

# 1(FIGHTER) SQUADRON'S NEW ERA

**Editor  
Dino Carrara**  
visited RAF  
Leuchars to hear  
how the RAF's  
most recent  
front-line squadron  
to be equipped  
with the Typhoon  
has achieved a  
lot in a short  
space of time.



Above: **The Officer Commanding 1(F) Squadron, Wg Cdr Mark Flewin.** RAF/MOD Crown Copyright 2012 - SAC Helen Rimmer

Left: **RAF Leuchars' two Typhoon units, 1(F) and 6 Squadrons, share the QRA commitment at the base. Sometimes they also come together for deployments, such as the joint detachment to Exercise Red Flag. These two Typhoons, one from each squadron, are shown over the HAS site used by 1(F) Sqn at Leuchars.** Geoffrey Lee/Planefocus

**O**n September 15, 2012 the RAF's 1(Fighter) Squadron reformed flying the Eurofighter Typhoon at RAF Leuchars in Fife during the base's airshow. The squadron's last mount was the Harrier GR9 with which it flew its final sortie from its previous home base of RAF Cottesmore Rutland, on December 15, 2010 as part of the farewell to the type in the RAF. Disbandment of the unit formally took place on January 28 the following year. On being stood up, it became the RAF's fourth front-line Typhoon squadron and second at the Scottish base after 6 Sqn.

In the short space of time 1(F) Sqn has been on the Typhoon it has had a very busy schedule in the UK and overseas. Initially, it operated

from the facilities and ramp of the co-located unit. Then on January 7, 2013 it moved to the hardened aircraft shelter (HAS) complex on the south-east corner of the airfield, previously used by the Tornado F3s of 111(F) Sqn. Rather than operate aircraft from HASs and so have engineering personnel spread out, aircraft are towed to an apron within the complex that used to be a parking area for fuel bowzers. Used for 'continuous charge operations' (CCO) it has space for five aircraft.

The squadron's first operational commitment was to provide pilots and aircraft for Quick Reaction Alert (QRA) – a duty shared at the base with 6 Sqn. QRA was undertaken by both pilots and engineers on 1(F) Sqn from July 2012 and before the formal stand-up parade in September 2012.

However, it wasn't long before the squadron was expanding its horizons and taking part in an Advanced Tactical Leadership Course (ATLC) in November 2012 at Al Dhafra Air Base in the United Arab Emirates, whilst integrated with 6 Sqn who were the lead unit on the deployment. This involved working with F-16s from the United Arab Emirates Air Force & Air Defence and USAF, with the latter air arm also participating with F-22 Raptors and F-15E Strike Eagles. France attended with Rafales and Mirage 2000Ds, and Germany was represented with Typhoons. Missions were flown that involved 60 aircraft and simulated high threat scenarios.

Officer Commanding 1(F) Sqn, Wg Cdr Mark Flewin told *Aviation News*: "I think ATLC is on a different level to the Tactical Leadership

Programme [TLP, run by ten NATO air forces and held at Albacete Air Base in Spain] because of the number of assets that are available in theatre and the diversity of air assets involved. Having a lot of aircraft in one place means you can achieve some extremely good and coherent joint planning. Also, the airspace has been built around the construct of ATLC so is very close to Al Dhafra, is supersonic, and has very few limitations. Finally, the fidelity [of the systems used] for the brief and debriefing process are very good and it's an excellent course in terms of the progression and development of our tactical leaders." Two waves were flown each day, the first for ATLC and a second to allow for other multinational training.

The same aircraft were to be handed over to 3(F) Sqn from RAF Coningsby, Lincolnshire, for the joint Omani-UK Exercise Magic Carpet. However, there was a gap between the two events so the RAF decided to keep the aircraft in the Middle East and organise an exercise called Shaheen Star run from Al Minhad Air Base, also in the UAE. Held in December 2012, this was the first exercise in which 1(F) Sqn had participated on its own. Wg Cdr Flewin said: "We put together a flying programme working with many of the units we had built relationships with at ATLC, and also utilising some of the structure that the ATLC airspace offers."

## BOUND FOR ASIA

The squadron wasn't back in the UK for long before it was off to Asia for Exercise Bersama Shield in Malaysia. Four aircraft were trailed 7,000 miles (11,265km) to Butterworth Air Base over four days, via stops at RAF Akrotiri on Cyprus, Bahrain International Airport and Bandaranaika International Airport, which serves the Sri Lankan capital, Colombo. Air-to-air refuelling was provided by an Italian Air Force Boeing KC-767A of 14° Stormo. In March, prior to the trail, one of the tankers visited Leuchars for four days so aircrew could familiarise themselves with each other's aircraft.

Asked why an Italian tanker was used, Wg Cdr Flewin commented: "We've got a very good agreement across Europe in terms of the way we utilize assets, and at the time it made the most sense to utilize the Italians, given the standing commitments of the UK tanker fleet. They hadn't done much trail work with their KC-767s, and we are very well versed in trailing aircraft around the world. So it was very beneficial to share best practices and for them to share with us their knowledge and the capabilities of their new tanker. It was a great opportunity for both units."

Before the start of the exercise in Malaysia 1(F) Sqn pilots undertook some close air support (CAS) work with 16 Air Assault Brigade and RAF Regiment forward air controllers deployed into the jungle. They also conducted some dissimilar air combat training with Royal Malaysian Air Force (RMAF) F/A-18D-50 Hornets and MiG-29 *Fulcrums*.

Wg Cdr Flewin said: "The Typhoon Force hasn't really fought MiG-29s before, so it was fantastic for the squadron's pilots to go up against them both in close air combat and more broadly in the air-to-air arena." Asked how the Typhoon performed against this fighter, he commented: "It went very well for us."

A greater match for the Typhoon would have been the RMAF's Su-30MKM *Flankers* although, despite a request being made, it was not possible to arrange to train with the newer fighter and it also didn't take part in Bersama Shield. This exercise took place from April 8-18 in the South China Sea, Singapore and the Malaysian Peninsula. It is a

**On September 15, 2012 a formal parade and flypast took place during the RAF Leuchars Air Show to re-form 1(F) Sqn.**

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**A Typhoon from 1(F) Sqn shadows a Russian Air Force Tupolev Tu-95 Bear during a QRA mission.** RAF/MOD Crown Copyright

Five Power Defence Arrangements (FPDA – made up of Australia, Malaysia, New Zealand, Singapore and the UK) exercise held annually and designed to enhance regional security and foster cooperation among the member countries. The US also took part this year. Wg Cdr Flewin described it as a huge exercise involving a wide range of both air and naval assets, which was very interesting to take part in. More specifically he said: "Some of the COMAOs [composite air operations] which were put together were large force packages that were very beneficial for our training needs. Butterworth is a considerable distance from the exercise operating area, so we would transit about 300 miles [483km] to deliver the task [both air-to-ground and air-to-air roles], including dissimilar air combat training (DACT) with the MiG-29s, and then recover – notably without air-to-air refuelling, as there weren't any AAR assets taking part in the exercise. All the nations were really impressed with the range and endurance of the Typhoon and its ability to undertake a complex and diverse range of mission sets."

The next major event for the squadron was the Combined Qualified Weapons Instructor (CQWI) Course Op Phase at RAF Lossiemouth, Moray, which was held over July 15-26. This is where experienced aircrew return to the operational conversion units (OCUs) of the respective types they fly, to complete a demanding syllabus; a syllabus aimed at graduating them as a Qualified Weapons Instructor (the weapons and tactics expert on a squadron). Their final hurdle is the CQWI Course Op Phase where large formations fly complex scenarios planned by the QWI students, who also fly on these sorties. Every day of the course flying from Lossiemouth, the squadron successfully met its tasked requirement to generate an eight-ship.

## ANGLO-FRENCH EXPEDITIONARY AIR WING

The signing of the Defence Co-operation Treaty in 2010 by Prime Minister David Cameron and the then French President Nicolas Sarkozy, opened a new era in military cooperation between the two



**Above: The Petronas Twin Towers in Kuala Lumpur provide the backdrop to this 3(F) Sqn marked Typhoon being flown by a 1(F) Sqn pilot. The squadron was in Malaysia to participate in the multi-national Bersama Shield exercise in April last year.** Geoffrey Lee/PlaneFocus

**Below: The HAS site in the south-east corner of RAF Leuchars, formerly used by the Tornado F3s of 111(F) Sqn, is 1(F) Sqn's current home. This is the first time in its history that the squadron has operated from a HAS site.** RAF/MOD Crown Copyright - SAC Matthew Baker



countries. This led to 1(F) Sqn deploying to RAF Leeming in North Yorkshire for two weeks in October last year to work with the Mirage 2000Ns of the French Air Force's L'Escadron De Chasse 2/4 La Fayette. Called Exercise Capable Eagle, this collaboration took place within the larger Exercise Joint Warrior held from October 7-17. Flying as a British-French Expeditionary Air Wing meant that the unit lived and worked out of tents, with missions flown every day of the exercise, including the middle Saturday and Sunday. The scenario the crews faced involved helping an overseas power cope with rising political and military instability.

Wg Cdr Flewin said: "The important thing was how we integrated with the joint headquarters and expeditionary air wing. The way the French approach their business is very similar to the RAF and I like to think we worked seamlessly with the Mirage 2000s from day one. We flew a wide range of complex missions together, escorting them into target areas and providing defence from enemy air assets, then doing a similar role to them in and around the target sets – from close air support to working with maritime assets."

Also as part of the Defence Co-operation Treaty the squadron currently has a French Air Force pilot on an exchange posting who previously flew the Rafale. "Commandant Marc-Antoine Gérard has integrated seamlessly into the squadron and it's good to have him



**A 1(F) Sqn pilot prepares for a sortie from RAF Leuchars.** Key-Dino Carrara

here, bringing his lessons from the Rafale and the French defence system," said Wg Cdr Flewin.

In the last few months, 1(F) and 6 Sqn have been working up to participate in the most challenging exercise of all – Red Flag. To help prepare the pilots, both units participated in Exercise Tartan Flag. This ran from December 2-13 and involved packages of around 30 aircraft, mostly from the RAF but also featuring USAF F-15C and Es from the 48th Fighter Wing at Lakenheath in Suffolk. Air-to-air refuelling was provided by RAF tankers and a USAF KC-10A Extender from the 305th Air Mobility Wing at Joint Base McGuire-Dix-Lakehurst, New Jersey, which deployed to Leuchars.

The USAF unit had visited the base a number of times, providing an aircraft for the static park at the airshow and building up a good relationship with the resident Typhoon squadrons. Tartan Flag also gave the squadron a chance to work with its affiliated Royal Navy ship, the Type 45 Daring class air defence destroyer HMS *Duncan*. Wg Cdr Flewin said on this: "We see air maritime integration as a very important element of our training, both now and in the future. We're working very hard with HMS *Duncan*, which has some extremely capable systems and is predominantly an air control asset. Very much like an AWACS, it gives us the recognised air picture and we work with its controllers to achieve the task. We were defending them and they were fully integrated into Exercise Tartan Flag. Our integration with the ship worked very well and we also did a number of liaison visits to the ship ▶

so we can understand the intricacies of each other's business."

Wg Cdr Flewin added: "The timing of Tartan Flag as a work-up exercise was perfect, as it meant that from the most junior to the most senior pilots, everyone would be at the top of their game. We also used it to ensure that both OC 6 Sqn and I had the confidence that the combined squadron could deploy to Red Flag and deliver. We certainly got that confidence, which is important as Exercise Red Flag involves flying in a complex environment with up to 100 other aircraft."

Wg Cdr Flewin also explained the rationale for the combined wing detachment: "There are two reasons: (a) it's a huge exercise requiring an increased level of supervision, and (b) it benefits capability growth across the wing. Often on large exercises we would do it as a wing, so that we have a detached joint squadron delivering the exercise whilst a squadron, a joint one, remains at home to continue day-to-day training and deliver quick reaction alert at RAF Leuchars."

The joint deployment of eight Typhoons with 6 Sqn left Leuchars on January 8, with Red Flag 14-1 taking place between January 27 and February 14. Wg Cdr Flewin commented while at Nellis AFB: "Exercise Red Flag has been a phenomenal success thus far and has been an invaluable experience for all those involved. The aircraft has performed extremely well, integrating seamlessly with the other coalition assets, and I am very proud of the way in which every member of the squadron has conducted themselves."

The other major undertaking for the squadron this year is moving to its new home of RAF Lossiemouth. It was announced as part of the Strategic Security and Defence Review in October 2010 that the Leuchars-based Typhoon squadrons would relocate. With regards to the timetable for the move, Wg Cdr Flewin commented: "Work is ongoing but we'll start the transition in the summer and will have left Fife by the end of the autumn. QRA will also move in that period."



Above: **One of the squadron's Typhoons lifts off from the runway at RAF Leuchars.** Key-Dino Carrara

Below: **Although 1(F) Sqn operates from a Cold War HAS site – a former fuel bowser parking area was converted to provide a ramp for up to five Typhoons to operate from so that groundcrew were not dispersed across the complex.** Key-Dino Carrara



**An impressive line-up of Typhoons at RAF Lossiemouth in July last year during the Combined Qualified Weapons Instructor (CQWI) Op Phase. No 1(F) Sqn achieved its tasking of flying an eight-ship every day during the two-week Op Phase. As well as 1(F) Sqn aircraft in this shot there are examples in the markings of 3(F), 29(R) and 41(R) Squadrons.** RAF/MOD Crown Copyright 2013 - Sgt Stu Fenwick

squadron will use No.3 hangar at Lossiemouth, which is beside the apron currently used by the Visiting Aircraft Servicing Section (VASS). Indeed, this apron will be taken over by 1(F) Sqn and will be from where it will operate its Typhoons.

However, there is a referendum on Scottish independence on September 18 this year and should the result be a 'yes' this would throw the future plans for the squadron into doubt.

### FIGHTING UNIT

The squadron can trace its history back to 1878 when it was formed at Woolwich as No 1 Balloon Company of the Royal Engineers. Along with II(Army Co-operation) and 3(F) squadrons it was one of the founding squadrons when the Royal Flying Corps (the pre-cursor of the RAF) was established on May 13, 1912. Today, the squadron has 18 pilots, including the OC and three executives – the second in command Executive Officer and two flight commanders.

In total the unit has 170 personnel. It usually operates with 11 FGR4s and one T3 two-seater (the standard complement for the Typhoon front-line force), which it has had since standing up. However, this can vary if there is upgrade work taking place and/or aircraft undergoing maintenance. The squadron has predominantly Tranche 2 aircraft, though some are Tranche 1.

Wg Cdr Flewin said: "The jets are going through a continual upgrade. We're constantly evolving the Typhoon to get as much out of it as absolutely possible to ensure it delivers all the capabilities the Royal Air Force want from a multirole combat aircraft. The Tranche 1 and 2 aircraft will actually be very similar to Tranche 3 by the time we get them."

The Tranche 2 aircraft have been using a new software standard, which Wg Cdr Flewin described as a "stepping stone" to future capability. The next software standard will give full multi-role capability including integration of the 500lb (226kg) Raytheon Paveway IV bomb, which has INS/GPS and laser guidance as well as a programmable fuze capable of providing a variety of impact effects.

Currently, the arsenal of the RAF Typhoon force is the Raytheon



**In October last year 1(F) Sqn deployed to RAF Leeming to work with a French Air Force Mirage 2000N unit in an Anglo-French Expeditionary Air Wing exercise.** RAF/MOD Crown Copyright 2013 - Sgt Ralph Merry ABIPP

Advanced Medium Range Air-to-Air Missile (AMRAAM), MBDA Advanced Short Range Air-to-Air Missile (ASRAAM) plus the 1,000lb (454kg) Raytheon Enhanced Paveway II laser-guided bomb with Global Positioning System Aided Inertial Navigation System (GAINS). The aircraft also has the Mauser 27mm cannon. For the future the RAF is planning to add the MBDA Brimstone and Storm Shadow air-to-ground missiles to the Typhoon.

Right: **The squadron recently attended Exercise Red Flag at Nellis AFB as part of a combined deployment with 6 Sqn.** Geoffrey Lee/Planefocus

Below: **A 1(F) Sqn Typhoon in formation with a 15(R) Sqn Tornado GR4 with RAF Lossiemouth in the background. Later this year 1(F) Sqn will move from RAF Leuchars take up residence at the Moray base.** Geoffrey Lee/Planefocus



Asked what impresses him most about the Typhoon, Wg Cdr Flewin said: "Its raw performance. The fantastic thing about the Typhoon is we've got the airframe right this time, and if you've got that right, it means that you can improve and evolve the capability constantly. So we've got extremely solid and robust foundations to build on for many years to come."

He added: "I think the aircraft's matured very well into a very competent multirole platform. I'm very excited about it because it's always going to present new opportunities year in, year out."

Summing up his time so far as boss of the squadron, Wg Cdr Flewin said: "It's a real privilege to get command of a frontline fast-jet squadron, and it was an extremely proud moment for me to stand-up the squadron with the most capable multirole aircraft the RAF has. It's also been great bringing on the capability growth that we've seen with the aircraft, and watching the squadron grow. We've achieved a phenomenal amount, delivering as we have at home and overseas, including sustaining our standing commitment of QRA. I'm very proud of what the officers, men and women, of the squadron have achieved." [AN](#)

