

'Flying Scyt



"Being sat on alert in a fully armed and fuelled jet is what we train for. You get a real buzz when the horn goes off and you get airborne as fast as you can"

The US Air Force announced in March 2014 an intention to reduce the number of fighter aircraft based overseas as part of overall cuts to its fleet.

Dick Wels looks at the impact this may have at RAF Lakenheath, Suffolk.

Above: The Eagle exudes class and an unspoken superiority that can't be matched by any other modern fighter jet. Someone once said that 'if a fighter looks good it'll fly well'; there are few better examples of this than the F-15C Eagle.

Key – Jamie Hunter

The venerable F-15C Eagle is one of the types likely to be affected by cuts to the USAF's overseas fighter fleet. It wants to retire 51 combat jets, 21 of which are based overseas. The UK-based 493rd Fighter Squadron (FS) is a possible victim of cutbacks. It has flown 19 F-15Cs and two F-15Ds as part of the 48th Fighter Wing (FW) at RAF Lakenheath, in Suffolk, since January 1994.

Gen Philip M. Breedlove, Commander, US European Command (USEUCOM) and Supreme Allied Commander Europe of NATO Allied Command Operations, said in June 2014 plans were being formulated to scale

back the size of the F-15 force in Europe.

Increased tensions in both eastern Europe and the Middle East may delay the withdrawal of the Eagles from the 493rd FS, which is the only squadron in Europe equipped with the F-15C. Pilots from the unit, which is nicknamed the 'Grim Reapers', continue to train daily to perform the mission tasking of the 48th FW of providing responsive combat air power and being capable of dominating any adversary.

The 493rd FS has a purely air-to-air role and executes air superiority and air defence missions



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in support of war plans and contingency operations for USAFE, USEUCOM and NATO. Although based in Europe, the squadron can be deployed anywhere across the globe to undertake peacetime training or actual combat operations.

A 'Grim Reaper'

F-15C pilot Lt Tyler Studeman, who has only recently joined the 493rd FS, outlines a typical working day when he is flying from RAF Lakenheath. He said: "When at home we will usually fly between three and seven times a week, depending on our operational tempo. Usually, we work 12-hour days. We will show up between 0600 and 0700hrs and come together for a mission briefing two hours prior to take off. After that it is off to the aircraft for a thorough pre-flight check, before firing up the

engines, taxiing out and departing. A standard training mission lasts from one to two hours. Upon returning to Lakenheath, the debrief will start about an hour after landing and takes from one to two hours, based on the complexity of the sortie. Then we will head for home, before doing it all over again the next day."

Pilots usually prepare their missions the day before they fly them, with the time spent on planning varying with its complexity. "If we are going out there with 18 aircraft in one sortie, then it's probably going to take a day to work through the co-ordination required to get all the aircraft in the right place at the right time, and build individual briefing packs for the pilots involved", Lt Studeman explained. "If we are just going to fly basic fighter manoeuvres [BFM] and dogfight with each other, then it doesn't take

quite as much preparation because that is just a two-ship, one-versus-one evolution.

"We have multiple different mission sets that are regularly flown. We've got BFM, which is all within visual range – close in one-versus-one, where we really max-perform the Eagle. We'll do ACM [Air Combat Manoeuvring], which is two-versus-one or two-versus-two. These engagements usually start beyond visual range and, as we close in, turn into visual range dogfights. We also do tactical intercepts, defensive counter air and offensive counter air, which are all long-range mission sets."

When undertaking training missions from Lakenheath the 'Grim Reapers' usually fly in specially reserved airspace over East Anglia, as well as 'The Lake', The Wash and the 323 Complex, which are all over water. "We will practise amongst ourselves, but also work ►

493rd FS Operation with the F-15 Eagle

Having been a part of USAFE since 1952, the 493rd FS began operations with the F-15C/D following its reactivation on January 1, 1994. The unit had been deactivated on December 18, 1992 after the last of its F-111Fs had returned to the USA. By July 22 the squadron had a full complement of 18 Eagles.

From July to October 1995 the 493rd deployed to Turkey as part of Operation Provide Comfort, the 'Reapers' returning to Turkish skies two years later when the unit operated from Incirlik Air Base (AB) in support of Operation Northern Watch. During this deployment F-15 crews helped enforce the no-fly zone over northern Iraq. In February 1999 the 'Reapers' joined the 54th FS from Elmendorf AFB, Alaska, within the 501st Expeditionary Operation Group for the opening phase of Operation Noble Anvil/Allied Force in the Balkans. The 'Grim Reapers' shot down four Serbian MiG-29s during the brief conflict.

In 2000 the squadron received extra Eagles, boosting its fleet of F-15C/Ds to 24 jets. From March through to June 2001 the unit deployed to Prince Sultan AB in Saudi Arabia to undertake Operation Southern Watch sweeps over the no-fly zone in southern Iraq. In November of that same year Eagles from the 493rd were forward deployed during Operation Enduring Freedom, escorting C-17 Globemasters into Afghanistan and providing air supremacy for the humanitarian airlift deliveries to refugees that followed.

Closer to home, in November/December 2006 the squadron took part in Operation Peaceful Summit, generating patrols from Denmark to protect the NATO summit in Riga, Latvia. In June of the following year the 493rd was ordered to participate in Operation Sky Marshall, which saw it provide airborne protection for President George W. Bush during a summit in Albania. In 2008, during Operation Noble Endeavor, the squadron again flew patrols protecting delegates at the NATO summit in Bucharest, Romania.

That same year, when President Bush visited the EU-US summit in Ljubljana, Slovenia, the 493rd FS patrolled the skies overhead as part of Operation Astute Tracker. In an ongoing series of deployments that started in September 2008, the unit has committed up to ten jets to the Icelandic and Baltic air policing mission as directed by NATO.

Further afield, in early 2011 the squadron participated in Operation Odyssey Dawn in Libya, and it has also undertaken numerous deployments as part of Operations Iraqi Freedom and Enduring Freedom – the unit has frequently flown its missions from Al Udeid Air Base, in Qatar, when deployed to this theatre.

Finally, the 493rd FS has also participated in myriad exercises primarily with other NATO air arms over the past 20 years. Some of the highlights have been African Eagle in Morocco, Maple Flag in Canada, Frisian Flag in Holland and, of course, Red and Green Flag exercises in the USA. ■

Right: The AMRAAM and MSIP combined have given the Eagle an even greater advantage over an enemy. It is hardly surprising that the fighter is still at the top of the wish list of many newly graduated USAF pilots. *Key-Jamie Hunter*



Right: Two squadrons of F-15E Strike Eagles are co-located with the F-15Cs at RAF Lakenheath as part of the 48th FW. The Wing is currently the largest F-15C/E composite unit in the USAF.

Below: Briefings and debriefings are especially detailed for the Eagle crews. This enables them to focus entirely on their primary mission and has assured them of their place as 'masters of the air'. *All Images By Author Unless Stated*



with the F-15E Strike Eagles from our Wing," Studeman said. "We have also recently flown against RAF Typhoons, with two or three of them duelling with us in a series of hard-fought air-to-air engagements. With both the Typhoon and the Eagle having plenty of thrust available for high-G manoeuvring, ultimately, the result in ACM is usually determined by the experience and proficiency of the pilot. If you have an experienced 'Eagle Driver', he or she can really challenge a Typhoon pilot. Fortunately, we have a very experienced group of pilots in the 493rd, so we can usually hold our own. It's a good fight. We also routinely conduct ACM with Dutch F-16s as well. The squadron tries hard to get dissimilar aircraft types from different NATO air forces to both fly against and integrate with."

On a more mundane note, aerial refuelling plays a key role in allowing the 493rd FS to effectively have a global presence should the need arise for rapid deployment away from Lakenheath. During long combat air patrols, it is crucial to have enough fuel on board in order to engage the enemy and get home after the fight has concluded. The 493rd normally works closely with the KC-135R



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Stratotankers of the 100th Air Refuelling Wing from nearby RAF Mildenhall to keep its pilots fully qualified to “hit the gas station in the sky”.

Lt Tyler Studeman, as previously noted, is quite new to the F-15, having just over 140 flying hours in the aircraft. “The process of becoming an experienced ‘Eagle Driver’ takes about four to five years,” he said. “After I finished pilot training and received my wings, I attended the six-month ‘B-Course’ [Basic Course] with the Oregon Air National Guard’s 173rd FW at Klamath Falls. I was initially taught how to fly the Eagle – taking off, flying it and landing it – then how to fight in the jet, BFM and then progressing to long-range missions. After graduation I came to Lakenheath, where I completed a short mission qualification programme. It took seven or eight sorties to go through each mission set. After that, the Instructor Pilots of our squadron decided that I was ready to be a wingman, which meant that I was qualified to fly the Eagle, go out with a flight lead and continue to learn.”

Once he had enough experience as a wingman, a new pilot like Lt Studeman commenced the two-ship flight lead upgrade programme. “I am now qualified to fly with another wingman – somebody who has only just completed his mission qualification training – as a two-ship element, leading him around. After that, I will move on to the four-ship flight lead upgrade programme, where I am responsible not only for my wingman, but also for a second flight lead and his wingman too. Next step is the mission commander upgrade programme, where I will receive instruction on how to command more complex missions with a mix of different aircraft. ▶



The 493rd FS would claim four MiG-29s destroyed during Operation Noble Anvil in 1989. Eagles operated from Aviano AB, Italy to provide combat air patrol support.

GRIM REAPER PILOT

Finally, during my first tour as an F-15 pilot, I will undertake the Instructor Pilot upgrade programme. Once this has been successfully completed I will be able to instruct a fresh F-15 pilot who is just out of the 'B-course' during his first ever flight from Lakenheath."

Besides being pilots, 'Eagle Drivers' also have a myriad of ground jobs to perform. "I work in weapons", Lt Studeman explained. "I spend a lot of my time back in the ordnance vault, making sure that everything is good to go in there. But I am also our squadron's 'snacko', our morale officer, making sure our snack bar is stocked up, taking care of squadron patches and ensuring that new personnel photographs are put up on the wall." Fellow pilots within the 493rd FS work as schedulers, section commanders, training officers, the director of operations and, of course, the CO of the squadron.

Putting training into practice

In 2014 the 493rd FS has performed its air policing role in both Iceland and Lithuania. The deployment to Siauliai-Zokniai, in Lithuania, lasted from January until the end of April. F-15C/Ds relieved six Dutch F-16AMs at Keflavik International Airport in June as part of NATO's "Airborne Surveillance and Interception Capabilities to Meet Iceland's Peacetime Preparedness Needs" mission. These deployments were great opportunities

for the squadron to put training into practice. Tyler Studeman participated in both. "Being sat on alert in a fully armed and fuelled jet is what we train for. You get a real buzz when the horn goes off and you get airborne as fast as you can, performing a real world scramble interception," he said. "These weren't practice missions. We were going out there and

performing the job we had been trained to do. You have to rely heavily on your previous mission experience flying from Lakenheath in order to run a professional intercept.

"It is up to you to get the information that you need in order to engage the unidentified contact as expeditiously as possible – specifically altitude, course and speed – and



'Like a knife fight in a telephone box' is the phrase often quoted when describing a close-in dogfight between an F-16 and F-15. The RNLAf aircraft regularly engage Lakenheath F-15Cs during NATO exercises. This F-16A MLU from 322 Squadron, Leeuwarden AB, comes in to land following just such an exercise.

"It wasn't like the airspace we have here in the UK – we couldn't get as high and go as fast as we are used to"





to monitor your expected fuel burn in order to return home safely. It was great for me personally and for the squadron as a whole to show that we have what it takes to perform the air policing mission. We are fully trained and ready to deploy when called upon to do so.

"I can't talk specifically about the intercepts the squadron performed other than to say that we were given NATO tasking to intercept targets of interest.

Once we had received the tasking we would scramble, find the target, identify it and report that information back to NATO."

Air policing was the 493rd FS's priority while on extended deployment to Lithuania. The number of jets involved rose from four to ten F-15Cs in March and there was a risk, pilots both in the Baltic and back at Lakenheath, would be losing precious training time due to the reduced flying hours that typically come with operational deployments. Lt Studeman said this was not the case.

"We were able to practise quite a bit over

there as we were allocated specific airspace in which to train in," he said. "Granted, it wasn't like the airspace we have here in the UK – we couldn't get as high and go as fast as we are used to, and we had a lot of restrictions that we had to observe. Nevertheless, the squadron extracted training value from flying in restricted airspace, for although we still employed our ACM tactics as per usual, they had to be modified so that we respected the wishes of our hosts. We rarely have to operate under such restrictions when flying from Lakenheath, so this was one of many positive 'takeaways' for pilots from the deployment."

Although the long-term future of the 493rd FS is unclear, there are some plans for the coming fiscal year. In early 2015 it is scheduled to take part in a Red Flag exercise at Nellis Air Force Base, Nevada. Whatever the future holds for the unit, its various deployments in 2014 proved the 493rd is ready to perform its mission whenever the squadron is called upon to do so.



Above: Lakenheath Eagles now regularly practise ACM against local Typhoons from RAF Coningsby.
Top: The end of the road is in sight for the Eagle, although its spectacular career is not quite over. Following Desert Storm, post-war drawdowns, and the arrival of F-22A Raptors into service, mean the USAF's only operational Eagles are those of the 493rd FS. Key – Jamie Hunter
Left: Blasting off for another training sortie – Eagle pilots at RAF Lakenheath can expect to fly around seven times a week, with sorties lasting up to two hours.