



Air Pilot

APRIL 2017 ISSUE 20





AIR PILOT

THE HONOURABLE
COMPANY OF
AIR PILOTS
incorporating
Air Navigators

PATRON:
His Royal Highness
The Prince Philip
Duke of Edinburgh KG KT

GRAND MASTER:
His Royal Highness
The Prince Andrew
Duke of York KG GCVO

MASTER:
Captain C J Spurrier

CLERK:
Paul J Tacon BA FCIS

Incorporated by Royal Charter.
A Livery Company of the City of London.

PUBLISHED BY:
The Honourable Company of Air Pilots,
Cobham House, 9 Warwick Court,
Gray's Inn, London WC1R 5DJ.

EDITOR:
Paul Smiddy BA (Econ), FCA
EMAIL: editor@airpilots.org
FUNCTION PHOTOGRAPHY:
Gerald Sharp Photography
View images and order prints on-line.
TELEPHONE: 020 8599 5070
EMAIL: info@sharpphoto.co.uk
WEBSITE: www.sharpphoto.co.uk

PRINTED BY:
Printed Solutions Ltd 01494 478870

Except where specifically stated, none of the material
in this issue is to be taken as expressing the opinion
of the Court of the Company.

EDITORIAL CONTRIBUTIONS:
The copy deadline for the June 2017 edition of
Air Pilot is 1 May 2017 and should be sent to:
The Editor, Air Pilot, Cobham House, 9 Warwick
Court, Gray's Inn, London WC1R 5DJ.

TELEPHONE: 020 7404 4032
FAX NO: 020 7404 4035
EMAIL: office@airpilots.org
WEBSITE: www.airpilots.org

Diary

APRIL 2017

4th	Senior Flight Instructors' Forum	RAFC Cranwell
6th	Benevolent Fund Committee	Cobham House
13th	General Purposes & Finance Committee	Cobham House
20th	New Members' Briefing	Cobham House
26th	Lunch Club	RAF Club
26th	Cobham Lecture	4 Hamilton Place

MAY 2017

17th	Inter-Livery Clay Shooting Competition	Northwood
18th	General Purposes & Finance Committee	Cobham House
18th	Court	Cutlers' Hall
23rd	ACEC	Cobham House
25th	Livery Dinner	Drapers' Hall

JUNE 2017

15th	General Purposes & Finance Committee	Cobham House
27th	Trophy & Awards Committee	Cobham House
28th	AST/APT meeting	Cobham House

VISITS PROGRAMME

Please see the flyers accompanying this issue of Air Pilot or contact Liveryman David Curgenvin at visits@airpilots.org.
These flyers can also be downloaded from the Company's website.
Please check on the Company website for visits that are to be confirmed.

GOLF CLUB EVENTS

Please check on Company website for latest information

Cover photo: Two BAC 167 Strikemaster Mk88's owned by Freeman Brett Nicholls over the Hauraki Gulf near Auckland, New Zealand. The photo was taken by Gavin Conroy from a North American Harvard in the lead up to the New Zealand Warbirds Open Day at Ardmore Airfield, Auckland in June 2016.

The pilots of the aircraft were Brett and Dave Brown (NZ Warbirds CFI), in NZ6370 and Mark Helliwell in NZ6362. Note, both Mark and Dave joined the RNZAF on the same day, both flew BAC Strikemasters and A4 Skyhawks in the RNZAF, and both are now airline captains (Dave is an A340 captain and Mark on the B777). Dave was also an instructor and display pilot on the BAC Strikemaster during his service in the RNZAF.

A message from your Editor...

The AAIB's final report on the Shoreham disaster was published on March 10th, and I asked our DAA for some analysis – he has provided some very cogent comments. In my (amateur) opinion, few organisations or individuals emerge from the report without some taint. However most of the holes in the cheese have already been sealed.

Users of Britain's major airports will have realised that for some time they have not been operated for the benefit of passengers. Frequently owned by overseas and highly leveraged companies, their pursuit of profit at the expense of passenger comfort is very evident. Freed from Britain's licensing laws, bars are typically open for all the period the terminal is open. Recently cabin crew have (justifiably) been complaining that they are left to cope with the inevitable consequences of over-indulgence – lager breakfasts seem to be quite commonplace. And which sentient human being in the management of Manchester Airport, for example, thought it was a good idea to sanction beer being sold in two pint glasses?! Like our new Master, I too am innately against creeping regulation, but airport managements need to demonstrate a little more consideration for the wellbeing of all passengers.

On which note, I wish Chris, our new Master, a very successful year – if perhaps less eventful than the one which preceded it!



Paul Smiddy - Editor

Contents

News Round Up	4
Gazette	6
Profile of the new Master	7
The Master's Message	10
Profile of the new Warden	11
The Company's Annual General Meeting	12
Thoughts on the Shoreham report	14
From the desk of the DAA	16
Company visit to Retrotec	17
Company visit to ORBIS at Stansted	19
Walsh Memorial Scout Flying School	22
A short visit to the front line	24
Sheila Scott 50 years on	25
Flying the de Havilland Caribou	27
Luncheon Club	28



News Round Up



CHANNEL DASH

In February at the Fleet Air Arm Memorial Church in Yeovilton the 75th anniversary of the Channel Dash was commemorated. The episode giving rise to the need for this action was one of the worst examples of inter-service lack of co-operation in WW2. Had Whitehall and the three services been operating together more effectively the need for the extreme bravery of members of 825 NAS would have been much reduced.

In February this year there was a flypast of four Wildcat helicopters from 825 Naval Air Squadron. The Channel Dash is remembered by the Navy as one of the most daring and courageous actions in the history of naval aviation, when 18 aviators of 825 NAS, under the command of Lieutenant Commander Eugene Esmonde, and flying six obsolescent Swordfish, attacked the might of the German Battle Fleet in the English Channel. There were only five survivors.

RAF BOOK

In connection with the centenary of the Royal Air Force on 1 April, 2018, the RAF Museum has announced the launch of the RAF Centenary Anthology, a handmade limited edition of 1,500 books, of which 250 are signed copies. A donation from all sales will be made to the RAF100 Appeal supporting the RAF Association, Charitable Trust, Benevolent Fund, Museum and the Royal Air Force.

The RAF Commemorative Anthology will consist of at least 650 pages of documents, orders, operational reports, maps, air diagrams, diaries, letters and ephemera, recording RAF life over its first 100 years. It will measure 39 x 27 cm, in order that original documentation can be reproduced at full size.

From General Smut's memorandum on the need for an air force to the latest air actions, the book presents both a history of the Service and a series of fascinating glimpses into RAF life, operations and policy. Among the many extraordinary documents included in the book are the leaflet dropped over German lines telling them of Von Richthofen's death, the tragic last written note from Arthur Aaron VC and the secret clandestine letters from an imprisoned Douglas Bader.

A team based at the RAF Museum has been working over the last year, identifying and assessing material and photographs from the RAF Museum archives and the Air Historical Branch in order to create the ultimate documentary history of the Service. There will be a specially written introduction to each chapter and extensive footnotes throughout to guide the reader.

All the documents and images will be scanned at ultra-high resolution to ensure the best possible reproduction and the book will be printed on a specially made, acid free, archival quality paper. The Centenary Edition will be hand bound on brass posts in quarter leather over reinforced boards, with a book cloth



cover depicting the roundel and a pattern of rivets reminiscent of a wing section. Each copy will come in a die cut slip-case revealing the roundel. This edition is limited to 1,250 copies.

The Signed Exemplary Edition will be limited to just 250 copies published in 5 different versions, each representing an iconic aircraft and signed by three pilots or crew from that aircraft: the Spitfire, the Lancaster, the Vulcan, the Harrier and the Tornado. In addition they will contain extra material about each specific aircraft. Each of the Signed Exemplary Editions will be hand-bound in full leather using RAF colours, with the roundel of the cover inlaid in leather, and presented in a specially made solander box.

This Anthology is now offered at a special subscriber discount to members of the RAF and the RAF charities. Members can secure a copy by completing the subscriber form and sending a deposit. Once sufficient subscriptions have been received the book will go into production with delivery planned for early 2018 in time for the anniversary. All subscribers will have their names listed in the book.

The entire edition set is limited to just 1500 copies worldwide and books will be allocated on a strictly first come first served basis. Members who wish to purchase a copy are urged to do so as soon as possible as any unsubscribed copies will be made available to the public from June 2017 at full price at which point this subscriber offer will close.

Subscribers will be kept in touch with the project through RAF100 partner publications and the RAF Museum and Extraordinary Editions websites. In early 2018 the publishers will write to each subscriber requesting their final payment, checking delivery details and confirming delivery costs. The Centenary Edition is available to subscribers at £750, the recommended retail price being £950.

HISTORIC AIRCRAFT ASSOCIATION LAUNCHED STRATEGIC REVIEW

‘The HAA has an honourable history, but it has regrettably become seen as a somewhat moribund and less effective organisation than desired, lacking the widespread influence or recognition within the historic aircraft community.’

At their December 2016 regular council meeting, the Historic Aircraft Association (HAA), which has a strong overlap with Company members, decided to launch a comprehensive review, having reached the conclusion that changes were needed to make the body truly representative again. This review will cover the HAA’s aims and objectives, membership composition (and how to get more warbird owners to join) and management structure. This is in recognition that an overhaul could give the association a new focus, after becoming somewhat peripheral since the CAA took over responsibility for air show safety and pilot display approvals.

The HAA has appointed eminent aviators from the historic aircraft world to form a Strategic Review Task Force. Many of them are indeed Company members, they are: display pilots Air Marshal Cliff Spink, Phil O’Dell, and Roger ‘Dodge’ Bailey; aircraft inspector and test pilot Phill Hall; and owner and pilot from the Gnat display team, Edwin Brenninkmeyer.

The task force should have set out its recommendations at the HAA AGM in March.

AIRCRAFT MANUFACTURING IN THE UK

As worries mount as to whether Brexit will harm the UK operations of Airbus, so another (small) door opens.

Building on in its longstanding R&D co-operation with the city’s university, Boeing plans to open its first manufacturing plant in Britain in Sheffield. This will make complex parts for actuators for flap assemblies on 737 and 777 models. The initial investment in the plant is only £20m, but from little acorns....

SINGLE-ENGINE CAT IN IMC

The European Union has very recently accepted of Commercial Air Transport (CAT) operations using Single-Engine Turbine aeroplanes at night or in Instrument Meteorological Conditions. Europe is now aligned with the International Civil Aviation Organization’s (ICAO) standards for CAT operations. GAMA President and CEO Pete Bunce said “The EU’s acceptance of CAT operations has been a long-awaited moment for general aviation. We are very pleased to see Europe joining other regions in permitting this important form of transport.”

LAA DEVELOPMENTS

The Light Aircraft Association has recently added jet and electric propulsion to those which it will consider for the fleet under its supervision. Chief Engineer Francis Donaldson has visited a Dutch company, AMT Netherlands, in the company of member and aerobatic pilot Richard Goodwin. AMT manufactures small gas turbines, and Richard wishes to fit two to his Pitts S2S. These will give the diminutive biplane a thrust:weight ratio of better than 1:1, enabling some rather impressive climb performance! The 17kg engine produces more than 1,500 Newtons of thrust – but at some cost – they are more expensive than the Lycoming AEIO-360 fitted to the Pitts!

OLDER PILOTS

The Editor does not normally read the Sun, but came across the following story in another journal, (and as our membership includes a number of "older pilots" it is highly relevant to our cause!). Harrison Ford’s recent incident at John

Wayne airport in Orange County, California, received much publicity. A Sun columnist was reported as concluding "Isn't it time Harrison Ford has his wings clipped? Ford is rich enough to buy a hangar full of incredible life-sized toys to play with, and he obviously enjoys taking them all out for a spin. But in an age when commercial pilots are forced to retire at 65, perhaps Ford needs to start taking the passenger seat when he takes to the skies in future."

We older pilots possibly need a new standard bearer!

THE POULTERS' PANCAKE RACE (courtesy of an anonymous Company participant....)



On Shrove Tuesday, 28th February, a team of four intrepid adventurers represented the Honourable Company in the annual pancake race in Guildhall Yard, under the stern direction of the trainer, the Learned Clerk. Your team was made up of the Master (in the Masters’ race), Assistant Commodore Chris Palmer (for the Assistants’ race), Paula Spurrier (in the Ladies’ race) and the Master Elect running as the Novelty. One couldn’t possibly comment. Regrettably all entrants were outpaced by others, who seemed to have been in training for the Olympics. Nevertheless the day was a lot of fun and enjoyed by everyone. As ever, the entrants for the Novelty race were imaginative. The theme was set by the Lord Mayor’s charities for the year, which all have musical connections. The winner of the most original costume went to a lady wearing an organ (no laughter in the cheap seats please), although it was a close run thing. Your reporter was very impressed by a contestant dressed in a cow suit and calling himself the Sound of Moosic. Fortunately he stopped there. Your



Master Elect thought he had constructed the worst pun in the race by wearing an inflatable killer whale, with piano keys taped to the sides and calling himself the Piano Tuna.

The races were followed by a very enjoyable buffet lunch, after resuming normal dress standards. Prospective entrants for next year's race are urged to start training over the summer!



AIRFIELDS UNDER THREAT TOUR

In this column I have frequently noted the number of GA airfields in the UK which are at risk of closure, predominantly to be turned into housing estates. A new field in the developers' sights is Peterborough Sibson.

Your editor thought it might be an idea to mark the current dire situation with a tour of many of these airfields, overflying those such as Hullavington and Panshanger which are already closed, and landing at some others. This would be done under the mantle of the Air Pilots

Flying Club, and would achieve two objectives - putting some destinations into one's logbook that will soon disappear into the ether, and secondly possibly enabling us to draw attention to the plight of GA airfields in Britain. An informal tour when summer arrives, that members could join as they wish, lasting perhaps three days midweek, and necessitating an overnight stay or two in a pub, is what I envisage. Thoughts and expressions of interest to the editorial email address.

Past Master Chris Ford recently presented a MAP certificate to Flt Lt Mark Raymond of 47 Sqn at a recent awards ceremony at RAF Brize Norton.



GAZETTE

APPROVED BY THE COURT 16 MARCH 2017

ADMISSIONS

As Upper Freeman

Ian Grant ALLAN (AUS)
Michael Craig ATKINS (NA)
Christopher Graham BODDY
Nigel Henry Thomas COTTRELL
Peter Stanley JOHN
Jon Edward OMEY (HK)
Ian Thomas PEARSON
Andrew Michael Timothy ROSE
Stephen WOOD

As Freeman

Susan Margaret HAWKINS (OS)
Lisa A SASSE (NA)
Peter William WALKER

As Associate

Andrew KURIBAYASHI-COLEMAN

REINSTATEMENTS

As Upper Freeman

Michael John MYLAN (HK)

ACKNOWLEDGED BY THE COURT

16 MARCH 2017

REGRADE

To Livery

Wing Commander Steven James DEAN
Christine Susan MILNER

DECEASED

Robin BENNETT
Mary CUNNINGHAM
Peter HARRIS
Maurice HICKMOTT
Keith MYERS

RESIGNATIONS

Nakita ANDERSON (AUS)
James CARRIE
Steven FARNWORTH
William FRY (AUS)
Peter GRIFFITHS
Alexander HARMAN
Andrew Ian HARRIS
Patrick HILL (AUS)
Alex McNEILLIE
John PLASTOW
Timothy PRICE
Dennis WRIGHT

Profile of the new Master, Captain Chris Spurrier

By the Editor

Chris was brought up on the borders of North West Kent and Greater London. These were the years immediately following WW2 and there was still a battery of anti-aircraft guns on the nearby heathland. Biggin Hill was within cycling distance and formations of aircraft destined for Royal fly-pasts would often fly overhead. He joined the school ATC squadron as soon as age allowed. Being a natural techy, Chris was put in charge of the film projector, mainly to show *The Dam Busters* and *Reach for the Sky* each year. He blames this over-exposure for his subsequent career! Chris was fortunate to have the usual (for that era) gliding course; he was less fortunate to bend the *Slingsby T31* cadet on the third of his trio of solo flights. He assures your Editor that there were heavily mitigating circumstances!

It was a bit of an academic school so when Chris told the Headmaster that he wanted to join the RAF, the response was a sharp intake of breath. Chris was persuaded to get a degree first, which led him to London's Imperial College to study Aeronautical Engineering, graduating in 1965. In retrospect Chris says the school served him very well, especially in the sixth form. Health and Safety had yet to be invented in those happy days. The senior maths master was an RAF reservist and introduced aircraft navigation into his lessons whenever possible. Chris' physics teacher let him play with all sorts of exciting bits, some of them radioactive (perhaps our new Master glows in the dark?!). The chemistry chap pretty much let him get on with anything he felt like studying, which frequently involved explosives.

That master was married to Melita Norwood who, it was subsequently discovered, was a Russian spy. The Headmaster thought that scientists should be given a broader education to prevent them becoming savages. His view was that Chris would only meet culture in petri dishes so made him take GCEs in English Literature and History, whilst doing four A levels at the same time. Chris notes that he did not notice the Head forcing historians and linguists to study maths and physics!

Back to the RAF. Initial training at South Cerney (whence he graduated as head of his course) led to the Jet Provost at Leeming, where Chris gained the inky-fingered swot prize, and then on to the Varsity at Oakington. It was a good time to be in the multi-engine world as the Hercules was just coming into service. (The Herc world seems to be producing a run of Masters at the moment). Chris was on No 7 course at Thorney Island, and was posted to 47 Sqn at Fairford. This had just re-opened as a RAF airfield, having been a USAF station, but lacked an Officers Mess, necessitating daily journeys to and from South Cerney. This period brought very happy memories: the flying was ideal for a first-tour truckie, with a mix of low-level tactical trips and long range route flying. Dropping paratroops and supplies (usually fairly close to the right place) was the main UK role. Chris's first ever para drop was on Hankley Common, now a golf course but at that time the main para training site. The chaps used to do their first three jumps from a basket slung under a barrage balloon and then they progressed to live jumps from a

Herc. Chris was flying one of these trips with the CO, a very pleasant Wing Commander. They had a good view of Hankley Common with the barrage balloon tethered nicely on the ground. Unfortunately they misjudged the aiming point and the last man out landed on top of the balloon, from whence he slid gracefully to the ground. An early lesson in the importance of accuracy. Actually they did something similar a few months later, when a Land Rover was scheduled for a drop zone in Wales. The idea was that, at the critical moment, Chris would operate a switch and a parachute would deploy, dragging the Land Rover out. Except the parachute didn't deploy. The CO decided to lend a hand and jabbed the switch three times. The 'chute did deploy but by then they were way past the DZ. As far as Chris knows there may still be a Land Rover in a forest somewhere on a Welsh mountainside.

Chris soon discovered, however, that life at Fairford was not all about dropping Landrovers onto an unsuspecting public. There was also the more mundane task of resupplying the British Garrison in Singapore by air. 'Their Airships' had decided in their infinite wisdom to capitalise on the C130's flexibility and to use this tactical transport aircraft in the long-range cargo carrying role. Thus the

ATC gliding at Hawkinge



The Kirby Cadet before young Spurrier demolished it



*ATC summer camp
at RAF Waterbeach
1960*





47 Sqn John Lord Trophy crew

infamous 'Changi Slip' was born, stopping only at Bahrain on its two 12 hour sectors to the Far East. This task alternated between the two C130 operating stations – Fairford and Lyneham – and soon a healthy rivalry broke out between them over which one could make best use of the available carrying capacity; a competition won hands down by Fairford as a result of close cooperation (both in and out of the Mess bar) between the squadron's crews and the Base Movements team. Characteristically, Chris entered fully into the spirit of this, despite a tricky moment early on when, making his way to the aircraft, bouncy, Tiggerish, exercise-averse Chris tossed his car keys to the tall, rugby-playing and rather hard-pressed Duty Movements Officer with a cheery 'You must be Mac, do lock the squadron up for me and leave the keys in the Guard Room'. That they became and remain firm friends nearly 50 years later must at the very least prove the old adage that opposites attract.

The social life at South Cerney was full-on and mildly hedonistic, revolving around Mess Balls, cocktail parties, fast cars, cosy Cotswold pubs and lovely ladies in floaty dresses. Chris's organisational talents in this regard were soon recognised when he was unanimously (though in absentia) elected as Mess Entertainments Officer tasked with making South Cerney Mess the hot ticket for all the young ladies of the county. After a few teething troubles, during which some very eligible candidates confirmed their willingness to attend but drew the line at paying for the privilege (nice try Chris but a step too far in those less enlightened times), his efforts came to a personal triumph when



With Paula at South Cerney Mess Ball c 1969

he ended his tour with a lovely wife – Paula. They were married in Cirencester shortly after he had left 47 Sqn for a command course, back at Thorney Island. Command led to a posting to 36 Sqn at Lyneham. Married quarters at Lyneham were scarce so they lived at Colerne, just down the road, near Bath, until they bought their first house in Malmesbury. The Air Force, though, was consolidating and contracting. BOAC, on the other hand, was recruiting so Chris left the RAF after eight very happy years and joined the civil world.

There was a small matter of gaining a licence first but Chris (together with some of his friends) was fortunate to discover what was then the Sir John Cass College. They fixed up a four-week course to get through the ground exams. So Chris joined BOAC as a very junior VC10 pilot. In those days he was at the bottom of a very bad bidline scheduling system, which meant that for the first years he only did standby, usually with one recency trip each month. Not a good beginning. Things got even worse when the VC10 was taken out of service due partly to the fuel crisis of the late 1970s and partly to the arrival of the more economical 747. This led to time on the ground for many junior pilots. Chris spent some time as a supply teacher, offering maths and science, and then a couple of years programming computers for BA. Eventually everything turned out well and Chris was given a 737 course. Good times were back.

Chris spent several happy years on the 737, latterly as what was called a Flight Technical Officer. That meant sitting in an office, partly writing the BA version of the 737 flying manual, partly doing



BOAC days

techy stuff and, best of all, assisting in the specifying, accepting and delivering the new 737-400 aeroplanes. Chris spent some time with Boeing in Seattle, which he found a fascinating experience. Paula and their sons were occasionally able to join him and they had great fun exploring and, in the winter, skiing.

All good things come to an end and Chris was eventually given a command on the DC10 at Gatwick. Not the best time of their lives, since it was during this period that their elder son was diagnosed with melanoma cancer. It took ten awful weeks from diagnosis to his death, just one month before his 21st birthday. Beware of the sun – it can kill. The DC10 took Chris to his 55th birthday, when BA decreed he was too old to fly, but he did spend another five happy years back on the 737 with GB Airways. It was there that Chris was asked to run courses for pilots on the use of cabin address, a subject which Chris had always thought important.

In 2004 Chris finally hung up the helmet and goggles to face the rigours and challenges of retirement. He was swiftly grabbed to run a project for resurfacing the Village Hall car park and installing a new drainage system. He had already been a member of the then Guild's old Technical and Air Safety Committee but, after a few years out of flying, Chris felt his views were becoming out of date so he resigned from that and John Robinson grabbed him for the

Benevolent Fund, first as Secretary and, when John stood down, as Chairman.

Outside the Honourable Company Paula and Chris both play golf and both enjoy fly fishing. They usually spend a week or so in Scotland, partly on Deeside and partly on the Spey. There are golf courses in both these places and the rivers contain salmon, although it would appear our new Master has not depleted fish stocks by a material amount. On those days when the salmon refuse to co-operate there are also many distilleries, so the paucity of fish can soon be forgotten. Chris does a few days shooting in the season and he still get a kick out of taking things to bits and sometimes mending them. Their younger son, Edward, is an RAF surgeon who served in both Iraq and Afghanistan. Married to Olivia, another surgeon, he has a PPL and is a Liveryman of the Company.



Togged up for a recent Chinook flight at Odiham

In GB Airways days



Footnote:

The Company of Spurriers obtained their ordinances in 1345. In 1501 they are recorded as the 76th Livery company. They were one of the companies which lined Cheapside at the coronation of Henry VIII. They subsequently merged with the Loriners and then, in 1571, with the Blacksmiths. Among their original ordinances it was stipulated that “No-one of the trade shall work longer than daybreak to curfew rung out of St Pulcher’s Newgate, by reason of the deceptions practised, as the use of false or cracked iron and the laying of gilding on false copper and further, because certain would wander about all day, and go to their work drunk and blow up their forges to the peril and discomfort of all.” It seems Chris’s ancestors were cads and drunkards.

We have third party verification of Chris' attributes from a former BA colleague who (strangely) wishes to remain anonymous!

I first met Chris after he qualified on the 737 in British Airways, and I subsequently flew with him several times. I always enjoyed our flying together even if some of those times were more memorable than others....night stops in Madrid for example...but that's another story. Not being a “techie” myself I found his depth of knowledge to be impressive.....the only worrying thing was that when the odd thing ceased to work properly Chris had to be discouraged from taking the thing apart and trying to mend it whilst still in the air. It was inevitable that he would move up the technical ranks...he became Flight Technical Officer of the 737 fleet....a management position that was respected and not derided by the lads. Always approachable he gave a cheerful helping hand to anyone who needed it. Even now, if I have a problem, be it mechanical, IT or even a baffling card trick, a quick call or e-mail to Chris will always get an enlightening and simple answer.

Our friendship grew from the many interests we had in common, in and outside of BA, and is one of the aspects of life that I cherish today. In this present world of unpredictability, of one thing I am certain..... the future of The Honourable Company will be in very safe hands.

Last flight for GB



The Master's Message

Captain Chris Spurrier

Every new Master is faced with this, their first challenge even before taking office – write the Master's message. I suspect every new Master has felt as I do now, sitting in front of a blank screen, wondering what on earth have they let themselves in for and, more importantly, what are they going to achieve for the Honourable Company in the next twelve months. Before I move on to that, though, let me add my voice to those that have already praised the work of my predecessor, IPM Peter Benn and his partner Christina. Theirs has not been an easy year but Peter has conducted himself, and the business of the Honourable Company, admirably in the face of problems that would have daunted lesser men. Much of what he has done and achieved has been in the background and will not be realised by many of our members. Much more is still work in progress and will, we hope, come to fruition in the next year. We owe him a debt of gratitude and I offer him and Christina my sincere thanks.

Much has changed in the last few years. The Royal Charter and name change were, at times, difficult and controversial, although eventually reaching a successful conclusion. The working committees have restructured and are moving forward, using remote working via email and video links. We have seen changes in the office staff. The new Audit Committee presented its report to the GP&F and thence to the Court. Our continued stay at our home, 9 Warwick Court, has come under threat and, as I write, that matter has still to be completely resolved. And, finally, the Strategic Review of five years ago is in the process of being updated. All of these have created extra work for the office staff, already working hard just to keep up with the usual administrative burden of a busy Livery Company whilst organising the two annual showcase events, the Livery Dinner and the Trophies and Awards Banquet. In all of this the Learned Clerk and his staff have been exemplars of efficiency and I know I can rely on them in the coming year. It is, though, time to take our collective foot off the accelerator for a while, to finish what we've started and to

consolidate.

That doesn't mean I don't intend to do anything. For many years I have despaired at the way in which mathematics and sciences were being taught in our schools. At last there has been some recognition that this must change if we are to produce the pilots, engineers and scientists that our country needs. My wish is to reach out into schools by whatever means and to encourage those who are already doing just that. Assistant Professor Marion Wooldridge is already working on a STEM initiative and I hope to encourage more and broader work in that direction from other members. The Air Cadet organisation has suffered greatly under recent budget cuts and from problems with their aircraft. The University Air Squadrons are more accustomed to looking at pictures of aeroplanes than actually flying them. Anything we can do to assist these organisations will be at the forefront of my efforts. The IPM has already started work on this and he will receive my active support and assistance as it moves forward. Of course, we are already directly involved helping people into the air. Our charities will be continuing their work both in assisting those who need help and in allocating funding for our scholarships. The awards team will be sifting and interviewing applicants. All these tasks take time – lots of time – and the application of willing and very able volunteers. Fortunately, as Master I only have to keep a watching brief over these activities because they are in the hands of very capable people.

I am greatly concerned with the potential problems of small drones. In irresponsible hands these have the potential to pose a serious threat to aircraft and this will inevitably require some form of legislation, if only to require them to be registered. Likewise, laser pointers. It's good to see that legislation is now under consideration to criminalise those who point lasers at ships, aircraft and trains. Nevertheless there is no current proposal to limit the power of these devices and it will remain difficult to catch those who think it amusing to shine them into flight decks

and control cabins. If we can use our influence to incorporate a power limit into the current legislation we shall have achieved a worthwhile outcome.

The Strategic Working Group under Warden Malcolm White will present its findings. I cannot guess the outcome of their deliberations but I am sure there will be new ideas which will need implementation and which will further enhance our influence and relevance.

Finally, and this is much more difficult, I abhor unnecessary rules, controls, legislation or requirements. That seems like a highly tautological sentence but the words are carefully chosen. I guess it reveals that I'm an anarchist at heart. Aviation authorities, governments and employers are very good at gold plating sensible suggestions and thus introducing unnecessary restrictions to combat non-existent threats. Employers, constantly wary of vexatious litigation, insist on covering their corporate backs with requirements that do nothing to promote safety but would look good should there be an incident. I'm not going to give examples. I'm sure you have all met plenty of your own. Previous Masters have made similar efforts on the subject. If we can debunk a few of these impositions during the coming year, that would give me immense satisfaction.

Those, then, are my ambitions and work schedule for the year. But probably the best reason for belonging to a Livery Company is to have fun and enjoy the company of like-minded people. So my next ambition is for you, the members, to enjoy the year. Our visits team under the guidance of Liveryman David Curgenven has a full and varied programme planned. My wife, Paula, is planning some events for partners. We would be very pleased to see you at any of them. For Liverymen there is the Livery Dinner and for everyone, the Trophies and Awards Banquet. Past Master Chris Ford is organising another informal supper, this time at Tallow Chandlers Hall and, of course, there will be our usual garden party in August and our Carol Service and supper in December. There are many of you I've not met. If you've not attended any of these events before, make this the year you do. Please do come, do introduce yourselves and do enjoy the year. Paula and I are looking forward to it. We hope you are, too.

Profile of the new Warden, Nick Goodwyn

By the Editor

Nick Goodwyn has enjoyed a 34 year aviation career as a military fast jet and civilian pilot, instructor, examiner, and latterly as a qualified Aircrew/Executive/ & Business Performance coach and trainer.

His interest in aviation was ignited by a BA pilot, a regular visitor to his father's Surrey pub, who took Nick to Gatwick and plonked him in the left hand seat of a Boeing 707. A trial flight on his 12th birthday in a Cessna 172 at Shoreham was a huge success.

He had the great fortune to spend much of his time at what is now IWM Duxford, as a member of the Duxford Aviation Society. An angry letter to his father from his headmaster 'asking for a photo of your son as we have forgotten what he looks like' bears witness to how much time there as a hangar rat he was entranced by the world of restoring and operating vintage aircraft, and helped in the latter stages of the restoration of the Bristol Blenheim working under Liveryman John Romain and the (then) British Aerial Museum Team.

John Romain and John Larcombe became influential role models; he also was lucky enough to fly a number of times with the mercurial test pilot Dizzy Addicott, in both the T6 Havard and DC3. Mark Hanna once allowed him to sit in a F4 at one of the airshows – this cemented a desire for a service career.

Nick learnt to fly gliders with the school CCF on the Kirby Cadet Mk3 at 618 GS at RAF West Malling, going solo on his 16th birthday, and then won a RAF Flying Scholarship at age 18, completing his PPL at Leavesden, one of his instructors being Concorde captain John Eames.

But his burning ambition was to fly with the RAF. He was commissioned in 1988, and his first flying tour was as a 'creamie' QFI, teaching students on the Jet Provost and Tucano. All the while both Mark Hanna and his father Ray often asked how his flying training was progressing. He then converted to the Tornado GR1/A Recce/Bomber and served with XV(R) and then XIII Sqn

based at RAF Marham, where his first boss was Assistant ACM Sir Steven Dalton.

Nick says his first instructional tour in many ways set the tone for his career and shaped his approach to flying such that whilst he loved flying the Tornado as a crew, he realised that his flying skills and passion were better utilised in teaching and developing others rather than as a pure warfighter.

After a brief spell as CFI with Northumbrian UAS on the Bulldog, Nick was back to 1 FTS at RAF Linton on Ouse, first as Sqn ExO and then for 3 years as OC CFS Tucano Standards Flight. This was the start of a long and hugely varied career with CFS spanning 15 years, wearing the staff badge with pride.

A car accident as a passenger and serious back injury led to 2 months rehabilitation in Headley Court and a temporary loss of his 'bang seat' medical category so in 2002, he was posted to the CFS Tutor Squadron at RAF Cranwell, responsible for the training of new QFIs and then to CFS Examining Wing. As OC Elementary Examiners he flew the Chipmunk, Beaver, Harvard and 2-seat Spitfire. In addition, he gained rotary experience on both the Wessex and the Squirrel.

Promoted in 2008, he took command of 115(R) Sqn CFS, responsible for the tri-service training of all new and refresher QFIs and the standardisation of all instructors in Elementary Flying Training. This tour also included 4 busy seasons as the RAF Tutor Display Supervisor.

He clearly enjoyed his time at CFS and flew some 18 different types from microlights to the F16 and F35 Lightning II Full Mission Simulator.

In 2011 he became OC CFS Flying Training Development Squadron, but "the real pinnacle" in his CFS career was without doubt commanding the Human Performance Training Squadron (CFS HPTS) where he was responsible for the cognitive and performance development of all airborne instructors and aircrew



Flying the Tornado



Solo formation sortie in the JP

students through the Aircrew Performance Coaching Programme, Human Performance for Instructors Course and through the delivery and evolution of the RAF Airmanship Model. January 2015 brought a posting to work with the CAA, and he decided to leave the RAF in August 2016 to start his own business as Director of EPT Ltd (Aviation Services); this focuses on performance coaching and individual, team and organisational development.

In our Company, Nick has been Chairman of the E&TC, which he joined in 2005, and he served on and as Chair of the Flying Instructor sub-committee (2008-2011). He was the inaugural Chairman of the ACEC and currently chairs the Flight Instructor Scholarship and Apprenticeship selection panel. He was awarded a Master Air Pilots Certificate in 2006 and took the Livery in May 2010.

Nick is married to Lenka (whom he met in the champagne bar on an Emirates A380), and has an elder daughter and a young son. He is actively interested in vintage aviation, Formula 1, rugby and oenology, and other sporting interests.

The Company's Annual General Meeting 27th March 2017

The Editor

Captain Chris Spurrier was installed as Master for the Company's 88th year, in succession to Captain Peter Benn, with IPM Chris Ford now retiring to the back benches (or should that be the Lords?). Very active as an Assistant and as a Warden, Chris' full profile can be found on page 7. Warden Colin Cox therefore becomes Master Elect, and Sqn Ldr Nick Goodwyn was elected to become the new Warden. Nick's profile is on page 11.

After the annual service at St Michael's Cornhill, conducted by the Venerable Ray Pentland and the Right Rev. Dr. Stephen Platten, the congregation repaired to Merchant Taylors' Hall for the AGM and Installation ceremony. Master Peter Benn presented his annual report (to be found on the Company website) – it had been an eventful, and sometimes challenging, year. He paid particular tribute to Past Master Roger Gault for his sterling efforts in setting up the apprenticeship scheme.

The Hon. Treasurer, Liveryman Nick Goulding, presented his report and financial statements for the year to 30

September 2016. The Honourable Company's financial result for the year ended 30 September 2016 was a satisfactory operating surplus of 4.6% compared with 6.6% in 2015. These percentages were after adjusting for the significant windfall donations received in 2015 and 2016. Fees, quarterage and Livery fines were 1.96% higher in 2016 than in 2015 while Investment income rose by a very satisfactory 19% due in part to a larger portfolio. Total operating income in the year was almost 8% lower than 2015 although all of the decrease was due to the smaller windfall donation received in 2016.

Operating expenditure in 2016 was some 1.96% higher than the level incurred in 2015, mainly due to inflation related cost increases.

In addition to the operating surplus, the Honourable Company also benefitted from realised and unrealised capital gains on its investment portfolio which amounted to 34% of total recurring income (2015 –7%). These gains were reflected also in the Honourable

Company's investments which had increased in value by 14% due in part to the liquid funds from the windfall donation being invested. As a result of this, the balance sheet at 30th September 2016 indicated that net assets had increased in the year by 15%. The financial result for 2016, a year which had again benefitted from a large windfall donation, should therefore be regarded as very satisfactory.

The Treasurer indicated that whilst the Honourable Company's budget for 2017 envisaged a modest operating surplus, in the absence of any special donations and before taking into account any investment gains or losses, a degree of caution should continue to be exercised in anticipating the potential outturn. Regular monitoring of income and expenditure against the budget throughout the year would continue to be important so that appropriate action could be taken if it became necessary. Similarly, the performance of the Honourable Company's investment portfolio, which had benefitted from the



Christina passes the mantle to Paula Spurrier

The new Warden, Nick Goodwyn



Our new Master, Capt Chris Spurrier



Another year successfully completed by our office team

Liveryman Allan Boyce with Past Master Dorothy Saul-Pooley





Our new Master and Paula arrive for dinner

This year's Assistants



The new Master, the Immediate Past Master, Wardens, Clerk and Beadle

Wisdom meets youth - Past Master Hugh Field has the ear of Assistant Simon Brailsford



general increases in capital markets valuations, would require careful monitoring.

In conclusion, the Treasurer expressed his grateful thanks to the Learned Clerk and his team for their willing help and support throughout the year. He also thanked the other members of the General Purposes and Finance Committee for their helpful contribution and thanked the Auditors for their professional assistance.

Past Master Chris Ford paid tribute to Peter Benn's "blood, sweat and tears" expended during his year as Master, and praised his articulate communications with the membership.

The results of the Court Elections were announced: Liverymen Trica Nemes, Sir Stephen Dalton and Chris Palmer were re-elected, and the Court welcomes

Liveryman Alan Burrows as a newly elected member. There was a moment of light relief when the new Master, Chris Spurrier, attempted to present the medal of Master Elect to Warden Colin Cox. I am not saying it was a case of Little & Large, but they were possibly not using the same altimeter pressure setting! The new Court was sworn in, the appointments of the Company's Honorary Officers were confirmed, and the new Master, Chris Spurrier, was installed. Afterwards Chris and his wife Paula greeted members and guests at a champagne reception before dinner in the Great Hall.

Chris began by thanking all those in the Company who had propelled him to his new position, and his predecessor, Peter Benn, for all his labours. Our new Master did not promise any radical changes - it

would be "more of the same". He looked forward to resolving the thorny issue of our current home, 9 Warwick Court, and also following through on the findings of the Strategic Working Group.

He has chosen for his charities of the year two which will be familiar to many members: Fly2Help and Clic Sargent. He looks forward to the very active visit schedule for 2017: it is clear that Chris and Paula intend to enjoy their year, and help all members do the same.

Chris concluded with the Company's traditional toast - "The Honourable Company of Air Pilots, may it flourish root and branch forever."

Thoughts on the Shoreham Report

By the DAA Liveryman John Turner

Writing days after the UK Air Accident Investigation Branch (AAIB) released its final report into the fatal accident involving Hunter T7 G-BXFI that crashed while displaying at the Shoreham Airshow on 22 August 2015, our hearts go out to those who lost friends and family in the accident. They and everyone in the air display world will wish that everything possible is done to avoid a repetition. Hopefully, the report's publication will also allow a speedy conclusion to any further investigation and enable the coroner to fulfil due process.

The report recognises that UK airshows are enjoyed by millions of spectators annually and provide important economic and educational benefits; many of us decided to pursue a career in aerospace at an airshow. The AAIB report runs to 452 pages. Skipping the introductory pages, index and annexes leaves a more comfortable 219 pages comprising 159 pages of 'Factual Information,' 34 of 'Analysis', a list of (88) concluding statements, two Causal and six Contributory Factors and 11 new Recommendations. The AAIB accepts that Civil Aviation Authority (CAA) actions following its two interim reports allow all the previous 21 recommendations to be closed; much has been done already to address issues that have been identified following the Shoreham accident. The Causal and Contributory factors found by the report are listed verbatim below:

Causal factors

1. The aircraft did not achieve sufficient height at the apex of the accident manoeuvre to complete it before impacting the ground, because the combination of low entry speed and low engine thrust in the upward half of the manoeuvre was insufficient.
2. An escape manoeuvre was not carried out, despite the aircraft not achieving the required minimum apex height.

Contributory factors

1. The pilot either did not perceive that an escape manoeuvre was necessary, or did not realise that one was possible at

the speed achieved at the apex of the manoeuvre.

2. The pilot had not received formal training to escape from the accident manoeuvre in a Hunter and had not had his competence to do so assessed.
3. The pilot had not practised the technique for escaping from the accident manoeuvre in a Hunter, and did not know the minimum speed from which an escape manoeuvre could be carried out successfully.
4. A change of ground track during the manoeuvre positioned the aircraft further east than planned producing an exit track along the A27 dual carriageway.
5. The manoeuvre took place above an area occupied by the public over which the organisers of the flying display had no control.
6. The severity of the outcome was due to the absence of provisions to mitigate the effects of an aircraft crashing in an area outside the control of the organisers of the flying display."

The AAIB is to be congratulated on a generally extremely thorough investigation. Be warned that just reading the summary, conclusions and recommendations, means you will miss important detail and nuance. The pilot has no memory of the period from the Wednesday before the accident until he regained consciousness in hospital after a period in a medically induced coma. The Hunter did not have a flight data recorder ('black box'), but a small cockpit-mounted video recorder provided limited coverage of cockpit instruments and ambient cockpit noise. This provided the investigators with a lot of their information, albeit with gaps, supplemented by data from National Air Traffic Services' (NATS) that provided occasional information on the aircraft's flight trajectory. All sources are combined into graphs (report Fig 11/p

48) showing derived aircraft parameters before and during the accident.

The report finds no conclusive causal factors from either mechanical or organisational issues, which indicates that Human Factors played a considerable part. The accident occurred on a hot and sunny August day with ground temperatures of 28 °C at North Weald and 24 °C at Shoreham. The pilot worked as an airline pilot and had flown himself to North Weald where the Hunter was based. Fatigue is a regular feature of many accidents so it is a pity that the report does not consider possible crew fatigue; a description of activities in the 24 hours preceding the accident, as is common in military reports, would have been useful. Similarly, the physical challenges of flying fast jets in high ambient temperatures under a glass-house canopy with often limited cooling are not insignificant. We know from other accidents that increased body temperature, dehydration, minor illness, reduced blood sugar level, hyperventilation and hypoxia, time off higher 'g' flying, all lower an individual's 'g' tolerance so it was disappointing that Fig 11 lacked normal 'g' data derived from aircraft track and speed.

The AAIB found that less than maximum engine thrust during the accident manoeuvre was a causal factor. The engine was declared serviceable up to impact, which infers the thrust reduction was commanded by the pilot. Page 3 of the introduction and summary states, "The investigation identified a degraded diaphragm in the engine fuel control system, which could no longer be considered airworthy. However, the engine manufacturer concluded it would not have affected the normal operation of the engine." In contrast, the report also notes that, "... records kept on a computerised database between 1980 and 1992 showed 22 cases involving the Avon Mk 122 engine where engine speed had dropped and subsequent engineering investigation had not established a clear cause. Anecdotal evidence indicated that Avon Mk 122 engines had suffered from unexplained power reductions from time to time during RAF service, but in most cases the aircraft had returned safely and the subsequent RAF engineering investigations, including related engine

ground runs, had failed to identify associated causes or to reproduce the symptoms.” In other words, the Avon has a history of un-commanded power reductions without anything apparently wrong post-flight. It is unfortunate that neither throttle was visible on the cockpit video.

The AAIB compares accident rates in USA/Canada and UK but counts only UK public displays granted an Air Navigation Order (ANO) Article 162 permission, and not the equally large number of private displays conducted with an ANO Rule 5 exemption. This inflates the actual UK accident rate. Even so, the AAIB’s assertion that the CAA should keep records of the number of airshows and display items, etc. is a good one as it will measure the effectiveness of any regulatory change.

The AAIB asked the Health and Safety Laboratory (HSL) to review Shoreham’s risk assessment (report Annex J) and the risk assessment guidance provided by the CAA in CAP403 ‘Flying displays and special event: A guide to safety and administrative arrangements’ (Annex K). HSL were critical of both which gave rise to the comments in the two paragraphs above. Interestingly, Annex J emphasises that meeting CAP403 requirements is not sufficient to mitigate risks and that additional mitigating measures are required to ensure that risk is reduced to ‘as low as is reasonably practicable’ (ALARP). It struck me while reading this section that a similar approach to driving would force us all to drive no faster than 10 mph below the statutory speed limit. Almost all aviation-related regulations are intended to secure or improve safety; many are the result of hard-won lessons. No doubt this aspect will receive some major scrutiny, and hopefully copious instruction, on the new joint MAA/CAA accreditation course for civilian and military Flying Display Directors that will start at the end of March.

The HSL concluded that “No organisation or individual considered all the hazards associated with the aircraft’s

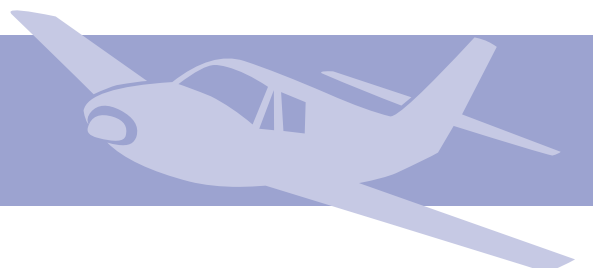
display, what could go wrong, who might be affected and what could be done to mitigate the risks to a level that was both tolerable and as low as reasonably practicable.” A safe flight requires a safe aircraft (airworthy and suitably prepared for flight), operated in a safe environment (airspace volume coordination by air traffic control or other measures, suitable atmospheric conditions) by a safe crew (trained, competent and current), using safe procedures (standard operating procedures, compliance with the aircraft checklist, observance of limitations, etc.) under safe management. Rarely are all under the control of one accountable manager.

The second and third paragraphs of the summary go to the heart of the regulator/regulated relationship. Somewhat damning, AAIB considered “There was a lack of clarity about who owned which risk and who was responsible for the safety of the flying display, the aircraft, and the public outside the display site who were not under the control of the show organisers. The regulator believed the organisers of flying displays owned the risk. Conversely, the organiser believed that the regulator would not have issued a Permission for the display if it had not been satisfied with the safety of the event.” Does a regulator that sets the standards required for grant of a permission to hold a display, charges a significant amount for issuing that permission and, post Shoreham will only do so having satisfied itself that the event’s Risk Assessment is adequate, not carry some liability for the safety of the event?

The AAIB’s interim reports prompted much in the way of quick-fire CAA regulation change, issued without effective consultation and not always to the benefit of display safety; some changes were then rescinded with the issue of exemptions to individual display pilots so that different people were flying to different rules at the same airshow. This report’s final recommendation reads, “It is recommended that the Department for Transport commission,

and report the findings of, an independent review of the governance of flying display activity in the United Kingdom, to determine the form of governance that will achieve the level of safety it requires” which appears to be a final dig at the CAA. There might be some logic in calling for a further review but this raises the spectre of another review conducted by those who do not understand the environment in which their recommendations will be enacted. Having experienced this in early 2016, the airshow community would be horrified at a further review UNLESS THEY ARE ABLE TO PLAY A FULL PART. New Zealand takes a collaborative approach to the regulation and oversight of their airshows and their display pilots, display directors, display organisers and the regulator resolve issues and formulate regulation together. We never stop learning in aviation and, as I said at the start of this article, we all want to do everything possible to avoid a repetition of an incident like that at Shoreham.

None of the above is intended to be a criticism of the AAIB or of their report on the events that led to the tragic accident at Shoreham; rather, it is intended to provide an airshow practitioner’s perspective of a valuable independent and expert technical report and an independent investigation of current airshow practices. A measure of the UK’s success in putting this tragic event behind it will be the extent to which every part of the airshow community, pilots, directors, organisers, the CAA, MAA, and the AAIB – and perhaps even the HSL – can work together to provide and demonstrate consistent improvements in safety for the public, whether attending the airshow as spectators or simply passing by, for airshow participants and the display pilots.



From the Desk of the Director Aviation Affairs

Liveryman John Turner

An assessment of the UK's Air Accident Investigation Branch (AAIB) report into the Hunter accident at Shoreham airshow is elsewhere in this edition so I will not repeat what is said there. However, while many are focused on that single event, it is worth looking at the wider picture in terms of air safety because we invariably find safety reads-across to all sectors of manned aviation. Since Remote-Pilot and Autonomous Un-manned Air Vehicles (RPAS/Drones/UAS) also depend on human input, it seems inevitable that extends to the un-manned sector too.

(I am writing this on International Women's Day, so perhaps we need an alternative to the term 'un-manned.' Pilot-less Air Vehicles/Systems seems a good candidate but that would exclude drone pilots from any possibility of becoming accepted members of the Air Pilots.)

Each year, General Des Barker, South African Air Force (retired) reports on all the world's airshow accidents and incidents over the past year. An accident or incident to an aircraft during display or rehearses for a public air event is considered within scope. This has often included super-warbird air race accidents and inevitably results in higher figures than those arising just at air displays. Nonetheless, it provides the best available

Hunter G-BXFI



overview of the aviation sector that entertains the public.

In 2003, having discovered there was no book on the world market that addressed display flying from the display pilot's perspective, Des authored the book "Zero Error Margin". His aim was "to address the dynamics of display and demonstration flying, in particular, highlighting the display pilot's physiological deficiencies and the factors affecting the safe presentation of a display/demonstration flight." A .pdf of the book can be downloaded free from the internet (search 'zero error margin des barker'). I recommend it to anyone considering embarking on display flying though since it addresses human factor issues, it is of relevance to all pilots.

His annual report gives a unique year-on-year equivalent overview of flight safety issues. Globally, airshow accidents average out a 27.6/year but over the last 3 years there has been an almost linear increase from 18 to 24 to 28 accidents. The long term trends are valuable though we must be aware that the relatively low global figures numbers may be influenced more by statistical blips than systemic factors. In June 2016, the US Air Force *Thunderbirds* (F-16), US Navy *Blue Angels* (F-18), Swiss *Patrouille Suisse* (F5) and Russian Air Force *Russian*

Knights (Su-27) all suffered accidents. In November 2016, another national formation aerobatic team, China's *1st August* (J10) suffered the loss of their first women pilot in a mid-air collision – improbable odds that defy statistical explanation. These were highly disciplined, well regulated, well maintained and well-practiced military teams yet their two technical failures and three mid-air collisions accounted for more than the increase from 2015 to 2016.

The lesson? As Des Barker observes, *"There is nothing new under the sun. Due to the fickleness of man's (and women's) decision making, highly experienced pilots have in some cases, continued making the same errors of judgement for 107 years. Note, not 'pilot error' but rather error of judgement. The term error has connotations of negligence or incompetence, which clearly is not the case in these accidents. Display pilots do not intentionally have accidents but make their decisions based on the environmental factors, energy states and altitude of the aircraft in terms of a particular manoeuvre."* All pilots do the same, though usually in a more forgiving environment than the low level display arena.

All flying is hazardous, as is every human venture to varying degrees. Sometimes, despite our best efforts in preparation, practice and training, things will go wrong. Witness the average daily toll of UK road accidents which persists at about 5 fatalities and 61 seriously injured. Although aircraft technical reliability has increased remarkably, the human factor remains unchanged; it is far too early for evolution to improve our sensory powers or the accuracy and speed of our decision making! In airshows as in other walks of life, we will not eradicate the human factor by introducing yet more regulations because regulation alone does not solve human factor issues. Across aviation we need continuous improvement programmes that can zero-in on safety through human factors, occupational health and culture.

Company Visit to Retrotec

by Liveryman Tom Eeles, Photos by Liveryman Alan Jackson

Cast your minds back to 11th April 2011. That was the last time the then Guild, now the Honourable Company, was privileged to be able to visit Guy Black's amazing restoration organization, Retrotec, located near Hastings in rural Sussex. Six years on revealed a number of changes. Guy and his wife Janice welcomed us and set the scene. Retrotec is one of a group of organizations, the others being Aero Vintage (responsible for funding the restorations undertaken by Retrotec), and the Historic Aircraft Company (based at the IWM Duxford, who fly the aircraft). Guy also explained that his work was split roughly 50/50 between his own projects and outside ones, and that with his extremely high standards of work, restorations were slow and expensive. He quoted the case of the Hawker Tempest F2, powered by a Centaurus engine, that he is currently restoring. There had been five previous attempts by other organizations to restore this aircraft to flying status, all of which had failed. Only now was positive progress being made by Retrotec, after considerable sums of money had been wasted in the previous attempts on what proved to be nugatory work. No wonder this is an expensive business, but the high quality and the authenticity of Retrotec's work, evident all around us, justifies the cost. Guy explained that aeroplane owners tend to go to him last because Retrotec had a reputation for high costs, but this is often due to the problems the company is left with after so many futile attempts. In his view it is always cheaper

to go to the best first, not last!

Those who visited in 2011 will doubtless remember seeing the DH 9 single engine bomber dating from 1918 in its earliest stages of recovery to flying condition (see Guild News, June 2011). Now, six years later, work is nearly complete and the DH 9 is expected to fly at Duxford in the late spring or early summer. The story of its recovery from India, where it had provided food and shelter for thousands of termite ants, was worthy of a book in its own right - indeed one is due to be published in September this year. The DH9 will be completed exactly as it was originally built, powered by its 200 HP Beardmore, Halford and Pullinger engine - of which there are only two examples in the world propelled by an original Dh9 1917 airscrew. How many of you have ever heard of this aero engine manufacturer? The pilot will likely be Roger 'Dodge' Bailey from the Shuttleworth Collection, who recently test flew a Sopwith Pup built by Retrotec.

Alongside the DH 9 was a massive structure, which is the jig for the Tempest's fuselage. It was soon apparent that everything connected with the Tempest is big, heavy, and robust. Also visible were the remains of the very rare dual control version of the Hawker Hind, recovered from Afghanistan in 2005; its status had not changed since our visit in 2011, though a full set of drawings for the dual control conversion has since been prepared - a not insignificant

project in its own right .

The party was then split into two groups, one escorted by Guy, the other by Andy Saunders, editor of the magazine Britain at War. The tour of the premises was as

fascinating as ever, and it was good to see the many machine tools of a considerable vintage still being put to good use in this health and safety obsessed era. Surely the prize for longevity must go to the 1890 era Draw Bench, an amazing device, which over a century on from its construction is still working.

The enthusiasm of Simon Knight, who described himself as a 'tin basher', was inspiring. Many piston aero engines were undergoing restoration, assisted by the availability of a magneto testing rig and a static engine test stand. The most interesting for me was the Anzani engine that powered a Blériot monoplane, which was being restored for the Brookland's Museum Trust. Typical examples of the extraordinarily high quality of Retrotec's work were the guns and ammunition boxes being restored for a Canadian Hawker Fury. The attention to detail was astonishing, right down to the brushes in the ammunition boxes that were fitted to ensure that ammunition was cleaned of any dirt or grass picked up during re-arming before it reached the gun breech.

Following the morning's visit the party repaired to a local inn where a tasty buffet lunch and local ales awaited. After lunch a diehard core of enthusiasts was invited back to Guy Black's beautiful home, to see a further collection of artefacts awaiting restoration in his large storage facility, guarded by a large (4") gun. This is from a naval battleship and is

The DH 9's superbly restored cockpit



The DH9 with its esoteric engine installed



thought to have come off HMS Caroline which fought in the Battle of Jutland. Caroline survives, and it is believed that when de-gunned during conversion to a training ship, the armament was donated to a number of Sea Cadet units; Guy's came from one such, just as they were about to scrap it. The ship is now at Portsmouth being restored to its fighting ship status (as a museum piece rather than becoming a last ditch battleship for the current RN!)

In the building were numerous aero engines, an Austin 7, a Hucks Starter, a vintage caravan, an armoured fighting vehicle and the uncovered fuselage of a

Hawker Audax biplane recovered from a scrap dump in Cheshire. But most arresting of all was a Messerschmitt BF or Me 109 E, known as the Emil. The story behind this aircraft is quite extraordinary. A young German pilot named Xaver Ray, of JG 53, flew it during the Battle of Britain.

During a sortie over Kent the engine failed and Ray forced landed the fighter and was taken prisoner. Ray was subsequently wrongly accused by his colleagues of deliberately landing the aircraft to avoid combat, a charge of cowardice that sadly stayed with him to his death. The Me 109 was sent to India

as part of a wartime fund-raising initiative, ultimately ending up on a scrap dump where the aircraft was spotted by an Indian enthusiast who acquired it. After considerable difficulty, the aircraft was eventually sold

to Rare Aero Ltd. and then sent to Retrotec for restoration – doubtless again a story fit for a book. The cause of Xaver Ray's engine failure was discovered when the engine was stripped down: the engine's intermediate camshaft gear bearings had seized and the shaft consequently sheared, leading to inevitable engine failure. Thus Xaver Ray was exonerated, but sadly too late for him to know, as he died about two years before the fault was found. One day perhaps we shall see this unique artefact airborne again.

Enormous thanks go to Guy and Janice Black for allowing us to see such a priceless collection and the work that goes into restoration of these marvelous aircraft. Thanks also are due to Liveryman John Davy for his organization of the visit and the pub lunch. Maybe in another six years' time it will be possible to go again and see what progress has been made with these wonderful projects.

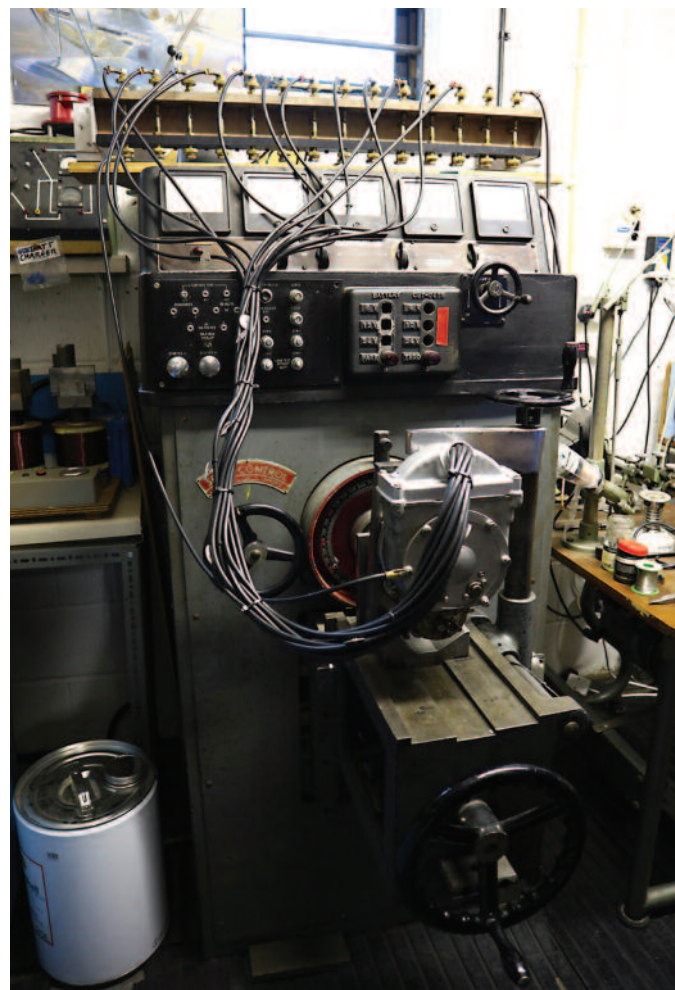


Me109 showing its unusual red spot

Guy Black describes the Fury's ammo boxes



The magneto testing rig



Visit to ORBIS at Stansted

Friday 17th Mar 2017

Past Master Chris Ford, Photos by Freeman Vic Flintham

At the end of my term as Master I presented Orbis with a cheque for £2500 raised by the generous response of many of you to my appeal for the year. Since then I was pleased to be approached by Liz Allen, the Head of Major Fundraising, inviting members of the Company to visit Stansted and have a viewing of Orbis' new MD10, which was in the UK for a week. This aircraft is the third such flying eye hospital operated by Orbis since their first aircraft took to the skies in 1982. The organisation has now visited 81 countries, reaching hundreds of communities that otherwise would have been inaccessible and trained thousands of ophthalmic doctors and nurses.

We were extremely pleased to be hosted by Chief Pilot Gary Dyson, a long time FedEx & ORBIS Captain, who explained the set up of the venture to us.

Provided and fully maintained by FedEx and flown by 18 of their volunteer pilots, the MD10 has an upgraded glass cockpit, two man crew, and its three GE CF6-502C engines provide a range of 6000nm. Behind the flight deck there is a

46-seat classroom equipped with TV monitors and conference facilities including 3D cameras, which provide microscopic views of live surgery. The classroom also has two-way microphones for real time interaction with surgeons in the Operating Room.

Chief Pilot Gary Dyson introduces us to the MD10 in the classroom



The aircraft

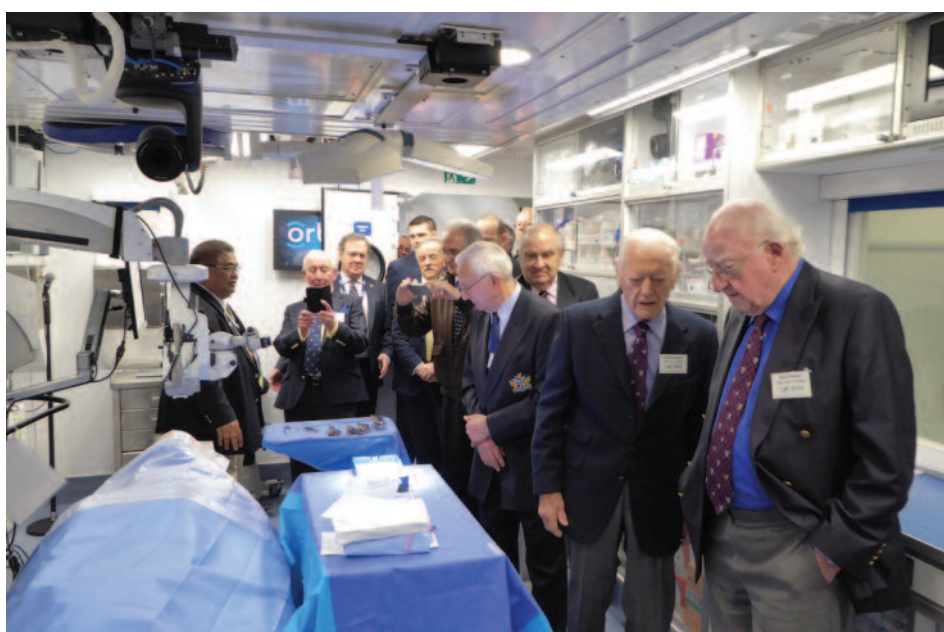




The glass flight-deck



The Laser Room



The Operating Room

From this point aft one enters the sterile medical work area and the aircraft is like no other. Here we were escorted and briefed by Orbis medical staff who gave us a very comprehensive and informative tour around the business end of the aircraft. We found seven purpose-built fully equipped containers interlocking to form the hospital. These seven separate areas are made up of an administration room, an audiovisual/IT room that is the hub of all the comms within the aircraft, and from where the procedures can be relayed worldwide to other classrooms for education. All operations are recorded and copies are distributed to enhance the learning package provided. Further aft is the Patient Care and Laser room. Next there is an Observation room, which acts as an extension to the Patient Care room but from which all operations can be observed live. In the centre of the aircraft, situated over the wing box for extra stability, is the main Operating Room. This is the centre for all hands-on, one to one training between the ORBIS Volunteer Faculty and local medical professionals.

Next, as one moves aft, is the Instrument Sterilisation room/Sub-sterile room where nurses learn how to sterilise instruments for surgery, use ophthalmic tools, scrub correctly and prevent infections; it complies fully with international hygiene and air flow standards. Finally, at the rear of this amazing space the pre- and post-operative care room is situated. Here patients are prepared for and recover after surgery, and local nurses are taught how to enhance their patient care skills.

To round off our visit we had a question and answer session with Gary Dyson and Allan Thompson, Director of Fundraising, after which the Master Elect presented Allan with a donation and Gary with a Company shield which now hangs in the flight-deck. Throughout the visit the 'Orbis model' of health care and



The Recovery Room

education impressed us all. The dedication of the volunteer staff was clear and everyone was more than happy to answer the many questions we threw at them.

The facts speak for themselves: there are 285 million visually impaired people worldwide. Of these 39 million are blind, and 32 million of these cases are avoidable. 246 million have severe or moderate visual impairment, nearly 200 million of these cases are also avoidable. Roughly 90% of the world's visually impaired people live in developing countries and Orbis' aircraft could reach most of these. As aviators we are fully aware of the necessity for good vision and often take it for granted. However, in Orbis one can see the foresight, vision, and dedication of people willing to give their time and efforts to help eradicate blindness, whilst striving also to provide a lasting legacy of educated local doctors and nurses.

Please visit <http://gbr.orbis.org> for even more details of the excellent work achieved with the generous support of many people worldwide.

The visitors pose for a group photo



The Master Elect presents Allan Thompson, Director of Fundraising, with a cheque and a Company Shield (which now resides on the flight deck of the aircraft)



Walsh Memorial Scout Flying School An Instructor's View

Upper Freeman Mark Woodhouse

I guess we are all masochists at heart. I mean who else in their right mind would fight for annual leave in the middle of January each year to forsake family, friends, and stunning beach paradises, instead to take up residence on a paddock in the middle of the Waikato, and work hard teaching youths to fly?

Like an illicit drug the lure of the Walsh is hard to explain to someone who has not previously been a member of the Walsh community. Over a period of 24 hours the culmination of months of meticulous planning is seen when what was a relatively quiet grass strip gets transformed into the busiest airfield in the country, hosting the most concentrated flying school of its kind.

The Walsh Memorial Scout Flying School calls on a team of highly skilled instructors from throughout New Zealand, and beyond, and from all different facets of the aviation spectrum. Most of this team have attended previously, so arriving back at Matamata airfield feels like coming home, and the continual process of greeting old friends and reconnecting with what each has been accomplished in the preceding 50 weeks lasts well into the first night on camp.

The instructor team is predominantly assembled from 'B' Category instructors, with a few 'C' Category who get the opportunity, and a handful of 'A' Category and Flight Testing Officers. Since many of the instructing staff are not teaching full-time throughout the year, the first few days is hectic with type currency flights, self currency flights, and

instructor renewal flights.

While this article will look at the operational side of the School, the main focus of the Walsh is to instil a passion for aviation into the hearts and minds of teenagers from a number of youth organisations across the country. While the staff are greeting each other with hearty handshakes, beaming smiles and hugs, carloads of nervous children are being delivered by parents to start a journey which they do not realise will change them for life.

For many this may be the first time they have been away from their family for a two week period, and they have to learn to make all their own decisions. For most this will be the hardest thing they have done, with early morning work details, continual lessons—both theory and practical – and mounting peer pressure to succeed as the School builds to its finale in the last few days. For all this will be a defining moment in their lives as they will leave the School with new skills, new confidence, and a wide range of opportunities in the aviation industry.

The 2017 School comprised 44 ab initio students and 26 second, third or fourth year (Returned) students. Every one of the 70 young pilots required individual coaching. Whilst the first years all follow the same syllabus, each of the returned students are at different stages in their training, therefore requiring a bespoke training plan to achieve their goals.

To run a school with this number of ab initio students efficiently requires both a structured timetable, and a well organised



teaching framework. Students are divided into four 'Flights' which are led by returned students. Each flight is allocated a team of instructors, with each instructor looking after three or four of the members from the flight, covering both first year and returned students.

In addition to the students and instructors, each flight is allocated four two-seat aircraft. Currently these are a mix of Cessna 152s and Piper Tomahawks sourced from the wider aviation community. When you add a couple of spare training aircraft and the six instructor-owned aircraft, the daily booking sheet lists 24 aircraft in all. From the second operational day of the School onwards the instructors will juggle students, aircraft and bookings to ensure all facets of the training syllabus are covered in a timely manner that will let all ab initio students progress at a rate that corresponds with the ground lessons.

The theory side of the training is conducted in a 'mass briefing' format. On arrival at the School the team of instructors eagerly(?) look at the briefing schedule to see which of the main lesson briefings they have been allocated. While the instructors have many years of experience, and a vast wealth of knowledge, many of them are now employed with the airlines and beyond, and so teaching a class of over 40 students, as well as an array of the other



instructors, can be a daunting proposition. The Walsh Flying School has assembled a curriculum of materials to be delivered by data projector and PowerPoint, and during the School those instructors assigned a mass briefing find time slots to reacquaint themselves with the teaching materials, and the skills to deal with a class of this size.

The flying programme starts daily at 0600hrs (weather permitting), and from then until 2115hrs it is rare to have more than a couple of the fleet on the ground at one time. To cope with a fleet of 24 aircraft efficiently, the booking sheet is devised so half the fleet start on the hour, and the remainder start on the half hour. In addition, the airspace is divided into quarters, so that the instructors from each flight work in an allocated training area that is relatively clear of other aircraft. Ideally it leads to two aircraft in a training area for the bulk of the lesson, with a period of transition when the second brace of aircraft arrive.

For the duration of the School the airspace is designated as a control zone with a full complement of air traffic controllers manning a mobile control tower to maintain efficient and safe traffic movements. Even though this change is properly promulgated via NOTAMs and other methods, we regularly get itinerant and transiting aircraft who break through the airspace and, being unaware of the event, are usually on a different frequency, if they are monitoring a radio at all!

By the start of the second week the ab-initio students are completing the upper air part of the syllabus and remain in the vicinity of the airfield for the circuit training lessons. This is where the circuit tends to get a wee bit busy, and the controllers are made fully aware that this is not a holiday camp. It is not uncommon to have twelve in the air 'circuit bashing'. Personally I have sat at the holding point for the main vector and seen five light aircraft lined up on finals. To cope with this volume of movements the main vector at Matamata gets split into three (left, centre, and right). While simultaneous parallel operations are not permitted, reduced separations on the parallel vectors enable a high density of movements. During the 2016 School the peak was 1,300+

movements in a single day. The weather in 2017 meant that was not quite matched.

Typically about 750 to 800 hours of flying takes place over the 13 days of flight operations.

Once students start getting close to solo standard restrictions are placed on the number of aircraft in the circuit. This provides a good opportunity for the returned students to move out into the training areas to complete their individual syllabi.

With all this training the instructing team need a tight rein on consistency and completion. Each flight has an allocated 'Flight Commander', one of the senior experienced instructors, to oversee this. Through monitoring and team briefings a cohesive standard is maintained in the student body training, and any student having difficulty maintaining the pace of progression is flagged, and given additional resources to get them back on track.

After official flying activity ceases the students retire for self study, duties at running the camp itself, or occasional visits off-site to let off steam. It is now that the instructors have a chance to relax and interact themselves. Staff accommodation ranges from a handful of block units, through to campervans, caravans, tents and even a horse float. Such salubrious quarters become the venues for cocktail parties, barbecues and even a progressive dinner, staged with all the trimmings that are available. Do not let our simple lifestyle get confused with frugality. For nights when no organised social events are scheduled, a few

'friendlies' in the instructor's bar provide the catalyst to conversations on all manner of topics flying-related.

To complete the training syllabus, the ab-initios sit a theory exam on all the subjects presented through the duration of the camp. In addition to the flight training materials this covers meteorology, principles of flight, aircraft technical knowledge, air law, and rescue fire and emergency systems. Final cramming for the exam involves each flight holding review sessions with the allocated flight instructors to ensure a thorough understanding of all content.

So when you consider the workload for the instructors, the daily early starts, the time and effort to work with multiple students in a condensed timeframe, and the fact that all of this is taking part on a glorified paddock where most facilities are transient, there must be a reason that instructors return time and time again. For many the excitement of adding another 40 hours teaching in their logbook isn't too important, so it comes down to the camaraderie, the social interaction with like-minded individuals, and the satisfaction of sitting back at the final day's graduation parade, and seeing the continual stream of your protégés step up to receive their recognition and awards after attaining such high standards of ability and knowledge. There are few institutions that can manifest such a change in personality and demeanour in two weeks, and Walsh is definitely one of them.

So when I am asked what I have been doing for the previous 50 weeks of the year, my answer is invariable - "recovering from the last Walsh".



A Short Visit to the Front Line

Liveryman Tom Eeles

I was lucky enough to be seated next to a currently serving RAF Flight Lieutenant at the last Trophies and Awards Banquet. He is a Weapons System Officer (WSO) – Navigator in old-fashioned terminology – serving on No IX (Bomber) Squadron equipped with the Tornado GR4. In the course of the conversation that evening I asked if it might be possible to visit the squadron at RAF Marham to see at first hand the equipment used by the Tornado and hear how it is employed. He readily agreed and so in mid January I arrived at Marham on a glorious cold sunny day for my briefing and guided tour.

Before going into detail, it is worth having a look back in time to see the situation that resulted in the birth of the Tornado, or Multi Role Combat Aircraft (MRCA), as it was then known. In 1965 the RAF's premier project to replace the Canberra and ultimately the V bombers, the TSR2, was cancelled. After some debate the RAF was promised a mixture of Phantoms and Buccaneers to undertake, as 'stop gap' aircraft, the tactical conventional attack, reconnaissance and nuclear strike role in the Central Region, with the added task of providing air defence and maritime attack for the surface fleet with the demise of the carrier force, another political decision. In the longer term the RAF sought a TSR2 replacement to take over from these legacy aircraft. A purely national project would prove far too costly, so a tri-national collaborative project with the Germans and Italians was devised to produce the MRCA for these three nations. Thus Tornado was born. It entered RAF service in the early 1980s as the Tornado GR1, configured for attack and nuclear strike missions against targets in the Warsaw Pact Central Region. By 1989 the RAF fielded seven squadrons in Germany and three in the UK plus a large operational conversion unit. A Tornado Air Defence Variant (ADV) was proposed as a Lightning/Phantom replacement, it was produced for the RAF and the RSAF, and entered RAF service as the F2 and F3. The ItAF also leased a number of the ADV from the UK as a stop-gap between F104 and Typhoon. The aircraft has now been completely replaced by the Typhoon. The Tornado GR1 fleet received a major upgrade during the late 1990s and emerged as the Tornado GR4. Moving forward now to 2017, there are now only three Tornado GR4 squadrons,

IX(B), 12(B) and 31, all based at RAF Marham. XV (Reserve) Squadron, the conversion unit, is due to disband in April.

The role of the Tornado GR4 today is completely different from the Tornado GR1's Cold War days in Germany. In those now far off times it was optimized for high speed, low level attack profiles against fixed target arrays. This concept of operations was put to the test in the Gulf War in, 1991, but attrition led to a change to medium level attacks. Today, most of the GR4's operations are still carried out at medium level and speeds, providing close air support for Coalition Forces combating ISIL in Syria and Iraq. It is proving to be a very flexible and effective platform for this type of work. A typical configuration for an Op Shader mission over Syria or Iraq consists of a mixed load of Enhanced Paveway 2 or Paveway 4 precision guided bombs, Dual Mode Seeker Brimstone guided missiles and the integral 27mm Mauser cannon. Tornado crews maintain currency in air to ground strafing with the cannon, although this option is rarely used on Op Shader missions. It can also carry Storm Shadow cruise missiles. The Litening designator pod is used to provide laser designation for Paveway and Brimstone and a very good degree of intelligence data collection; for more specifically detailed reconnaissance work the Raptor pod can be fitted. The self-defence suite consists of a radar warning receiver and missile approach warning system, a chaff and flare dispenser, the Skyshadow ECM pod and the facility to carry two ASRAAM missiles. Secure communications and the recently added Link 16 datalink capability ensure that there is a huge amount of data for the crew to absorb and act upon, the two man crew being a great advantage in this respect.

I was privileged to be given an extensive overview of how the current range of equipment is used and what its capabilities are. It was interesting to see that throughout my time inside the Pilot Briefing Facility (PBF) a very prominent bright red light was illuminated both at the entrance and inside. This was to indicate that there was someone – me – in the building without the same level of security clearance as the squadron personnel, so be careful what was said or displayed on screens. I was also shown the impressive Tornado planning system; paper charts are now history, but the

WSO did admit to carrying one in his flying suit out of long habit. Despite the extensive array of screens showing information pertinent to flying operations it was interesting to see a large wall map of the UK covered with numbered pins showing various NOTAMS in the traditional, non digitized format, in case of a power failure, I was told. Then it was out to a Hardened Aircraft Shelter (HAS) to see a GR4's cockpit displays. The WSO's seat was quite fascinating, a mixture of glass and more traditional instrumentation. With the APU fired up it was possible to play with the Litening pod and to see the picture it displayed. Interesting to see also that the WSO has a landing gear indicator and an attitude indicator. The pilot's seat is again a mixture of glass and more traditional instruments, indicative in many ways of the aircraft's age and regular upgrades. There is no doubt in my mind that working in this complex environment is very demanding, both physically and mentally. I was also shown the Life Saving Jacket (LSJ) currently used – I was astonished how heavy it was. There's no such thing as a comfortable day in the office.

RAF Marham is undergoing a major upgrade to its facilities in anticipation of the forthcoming arrival of the F35 Lightning 2 aircraft. There was much evidence of this in the form of new buildings being erected and a large number of construction contractors working on the airfield. The three Tornado squadrons have all relocated to a single HAS site to make room for all this activity, but this does not seem to pose too much of a problem with one squadron always away for three months at a time in Cyprus. The Tornado is expected to go out of service in about two years time but this assumes the role can be fully taken on by the Typhoon and later F35. It would not surprise me to see this out of service date extended. The Tornado GR4 Force's current capabilities and achievements are very impressive but rarely mentioned by the mainstream media. My thanks go to the Squadron WSO for his excellent briefing and also to OC IX(B) Squadron for allowing me to visit. I see from my logbook I last flew with the squadron commander on 13 June 2000, in a Tutor, on a formation sortie when he was a member of Cambridge University Air Squadron.

A look in the archives...

Sheila Scott - 50 years on

Beverley Harrison (BWPA Archivist)

1966 was a special year for the record-setting pilot, Sheila Scott, but 50 years on her achievements seem largely unremarked. Born in 1927 in Worcester, Sheila Christine Hopkins had worked as a nurse in WW2. Post-war, having changed her name to Sheila Scott, she found employment as a model and minor actress. She started flying as a dare: having failed her driving test, she seemed such an unlikely pilot. After going solo in 1958, she qualified and became a very successful air race competitor from the outset. By 1964 she was regularly setting flying records, but her ambition was raise the bar ever higher.

In 1966, Sheila set an around-the-world record in her single engine Piper Comanche, G-AT0Y, which she named Myth Too. Leaving Heathrow on 18th May 1966, she arrived back, 33 days and 3 minutes later, on 20th June, having flown through the Middle East, India, South East Asia, Australia, across the Pacific to USA, and thence back to UK via the Azores. It would be much harder to fly that route in the current political climate. The journey is reported to have cost £20,000 in 1966 prices.

Thereafter Sheila Scott, by then 38 years old, was rarely out of the news for her flying exploits. Presenting a very

glamorous image and, much like Amy Johnson, she needed copious publicity to generate the sponsorship essential to fund her flying. She was the recipient of a steady stream of awards, and gave many talks about her journeys, especially her global record flight, which she also recorded along with her life to that date, in her autobiography *I must Fly*.

She was an early member of the British Women Pilots' Association (BWPA, founded 1955) and was awarded one of its most prestigious awards, the Brabazon Trophy, on three occasions in the mid/late-60s. She was awarded an OBE in the 1968 New Year's Honours List; the Royal Aero Club's Britannia Trophy in 1968; and the RAeS Gold Medal in 1972. She was a keen supporter of youth flying, especially the Girls' Venture Corps, whose officers and cadets were often present to see her off, and back, from her flying exploits.

Sheila kept many of her press cuttings. But on one occasion the publicity backfired: in 1971, whilst she flew her trans-polar flight (her 100th record), her small London flat was burgled – the publicity given to her meant that the burglars knew she was



Sheila Scott showing her route around the World, taken in 1966. At talks she also used a globe marked with her routes.

away; in any event they stole her trophies, logbooks and a camera.

During this period there were, not unusually for the time, many racy stories (mostly fictional) circulating about Sheila. Certainly her life did seem to have a certain 'Lady Penelope' quality about it, and a similarity to characters in 'Those Magnificent Men in Their Flying Machines', when she took part in events such as the 1969 London to New York Air Race.

One of her celebrity arrivals/departures.

Sheila Scott with a Brantley B2B



But Sheila was a serious pilot; commercially qualified and rated in single and multi-engine aeroplanes, seaplanes and helicopters. She was a member of the Ninety-Nines, founding and serving as governor of the British branch. She was also a member of the Whirly-Girls and the International Association of Licensed Women. And she was literally On Top of the World, the title of her second book, which included an account of her 1971 flight (and 100th record), crossing the North Pole. For this she flew a twin-engine Piper Aztec, safer for trans-polar flying than a single, which she named Myhre. The flight was heavily monitored for research purposes, and the associated equipment needed space and payload too, better achieved in a twin. This more costly aircraft presented some mechanical problems en-route, and stretched her slender financial resources. Her sponsors then pulled out before the record flight, so she used her beloved Myth Too as surety for Myhre, and when she could no longer afford both aircraft, she was forced to sell the former, in which she had set so many records.

Sheila's luck eventually ran out. She had planned to repeat a polar record by flying across the Antarctic, but her Aztec, which had been back in USA for work, was almost completely destroyed in a storm in 1974 that hit the Piper factory at Lock Haven. When she tried to find the resources to repair the aircraft she was defeated by the negotiations between her bank and her insurance company. There were other misfortunes around that time, too. Having belatedly learnt to drive, Sheila finally passed her test in 1971, but suffered a car crash with injuries from which she never properly recovered. After achieving 104 records, Sheila's record breaking flights were over.

After years of smoking, Sheila Scott died of lung cancer, aged 61 years, in the Royal Marsden Hospital, London, some 22 years after her record-breaking circumnavigation of the globe. She had been working on another autobiography, but it was not to be. The aviation author Judy Lomax included some of Sheila's memories in her own book *Women of the Air*,

published in 1986, before Scott's death.

The writer's memories of Sheila Scott are from the GVC National Festival, Walsall, 1981, where Shiela, as the guest of honour, presented the awards including the Sheila Scott Rose Bowl, still a GVC Trophy.

Where are her aircraft now?:

1. A Thruxton Jackaroo – converted to enclosed cockpit 4-seater, Tiger Moth – G-APAP, nicknamed Myth. Latterly a parachute school “jump” craft. It was believed still flying in the late Nineties.
2. Myth Too: Piper Comanche G-ATOY. Now at East Fortune's Air Museum having been crashed by its subsequent owners in 1979, and now being restored.
3. Myhre: Piper Aztec G-AYTO. Damaged in a storm at the Piper factory and finally written off as irreparable.

Publicity photograph at the controls on the ground, with her first book.



Girls' Venture Corps cadets and BWPA members with Sheila Scott (centre, dark glasses) with papers documenting her many record-breaking flights, at the 'Women in the Air' event, Sywell, 1973



Flying the de Havilland Caribou; or how I learned to enjoy life at 120 knots

Liveryman William Pinney

Long ago, when I was learning my way in the professional flying world, I was given the wonderful opportunity to fly the DeHavilland C-7A Caribou. It was during the time of the post-Vietnam era of military cutbacks, and the US was strewn with large numbers of unemployed pilots. During this period, I was very fortunate to get USAF UPT (undergraduate pilot training) slot with a Reserve unit and this unit was of course, flying Caribous. In many ways, due to my flying during high school and college, I felt I knew more about that type of flying before I went to UPT ... and I was right. There's nothing like flying a 500-knot trainer to prepare you for flying a 120 knot Caribou off a short, dirt strip! My squadron had 16 airplanes, 14 of which were Vietnam veterans. In fact, many of the pilots and flight mechanics (doubled as loadmaster & engineer) flew them there. And I don't mean that type; I mean that one. By serial number. During pre-flights, they kindly pointed out to me all the bullet hole patches on them, most from the wing, aft. When I asked about this, they told me the Viet Cong had trouble leading them (slower than they expected, I guess) and so they most hit too far aft. But on one airplane, one day I noticed a very large patch under the co-pilot's sliding side window. When I asked the other pilot about it, he said "the guy in that seat died right there". Needless to say, I felt a bit strange, and sad too, sitting in that seat.

Our mission was usually a fun one, dropping paratroopers and crates, and occasionally flying in cargo somewhere. But the airplane was actually a bit small by Air Force standards, and I don't remember ever flying more than about twenty paratroopers or carrying more than about 5000 pounds of cargo. You could fit a Jeep and ammunition trailer back there.

Two of my four engine failures (so far) have been in Caribous. One occurred over downtown Atlanta, Georgia. The FM came running up shouting, "there's a hole in the right cowl and oil is pouring out!" After shutting it down and landing at nearby Dobbins AFB, opening the cowl revealed a cracked cylinder head, from spark plug hole to the other spark plug hole. Also, one of the spark

plugs was missing, having fallen out over downtown Atlanta. Something like that hitting you in the head could ruin your whole day! But we never heard anything. Another time I had a severely rough running engine, which we shut down and then went home. We happened to be training our Aeromedical Evacuation flight folks at the time (nurses, medical corpsmen, and "patients") and when I looked back they were sitting down covering themselves in blankets! Best not to look, I expect.

But the airplane was very reliable and safe. The reliability was important, because as a Reservist, sometimes whether you got paid or not depended on whether or not you got into the air. And I always thought the airplane was very safe. De Havilland of Canada designed it as a STOL bush airplane, and I always knew I could land it at 50 knots if I had to. In fact, that was where I disagreed with the Air Force on how to fly the plane. I began to notice when I was riding in the cargo compartment (training flights with 3 pilots), that when making an STOL takeoff, the main gear struts would start to extend before the nose wheel came off, and the airplane leaped off the ground. This of course indicates that the airplane was ready to fly well before it was actually pulled off the ground; that is, I believe the AF was afraid to fly before Vmc. It made us use runways that were much longer than we actually needed. Just ask the Army pilots who flew them in Vietnam before they were handed over to the Air Force in 1967. That mind set might have been a product of operating larger, so called STOL airplanes, the C-123 and C-130 that really did need 3000' or so.

The airplane had a fantastic set of flaps, that ran the entire length of the trailing edge. When the flaps were lowered, the ailerons drooped with them. The flaps could go all the way down to 40 degrees, but this was rarely used as 30 degrees was more than enough and 40 could be a little bit scary. One interesting feature related to this was the airspeed indicator. It had a little sliding marker that show the acceptable speed range for any given flap setting and it operated with a mechanical linkage all the way back to the flaps themselves. It must have been a



nightmare to maintain! One day I walked in to the squadron and was greeted by a flight mechanic friend, who waived his car keys at me, upon which was attached a shiny AK-47 bullet. Well naturally, I asked about this and he replied that he had been assisting on a Caribou inspection. He was looking through an inspection port with his flashlight (sorry, torch!) and mirror, and saw something shiny resting in a U-shaped longeron. It was the bullet and the entry hole was on the other side of the fuselage (patched, of course) and had run out of energy and came to rest on the other side, having sat there for at least 6 years!

Most of the time, our flying was quite routine. Somehow I took solace in being one the last Lieutenants in the Air Force to be checked out in radial, piston engine airplanes. While others were zooming about in jets and turboprops, I was content at 120 knots, never having gone above 10,000'. I mean, if you can't go very fast, you can't go too far from home, right? Or so I thought! One year, as Reserve summer camp (the annual two weeks on active duty) came near, the leadership went around and asked, "who would like to go to Germany?" I thought hey, fine, I'll ride over in a KC-135 or perhaps on the airlines. Wrong! They meant, "who would like to fly a Caribou to Germany?"

Well, at 120 knots this was quite an adventure. We took about ten airplanes, put in two 500 gallon (each) bladders, and shoved off. First stop was Goose Bay, then Keflavik, then Wiesbaden. Don't even ask how heavy we were; we were at least 5000 pounds over max T.O. gross weight, so for several hours after departure, engine failure would have meant ditching for sure. The flying around Germany was great, and I even got to fly to Bitburg AB where I was born 24 years earlier. The trip back was pretty exciting too. As the Caribou was only equipped with one TACAN receiver, one VOR, and one ADF receiver, we had no means of long range

navigation. So, we had a very rudimentary flight plan (it was basically fly E on the compass for Europe, and W on the way back for wife... and I'm not really joking). Coming home, we did have a "duckbutt" or an HC-130 overhead that could pick up our IFF and give us an occasional heading for Lajes, and then St. Johns. But when we got to Lajes, I was not happy about not having a map. So, I went in to the map room at Base Ops and looked for something that had the Azores on one end and Canada on the other. I finally found a LORAN chart, ripped it to size, and with pencil (no straight edge), roughed out a course to St Johns. As I was leaving I looked up to see a group of Marine pilots (Harrier guys) shaking their heads at me. Hey, I had to have something to fly with! Fortunately, all ten of us got off OK from Lajes, and we decided to fly a loose formation to St Johns, because the heck with the rules, it was safer for us all to be together and maintain sight of each other. And then about 5 hours out of St Johns another airplane had a rough running engine. They decided to shut it

down and it was the worst feeling in the world to watch them slowly fall back. The discussion was that the rest of us should continue, and the HC-130 would orbit them the rest of the way. After the rest of us arrived we were told to go to the hotel, but no way, so we waited four hours until a Caribou appeared in the distance and touched down on one engine. Thank you, Pratt, and Whitney! The crew had put on their exposure suits, laid out their chutes and had decided to ride it down if the other one had quit.

Not long after that, it was decided that we should start to train at low level. I think someone figured out that if we had to deploy back to Germany for real (our area would have been the Fulda Gap), we would have lost all 16 airplanes on the first day of the war. So now we started flying at 300' AGL, by maps only, with no other means of navigation and no radar. This part-time flying was starting to get a little bit risky!

But by the 1980's the days of the Caribou flying as a military airplane were beginning to fade. In late 1981 my full-

time flying job went away and forced me to move to the American mid-west, making participation at my Reserve unit very difficult. By 1983, the decision was made to retire the Caribou, and my old unit got brand new C-130H models, but the mission had changed, and a lot of folks thought it wasn't as enjoyable as the "old days". Interestingly though, the US Army actually took a few of the Caribous back, the first time they wore Army colors since 1967. The rest went to boneyards and museums. In fact, one of my unit's old airplanes is enjoying retirement at the USAF Museum in Dayton, Ohio. No more ham-fisted ex-KC135 pilots to try and start her engines anymore!

Luncheon Club - 50th Lunch Report

Liveryman Tom Eeles

On 23rd February the Honourable Company of Air Pilots Luncheon Club celebrated its 50th Luncheon since its foundation on 9th February 2000. Eighty five members and their guests assembled in the downstairs bar of the RAF Club in much anticipation of an outstanding event. They were not disappointed.

Ruth Cundy opened the proceedings with the following Grace:-

*Dear Lord, as we meet here to dine
On Roasted Beef and flowing wine
We ask your blessing on this Luncheon
And on our Chairman, our friend John*

*Lord, as we meet, we must remember
Those sadly missed, no longer able
To share our common fellowship
And chat around the Luncheon Table*

*For 17 years, this Club has prospered
50 Editions, friendships fostered*

Good mates together, aviators'

Good food provided, charming waiters

We've heard some chats, we've been regaled

We've heard some very stirring tales

Of serious fun, of derring-do

Of world-wide capers and deep, deep pool!

And after lunch Lord, may we presume

The Running Horse might offer room,

To raise a glass to JBR

Distinguished AFC and Bar.

The menu was a good traditional British meal of Smoked Salmon, followed by Roast Beef and Yorkshire Pudding, with a dessert of Apple and Blackberry Crumble. After the meal the diners were entertained by the Chairman, Liveryman John Robinson, who reviewed the past fifty Luncheons, spoke of his other activities within the Honourable

Company, which are extensive, and gave an outline of his long and successful career as both an RAF pilot and instructor, and as a civilian commercial pilot. He described it as forty-four years of undetected crime. There was simply not enough room on your correspondent's menu card or enough ink in his pen to record all the detail, however, purchase of JBR's excellent autobiography 'A Life of Flying' will fill in any gaps. JBR is now standing down as Chairman of the Luncheon Club and has handed over the controls to one of his past students, Past Master Squadron Leader Chris Ford. We wish JBR a happy and relaxed time off duty and hope he will be seen at many more luncheons, and we wish Fordie every success in his new role as Chairman. The celebrations continued on in the Running Horse bar, with members then struggling home amidst travel chaos caused by Storm Doris.

