



THE HAWKER ASSOCIATION

NEWSLETTER 45 - Summer 2016

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EDITORIAL

Reported below is this year's Annual General Meeting at which Ambrose Barber stated that he would remain as **Chairman** of the Association for this year but would retire in 2017. Ambrose has made a fine Chairman and we will miss him but a new Chairman will have to be found. So, the Committee is looking for volunteers. Please consider whether you would like the honour of replacing Ambrose at next year's AGM or, if you have any suggestions for a new Chairman, please let the Committee know via the Editor.

Please read and respond to Richard Cannon's request below regarding **e-mail addresses**. This is an important functional issue for the association. Thank you.

Also, please send stories of your time at 'Hawkers' to:

The Editor, Chris Farara, 24 Guildown Road, Guildford, Surrey, GU2 4EN,
tel 01483 825955, e-mail cjfarara@ntlworld.com.

Some 90 Members have not paid their current subscriptions! Your names are in bold on the back page. Please check Newsletter 45 to see if you still owe for 2015 - 2016.

PROGRAMME FOR 2016

Wednesday 14 th September	Social and video
Wednesday 21 st September	Visit to Weald Aviation
Wednesday 12 th October	Born into Aviation - Gp Capt Peter Bedford .
Wednesday 9 th November	So What Have We Done Since 1866? - Sir Donald Spiers .
Wednesday 14 th December	Christmas lunch

PROGRAMME FOR 2017

Wednesday 11 th January	Quiz
Wednesday 8 th February	F-105 Thunderchief - Gp Capt Jock Heron

Peter Bedford is Bill Bedford's son with a long and varied RAF career including air transport, **Sir Donald Spiers** was Controller of Aircraft in the MoD and President of the Royal Aeronautical Society and **Jock Heron** was an RAF exchange pilot with the USAF and was with the Harriers in Germany.

The **visit** this year is planned for **Weald Aviation** where we will see work being done on a Sea Fury T20 and a Tempest as well as other aircraft. A coach will depart from the Hawker Centre at 9.30. Please contact Frank Rainsborough by telephone on 01784 247888 or by e-mail at frank@rainsborough.me.uk for details and booking..

Unless stated otherwise, meetings are at the 'YMCA Hawker Centre', Kingston - the old Sports & Social Club - and start at 2.00 pm. Lunch and drinks are available beforehand, tea afterwards, and there is a large, free car park.

SEPTEMBER MEETING

The September meeting is going to be another of the popular events where members bring along photographs, papers and memorabilia to show each other. Please bring yours. As a rather special example, Brian Indge is going to bring his unique photograph albums of Ground Test Services test rigs.

The Kingston Aviation Centenary Project team will be there to scan photographs for their digital archive. In preparation for a special exhibition next year to commemorate 100 years since the Richmond Road factory was built and twenty five years since it closed, they are keen to get images of inside the factory showing offices, workplaces and manufacturing. If you have some photos and cannot get along to the meeting David Hassard would be delighted to receive scans. Please send them to hassards@talktalk.net.

E-MAIL ADDRESSES AND THE HAWKER ASSOCIATION

Our Webmaster, Richard Cannon writes...

The occasional email is excellent for sending news to members quickly, with no cost and minimum effort. E-mail addresses are never given to other people and members never see who else has received an e-mail, except for small groups like the committee.

If someone asks to contact a Member an e-mail reply is sent to the sender with a blind copy to the Member so

his email address isn't visible. The Member can then decide if he wishes to reply to the sender and so pass on his email address

I may need to change to another service provider for sending e-mails to all Members and some providers require everyone in the list to have explicitly agreed to being in the distribution list; just giving an e-mail address to the Webmaster isn't enough.

Would you please send an email to webmaster@hawkerassociation.org.uk, with the subject "**Hawker Association e-mail continue**" saying that you would like your e-mail address to be held by the Hawker Association and agree that it be included in the Hawker Association Members' distribution list.

Also if you don't currently receive occasional e-mails from the Hawker Association and would like to, please send a similar email with the subject "**Hawker Association e-mail add**". At the moment the Association has some 380 Members but only holds 236 e-mail addresses.

ANNUAL GENERAL MEETING - 13th APRIL 2016

CHAIRMAN'S REPORT

After thanking Members for attending Chairman Ambrose Barber noted that an interesting programme of speakers had been arranged covering events from our careers at Hawker as well as more contemporary subjects, and that the barbecue and Christmas lunch had been well attended and clearly enjoyed. Membership had remained steady and some fifteen Hawker enthusiasts had joined since the rule requiring members to have been employed by Hawker had been relaxed. During the year the Kingston Aviation Heritage Trust had submitted its final report to the Charity Commission and the Kingston Aviation Centenary Project had continued to raise awareness of the Royal Borough's aviation industry achievements. Members involved in this endeavour were to be congratulated. The Chairman finally expressed his grateful thanks to the committee members for their work during the year.

SECRETARY'S REPORT

Barry Pegram summarised the membership situation: membership at the time of the AGM was 377, close to last year's 379. This included 17 overseas, 55 ladies and 15 non-employees. There had, sadly, been 9 losses. There had been six talks (Chris Roberts, Mike Salisbury, Philip Jarrett, Lt Simon Wilson RN, David Hassard and Graham Cooke GAvA. The annual visit had been to RAF Northolt and RAF Uxbridge and Chris Farara had presented the new year quiz. The most popular talk had been Chris Roberts's and the largest attendance had been to the Christmas lunch.

TREASURER'S REPORT

Martin Pennell stated that the balance at the end of the year was greater than at the beginning showing that the Association's operations are sustainable at the current level of income and expenditure, and that there was no need to increase the annual subscription above the current £5. The main items of net expenditure are stationery and postage, hire of the venue and insurance. Subscriptions raised £1658 and the raffle £596.

ELECTIONS

Committee members due for re-election were re-elected and there were no new candidates. The Chairman wished to serve for only one more year.

AIRCRAFT NEWS

Typhoon - We have heard from Ian Slater of Typhoon Legacy that Typhoon IB, JP843, is being recreated in British Columbia, Canada, using Typhoon parts, original drawings and reverse engineering. It will be an airworthy machine in flying condition. Go to www.typhoonlegacy.com for pictures, information and the opportunity to make a donation to the costs. Ian can be contacted on ian@typhoonlegacy.com.

Hurricane - The Lone Star Flight Museum's Canadian Hurricane XII has been bought by a UK owner and will come to the UK from Galveston. At Hawker Restorations of Lavenham, near Ipswich, the restoration of Hurricane I P2902, recovered from the English Channel in 1988, is nearing completion.

Fury - Iraqi Fury G-CBEL/VH-SFW is returning to the UK from Australia.

INDIAN NAVY SEA HARRIERS RETIRE

The Indian Navy formally decommissioned its Sea Harrier FRS51 fighters and T Mk 60 trainers at a formal ceremony at INS Hansa in Dabolim, Goa.

The phasing out of the Sea Harrier with Indian Naval Air Squadron 300 (INAS 300), 'White Tigers', coincided with the induction of the MiG-29K carrier borne strike aircraft into the Squadron. The type's final appearance in Indian skies saw two Sea Harriers perform a flying display with two MiG-29Ks.

The Indian Navy decided to acquire the Sea Harrier FRS Mk 51 in 1979, placing orders for six single seat fighters and two T Mk 60 trainers. The type replaced the Hawker Sea Hawk, which was phased out in 1978. The arrival of V/STOL capability was heralded in India when the first three Sea Harriers landed at Dabolim on 16 December 1983. This was followed by the first deck landing on the carrier, INS Vikrant, on 20 Dec 1983 and the arrival of the first

Harrier T Mk 60 trainer, on 29 March 1984.

The Indian Navy operated its Sea Harriers for a full decade after the Royal Navy retired the type in 2006. The Sea Harrier served for 33 years in the Indian Navy, flying from the aircraft carriers INS Vikrant and INS Viraat in the fleet air defence role. Surviving aircraft will be distributed to museums.

The ageing Sea Harriers were getting increasingly hard to maintain and flew for the last time on 6th March from INS Viraat, (previously HMS Hermes) also to be retired this year. The Sea Harriers were modernised by Hindustan Aeronautics as part of the Limited Upgrade Sea Harrier (LUSH) programme to carry Israeli Derby BVR missiles, ELTA EL/M-2032 multimode radars and a datalink.

(Information via Bob Bounden and Mike Pryce)

LOST AND FOUND

Thanks to John Farley for spotting this...

Yorkshire Evening Post Thursday 1st September 1938.

“PLANE WRECKAGE FOUND BY NORTH SEA TRAWLER

The North Shields steam trawler, General Joffre, belonging Alderman Richard Irvln of North Shields, arrived in port last night bearing part of the wreckage of an aeroplane which had been picked up on Tuesday, 25 miles east by north of St. Abb's Head, Berwickshire. On the wreckage was a brass plate bearing the following details:

The H. G Hawker Eng Company Ltd. Serial Number 41 9994. Drawing Number B35584 B. K2830.

Date 7 12 32. HB830.

The skipper said he took the brass plate from the cockpit and permitted the main part the wreckage to go back into the sea.”

Editor's note - K2830 was, according to Frank Mason, a Hawker Nimrod I of No. 800 Squadron which crashed during a deck landing on HMS Courageous on 25th October 1936.

ALL SHAPES AND SIZES

On February 10th David Hassard delivered a ‘tour de force’ of an illustrated talk covering, as the sub-title said “the extraordinary variety of light aircraft in the British Isles”. Members were treated to photographs, all taken by the speaker, of some three hundred aeroplanes of “all shapes and sizes”.

As a schoolboy David was taken, on his ninth birthday by his father, who worked for de Havilland, to the 1951 King's Cup air race at Hatfield. Sadly the race was fogged out but the day left David with his first memory of an aeroplane, the Comper Swift, G-ABUS. Later living near Christchurch airfield, as his father had been transferred from Hatfield, with its own flying club, David began to spend time there and soon became, like many in the audience, a fully fledged aero-spotter. Spending his pocket money on film for his father's camera he started to photograph aeroplanes. Sometimes staying with his grandmother in Old Welwyn in Hertfordshire, travelling by train and bicycle, he became familiar with many aerodromes in the south of England with evocative names such as Stapleford Tawney, Panshangar, Southend, Stanstead, Hurn, Luton, Thrupton, White Waltham, Portsmouth and Shoreham.

Soon real life intervened and David became an apprentice at Westlands, got married and started a successful career with the company. However, in 1985 he discovered Popham and found some 150 light aircraft there including some old friends, which rekindled his interest. David showed a charming watercolour painting he did of the scene. There were no comprehensive light aircraft recognition books available, just registers, so he decided to try to photograph examples of every type of light aircraft on the UK register.

Some of the fruits of this endeavour are what David showed us in his talk; some 300 photographs and this, he said, was less than half of the complete collection. Your Editor, like most of the audience I am sure, was amazed at the variety of configurations, classes and types that are out there to be seen, many with innovative layouts and features. He showed us low, mid, shoulder, high, parasol and flexible wings of many plan forms; tailed, tail-less, canards and tandems; tractors and pushers with in-line upright, inverted or flat or radial engines; wood, metal, glass and carbon reinforced plastic airframes, fabric, plywood and metal skinned, or with unskinned fuselages; tail wheels, tail skids, tricycles and reversed tricycles; one, two and four seaters, side-by-side and tandem; factory built production aeroplanes; home-builts from kits or plans, and own designs; vintage aircraft and modern; scaled down military and production types; and many permutations of the above. They were designed or built world-wide including in the UK, USA, Canada, Australia, France, Germany, Austria, Czechoslovakia, Italy, Holland, Sweden, Russia, India and Japan. Light aviation is truly international.

As David said, we who live in the environs of London get a false impression of light aviation because of the large areas of controlled air space, but get away and you see that the movement is thriving. For example there are 2,000 flex-wing microlights in the UK. The Civil Aviation Authority (CAA) has delegated airworthiness services for light aviation to the Light Aircraft Association (LAA) previously called the Popular Flying Association (PFA). A sub-set with less stringent regulation is Microlights which must weigh less than 450 kg and have a stalling speed of less than 36

mph. Aircraft weighing less than 115kg are classified as Deregulated and require no approvals or licences at all - just design it, build it and fly it! (but not over built up areas).

AVIATION ART AND LIFE IN THE RAF

On March 9th Graham Cooke spoke to Members on this subject. During his talk he summarised his careers in the RAF and in the Guild of Aviation Artists. After school in the Isle of Wight Graham joined the Royal Air Force in 1962 as an Apprentice Airframe Fitter at RAF Halton. He was commissioned in 1979 as an Engineering Officer, subsequently specialising in weapons engineering. He was OC Armament Engineering Squadron at RAF Marham at the onset of the 1991 Gulf War and deployed to Tabuk, Saudi Arabia, as a member of the advanced party and remained there until the end of the conflict. By this time, always interested in art, he had taken up painting in oils and on his return from the Gulf painted a number of pictures, one of which won the 1991 Armed Forces Art Society prize. In December 1998 Graham was detached to Ali Al Salem, Kuwait, during Operation Desert Fox. A picture he painted there was donated to the Royal Air Force Club in London together with another painting of Tornado aircraft flying over RAF Cottesmore. Twelve of Graham's paintings have been made into limited edition prints. The sales of prints have raised over £14,000 for RAF charities and eighteen of his original paintings hang in RAF Messes and crew rooms.

Graham joined the Guild of Aviation Artists in 1991 and served as Guild Vice-Chairman before retiring from the RAF after thirty nine years in 2001. He continued his active involvement with the Guild, organised the annual Submission Day for ten years and was promoted to Full Member of which there are only sixty five. Graham is the current Chairman of the Guild. He said he owes his success as a professional painter to the help and mentoring of the late Frank Wootton who was the Founder President of the Guild. Frank was a shy man who worked in a collar and tie and was always willing to help aspiring painters. Graham still has Frank's book, 'How to Draw Aircraft'.

It is not possible to do justice to Graham's talk in a summary. It was extemporized in a most entertaining way in his personal style with anecdotes which have to be heard to be fully appreciated. His story of the Flight Sergeant demonstrating to a group of Halton apprentices how to launch a Thunderflash with a Very pistol that didn't fire and forgetting, as he tried to throw the pistol-cum-Thunderflash away, that it was attached to him by a lanyard, was worthy of Gerard Hoffnung and had the audience aching with laughter. Those who were present will also remember the West Freugh Hotel parrot and the billet orderly stories.

On painting techniques Graham explained some of the rules of composition that are no longer taught in art schools; the rule of thirds which give the four points of interest, and groupings of threes and fives. Sometimes he uses model aircraft suspended in front of a background and illuminated from the appropriate direction to achieve a realistic impression and to get the complex shadows and highlights correct. He also passed on a tip he had picked up from 'U Tube' for achieving waves on water realistically 'frozen'. The professional artist has, he said, to use time-saving methods as, unlike the amateur painter, he does not have the luxury of endless time. Throughout Graham illustrated his talk with paintings, all oils on canvas, that he had brought along. He said that he is usually working on half a dozen paintings at a time so that as one dries he can move on to work on another.

The vote of thanks for this very special talk was given by David Hassard.

COMBAT OPERATIONS IN THE GR7

RAF Harrier pilot Mark Zanker spoke to the Association on May 11th about his experiences flying the Harrier GR7 in many theatres of operation. The 19 year old Mark joined the RAF in 1981 and trained as a fast jet pilot. His first tour was on Jaguars at Coltishall after which he transferred to Harrier GR3s at Gutersloh. After accumulating over 4000 hours in fast jets Mark left the RAF in 2000 to become an airline pilot. He is now a captain for Cathay Pacific flying Boeing 747s.

Muslim Kosovo, part of Serbia about half the size of Wales, wanted independence and the Kosovo Liberation Army fought to get it resulting in a fierce Serbian response. Attempts at a diplomatic solution failed so NATO intervened on humanitarian grounds in 1999, supporting the KLA with air power. At Wittering the GR7s prepared to go to Gioia del Colle in the 'heel' of Italy which would be the NATO base for 'Allied Force' attacks. Paveway II laser guided bombs (LGBs) were to be used in conjunction with the Ferranti thermal imaging airborne laser designator (TIALD) pod with a TV sensor. Mark did work-up trials at the Wainfleet and Aberporth ranges.

The first attack after arrival at Gioia, after just one hour's preparation with a secret briefing on the position of Serbian forces, was to be by six GR7s plus two airborne spares on Serbian army barracks near Pristina. Prime Minister Blair had instructed that if there was any doubt weapons were not to be dropped. Air to air refuelling was carried out with VC.10s in total darkness without radio contact over the Adriatic using night vision goggles (NVGs), forward looking infrared (FLIR) and the 'traffic lights' on the tankers. The fighter escort of Royal Netherlands Air Force F-16s reported high speed aircraft approaching and downed a Serbian MiG 29 with an advanced medium range air-to-air missile (AMRAAM). Enemy air defence radars were suppressed by USAF A-6s using high speed anti-radiation missiles (HARMs). The plan was for three GR7s to locate and attack the target with TIALD with the other three looking out for

threats. The target was seen on the FLIR display in the HUD and NVGs but certain identification was not possible - so no attack.

In the first week of the campaign all operations were at night but by the second week the Serbian air force fighters and surface to air missiles (SAMs) had been neutralised so daylight operations commenced although portable SAMs and guns were still active. The Harriers also carried the long range optical (LOROP) reconnaissance pod to search for military activity. After quick processing and interpretation the information was passed to the USAF for A-10 attacks.

The GR7s used their LGB-TIALD combination to attack barracks, bridges, Bosnian snipers killing refugees and to provide air cover for the British Army. For the latter 24 hour cover was required, often flying low under cloud cover operating with forward air controllers (FACs). The air campaign lasted 77 days during which Mark flew forty operational sorties.

After a video and an interesting questions and answers session the vote of thanks for this detailed first hand talk packed with operational details was given by Frank Rainsborough.

Editor's note - see NL.44 for more of Mark's experiences in the RAF.

THE F-35B LIGHTNING

On July 13th Group captain 'Cab' Townsend, Lightning Deputy Force Commander, spoke to members about the RAF F-35B programme. He has a Harrier background flying GR7s at Wittering, Laarbruch etc, was a qualified Weapons Instructor and took part in the 1998 Balkans campaign, the 2005 Iraq war and flew from HMS Illustrious in the Afghan war. He was also CO of No.1 F Squadron (Harrier GR7) and No. 3 Squadron (Typhoon). This experience ideally fitted him for his position as Gp Capt Lightning, the Deputy Force Commander with the responsibility of generating a war fighting force.

People always want to know the origin of 'Cab'. Flying a GR7 from Laarbruch he was learning to flight refuel. His first 'prod' went perfectly but his second attempt was too slow and the basket was deflected and hit the Harrier's canopy completely shattering it, turning the aircraft into an open model or cabriolet. After landing safely at Conningsby the name 'Cab' was applied and stuck.

Like Joint Force Harrier ("not a marriage made in heaven", commented Cab) the Lightning will also be operated as a joint RAF-RN force. The UK chose the ASTOVL F-35B to operate from the new Queen Elizabeth class carriers but David Cameron was advised that, in his government strategic defence review, he should not only withdraw the Harriers and the Ark Royal but also to change from the F-35B to the ship-borne F-35C which needed catapults and arrester gear to be installed in the carriers. However, the necessary electro-magnetic catapult (the QEs have no steam for traditional catapults) had been neither designed nor even demonstrated as feasible and would have been ruinously expensive. Consequently after a very costly two year hiatus the F-35B requirement was reinstated. This was a sensible decision as STOVL had been proven to be essential, not only on Illustrious and Ark Royal, but also at Kandahar in Afghanistan and other areas with short runways.

The UK is a 'first tier' partner with a quarter share in the F-35 design and manufacturing programme which is centred at Lockheed-Martin's Fort Worth facility at Dallas, Texas. BAE Systems contributed very significantly to the design and development programme and 15% of each \$100m aircraft will be UK made, BAES building all rear fuselages and tail units. Rolls-Royce provide the lift fan and other VSTOL items, Martin Baker supply the seats and General Electric, Selex and Suntec are also suppliers.

The UK F-35 team is embedded with the US services in America. There are three RAF pilots, sixty support personnel and three UK aircraft at Edwards Air Force Base with No.17 Reserve Squadron on Operational Test and Evaluation duties. There are UK personnel at Lockheed Martin in Fort Worth, Texas, with its one mile long production line and in the Joint Programme Office in Washington DC. RAF and RN pilots are participating in test flying at Naval Air Station (NAS) Patuxent River, Maryland, and at Marine Corps Air Station (MCAS), Beaufort, South Carolina, with USMC squadron VMFAT 501 where there are fifty 617 Squadron RAF and RN personnel, pilots and engineers. At Eglin Air Force Base in the Mission Reprogramming office UK personnel prepares the software for the UK mission systems and weapons. The F-35 is a 'fifth generation' fighter. The first generation was the early jets, the second was supersonic with radar and missile armament, the third was multi-role, the fourth had advanced avionics and early stealth and the fifth introduced 'daily use' stealth and multiple sensors whose outputs are fused to give the pilot easily absorbed information.

The F-35 has one wide, touch screen to which the 'fusion engine' provides a single tactical display derived from the various sensors including a 'synthetic aperture' radar ("the best radar in the world") capable of providing a detailed picture from far off. The information is passed amongst all the F-35s in an attack group and also back to their home carrier. 'Daily use' stealth implies that the stealth technologies employed in the F-35 (and F-22) are far more durable than earlier aircraft (F-117, B-2). Nevertheless at RAF Marham there will be a large facility for checking the stealth characteristics of repaired aircraft.

Fourteen countries are in the F-35 programme including: USA, UK, Norway, Australia, Italy, Netherlands, Canada, Turkey, and Denmark. The price per aircraft quoted by Lockheed Martin is \$100 million, similar, said the speaker, to the Typhoon. There are 200 aircraft currently flying. The UK has five at present, all operating in the US. In the UK 617 squadron will form at RAF Marham, which is undergoing £500k infrastructure and security update, in 2018 followed by 809 squadron in 2023. The Operational Conversion Unit will form in 2019. All UK squadrons will be joint RAF -RN units. Initial Operational Clearance (IOC) is planned for 2018-19, IOCM (maritime), for carrier operations for 2020/21 and FOC (full) for 2023. By 2017 the UK will have 14 aircraft and 48 by 2024 with a total government authorised buy of 138. The 65,000 ton RN Queen Elizabeth class carriers are the only ones in the world purpose-built for the F-35 and are, said the speaker, “the envy of the US”.

The vote of thanks for this thorough and interesting talk was given by Frank Rainsborough who, commenting on the speakers youthful looks, said he thought it was policemen who got younger as one got older but clearly the same applies to Wing Commanders!

OVERSEAS FOR ‘HAWKER’

Keith Hobbs remembers some of his overseas trips.....

They say join the Navy and see the World. I joined Hawker and saw a good part of it!

1. USA - Harrier

My first trip overseas was to Washington at the start of the US Harrier Programme. A party of us from Kingston and Dunsfold headed to the Pentagon to outline and agree the weapons clearance flight test programmes required by the US Authorities for their choice of stores. This started with a presentation by Chris Farara on our proposals for the programme followed by round table discussions with our American counterparts. Later that week a visit to the Naval Air Test Center at Patuxent River was organised. This visit was hosted by Colonel Grey of the USMC and included a tour of their armament storage area to view the weapons we would be handling. One memory of this was our guide, patting a particular weapon (which shall remain nameless) remarking that this was one the President would no longer allow them to use.

2. Egypt - Hawk

My next visit abroad was to Egypt, led by Colin Chandler, with the primary purpose of exploring the possibility of a Hawk sale. In those days the normal route to Cairo was via Beirut in the Lebanon. We departed from Heathrow in a VC10, meeting up with Jonny Johnson from Sales, staying overnight in Beirut and travelling next day on an MEA flight to Cairo. The main discussions on this trip were held in the Ministry of War Production and included proposals for limited manufacture of the aircraft in-country. Bert Tagg, the Head of Production Engineering at Kingston and John Gale, Product Support Manager, Dunsfold, were the mainstays for this part of our presentation.

As a follow-on from this, the Egyptians arranged a visit to their Air Force Base at Helwan, several miles south of Cairo. Here we saw a hangar full of MiG 21s all in various states of overhaul. The site had the potential for Hawk manufacture but the subject of possible HSA assistance on the upkeep of MiGs was raised. My abiding memory of this trip was of being caught out by the room service staff at Shepherds Hotel where we were staying. I had been warned not to drink the local water and so ordered bottled water from my hotel room. It transpired that they were taking away my empty bottles, filling them with tap water, returning them to my room, opening them and filling a glass for me. I spent three days in bed feeling somewhat sorry for myself. I was young and learnt the hard way. The bitter pill was they charged me for the service!

I had another visit to Cairo some weeks later to progress matters. On this visit Len Woodward took care of the manufacturing aspects and because of my previous experience we stayed at the Hilton. The MiG aspect led to a contract for us to supply parts and support to the Egyptian Air Force and was followed by the visit of a supplier team headed by Maurice Lomas. An in-country support team was set up at Helwan. It included Product Support representatives, Quality Assurance involvement and a liaison arrangement with HSA’s Purchasing Organisation. I recall that one of the team members was Rory Quigley from the Programme Control organisation.

3. Finland - Hawk

The country I visited the most often was Finland. The first visit was before contract signature with a team again headed by Colin Chandler. Its purpose was to agree the top level framework of the contract prior to detailed discussion taking place at Kingston between their Air Force’s engineering officers and our specialists. We were met at Helsinki Airport by the HSA agent, Bjorn Schonberg of Machinery Oy, and were taken to our hotel where we spent the following week hammering out the details. Reg Gearing, our Contracts Manager, had the task of drawing up the contract and he was supported on the design, production and support aspects of the programme by Gordon Hodson, Bert Tagg and John Gale. The scope of the discussions covered the standard of aircraft to be supplied together with details of the equipment fit required by the Finnish Air Force (this included items the Finns would purchase themselves and provide to HSA), the amount of manufacturing work to be undertaken in Finland together our willingness to provide the jigs, tools, parts and data needed for their manufacture, and the training needed for both ground crew and aircrew. There were also separate

commercial discussions which I was not privy to. It was a very busy and hectic week with the Finnish Air Force and their government officials.

The visit ended in true Finnish style with a sauna for all who were involved during the week of discussions. This turned out to be a feature of most of our subsequent visits. It was not my idea of fun, sitting in a chamber heated to 110° C in ones birthday suit followed by a jump into the swimming pool. It brought us all down to the same level with CMC surprisingly looking no different to the remainder of us! Later visits led to saunas at the lakeside followed by a pontoon run and a dip in the lake. At next day's meetings you felt insect bites in the most unusual places.

Shortly after contract signature a visit was needed to establish and agree the best way of translating our publications into the Finnish language together with the subsequent type setting and printing. To this end I set off with Pat Finnigan from Technical Publications and Barry Brown from the Purchasing Department print room for a tour of various printing establishments around Finland. We were accompanied by a member of the Finnish Air Force to act as our interpreter and overseer. This involved visits to Tampere, Lathi, Kuopio, Helsinki and Jyväskylä. The travelling by car was interesting but led to long days due to the distances involved. The outcome was that the Finnish Air Force would do the translation, because of the technical content of the manuals, with printing undertaken at one of the printers we visited.

Once the main contract was in full swing we had quarterly progress meetings with the customer alternating between Kingston and Jyväskylä. My first of such meetings was in mid-winter. After a change of flights at Helsinki I arrived at Jyväskylä and summoned a taxi. We set off for the hotel down a tree lined frozen road which glistened in the headlights. Looking at the speedo I saw we were doing the equivalent of 50mph and as we approached a tee junction my heart sank. I was relieved when the studded tyres brought us to a halt. I then understood why the Finns were so good at rally driving. These meetings were attended by representatives from Design, Contracts and Product Support with myself from Programme Control. Our hotel was outside the town and somewhat isolated apart from an overhead ski lift. These meetings continued over a two-year period.

Interspersed with these sessions I had regular progress meetings between our manufacturing departments and the Finnish aircraft constructor, Valmet Oy, at their plant in Kiuruvesi. These get-togethers were to monitor our manufacturing departments' progress on the supply of data and parts for Valmet's share in the build programme, and overseeing Valmet's own activities. Ron Bryan was the main contact in our manufacturing departments for this work. The Finnish plant was at an isolated location alongside the main north south route across Finland. Our hotel was a 'motel' on this road which was subject to an all-night flow of heavy traffic including air brake applications; not conducive to sleep. I recall one visit when we were taken to lunch and on the adjacent table were representatives of Russian industry with staff from Valmet for discussions on Migs (yet again!) We were introduced to the Russians in their smart uniforms with much heel clicking on their part. Later we appointed a manufacturing representative to reside at the factory. This was Mike Boddington from HSA Brough.

For the final meeting I had with the Finnish Air Force they suggested an alternative location for it. Apparently they had a log cabin inside the Arctic Circle and we were welcome to hold it there. All previous meetings had been in a hotel at Jyväskylä, arriving there on a Sunday night and not leaving the hotel until Friday afternoon, so we naturally jumped at the invitation. We flew by scheduled airline to Ivalo and then went by road to their cabin 100 miles inside the arctic circle. It was a delightful location alongside a lake with visiting deer and as it was September there was no snow but vivid autumn colours. It goes without saying that we all had to have a sauna. We were told afterwards that although the lake was not frozen the permafrost was eighteen inches down – never again!!!. It was a useful meeting held at a superb location and our hosts looked after us well. The Finns had flown to Ivalo in one of their Dakotas and offered us a lift back to Helsinki. Much to our regret this would not have got us back to Helsinki in time for our return flight to the UK.

(To be continued)

REQUESTS FOR INFORMATION

Jack Sollis is looking for information about his grandfather Jesse 'Jimpy' Sollis who worked in the Production Department for Hawker at Dunsfold until the 1980s. If anybody remembers 'Jimpy' please contact Jack at Jacksollis@icloud.com, copy to the Editor at cjfarara@ntlworld.com

MEMBERSHIP NEWS

We welcome new members Les Phipps, Margaret Hamilton and David Zanker. Sadly we record the deaths of Eric Brown, Roy Budgen, Percy Collino, John Parker and Ian Turner (non Member) and send our condolences to their families and friends.

MEMBERSHIP LIST - AUGUST 2016

Members who have not yet paid their subscriptions for 2016- 2017 are in bold below. Please send cheques payable to The Hawker Association to Barry Pegram, 12 Becket Wood, Newdigate, Surrey, RH5 5AQ. If you are **leaving** please let him know by post or by telephone on 01306 631125. Thank you.

A: Allan Abbott, Roy Adolphus, Beryl Alexander, Ken Alexander, Peter Alexander, John Allen, Peter Amos, **Terry Anstey**, Steve Apted, **John Arthur**, Alan Auld, Bryan Austin, **B:** Brenda Bainbridge, Lyn Baker, Colin Balchin, Ambrose Barber, **Derek Barden**, Peter Barker, Geoff Barratt, **Frank Barrett**, Graham Bass, **Donald Bateman**, Ken Batstone, **Dennis Baxter**, Colin Bedford, Peter Bedford, Anne Beer, Brian Bickers, **Guy Black**, John Blackmore, Andy Bloomfield, Melvyn Bluck, **Keith Bolland**s, Paul Boon, Betty Bore, Pat Bott, Steve Bott, Bob Bounden, Mike Bowery, **Alan Boyd**, Sally Bracher, Roy Braybrook, Laurie Bridges, **Doug Britton**, Arthur Brocklehurst, Peter Brown, **Ron Bryan**, Christopher Budgen, Reg Burrell, Robin Burton, Clive Bushrod, **Barry Butcher**, Tony Buttler, Dave Byford. **C:** **Richard Cannon**, Chris Carter, Tom Casey, Bob Catterson, Colin Chandler, Keith Chapman, Keith Chard, John Chitty, Martin Churms, Gerry Clapp, JF Clarke, John Cockerill, **Hank Cole**, Nigel Cook, Brian Coombes, Jonathan Cooper, Patricia Cosgrove, Ron Cosgrove, David Cotton, **Nick Cox**, Mike Craddock, Shirley Craig, **Richard Cripps**, **Jane Cull** (nee Nightingale), **Russ Culley**, **Richard Curling**, Richard Curtis. **D:** Clive Dalley, **Andy Dalton**, John Danse, Afandi Darlington, John Davie, Jo Davies, Ken Davies, Trevor Davies, Michael Davis, Diana Dean, **Ralph Denning**, Norman Devieil, Wilfred Dimsdale, **Mike Diprose**, **Colin Dodds**, Lambert Dopping-Heppenstal, **Cliff Douthwaite**, **Bill Downey**, **Brian Drew**, Mike Drew, **Peter Drye**, Gwen Duke, Chris Dunhill, **Mike Dyke**. **E:** John Eacott, Andy Edwards, Dave Edwards, Barry Elliot, Stephen Elliott, Tony Elliott, **Roy Elms**, Celia Evans, Norman Evans, Roy Evans. **F:** Russ Fairchild, Ian Falconer, Mike Fantham, Chris Farara, John Farley, John Farrow, Max Fendt, **Donna Ferguson**, Ian Ferguson, **Stan Field**, Geoff Fieldus, **Mike Finlay**, Wilf Firth, Richard Fletcher, Colin Flint, Ted Forster, Mike Frain, Steve Franklin, Geoff French, Mike French, **Heinz Frick**, **John Friend**. **G:** Roy Gaff, David Gaitley, Daphne Gaitley, Mike Gane, John Gardner, Patricia Gardonio, Peter Gates, Sandie Gear, Tim Gedge, Mark Gerrard, Tony Gibbs, John Gilbert, John Glasscock, Pat Goodheart, John Gough, Andy Green, Ray Grout. **H:** Violet Hall, Douglas Halloway, Margaret Hamilton, Valerie Hanscomb, Liz Hargreaves, Simon Hargreaves, Bryan Harman, Guy Harris, Thelma Harris, Brian Harvie, David Hassard, Juliet Hassard, **David Hastie**, Norman Hayler, Bob Head, Alan Heasman, Sheila Hemsley, Ted Henbery, **Brian Hennegan**, Jock Heron, Keith Hertenberg, **Frederick Hewitt**, Merlin Hibbs, Richard Hickey, Peter Hickman, Dennis Hills, Reg Hippolite, **Keith Hobbs**, Chris Hodson, Michael Hogan, **Derek Holden**, **Patricia Holt**, Ralph Hooper, Linda Hopkins, Lesley Hoskins, Diane Howells, Terry Howes, **Simon Howison**, Miles Huckle, **Ed Hui**, Gavin Hukin. **I:** Len Illston, Maive Impey, David Ince, Brian Indge. **J:** **Keith Jackman**, Barry Jackson, Gerry Jackson, Simon Jackson, John Janes, Gordon Jefferson, Mick Jeffries, **Mark Jennings**, John Johnson, Andy Jones, **Ian Jordan**, Robin Jowit, Alf Justin. **K:** **Andrew Keech**, **Barry Kensett**, **Dennis Ketcher**, Bill King, Dave King, Kieran Kirk. **L:** Mike Laker, **Rich Lambert**, Richard Lane, **George Latham**, Paul Latham, **Pam Lawrence**, **Andrew Lawson**, **Stanley Lawson**, David Lee, **Geoff Lee**, Mark Lewis, Vernon Lidstone, **Gary Lillistone**, **Andrew Lloyd**, **Dawn Lloyd**, Norman Long, Terry Long, David Lovell, Lynda Lucas. **M:** Albert Magee, Al Mahoon, **Ron Mancey**, Mick Mansell, John Marsh, **Ann Martin**, Brian Maton, John McCarthy, Don McGovern, **June McKeon**, Keith McMahon, Mike Mendoza, Alan Merriman, Jim Middleton, Robert Millar, Alan Millican, Jack Mills, **Bruce Mitchell**, **Peter Mitchell**, **Brian Monk**, Pat Moon, Pauline Moore, **Nicholas Morland**, **Geoff Mudle**, Pete Munday, Carole Murphy, Martin Murray, Helga Mutton. **N:** Tony New, Terry Newell, Anthea Newman, Jennifer Nicholas, **Chris Nicholson**. **O:** Roger **O'Brien-Hill**, **Chris Oliver**, **John O'Sullivan**, **Robin Owen**. **P:** **Les Palmer**, **Glynne Parker**, **Bernard Patrick**, **John Pearce**, Barry Pegram, Martin Pennell, Bill Phillips, Les Phipps, Dick Poole, **Mat Potulski**, **Phillip Pratt**, Dave Priddy, **Mike Pryce**. **Q:** **John Quinn**. **R:** Clive Radley, Frank Rainsborough, Paul Rash, **Diane Raymond**, Vanessa Rayner, **David Rees**, Peggy Remington, Brian Renwick, Francis Rhodes, Geoff Richards, Bill Richardson, Robert Richardson, Chris Roberts, **Alistair Robertson**, Chris Rostant, Peter Ryans. **S:** Ian Sandell, Tim Sargant, Bernie Scott, Alex Seaman, Ray Searle, Maurice Shakespeare, Mike Sharland, Douglas Shorey, Duncan Simpson, Derek Sims, Gerry Sims, Siva Sivalingham, Charles Smith, John Smith, **Karl Smith**, Pete Smith, Thomas Sopwith, Roy Sparrow, Don Spiers, Peter Spragg, Mary Stark, **Chris Stephens**, June Stephens, John Strange, **Nick Stroud**, Christine Strudwick, Tony Strudwick, Terry Summerfield, John Sweetman, Bill Swinchatt, Edward Syradd, Laura Syradd. **T:** **Dominic Tait**, **David Taylor**, Stuart Taylor, Brian Tei, Joanna Terrell, **Reginald Thompson**, Geoff Tomlinson, Graham Tomlinson, Richard Townsend, John Tratt, Rod Tribick, Bert Turner, **Michael Turvey**. **V:** Roland Van Haeften. **W:** Terry Walker, **John Wallace**, David Ward, **Harry Webb**, Graham Weller, **Rob Welsh**, Judith Westrop, **Jan White**, Mick White, Roy Whitehead, Peter Whitney, **David Whittam**, Annette Williams, Don Williams, John S Williams, Sally Williams, Rosemary Wills, **Geoff Wilshire**, Colin Wilson, George Wilson, Paul Wilson, Dick Wise, Helen Woan, **Kuo Wong**, **George Woods**, Alan Woolley. **Z:** David Zanker.