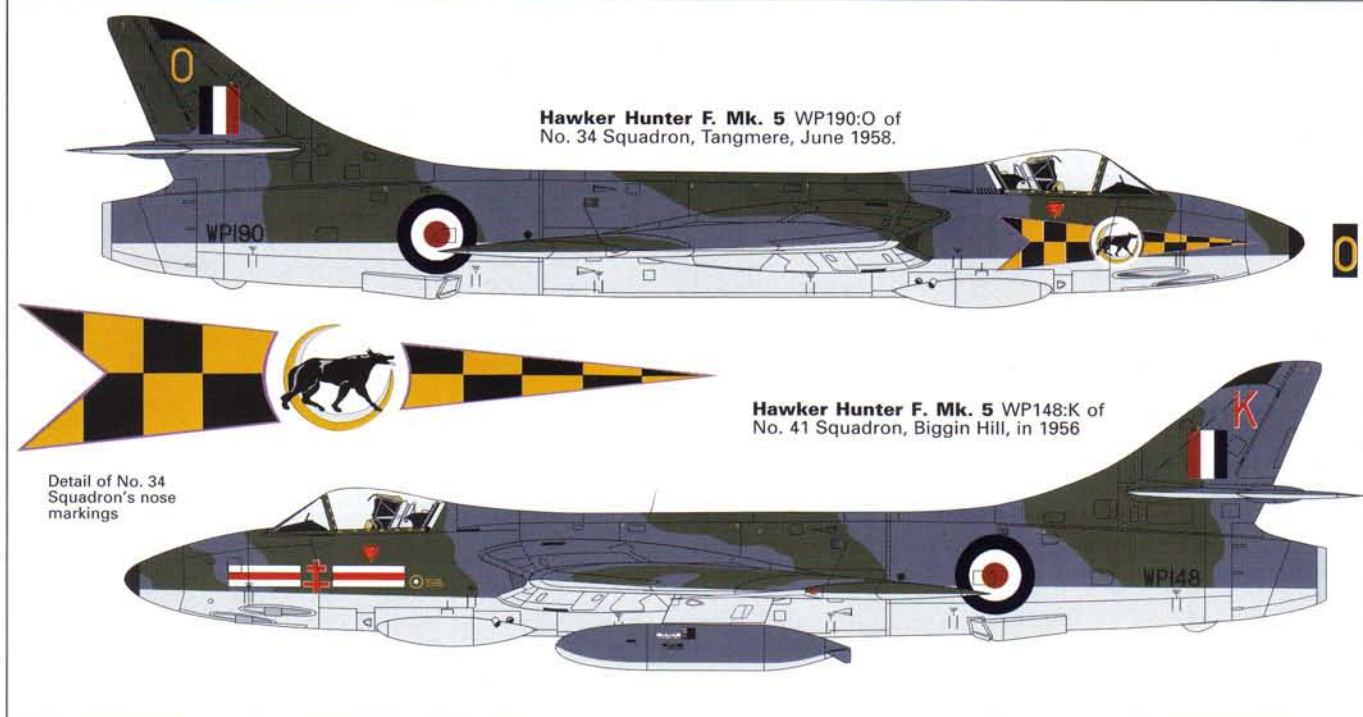
By the end of the first production run Kingston had built 113 and Blackpool 26 in addition to the 45 Coventry-manufactured aircraft. By mid-1958 all Hunter F.Mks. 1 and 2 had been withdrawn from service.

## NEW VARIANTS

Having built the first operational aircraft, Hawkers were hard at work producing improvements to their basic design. In addition it was high time that the RAF Germany squadrons were re-equipped.

The Hunter Mk. 4 was the first to appear for which the Hawker design team had developed a modified fuel system, increasing the internal tankage as well as providing underwing hard points for the attachment of





two 100 gallon Bristol drop tanks. The wing was strengthened to permit some of this extra tankage to go into the leading edges. The opportunity was also taken to fit hard points under the wings for a wide variety of stores from bombs to rockets which qualified the Hunter for the Air Ministry's OR 228 requirement.

The first Mk. 4, which was the 114th production aircraft was WT701 followed by WW646 from Blackpool, being the beginning of a further 365 Hunters of this variant to come from the two production lines.

The first unit to get the new variant in March 1955 was No. 54 Squadron at Odiham who gave up their F.Mk.1s to the OCUs. Mk. 4s were also allocated to No. 111 Squadron at North Weald who made the pace for things to come by their CO setting a London to Edinburgh speed record of 714.504 mph commemorating that set by another Treble One commanding officer in 1938 in a Hurricane.

Meanwhile the first Sapphire-powered Mk. 5s were re-equipping the Wattisham Wing's No. 263 Squadron who were then joined by Nos. 1 and 34 Squadrons at Tangmere in February 1955. Similarly No. 41 Squadron at Biggin Hill and No. 56 Squadron at Waterbeach were provided with Mk. 5s. However, none of these were to remain in service for all that long as the Mk. 5 was taken out of service by June 1958 with all of the named squadrons either disbanded or being re-equipped.

In spite of this it was the Hunter F. 5 that was the first to be used on operations when Nos. 1 and 34 Squadrons were deployed to Nicosia, Cyprus, in October 1956 for the defence of the island during the Suez operation. The distinctive Suez stripes of black and yellow were applied to the rear fuselage and wings, but after participating in the

**WT802 was a Hunter F. Mk. 4. It is seen here in service with No. 98 Squadron when based at Jever between 1955 and 1957. The aircraft also flew with No. 247 Squadron and was broken up in 1962. (RAF Museum)**

strikes against Egypt on 1 November, they were judged to have too short a range to be effective and therefore withdrawn. Although no enemy aircraft were encountered in combat, the Hunters lost two of their number on the ground due to being blown up by EOKA terrorists.

Hunter Mk. 4s on the other hand were quickly replacing older types in the RAF's fighter squadrons. Within the space of 12 months no fewer than 19 squadrons received them including those in RAF Germany that had previously been using Canadair Sabre aircraft which was in any case considered as an interim machine before British-built replacements could be manufactured.

Sabre squadrons re-equipped included Nos. 3 and 234 at Geilenkirchen in May and June 1956, Nos. 4 and 93 at Jever in January 1956, No. 20 at Ahlhorn in November 1955, No. 26 at Oldenburg in June 1955 and Nos. 67, 71, 112 and 130 at Bruggen between April and May 1956. At home Nos. 66 and 92 Squadrons made the change from Sabres at Linton-on-Ouse in March and April 1956 respectively.

At the same time other Germany-based squadrons previous using the Venom FB.1 changed their aircraft. These included No. 14 at Ahlhorn (June 1955) and Nos. 98 and 118 at Jever (March and April 1955) plus the

Vampire FB. 5 unit, No. 130 Squadron at Bruggen in May 1956.

Some of the original F.1 squadrons in the UK including Nos. 43, 54 and 222 Squadrons also changed to the Mk. 4 in March 1956, September 1955 and August 1956.

Finally two other Meteor F.8 squadrons Nos. 74 at Coltishall and 247 at Odiham transitioned in July 1955 and March 1957 respectively.

Hunter Mk. 4s were also engaged in a number of interesting trials. XF310, for example was modified to carry two Fairey Fireflash air-to-air missiles under the wings and was fitted with an elongated nose to incorporate the fire control radar. A series of firing trials were carried out over the RAE range at Llanbedr in Wales.

The Hunter Mk. 4 was to remain in front line service until 1957 when it began to be replaced by the Mk. 6. It was throughout this period and beyond that it rendered invaluable service in the Operational Conversion Units (No. 233 being disbanded after the initial rush to convert pilots was complete) and with Advanced Flying Schools. Many examples were later bought back by Hawkers from this source and from overseas countries which had earlier been exported, whilst others were converted into two-seat trainers.



Hunter F. Mk. 6 XG172 was part of the third production batch of 110 aircraft built at Kingston. Issued to No. 19 Squadron it was later used by 229 OCU where it adopted the colours of No. 63 Squadron

## THE ULTIMATE FIGHTER

Development of the Hunter depended on a number of circumstances but were generally associated with the improvements that were made to the Avon engine.

Hawkers, at the instigation of the Ministry of Supply looked at the possibility of both airframe and engine improvements to the aircraft early on in its career. The Hawker P.1091 was the most radical of these which was a tailless delta with a Hunter fuselage but this was not proceeded with. Less innovative was the P.1083 with a completely new wing of thinner section and greater sweepback of 50 degrees compared to the Mk.4's 40 degrees. The prototype for this aircraft was 80 per cent complete by July 1953 when the



project was cancelled in favour of the Supermarine Type 545, but this too was cancelled.

The P.1083 was to have had a Rolls Royce

Avon RA.19R which was fitted with reheat and although the official view was that there was insufficient development in this engine, the company used the fuselage and, after



Detail of No. 43 Squadron's nose markings

**Hawker Hunter T. Mk.7** XL611:T of No. 43 Squadron, Leuchars, September 1959.



Detail of No. 45 Squadron's nose marking

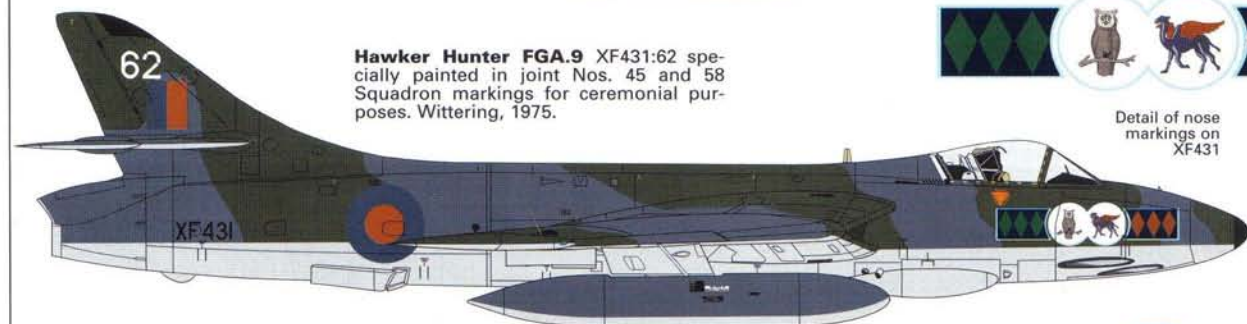
**Hawker Hunter FGA.9** XG130:61 of No. 45 Squadron, Wittering, May 1974



**Hawker Hunter FGA.9** XF431:62 specially painted in joint Nos. 45 and 58 Squadron markings for ceremonial purposes. Wittering, 1975.



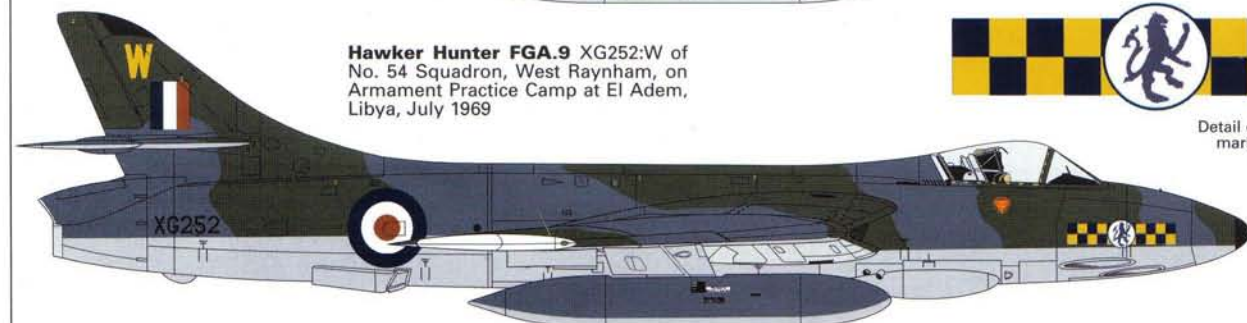
Detail of nose markings on XF431



**Hawker Hunter FGA.9** XG252:W of No. 54 Squadron, West Raynham, on Armament Practice Camp at El Adem, Libya, July 1969



Detail of nose marking on XG252





Left: Hawker Hunter F. 4 XF296:Z of No. 67 Squadron at RAF Bruggen in 1956-57. Note that the gun pack has been removed. Above: From the same squadron, XF317 was the aircraft assigned to *Scale Aircraft Modelling* columnist Mike McEvoy, then a Flying Officer. The aircraft went to Halton as 7773M in April 1957 and was subsequently bought back by Hawkers for resale to the Chilean Air Force as FR.71A serialised J-734 in 1971. This picture shows Mike renewing the acquaintance with 'his' Hunter during a Halton open day. (via Mike McEvoy)

suitable modifications, it eventually flew as the Hawker P.1099 XF833 and became the prototype for the Hunter Mk.6.

This featured the Avon 203 engine which gave one third more thrust than those fitted to the Mk.4 and was immune to surging. It is sad to relate that the Hunter could have gone

**Hunter F. Mk. 6 in squadron markings:** 1. XJ691:M of No. 14 Squadron when based at Gutersloh. 2. No. 56 Squadron's XG159:P with red and white checks on the wing tips. 3. XF447:H of No. 65 Squadron also served with No. 92 Squadron as 'F'. 4. Seen at a Gaydon open day, XE544:V of No. 66 Squadron was converted to FGA.9 standard. 5. No. 74 Squadron had XK141:F on strength before it went to 229 OCU. 6. XG207:F first served with No. 93 Squadron before going to No. 1 Squadron as shown.

on to even longer production had the opportunity been taken to install reheat for the engine as export customers, particularly in NATO, who wanted an aircraft that was not too expensive, unlike the Lightning which was by then destined to follow Hawker's product into RAF service, and on which they already had aircrew and servicing teams well acquainted with Hunters already in service.

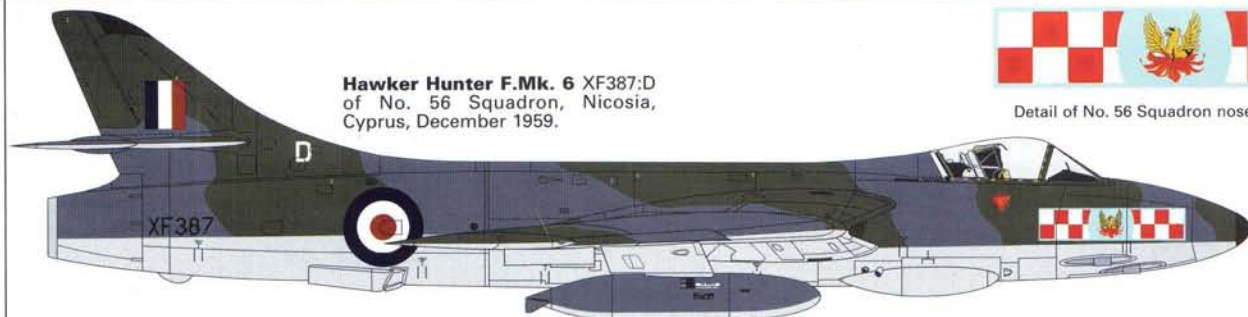
The F.Mk.6 had a number of other external changes. The increased power caused some problems with pitch-up, which were eventually cured by extending the wing leading edge from half-way along the span into the characteristic 'saw-toothed' shape that was the feature of this variant. This was retrospectively introduced onto all Mk. 6 air-

craft and several late service Mk. 4s.

The prototype Hunter F.6 made its first flight from Dunsfold on 22 January 1954. A small pre-production batch of seven aircraft were built at Kingston, serialised WW592 to WW598, followed by full scale manufacture beginning with XE526 which flew on 11 October 1955.

Production was mainly based at Kingston but because the factory at Coventry had completed their assigned quantity of Sapphire-engined F.Mk.5s, Armstrong Whitworth turned over to building the Mk.6 beginning with XF373 that flew on 25 May 1955. No production line was set up at

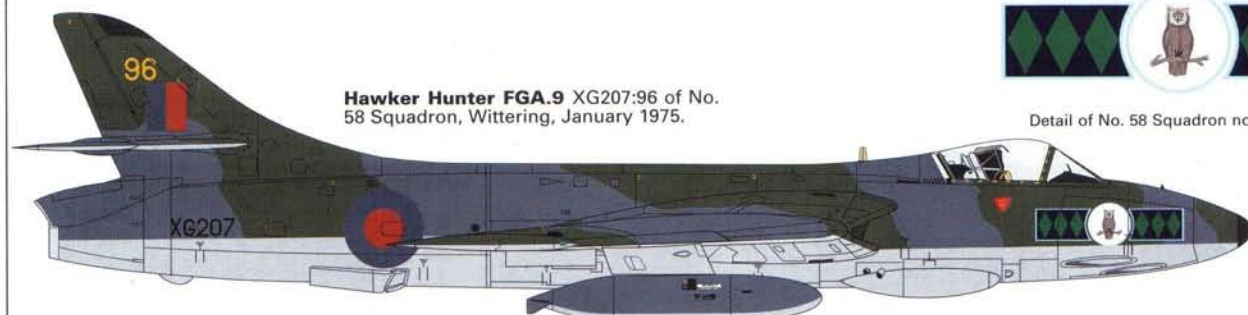




**Hawker Hunter F.Mk. 6** XF387:D  
of No. 56 Squadron, Nicosia,  
Cyprus, December 1959.



Detail of No. 56 Squadron nose marking



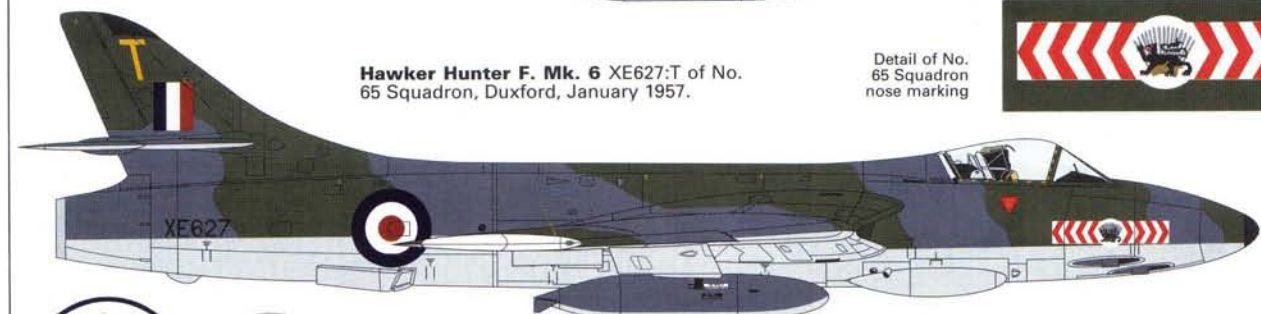
**Hawker Hunter FGA.9** XG207:96 of No.  
58 Squadron, Wittering, January 1975.



Detail of No. 58 Squadron nose marking



**Hawker Hunter F. Mk. 6** XE647:E of No.  
63 Squadron, Waterbeach, July 1958



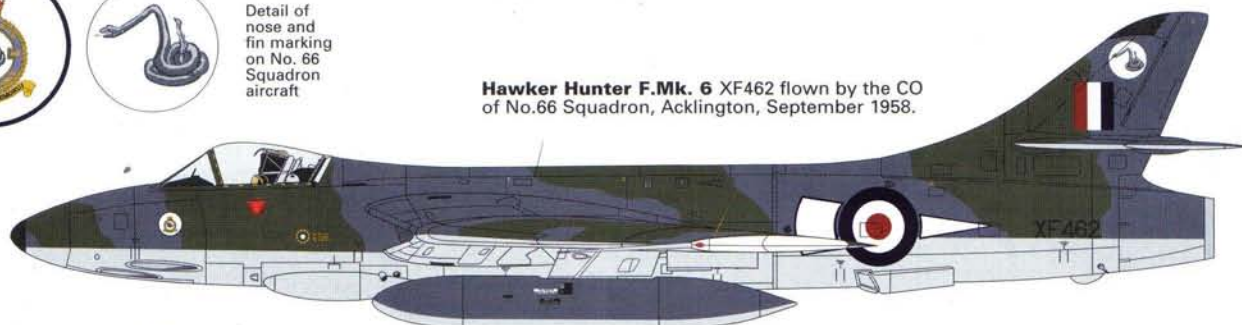
**Hawker Hunter F. Mk. 6** XE627:T of No.  
65 Squadron, Duxford, January 1957.

Detail of No.  
65 Squadron  
nose marking



Detail of  
nose and  
fin marking  
on No. 66  
Squadron  
aircraft

**Hawker Hunter F.Mk. 6** XF462 flown by the CO  
of No.66 Squadron, Acklington, September 1958.



Detail of No. 67  
Squadron nose  
marking and  
squadron  
badge

**Hawker Hunter F.Mk. 4** XF317:U of No. 67  
Squadron, Bruggen, Germany, April 1957.  
Aircraft flown by Flying Officer Mike McEvoy.  
Later served as an instructional airframe at  
Halton before becoming J-734 of Chilean Air  
Force.





Blackpool as although they had a contract for 51 to be built there, by the time their work on the earlier version had been completed, cuts were made in Hunter F.6 orders and it was considered that this was the best way in which this could be done.

In all 100 aircraft were cancelled from the original contracts obtained by Hawkers leaving the Kingston factory to build 296 and Coventry 119. In spite of these cuts the last 32 aircraft destined for the RAF were diverted to cover an order from India along with 15 others which had been used for trials or were in storage. Ten more new-build aircraft went to Iraq and a few others to the Lebanon, Jordan and Switzerland after only nominal RAF service. As a result only 19 operational squadrons were equipped with the F.Mk.6 but of these there were some new squadrons. Nos. 19, 63 and 65 at Church Fenton, Waterbeach and Duxford discarded their Meteor F.8s between October 1956 and March 1957. Other converts from the Mk. 4

**One of the interesting experimental uses of the Hunter was that of trials aircraft for the Fairey Fireflash missile. F.Mk. 4 XF310 was loaned to Fairey Aviation Ltd and one of the missiles was fitted under each wing. Trial firings were carried out over the Aberporth ranges but the Ministry of Supply favoured the de Havilland Firestreak and therefore the project was dropped.**

were short-lived like No. 118 Squadron at Jever who had the Mk. 6 for only a few months before disbanding in July 1957. No. 247 Squadron at Odiham used the type between March and December 1957 and No. 263 Squadron, by now at Stradishall, adopted the Mk. 6 in October 1957 only to be re-numbered No. 1 Squadron on 23 June 1958, the day on which the Hunter F.5 unit with this designation disbanded at Tangmere.

The remaining F. 6 squadrons comprised No. 14 at Ahlhorn from April 1957, moving later to Gutersloh and Jever where it joined the similarly-equipped No. 4 Squadron; No. 20 also at Ahlhorn, converted in early 1957 before transferring to Gutersloh, there joining No. 26 Squadron which received F. 6s in June 1958; No. 43 Squadron, Leuchars in December 1956; No. 54 Squadron, Odiham, March 1957; No. 56 Squadron, Waterbeach, late 1958, moving to Wattisham in July 1959; No. 66 Squadron, Acklington, February 1957; No. 74 Squadron, Coltishall, November 1957; No. 92 Squadron, Middleton St. George, March 1957; No. 93 Squadron, Jever, June 1958 and No. 111 Squadron, North Weald (later North Luffenham and Wattisham), November 1956.

In spite of the fact that the Hunter was the main interceptor fighter the RAF and three

**More Hunter F. 6 markings. 1. Early markings for No. 66 Squadron consisted of the badge flanked by blue outlined white bars. 2. Before becoming the RAF's aerobatic team No. 92 Squadron aircraft were uniquely marked with their red and yellow checks under the tailplane. XG226:B is the representative aircraft. 3. XE557:O belonged to No. 19 Squadron. 4. An unusual No. 63 Squadron F.6. XE647:E appears without the nose markings and may have been recently delivered or had nose panel repairs. (MAP)**

NATO countries the writing was on the wall as far as its life expectancy was concerned. The fully supersonic, missile-armed, all-weather Lightning was by the time that the last Hunter F. 6s were entering service almost there itself, and with the conversion of No. 74 Squadron in November 1960 the run-down of front line Hunter squadrons had begun ending in the re-equipment of No. 92 Squadron at Leconfield in May 1963. Thus ended the Hunter's day interceptor role but all was not lost for the aircraft's history in many cases, had only just begun.

## RAF AEROBATIC TEAMS

One cannot dismiss the Hunter F.Mk. 6 without mention of the two squadron aerobatic teams that thrilled the general public with their magnificent displays during the late 1950s and early 60s.

One will never forget the precision with which No. 111 Squadron gave their demonstrations. People knew the name 'Black Arrows' before they recognised the aircraft type. Led initially by Squadron Leader Roger Top, the squadron's most remarkable, and never to be forgotten achievement, when 22 Hunters were looped in perfect unison, was the result of leadership by Squadron Leader Peter Latham.

When Treble One converted to Lightnings in early 1961 the mantle of the RAF's aerobatic team fell on No. 92 Squadron who adopted an overall royal blue colour scheme. Known appropriately as the Blue Diamonds they went on to vie with the Black Arrows in



## HAWKER HUNTER PRODUCTION F.1 to F.6

Prototypes: WB188, 195, 202

Hunter F.Mk.1: WT555-596, 611-660, 679-700 (Kingston/Dunsfold) WW599-610, 632-645 (Blackpool)

Hunter F.Mk.2: WN888-921, 943-953 (Armstrong Whitworth, Coventry)

Hunter F.Mk.3: WB188 (conversion)

Hunter F.Mk.4: WT701-723, 734-780, 795-811, WV253-281, 314-334, 363-412, WW589-591 (Kingston/Dunsfold); WW646-665, XE657-689, 702-718, XF289-324, 357-370, 932-953, 967-999, XG341-342 (Blackpool)

Hunter F.Mk.5: WN954-992, WP101-150, 179-194 (Armstrong Whitworth, Coventry)

Hunter F.Mk.6: XF833, WW592-598, XE526-561, 579-628, 643-656 (Kingston); XF373-389, 414-463, 495-527 (Coventry); XG127-137 (Kingston); XG150-168 (Coventry); XG169-172, 185-211, 225-239, 251-274, 289-298; XJ632-646, 673-695, 712-718; XK136-176, 213-224 (Kingston)

## REPRESENTATIVE AIRCRAFT F.1 to FGA.9

**No.1 Squadron:** F.5 Jun 1955-Jun1958 WP119:T. F.6 Jul 1958-Jun 1960 XE623:G. FGA.9 Mar 1960-Jul 1969 XG229:K

**No. 2 Squadron:** FR.10 Mar 1961-Mar1971 XE556:W

**No. 3 Squadron:** F.4 May 1956-Jun 1957 XF975:W

**No. 4 Squadron:** FR.10 Jan 1961-May 1970 XE580:D. FGA.9 Sep 1969-May 1970 XG480:D

**No. 8 Squadron:** FGA.9 Jan 1960-Dec 1967 XE435:E. FR.10 Apr 1961-May 1963 XE589:V

**No. 14 Squadron:** F.4/F.6 May 1955-Dec 1962 XG274:P

**No. 19 Squadron:** F.6 Oct 1956-Nov 1962 XE583:D

**No. 20 Squadron:** F.4 Nov 1955-Jun1957 WV411:D. F.6 May 1957-Dec 1960 XJ684:B. FGA.9 Sep 1961-Feb 1970 XF418:U

**No. 26 Squadron:** F.4 Jun 1955-Sep 1957 WT769:B

**No. 28 Squadron:** FGA.9 May 1962-Jan 1967 XE535:C

**No. 34 Squadron:** F.5 Oct 1955-Jan 1958 WP133:L

**No. 41 Squadron:** F.5 Aug 1955-Jan 1958 WP187:R

**No. 43 Squadron:** F.1 Aug. 1954-Aug 1956 WT641:T. F.4 Mar 1956-Dec 1956 WV663:V. F.6 Dec 1956-1960 XF456:A. FGA.9 1960-Oct 1967 XJ684:D

**No. 45 Squadron:** FGA.9 Aug 1972-Jun 1976 XG130:61

**No. 54 Squadron:** F.1 Feb 1955-Sep 1955 WW641:B. F.4 Aug 1955-Jan1957 WV281:M. F.6 Jan 1957-Mar 1960 XE645:P. FGA.9 Mar 1960-Sep 1969 XF517:V

**No. 56 Squadron:** F.5 May 1955-Nov 1958 WP116:W. F.6 Nov 1958-Jan 1961 XG157:H

**No. 58 Squadron:** FGA.9 Aug 1973-Jun 1976 XJ694:94

**No. 63 Squadron:** F.6 Nov 1956-Oct 1958 XE647:E

**No. 65 Squadron:** F.6 Dec 1956-Mar 1961 XF507:A

**No. 66 Squadron:** F.4 Mar 1956-Oct 1956 XE713:E. F.6 Oct 1956-Sep 1960 XG266:R

**No. 67 Squadron:** F.4 Jan 1956-Apr 1957 XE689:W

**No. 71 Squadron:** F.4 Apr 1956-Apr 1957 XF313:G

**No. 74 Squadron:** F.4 Mar 1957-Jan 1958 XE683:G. F.6 Nov 1957-Nov 1960 XE612:M

**No. 92 Squadron:** F.4 Apr 1956-May 1957 XF324:D. F.6 Feb 1957-Apr 1963 XG186:J

**No. 93 Squadron:** F.4 Jan 1956-Apr 1957 XE685:B. F.6 Mar 1957-Dec 1960 XJ717:Z

**No. 98 Squadron:** F.4 Apr 1955-Jul 1957 WW649:E

**No. 111 Squadron:** F.4 Jun 1955-Nov 1956 WT808:G. F.6 Nov 1956-Apr 1961 XG203:H

**No. 112 Squadron:** F.4 Apr 1956-May 1957 XF937:T

**No. 118 Squadron:** F.4 Mar 1955-Jul 1957 WW657:G

**No. 130 Squadron:** F.4 Apr 1956-Apr 1957 XF321:G

**No. 208 Squadron:** F.5 Jan 1958-Feb 1958 WP111. F.6 Jan 1958-Mar 1959 XG255:E. FGA.9 Mar 1960-Sep 1971 XF421:H

**No. 222 Squadron:** F.1 Dec 1954-Aug 1956 WT630:T. F.4 Aug 1956-Nov 1957 WW650:R

**No. 234 Squadron:** F.4 May 1956-Jul 1957 XF943:A

**No. 245 Squadron:** F.4 Mar 1957-Jun 1957 XE686:Q

**No. 247 Squadron:** F.1 Jun 1955-Jul 1955 WW638:J. F.4 May 1955-Mar 1957 XF320:R. F.6 Mar 1957-Dec 1957 XF442:Z

**No. 257 Squadron:** F.2 Sep 1954-Mar 1957 WN947:W. F.5 Jul 1955-Mar 1957 WP119:Q

**No. 263 Squadron:** F.2 Feb 1955-Aug 1956 WN921:S. F.5 Apr 1955-Aug 1956 WP108:T. F.6 Aug 1956-Jul 1958 XE626:P

## SECOND LINE UNITS

**No. 229 OCU:** F.1 WT625:RS-L. F.4 WV402:ES-70. F.6 XG200:5. **No. 233 OCU:** F.1 WT647:E

**Central Fighter Establishment/Air Fighting Development Squadron:** F.1 WT578:S. CFE/Day Fighter Leaders School: F.1 WV600:M

**RAF Flying College:** F.4 XF979:A. **Central Flying School:** F.4 XF935:D. **Empire Test Pilots School:** F.1 WT621:5. **Fighter Weapons School:** F.4 XE678:D. **RAE/RRE:** F.4 WV325. **A&AE:** F.6/FGA.9 XE601. **No.4 FTS:** F.6 XG274:71

their achievements. One well remembers the power and awe inspiring might of their 16 Hunters taxiing almost half way down the Farnborough runway, the remainder being filled with 10 Lightnings of No. 74 Squadron. The ground shook with the noise of 36 Avons at full throttle as the Hunters pulled away and the Lightnings in full rehear shot over the top of them in a vertical climb which was their speciality. They then performed 15 minutes of closely coordinated aerobatics culminating in a combined formation in which seven of the Lightnings and 18 Hunters flew in a perfect diamond formation.

Although slightly out of context it should also be mentioned that other services including the Royal Navy's Hunter GA.11s and a Swiss aerobatic team were also prominent in giving public displays in the later years of the Hunter's life. In spite of this and with no disrespect to their immaculate flying no other teams were able to emulate the precision and spectacle of Nos. 92 and 111 Squadrons during the Hunter's heyday.

## Two-seat Hunters

One of the remarkable things about British jet fighter development, and the Hunter in particular, was that the need for a two-seat conversion trainer version was not contemplated until some time after the entry of the fighter into operational service. Like the Meteor and Vampire before it, the Hunter suffered, and so did the aircrew involved, in not having the two-seat version available at the time when rapid expansion was neces-

sary. As recorded earlier the Hunter reached its first operational unit, namely the Central Fighter Establishment, in May 1954 but it was not until over four years later, in August 1958, that two-seat Hunters were starting to

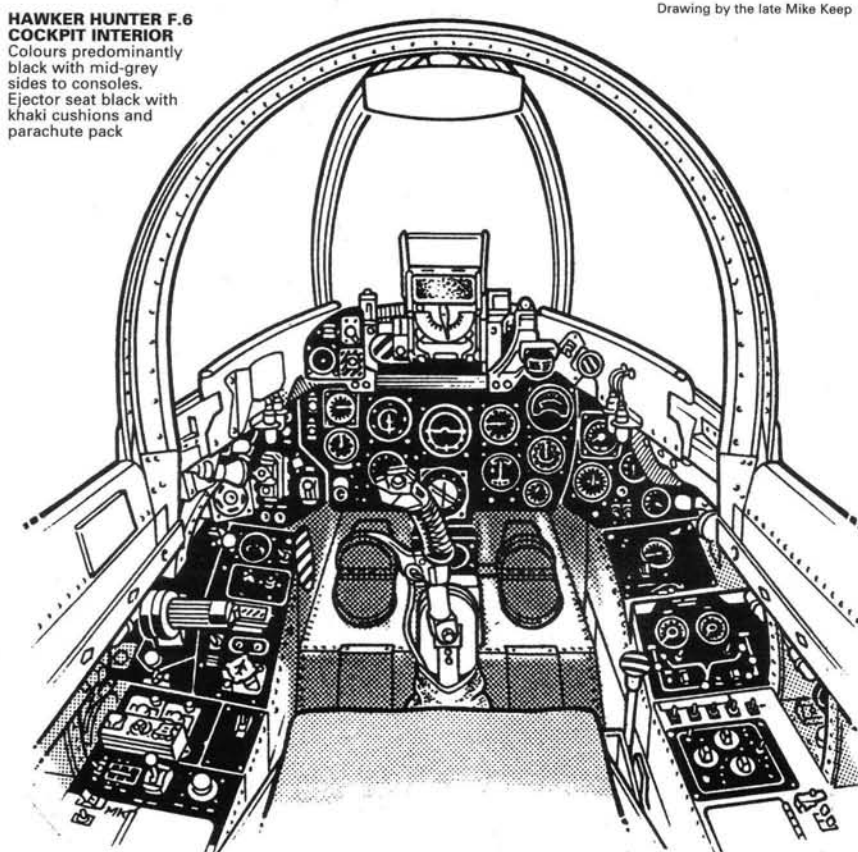
be delivered to the Operational Conversion Unit at RAF Chivenor.

Why did this occur?

The reasons are not necessarily easy to understand as although it is fully appreciated

### HAWKER HUNTER F.6 COCKPIT INTERIOR

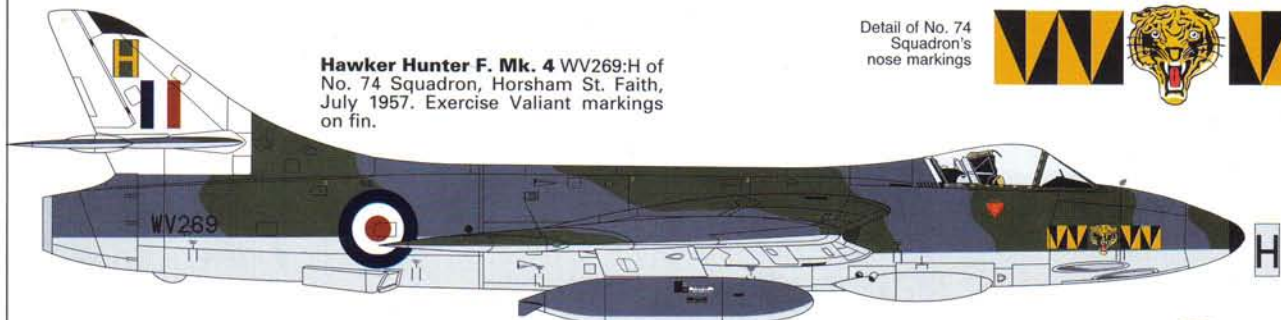
Colours predominantly black with mid-grey sides to consoles. Ejector seat black with khaki cushions and parachute pack



Drawing by the late Mike Keep

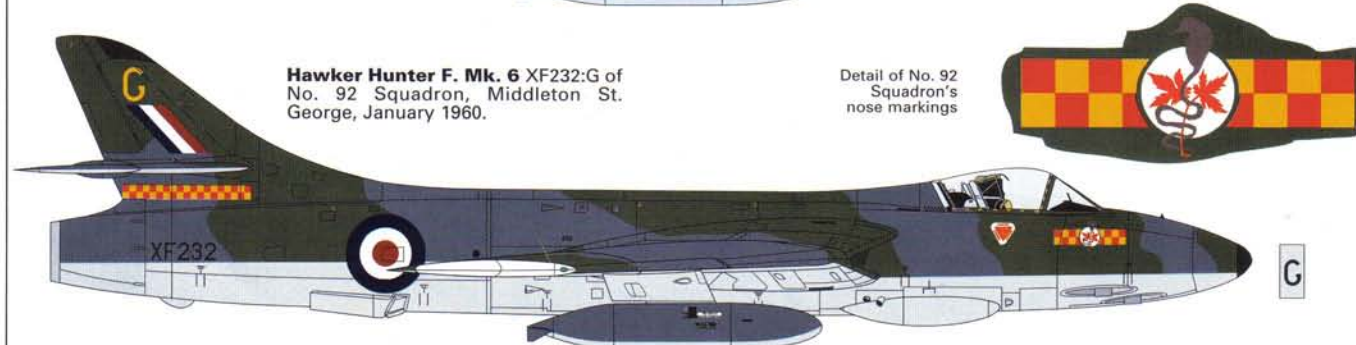


**Hawker Hunter F.Mk. 4** XF313:G  
of No. 71 Squadron, Bruggen,  
Germany, December 1956.



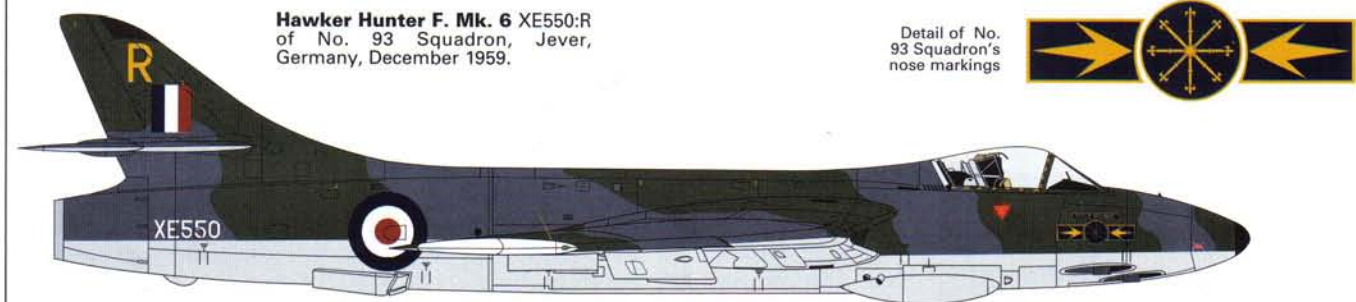
**Hawker Hunter F. Mk. 4** WV269:H of  
No. 74 Squadron, Horsham St. Faith,  
July 1957. Exercise Valiant markings  
on fin.

Detail of No. 74  
Squadron's  
nose markings



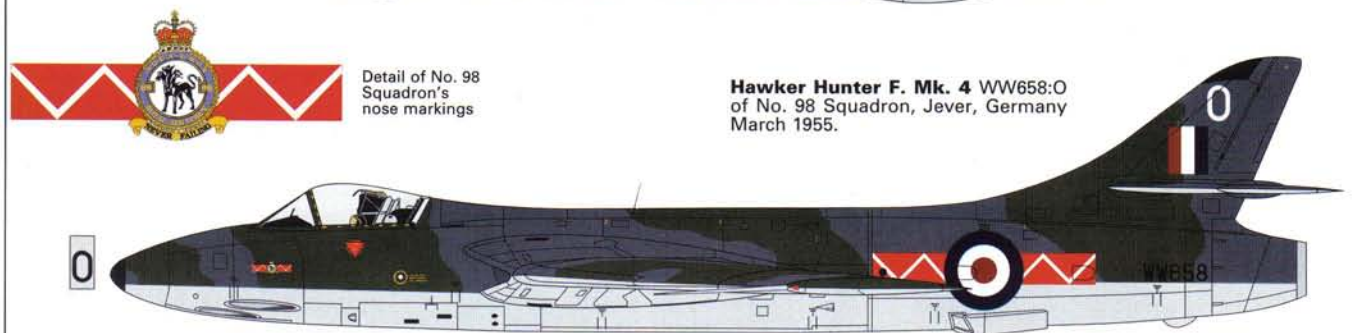
**Hawker Hunter F. Mk. 6** XF232:G of  
No. 92 Squadron, Middleton St.  
George, January 1960.

Detail of No. 92  
Squadron's  
nose markings



**Hawker Hunter F. Mk. 6** XE550:R  
of No. 93 Squadron, Jever,  
Germany, December 1959.

Detail of No. 93  
Squadron's  
nose markings



Detail of No. 98  
Squadron's  
nose markings

**Hawker Hunter F. Mk. 4** WW658:O  
of No. 98 Squadron, Jever, Germany  
March 1955.



Detail of No.111  
Squadron's  
nose markings

**Hawker Hunter F. Mk. 4** WW651:F  
of No. 111 Squadron, North Weald in  
early 1956.





**Hunter T. 7s in squadron service: 1. XL620 was delivered to No. 66 Squadron in February 1959. 2. The same aircraft when transferred to No. 74 Squadron coded 'Z'. (APN) 3. XL601 belonged to No. 1 Squadron. 4. The first user of XL609 was No. 56 Squadron as seen here. The aircraft later went to No. 4 FTS as '80'. (MAP).**

that the top priority was to produce enough Hunters of the early versions to replace the Sabres in Germany and equip home-base fighter units, it must surely have led to a longer conversion period for the pilots under training and necessitated a further conversion from the two-seat Meteor T.7 before going solo on a single-seat Hunter.

It would appear that the Ministry of Supply concentrated on the large scale production of the fighter to the exclusion of all else as it was argued that it must be relatively simple to convert from a Meteor T. 7 to a Hunter - both were jets...weren't they? How wrong

**Hunter T. 7 XL591:82 seen taxiing away from the ramp at the start of a sortie. The red, white and grey colour scheme was used for high visibility purposes by No. 4 FTS who were resident at RAF Valley at that time. The unit badge appears on the fin. (A.W.Hall)**



can you get? The conversion was not all that simple. The Meteor's characteristics were quite different from the Hunter and it had a twin-engined layout which involved the possibility of asymmetric flight problems to overcome whereas the Hunter did not. There was also the question of a considerable difference in speed and therefore the ability of the pilot to react quicker was part of the problem. One can recall that quite a number of student pilots failed to make the conversion whereas if a two-seat Hunter had been avail-

**Hunter T.7A XL616 was in use with the Empire Test Pilots School at Boscombe Down in a red and grey colour scheme.**

able it might have been a very different story.

### HAWKER'S SOLUTION

Hawkers on the other hand were one step ahead of the game and had already prepared for a Hunter trainer at the same time as the first F.Mk.1s were leaving Dunsfold. It was



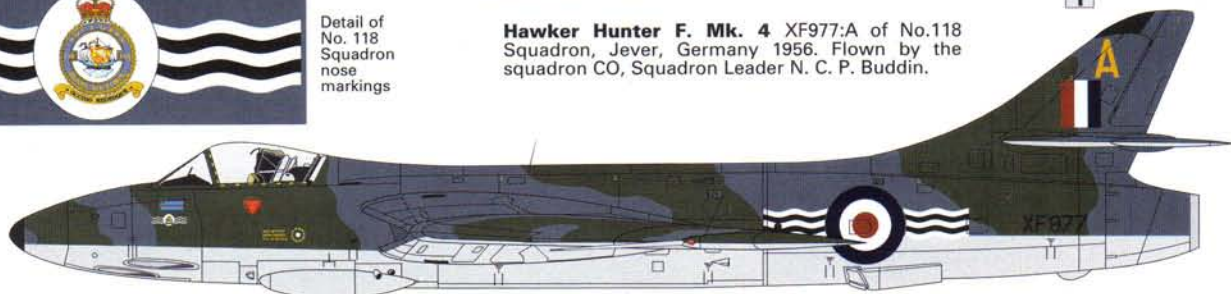


**Hawker Hunter F. Mk. 4** XF937:T of No. 112 Squadron, Bruggen, Germany, August 1956



Detail of No. 118 Squadron nose markings

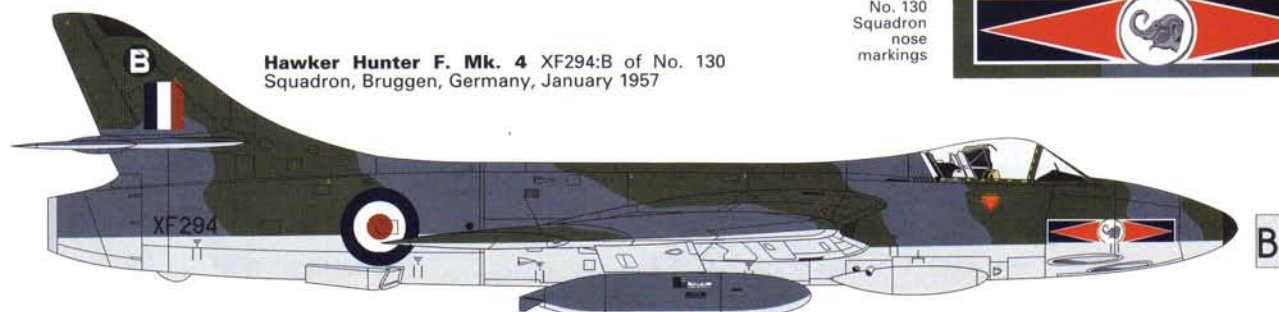
**Hawker Hunter F. Mk. 4** XF977:A of No.118 Squadron, Jever, Germany 1956. Flown by the squadron CO, Squadron Leader N. C. P. Buddin.



Detail of No. 130 Squadron nose markings



**Hawker Hunter F. Mk. 4** XF294:B of No. 130 Squadron, Bruggen, Germany, January 1957



**Hawker Hunter FGA. 9** XG169:K of No. 208 Squadron, Sharjah, Persian Gulf, 1968.



Originally a Hunter F. 4, WV322 was converted in 1959 to a T. Mk.8 for service with the Fleet Air Arm. It was returned to the RAF and No. 237 OCU at Honington whose badge is illustrated on the aircraft's nose

to be a further year before Specification T.157D was issued to cover this private research as the commercially minded management at Kingston had foreseen that there was likely to be considerable numbers involved in two-seat trainer orders in the UK apart from the export potential which was at that time in its early beginnings.

But their optimism was to be short-lived for, in all, UK orders were obtained for a mere 55 original-build Hunter T.Mk.7s and these included four conversions from F.4s.

During the Hunter T.7's gestation period the Hawker design team had to address the thorny old problem of whether a side-by-side or tandem seating arrangement should be adopted. Designated as the P.1101 in Hawker's production listings, drawing board





Detail of  
No. 216  
Squadron  
nose  
markings

**Hawker Hunter T. 7** XL609 of  
No 216 Squadron, Lossiemouth  
in 1980.



**Hawker Hunter F. Mk. 1** of No. 222  
Squadron, Leuchars, January 1955.



solutions for both were found and then put to the potential users at the Central Flying School and Central Fighter Establishment for their opinions. The outcome was a side-by-side arrangement because, as had been proved on the Vampire T. 11, this allowed better communication between pilot and student and also made weapon sighting easier for both occupants.

Whilst later experience showed this to

**Left:** This Hunter T. 7 in the markings of No. 4 FTS shows of its red, white and grey high visibility colour scheme. (A.W.Hall)  
**Below:** Fleet Requirements and Air Direction Unit Hunter T. 8s went occasionally to the Mediterranean to cooperate with Royal Navy ships in the area. Here one of these, coded '839', is seen taking off from Luqa airfield. (G. Mangion)



have been a wise move, the official choice of the engine was somewhat astonishing. By the time the decision was taken, the F.Mk. 6 was almost in production with its more powerful 10,000 lb st Avon 200 (RA.28) series installed. For some unknown reason the lower-powered Avon 100 (RA.21) was used which was the same as that fitted to the earlier Mk. 4 fighter.

Two prototypes were ordered under Contract 11595, the first of which, XJ615, being flown for the first time by Neville Duke from Dunsfold on 8 July 1955. It made its Farnborough SBAC show debut two months later in a pale green colour scheme overall.

Although the first trainer was fitted with the lower powered engine Hawkers saw to it that the second, XJ627, was fitted with an Avon 203 when this made its maiden flight on 17 November 1956. But even this failed to excite the Ministry of Supply and in the long run the lower-powered engine became standard.

Both prototypes were fitted with two 30mm Aden cannon when first built, but on later consideration the RAF chose to have only a single gun as this was considered enough for purposes of armament instruction. Obviously this meant that the quick-change cannon pack fitted to all of the fighters was not included.

As will be seen later, the rear half of the fuselage and wings were identical to other fighter versions of the Hunter so it was surprising that early test flights revealed severe

al aerodynamic problems. These were to plague the aircraft for over a year and were mainly due to severe instability which led to a speed restriction of Mach 0.88 being placed on all manoeuvres until the cause had been established. This was proved to be caused by disturbed airflow in the region of the double canopy.

The fault was found to lie in the rapid shape change from the bulged, broad, cross section occasioned by the side-by-side seating down to the much narrower spinal fairing of the single seaters. The distinct change in shape had brought about a break-away of the airflow which was later to be well-known as area ruling. This had only recently been discovered by aircraft designers in the United States so Hawker's engineers were forced to find out for themselves the hard way.

To solve the problem the canopy fairing was progressively enlarged until the airflow irregularities had been eliminated. Naturally the Hunter was not the first to fall foul of this phenomena but it did have the effect of delaying the aircraft's entry into service by at least 12 months.

One other change was made to the T.7 when a braking parachute was installed in the tail of XJ615 in 1956 and all subsequent aircraft. This produced the characteristic overhang to the jet orifice which was to follow on the FGA.9 and FR.10.

Hunter T.7s were to be built at Blackpool to Contract 12626 which ordered 65 aircraft, but this was later cut back.

The period coincided with the Sandys White Paper to Parliament which did as much damage to national prestige as anything before or since. In effect it cut the strength of the Royal Air Force by half and stated unequivocally that all future defence of the realm would rely on ground-to-air missiles.

Existing contracts for military aircraft then

in production at British factories were slashed. Hunter F.6 production suffered and so did that for the T.7. Eventually only 55 were built for the RAF and of these 10 were transferred to Fleet Air Arm use as the T. Mk.8.

The cutbacks also meant the end of production at Blackpool as, because Hunter F.6s on the Kingston production line were cancelled, this left spare capacity which was taken up by moving the jigs down south and resuming production there.

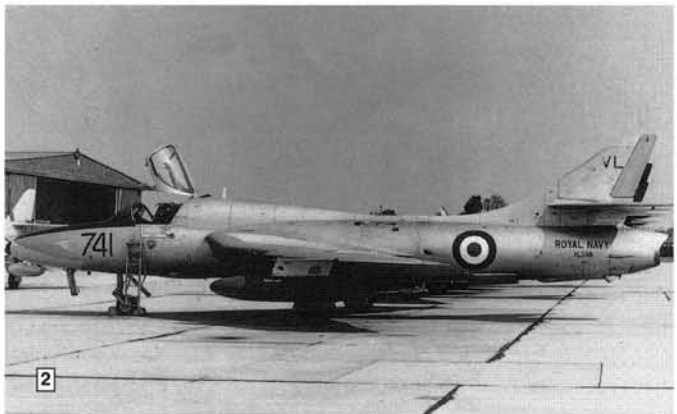
## TRAINERS IN SERVICE

The first production Hunter T.7, XL563, flew on 11 October 1957, the first deliveries being made to 229 OCU, Chivenor in mid-1958. Most of the production run went to the same destination\*but generally speaking each operational squadron was allocated one and others went to No. 4 FTS at Valley, No. 402 Weapons Training Unit at Sylt and to several station flights and the Empire Test Pilots School. Later when the Jaguar, Phantom and Buccaneer were entering service, Hunter T.7s were allocated for conversion and instrument flying training.

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The Hunter T.7's earlier aerodynamic

**Naval trainers. 1. Hunter T. 8 XL598:778 belonging to 738 Squadron showing that unit's Pegasus marking on the nose 2. Hunter T. 8 XL598 of the Yeovilton-based Air Direction Training Unit. 3. WT799 was a converted F.4 which was in use by 759 Squadron at Brawdy. 4. The final colour scheme for FAA Hunters was overall extra dark sea grey shown here on XF685:876.**



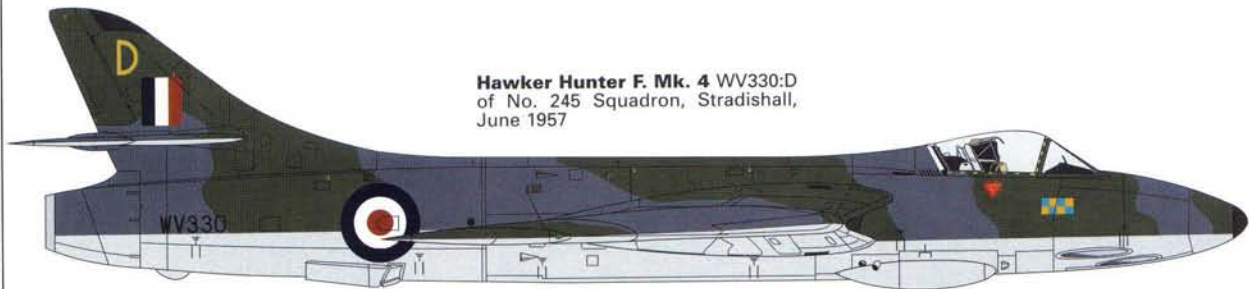
Detail of  
No. 234  
Squadron  
nose  
markings



**Hawker Hunter F. Mk. 4** XE689:K of  
No. 234 Squadron, Geilenkirchen,  
Germany, January 1957.



**Hawker Hunter F. Mk. 4** WV330:D  
of No. 245 Squadron, Stradishall,  
June 1957



**Hawker Hunter F. Mk. 6**  
XF440:D of No. 247 Squadron,  
Odiham, December 1957.



Detail of  
No. 257  
Squadron  
nose  
markings

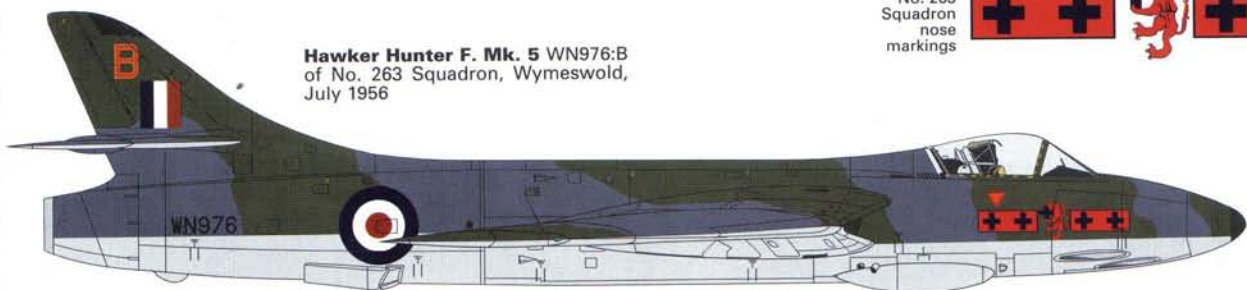
**Hawker Hunter F. Mk. 2** WN907:H  
of No. 257 Squadron, Wattisham,  
January 1957



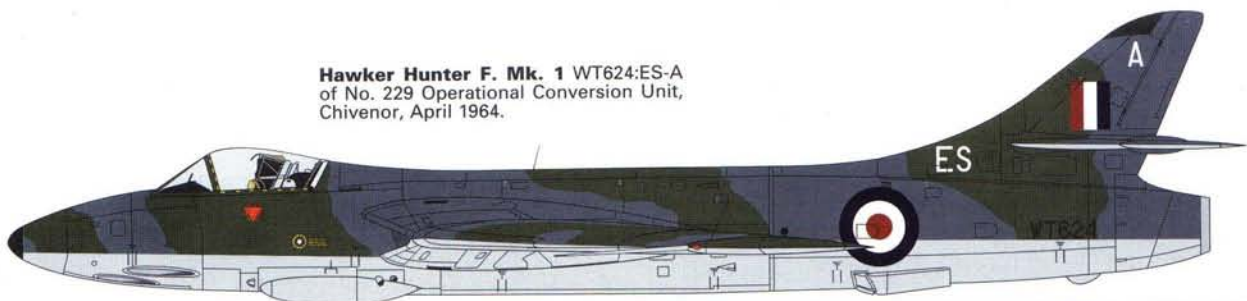
Detail of  
No. 263  
Squadron  
nose  
markings



**Hawker Hunter F. Mk. 5** WN976:B  
of No. 263 Squadron, Wymeswold,  
July 1956



**Hawker Hunter F. Mk. 1** WT624:ES-A  
of No. 229 Operational Conversion Unit,  
Chivenor, April 1964.



have been a wise move, the official choice of the engine was somewhat astonishing. By the time the decision was taken, the F.Mk. 6 was almost in production with its more powerful 10,000 lb st Avon 200 (RA.28) series installed. For some unknown reason the lower-powered Avon 100 (RA.21) was used which was the same as that fitted to the earlier Mk. 4 fighter.

Two prototypes were ordered under Contract 11595, the first of which, XJ615, being flown for the first time by Neville Duke from Dunsfold on 8 July 1955. It made its Farnborough SBAC show debut two months later in a pale green colour scheme overall.

Although the first trainer was fitted with the lower powered engine Hawkers saw to it that the second, XJ627, was fitted with an Avon 203 when this made its maiden flight on 17 November 1956. But even this failed to excite the Ministry of Supply and in the long run the lower-powered engine became standard.

Both prototypes were fitted with two 30mm Aden cannon when first built, but on later consideration the RAF chose to have only a single gun as this was considered enough for purposes of armament instruction. Obviously this meant that the quick-change cannon pack fitted to all of the fighters was not included.

As will be seen later, the rear half of the fuselage and wings were identical to other fighter versions of the Hunter so it was surprising that early test flights revealed sever-

al aerodynamic problems. These were to plague the aircraft for over a year and were mainly due to severe instability which led to a speed restriction of Mach 0.88 being placed on all manoeuvres until the cause had been established. This was proved to be caused by disturbed airflow in the region of the double canopy.

The fault was found to lie in the rapid shape change from the bulged, broad, cross section occasioned by the side-by-side seating down to the much narrower spinal fairing of the single seaters. The distinct change in shape had brought about a break-away of the airflow which was later to be well-known as area ruling. This had only recently been discovered by aircraft designers in the United States so Hawker's engineers were forced to find out for themselves the hard way.

To solve the problem the canopy fairing was progressively enlarged until the airflow irregularities had been eliminated. Naturally the Hunter was not the first to fall foul of this phenomena but it did have the effect of delaying the aircraft's entry into service by at least 12 months.

One other change was made to the T.7 when a braking parachute was installed in the tail of XJ615 in 1956 and all subsequent aircraft. This produced the characteristic overhang to the jet orifice which was to follow on the FGA.9 and FR.10.

Hunter T.7s were to be built at Blackpool to Contract 12626 which ordered 65 aircraft, but this was later cut back.

The period coincided with the Sandys White Paper to Parliament which did as much damage to national prestige as anything before or since. In effect it cut the strength of the Royal Air Force by half and stated unequivocally that all future defence of the realm would rely on ground-to-air missiles.

Existing contracts for military aircraft then

in production at British factories were slashed. Hunter F.6 production suffered and so did that for the T.7. Eventually only 55 were built for the RAF and of these 10 were transferred to Fleet Air Arm use as the T. Mk.8.

The cutbacks also meant the end of production at Blackpool as, because Hunter F.6s on the Kingston production line were cancelled, this left spare capacity which was taken up by moving the jigs down south and resuming production there.

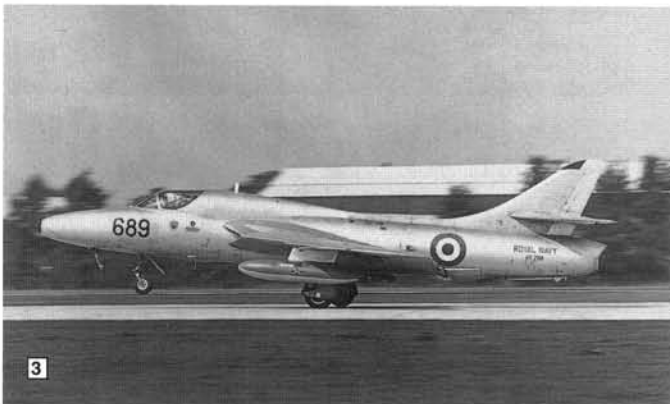
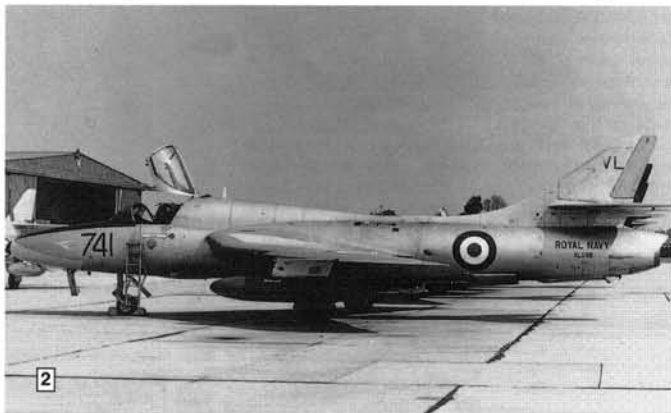
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## RAF HUNTER T.Mk. 7 PRODUCTION LIST

**New-build:** XJ615, XJ627, XL563-579, XL583, XL586-587, XL591-597, XL600-601, XL605, XL609-623, (XL605 and XL620 became XX467 and XX466)

**F.4 conversions:** WV253, XV372, WV318, WV383, XF310, XF321

### REPRESENTATIVE AIRCRAFT:

**No. 5 Squadron** WV318, **No. 8 Squadron** XL612:T, **Nos 8 & 43 Squadrons** XL565:TX, **No. 12 Squadron** WV318, **No. 19 Squadron** XL567 later '7', **No. 20 Squadron** XL619:S, **No. 28 Squadron** WV383:T, **No. 43 Squadron** XL566:T, **No. 45 Squadron** XL619:S, **No. 54 Squadron** XL596:O, **No. 56 Squadron** XL609:Q, **No. 66 Squadron** XL620:Z, **No. 74 Squadron** XL568:X, **No. 92 Squadron** XL571:Q, **No. 111 Squadron** XF310:98 then XL610:Z, **No. 208 Squadron** (1980) XE665 - T.8C **402 WTS** XL616, **229 OCU** XL586:90 (No. 63 Squadron), XL564:99 (No. 79 Squadron), XL592:ES-93 (No. 145 Squadron), XL623:88 (No. 234 Squadron), **DFLS** XL573:L, **FCIRS** XL567:Z, **AFDS** XL591:M, **237 OCU** WV322, **4 FTS** XL609:80, **1 TWU** XL617:89, **2 TWU** XX467:02, **Station Flights:** Gutersloh XL621:C, Jever XL622:J, Laarbruch XF967:B - T.8, West Raynham, later Wittering XL601:2, **ETPS** XL564:4, **A&AEE** XL564, **CFS Little Rissington** WV318, **RAE Farnborough** WV372, **RAE Bedford** WV383, **IAM Farnborough** XL563 with nose probe, **Rolls Royce** XL565

## FLEET AIR ARM HUNTER T.8s

**New build:** XL580-582, XL584-585, XL598-599, XL602-604.

**F. 4 conversions:** **T.8** WT701, 702, 722, 745, 755, 772, 799, XV319, 322, 363, WV661, 664, XE664, 665, XF289, 322 357, 358. **T.8B** XF967, 978, 995. **T.8C** WV396, 939, 942, 983, 985, 991, 992, 994. **T.8M** XL580, 583.

### REPRESENTATIVE AIRCRAFT

**700B Squadron** XE664:739LM, **738 Squadron** WT755:633LM, XL582:631BY, XF357:777BY, **759 Squadron** XF289:662BY, WT772:808BY, **764 Squadron** WT701:701LM, **800 Squadron** XF978:111LM, **FRU (Hurn)** WT799:839, **FRADU** XF985:876, **FOFT** XL580, **Station Flights:** Yeovilton WW661:948VL, **A&AEE** WT799, **RAE Bedford** WT799.

delivered in early 1959.

### NAVY TRAINERS

The ten Royal Navy Hunter T.8s allocated out of the original production batch for the RAF started with XL580 delivered on 30 May 1958 but this was preceded by WV664 which was originally an F. 4 that had been repaired after an accident and then converted. This flew on 3 March 1958.

All Hunter T.8s differed from their RAF counterparts by having naval radio and an arrester hook fitted. This was not stressed for carrier deck landings but was used in practice approaches and in the event of an emer-

gency to make contact with an airfield arrester system.

The ranks of Fleet Air Arm trainers were increased considerably by conversion of ex-RAF Mk. 4s, the total eventually reaching 31 by 1965. The first of these conversions, WV664, has already been mentioned, but was the forerunner of a batch of 18 further conversions. The next order for three were built as T. Mk. 8Bs which had TACAN equipment installed, ten others of the existing fleet also being partially converted as T.Mk. 8Cs. Most of these had the gunsights, guns and nose radomes deleted and a Harley light fitted in the extreme nose.

Hunter T. 8s entered service with 764

Naval Air Squadron which was the Advanced Weapons Training School at Lossiemouth in December 1958, where together with Hunter GA. 11s they replaced Sea Hawks in the training of air warfare instructors. The squadron was eventually disbanded in July 1972.

Also at Lossiemouth 738 Squadron, the Naval Strike School, had several T. 8s in June 1962 to use in conjunction with GA. 11s. The unit transferred to Brawdy in January 1964.

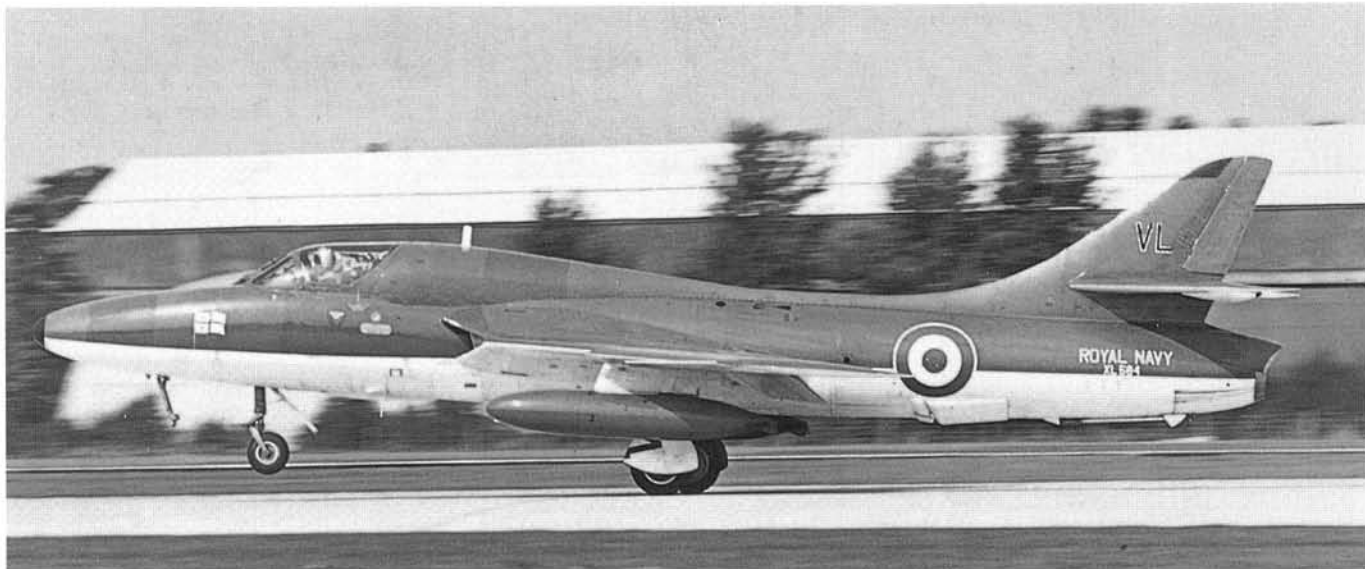
The last of the Navy's second line Hunter training squadrons was No. 759 otherwise known as the Advanced Flying Training Unit. This formed at Brawdy on 1 August 1963 and lasted for six years before it disbanded on 24 December 1969.

In more recent years the Hunter in Fleet Air Arm service became well-known as the standard equipment of the Fleet Requirements and Air Direction Unit (FRADU) originally based at Hurn but moving to Yeovilton in October 1972. These Hunters remained in service until the early 1990s providing realistic targets for the training of ships at sea and for ground-based controllers whose course was established at Yeovilton.

Few Navy Hunters have worn colourful markings but three XE665, XL580 and XL584 were used as airborne equivalents of an 'Admiral's Barge'. All were in service with successive Flag Officers Flying Training at Yeovilton and were painted in a bright blue on the upper surfaces with white undersides and the Admiral's flag on the nose.

The ultimate naval training version was the T.Mk.8M specially produced for Sea Harrier pilot instruction in having the Ferranti Blue **Hunter T. 7 WV372 was originally a F. Mk. 4 which was damaged by fire when the jet pipe became detached from the engine in November 1956. It was converted to T.7 standard, served with Station Flights at Jever and Gutersloh before becoming a No. 2 Squadron aircraft coded 'R'.**





**The Admiral's Barge.** A Hunter T.8 was allocated to the Flag Officer Flying Training at Yeovilton and painted in the distinctive gloss dark blue associated with naval Barges. Above: XL584 differs slightly from XL580 (right) in style of finish but one has to look closely to spot the differences.

Fox radar associated with that aircraft and fitted into a similarly shaped radome mounted in the nose. Conversion was undertaken at Holme-on-Spalding Moor and the first of three aircraft, XL602, flew on 9 January 1979. It was followed by XL603 and XL580 and all three eventually served with 899 Squadron.

## TRAINER ODDITIES

It is appropriate to make mention of a number of Hunter two-seaters that have been in civil markings or with test establishments. The most well-known of these is surely the Mk. 66A registered G-APUX which was used as a company demonstrator and was one of the most widely travelled Hunters of all.

Built from a number of spare parts including a demonstration nose constructed for the Paris air show and wings and rear fuselage from a crashed former Belgian Air Force F. 6, this machine, in its brilliant scarlet and white colour scheme, was fitted with the more powerful Avon RA.28 and retained the two cannon armament originally intended for the T. Mk. 7.

It travelled to Switzerland and the Middle East on sales tours several times, was the company's demonstrator at Farnborough and also went on loan to the air forces of



Iraq, Jordan and Lebanon before being eventually sold to the Chilean Air Force in 1967.

Another equally interesting Hunter was the sole Mk. 12. This was originally conceived as an eventual trainer for the TSR.2 but with the cancellation of that project XE531, which was a conversion from a Mk. 6, was fitted with a head-up display and a nose mounted vertical survey camera and was delivered to the Royal Aircraft Establishment, Farnborough, on 8 February 1963 where it received a bright green and white paint scheme. It remained with RAE for all of its career being used for experimental work connected with 'fly-by-wire' electrically controlled linkages for the flying surfaces and was at one time fitted with a side-mounted miniature control column. The contributions made by this aircraft to present day military and civil aircraft have been considerable. The Hunter T. 7 was widely used by RAE for experimental purposes.

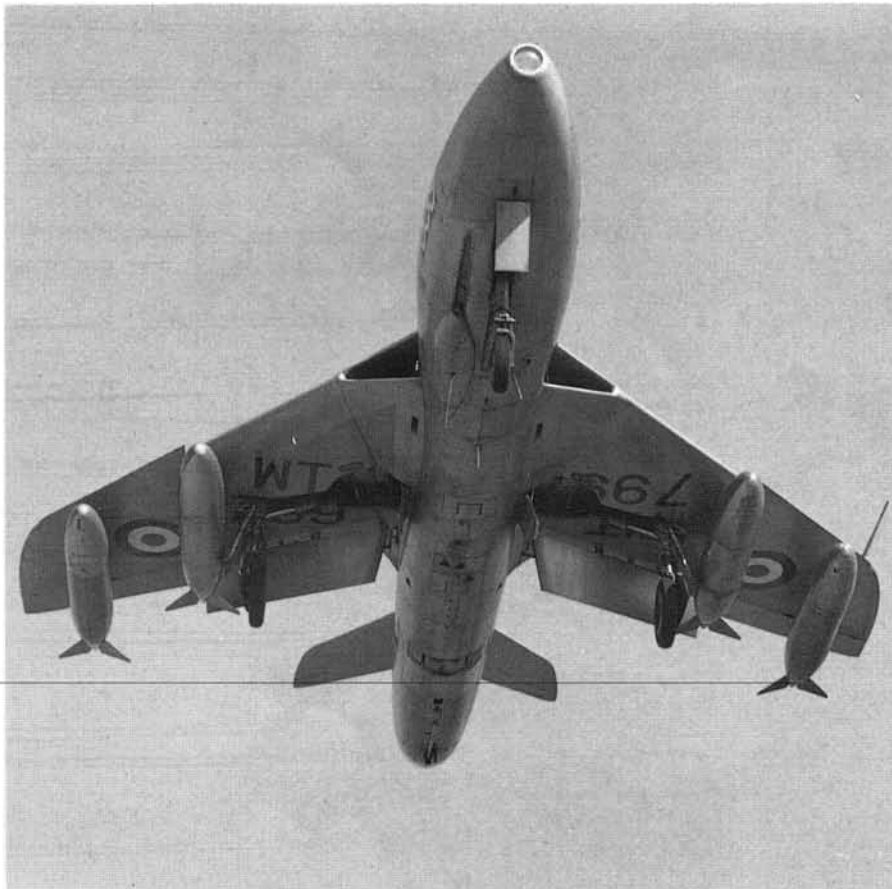
## Ground attack and reconnaissance

Although the final operational versions of the Hunter in RAF service were all rebuilt airframes from previous Marks they were nonetheless powerful additions to the attack and strike element of the RAF in the 1960s and early '70s.

The modifications came about because there was no immediate replacement for the ageing de Havilland Venom in the Middle East.

In 1958 Hawker Aircraft Limited received an order to convert the first of 100 Hunter **Left: 764 Squadron used Hunter T.8s from 1958 for air warfare instructor training when based at Lossiemouth. WV383:707LM was an F. Mk. 4 conversion. (APN) Below: A blue heron on a white cloud signifies that WV396:748 belonged to Heron Station Flight at Yeovilton. Overall silver, white tanks and dayglo on the nose and rudder.**





**A useful underside view of a Naval Hunter T.8C WT799 belonging to the Fleet Requirements Unit seen landing at Malta. The Harley Light in the nose stands out prominently. (G. Mangion)**

pylons could carry 100 gallon tanks but these could be alternated with napalm bombs.

## WORLD WIDE SERVICE

The first squadron to equip with the Hunter FGA. 9 was No. 8 Squadron based at Khormaksar, Aden in January 1960. They were joined later that year by No. 208 Squadron in Nairobi and No. 43 Squadron at Leuchars, Scotland. Both of these squadrons were destined to join No. 8 Squadron and operate from the Aden base against rebel forces in the Arabian Gulf.

Other overseas squadrons to reform using the ground attack Hunter were No. 20 in Tengah, Singapore and No. 28 at Kai Tak, Hong Kong.

At home Nos. 1 and 54 Squadrons both former F. 6 units were re-equipped with the FGA. 9 based at Stradishall, Waterbeach and West Raynham. They provided the offensive element of No. 38 Group, the tactical element of RAF Air Support Command. Operationally they were always on short notice to deploy overseas to the Near or Middle East should the need arise. They also took part in many exercises involving rapid reinforcement of the various NATO commands from Norway to Turkey.

The Hunter FGA. 9s permanently deployed overseas gave good account of themselves and were well liked by the air and ground crews who worked on or flew them. Those at Khormaksar, for example formed an attack wing which took part in numerous local actions against dissident tribesmen and politically activated rebel forces particularly in the Radfan. Deployments to Kenya, Sharjah, and the other Gulf States and protectorates allowed a relatively small force to maintain order in an area that was constantly under tension. In effect the work carried out was an extension of the RAF's pre-war policy of policing by air power alone albeit that in this case ground forces backed up the attacks from the air. It was considered, and often proved, that by placing a well-aimed three inch rocket through a local tribesman's back door was far better than the involvement of several hundred troops and vehicles in an environment ideally suited to local defence.

In the Far East the role of the Hunter squadrons was somewhat different. No. 20 Squadron at Tengah arrived during the period of confrontation with Indonesia between December 1963 and August 1966. The squadron was deployed to Labuan and Kuching for the first time. Four aircraft at a time maintained standing patrols over North Borneo and when Indonesian terrorists were parachuted into Malaysian territory the squadron's Hunters carried out rocket attacks on groups of suspected hostile forces in the swamps of Johore. The squadron was also involved in a six month detachment to Thailand as part of a SEATO strike force during the Laotian crisis.

No. 20 Squadron eventually disbanded on 18 February 1970 and was later reformed in

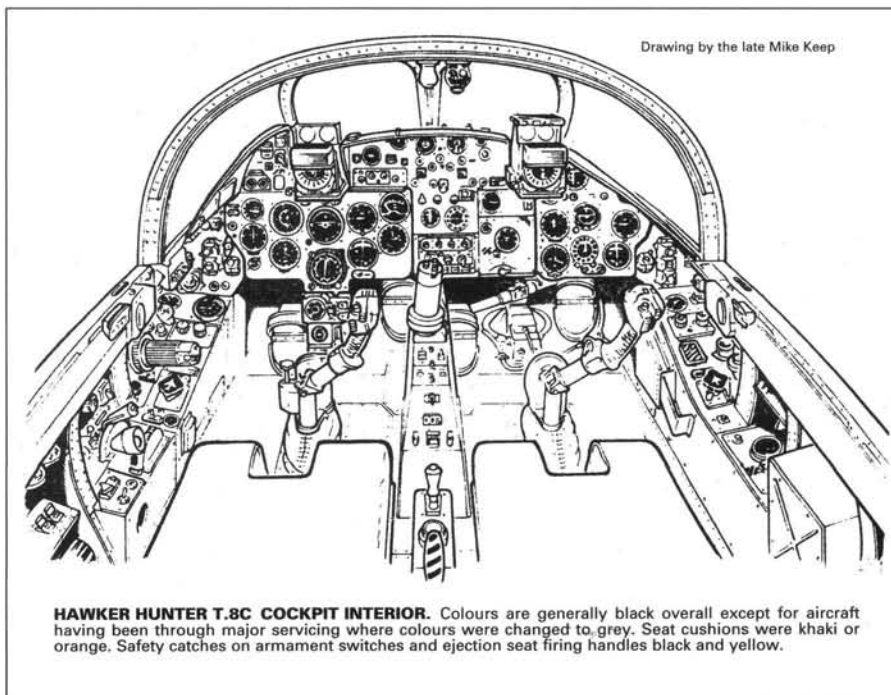
F.Mk. 6s into a new tropical standard to be designated Hunter FGA. 9.

The aircraft were to be fitted with the 10,050 lb st Avon 207 and have strengthened wings for the carriage of offensive weaponry. Further modifications were put in hand at RAF Maintenance Units for the carriage of 230 gallon underwing long range fuel tanks. The FGA. 9 had more adequate ventilation and increased oxygen supply for the pilot to allow longer range operations and, because most of the airfields on which it would be used only had short runways, the rear fuselage was modified to take a tail braking parachute which had a diameter of

13 ft 6 ins, giving it the easily identifiable projection over the jet orifice.

The four 30mm cannon were retained but it was under the wings where the major changes took place.

Four underwing stations could carry either two 1,000 lb bombs, two 500 lb bombs, two practice bomb carriers each holding two 25 lb practice bombs, two clusters of six three inch rockets, two two-inch rocket batteries each containing 24 or 37 folding-fin rockets, two 100 gallon phenolic asbestos drop tanks or two 230 gallon Hawker mild steel drop tanks, to accommodate which the FGA. 9 was fitted with cutaway flaps. The outer



**HAWKER HUNTER T.8C COCKPIT INTERIOR.** Colours are generally black overall except for aircraft having been through major servicing where colours were changed to grey. Seat cushions were khaki or orange. Safety catches on armament switches and ejection seat firing handles black and yellow.

Right: Hunter T.8M XL580:717VL of 899 Squadron was part of the training unit set up to convert naval aviators to the Sea Harrier FRS.1. The Hunters were specially modified to have the Blue Fox radar in the nose. Lower right: The prototype for the Hunter T.8M was XL583 seen without its normal squadron tail insignia. Note the pitot head mounted on top of the Blue Fox radar nose. (BAe)

RAF Germany as a Jaguar squadron.

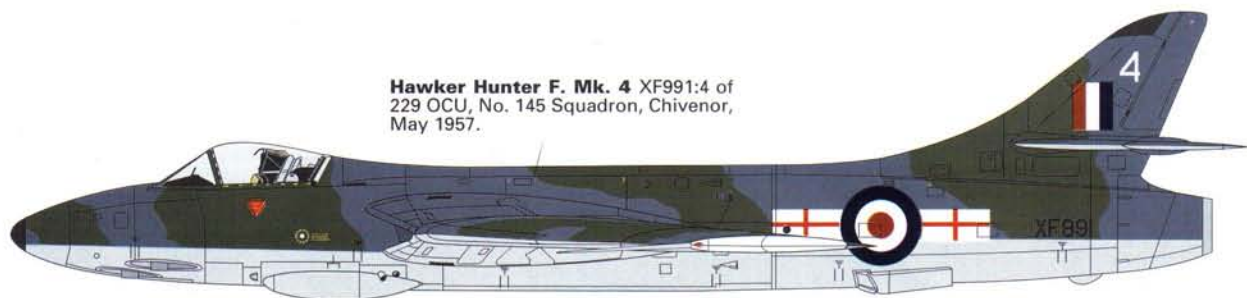
No. 28 Squadron in Hong Kong replaced all of its Venom FB. 4s with Hunter FGA. 9s by 28 August 1962 and for a period of four and a half years thereafter operated on Army and Navy combined exercises, firepower demonstrations, long-range training and goodwill flights in addition to sending detachments to assist in the patrolling of the East Malaysian border and sea area with Borneo.

When No. 28 Squadron disbanded on 15 December 1966 they were to be the last fixed wing operational RAF aircraft to be used in Hong Kong, their place being taken by Wessex HC. 2 helicopters.

### HOME-BASED TRAINING

By the end of the decade some 50 Hunter FGA. 9s were still in RAF service but as the operational squadrons replaced them by more powerful and modern aircraft they were relegated to equally useful operational training tasks.

In one instance No. 45 Squadron was reformed on 1 August 1972 with Hunter FGA. 9s and one T.7 at West Raynham all



**Hawker Hunter F. Mk. 4** XF991:4 of 229 OCU, No. 145 Squadron, Chivenor, May 1957.



**Hawker Hunter F. Mk. 6** XE591:8 of 229 OCU, No. 234 Squadron, Chivenor in the early 1960s.



Detail of No. 234 Squadron nose markings on both F.6 and T.7 aircraft



**Hawker Hunter T.7** XL579:92 of 229 OCU, No. 234 Squadron, Chivenor, early 1960s.

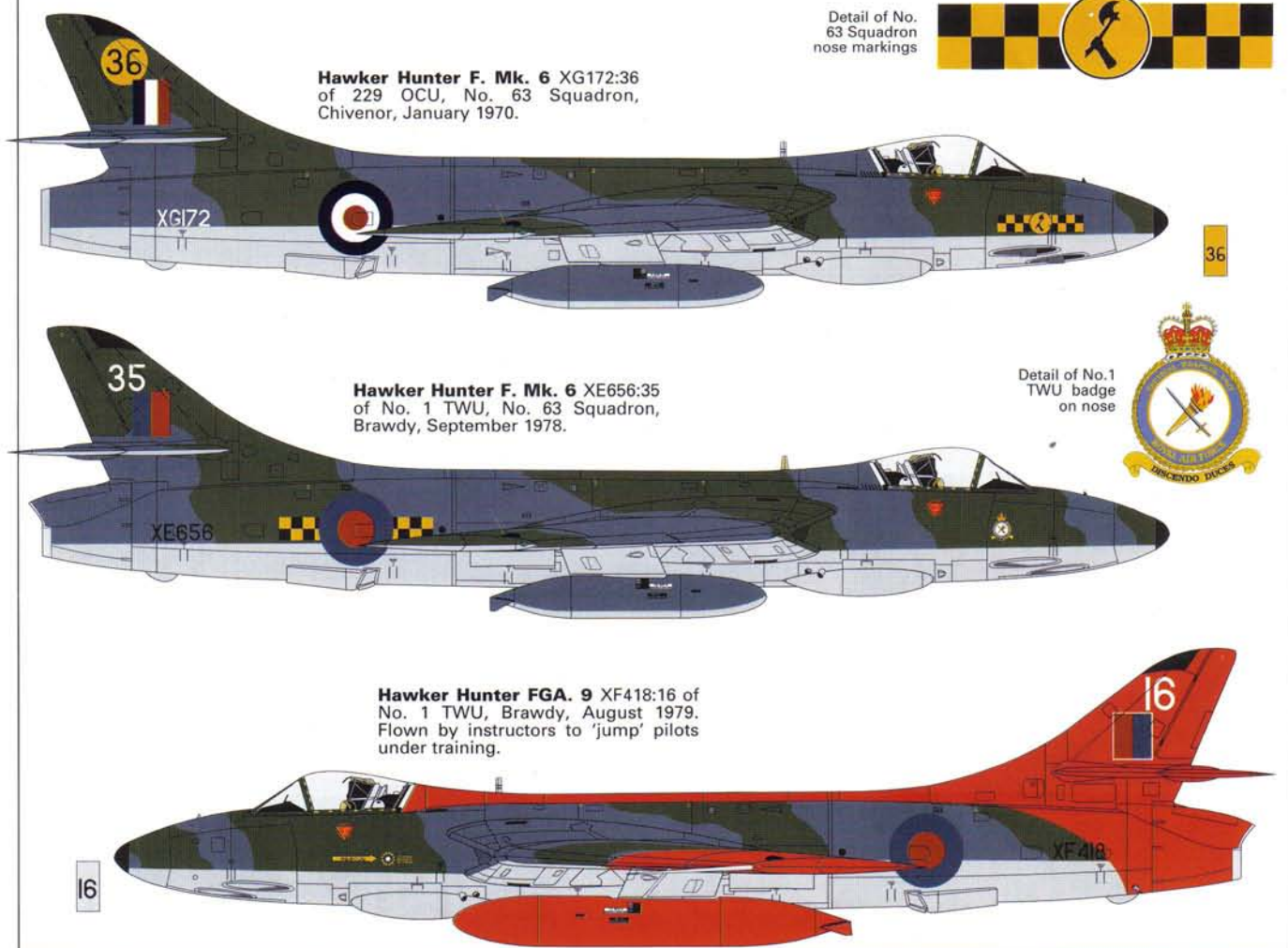


**This Hunter T.7 XL614 leading two Buccaneers of 237 OCU over the Scottish highlands shows that aircraft of this type were frequently used by both operational and training units for instrument flying and check flights. (Geoff Lee BAe)**

followed by a move to Wittering. They were joined by No. 58 Squadron at Wittering to form a pool of aircraft that could be used for the introduction of ground attack techniques to pilots destined to join the Jaguar squadrons then being formed. This task remained active until July 1976 when it was considered that as the Jaguar squadrons were by then complete and could handle their own training, that the role of the two Wittering squadrons should change.

Accordingly the task was undertaken by Immaculate Hawker Hunter T.7B WV318 of No. 208 Squadron, finished in an all black colour scheme reminiscent of the famous Treble One Squadron 'Black Arrows', photographed at Lossiemouth in March 1994 just before the final disbandement of the squadron (Mark Attrill)





the Tactical Weapons Unit which had been set up earlier in September 1974 at Brawdy to provide a stepping stone between flying training and an operational squadron for pilots destined to join the front line strike squadrons.

The TWU consisted of three shadow squadrons Nos. 79, 63 and 234. The course for pilots coming straight from 4 FTS at Valley lasted four and a half months involving some 60 hours flying. Formation flying, low level navigation, dog fighting and air-to-ground rocket and bomb attacks were combined with dive bombing and ground strafing with cannon. In addition the Hunters were allocated the secondary role of air defence of parts of the United Kingdom, should the need arise, and just to add to the heavy work load the TWU maintained a Flight at Gibraltar to provide fast reconnaissance over the western end of the Mediterranean.

Originally the establishment of the TWU at Brawdy had been a political one to overcome the loss of civilian jobs after the Fleet Air Arm moved out. But because of frequent bad weather over the Welsh coast and Irish Sea it became imperative to make a move as the unit could not keep up with the demands made upon it for students to complete the

**Hawker Hunter FGA. 9 belonging to No. 1 Squadron. This unit was late in the field to use the Hunter starting with the F.5. In 1960 the role changed to ground attack and the FGA.9 became standard equipment when based at Waterbeach.**

course on time. Consequently in September 1978 30 Hunters were transferred to Lossiemouth, Scotland to form No. 2 TWU. They were not to stay there all that long because in 1980 No. 2 TWU moved south again, this time to RAF Chivenor and were integrated with BAe Hawk T.1s then entering service. Eventually the Hawks took over completely and the Hunters returned to No. 1 TWU, again based at Brawdy, 19 single-seaters of various marks and six two-seaters being concentrated under the No. 79 Squadron banner. Here they remained until the last Hunter instructors' course was completed in May 1979 and were phased out altogether by the end of the following year having completed a satisfactory phase in the

Hunter's history.

## RECONNAISSANCE

One other role was given to the Hunter, that of fighter-reconnaissance. The Hawker design team had envisaged the use of their multi-role aircraft back when the Mk. 4 was coming into service and one of the production versions of this variant, WT780, was converted as a private venture to have a five camera nose. The venture found favour with the Ministry of Supply who issued a contract in 1985 for the conversion, over a three year period, of 40 Hunter F.Mk. 6 airframes but with only three cameras installed.

The prototype XF429 first flew on 7

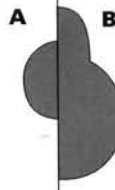


SCALE 1:72nd



# HAWKER HUNTER

SINGLE SEATER



**HAWKER HUNTER F. Mk. 6**  
Upper surface plan view

**Drawings by**  
**David Howley**

Original straight wing  
for F. Mk. 2, 4 and 5

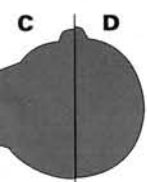
**HAWKER HUNTER FR. 10** Starboard side view

**HAWKER HUNTER F. Mk. 2, 4 and 5** Port side view

**HAWKER HUNTER F. Mk. 6** Port side view

Two 100 gallon tanks

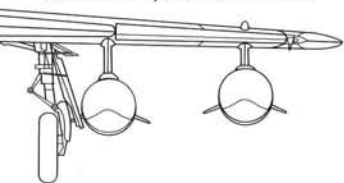
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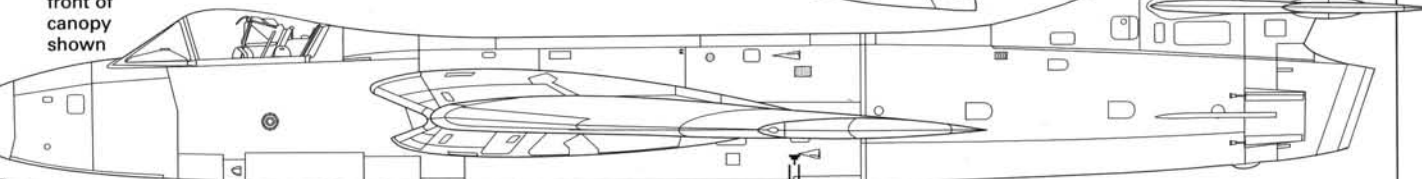
## CTIONS CROSS SECTIONS

## INTER Fighter versions

Leading edge extension  
for Mk. F. 6, FGA. 9 and FR.10

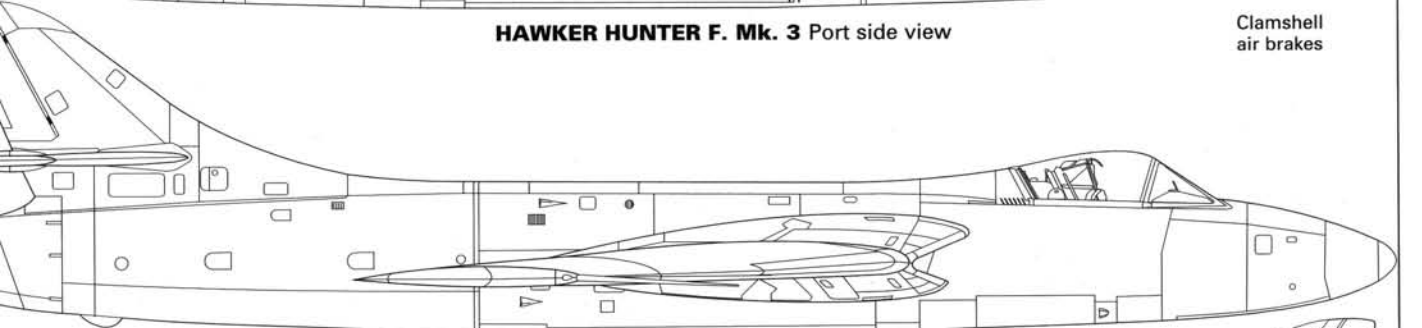


Original  
front of  
canopy  
shown

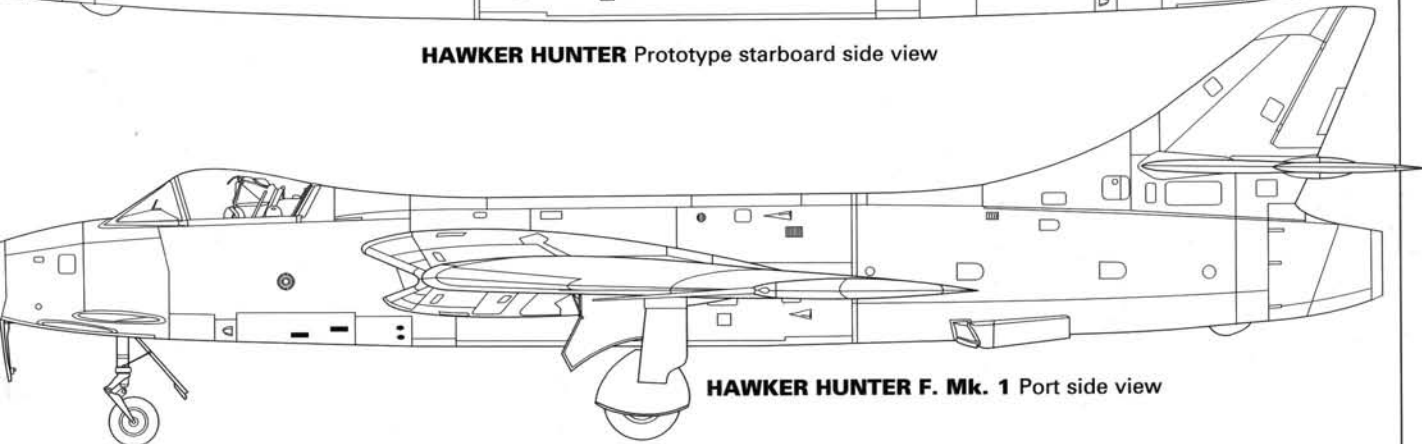


**HAWKER HUNTER F. Mk. 3** Port side view

Clamshell  
air brakes



**HAWKER HUNTER** Prototype starboard side view



**HAWKER HUNTER F. Mk. 1** Port side view

**HAWKER HUNTER FGA.9**  
Underside plan view

Cutaway for flaps  
on FGA.9 only

230 gallon  
long range tank

100 gallon  
long range tank

# HAWKER HUNTER

Drawings by  
David How

TWO-SEAT and MISCELLANEOUS VERSIONS

**HAWKER HUNTER T. Mk. 8**  
Starboard side view

Arrester hook  
under rear  
fuselage

Straight wing  
on Danish  
Hunters

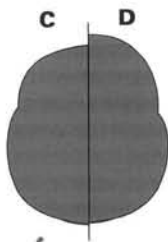
Standard  
wing

**HAWKER HUNTER T. 7**  
Front view



SCALE 1:72nd

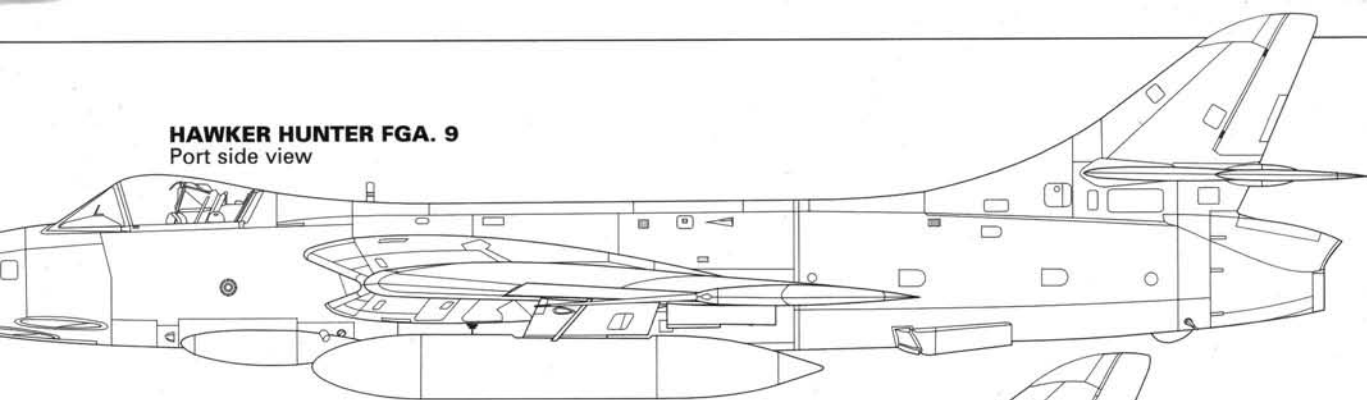
**HAWKER HUNTER F. 1, 2.**  
Underside plan view



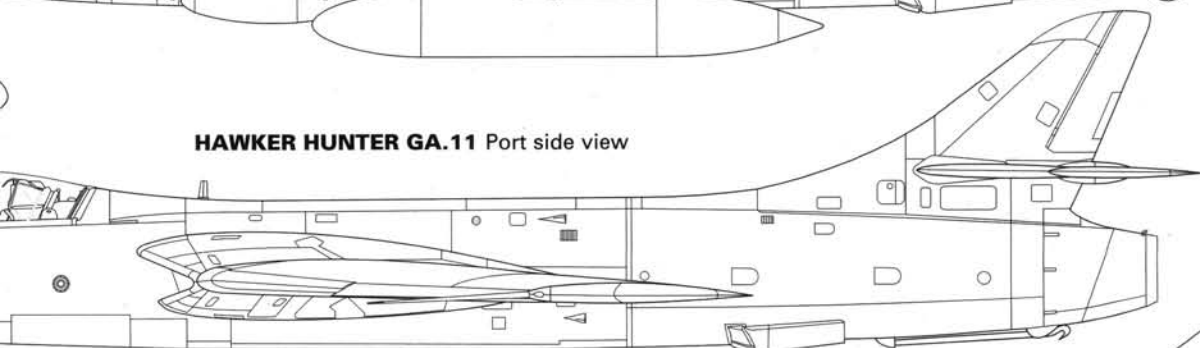
**TWO-SEAT HUNTER CROSS SECTIONS**

**HAWKER HUNTER T. 7**  
Underside plan view

**HAWKER HUNTER FGA. 9**  
Port side view



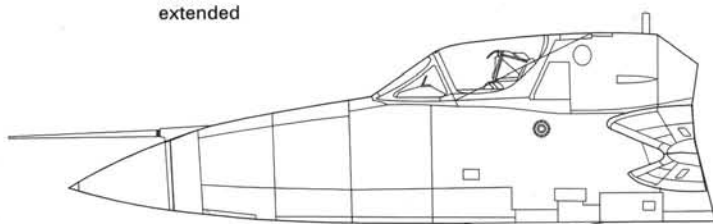
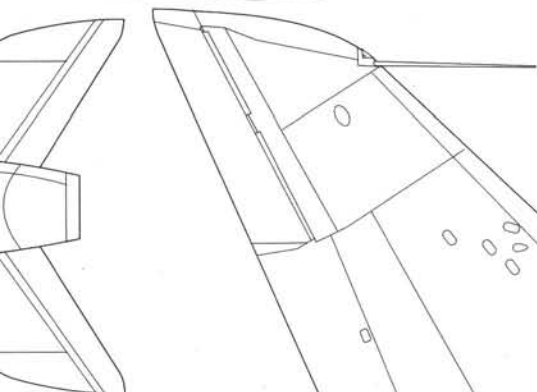
**HAWKER HUNTER GA.11** Port side view



**HAWKER HUNTER T. 7**  
Port side view

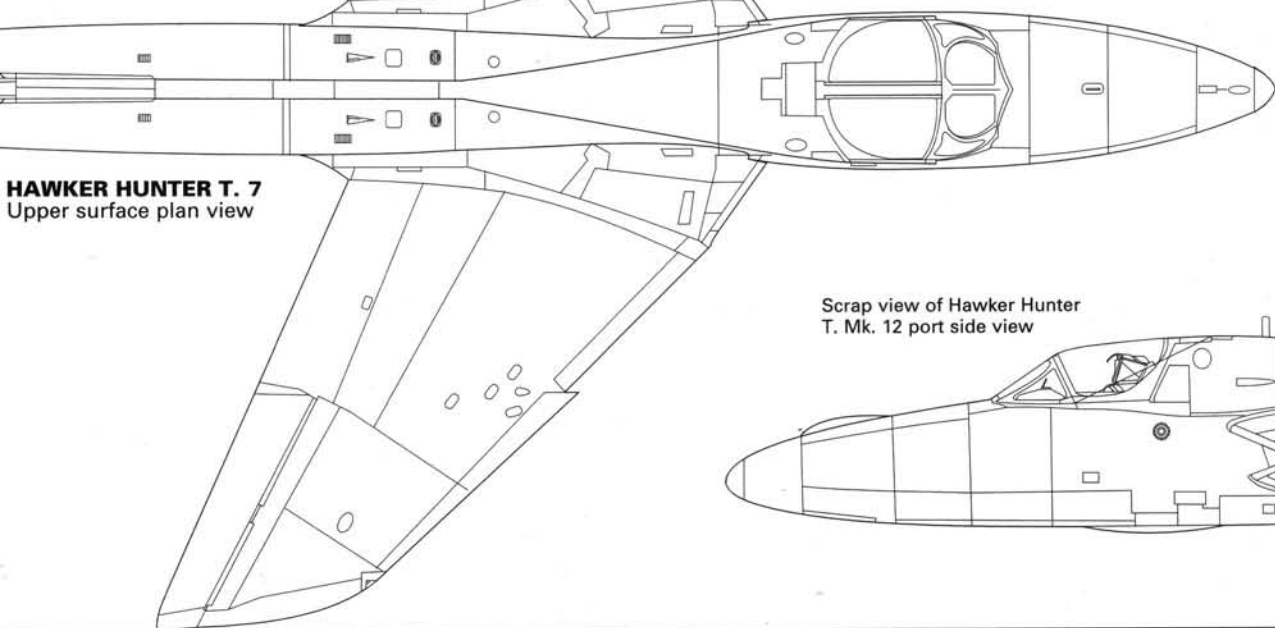


Dive brake  
shown  
extended

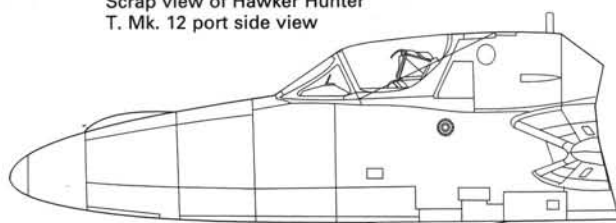


Scrap view of Hawker Hunter  
T. 8M port side view

**HAWKER HUNTER T. 7**  
Upper surface plan view



Scrap view of Hawker Hunter  
T. Mk. 12 port side view





The serial number of this Hunter FGA. 9 is not known for certain but the picture was taken by staff photographer Peter Hudson of RAE Bedford showing how close one can get in formation with one of the Establishment's test aircraft. The small triangular aerial on the nose is that for the IFF transponder. (RAE Bedford)

November 1959 and the majority were issued to Nos. 2 and 4 Squadrons then based in RAF Germany. The variant was designated FR. Mk. 10 and the role allotted to the two squadrons was that of fast, very low altitude, visual reconnaissance under the direction of a NATO-administered Tactical Operations Centre.

They were made available for rapid deployment anywhere in the NATO region



**Above:** Chivenor formation take-off. Two Hunter F. Mk. 6s, XF420:29 leading, seen at the point of getting airborne from RAF Chivenor in the late 1960s. (A.W. Hall) **Left:** Hunter F. Mk. 6 coded 'O' of 229 OCU in the markings of No. 79 Squadron when based at Chivenor in 1971. (RAF Museum)

and with two 230 gallon tanks could fly from Germany to Malta, for example, without refuelling. Hunter FR. 10s were to be seen on all major NATO exercises and their low-speed of 620 kts at zero feet made them ideal for the purpose.

The aircraft retained the four 30 mm cannon armament which made them suitably equipped to fight their way out of any tight corners. Matched up against RF-84F





**Above: Home for old Hunters.** This remarkable view of the No. 1 TWU Brawdy flight line shows F.6As, T.7s and FGA.9s mixed in together. (A.W.Hall)



**Middle East Hunter.** No. 208 Squadron was part of the Aden Strike Wing when based at Khormaksar along with Nos. 8 and 43 Squadrons in 1961. FGA.9 XJ636:F is seen on the squadron's flight line at that time. (MAP)

Thunderflash, RF-101 Voodoo, Canberra and Mirage IIIR in NATO reconnaissance competitions like 'Royal Flush', they were always rated amongst the top two or three squadrons involved, demonstrating the flexibility of the aircraft under many different

environmental conditions.

Each of the two squadrons acted autonomously in the field. Equipped with a number of highly mobile ground units including high speed film processing facilities and photographic interpretation personnel they were able to rush the results of a sortie to battlefield commanders in the shortest possible time.

Eventually other aircraft types became operational and in the case of No. 2

Squadron they were re-equipped with Phantom FGR.2s in December 1970 but still in the same NATO-assigned role. No. 4 Squadron relinquished their Hunters in May 1970 to become a Harrier GR.1 unit based at Wildenrath and then Gutersloh.

### NAVAL SINGLE-SEATERS

Finally mention must be made in detail of the use made by the Royal Navy of the Hunter apart from the T.Mk.8 two-seater already mentioned.

In 1960-62 a conversion order was placed by the Ministry of Supply on behalf of the Admiralty for a batch of Hunter T. Mk. 4s to

**This classic picture of the Hunter F. 6 at the point of getting airborne from RAF Chivenor's runway in the late 1960's says much for the clean lines of the aircraft. No serial is visible but the aircraft is painted in the shadow markings of No. 234 Squadron. (MoD Air)**



**HAWKER HUNTER FR. 10** XG168:10  
of 229 OCU, No. 79 Squadron ,  
Chivenor, August 1971.

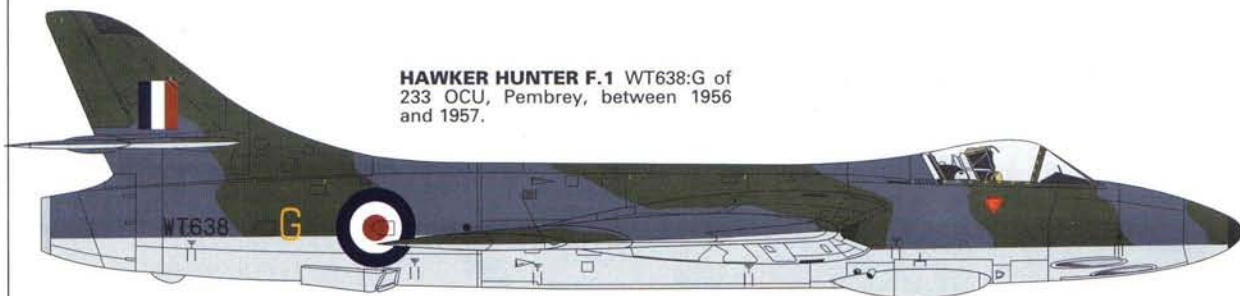
10



**HAWKER HUNTER F.1** WT638:G of  
233 OCU, Pembrey, between 1956  
and 1957.

WT638

G



Detail of nose  
markings on 237  
OCU aircraft



**Hawker Hunter T. 7** XL573 of 237 OCU,  
Honington between 1986 and 1987. This  
aircraft was formerly with 4 FTS.

XL573



**Hawker Hunter T.7** XL573:WC of  
237 OCU Honington July 1987.  
Seen in last style of camouflage  
and markings before declared  
obsolescent

XL573

WC



**Hawker Hunter F. Mk. 6** XF527:P of  
Central Fighter Establishment/Air Fighting  
Development Unit, Binbrook, November  
1965.

XF527

P

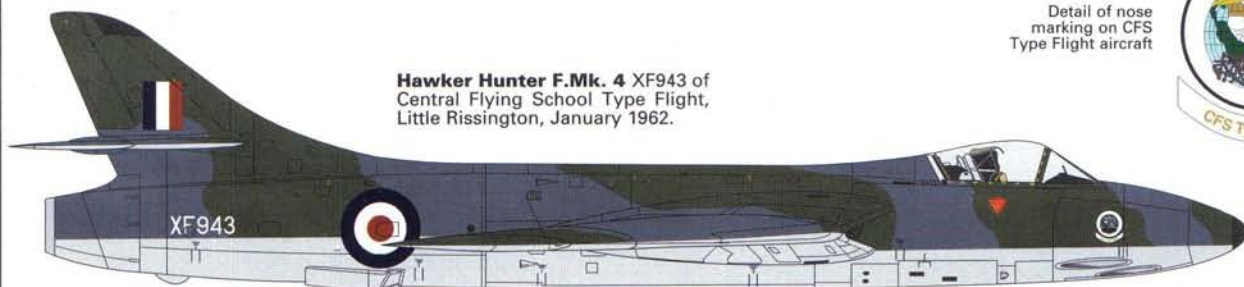


Detail of nose  
marking on CFS  
Type Flight aircraft



**Hawker Hunter F.Mk. 4** XF943 of  
Central Flying School Type Flight,  
Little Rissington, January 1962.

XF943



**Right: Shadow squadrons. No. 45 Squadron was based at Wittering in 1972 tasked with the training of ground attack pilots for the Jaguar squadrons. The role eventually passed to the TWU at Brawdy. Lower right: No. 54 Squadron was one of the first to receive Hunter F.1s. This picture shows their markings in the early 1960s when equipped with the FGA.9.**

be modified for the training role with the Fleet Air Arm.

The cannon armament was removed, an arrester hook placed under the rear fuselage and provision made for rocket launchers on underwing racks. A total of 40 aircraft were modified and given the designation of Hunter GA.11, a few of these were further modified with nose cameras to become PR Mk.11As.

Most of these aircraft were operated by the Fleet Requirements and Air Direction Unit at Yeovilton. Uniquely they were actually flown by civilians, many of whom were former FAA pilots, employed by Airwork Services Ltd under contract. Each Hunter was fitted with a powerful Harley Light in the nose, which was used during dummy attacks for visual tracking, by both single and groups of aircraft on ships at sea and for radar calibration work.

Naval Hunters both GA.11s and T.8s were used by Nos. 700, 736, 738, 759, 764, 800, 899 Squadrons in addition to FRADU. These included conversion flights for the Buccaneer and Sea Harrier as well as air warfare instruction and advanced flying training.

## Hunters for export

The Hunter became one of the most successful of all British manufactured post-war mil-

**Right: No. 79 Squadron was part of 229 OCU when this picture was taken of one of their aircraft visiting Greenham Common in the early 1970s. Below: Hunter FGA.9 XF419:L of No. 58 Squadron when based at Wittering for training ground attack pilots destined to go to Jaguar squadrons.**





**Above:** Hunter FGA.9 of No. 20 Squadron based at Tengah, Singapore before the country was granted independence. It was one of the last operational Hunter squadrons. **Below:** The last style of camouflage and markings used by No. 1 TWU is seen on Hunter FGA. 9 XG154:54. Toned down roundels, no shadow squadron markings and only the badge of the TWU appears on the nose. (Phil Boyden BAe)

itary aircraft in terms of numbers. It was also licence manufactured by Fokkers in Holland and in Belgium. Overseas it served with no less than 19 other countries.

#### NATO LICENCE PRODUCTION

Licence agreements were negotiated with

Fokker in Holland and SABCA and Avions Fairey in Belgium with deliveries of two Hunter F. 4 pattern aircraft one to Holland on 3 March, coded N-1, and the other to Belgium, coded ID-1, on 16 March 1955.

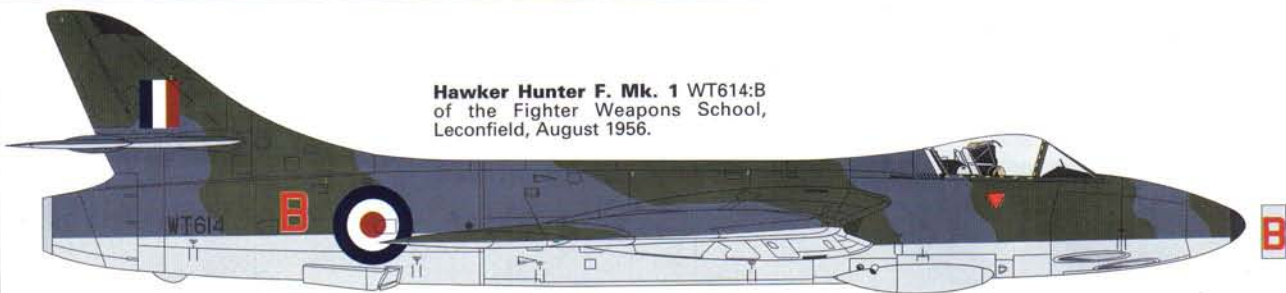
Both factories used the same Mark designation as the Hawker originals and the first F.Mk. 4s began to leave the Dutch assembly line before the end of 1955. Coded from N.101, onwards the Hunter was to equip three Dutch squadrons, Nos. 324 and 325 at Leeuwarden and No. 327 at Soesterberg before a change over on the production line in 1957 to the F.Mk. 6 was initiated. In all cases the Hunters replaced Meteors in the fighter squadrons to which they were attached.

Both Dutch and Belgian production was funded by the United States Government's Offshore Procurement Programme. The initial Dutch contract called for the building of 96 aircraft but this total included six that



**Below:** Refuelling and rearming a No. 20 Squadron Hunter FGA. 9 after a sortie. Based at Tengah, Singapore, the squadron gave support to units operating against enemy forces in Borneo and also undertook many away-from-base deployments. Their aircraft had that well-worn look as a result!



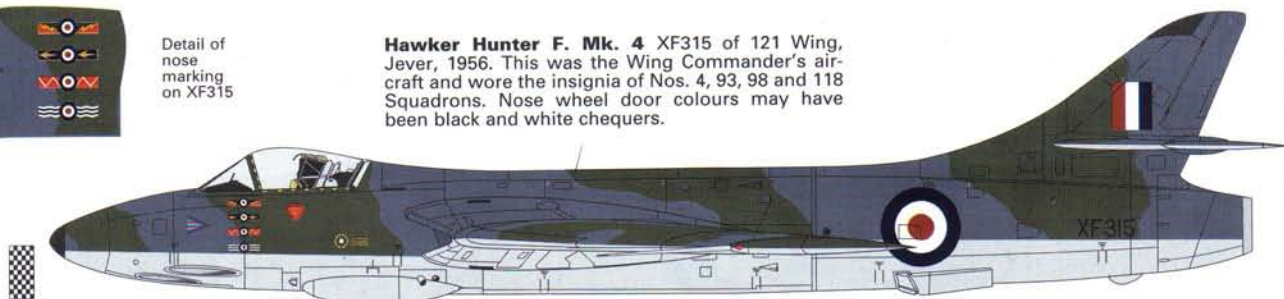


**Hawker Hunter F. Mk. 1** WT614:B  
of the Fighter Weapons School,  
Leconfield, August 1956.

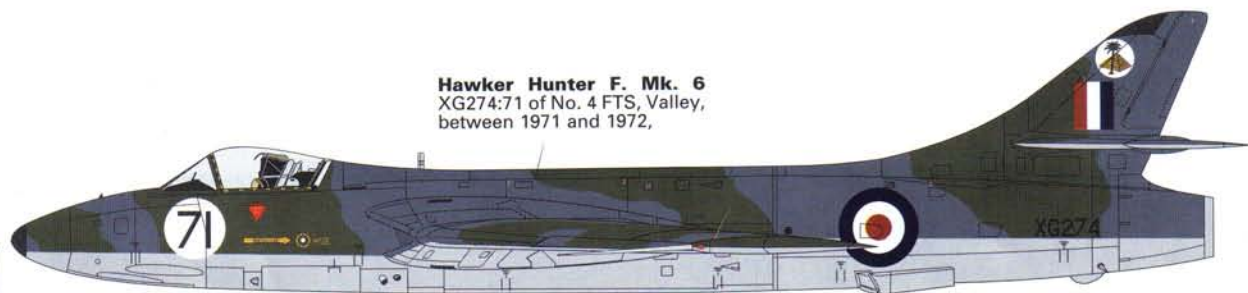


Detail of  
nose  
marking  
on XF315

**Hawker Hunter F. Mk. 4** XF315 of 121 Wing,  
Jever, 1956. This was the Wing Commander's air-  
craft and wore the insignia of Nos. 4, 93, 98 and 118  
Squadrons. Nose wheel door colours may have  
been black and white chequers.



**Hawker Hunter F. Mk. 6**  
XG274:71 of No. 4 FTS, Valley,  
between 1971 and 1972,



Detail of  
No. 4 FTS  
badge used  
on fin

**Hawker Hunter F. Mk. 6**  
XG274:71 of No. 4 FTS Valley in  
the later red, white and grey  
colour scheme adopted from  
1973 onwards.



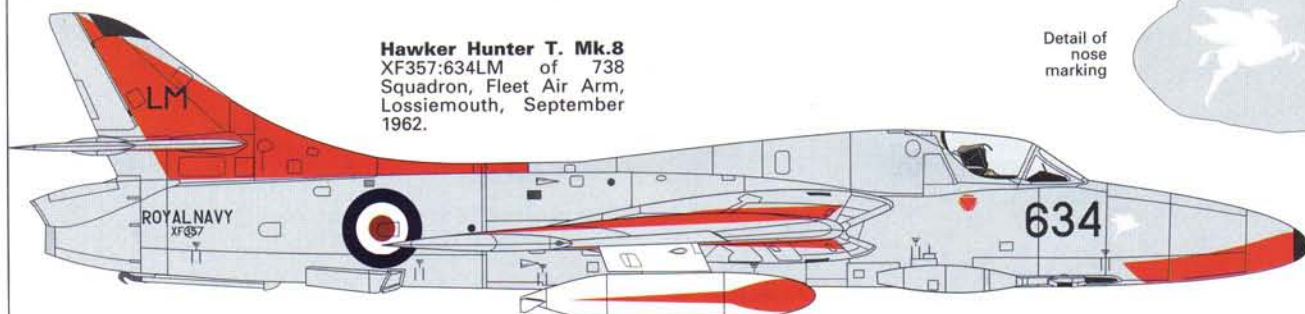
Detail of Harrier  
Conversion Unit  
nose markings

**Hawker Hunter FGA.9** XF430:N  
of the Harrier Conversion Unit,  
Wittering, July 1970.



**Hawker Hunter T. Mk.8**  
XF357:634LM of 738  
Squadron, Fleet Air Arm,  
Lossiemouth, September  
1962.

Detail of  
nose  
marking





**Above:** Hunter FR. 10 XE556:W of No. 2 Squadron was built as a Mk. 6 and converted to the photographic role in 1961. It went back to Hawkers in 1971 and was sold to the Indian Air Force as a T.66E after conversion. **Left:** Hunter FR.10 WW594:11 with a white painted spine was used for experimental purposes. **Below:** XJ633:K was a Hunter FR. 10 belonging to No. 4 Squadron in Germany in 1959. These aircraft were amongst the most colourful Hunters having squadron markings both on the nose and rear fuselage.

were added direct from the Kingston production line in Britain. The first F.Mk. 4 was delivered on 1 February 1956 and the last completed on 1 November 1957. The Dutch also sent Hunters to Dutch New Guinea to serve with No. 322 Squadron which was hurriedly formed in 1960 during the con-





**Left: Hunter FR. 10 of No. 1417 Flight, part of the Aden Strike Wing based at Khormaksar. Serialled XE599:DW it is seen make a low level sortie over the inhospitable terrain of the area. (RAF Museum)**

banded after 12 months service and re-equipped with CF-100 Canucks. No. 9 Wing completed the change over to the Mk. 6 but this too disbanded to become an anti-aircraft missile unit using the Nike. It remained for No. 7 Wing to retain the Hunter with some 50 aircraft on strength but in the ground attack role. These were given up in 1963 and the aircraft put into storage. Hunter F. 4s formed the Belgian aerobatic team, the *Diabls Rouge*, before the advent of the Fouga Magister which was their better-known mount in the 1960s.

Serial numbers and codes of Belgian manufactured Hunters are likely to cause confusion as they varied due to whichever factory produced them. Although the Mk. 4s were in the range ID-1 to ID-48 only 64 were of pure Belgian manufacture, the remainder coming from the Fokker line and assembled in Belgium. The Mk. 6s were serialled IF-1 to IF-144 and included 56 from the Dutch source.

Eventually six Dutch squadrons, Nos. 322, 323, 324, 325, 326 and 327 plus the S&I Flight at Leeuwarden converted to the Hunter F.Mk. 6, the first of which was delivered in October 1957. The last Hunter was withdrawn from service with No. 325 Squadron in August 1968 a total of 93 having been built.

Training and operational conversion of both Dutch and Belgian pilots was carried out jointly, hence the lack of two-seat trainers in the Belgian Air Force. The RNethAF bought 20 Hunter T.Mk. 7s (N-301 to N-320), 10 of which were diverted from a cancelled Ministry of Supply order for the RAF. The first ten were delivered from 28 July 1958 and the remainder from 6 March 1959. All were withdrawn from service by August 1968. Of these two had already gone to the Danish Air Force in December 1967 and another, N-320 became PH-NLH with the Lucht-en-Ruimtevaartlaboratorium for re-



**Above: Two Hunter FR.10s from No. 2 Squadron, XE556:W and XE625:I, scramble from the Luqa, Malta, runway. Detachments to Mediterranean venues were popular with crews based in RAF Germany. (G. Mangion) Below: One of a number of Hunter GA.11s used by the Fleet Requirements and Air Direction Unit (FRADU) based at Yeovilton and flown by civilian pilots under contract to Airwork Services Ltd. (MAP)**

frontation with Indonesia. The final RNethAF Hunter F. 4 flight took place on 30 August 1963.

In Belgium the first Hunters went to No. 7 Wing at Chievres in 1956 followed by Nos. 1 and 9 Wings at Beauvechain and Bierset respectively. In all 112 examples of the F.Mk. 4 were built but remained in service for a relatively short period. No. 1 Wing dis-





**Hawker Hunter T. Mk. 8C** XF985:811BY  
of 759 Squadron FAA, Brawdy, in the late  
1960s.

Detail of fin  
badge on  
XF985



Detail of  
nose  
marking  
on 764  
Squadron  
aircraft

**Hawker Hunter PR. 11** XE689:695LM of  
764 Squadron, FAA, Lossiemouth,  
January 1970.



Detail of fin  
marking on  
XL580.

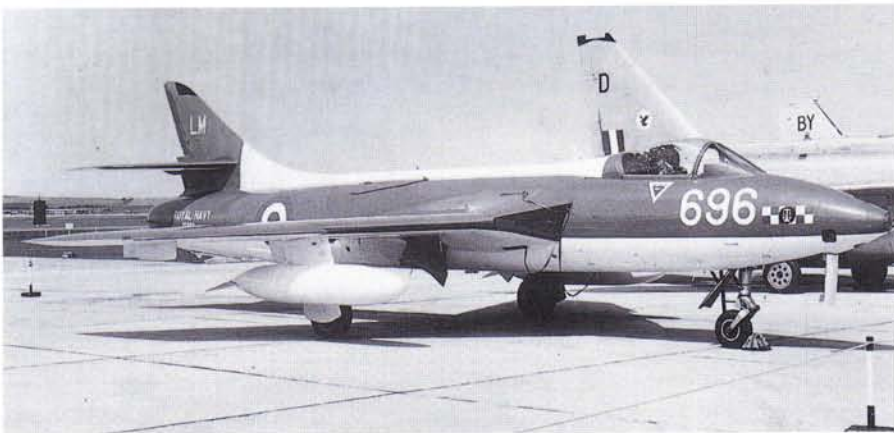
**Hawker Hunter T.Mk. 8M** XL580:719VL  
of 899 Squadron FAA, Yeovilton, June  
1985.



19



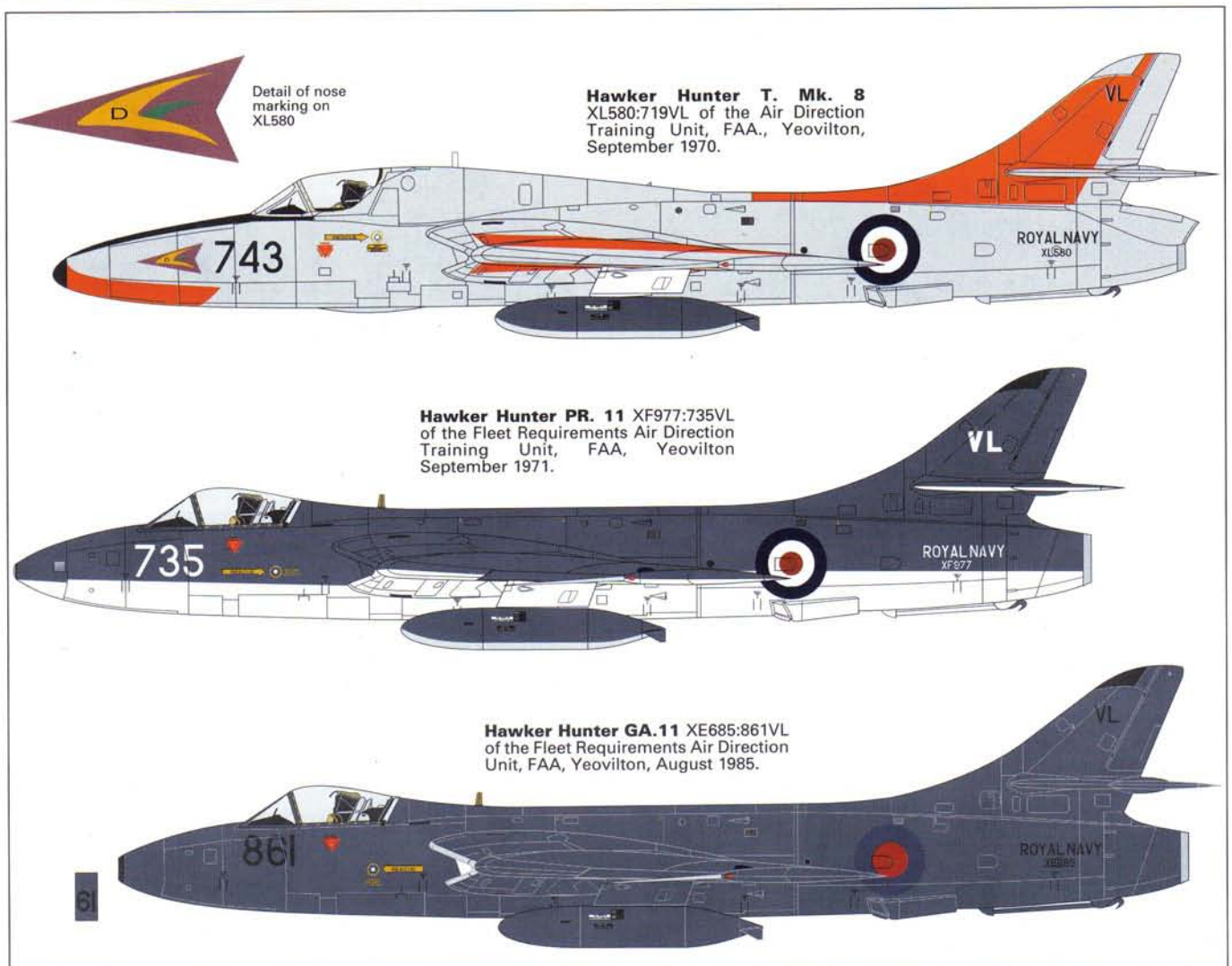
Fleet Air Arm Hunters underwent a mid-life refurbishment programme in the late 1980s. The work was carried out by Lovaux at Hurn and consisted of major servicing, rewiring, and repainting. This aircraft has the Harley nose light fitted.



search purposes. This colourful aircraft was painted in a glossy blue, white and orange colour scheme and was used for high altitude nuclear radiation research for a short time equipped with samplers carried on the inboard wing pylons.

Total licence production amounted to 96 Dutch Mk. 4s, 93 Dutch Mk. 6s, 111 Belgian Mk. 4s and 144 Belgian Mk. 6s plus the 20 T.Mk. 7s produced in Holland. In retrospect, although the Hunter remained in service for a total of ten years with both of these air forces it was a comparatively short period for such a powerful and versatile aircraft - it could easily be said that it was effectively under-employed. Certainly the airframe and engine hours on almost every aircraft were low and in fact some of the Belgian Hunters had spent much of their lives up till then in storage. The disbandment of Dutch and Belgian squadrons in favour of the F-104 Starfighter came at a time when the world demand for aircraft of the Hunter type was rapidly increasing so providence played a major role in allowing Hawker Aircraft Limited to buy back many of the aircraft

**Top left: One of the Hunter FR.10s attached to 764 Squadron FAA, at Lossiemouth in 1970. The white painted fin may have had something to do with exercise markings. (MAP) Left: 738 Squadron, FAA transferred to Brawdy from Lossiemouth in 1964 noted by the fin letter change. This one appears to have a dayglo band on the nose in addition to the Pegasus marking associated with the squadron. (MAP)**



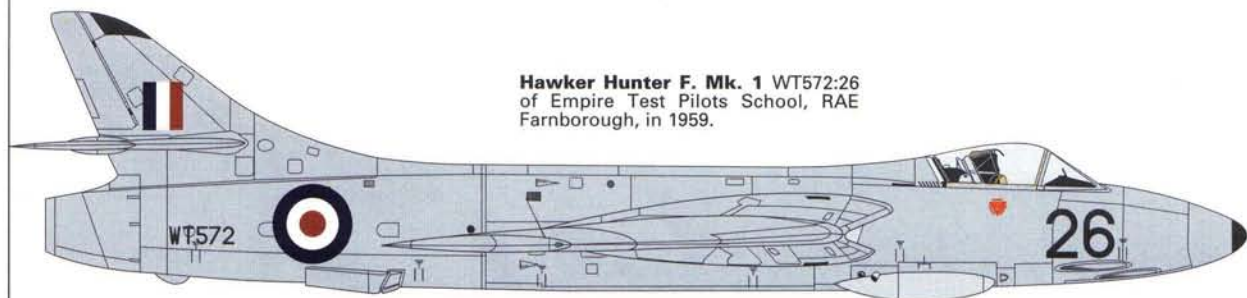


Detail of nose markings on Heron Station Flight aircraft

**Hawker Hunter T. Mk. 8** XF289:738VL of Heron Station Flight, Yeovilton, September 1972



**Hawker Hunter F. Mk. 1** WT572:26 of Empire Test Pilots School, RAE Farnborough, in 1959.



**Hawker Hunter T. Mk. 7** XL563 of the Institute of Aviation Medicine, RAE Farnborough, July 1976.



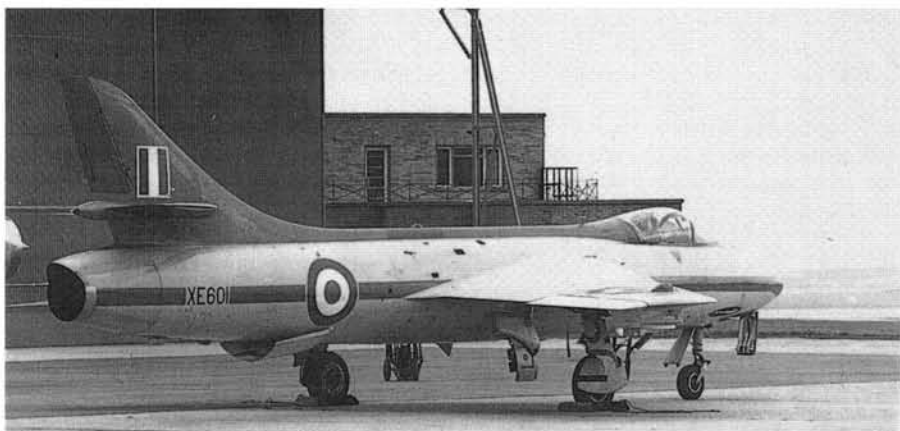
**Hawker Hunter T. Mk. 12** XE531 of RAE Farnborough, January 1964.



The Empire Test Pilots School operated Hunter T.7 XL564 in 1983 seen in its 'raspberry ripple' colour scheme of red, white and blue at A&AE Boscombe Down.



**Left: The four Hunter GA.11s of the Blue Herons aerobatic team. Flown by civilian pilots, though all ex FAA aircrew, they put on some accurate and well displayed performances. Lower left: WW598 was a Mk. 6 that was much modified at RAE Farnborough for experimental high speed flight purposes. The red, white and blue colour scheme was most attractive. (RAE)**



held in store and these second-hand, low-houred aircraft were to make a distinct impression on third world jet procurement. It was also a rare and unique opportunity for HAL to sell the same product twice as they were able to buy all surplus Hunters at bargain prices and, after refurbishment, offer them at equally, though profitable, prices as up-to-date equipment, world-wide.

## EUROPEAN SALES

Sweden, Switzerland and Denmark were three European countries that ordered Hunters.

### Sweden. Mk. 50

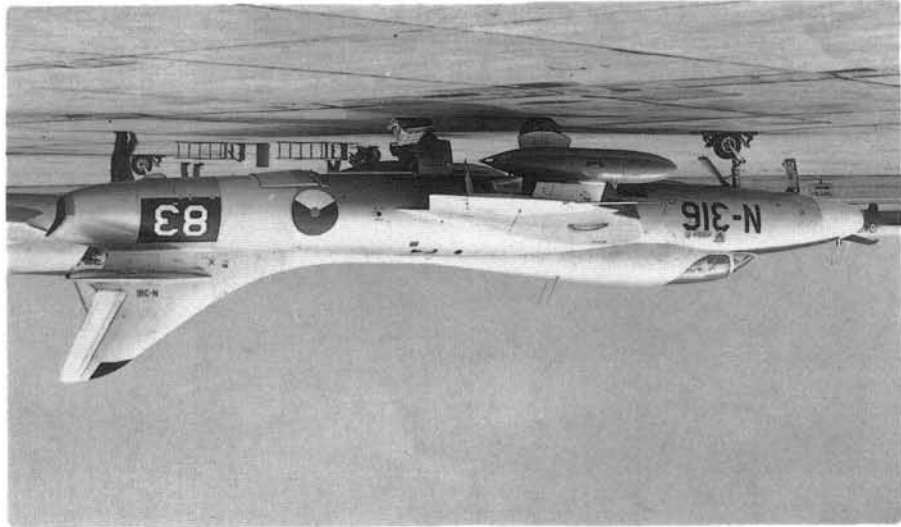
The first of these was Sweden who placed a substantial order for 120 with Hawkers before the first of the Hunter F. Mk. 4s had done its initial engine runs. The contract worth £25 million at 1954 values, was signed on 29 June of that year with the production run to be completed at the Blackpool factory after the first 24 were built at Kingston.

The first Hunter to go to Sweden was WT770 in February 1955 for evaluation and familiarisation. Subsequently Hawkers designated their first overseas order as the Mk. 50, the first actual production aircraft making its maiden flight on 24 June 1955. The Swedish Air Force, however, designated their Hunters the J-34.

Four Wings of the Swedish Air Force stan-

**Left: Hunter XE601 was built as an F. Mk. 6 and progressively updated to FGA.9 standard though never designated as such. It was used by the experimental establishments and Hawker Aircraft Ltd for trials work throughout its life. (MAP) Below: The green and white unique Hunter Mk. 12 seen later in its flying career with the Avionics Flight at Farnborough for fly-by-wire experiments. (RAE)**





following a demonstration visit to Denmark

All of these aircraft were built at Kingston

51

which were subsequently designated the Mk. 4 order for 30 Hunters similar to the Mk. 4 Limited the Danish Government placed an signed their contract with Hawker Aircraft July 1954, four days after the Swedes had overseas country to order the Hunter as on 3

The Royal Danish Air Force was the second

**Denmark, Mk. 51 and T.53**

superceded in Swedish service in 1966

and then the Draken, the Hunter 50 was

With the introduction of the Saab Lansen,

great expansion of the flight envelope.

basic design by the wing did not allow for a

system but the limitations placed on the

installation of the Volvo Flygmotor reheal

improve the Hunter 50's performance by the

training but experiments were made to

bought by the Flygvapnet for conversion

Surprisingly no two-seat trainers were

Sidewinder missiles for air-to-air combat

but they were adapted to take two

fitted with the leading edge wing extensions

the Swedes. None of these aircraft was retro-

Hunter production continued until 1958 for

'Acro-Hunters' aerobatic team in 1962.

F.18. It was the latter that was to form the

Barabab, F.9 at Save, F.10 at Angelholm and

dardised on Hunters including F.8 at

the Starfighter in August 1968.

R.Neth.A.F. This unit was the last to use the

Four Hunter F. Mk.6s from 325 Squadron,

One of the 20 Hunter T.Mk.7s bought by the R.Neth.A.F. for conversion of both Dutch and Belgian pilots. These were based at Soesterberg and were distinguished for a time by having large white fleet numbers on a black panel under the tailplane. (MAP)

this day as it was bought by Spencer Flack

were disposed of. One however remains to

were too worn for further service and

ing and resale but in most cases the aircraft

back the remaining 20 aircraft for refurbish-

March 1974. Hawker Aircraft Ltd bought

and the unit was finally disbanded on 31

Squadron was down to 10 effective aircraft

keep the remainder flying. By 1973 No. 724

storage whilst others were cannibalised to

difficult and some Hunters were placed in

lack of funds made the purchase of spares

restrictions of the Danish Defence Act. The

be run-down by 1966 due to attrition and the

that they were in service but they started to

than 60 NATO exercises during the 18 years

The Danish Hunter force took part in more

problem had been solved on RAF aircraft.

modified all of the Danish aircraft once the

surging when the guns were fired. Hawkers

Avon 115 engine with its inherent fault of

The initial aircraft were fitted with the

operational area over the Baltic.

Skrydsrup in order to be nearer to their

but later moved to Karup and then

No. 724 Squadron, then based at Aalborg,

mid-August 1956. They were all assigned to

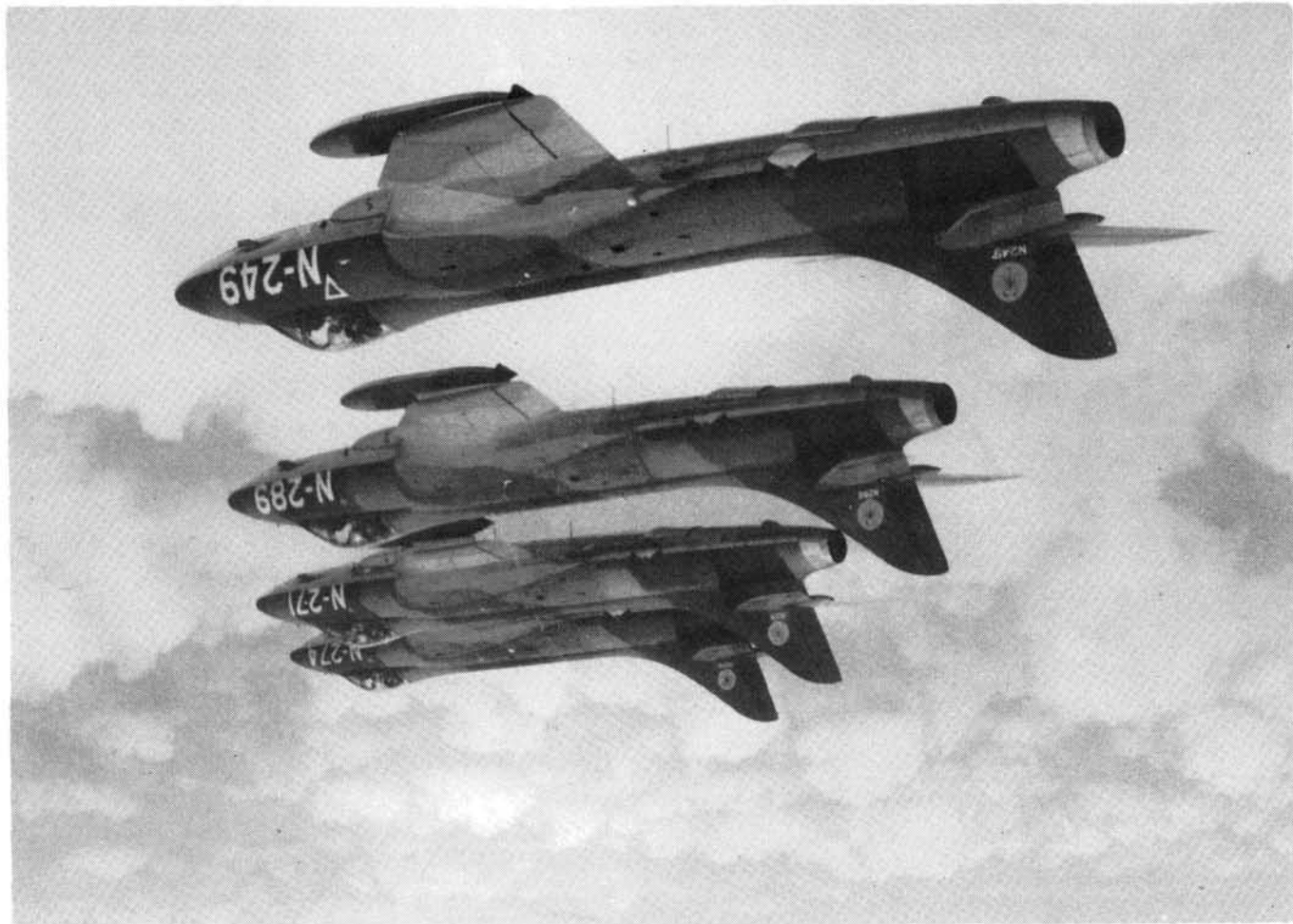
of the order was delivered to Vaerlose by

WW591 remained in Denmark and the rest

best suit their needs.

no doubt that this was the aircraft that would

of F. Mk. 4 WW591 which left the Danes in





**Left:**The Dutch license-built the Hunter F. Mk.4 to start with. This aircraft belongs to 323 Squadron at Leeuwarden. **Lower left:** The only Dutch Hunter that attained civil registration was PH-NLH (formerly N-320) which was used by the Lucht-en-Ruimtevaartlaboratorium for research into upper air pollution. (APN)

and then taken over by Michael Carlton's Hunter One Collection. Formerly serialised E-418, it was civil registered as G-HUNT and given a bright red finish overall as well as having the leading edge wing extension fitted and a tail braking parachute installed. The restoration was completed at Elstree under the direction of former Hawker employee Eric Hayward.

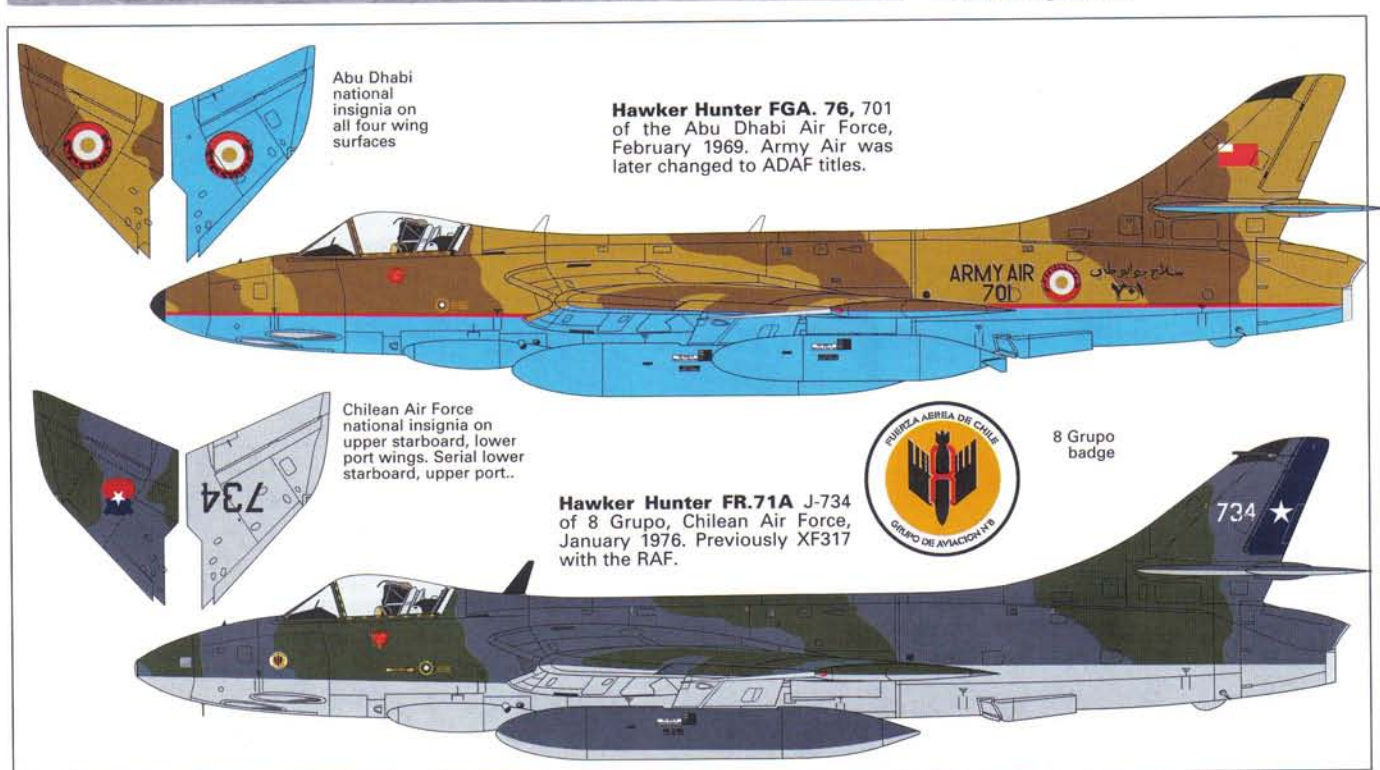
In addition to the F.Mk. 4s the RDanAF acquired four two-seat trainers. The first were designated T.Mk. 53s and were fitted with Avon 122 engines. The first examples were delivered in 1958 and the original two did not have the leading edge extensions as fitted to RAF T.Mk. 7s. A further two aircraft were later bought from former Dutch Air Force stocks.

Danish Air Force Hunters were distinctive in having an overall dark green camouflage and toned down markings but this weathered very quickly and made the aircraft look dirty and stained. Two-seat Hunters used the serial numbers running from ET-271 to ET-274 and in later years most in-service aircraft wore the badge of No. 724 Squadron on the nose.



**Switzerland.** Mk. 58, F. 58A and T. 68 The Swiss have always maintained an efficient though small air force composed mainly of reservist aircrew and adapted to the peculiarities of the mountainous countryside. They have also developed their own method of selection for new aircraft types which, if it may seem ponderous to other

**Left:** With its distinctive tail badge, a 325 Squadron Hunter F. Mk. 6 of the R. Neth AF seen landing at its home base at Soesterberg. (APN).



Badge of the  
TTF or 20  
Squadron



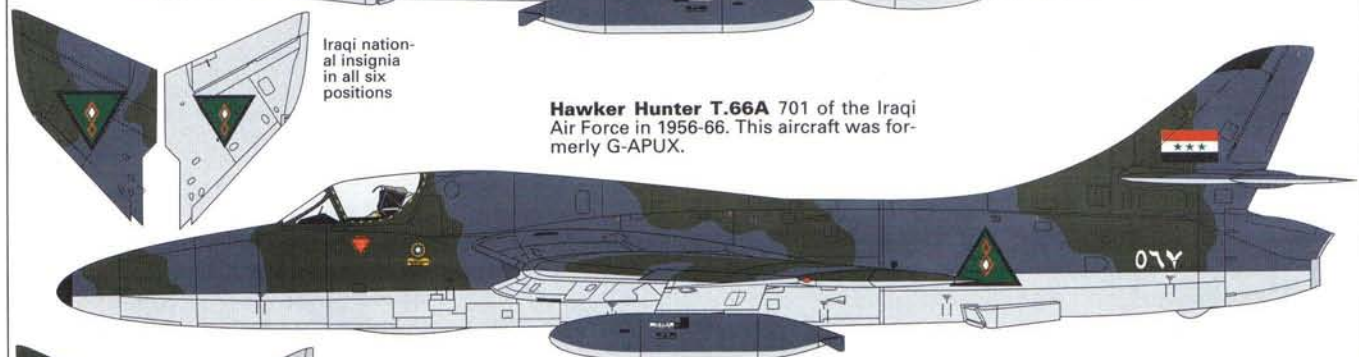
**Hawker Hunter F. 56 BA360A** of either  
20 Squadron or the Target Towing  
Flight, Indian Air Force, in early 1970s.

Indian Air Force  
national insignia  
in all six positions



Iraqi national  
insignia  
in all six positions

**Hawker Hunter T.66A** 701 of the Iraqi  
Air Force in 1956-66. This aircraft was formerly  
G-APUX.



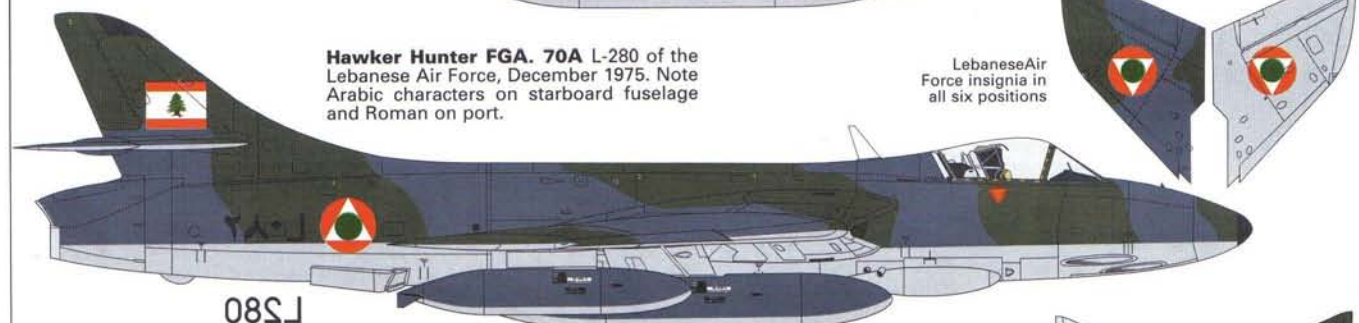
Kenyan Air Force  
national insignia  
on upper wing  
surfaces only

**Hawker Hunter FGA.80** 803 of the  
Kenyan Air Force. in 1974.



**Hawker Hunter FGA. 70A** L-280 of the  
Lebanese Air Force, December 1975. Note  
Arabic characters on starboard fuselage  
and Roman on port.

Lebanese Air  
Force insignia in  
all six positions



No. 325  
Squadron  
badge

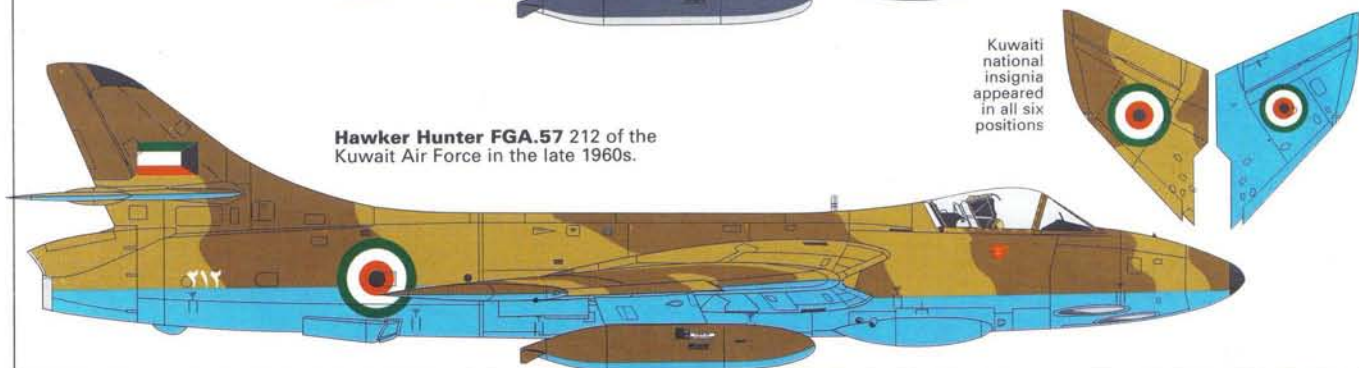
**Hawker Hunter F. Mk. 6** N-266 of 325  
Squadron, Royal Netherlands Air Force,  
in the late 1950s.

R. Neth AF  
insignia  
appeared on  
upper port  
and lower  
starboard  
wings



**Hawker Hunter FGA.57** 212 of the  
Kuwait Air Force in the late 1960s.

Kuwaiti  
national  
insignia  
appeared  
in all six  
positions





**Above:** Two Swiss Air Force Hunters getting airborne in a hurry. The white bands round the rear fuselage are probably there for exercise purposes. **Left:** Hunter F.58 of the Swiss Air Force serialised J-4301 was a member of the Patrouille Suisse aerobatic team judging by the badge on the nose.

European eyes, has the advantage of evaluating all available aircraft from the world's manufacturers. This was the same for the Hunter and, needing a replacement for their front line Venom force, trials were set up in July 1957 to evaluate the F-86, Mystere IV and Hunter.

Hawker sent two aircraft, both Mk. 6s, XE587 and XE588, which emerged the clear victors in the trials that followed. Following performance, ground handling and arma-

**Below:** The Royal Swedish Air Force was the first to order export Hunters. Designated J-34 this equivalent of the F. Mk. 4, coded red 02, belonged to F.9 Wing and had the Swedish serial of 34005. (Ake Hall)





**Different styles of camouflage and markings on Danish Air Force Hunters. Left: One of 30 Mk. 51s, equivalent to the F. Mk. 4 seen in the original colours. Below left: Hunter T. Mk. 53 ET-271 was one of four purchased, two being ex-Dutch, and showing the later overall dark green colours of Danish Hunters. These aircraft did not have wing leading edge extensions and the 724 Squadron badge appeared on the nose. (MAP)**

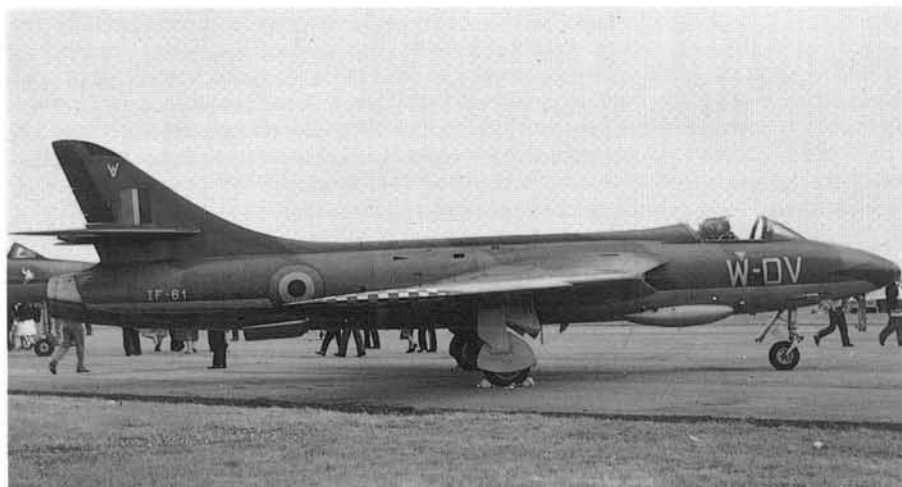
the enlargement of the ammunition link containers.

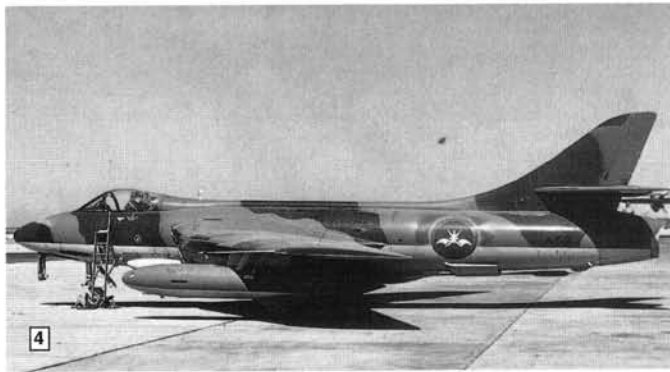
The Swiss aircraft were designated F.Mk. 58 and the first 12, serialised J-4001 to J-4012, came directly from RAF stocks, the first making its maiden flight on 29 March 1958. All of the remainder of this order were newly-built machines, numbered from J-4013 to J-4100. Two more orders were eventually placed in 1971 and 1974 for a total of 52 additional aircraft and almost all of these came from ex-RAF stocks, many of which had already been given RAF Maintenance serial numbers for instructional purposes. These 52 aircraft were then delivered in component parts to the Federal Aircraft Factory at Emmen where final assembly took place. After the last two batches were delivered most aircraft were brought up to FGA. 9 standard and provision was made for two AIM-9 Sidewinder missiles on underwing pylons.

ment delivery trials the Swiss even awarded the Hunter the Swiss Alpine badge for its ability to manoeuvre low down in the valley in which the trials airfield, Meiringen was situated.

A Swiss Standard of Preparation was prepared and a contract for 100 aircraft was signed in January 1958. Although similar to the F. 6, the Swiss Hunter differed in having a tail parachute for additional braking, and

**Right: One of the last European air forces to retain war-time codes were the Belgians. This Hunter F. Mk. 6, IF-61, coded W-OV belonged to 8 Smaldeel. Codes were later replaced by the numerical part of the serial number. (MAP). Below: A Swedish Air Force J-34 Hunter, the equivalent of an RAF F. Mk.4, belonging to F.9 Wing at Save. Most Hunters were modified to have underwing racks for Sidewinder missiles.**





In addition to the single-seaters, eight trainers were delivered under the designation T. 68, these being serialised J-4201 to J-4208.

The Hunters equipped Fliegerstaffeln 1, 4, 5, 7, 8, 11, 18, 19 and 21, the last mentioned being a mixture of both fighters and trainers. The main bases were at Dubendorf, Ambri and Meiringen with the trainers at Turtmann though the actual disposition was varied according to need. The Swiss also set up a very efficient aerobatic team which gave demonstrations at the International Air Tattoo in England as well as elsewhere in Europe.

## MIDDLE EAST

### Abu Dhabi. Mks. FGA. 76, FR. 76A and T. 77

In February 1969 Abu Dhabi placed an order for seven Hunter FGA. 9s to form a ground attack squadron. These were delivered in 1970 and serialised 701-707. All were ex-RAF machines including the first production Mk. 6 ever built WW592. They were the first operational aircraft, apart from transports, to equip the small Abu Dhabi Army Air Wing. They remained in service at Sharjah and retained Abu Dhabi markings even though the confederation of the United Arab Emirates was formed and military forces pooled.

At the same time three fighter-reconnaissance Hunters were ordered as well as a pair of two-seaters. The latter were ex-Dutch Air Force aircraft N-312 and N-301 which were brought up to Mk. 66B standard by Hawker Siddeley at Kingston and redesignated Mk. 77. One of these aircraft, 712, was broken up and two of the FR. 76As, 708 and 710 were lost in crashes.

**The first of seven Hunter FGA.76s supplied to the Abu Dhabi Army Air Wing in February 1969. Serialised 701, the first of these is seen passing through Malta on its delivery flight. (Flightlines)**

RAF pilots were seconded to fly these aircraft and despite being slowly replaced by local nationals and the fact that the UAEAF ordered 32 Mirage 5 fighters from France, it was several years before the RAF involvement was complete.

### Qatar. Mk. FGA. 78 and T. 79

Another of the smaller states bordering the Persian Gulf, Qatar followed its neighbours in ordering Hunters. Three single seaters from ex-Dutch Air Force stocks, modified to FGA. 78 standard, were completed in June 1969. The order also called for one T. 79 trainer and this was rebuilt from an ex-Dutch T. 7, N-316.

The aircraft were flown and maintained by seconded RAF personnel and based at Dohar. The serials ranged in consecutive order from QA-10 to QA-13. All were superseded by six Alpha Jets but not before one of the Hunters had been lost in a crash.

### Saudi Arabia. Mks. F. 6 and T. 7

When Saudi Arabia signed a contract with the British Aircraft Corporation in January 1966 for the supply of a complete air defence system to include Lightnings and missiles, it was thought to be of some impor-

**Middle East and African Hunters. 1. The sole Kenyan Hunter T. 81 delivered in 1974. 2. Based at Gwelo during the anti-guerilla operations the Rhodesian Air Force had 12 ex-F.Mk.6 Hunters brought up to FGA. 9 standard. 3. Hunter T.7 70-616 one of two supplied to the Royal Saudi Arabian Air Force. 4. The Sultan of Oman's Air Force used a variety of Hunters from Jordan, ex-RAF and Kuwait. They were operated by No. 6 Squadron at Thrumrayt.**

tance that four refurbished Hunters should be supplied as well in order that Saudi pilots could make the transition from their relatively inoffensive Jet Provosts to the far more potent Lightning. Four Hunter F. 6s and two T. 7s were therefore made available as part of the deal.

RSAF Hunters were serialised from 60-601 for the single-seaters and 70-616 and 70-617 for the trainers.

### Oman. Various Marks

The Sultan of Oman's Air Force obtained about 31 Hunters from a variety of sources hence the many different variants involved. The majority were ex-Jordanian aircraft transferred in 1975 but others also came from Kuwait and from the United Kingdom, the later including a few FR. 10s formerly used by the Khormaksar Strike Wing and handed





over when that unit disbanded.

Operated by No. 6 Squadron SOAF from Thrumray, they were known to be still active in 1983 although supplemented and replaced by Jaguars after 1977. Like some other Gulf states the SOAF aircraft were flown by RAF pilots on secondment.

#### **Kuwait. Mks. 57 and T. 67**

A small force of four ex-Belgian Hunter F. 6s were sold to Kuwait under the agreement reached between the British Government and Kuwait, during 1965-66 for the defence of the oilfields in the region. The BAC Lightning was also scheduled for purchase

but it was decided that these were too potent an aircraft for the experience of Kuwaiti pilots and the Hunters were used in their place. The country eventually received six Hunter FGA. 57s and five T. 67 trainers.

All of the single seaters were withdrawn from service in late 1976 and their place taken by A-4KU Skyhawks whilst the trainers were used for their allotted purpose for several years longer.

#### **Lebanon. Mks. F. 6. FGA. 70, FGA. 70A and T. 66C**

The fluid political situation in Lebanon over the last 20 years has resulted in the loss of all

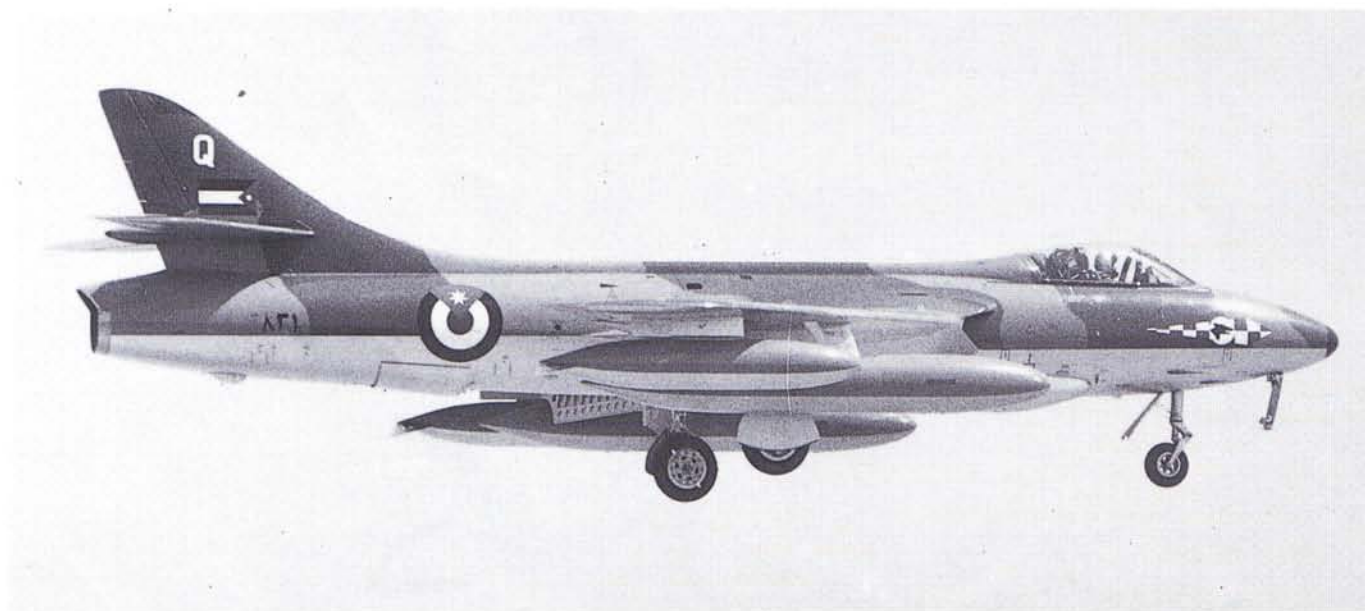
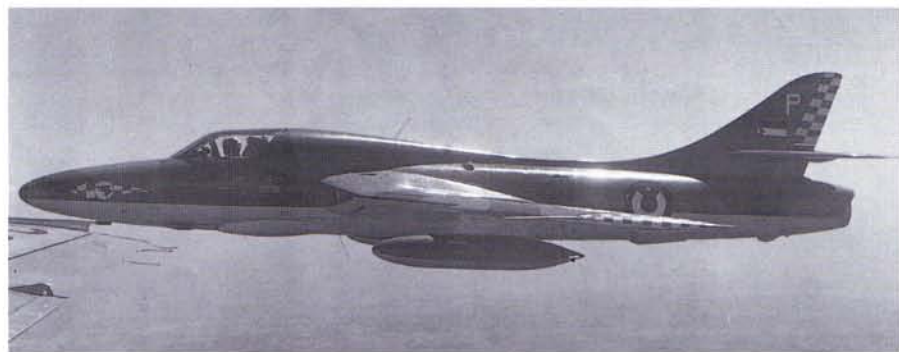
**The Chilean government had 15 single-seat Hunter FR. 71s to equip Grupo 9 at Antofagasta in 1966, other two-seaters were also ordered making a total of 39. The 20 survivors were updated in the early 1990s and not retired until 1996 making Chile the last air arm to use the Hunter operationally.**

of the original Hunters bought by that country.

An initial six, serialised L-170 to L-175 were ordered from ex-RAF Mk. 6 stocks in October 1968 and these were followed by four FGA. 70s, L-176 to L-179, which came from former Belgian sources. A total of 16 strike-role Hunters were subsequently on strength, the latter consisting of six ex-RAF FGA. 9s which were re-designated as FGA. 70As.

The former Belgian aircraft were rebuilt as T. 66Cs for Lebanon in 1966 and the well-known G-APUX also served for a time

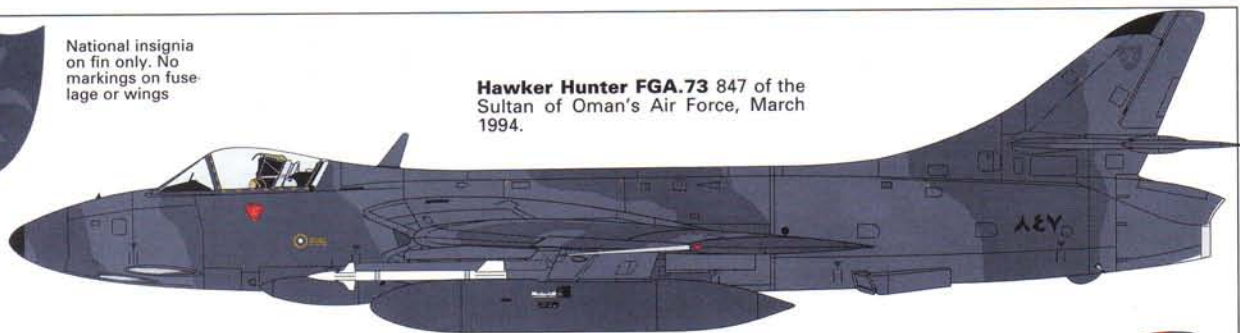
**Hunters of No. 1 Squadron, Royal Jordanian Air Force. Left: A two-seat T.66B with the squadron's nose, wing tip and rudder markings. Below: Most of the single-seaters came from ex-RAF Mk.6s and some FGA.9s which were originally operated by No. 43 Squadron, RAF. All of these aircraft were engaged in the Arab-Israeli wars, initially having a high success rate, but later suffering severely in ground strikes.**



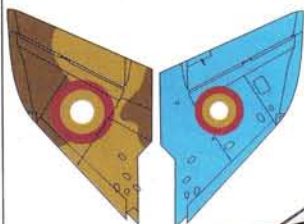


National insignia on fin only. No markings on fuselage or wings.

**Hawker Hunter FGA.73** 847 of the Sultan of Oman's Air Force, March 1994.

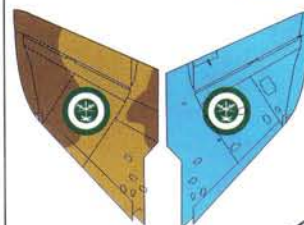
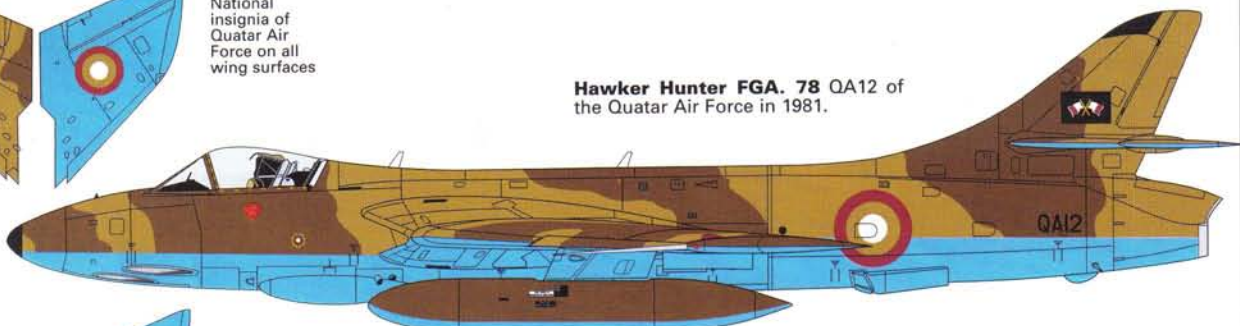


**Hawker Hunter F. 52** 638 of the Peruvian Air Force in the late 1950s.



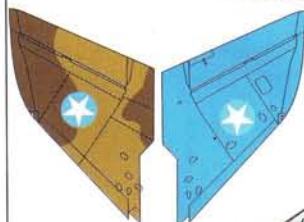
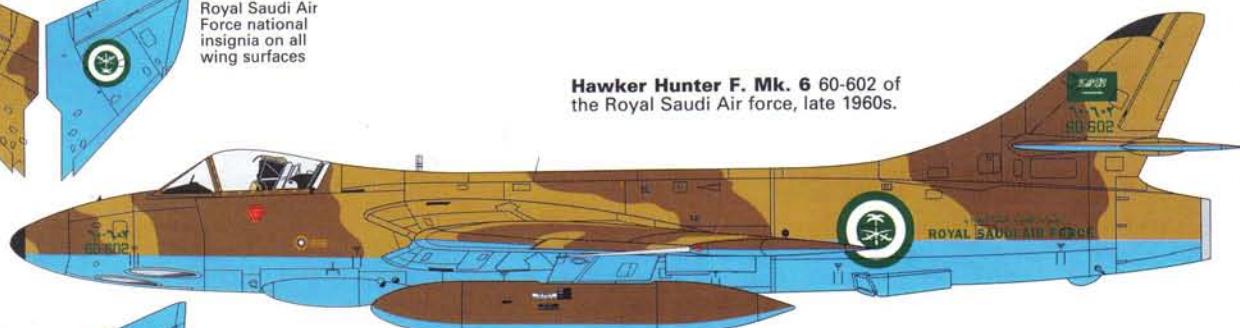
National insignia of Quatar Air Force on all wing surfaces

**Hawker Hunter FGA. 78** QA12 of the Quatar Air Force in 1981.



Royal Saudi Air Force national insignia on all wing surfaces

**Hawker Hunter F. Mk. 6** 60-602 of the Royal Saudi Air force, late 1960s.



National insignia confirmed on under wing surfaces. Probably similar on upper surfaces.

**Hawker Hunter FGA. 76** of the Somalia Air Force. Former Abu Dhabi Air Force aircraft. No serials known.



No. 141 Squadron, Singapore Air Force badge on nose

**Hawker Hunter F. 74B** 521 of No. 141 Squadron, Republic of Singapore Air Force, January 1991. No national insignia on wings.





The Indian Air Force employed more Hunters than any other country apart from the RAF. They had convincing success in the two Indo-Pakistan wars in 1965 and 1971. Most were not given any squadron or unit markings as can be seen on this F.56 on patrol (above) and the T.66D (right) at the OCU at Kalaikunda.

before the completion of the order.

It is known that six of the single-seat and one of the two-seat Hunters were lost to Israeli action at the beginning of the conflict between the two states.

#### Jordan. Mk. 6, FGA. 9 FR. 73B and T. 66B

Formed with British assistance as the Arab Legion Air Force in 1949, King Hussein gave considerable support to the procurement of up-to-date aircraft and in 1958, when it became the Royal Jordanian Air Force, orders were placed for 12 F. Mk. 6 Hunters to form No. 1 Squadron at Mafraq. The Jordanians were delighted with the aircraft and a further eight FGA. 9s, all from RAF stocks, were obtained to equip No. 2 Squadron. Meanwhile No. 6 Squadron was formed to act as an Operational Conversion Unit and three two-seat Mk. 66Bs were ordered in 1960. G-APUX spent a few months with the RJAF after its year in Iraq and Lebanon before returning to the UK and subsequent sale to Chile.

The first action in which the Hunter was engaged occurred in December 1964 when



Jordanian Hunters intercepted Israeli Mirages over their own territory. The pilots of four Hunters of No. 1 Squadron who took part claimed that two of the Israeli jets had been shot down. Two years later, another Israeli attack against Jordanian frontier villages, in which a superior force of Mirages was intercepted by four Hunters, resulted in claims of two enemy aircraft shot down for the loss of one Hunter.

During the Six-Day War, Jordan was placed at a distinct disadvantage because Israeli action on the first day knocked out its only early warning radar station. Attacks were made by Jordanian Hunters on Israeli positions but on return from one of these raids four of No. 2 Squadron's pilots found their own airfield under attack. Several

Hunters were destroyed on the ground and the Jordanians admitted the loss of one of their aircraft shot down. In subsequent attacks, all but four of the Jordanian Hunters were destroyed on the ground and the remaining pilots were withdrawn to serve with the Iraqi Hunter force for the remaining duration of the war.

To make up for the losses 12 more Hunters were acquired, including some from Iraq. The Hunter was however, phased out of Jordanian service in 1974 and replaced by the Northrop F-5, the remaining aircraft going to the Sultan of Oman's Air Force.

#### Iraq. Mk. 6, FGA.59, FGA. 59A, FGA. 59B and T.69.

One of several Arab countries needing to reinforce their air arms following the first direct conflict between themselves and the Israelis in 1956, Iraq placed the largest orders for Hunter fighters. Initially 16 aircraft, all Mk. 6s were delivered in two batches and purchased with the aid of American funds. These were taken from RAF stocks and the first five to arrive were used to form Iraq's first Hunter squadron, based at Habbaniyah, in the spring of 1958. Iraqi pilots were trained in the UK at 229 OCU, Chivenor.

All of the initial 16 were soon in service. Two squadrons, Nos. 140 and 141 based at Tengah were the recipients for the 47 FGA. 74, FR.74A and T.75s ordered by Singapore in 1968. This Hunter FGA.74 is seen at an air show held at Changi in 1974.



and further orders were placed in 1964-66 for an additional 42 Hunters but these were former Belgian and Dutch examples re-manufactured by Hawker Siddeley and were designated FGA. 59s and FGA. 59As. As this suggests they were brought up to FGA. 9 standard and delivered in two batches, one of 24 and the other of 18. Later a further five were supplied as FGA. 59Bs for photo-reconnaissance work. Iraqi serial numbers ranged from 394 to 702 and appeared in Arabic numerals on the rear fuselage.

In 1962 the Hawker demonstrator G-APUX was loaned for almost a year following a Middle East tour and this in turn brought orders for five T. 60s, the first three of which were serialised 567, 568 and 569, being delivered in 1963-64, whilst the remaining two, 626 and 627 arrived in 1965. All were ex-Belgian aircraft with new noses.

During the Six-Day War of 1967 Iraq's Hunters saw no action but the Israelis mounted a surprise attack on Habbaniyah airfield in which five Hunters were destroyed on the ground.

The Hunters were phased out in the early stages of the Iraq-Iran war when the Soviet Union made available a variety of up-to-date military aircraft and supplied ground equipment, radar and advisers backed by Su-7Bs and Su-20s which took over the ground attack role.

INDIAN AIR FORCE

Mks. F. 56, F. 56A, T. 66, T. 66D, and T. 66E.

Special mention must be made of the Indian Air Force use of the Hunter as this was the first overseas order for Hunter F. 6s made in September 1957 by the Indian Government. This called for a production run of no less than 160 examples which were to be designated F. 56. Because of the size of the order the Ministry of Supply agreed to the first 32 being provided from airframes already on the production line which were intended for the RAF. The following 16 aircraft were taken directly from RAF stocks held at Maintenance Units. These were serialised BA201 to BA248 in Indian Air Force service. All following F. 56s were newly-built to full Indian requirements, having gun blast

**Right: The famous Hunter G-APUX which was used as Hawker's demonstrator for many years. It was eventually sold to the Chilean Air Force as a T.72. (A.W. Hall)**  
**Below: Civil Hunters at Bournemouth (Hurn), both having formerly served with the Danish Air Force. Leading is G-HUNT followed by two-seater T.51 G-BOOM. Both belonged to Jet Heritage at that time. (A.W.Hall)**

deflectors and tail braking parachutes. Some of the later production aircraft were modified to allow them to take the 230-gallon drop tanks then coming into service.

Indian Air Force pilots came to Dunsfold for conversion training and the first Indian F. 56 was delivered on 11 October 1957. Each aircraft was fitted with extra tankage and ferried to Karachi by IAF pilots from Nos. 7, 17, 20 and 27 Squadrons.

Subsequent orders for Hunter F. 56s were catered for by the refurbishment programme set up by Hawkers using ex-Belgian and Dutch Hunters. All came within the serial range A459 to A494, A936 to A943, A967 to A969 and A1010 to A1015. These aircraft were modified to interim F. 6/FGA. 9 standard and were therefore known as F. 56As in Indian service.

The original contract negotiated in 1957, also called for 22 two-seat trainers. Serialised BS361 to BS376 and BS485 to BS490, they were fitted with Avon 203 engines and the first example flew from Dunsfold on 6 August 1958 followed by delivery in February 1959. The reason for the delay was a series of trials which led to the fitting of the newly-designed gun blast deflectors for the two 30-mm Aden cannon. One of these aircraft, BS366, was demonstrated at the 1959 Paris Air Show and subsequently set up the second fastest time in the London-to-Paris air race sponsored by the *Daily Mail*.

Subsequent orders for the Hunter T. 66 were met by the delivery of 12 ex-Dutch machines which were designated T. 66Ds (S570 to S581). Indian Hunter trainers were also delivered from ex-RAF stocks and were designated T. 66Es (S1389 to S1393). Indian Hunter trainers were allocated at an establishment of two per operational squadron with the remainder going to the Operational Conversion Unit at Ambala.

The two bitter conflicts between India and Pakistan in 1965 and 1971 resulted in a number of Hunter losses both in the fighter and ground attack roles. Reports of the fighting confirmed that as far as Indian fighter losses were concerned 13 were shot down by

ground fire or F-86 Sabres between 6 and 22 September 1965. Of these nine Hunters fell in air-to-air combat during which time the Pakistanis admitted to the loss of six F-86s. It appears that the Sabre had the advantage over the Hunter in low-level action as it could out-turn its adversary although it did not have the acceleration of the Hunter.

By the end of the second war in December 1971, India had made up its attrition to some extent and was reckoned to have 95 Hunters in front line service. These were allocated to the ground attack role over both Pakistan and Bangladesh. The Pakistan Air Force had meanwhile been reinforced with both the F-104 Starfighter and the Chinese-built MiG-19. Even so, six Hunters were shot down by Sabres, three by MiG-19s and four fell to Mirage fighters. The remainder of the 17 Hunters claimed by Pakistan were either destroyed on the ground or by ground fire in low-level attacks.

Although the Hunter appeared to come off worse during both wars the F-86 Sabre pilots were very wary of them. They stood up well in the ground attack role and destroyed a great deal of Pakistan armour. Hunters also claimed to have shot down a Pakistan F-86 and a MiG-19 during the 17 days of hostilities.

Although the Hunter was replaced by the Jaguar in the Indian Air Force quite a number remained on charge with Nos. 20, 27 and 37 Squadrons up until the early 1980s.

AFRICA

**Kenya. Mks. FGA. 9 and T. 81**

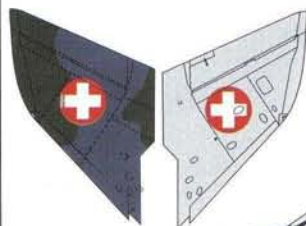
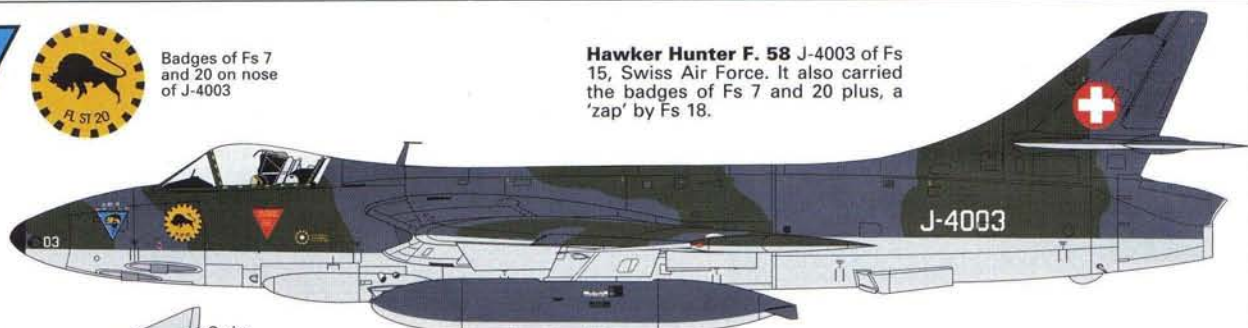
The Kenyan Air Force was formed in 1964 with substantial British assistance after the former Crown Colony was granted independence. Because of the build-up of the air forces of neighbouring states in the early seventies, a fighter-ground attack force was decided upon and six Hunter FGA. 9s and one Hunter T. 81 (ex-T. Mk. 8 XL604) were delivered in 1974. These were serialised in the 800 to 807 range and had standard RAF camouflage on the upper surfaces and light





Badges of Fw 7 and 20 on nose of J-4003

**Hawker Hunter F. 58** J-4003 of Fw 15, Swiss Air Force. It also carried the badges of Fw 7 and 20 plus, a 'zap' by Fw 18.



Swiss national insignia on all wing surfaces

**Hawker Hunter T. 68** J-4203 of 2Fs24, Swiss Air Force, June 1995

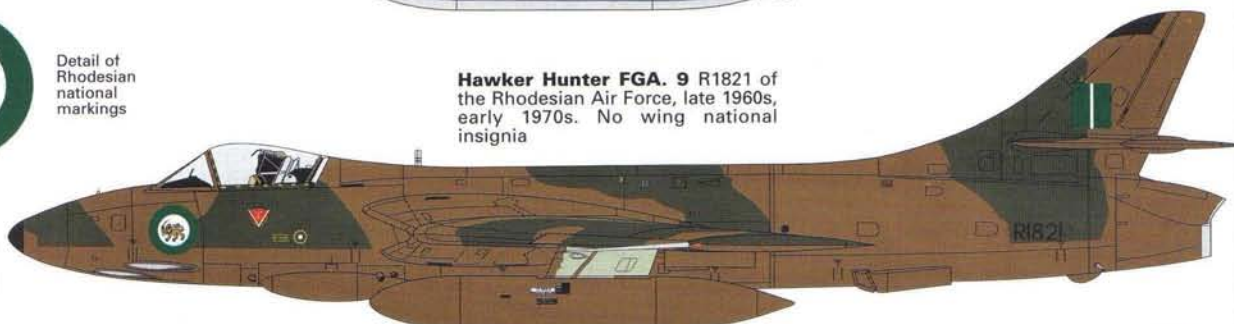


Detail of badge of 2Fs24



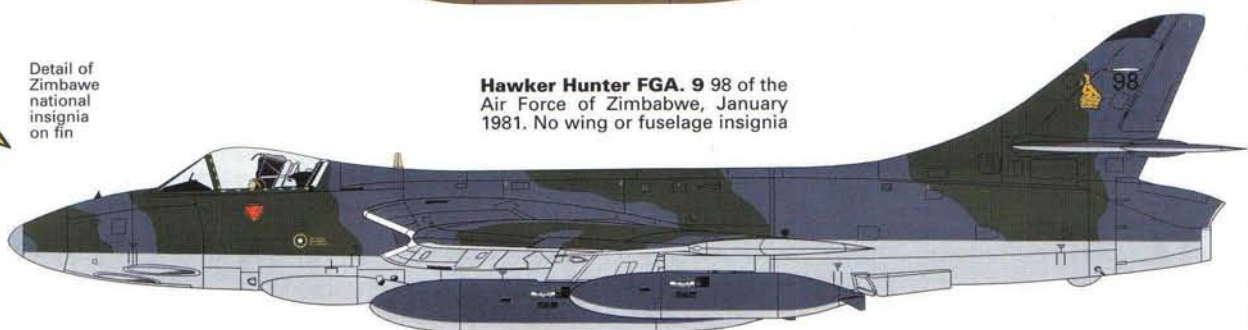
Detail of Rhodesian national markings

**Hawker Hunter FGA. 9** R1821 of the Rhodesian Air Force, late 1960s, early 1970s. No wing national insignia



Detail of Zimbabwe national insignia on fin

**Hawker Hunter FGA. 9** 98 of the Air Force of Zimbabwe, January 1981. No wing or fuselage insignia



grey undersides.

The aircraft were based at Nanyuki, in the centre of the country, but inexperience and attrition had reduced the force to just four aircraft by 1979 and these were placed in storage pending disposal. Ten Northrop F-5s were acquired as replacements.

#### Zimbabwe. Mks. FGA. 9 and T. 80

Because of the fluid nature of the campaign against guerilla forces during UDI, and the fact that the Rhodesian Government acquired military aircraft from a number of illegal sources, research has not proved conclusively exactly how many Hunters were employed in its inventory.

It is known that a batch of 12 ex-RAF Mk. 6s brought up to FGA. 9 standard was delivered to Rhodesia from January 1963 before the declaration of independence and that these were based at Thornhill, near Gwelo, where they equipped No. 1 Squadron, and were serialled RRAF 116 to 127. Others are known to have come from the aircraft for-

merly used by Kenya in an arrangement made by the British aircraft sales organisation, Staravia. The Rhodesian Air Force is also known to have changed the serial numbers of aircraft in service as a security measure during the anti-guerilla operations.

The Hunters were used constantly in air strikes against guerilla positions and as a consequence a number were lost in accidents and to ground-to-air missile fire.

It is thought that no more than eight survived the fighting and that these remained in service with the Zimbabwean Air Force after the hand-over of power. All Hunters have now been taken out of service with the arrival of BAe Hawks.

**Hunter G-BABM**, the manufacturer's demonstration aircraft was eventually sold to the Singapore Air Force. It is seen here at an SBAC Farnborough display.



# HUNTER AEROBATIC TEAMS

SON LDR P LATHAM etc



Left: Nose marking on Sqdn Ldr Latham's Hunter



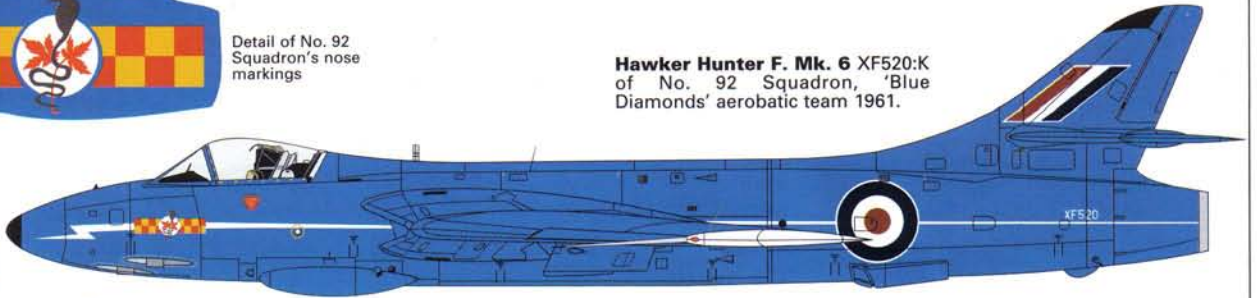
Left: Detail of No. 111 Squadron badge

**Hawker Hunter F. Mk. 6** XF506:X of No. 111 Squadron, 'Black Arrows' aerobatic team, October 1958. Flown by Squadron Leader Peter Latham DFC.



Detail of No. 92 Squadron's nose markings

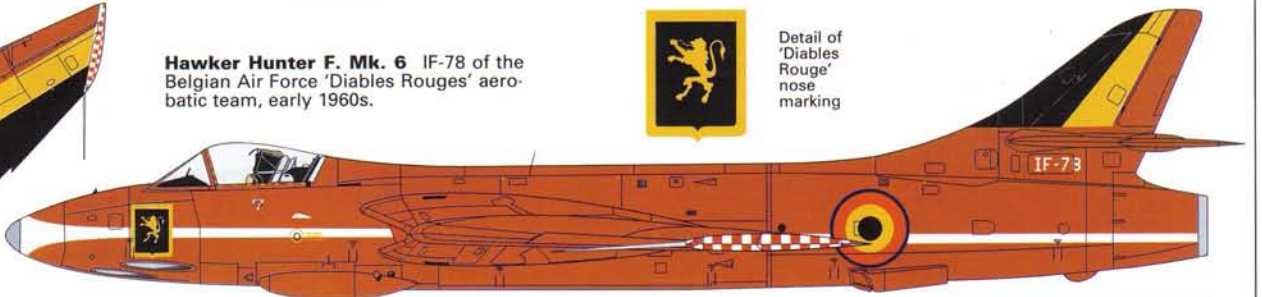
**Hawker Hunter F. Mk. 6** XF520:K of No. 92 Squadron, 'Blue Diamonds' aerobatic team 1961.



**Hawker Hunter F. Mk. 6** IF-78 of the Belgian Air Force 'Diables Rouges' aerobatic team, early 1960s.

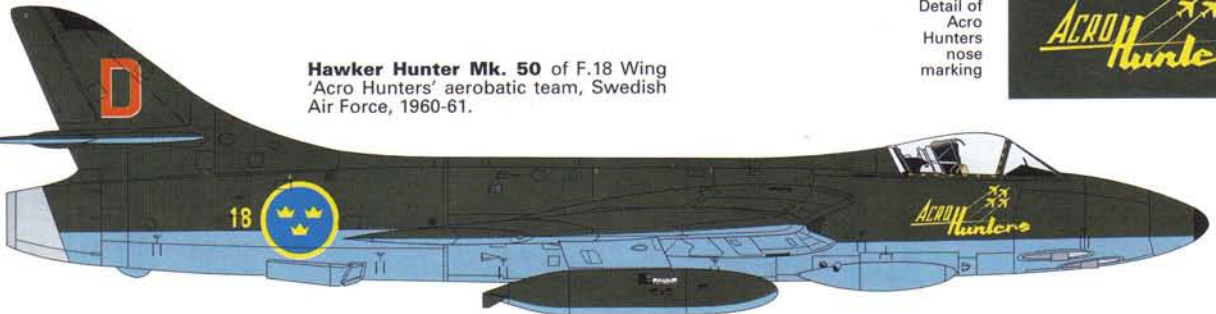


Detail of 'Diables Rouges' nose marking



**Hawker Hunter Mk. 50** of F.18 Wing 'Acro Hunters' aerobatic team, Swedish Air Force, 1960-61.

Detail of Acro Hunters nose marking

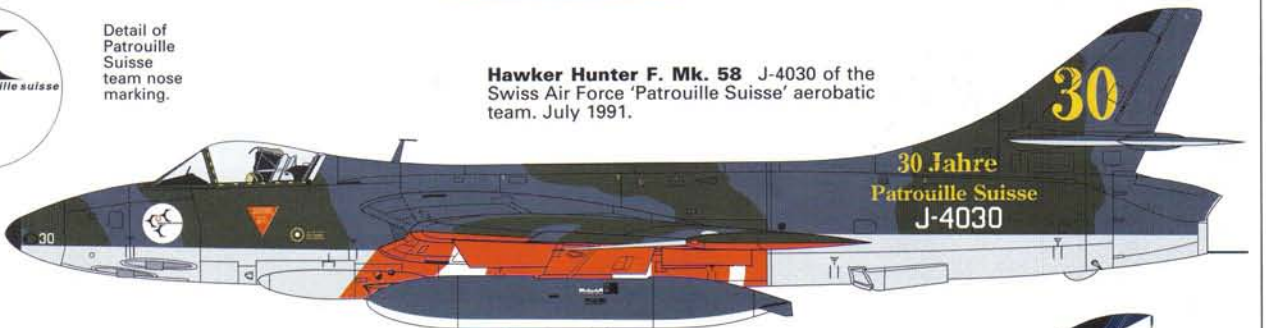


Detail of Patrouille Suisse team nose marking.

**Hawker Hunter F. Mk. 58** J-4030 of the Swiss Air Force 'Patrouille Suisse' aerobatic team. July 1991.

30

30 Jahre  
Patrouille Suisse  
J-4030



**Hawker Hunter F. Mk. 56** A943 of the Indian Air Force 'Thunderbirds' aerobatic team. Originally flown by aircraft of No. 20 Squadron.



**Peru. Mk. F. 52 and T. 62**

The sale of 16 ex-RAF Hunter Mk.F. 4s to the Peruvian Air Force in 1955 was something of a triumph for Hawker Aircraft Ltd as the United States was only too eager to provide the South American republics with surplus Sabres, F-80s and T-33s at ridiculously low prices and had, before this sale, attained a virtual monopoly on sales of military aircraft in the region.

The Peruvian Government, after an evaluation of the F-86 Sabre and the Hunter, decided that it should equip one squadron of Grupo 12 with Hunters and the other with the F-86F, leaving the Grupo's third squadron with the F-80 Shooting Star.

Peruvian pilots came to Dunsfold for conversion and the first modified aircraft, now designated F. Mk. 52 flew on 1 December 1955. Deliveries began in the following year and equipped Escuadron de Caza 14 at Talara and Limatambo, these being serialised 630 to 645.

In addition Peru ordered a single T. 62 which was converted from an ex-RAF Mk. 4, WT706. It first flew in September 1959 and was delivered the following month. This aircraft was serialised 681 in Peruvian AF service.

The Hunters were retired in 1980 after the supply of Su-22s by the Soviet Union.

**Chile. Mk. FGA. 71, FR. 71A and T. 72**

Following the breakthrough made by Hawkers in selling Hunters to Peru in 1955, the company re-doubled its efforts to influence South American countries to buy their aircraft. It achieved some success in an order from Chile for 15 refurbished Mk. 6s made up of ex-RAF, Dutch and Belgian machines. A formal contract was signed in 1966 for FGA. 71s which was the standard to which these aircraft were produced, being roughly equivalent to the FGA. 9. The same contract included three FR. 71As, all ex-RAF, and the equivalent of an FR. Mk. 10. Nine more ground attack Hunters were purchased in September 1969.

The Chilean Government soon realised that it would need two-seat trainers and placed a contract for delivery in 1967-68. Hawkers had recently taken back G-APUX, this venerable aircraft being modified to T.72 standard and sold as part of the deal for four aircraft, the others coming from former RAF and Netherlands stocks. A fifth T. 72 was delivered at a later date.

In all, Chile obtained 39 Hunters of the three marks listed and also had at a later date six former RAF FGA. 9s. The ground attack and trainer aircraft served with Grupo 8, while the reconnaissance fighters were assigned to Grupo 9, both units being based at Cerro Moreno air force base, Antofagasta.

It is known that by 1980 20 of these aircraft were still in service but with the arms embargo placed on Chile by the British Government for political reasons, the chances of keeping the Hunters serviceable was poor due to the lack of spares.

Attempts were made to re-engine the aircraft with either French or American equivalents and approaches were also made to



## Hawker Hunter in detail

Pictures by Mark Attrill

Nose view of Hunter T.8C WV322 showing the entry ladder and squadron markings.



1. Nose undercarriage leg and rear door. 2. Starboard main undercarriage leg. 3. Signs of previous FAA ownership. The arrester hook fairing with the hook removed.



4. Upper port wing detail shows the navigation light, pitot tube and tear-shaped ejector fairing.

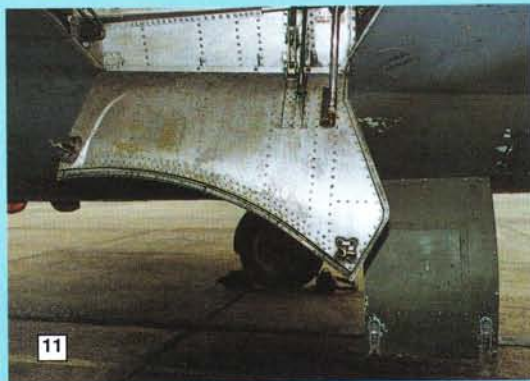




6. Port jet intake unusually painted white. 7. A view of the jet orifice. The doors above house the braking parachute.



8 and 9. Cockpit interior and instrument panel. Colours predominantly black but well worn and scuffed. 10. Starboard view of the air brake in the closed position.



11. The inner undercarriage door port side. Note the actuating jack. 12. The port inner stores pylon. Note its location in relation to the saw tooth wing leading edge and main undercarriage leg. 13. Close-up of the windscreen of the T.8C showing the housing for the windscreen wipers and the top of the coaming inside.



# Hunter kits, decals and accessories

Current to December 1996. Compiled by David Hannant

| Scale | Type                 | Manufacturer   | Reference | Remarks                       |
|-------|----------------------|----------------|-----------|-------------------------------|
| 1:72  | Hunter F.6           | Aeroclub       | ABC023    | Vacuformed canopy             |
| 1:72  | Hunter F.2           | Aeroclub       | ABC024    | Vacuformed canopy             |
| 1:72  | Hunter ejection seat | Aeroclub       | ABEJ008   | Martin Baker Mk.3             |
| 1:72  | Hunter ejection seat | Aeroclub       | ABEJ403   | Martin Baker Mk.4a            |
| 1:48  | Hunter Mk.4/5        | Aeroclub       | ABK420    | Complete kit                  |
| 1:48  | Hunter Mk.6          | Aeroclub       | ABK421    | Complete kit                  |
| 1:48  | Hunter T. Mk.7/8     | Aeroclub       | ABK422    | Complete kit                  |
| 1:48  | Hunter FGA.9         | Aeroclub       | ABK223    | Complete kit                  |
| 1:72  | Hunter T.7           | Aeroclub       | ABVA58    | Matchbox correction kit       |
| 1:72  | Hunter Mk.6          | Aeroclub       | ABVA59    | Matchbox correction kit       |
| 1:48  | Hunter Mk.6          | Academy        | AC2164    | New kit                       |
| 1:48  | Hunter FGA.9         | Academy        | AC2169    | New kit                       |
| 1:48  | Hunter               | Airwaves       | AEC48082  | Brass photo-etched parts      |
| 1:72  | Hunter FGA.9         | Airwaves       | AEC72082  | Brass photo-etched parts      |
| 1:72  | Hunter FGA.9         | Airwaves       | AEC72087  | Photo-etched flaps & airbrake |
| 1:72  | Hunter T.8M          | Airparts       | AP009     | New resin moulded nose        |
| 1:72  | Hunter FGA.9         | Airfix         | AX02073   | Complete kit                  |
| 1:72  | Hunter T.7 (NLR)     | Dutch Decals   | DD72007   | Also DC-3                     |
| 1:72  | Hunter               | Dutch Decals   | DD72020   | Also F-16, P-40N              |
| 1:32  | Hunter               | Flightpath     | FH3206    | Brass & resin accessory set   |
| 1:48  | Hunter               | ID Models      | ID4811    | Vacuformed complete kit       |
| 1:144 | Hunter               | Model Art      | MA4401    | Decals                        |
| 1:48  | Hunter               | Model Art      | MA4803    | Decals                        |
| 1:72  | Hunter               | Model Art      | MA7207    | Decals. Also Jaguar/Canberra  |
| 1:72  | Hunter               | Model Art      | MA7209    | Decals. Also Tucano           |
| 1:72  | Hunter               | Model Art      | MA7210    | Also Mirage 2000/MB.326       |
| 1:72  | Hunter               | Modeldecals    | MD026     | Decals. Also Buccaneer,       |
|       |                      |                |           | Gazelle, Canberra             |
| 1:72  | Hunter               | Modeldecals    | MD028     | Decals. Also Lightning, Jet   |
|       |                      |                |           | Provost, Canberra             |
| 1:72  | Hunter               | Modeldecals    | MD086     | Decals. Also Hawk, Mirage III |
| 1:72  | Hunter F.3           | Maintrack      | MKXC03    | Vacuform conversion kit       |
| 1:48  | Hunter               | Nichimo        | NI4811    | Complete kit                  |
| 1:72  | Hunter Mk.6          | PJ Productions | PJ721007  | Resin kit                     |
| 1:72  | Hunter Mk.6          | PJ Productions | PJ721008  | Resin kit                     |
| 1:72  | Hunter T.7/Mk.58     | Matchbox       | PK117     | Complete kit                  |
| 1:72  | Hunter               | PP Aeroparts   | PPAL717   | Photo etched brass entrance   |
|       |                      |                |           | ladder                        |
| 1:72  | Hunter Mk.6          | Plastyk        | PYS007    | Complete kit                  |
| 1:72  | Hunter F.Mk.1        | ex-Frog kit    | RF320     | Complete kit from Russia      |
| 1:72  | Hunter               | Superscale     | SS72548   | Decals. Nos. 54 and 43 Sqdns  |
| 1:72  | Hunter               | Superscale     | SS72549   | Decals. Nos. 45 and 8 Sqdns   |
| 1:144 | Hunter Mk.6          | Welsh Models   | WHPJW02   | Vacuform complete kit         |
| 1:144 | Hunter T.7           | Welsh Models   | WHPJW02A  | Vacuform complete kit         |
| 1:144 | Hunter Mk.6          | Welsh Models   | WHPJW021  | Vacuform complete kit         |

India to obtain the necessary spares. In the event the Thatcher government relented and supplied both aircraft and spare parts in 1982. One aircraft, an FGA. 71, is known to have become an instructional airframe serialised X-001. All of the original 39 aircraft used serial numbers within the range J-700 to J-738.

Surviving Chilean Hunters were updated under Project Aquila in the early 1990s, visible differences including RWR receivers in the fin leading edge. The type was finally withdrawn in early 1996 and at least one, J-734, ex-7773M/XF317 was being retained for the FAeC Museum.

## FAR EAST

### Singapore. Mks. FGA. 74, FR. 74A and T. 75

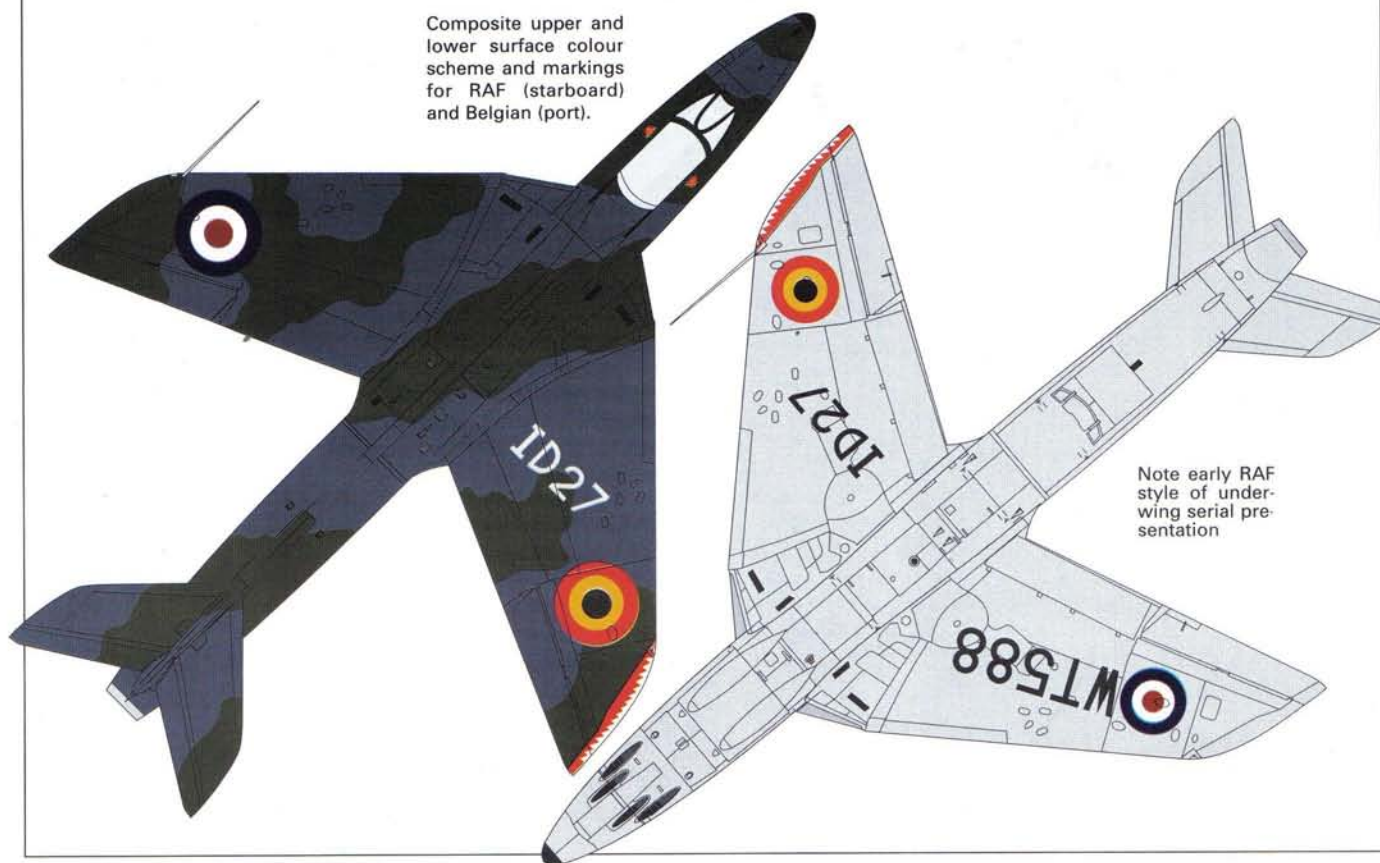
The Republic of Singapore Air Force was the last to order Hunters in any quantity when a contract was signed in 1968, three years after the country became independent. An initial quantity of 12 Hunter FGA. 74s and four FR. 74As was delivered, starting in 1970, to form two squadrons, Nos. 140 and 141, based at Tengah. These formed the basis of the island's Air Defence Command and later deliveries of single-seat aircraft comprised 22 FR. 74Bs, many of these being refurbished from ex-RAF Maintenance Unit machines. Four T. 75 and five T. 75A trainers were also delivered.

Hunters in the Singapore Air Force were serialised between 500 and 546. Amongst the machines delivered in the second major batch was the Hawker single-seat demonstrator G-BABM.

## Plan view markings for RAF and Belgian Hunters

See opposite page for side views

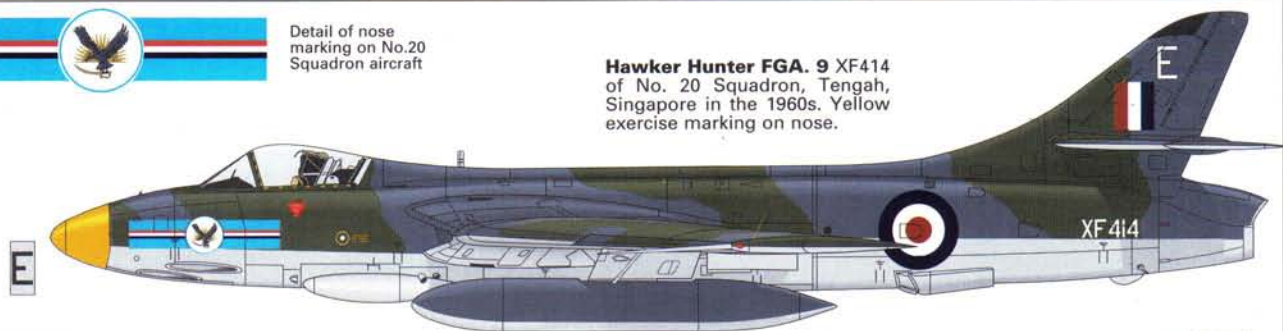
Composite upper and lower surface colour scheme and markings for RAF (starboard) and Belgian (port).





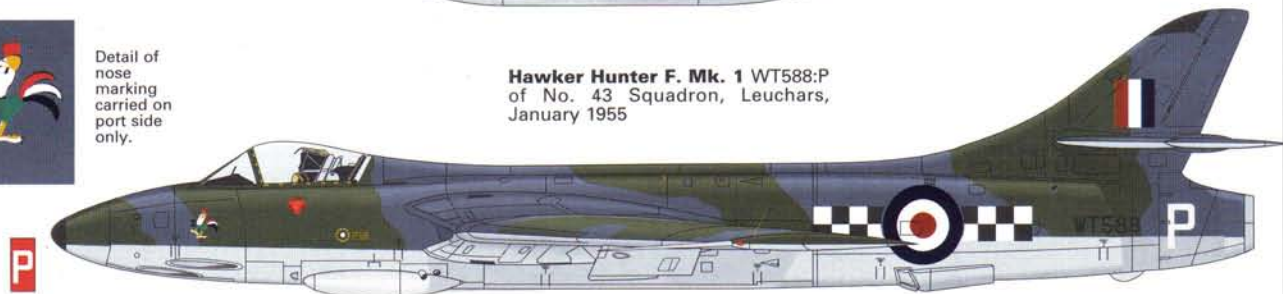
Detail of nose marking on No.20 Squadron aircraft

**Hawker Hunter FGA. 9** XF414 of No. 20 Squadron, Tengah, Singapore in the 1960s. Yellow exercise marking on nose.



Detail of nose marking carried on port side only.

**Hawker Hunter F. Mk. 1** WT588:P of No. 43 Squadron, Leuchars, January 1955

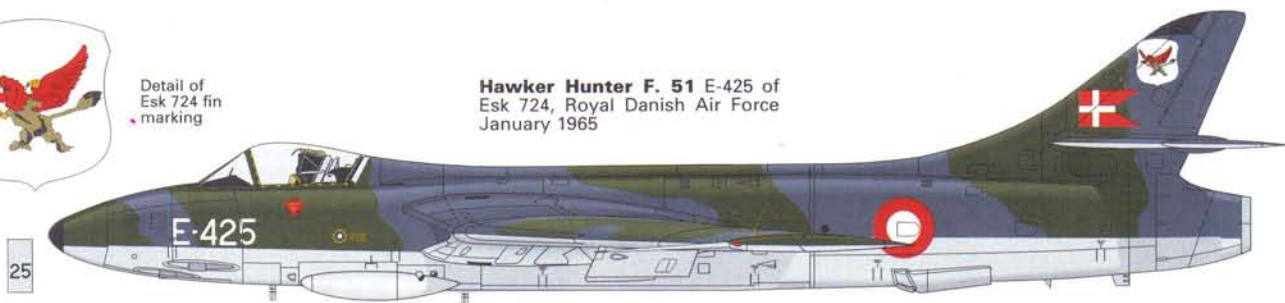


**Hawker Hunter F. Mk. 4** ID-27 of 8 Smaldeel, 7 Wing, Belgian Air Force, Chievres, 1965.



Detail of Esk 724 fin marking

**Hawker Hunter F. 51** E-425 of Esk 724, Royal Danish Air Force January 1965



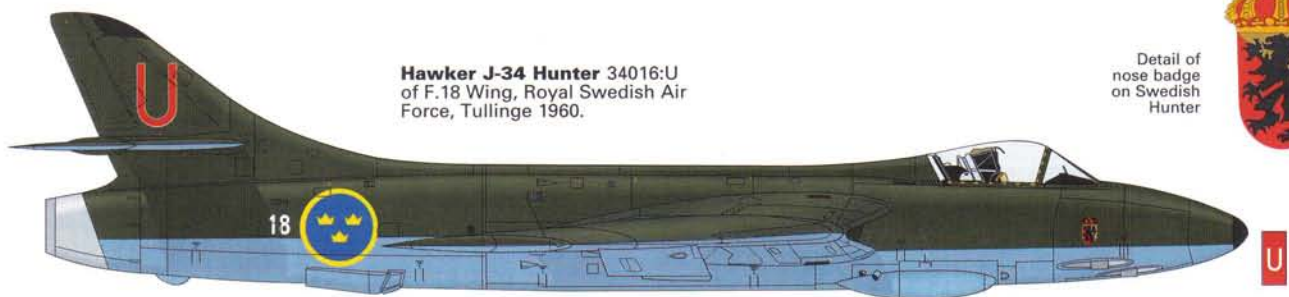
Detail of nose marking on Jordanian Hunter.

**Hawker Hunter F. Mk. 6** 707:H of No. 1 Squadron Royal Jordanian Air Force, 1966-67.



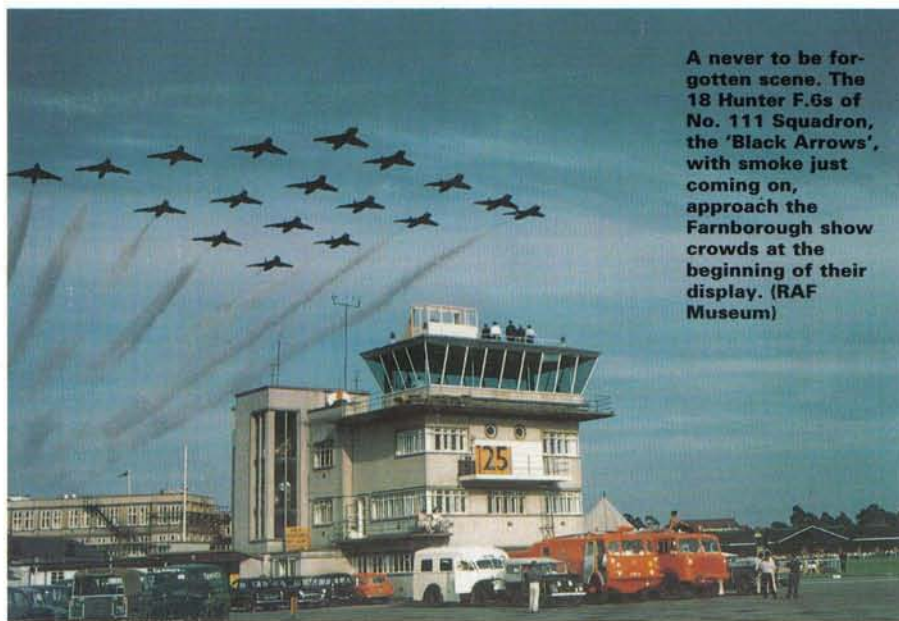
**Hawker J-34 Hunter** 34016:U of F.18 Wing, Royal Swedish Air Force, Tullinge 1960.

Detail of nose badge on Swedish Hunter





The last RAF Hunter FGA.9 to see service was XG228:56 which was retired to the Maintenance Unit at St. Athan from 1 TWU, Brawdy, in 1984 for storage. This superb portrait by Geoff Lee shows the aircraft doing a fly past over St. Athan before its final landing. (Geoff Lee)



A never to be forgotten scene. The 18 Hunter F.6s of No. 111 Squadron, the 'Black Arrows', with smoke just coming on, approach the Farnborough show crowds at the beginning of their display. (RAF Museum)

### HAWKER HUNTER SPECIFICATION

**Dimensions:** Span: 33ft 8ins. Length (single seat) 45ft 10.5ins (T.7) 48ft 10ins. (FR.10) 46ft 1 in. Height: 13ft 2 ins. Wing area: (F.1-5) 340 sq ft. (F.6, FGA.9, T.7) 349 sq ft.

**Power plant:** (F.1) Rolls Royce Avon Mk. 113 of 7,500 lb st. (F.2, F.5) Armstrong Siddeley Sapphire Mk. 101 of 8,000 lb st. (F.4, T.7) Rolls Royce Avon Mk. 113, 115, 119, 120, 121 or 122 of 7,800 to 8,000 lb st. (F.6, FGA.9, FR. 10) Rolls Royce Avon 203 or 207 of 10,000 lb st.

**Performance:** Max speed (F.1) 610 kts at sea level, 0.93M at 36,000 ft. Ceiling: 48,500 ft. (F.2, F.5) Max speed: 612 kts at sea level, 0.94M at 36,000 ft. Ceiling: 50,000 ft. (F.4) Max speed: 610 kts at sea level, 0.94M at 36,000 ft. Ceiling: 50,000ft. (F.6, FGA.9, FR.10) Max speed: 620 kts at sea level, 0.95M at 36,000ft. Ceiling: 48,900 ft. (T.7) Max speed: 603 kts at sea level, 0.92M at 36,000 ft. Ceiling: 47,000 ft.

**Armament:** Four 30 mm Aden cannon, variety of underwing stores including 2 in rocket projectiles, 500 lb or 1,000lb bombs, 3 in rocket projectiles, 100 gallon napalm tanks. Sidewinder air-to-air missiles fitted to numerous overseas versions.

**Note:** Royal Navy GA.11 similar to F. 6 but without armament. T.8 similar to T. 7.