



THE HORNET

The Newsletter of the 100 Squadron Association

President: Air Commodore N Bonnor FRIN FRAeS RAF (Ret'd)

Chairman:	Treasurer:	Secretary:	N/L Editor:
OC	M English	Sqn Ldr E Dawson	Mrs N Crane
100 Sqn	4 Forest Rd	Scarborough Lodge	Flat 48
RAF Leeming	Chalet Hill	Pickhill	Pine Park Mansions
Northallerton	Bordon	Thirsk	1 Wilderton Road
DL7 9NJ	GU35 0BH	YO7 4JN	Poole BH13 6EB
01677 423041	01420 489543	07808 760532	01202 376325
	mikej1947@ hotmail.co.uk	edawson.100sqnassoc sec@yahoo.co.uk	nina.crane1@ ntlworld.com

Association Website: www.100squadronassociation.org.uk

Newsletter 114 August 2016

Dear Members,

Since the publication of our last Newsletter in May, we sadly report that Frank Ockerby died in July aged 91 after several bouts of pneumonia. He will be greatly missed at squadron occasions and was very proud of playing his part in World War 2. Thanks go to our squadron historian, Greg Harrison, for compiling Frank's obituary. We are also grateful to Greg for his research into Joe Clark's time on 100 Squadron and to Jean Grimley for her interesting article about William Hancock.

This year's reunion at the beginning of the month at RAF Wyton was very enjoyable even though the number attending was smaller than usual. It was nice to welcome some new members to the Association including Joe Sharp and his son, Michael.

Plans are now in full swing for centenary celebrations next March at RAF Leeming and I urge those keen to attend to get their bookings in as soon as they can. It promises to be a memorable weekend of activities.

Nina Crane
(Editor of The Hornet)

2016 Reunion Report

Having lost a number of stalwart supporters of reunions in the last 12 months, the numbers attending this year's reunion at RAF Wyton were down compared to recent years. That said, we once again enjoyed the chance to meet up with old friends and colleagues in the service environment of the Officers' Mess where the staff ensured we were very well looked after.

The Boss - Wing Commander Andy Wright - gave us more details of the plans for the Centenary Reunion, which are covered below, and reported on some recent changes at the Squadron. These include the new task of training and refreshing pilots on the Hawk T Mk 1 - yes, the Red Arrows too - now that 208 Squadron at Valley has disbanded. This change means that an extra two pilot posts have been established, though not yet filled, and that four posts will now be annotated as Qualified Flying Instructors. The in-service life of the Hawk T Mk 1 has recently been extended to 2030.

During the reunion dinner, we once again enjoyed wines funded by Babcock and after loyal toast, the raffle raised a very commendable £325.



Our senior guest was Wing Commander Phil Owen, the station commander of RAF Wyton, who has sent a letter saying how much he enjoyed the opportunity to meet up with people from such a dedicated and enthusiastic Association.

We had just one Lancaster veteran with us at this year's reunion - Jack Cook seen here in front of the portrait in the main ante-room of the Officers' Mess showing Don Bennett, the Commander of No. 8 Group, The Pathfinder Force.

At the St George's Church on Saturday morning, Padre Roy Muttram conducted the service with Brian Lodde accompanying our singing on the organ. The collection raised £125 for the RAF Benevolent Fund.

We all departed with thoughts and expectations for the 100th Anniversary Reunion next year.

Centenary Reunion Plans

The first event that The Boss invites Association members to attend is a commemorative service at St Clement Danes, The Strand, London on the afternoon of Friday, 24th February 2017. All the Squadron members will be returning that morning to attend the service from a visit to one of the airfields in France used by 100 Squadron in WWI.

Enclosed with this issue is a provisional Booking Form for the 100th Anniversary Reunion - Friday, 17th March and Saturday, 18th March 2017.

Our Secretary has block booked accommodation at a number of local Bed and Breakfast possibilities, so please indicate if you wish to take up any of these options.

The form also asks for opinions on the possible activities on Friday and the Saturday morning. These could include: the Wensleydale Cheese Factory, the Royal Armouries at Leeds or the Elvington Air Museum on Friday and the Black Sheep Brewery on Saturday morning.

The main event then starts on Saturday afternoon with the 100 Squadron Open Day followed by an evening parade and Sunset Flypast leading to the Champagne Reception and Hangar Centenary Party

Inevitably, the numbers able to attend the Saturday evening Champagne Reception and Hangar Centenary Party will be limited, so get your request in early! At the moment, we can only accept that a successful application by a member plus one guest will be able to have tickets; however, if our total allocation of tickets is not taken up, extra guests might be possible, so please indicate if you would like to invite more than one guest.

An Anniversary Church Service will be held on Sunday morning in St Bede's, RAF Leeming to conclude the celebrations of 100's 100th.

100 Squadron Memorial Appeal

Shortly after Remembrance Sunday 2015, I wrote to a number of people including the Chairman of Holton le Clay Parish Council to ask whether there was any possibility of erecting an information board in the A16 layby to explain why our memorial is there. While the Memorial shows the Squadron badge and inscription:

Do not attack the Hornets' Nest
100 Squadron
Royal Air Force Waltham Grimsby
December 1942
April 1945
Honour the Brave

tourists or walkers passing through the layby would have no real understanding of the devotion to duty over two years of dangerous operations that the Memorial represents.

I went on to explain that 100 Squadron lost 594 young men and 92 aircraft on 3,984 sorties flown on 280 separate operational raids. Awards to aircrew members included: two Distinguished Service Orders, a Conspicuous Gallantry Medal, 94 Distinguished Flying Crosses, 85 Distinguished Flying Medals and a Polish equivalent of the Victoria Cross.

A Parish Councillor has sent me a cutting from the Grimsby Telegraph of Tuesday, 2nd February which states that they are requesting official war memorial status for the site. The cutting says that, if so registered, the site would be safeguarded and protected from any future building development. They hope to raise £100,000 to erect information boards, extend the paving and install more seating and picnic tables to encourage visitors to stay longer and understand the significance of the site where Lancasters were parked and taxied out to take off on operational sorties.

I'm reluctant to offer a donation from the relatively small sum in our Association funds, as we are saving this to help with the 100th Anniversary reunion next spring. However, can I please make an appeal for individual donations? Please make cheques out to the "100 Squadron Association" and send them to The Treasurer, but ensure that you make it clear that the donation is for "The Memorial Appeal."

So far, we have only received donations from six members!

Norman Bonnor

Obituaries

Ernest Joseph "Joe" Clark 576174



Joe arrived with 100 Squadron on the 8th of February 1943, the flight engineer in Sgt Fletcher's crew. One of ten crews posted to 100 Squadron on this date from 1656 Heavy Conversion Unit, they were part of the very first influx of complete crews on reformation of the squadron after the tragic events of twelve months earlier in Singapore. When these ten crews arrived at Waltham, they boosted the number of operational crews to such a degree that there were more crews than aircraft!!

Because of a lack of Lancasters at the Heavy Conversion Unit, the new crews were converted to the type at Waltham, with Sgt Fletcher being certified proficient on the 19th of February. Two days later, Joe and the rest of the crew flew a low-level bombing practice flight to the Misson ranges.

For reasons that aren't clear, Joe had to wait until the second week of April for his first operational sortie – a trip to the German industrial heartlands around the Ruhr known to all Bomber Command aircrew as "Happy Valley". The target was the German industrial city of Frankfurt. Airborne shortly after midnight, the crew bombed the primary aiming point and returned safely, landing at 6.09am, having been in the air a shade over six hours and flown a very uneventful first trip.

Joe's second trip was just three nights later, and involved a long flight to Italy and the naval base at Spezia. However, on the outbound trip and over enemy-held France, an oil pipe in one of the engines broke, causing the engine to burst into flames. Joe, as the flight engineer, skilfully and swiftly dealt with the fire, and feathered the propeller. The crew turned for home, making a good landing on three engines back at Waltham.

The next night Joe and his crew were on the battle order once more, tasked for another operation to "Happy Valley", this time to Stuttgart. However, fate intervened again and with their Lancaster unable to climb above 14,200 feet, the crew took the decision to abandon their sortie whilst still in friendly skies, and turned north for home whilst flying close to Chelmsford. For a new crew to have to abandon their second sortie in a row must have been very disheartening.

Two nights later they set the record straight. A large raid was laid on by Bomber Command against the Skoda armament works at Pilsen, and Joe was airborne with his crew at 9.15pm. Quickly making height, they set course with the rest of the bomber stream and over the target they released their bombs into the centre of the inferno below. Sgt Fletcher flew straight and level for long enough to get the aiming point photo, then swung the nose of the Lancaster around, and headed for home as fast as their Lancaster would take them. They touched down at Waltham at 6.25am, tired and relieved.

The infamous Bomber Command campaign known as the "Battle of the Ruhr" was now in full swing, and Joe and the rest of the crew quickly settled into the routine of heavy bomber operations. More trips to "Happy Valley" followed, with Stuttgart, Duisburg, Essen, Dortmund, Bochum, Dusseldorf, Mulheim, Oberhausen, Gelsenkirchen, Cologne and Wuppertal all being visited by Joe and his crew in April, May, and June 1943. These flights to "Happy Valley" tended to be short, but were also very lively as the full force of German anti-aircraft defences, and the might of the Luftwaffe night fighter forces were employed to bring down as many Bomber Command aircraft as possible. The flak got a little too close for comfort on a trip to Cologne on the night of the 28th/29th of June; Joe's aircraft sustaining damage but making it back to Waltham safely. Trips further afield to the Baltic on a minelaying operation, and another sortie to Spezia were also flown by Joe and his crew during this period.

Joe was now well over half way through his tour, and on the night of the 12th/13th of July 1943, he and his crew took part in a large raid by Bomber Command against Turin. This involved a long return flight of 1,970 miles over The Alps by night, and took skilful monitoring and handling of the petrol consumption by Joe. Electrical storms over France on the outward journey made flying conditions challenging, but

bombing conditions over Turin were perfect with clear skies. The return flight was planned to bring Joe and his crew back along the western coast of France and the Brest Peninsula, and on to Predannack airfield in Cornwall for a planned refuelling stop. Having taken off from Waltham at 10.04pm the previous night, they finally landed back at Waltham at 11.24am, a sortie duration of over thirteen hours. It is also interesting to note that by this time, Joe and his crew were considered sufficiently experienced to take newly-qualified aircrew on "second dickie" trips, and on this flight they took with them a pilot who had recently arrived on the squadron – Sgt Stow. Association members may remember him as Johnnie Stow, for many years a keen member of the 100 Squadron Association.

The Battle of the Ruhr came to an end in the middle of July 1943, and Sir Arthur Harris, the C-in-C of Bomber Command, quickly engaged his crews on his next big campaign – The Battle of Hamburg. A series of large raids against the German port city, noted particularly for the production of U-Boats in the Blomm and Voss shipyards, started on the night of the 24th/25th of July. 791 Bomber Command "heavies" took part, including no less than twenty-five from 100 Squadron. Joe and his crew took off from Waltham at 10.27pm, two minutes behind the Squadron CO who was accompanying a new squadron crew on the raid. Gaining height over the east coast, Joe and his crew set course for Hamburg and found conditions to be almost perfect for bombing – clear skies and very light winds. At 1.05am, and flying at 19,000 feet, the Bomb Aimer Sgt Cooper called "bombs gone!!" and after waiting for the obligatory photo flash, the crew set course for home, and the traditional bacon and eggs breakfast.

After debrief and sleep, the crew operated together again the next night, against Essen. However, this was to be the last time that Joe flew with his old crew (with the exception of rear gunner Sgt McRae), having flown 26 operations with them. Several of the crew were posted to training units as instructors, having been regarded as having flown a full operational tour, and this left Joe to complete his tour with skipper Flt Sgt Pickles and his crew. Two trips to Milan and a raid to Leverkusen (where their Lancaster was hit by heavy flak near Bonn) were followed on the 23rd/24th of August by the crew adding their weight to the 727 aircraft taking part in the first in a series of raids against the German capital over the Autumn and winter of 1943-44 that

would become known as "The Battle of Berlin". Airborne at 9.02pm that evening, the crew bombed the southern centre of the city at 00.08 from 19,000 feet. The German defences, both on the ground and in the air, mounted a fierce counter-attack against the bombers, and the following morning Joe would find four of the dispersals at Waltham empty. Of the twenty-eight men who failed to return to Waltham that morning, twenty-two were killed, five were incarcerated as prisoners of war, and just one managed to evade capture – a solemn reminder of the grievous price paid by bomber crews in World War 2.

Trips to Nuremburg and Mannheim followed, before Joe's final operational sortie with 100 Squadron on the night of the 6th/7th of September 1943, against Munich. Flt Sgt Pickles lifted the Lancaster off the runway at Waltham at 7.44pm, Munich was bombed a shade before midnight and Joe landed back at Waltham at 4.23am, his first operational tour completed.

Joe remained with 100 Squadron for a further month before being posted, on the 7th of October 1943, to 1656 Heavy Conversion Unit for instructor duties. On December the 10th 1943, details appeared in the London Gazette of the award of the Distinguished Flying Medal to Joe, not for a single act of bravery, but for sustained fortitude and courage in completing a full tour of operations during a period of intense bombing activity against Nazi Germany that included participation in no less than three of Bomber Command's major battles in 1943 – those against the Ruhr, Hamburg, and Berlin.

Following the relative safety of instructing, Joe went on to serve with both 626 Squadron (flying Lancasters) and 117 Squadron (flying the Dakota). Post-war, Joe enjoyed a long career in both military and civilian aviation, and was a keen supporter of the 100 Squadron Association.

Greg Harrison

100 Squadron Association Historian

William Hancock 1921–2014



In family tradition, William started work in a Stoke on Trent pottery but, greatly encouraged by his mother, attended night school and a Technical Training Centre before becoming a trainee aero engine fitter in 1939 at Cosford, where he learned the rapidly changing techniques in new aircraft, including test flying. *"It was a lovely job!"*

He undertook intensive training to be a RAF commissioned officer and navigator, studying aerodynamics, astronavigation and Morse code, visual and audio, then H2S radar.

After a posting to the Lancaster Finishing School at Hemswell, William was posted to 100 Squadron and the first thing he noticed were the squadron letters HW – his initials.

Operational flying began in September 1944 to the Ruhr, mainly Cologne, Essen and Dortmund, usually 4 to 5 hours flying and on Boxing Day he was sent on his first daylight operation to assist in countering the German offensive in the Ardennes salient at considerably lower altitude than normal for Lancaster raids. Early in 1945 he flew twice to Chemnitz on the Czech border, also to Plauen, Nuremberg, Munich and Stuttgart, all of which took 8 to 9 hours, usually starting at 4.30 pm.

On one particularly difficult occasion for William as navigator, a brand new aircraft, E², suffered total electric failure, but the crew pressed on to their target without navigational aids, using the stars and dead-reckoning only.

In 1945, when the squadron moved to Elsham Wolds, he dropped food supplies and collected POWs and troops from Europe. He took part in the last raid of the war on Hitler's fortified mountain retreat in Berchtesgaden.

Nominated by the CO, he was left hand marker at the front of the Bomber Command Section on Victory Parade Day, June 10th 1945. Promoted to Flight Lieutenant, he converted to the Lincoln aircraft, continuing with exercises in anticipation that he would be sent to the Far East, but the atom bomb was dropped in August 1945 bringing the war to a close. He was given the job as Squadron Navigation Officer.

In 1946, William married Audrey, the sister of his crew's bomb aimer, Geoff Champion and the couple acquired a registered smallholding of four acres in Selston.

After demobilization, William worked at Rolls-Royce, Hucknall. His most interesting years, 1956-9, included testing the Dart engine in a Dakota at high atmospheric temperature testing at 45 degrees C, with no air conditioning, on the West African coast and endurance testing Conway engines in the Vulcan prototype VX770 in Malta. He was involved in demonstrating Conway engines to Alitalia and Iberian airlines, then the Tyne conversion of the Airspeed Ambassador (BEA Elizabethan) in Malta.

After learning helicopter performance calculation at Cranfield, he became responsible for the operating costs of the Rolls-Royce communications Heron aircraft and was cleared to fly as co-pilot. He was Personal/Technical Assistant to the Manager at Hucknall as the company took over the operations of Napier's, whose principal project was the Gazelle engine for the Wessex helicopter. William was delighted to fly the first trip of those testing days, 6-8.30am, before starting his normal working day. In 1966, he was appointed Purchasing Manager at Hucknall, whilst transferring re-heat jet pipe manufacture for the Adour engine to SNECMA, Paris.

Suddenly, in 1980, Audrey passed away. The following year William revisited Canada and America, enjoying seeing old friends from his training days in the 1940s and ex-colleagues.

Having retired from Rolls-Royce in 1982, he married Victoria, who was secretary to their friend, the R-R Chief Test Pilot. William joined Victoria in Melbourne, Derbyshire and he worked four years, surveying sites of mining subsidence.

William maintained his membership of the Royal Aeronautical Society, R-R Heritage Trust, Nottingham Society of Engineers and 100 Squadron Association. He enjoyed Farnborough and Paris Air Shows. His love of

aeroplanes never diminished and Victoria would sometimes ask: "*William, can we close the hangar door, please?*"

A Ticknall Garden Club committee member, his creation was featured in Melbourne Community Care's Open Gardens 2011. He was quickly promoted from Tea-boy to President of Melbourne Probus Club and was a Civic Society member.

'A lovely man; a true gent', he was renowned for his upright stature and smart appearance. Friends and especially family have been very important to William and he watched with admiration as the young ones grew, taking pride in their achievements.

"William was a remarkable man who had a remarkable life" of wonder and awe. He was grateful to survive the war and, for his 90th birthday, received donations for the Bomber Command Memorial.

Jean Grimley

Friend of Victoria Hancock

Frank Ockerby

The Association is saddened to hear of the passing of Frank Ockerby, a stalwart member and one of the true characters not just of the Association and 100 Squadron, but of the RAF as a whole. Tim Clement represented the Squadron, and several Association members attended Frank's funeral on Tuesday, 2nd August at Grenoside.

Frank was a proud Yorkshireman, hailing from Sheffield, and with his schooling complete he volunteered for aircrew duties in 1942, receiving his "call-up" on the 30th of December that year. Frank was destined to become a Wireless Operator, and after completing all his basic training and "square bashing", he went to No.4 Radio Signals School at Madley in Herefordshire, where he undertook his first ever flight, in December 1943, in a de Havilland Dominie. His "sparks" training completed, Frank was then posted north to RAF Wigtown in Scotland, and No.1 (Observer) Advanced Flying Unit. This was a very busy unit, with over 50 Avro Ansons on strength at times, and Frank and his fellow pupils would have been kept busy during their time with the unit.

All of his basic and trade training now complete, Frank headed back

south, to 85 Operational Training Unit (OTU) at RAF Husbands Bosworth in Leicestershire. Here he met some of the crew he would go to 100 Squadron with – pilot: Sgt Richmond, navigator: Sgt Rose, bomb aimer: Sgt Mallows, and rear gunner: Sgt Wallace. At OTU, airmen were taught to fly as part of a crew, on bigger, multi-engined aircraft. In Frank's case it was Wellingtons, highly regarded by many WW2 aircrew as a fine and dependable aircraft.

Illustrating the fact that it wasn't just in front line operational squadrons where the danger lay; Frank and his crew had a narrow escape while they were with 85 OTU. On the 27th of November 1944, whilst on a daylight cross-country training exercise, their port outer engine failed and Sgt Richmond, in a commendable display of skill for a young and inexperienced pilot, managed to put the Wellington down on the runway at RAF Jurby on the Isle of Man. The danger didn't end with landing though, and with an over-run of the runway looking likely, Sgt Richmond had to retract the undercarriage and the Wellington slithered to a halt just short of the end of the tarmac. So skilful had been the landing, that the aircraft was repairable, and continued in RAF service until March 1948.

From the OTU, Frank and his crew went to Heavy Conversion Unit (HCU), where they learned to fly the four-engined "heavies". Picking up another two crew members (Sgt Jackson; the flight engineer, and Sgt Gowans: the mid-upper gunner), they successfully converted to the four-engined types and, whilst at HCU, the crew flew two trips to the Dutch and Danish coasts, dropping "window" to confuse the enemy's seaward-looking radar installations.

Frank and his crew arrived at 100 Squadron on the 6th of March, and after the usual local familiarisation flying and "second dickie" trip for the skipper, the crew operated together for the first time on the night of the 18th/19th of March. The target was Hanau, close to Frankfurt, and the crew dropped their bombs under the direction of the Master Bomber, bang on target, shortly after 4.30 in the morning.

100 Squadron moved to Elsham Wolds at the beginning of April 1945 and it was from there, on the night of the 9th/10th of April, that the crew next operated, against Kiel. Drama was never far away for a crew in Bomber Command, and on this trip the crew had to overshoot the aiming point by 20 seconds because another Lancaster was flying

directly below them over the target. 599 aircraft were tasked from Bomber Command on this raid, and being hit by bombs from an aircraft above was always a very real threat when so many aircraft were passing through the target area in such a short time – typically less than five minutes. The German pocket battleship “Admiral Scheer” was hit and capsized on this raid. The following night Frank and his crew were one of 19 from 100 Squadron, and 307 Lancasters in an all No. 1 Group attack against the railway yards at Plauen. Much damage was caused, and the local report at the time estimated that 51% of the target area was completely destroyed.

On the 22nd of April, a daylight raid was laid on against Bremen, involving nearly 800 aircraft, and 18 from 100 Squadron. The British XXX Army Corps were ready to move into the city, but the German Army was still holding it and required a degree of “softening up” by Bomber Command. That primary objective was easily achieved, and the British Army moved in two days later.

On the 25th April, the Richmond crew were not on the battle order to attack “The Eagles Nest” at Berchtesgaden. However, when Fg Off Sandy McTavish’s crew gathered for the briefing, their w/op (Pete Levielle) was nowhere to be found, so Frank filled in for him without the Squadron Exec's knowledge so that Pete wouldn't be under threat of a court martial. As a result the trip isn't in Frank's log book. Despite difficult bombing conditions, a concentrated attack was made.

Five days later Frank and his crew flew an “Operation Manna” trip to Lieden, just north of The Hague. Two more Manna trips followed, both to Rotterdam, followed by several “Exodus” trips to Italy to repatriate former prisoners of war.

Frank stayed on in the RAF after the end of the war, and in October 1946 was part of the RAF contingent that flew RAF Lincolns to Chile to celebrate the inauguration of that country’s new President. Offered a commission the following year, Frank elected to demob instead, and often wondered in later years if he made the right decision.

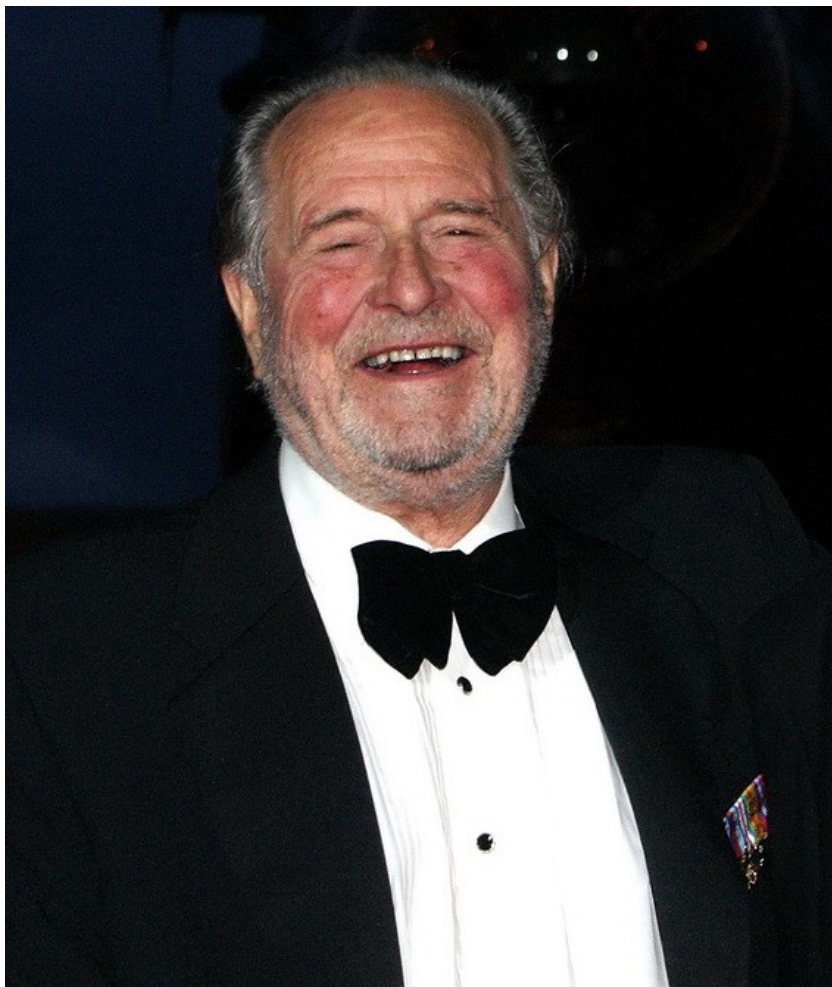
I well remember Frank from 100 Squadron Association reunions, and enjoyed a beer or two with him, and his sons, to talk about his time on 100 in the war. Frank was an enthusiastic member of our Association, and his lively personality always shone when he attended reunions.

Greg Harrison

100 Squadron Association Historian



Frank Ockerby (w/op), Bob Mellow (b/a), Arthur Jackson flt eng), Eric Richmond (pilot), Arthur Rose (nav), Colin Edwards (m.u.g), Jimmy Wallace (r.g) + WAAF driver and ground crew



Frank at the 95th Anniversary Reunion

Addition to a short Obituary published in the last issue

Brian John Kenneth Hulme

Brian's funeral was held on Wednesday, 18th May 2016 at Chester Crematorium. A number of Association members attended together with the Liaison Officers from No. 5 (Paul Taylor) and No. 100 (Tim Clement) Squadron Associations. The service was conducted by the Rev. Norman Ryder who gave the following tribute.

"Brian was born on 21 July 1941 in Liverpool, living near Everton football ground, and had two elder half-brothers who are now in their nineties. After his schooldays, Brian was accepted as a Boy Entrant in the Royal Air Force - he recalled, 'It was like going back to school', for as well as the usual square bashing drill sessions and trade training in engineering, the year's initial course of study included general education.

Brian didn't just survive all this; all his life he held warm memories of his Royal Air Force service and kept up his links with both No. 5 and No. 100 Squadron Associations. It is great to see many of his Air Force friends at his Funeral Service. Brian's active Air Force life lasted for just seven years, and then for a short time he enlisted in the Army until an accident ended his military career.

Everything then changed for Brian as he entered a completely new phase of life. He met and married Ann, moved to live in Chester, and transferred to employment with British Rail as a Fitter/Engineer, staying in this occupation until his retirement. They made many friends locally, both in his working life and after their move to Oulton Close on joining Upton Lunch Club. In retirement Brian and Ann enjoyed a number of cruising holidays, all recorded in photographs stored on his computer. Wherever they went, people valued his warm personality.

Brian became ill only last winter, and his physical decline has been heart-breakingly fast. News of his gentle passing away in the Hospice on 4th May was a shock to all who knew him, and this has shown in the messages of sympathy received by Ann."

Amendment to an Obituary



In the last issue of The Hornet, we included an obituary for Ronald (Doc) Watson; however, we stated that he arrived on 100 Squadron as a Sergeant on 20th July 1944.

Doc Watson's nephew, John Himsworth, has corrected us in that Doc was already commissioned as a Flying Officer when he arrived in England as the photographs clearly show. John's father Charlie was Doc's older brother, who served at Leeming with 429 (Bison) Squadron of 46 Canadian Group, Bomber Command.



Doc his older brother Charlie and some 1,000 pounders.

Norman Bonnor

No 100 (Bomber) Squadron

Major F A de V. Robertson VD

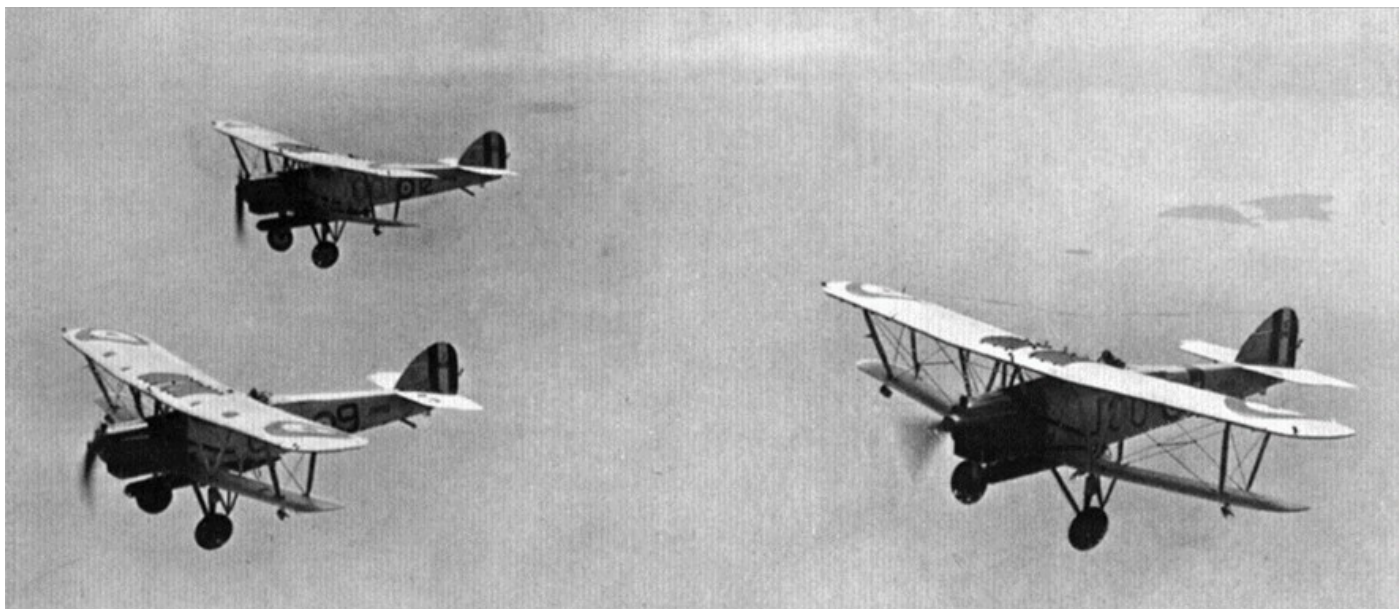
(Re-produced from an article in "Flight" dated 19th August 1932)

The Air Force List is sometimes mildly misleading. If you hunt through its pages to find what squadrons are exercised in the use of the torpedo, you will find (in addition to seven flights of the Fleet Air Arm) only one squadron with the bracketed denomination of Torpedo-Bomber. That title is borne by No. 36 Squadron, which is stationed in Singapore. Its equipment is the Hawker Horsley. 100 Squadron, the subject of the present article, is also equipped with the Horsley but is merely described as a Bomber Squadron. Yet it is, as a fact, a squadron which practises with the torpedo as well as with the bomb, and that is why it is stationed at Donibristle, in the county of Fife. Fife, I believe, likes to be called a Kingdom, and Shakespeare has something to say about an official called Thane of Fife.

Situated between two estuaries, with the Firth of Tay to the north and the Firth of Forth to the south, it is somewhat isolated from the rest of Scotland, and throughout history has lived a separate existence. The possession of St. Andrews, with its University and its Royal and Ancient Golf Club, has brought it fame and has induced invasions from other counties and kingdoms. Still, from north and south it is not easy of access. The good burghers of Edinburgh spend much time gazing across the Forth at the hills of Fife, but to get from the capital across the water and arrive at a given time requires forethought. The famous Forth Bridge takes the trains across, but has no roadway. Trains are useful, but they do not always start just when you want them to. To go by road means driving up to Stirling, crossing the river there, and coming back along the northern bank. There is a ferry which will take cars across, but it too, does not always start when you want it, and it is not cheap. In fact, to get from Edinburgh to Fife is a problem which is most easily solved by air transport. So if you have a friend at Turnhouse aerodrome who will fly you across, it is as well to accept his good offices. The trip is short, but, unless the Forth is much obscured by "haar" the view is fine, and it is fascinating to see the great Forth Bridge down below, looking like a twisted ribbon.

If you should land on Donibristle aerodrome, your pilot needs to keep his wits about him. It is a picturesquely situated aerodrome, and picturesqueness and happy landings do not accord too well together. The latter call for a bleak blank plain, with lots of room and nothing in particular to admire. The charming wooded hill in the neighbourhood of Donibristle makes for whimsical down currents of air, and the aerodrome itself is not one of the largest. What there is of it is cut up considerably by the tail-skids of the heavy Horsleys. Moreover, if the machine on which you have come over has wheel brakes, let your pilot again be cautious. It is so tempting to put them on if the boundary hedge seems to be coming unpleasantly near, but if they make your wheels stick suddenly in a muddy, rutted surface, your propeller may find the ground quite as damaging as the hedge would have been. Used with due caution however, brakes will help avoid trouble.

Apart from its somewhat limited area and its truly rural surroundings, Donibristle is an admirable site for a coast defence squadron. It is within easy reach of Rosyth, and warships are constantly going up and down the Forth. Naturally, most of them have to run the gauntlet of the dummy torpedoes of 100 Squadron. That adds great interest to the life of the squadron, and it must be quite good fun for the Royal Navy, too. Take for example the little story told by our photographs. The cruiser HMS Champion is going down the Forth from Rosyth one morning on her lawful occasions. The naval authorities duly inform Wing Commander G S M Insall VC MC, who commands the station of Donibristle, and he arranges with Sqn Ldr L G le B Croke, the CO of 100, for a flight of Horsleys to go up and "take tea with her" as she goes. Up go the three great machines in formation, the Condor engines barking as birds of prey should do. From up above, the Forth makes a glorious sight with hills on both shores. To the south can be seen the castle rock of Edinburgh, once stormed by Robert Bruce's men and more recently bombed by a Zeppelin, and beyond it lies the small but quite imposing range of Pentland Hills. The Forth itself is dotted with picturesque rugged little islands, of which Inchkeith is the most important. To-day, however, there is a bit of "haar" about, and the camera does not do full justice to a fine landscape and seascape.



Three Hawker Horsleys over the Firth of Forth (Flight Photo.)

The quarry is easily spotted down below, and the Horsleys prepare for action. One passenger gazes down on the cruiser with grim satisfaction, recalling that he had once been seasick on the Champion and chuckling that he was now getting some of his own back. For photographic purposes it looks well for the whole flight to commence its dive in formation, but actually the three Horsleys break formation before commencing to attack. The anti-aircraft guns on the cruiser must be distracted as much as possible by attacks from different directions. After circling around to choose his position, each pilot pushes his stick forward and commences a headlong dive. That is quite a great experience for the passenger, though not at all of the same nature as his recollections of the Champion.



HMS Champion

It is no time for photography, however. The roomy back cockpit of the Horsley is too much like the proverbial drum on which a pea once found itself. Down they come from some 4,500 feet to 15 feet in about seven seconds - seven seconds full of glorious life. At 15 feet the machines flatten out, and for a brief, dangerous period the pilots hold them steady on their course while they take aim. They must not be higher up or the torpedoes will be broken by their fall into the water. Two machines are on one side of the ship and one on the other. The pilots work the levers as soon as they are satisfied with their aim, and the dummy torpedoes drop into the sea.



A Horsley after diving down to 15 feet above the surface discharges a dummy torpedo; the island of Inchkeith is in the background.

(RAF Official: Crown copyright reserved.)

Being real dummies, they do not run, and motor-boats from Donibristle dash out and pick them up. Theoretically HMS Champion has been reduced to a lot of yawning holes connected with bits of metal, and is now lying at the bottom of the Firth. At the same time, no doubt, the AA gunners on board are gleefully telling all and sundry how they simply riddled the Horsleys with shells before ever a mouldy was dropped. Then both sides go off and have lunch.

Matters would not be so simple in the "real thing." It is, in fact, not very easy to picture what the real thing will be like, from the torpedo-plane point of view. It may turn out that these craft will be chiefly

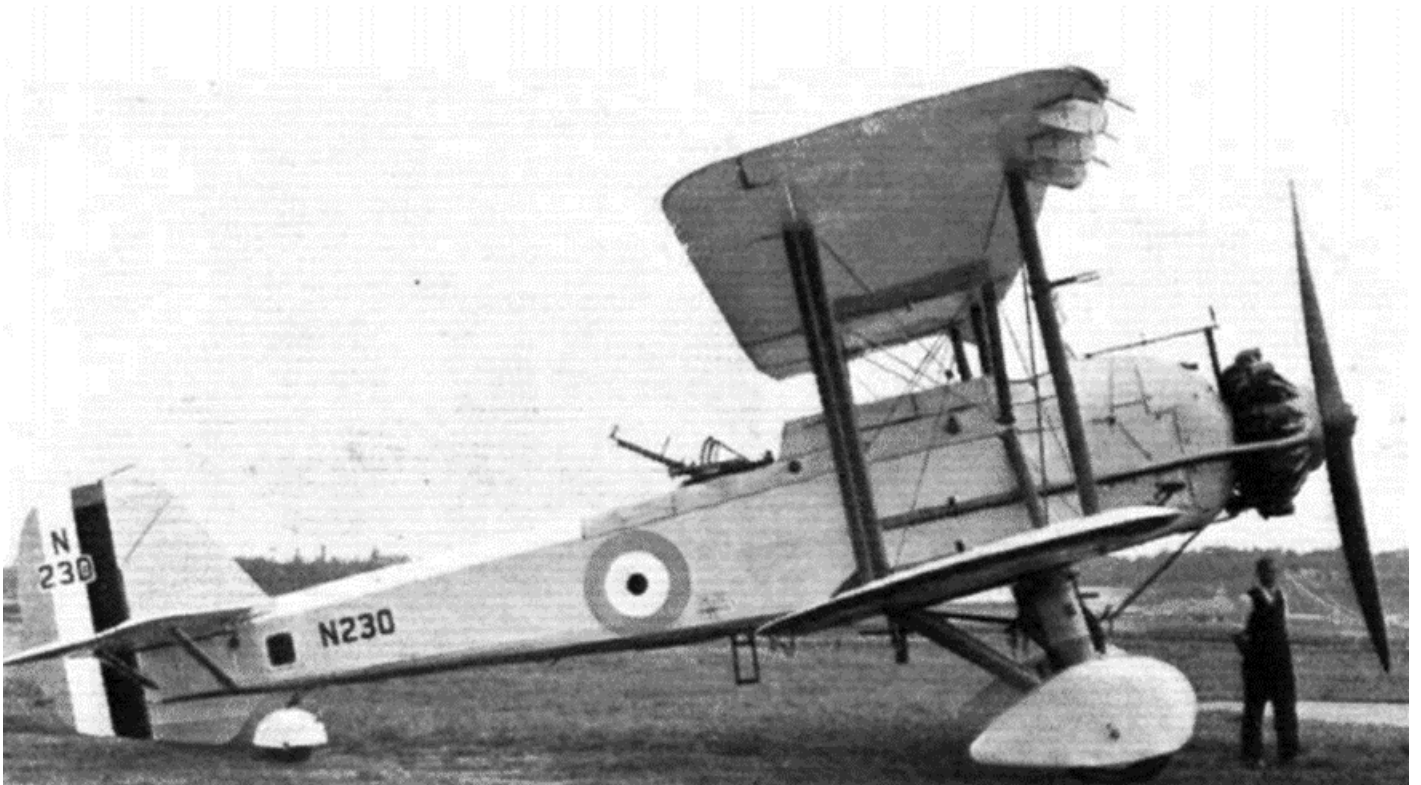
useful for attacks on fleets in harbour - if they can reach them; and on the other hand they may be able to cause serious embarrassment to fleets at sea. In all probability, the torpedo attack will be combined with a bombing attack, the former taking place shortly before the latter. Both 36 and 100 Squadrons are equipped and trained as bombers as well as torpedo-dropping units. Perhaps one flight of the squadron would go over the ships first at a great height and drop bombs. The bombs might do damage themselves, and in any case they would be likely to draw all eyes on the ships upwards. The muzzles of the guns would be likely to follow the eyes. That would be the moment for the torpedo-planes to deliver their attack. If they were seen during their dive, they would be in danger from anti-aircraft fire, as it is not easy for a pilot to manoeuvre his machine to the left or right during the dive, and so they would present a fairly steady moving target. But the most dangerous moment would be after flattening out when the pilots have to fly straight at 15 feet above the water as they aim. Incidentally, it is not too easy to maintain a level 15 feet altitude. If there seems any danger of flying into the sea, the nose is sure to be raised by an instinctive movement. If this is overdone, the machine will rise too high to allow of the torpedo being dropped without risk of its breaking up. But supposing the level height is maintained, this is the time when the machine presents the best target to the quick-firing guns. The moment the torpedo has been dropped, the pilot will naturally use all his wiles to escape.

It is sometimes suggested that smoke screens may be used to mask the approach of the torpedo-planes. Opinions seem to differ as to whether this would be good tactics or not. The smoke-layers might themselves suffer heavy casualties, the operation would certainly put all the gunners of the fleet on the 'qui vive', and then - after all - the wind might make the screen useless.

When attacking moving ships, the object of the torpedo planes is to make a ship turn. Once it has commenced to turn, say the pilots, it cannot get back on to its course in a hurry, and then it should be 'cold meat.' Therefore, it is good tactics to make a preliminary attack with the object of causing a ship to turn, and when that has been effected the main attack should be delivered. There are, in fact, so many considerations that it would be premature to say that torpedoes from

the air are considered a proved means of making a deadly attack on hostile ships. For that reason, perhaps, there is only one squadron in Great Britain and one overseas which has been given the task of experimenting with torpedoes, and it may also account for the omission of all mention of the torpedo from the description of 100 Squadron in the Air Force List. The Fleet Air Arm employs seven flights of torpedo bombers, and therefore may be more committed to the policy of using torpedoes from the air; but the circumstances of flights on a carrier and squadrons at a shore base are not identical.

During this summer, 100 Squadron is due to surrender its Horsleys and receive in exchange the Vickers Vildebeest with a Bristol Pegasus engine. The new machine will have a much better performance, and will be an improvement in every way. Pilots who have been flying Horsleys for some time get very fond of that machine, which is really a very fine aeroplane, and are sorry when they have to give it up. The change-over to an air-cooled engine is a very radical change too, and the pilots will have to get accustomed to the absence of a long stretch of something in front of them. Pilots, however, are adaptable people.



Vickers Vildebeest with which 100 Squadron is to be re-equipped this summer. (Flight Photo.)

The Great Pretenders

Extracts from an article by Alan Warnes who went behind the scenes with 100 Squadron in January before flying in a multi-mission sortie.

(Reproduced from "Air Forces Monthly" dated April 2016)

You would be hard pushed to find a unit flying such diverse roles as 100 Squadron and its Hawk T1As. Based at RAF Leeming, North Yorkshire since 1995, its pilots, who have flown frontline fighters, use their experience to hone the air combat skills of RAF Typhoon aircrew.

To do so, they keep well versed in the tactics of potential foes like the Su-27/30/35 and the missiles these Russian built fighters might use if confronted and put that knowledge into action while flying their Hawks against the RAF's top fighter.

Alternatively, they might simulate a Tornado GR4 for close air support (CAS) training or work with an Aerospace Battle Manager (formerly known as Fighter Controller) and vector their Hawks onto another airborne target. It is not boring!

RAF's Aggressors

OC 100 Sqn, Wg Cdr Andy Wright, summed up his unit's primary tasking: "We exist to provide operational support to as many services as possible across the joint ops world – we're the RAF's aggressor unit. "We have six main roles – air defence support, close air support training, exercises, trials work and domestic training, as well as engagement and influence. "Our core work is basic air defence support with the RAF's Typhoons. Red Air covers the basic air combat right through to complex multi-element international exercises."

Designed in the 1970s, the Hawk T1 is not a modern aircraft. While the T1A version may be weapons capable, fitted with a RAIDS (Rangeless Airborne Instrumentation Debriefing System) pod, and carry AIM-9 infrared (IR) acquisition rounds, the downside is it does not have radar or cutting edge IR missiles. Nor does it have a HUD (head-up display), GPWS (ground proximity warning system), multi-function displays (MFDs) or traffic alert and collision avoidance system (TCAS), air-to-air TACAN (tactical air navigation) system or a RADALT (radar altimeter).



But what the 100 Sqn jet lacks, the pilots more than make up for with their experience and skill sets to test and train the best fighter pilots in the world.

“Everything we do sees us bridge the BAe Hawk T1A’s capability gaps with conceptual work” explains Wg Cdr Wright.

“We emulate specific weapons systems. We think very much like a potential adversary rather than the Typhoon pilot.”

“We remember the ranges of specific air to air missiles (AAMs), how long the system flies, counter measures for both IR and radar missiles. We pretend we’re flying the enemy jet. We emulate what that aircraft can do based on what the pilot can do.”

This ensures those flying the Typhoon know they are in for a fight. No 100 Sqn will use the tactics of a potential adversary like the Su-27 Flanker – equipped with medium to long range AA-10 Alamo or short range AA-11 Archer missiles – and the Typhoon pilots will have to try to overcome their opposite number to make the ‘kill’.

The Hawk pilots study the attributes of foreign adversaries the Typhoon might come up against one day. They need to know about the air defence systems – specific weapons – of friend or foe. And they need to be aware of air to air rules for air combat and its techniques. Not surprisingly, the station intelligence office regularly briefs pilots on the latest knowledge. “We’re very much intelligence driven”, notes Wg Cdr Wright. Surprisingly there is no Intel Officer on the unit but the OC admitted it was one of his top priorities.

For air combat work, the Hawks are only fitted with RAIDS pods to ensure compatibility with Typhoons and Tornados during an air battle. This enables personnel to watch recordings of an air battle during the debrief. There are no disagreements over the outcome, unlike the old days – all manoeuvres are recorded.

The author witnessed four Hawks the previous day leaving Leeming to carry out 2v2 air combat as part of a pilot working up his air defence qualifications. All the jets were fitted with RAIDS pods. While they provide an accurate recording of what goes on in the air, they are a bit of a burden because their drag restricts the 'g' and reduces the Hawk's speed. "With a RAIDS on the jet, it can burn up to 20% more fuel so we must be selective about which missions they are used for" says the OC.



"We're the only regular unit providing this service in the UK. Although the Royal Navy's 736 Naval Aviation Squadron Hawks (at Culdrose) are light aggressors, they're used mainly to support the Royal Navy's fleet of warships. In fact, it's a role not common in Europe either: the French Air Force EC 2/2 Alphajets have an aggressor role but they're not as busy as us. In the USA, the 64th AGRS (Aggressor Squadron) at Nellis AFB, Nevada, is the USAF's main aggressor unit, but it doesn't have the breadth of missions we have – they concentrate on air-to-air. There are of course many civilian contractors (here) that do the work, including Cobham Aviation Services at Bournemouth and Discovery Aviation working out of Germany flying A-4s."

And there's more

The squadron pilots will be away for two months as the unit is committed overseas for 18 weeks this year and will work for approximately 20 weekends. In the UK it is usually a Joint Warrior or Cobra Warrior (formerly CQWI).

Last October, 100 Sqn flew its Hawk T1As in the Tactical Leadership Programme (TLP) held in Spain. TLP is a large force exercise supporting the needs of NATO and usually includes aggressors for air defence training. "While it's great flying, large force exercises only represented about 10% of our work in the last financial year although this is set to double in 2016/17" says Wg Cdr Wright. "We also support Joint Helicopter Command and participated in the EHTI (European Helicopter Tactics Instruction) exercise up at Vidsel in northern Sweden last year. Working with helicopters provides their aircrews with knowledge and experience on how to defend themselves against fighters. We look on this as high tariff (level of difficulty) work as is working with Tornados and electronic warfare. The School of Aerospace Battle Management (formerly the Fighter Controllers School) also uses our Hawks which we look on as low tariff aggressor work."

Although the squadron is not specifically responsible for initial Joint Tactical Air Controller (JTAC) training, it does conduct post graduate air support during combat readiness work-ups. It is what they know as pre-deployment work and during Operation Herrick they did a lot. This would have included dropping 'hot' weapons which is a NATO requirement because JTACs need to experience working with an aircraft to attack enemy positions. "For this we would fly out to the Air Weapons Range (AWR) where the JTACS are located and go through a normal CAS Control, resulting in the Hawk dropping blue 3 kg weapons", says Wg Cdr Wright.

Another role is trials support with 41 (Tactical Evaluation) Sqn at RAF Coningsby which uses 100 Sqn for air-to-air trials, Storm Shadow and radar work in the UK. The Hawks may act as chase planes recording the action.

Engagement and influence duties involves groups and individuals observing frontline ops, the squadron showing people round, such as senior civil servants, schoolchildren, air cadets, police and members of

the CAA and HM Coastguard. Funeral flypasts are also among 100 Sqn duties.

The team

“We need experienced pilots because they’ll be involved in air-combat scenarios such a four-ship Hawk formation taking on an eight shop of Typhoons”, says 100 Sqn’s OC. “What we look for in a pilot is driven by operations; and our limitations. The aviator must be a single-seat pilot, fairly mature and be able to fly aircraft with a basic avionics suite i.e. no computerised systems.”

Due to the squadron’s mix of roles, pilots come from both strike and air defence worlds. The most junior pilot is a third ‘tourist’ (i.e. on their third flying post) which, according to Wg Cdr Wright, is not unusual.



“There are 17 pilots here. We should have 22 but it’s unlikely to happen because of the requirements of the front line and QFI training systems. We have eight uniformed support staff and 65 civilian contractors working with Babcock who ensure our Hawk T1s are serviceable to fly. They provide an excellent service. We’re a ‘whole force’ with personnel from all three services as well as reservists and civilians. The close air support training is not keeping the unit as busy as it was when Army units were deploying to Afghanistan. This is high priority work to support AIRLAND integration and we’re partnered with the Army’s Royal Lancers on this. We’re not doing as much as we were with the Army

now as the Afghanistan campaign is over but this has been offset by our increased work with European partners. This financial year we've been governed by Tornado GR Force but, on April 1, we'll move under the responsibility of the Typhoon Force Commander. It makes sense because we do most of the work with the Typhoon – they're our main customer."

The future

The MOD is currently setting out the provisions for an aggressor based solution for the future as part of an air support to defence operational training (ASDOT) contract looking at how to integrate synthetic training with the flying side of the military. The new aggressor system should be introduced in the early 2020s although the T1A is likely to run on to 2027. When AVM Gary Waterfall spoke at the Manama Air Power Conference in Bahrain in January, he referred to ASDOT which will ultimately change the way 100 Sqn works. The future dynamics of 100 Sqn look set to change drastically with much of its work being replaced by synthetics. By hooking up the simulators as they have done at the RAF Waddington based Air Battlespace Training Centre, Battle Space Managers and JTACs will control F35s and Typhoons synthetically leaving 100 Sqn to concentrate solely on being aggressors for the seat of the pants flying.



100 Squadron at Donibristle in 1933 - note the dog!