

**Tiger News No 60**

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John Crow

**Our thoughts and prayers are with webmaster John who is very seriously ill. And with Margie too who is caring for him.**

**Reunion 2013. If you couldn't be with us this year, come and join us in 2014!**



**Lightning Tigers**



**Phantom Tigers**



Our guest of honour, Marigold Simpson, brought the 74 Squadron plaque carved by Robert Thompson and featured on the Antiques Roadshow, to the reunion. The plaque was made in commemoration of her brother Brian Kirk who died on 22<sup>nd</sup> July 1941 after being shot down the previous October. Marigold also brought other things of Brian's - letters, photographs and most evocatively of all the flying helmet he was wearing on the fateful day.



It was very good to welcome Dave Hartill (left, listening intently to Rhod with Bob looking on) and his wife Valentina to their first reunion. Dave was a Phantom Tiger.



Ken and Elizabeth Hazell were also first time attendees. Ken was groundcrew at Horsham St Faith when 74 were flying Hunters.



Angie and Heather ran the raffle as they usually do (above) and Tony Ellender invited Diana Brown as his guest this year (right).



And it was really good to have Ray Racy with us again. His granddaughter Sarah Flook accompanied him. Ray was a Tiger in 1945 and you will recall that he has written about his time with the squadron in past issues of *Tiger News*. By the way, did you see Ray and Sarah on the One Show on April 11<sup>th</sup>?

## Farewells



It is with sadness that we have to report the death of one of our few remaining World War II pilots. **Brian 'Titch' Harris** died on 28<sup>th</sup> March. He served in the RAF from 1940-1945, completing his flying training in the States before joining 74 as a Flight Sergeant. He was with 74 from 1942-1944, throughout their time in the Middle East and post D-Day in Europe. He was commissioned and with the rank of Flight Lieutenant was posted to RAF Stanmore Park as Camp Commandant. He completed his RAF service at No. 4 Maintenance Unit at Ruislip.

Brian had many eventful moments whilst flying with the Tigers. Whilst based at El Daba he took part in a 100 aircraft raid on Crete on 22<sup>nd</sup> July 1943, as one of fourteen participating squadrons, 74 contributing six aircraft which were fitted with long-range tanks. The 100 aircraft were formed into three Wings, 74 being part of the Sidi Barrani Wing. Each aircraft had fifteen minutes over Crete during which time they sought out briefed targets as well as targets of opportunity. The mission wasn't a success for in common with the other participants 74 had problems finding the targets and were loath to attack anything other than obvious military installations for fear of injuring civilians. If the object of the exercise was to create pandemonium on Crete for a few minutes it certainly succeeded, but returning to land in a sandstorm after their 550 mile, four hour excursion all the six Tigers really had to show for their efforts was a sore backside!

During the early morning of 3<sup>rd</sup> October 1943 a German invasion fleet approached the Dodecanese island of Cos and landed 1,500 troops and equipment that included armoured cars. Ju88s gave airborne protection to the fleet. 74 had a few aircraft based on the island at Antimachea as part of the inadequate defence force. With the German's arrival, ground and aircrew found themselves on the front line - literally. Titch was one the pilots and his colleague Guy de Pass recounted what happened.

"We were woken at 0430 and rushed out of our tents and saw Germans coming up the beaches three or four hundred yards away. Titch, David Maxwell and I ran off in the general direction of the road. The Germans were spraying the area with machine gun fire. There was little we could do except run and I don't think we have ever run so fast in our lives. We grabbed our few belongings and made for a jeep driven by a South African. The Germans managed one burst at us and we dropped our bundles as we ran but we did all manage to hang on to our logbooks. The firing was becoming more persistent, flares were being fired and mortar fire could be heard. It was still fairly dark. We joined up with two more of our pilots and headed straight for Cos Town. There was little we could have achieved by staying as the landing ground was out of action. We reckoned the best policy therefore was to try and find other British troops."

When they reached Cos Town the place was in a state of utter confusion. Realising the only course of action open to them now was to try and get off the island they moved down to the harbour, boarded an Italian boat and set off for Leros with shells exploding in the water all around them. En route they encountered enemy patrol boats and so altered course for Bodrum on the Turkish coast. From here they eventually reached Castelrosso where they found a high-speed launch to take them to Paphos and from there they flew by DC-3 to Nicosia where the rest of 74 Squadron, those that hadn't been detached to Cos, were.

By the end of October, 74 were operating from North Africa again, having moved to Idku. On 13<sup>th</sup> November Titch suffered engine problems at 16,000 feet. Coming down to land his engine caught fire and he did well to make a near

normal landing although the undercarriage collapsed shortly after touching down. Titch suffered slight burns but that didn't keep him away from duty for very long.

We next find him back in England with the squadron as part of the Lympne Wing from where they flew offensive sorties over France and the Low Countries. On the 22<sup>nd</sup> May 1944, whilst participating in one of these operations, Titch hit a tree whilst strafing German traffic along a Belgian road just south of Brussels. He escaped with just cuts and bruises. His friend Allan Griffin remembers him later returning to the squadron.



"There was a story circulating that he had been captured after taking refuge in a supposed safe house in Brussels and being looked after by a most attractive young lady. But the lady was not averse to entertaining members of the local German garrison and when one appeared Titch would go and sit in the wardrobe and only come out after the German had departed!" That story is largely apocryphal however. In fact the family that took him in made a den for him underneath the floorboards in the bedroom, with the bed placed over the top, rather than him hiding in the wardrobe. The Gestapo knew that he was in the area and finally realised that he was being looked after by the family. They arrested the wife and daughter of the household and threatened to shoot them unless the master of the house gave Titch up. Hence his capture. He woke up one morning to find the Gestapo on both sides of his bed. "I thought I was having a bad dream," he later recalled. "They tried to give me the third degree while I was still in bed but got nothing out of me so they hauled me out and took me to Brussels where I was thrown into a prison cell."

*The Brussels family that hid Titch (left).*

Titch was later able to escape and make his way back to England with the help of the local Resistance.

Brian Harris was born and brought up in Droitwich Spa, returning there after the war, spending time in Ronkswood hospital recovering from his ordeals. He was one of the first patients to be treated with penicillin. In 1949 he married Pat, his wife for 63 years. He has two sons, a grandson and a granddaughter. Our condolences go to Pat and all the family.

He became heavily involved in the development of Droitwich Spa, becoming a town councillor and Mayor. He was also a district commissioner of the Boy Scouts and chair of the Droitwich Spa Town Development committee. At the same time Brian was instrumental in developing the family business, the provision of high quality nursing home facilities in Droitwich Spa.

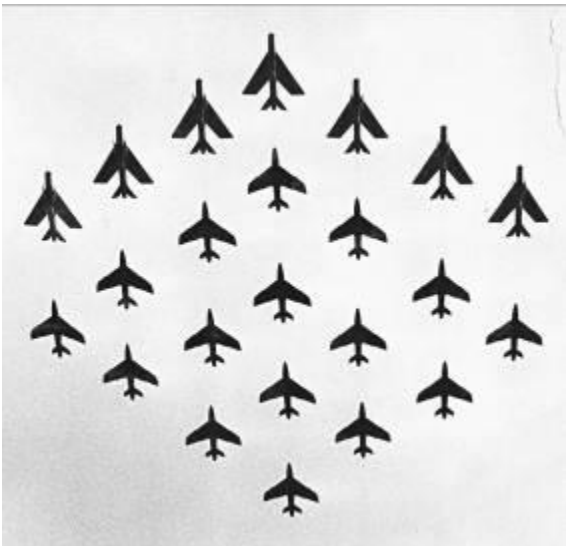


*Titch (on the right) demonstrates a manoeuvre to a colleague.*



**Group Captain Peter Botterill CBE AFC**, who succeeded John Howe as CO of 74 Squadron, died on March 27<sup>th</sup> aged 81. When he arrived on the squadron on 12<sup>th</sup> December 1961 it was operationally inactive, for the Lightning F.1s were again grounded, this time through hydraulic problems which could only be solved after major engineering work by English Electric's Contractors Working Party. The work took two months and it wasn't until 26<sup>th</sup> March 1962 that the first aircraft re-emerged from the hangar and it was the end of May before all the Lightnings were serviceable again. This would have been a challenge for

any squadron CO taking up his post and was especially so in Peter's case, for as soon as he had his aircraft back he led eight of them on a promotional deployment to Sweden. Then Fighter Command decreed that 74 would form the official acrobatic team for 1962. Working up for this began as soon as the Swedish trip was over. Farnborough was the centrepiece of the display season and this year would be an even more spectacular display at the famous venue, for 74's Lightnings were to perform synchronised aerobatics with the Hunters of 92 Squadron - the Blue Diamonds. It was an unqualified success. After Farnborough, Battle of Britain displays were flown - and only then could 74 get back to operations. The following year Peter welcomed Princess Margaret to Coltishall which she had come to see 'at work'. Then from November '63 all thoughts turned to an impending move to Leuchars and the CO flew up to sort out the many hangarage and accommodation problems the move meant. It was January 1964 before the squadron itself could move. Peter Botterill remained as CO until 14<sup>th</sup> December of that year and during that time he oversaw the transition for 74 from the Lightning F.1 to the F.3.



**74's Lightnings and 92's Hunters**



**The 1962 Farnborough team led by Peter Botterill**

Our commiserations to Group Captain Peter Botterill's wife Elizabeth and to his family. The funeral was a quiet family affair and a real celebration of his life.

## Ian Papworth

The late Ian Papworth, a Tengah Tiger (1967-1969) who is still greatly missed by us all, left a legacy in the form of an extensive photographic slide collection of his time with 74 in Singapore - photos not just of the squadron, but of Singapore and Singapore life as well. His son David has made these photos available on line for all to see - go to [www.picasaweb.google.com/britbrat1956](http://www.picasaweb.google.com/britbrat1956). David says "I decided to place the vast majority of the photos on the web as I believe they will be of great interest to some. Back then Singapore was pretty much a Third World backwater, a remnant of the British Empire, having not long gained independence, very different from today's Singapore which is as modern as anywhere in Europe." The photographs are indeed a fascinating record of life in that part of the world in the late 1960s. There are lots of them - it's well worth setting aside an evening to look through them. By the way, see **Tiger News 47** where Ian told the story of his RAF career.

### What a man can do with three naked women.

This recently did the rounds via e-mail. With our thanks to the unknown artist and models. Tiger! Tiger! Tiger!



1.



2.



3.



4.

## Hornchurch 1940



I was recently contacted by **John Young** who thought that as an Association we might be interested in the fact that he was the nephew of a 74 Squadron Battle of Britain pilot, **James Young**. In the Young family archive is this photograph of 74 Squadron taken on a dispersal track at RAF Hornchurch almost immediately prior to the start of the 'shooting war' on May 10<sup>th</sup> 1940. Sqn Ldr White (seated centre) was the CO at the time. It shows Malan (sitting on White's right) as a Flight Commander.

In an undated letter (but almost certainly sometime in 1956 given a reference in it to the 20<sup>th</sup> Anniversary of Fighter Command) written by **H M Stephen**, he lists most of the pilots shown together with some personal recollection of each of them. In the letter he says 'the aeroplane in the photograph is of course one of the early marks of Spitfire. At this particular time it would not yet have had the automatically retracting undercarriage. Judging by the propeller it also belongs to the era of the fixed pitch airscrew. The other point of interest that I remember is that the type of radio we went through Dunkirk with was primitive in the extreme compared with the VHF that followed a month or two later.'

Most interestingly to us is the fact that H M Stephen added his own assessment of his fellow Tigers which I include verbatim here. Remember this was written in 1956.

Back row from left:

- **Bird** was, I think, in the RFC in the First World War and re-joined the RAF as an Administrative Officer. With 74 he was Intelligence Officer. I think he was on the staff of one of the Banks in the City.
- **Stephen** himself.
- **Mungo Park** was my great friend. A wilder man would probably be hard to find but mixed up with this was a wonderful sense of humour, tremendous courage and a delightful personality. We remained the closest friends, flying together almost daily until we were parted in February 1941. He was killed a few months later in a fighter sweep which entered northern France and went into Belgium. He is believed to have been shot down by Me109s in the area of Morlaix.
- **Draper** was a good solid driver without a lot of personality who flew consistently with the Squadron until being posted to an OTU in 1941



- **Stevenson** was the son of Air Vice Marshal 'Red' Stevenson who had command of No.2 Group day-bomber Blenheims. After the Squadron was broken up in early 1941 I lost sight of him. His father was known to me very well and he came out to the Far East and was Commander in Chief, India-Burma Air Force.
- **Cobden** was a tough, wiry New Zealander with a nice sense of humour, from farming stock and who enjoyed a night out better than most. He was a great ally in many of our nefarious schemes and after shooting down five enemy aircraft failed to return from a battle with Me110s which took place in defence of a convoy at the estuary of the Blackwater on the Essex coast in June or July 1940.
- This officer's name escapes me completely.
- **Young** joined the Squadron almost the same day as myself. I can remember him particularly for his sense of humour and his enthusiasm about flying Spitfires in every conceivable position. He was a remarkably good pilot and we flew together as a 'junior pair' on quite a number of occasions. Young, in addition to being such a useful pilot in the air, was quite a leader of party games in the mess in the evenings, and these covered quite a variety of subjects. If my memory serves me correctly (and I have not got my own log book to refer to as it too was destroyed by enemy action) the engagement in which he was killed on July 28<sup>th</sup> 1940 was fought over the area of the Dover Cliffs. I think that the Flight Commander on that particular day was an officer by the name of Kelly, transferred from the Navy and because of his seniority was given one of the three units of four aircraft to lead. This particular afternoon the Squadron was operating from Manston (near Ramsgate). Kelly's flight were some distance away from the remainder of the Squadron being led by Malan and were jumped by some German Me109s who were above the Squadron and towards whom we were flying. Two other pilots in that unit were also shot down, one of who, I remember distinctly was Peter St. John - a really delightful character and good friend of Young. James Young is buried at Pihen-les-Guines. It is small consolation that although the Squadron lost three fine pilots on this particular sortie, Malan, Freeborn and another pilot each destroyed a German fighter while Mungo Park and myself both damaged on each.
- **Mayne** was a Warrant Officer of the old school of the British Air Force. He was one of the few Warrant Officers flying in Fighter Command at the outbreak of the war and a wonderful example to the young pilots. In comparison with the new pilots he was one of the most experienced people in the RAF having over 2,000 hours in the air to his credit by this time. His flying experience extended to the Middle East and the North West Frontier in India and he was easily the most experienced night flyer in the Squadron at that particular time. If ever there was a difficult or dirty job to do, invariably Ernie Mayne got it. Now he is a market gardener in Kent and well has he earned his pension and peace for the future. I saw him at the 20<sup>th</sup> Anniversary celebration at Fighter Command a couple of weeks ago - hale, hearty and enjoying life.
- This Pilot Officer came from Newcastle and his name escapes me too.

Seated from left:

- **Malan**, then a Flight Commander, was later Squadron Commander. He was one of the men who did much to develop air fighting in pairs and units of four, as a result of hard experience during the early Dunkirk days. He was an ex-sailor whose early youth was spent in South Africa and whose schooling was at one of the General Botha training schools. After Dunkirk development of wing formations took place, Malan taking command of one of the Wings and ultimately becoming C.O. of Heston OTU and later the Operational Commander as a Group Captain of RAF Biggin Hill. Of his exploits in general no words of mine need be added to those that are well known. He now resides in his native South Africa.
- **White**, the Squadron Commander, was a traditional RAF. peacetime officer with many years' service at the back of him by the time war broke out. He was not a colourful figure but very much the traditionalist and by the time Dunkirk was approaching its climax he was taken away for a staff appointment.
- **Measures** (son of an Air Commodore) was known as 'Tinky' because of his dark complexion and black wavy hair. I remember him as a fine shot whenever it came to Squadron target practice at which he excelled. He was a good example of a Cranwell cadet and flew with Flying Officer John C. Freeborn seated in front of

him (sic) and with whom he shared many a German aircraft. It is interesting to note that the leaders of both these No. 1 pairs (Mungo Park and Measures) are credited with only half the aircraft shot down by their No. 2. If my memory serves me right, Measures has four or five to his credit and Freeborn 10 or 11. A similar situation prevails with Mungo Park and myself where he is credited with 10 and myself with 20 or thereabouts. Missing from the Photograph is Flt. Lt. Tracey who I think must have been on leave at the time it was taken or he would normally have occupied the Chair in which Measures is seated.

On grass from left:

- **Mould** was at this particular time one of the only two Sergeant Pilots in the Squadron. He was later commissioned and flew with the Squadron right up to the end of 1940. I really cannot remember very much about him except that he was a likeable fellow and fitted in very well with the rest of our colleagues.
- **Dowding** - son of the Commander-in-Chief of Fighter Command, Air Chief Marshal Sir Hugh Dowding as he was at that time and now Lord Dowding, who will always be remembered as the architect of the modern Fighter Command as it was in 1939. Derek Dowding was a splendid fellow with a sensitive and severe nature. He was not as physically strong as some of the other pilots but this he made up for with finesse and skill. During the fighter sweeps over northern France in 1941 he won a DFC and shortly afterwards went to an OTU in Norfolk.
- **Freeborn** was small, wiry and really tough. He was an aggressive fighter whose main ambition in life at that time was to destroy as many Germans as he possibly could, whether in the air, on the ground or even in a parachute. Freeborn was easily the most aggressively minded person in the Squadron who believed that there was only one good German - a dead one. His aggressive character was apparent in his flying. He was always getting into scrapes and returned with more aeroplanes damaged than any other person in the Squadron, some so badly damaged that they had to go back to the manufacturers. Freeborn became a Flight Commander and was still with the Squadron when I left. After that time I lost sight of him and have not heard from him since. I have reason to believe that he survived the war but his address is now unknown, for only a month ago the Fighter Command, Battle of Britain Association circulated a note asking if anyone knew of his whereabouts.



H M Stephen



John Mungo Park



Ernie Mayne

All taken from the squadron diaries

## Flying Officer A.M. Parker

I received an e-mail recently from **Al Sawyer** who wrote:



"Although I never served on 74 Squadron, I did tours as an F-4 navigator on 17(F) Squadron, 892 NAS, 43(F) Squadron and JG71 Richthofen. I'm now retired and spend part of the summer on my bike touring round the continent. Last year I stopped for lunch in a hamlet called Massy, about 25 miles north east of Rouen. As French cemeteries always have a water tap, I went into the churchyard to top up and came across this Commonwealth War Grave Commission grave of Fg Off A M Parker, RAFVR, who was killed in the area in August 1944 while flying with 74 Squadron from Sommervieux near Bayeux. This was the second lone British war grave I had come across in two days and I found them both quite moving. They were obviously well cared for and both were at the entrance to their cemeteries, so is readily seen by all visitors. As you can see there were a few poppies and crosses against the headstone. If they weren't placed there by Tigers, I wonder who did?"

If you want to know exactly where the grave is, it's on the D24, 6 kms south west of Neufchatel en Bray. It's a peaceful corner of north west France as you can see.



Do any of our Phantom Tigers know Al Sawyer?



Will any member in the area please visit the grave and quietly remember yet another Tiger who gave his life during the Second World War?

Fl Off Parker, whose nickname was Sparks, was with 74 prior to D Day, serving in North Africa, for in our archive there is a reference to squadron pilots Parker and Leake colliding in mid air when returning from an escort mission. Leake was killed but Parker survived uninjured. We then

move forward to August 1944 and on the 22<sup>nd</sup> twelve of the squadron's aircraft were involved in an armed recce around Rouen during the course of which Parker was hit by flak. He tried to force land west of Buchy but hit trees in the process. The wings of his aircraft were torn off and the fuselage rolled several times which was when Parker was killed. His body would have been difficult for the RAF to recover as he came down in enemy held territory so local people would have retrieved and buried him.

## Blue J(ay) Way. The story of the RAF's F-4J (UK).

Author and photographer **Ian Black** reminds us how it was that 74 Squadron became the sole users within the RAF of this version of the famous Phantom.



It was sixteen years after the RAF introduced the troublesome McDonnell Douglas F-4K/M Phantom into service that it finally took delivery of second hand J models, enough to equip just one squadron. Whilst the focus of this article is on the procurement of the J, how the Phantom came back into fashion is a convoluted story.

The RAF's original purchase of the type came about in a circuitous fashion. With the government of the day abandoning both the BAC TSR.2 (with a huge loss of investment) and the General Dynamics F-111 (at huge cost with nothing to show for it), the RAF and Navy were still left with the need to replace their Sea Vixens, Canberras, Hunters and other types. They had cottoned on to the fact that the Blackburn Buccaneer S.2 was excellent in its role, being exceptional at low level strike, but to complement it they needed a 21st century fighter. However, UK plc managed to muddy the waters by buying off-the-shelf F-4s. Given they had tried to anglicise the F-111 and bumped up the cost to dizzy heights in the process it would be assumed lessons were learned. But with the Phantom the MOD excelled themselves by turning the best version (the F-4J) into the most expensive mediocre version. Part of the dilemma lay in the Royal Navy only having small carriers and for this they needed modified Phantoms. The F-4J was state of the art in the early 1960s but was deemed unsuitable for UK needs due to performance issues when operating from smaller vessels. In fairness the then British government were perhaps duped by sales propaganda from McDonnell Douglas. Recent information has revealed that from an early stage the UK were led to believe that the United States were interested in a proposal by Rolls Royce to use reheated Spey engines to allow heavyweight Phantoms to operate from smaller carriers such as the US Navy Essex class and the Royal Navy's *Ark Royal*, but the US Marine Corps and US Navy were more than happy to take standard General Electric J79 equipped F-4Js straight from the production line. One RAF pilot who was on exchange with the US Navy described how he would test fly brand new Js off the production line by taking them to 55,000 feet and Mach 2.0, something the UK F-4s would struggle to do.

So, perhaps hoodwinked into thinking that there was a sizeable export market for Spey powered F-4Js, the UK forged ahead with its reworked F-4 that would become the K and M models. What was not apparent at the time was that to fit the Spey into the Phantom would require a major redesign of the fuselage to accommodate the new power plant, so it was not a marriage made in heaven. Early trials at Edwards AFB with development batch YF-4Ks showed just how bad the situation was. One pilot said that 'often there were more flames coming out of the front of the engine than the rear!'



With their Ferranti avionics and Rolls Royce powerplants, the UK FG.1s and FGR.2s became unique F-4s. UK procurement dithering led to just one squadron of FG.1s for the Fleet Air Arm (892 NAS) and one squadron for the RAF (43 Squadron). Whilst packing a fearsome array of weapons the FG.1s were lacking in internal batteries or inertial navigation systems, almost a prerequisite for operations over the North Sea at night, the RAF's playground during the Cold War. The FGR.2 was produced in greater numbers and equipped seven operational ground attack squadrons. Subsequently these aircraft formed eight front line air defence squadrons having relinquished their mud moving duties.

As ever in history, the unexpected happened when in 1982 the RAF found itself involved in a conflict it had never envisaged on the opposite side of the planet. Always hitherto pointing east, the F-4s had to turn and head south to the Falkland Islands deep in the southern Atlantic Ocean. When the conflict began the politicians were suitably embarrassed, having scrapped the old HMS *Ark Royal* and handed her fixed wing fleet of FG.1s and Buccaneer S.2Bs to the RAF in a rare one way swap. The conflict would have probably been over before it started with a squadron of Phantoms and Buccaneers parked off the Argentine coast. However, all that could be mustered was a mixed force of RAF Harriers and Navy Sea Harriers - GR.3s and FRS.1s. Then with the conflict over initial air defence cover of the Falklands was provided by Sidewinder equipped Harrier GR.3s under the guise of 'Har Det' - Harrier Detachment. Clearly the RAF had to put in theatre a proper air defence aircraft. The choice was between the Phantom or Lightning. Whilst Lightnings were seen flying with overwing tanks during the conflict, realistically they were never going to deploy south. Within a matter of days the decision had been made to deploy the F-4 and initially 29 Squadron began toning down their aircraft and adding much needed war time modifications. Transiting via the Ascension islands, the Phantoms were initially based at a hastily made runway strip at Port Stanley. Conditions were far from ideal, but with mobile arrester gear in place and metal matting they performed well in a situation they were never designed for i.e. operating from semi prepared surfaces.

With the need for a full time air defence presence on the island it was decided that 23 Squadron should be based on a permanent basis at the newly built Mount Pleasant Airfield. With higher than average aircraft attrition and no sign of the Cold War thawing, this left a hole in the UK air defence network. Plans were hastily drawn up to replace the 'lost' squadron with additional aircraft. For Lightning enthusiasts this would have been the ideal opportunity to turn back the clock. Rumours were rife that 74 Squadron would reform with surplus aircraft held in store at Binbrook - indeed the tail code 'C' had been left free in case this happened, with the two resident squadrons adopting codes 'A' and 'B' with the Training Flight allocated 'D'. Ultimately it was allegedly a shortage of suitable pilots that prevented a new unit forming at Binbrook, nice though the idea was.

The UK's only other option was to turn to the US for surplus fighters. A shopping list consisting of the F-14, which was dismissed on cost, and the F-15, which was dismissed on lack of commonality and probably the prospect of having fun in the aircraft as well, left the F-4 as the only option. The wheel had turned full circle and the RAF were back in the Phantom buying game. The J model was deemed to be the most similar to the F-4M but it had been replaced in US Navy front line service with the F-4S, a reworked J with wing leading edge slats making a huge improvement to the F-4's poor turn performance, a lesson learned the hard way in Vietnam. But the US Navy couldn't spare any S models, or at least not enough to equip a full squadron, so the RAF were forced to look at surplus Navy and Marine Js in the boneyard at the Military Aircraft Storage Distribution Centre at Davies Monthan AFB in Arizona and in open storage at the Naval Air Rework Facility at NAS North Island, San Diego, in Southern California.

The RAF were in a dilemma. With the option to buy modern USAF fighters ruled out they were forced down the route of obtaining the obsolete F-4J, but even this was made doubly difficult as most of the best low time airframes had been converted to S models for US Navy use. Of the original 502 J models built, many had been lost in accidents or combat, one source quoting as many as 206. Nevertheless, an initial inspection short-listed eighteen potentially suitable airframes of which three were soon rejected and replaced by three more. The final airframes selected had mixed histories, having served with famous units of the US Navy and US Marines such as VF-101 *Grim Reapers*, VF-103 *Jolly Rogers*, VF-171 *Aces* and the well known VF-74 *Be-Devilers*. Most of the Marine aircraft had served with VMFAT-101 *Sharpshooters* and one airframe was from the Air Test and Evaluation Squadron, VX-4 - the famous Black Bunny Phantom. Perhaps it is a peculiarly British thing to document every movement of RAF aircraft, but despite their heritage (most being veterans of the Vietnam War) the individual histories of US Navy aircraft are hard to pin down.

By December 1982 the Air Force Board had given approval for the aircraft purchase along with a spares support package to keep the aircraft in service for at least five years. It was decided the aircraft would be known as the F-4J(UK). The aircraft have erroneously been called Phantom F.3s which is not correct. The RAF was about to operate the Tornado F.3 and already had the Lightning F.3 so the F-4 Phantom was never going to be another F.3. In truth the RAF could have called their new mounts F-4Ls as that suffix had never been adopted by McDonnell Douglas, but F-4J(UK) certainly had a better ring to it.

The option to convert the aircraft to the full S model standard was deemed too lengthy a process, so a decision was made to compromise and achieve a standard that was in between the J and S.. The aircraft would undergo a Service Life Extension Programme, the equivalent of an RAF major service, although despite the RAF's rework order coinciding with the end of the US Navy S modification programme, it was too late to refit the wings with slats due to the long order lead time. Obviously the aircraft would not be re-engined so they retained their J79s, the updated smokeless versions, and were also given various fatigue modifications to beef them up. The aim was to try and give the aircraft commonality with the RAF's Ks and Ms in terms of weapons. They would be armed with four AIM-9L and four Skyflash missiles as well as the centre line gun as per the RAF war fit. Uniquely they retained the capability to carry AIM-7 Sparrow missiles on the wing mounted pylons although this never seems to have been done. Being carrier suited the J models lacked the British Phantom Integrated Nav/Attack System. In the end the RAF ended up with an airframe that was about 75% common with the FGR.2 and FG.1. Electrics, hydraulics and flight control systems were pretty much the same but missile control, avionics and radar were only 50% similar. The RAF had almost finished the retrofit of its existing Phantom fleet with Radar Warning Receivers and Instrument Landing Systems but these were not incorporated into the UK's Js.

With the airframes selected, a team of engineers from CSDE at RAF Swanton Morley left the UK for San Diego in August 1983. They had just twelve months to get a fleet of fifteen tired ex-Vietnam fighters back from the boneyard and into front line service. The 'Flight of the Phoenix' would have been a suitable title for the project had not the rival 56 Squadron used a Phoenix in its emblem. Of the fifteen airframes, six were located at North Island

and the other nine at Davis Monthan. The RAF had agreed to purchase the airframes as seen, so they needed to be flown or airlifted out. With some aircraft having spent a considerable time in the desert it was not going to be an easy job. Nevertheless, with a Union Jack on its tail, the first aircraft was made airworthy in just three days and arrived at North Island on 10th November 1983. With some of the airframes being ex-US Marines the RAF had a rather clever idea and asked if one of the Marines' CH-53 Super Stallions would be able to airlift non-flyable F-4s to the maintenance depot. Initially the lift went well but over San Diego Bay one F-4J made its last spectacular flight nose first into the sea as it became detached. A replacement was soon found.



*155755 of US Navy squadron VF-121 became ZE362/V.*

With all fifteen aircraft on site the refurbishment got underway. Once the rework began it was found that many of the aircraft had led hard lives - they were suffering from airframe corrosion, overstressing (during rework, UK-style fatigue meters were fitted but quite how they calculated what fatigue the aircraft had already pulled in US Navy service is not clear), battle damage repair and salt water soakings. The Navy had reasonably accurate records though perhaps not as comprehensive as the RAF would have liked. Airframe hours ranged from 2,000 to 4,000, higher than most in-service UK F-4s. As an example, the Bureau of Naval Weapons Inventory held the following history for 153795 which was to become ZE354. During its time with the US Navy it had flown 3,891 hours and amassed 670 carrier launches and 428 carrier landings.

The RAF didn't require some of the equipment aboard the Navy optimised Js, such as the approach power compensator for deck landings, but what they did have to do was try to ensure that all fifteen aircraft would be to the same standard. A lengthy document was produced detailing the equipment that would be fitted and what would be removed. The aircraft would be handed over after post-maintenance shake down flights in what was known as Delta fit - two external Sergeant Fletcher tanks and a centre line tank with wing mounted LAU-17 weapon pylons.

As already explained, probably the biggest thorn in the side of the UK's original purchase of Phantoms was the decision to swap the proven J79 engine for the Rolls Royce Spey, a consequence of which was that early in its RAF career many aircraft were grounded due to a lack of serviceable engines. But now, finally, the RAF were going to get an F-4 with a J79 and, better still, the smokeless -10B version. The J79 was, and is, a spectacular powerplant. Over 13,600 were produced and many are in service today. It holds forty four world records - including being the

first to power a manned aircraft to over 100,000 feet. However, the RAF would have a major problem as the J79s required Houchin air start units that were both bulky and in short supply. The US Navy simply didn't have enough to spare any and the RAF didn't operate any other aircraft that needed them. Eventually the problem was solved away from base by using air starts of lower pressure in a 'get you home' scenario. Using lower pressure air ran the risk of over temping the engines on light up, so extreme care was needed during engine start.

The F-4J(UK) would be introduced into RAF service with the ability to carry a full war load. Initially the AWG-10 radar was deemed inferior to the RAF's Westinghouse AWG-11/12 which had recently been updated by Ferranti. Ferranti now updated the AWG-10 to AWG-10B standard, resulting in a radar superior and more reliable than even the AWG-11/12.

The F-4s were modified to carry the Eagle Eye target acquisition sight. Allegedly from a chieftain tank, the sight allowed the backseater to get an early pick up on the target and hopefully identify it as friendly or hostile which would enable the crew to shoot at ranges beyond normal visual pickups. On the



downside the sight was fitted by removing the left side perspex window in between the front and rear cockpit making the rear seater feel even more claustrophobic than before. The F-4s were also equipped with the telebrief system, a secure land based system of communications that was simply a wire cable plugged in on the ground to allow comms between the fighter and ground operations.

Part of the advantage of buying the F-4J was its potential for compatibility with other RAF types. For example, being ex-US Navy it could utilise the probe and drogue system for air to air refuelling - an essential part of UK air defence ops. But most importantly it could be placed straight into RAF service as it was deemed to be similar enough overall to existing UK Phantoms, which was a major advantage in that it bypassed the laborious procedure of having development aircraft at Boscombe Down undergoing every single trial pertaining to weapon release, stores carriage and exploring all corners of the flight envelope. Nevertheless early usage of the F-4Js often saw them flown clean whilst clearance was approved.

Whilst RAF FG.1s and FGR.2s had been optimised for the air defence role by the addition of the ALE-40 chaff and flare dispenser behind the Sidewinder launcher rail, the F-4J had the advantage of an integral self defence system mounted on the upper side of the right fuselage just forward of the jet pipe. The ALE-29A system ejected its flares and chaff upwards and sideways. A problem was the J's Radar Warning Receiver. Initially the US Navy said they could supply the ALR-45-50 but then declined, which left the housing for the units in the fin, forward intakes and wing empty.

A major bonus to air defence crews was that the aircraft were fitted with luminous formation light strips. These three strips on the fin, fuselage and under the cockpit made the difficult skill of night close formation flying a breeze. The airframes also kept their hydraulic wing fold system, not fitted to most RAF Phantoms as it was a carrier requirement.



Working to such a short time scale (less than twelve months) it was incredible what was ultimately achieved - each of the fifteen aircraft had been rewired, new stainless steel hydraulic pipe works and major fatigue upgrades installed and various modifications made. With the engineering work gaining pace the squadron number plate was announced. It would have been easy to allocate that of a recently disbanded unit but fortunately a sense of pride and tradition prevailed and 74 Squadron was chosen. 74 has always had charisma in abundance, with its black tails and tiger emblem which fostered a sense of unit pride not found on regular squadrons.

Initially 74's personnel were selected from those who had had F-4 experience in either RAF Germany or the UK. As few RAF pilots had flown the J the US Navy gave familiarisation flights in the F-4S at Yuma. Whilst the aircrew were getting to grips with the aircraft, groundcrews were undergoing training at the Naval Air Rework Facility and also at NAS Oceana, the home of VF-101 on the east coast.

Once the rework had been completed the RAF crews undertook several shake down flights prior to tanking the aircraft back from the US with the aid of RAF VC10s. Records show that the first F-4J arrived at Wattisham in August 1984. Adding to the sense of uniqueness and much to the annoyance of the RAF hierarchy, the RAF crews wore US flight gear - flying suits, helmets, gloves and Mae Wests - the reason being that the Martin Baker Type 7 ejection seats required it. The difference between American and British Type 7s was the harness assembly. RAF Mk 7 seats had been modified in the late 70s to a simple system of straps and a central Quick Release Box. The idea was to ultimately retrofit the Js with seats from surplus RAF stocks, ironic when you think that the whole purpose of buying the F-4Js in the first place was because we didn't have enough aircraft!

Before delivery from California the aircraft needed one final thing doing - painting. This is something that causes much discussion amongst UK Phantom aficionados. With the airframes stripped to bare metal the RAF had two options - fly them back to the UK for painting or let the Naval Air Rework Facility paint them using as near to RAF colours as possible. Presumably as part of the fixed price contract the second option was preferred, and so it was that the fleet came to be painted with slight variations and what was clear straight away to the 56 Squadron crews that intercepted the first wave of inbound F-4Js was that these were not in the RAF standard barley grey air defence colour, nor indeed did they resemble the standard US Navy gull grey. The finished product can only be described as a pale duck egg green/blue. Some aircraft were highly glossed, some had the radome in a two-tone finish and others did seem to resemble more closely the RAF barley grey. What this all achieved was a Phantom that now looked totally unique which added considerably to the Tigers' kudos!

As well as its unique scheme each Phantom had the famous tiger's head on the fin and the fighter style nose bars complete with tiger head on the forward nose. Serials were painted in a stylised font on the standard position upper fuselage. Once the squadron had its full complement of aircraft they adopted the fin codes T I G E R S Q N with the remaining aircraft randomly coded H J O P V W and Z.



Between August and December 1984 all fifteen aircraft were ferried to the UK with one straggler, ZE363, diverting to Goose Bay with a technical problem. Flown by a relatively junior crew their stay at Goose was not without advantage, for they decided to visit a local car DIY shop where they bought out the supply of matt black spray paint and proceeded to 'tigerise' the fin of the grounded Phantom. Once repaired it flew on to Wattisham now looking more like a tiger of old with its black tail. Despite an edict

which prevented coloured tails, 363 retained its black fin and was coded W. Within a year all the squadron's aircraft were blacked up with the final scheme covering the entire fin.

With the squadron up to full strength 74 quickly adapted to its new role in the UKADR. Often seen flying in clean fit or centreline tanks only it soon became the squadron of choice for new crews leaving the Phantom OCU. With no dual control J models, pilots still flew the FGR.2 whilst undergoing currency checks and an annual instrument test which also required dual control. Being co-located with 56 Squadron at Wattisham it was easy to borrow a twin stick aircraft.

Whilst the story of how the squadron operated the F-4J is outside the scope of this article it is worth noting that the RAF had taken on an ostensibly new type in rapid time on budget and on spec. Compare that to other recent fighter acquisitions! Final cost for the fifteen airframes was approximately £33 million or £2.2 million per aircraft. Also equally impressive was the fact that the squadron only lost one airframe in its time with the J - sadly fatally - but no aircraft were lost due to technical failure and is a stunning example of the quality of the rework that the US Navy did.

Planned as a stopgap the F-4Js were never destined for a long life in RAF service and within six years they were withdrawn - ironically due largely to a surplus of RAF FGR.2 Phantoms! The Tornado was coming into service and the long-term plan to base the Tornado F.3 ADV in RAF Germany had vanished with the falling of the Berlin Wall. The Cold War was over and the F-4s in Germany were returning to the UK faster than originally planned. With the unique Js becoming harder to maintain, 74 Squadron swapped to the FGR.2 almost overnight. Within a few months all the much loved Js were flown to various bases around the country to meet an inglorious end. Phantoms that had once duelled with MiGs over the South China Sea or had flown QRA over the North Sea were now relegated to battle damage repair or fire fighting duties. Four aircraft were sent to RAF Bruggen and Laarbruch in the full knowledge that RAFG was shutting up shop and that the Js wouldn't survive that. The remaining aircraft stayed in the UK. It looked as if only one airframe would be saved. In June 1991, some months after the squadron had re-equipped, the last flight of an F-4J(UK) took place when ZE359/J was flown onto the short runway at Duxford for preservation. However it was soon stripped of its RAF colours and repainted in VF-74's scheme. Superbly restored it now graces the American Air Museum. With the remaining F-4Js scrapped, only one other complete, although now very weathered, airframe remains, and that is at the Defence Fire Training and Development Centre at RAF Manston. With a pair of nose sections (including that of the famous Black Bunny F-4) also saved, the story of the RAF's Js is still not quite over. Whilst no complete F-4J is preserved in its original state, those who visit RAF Coningsby, original home of the FGR.2, should look closely at gate guard XT891 - with its original pre-RWR fin shape. Close inspection shows that perhaps this came from F-4J ZE354 which was scrapped at the base.

