

OCTOBER 2009

No.177

# GUILD NEWS

THE GUILD OF AIR PILOTS AND AIR NAVIGATORS





# GUILD NEWS

## THE GUILD OF AIR PILOTS AND 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 KCVO

### MASTER:

Rear Admiral  
C H D Cooke-Priest  
CB CVO FRAeS

### CLERK:

Paul J Tacon BA FCIS

The Guild, founded in 1929, is a Livery  
Company of the City of London.  
(Letters Patent 1956)

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# Guild Diary

## OCTOBER 2009

8	Aptitude Assessment	RAF Cranwell
13	3 <sup>rd</sup> Education and Training Committee	Cobham House
15	6 <sup>th</sup> General Purposes and Finance Committee	Cobham House
29	Trophies and Awards Banquet	Guildhall
31	Flyer Show	Sofitel, Heathrow

## NOVEMBER 2009

3	4 <sup>th</sup> Technical and Air Safety Committee	Cobham House
3	Benevolent Fund Board of Management	Cobham House
12	7 <sup>th</sup> General Purposes and Finance Committee	Cobham House
12	4 <sup>th</sup> Court Meeting	Cutlers' Hall
12	Scholarships Presentation	Cutlers' Hall
13	Silent Change	Guildhall
14	Lord Mayor's Show	
16	Lord Mayor's Banquet	Guildhall
18	St Cecilia's Festival	St Paul's Cathedral

## DECEMBER 2009

1	5 <sup>th</sup> Education and Training Committee	Cobham House
3	Aptitude Assessment	RAF Cranwell
11	8 <sup>th</sup> General Purposes and Finance Committee	Cobham House
11	New Member's Briefing	Cobham House
11	Guild Carol Service	St Michael's Cornhill
11	Christmas Supper	The Counting House
18	Guild Closes	

## JANUARY 2010

5	Guild Opens	
12	5 <sup>th</sup> Technical and Air Safety Committee	Cobham House
13	Trophies and Awards Committee	Cobham House
20	Benevolent Fund Board of Management	RAF Club
21	9 <sup>th</sup> General Purposes and Finance Committee	Cobham House
21	5 <sup>th</sup> Court Meeting	Cutlers' Hall
21	Court Election Dinner	Cutlers' Hall

## Guild Visits Programme

7 October		Blades, Sywell
27 October		Naval Strike Wing, RAF Cottesmore
26 January		Magic Circle, London

*The Reach for the Islands Flying Scholarships for the Disabled (FSD) team at Ronaldsway, Isle of Man. Back row, left to right: Farzin Nasari (representing one of the Sponsors, the Peter Cruddas Foundation); Steve Hopwood (FSD Scholar, 2008); Caroline Begg (GAPAN funded scholar, 2008); Assistant Diana Green (FSD Trustee, Project manager for the flight); Andy Lewis (FSD Scholar, 2006); Emma Suddaby (FSD Scholar, 2006). Front row, left to right: Robert Lough (Aztec pilot); Alan Rosser (test pilot, Marshalls Business Aviation, Cambridge); Edwin Brenninkmeyer (Lead pilot, Cessna 210); Timothy Nathan (Aztec pilot and GAPAN member); Dierk Reuter (Cessna pilot). Photo courtesy Stuart Cook, [office@prominent.tv](mailto:office@prominent.tv)*

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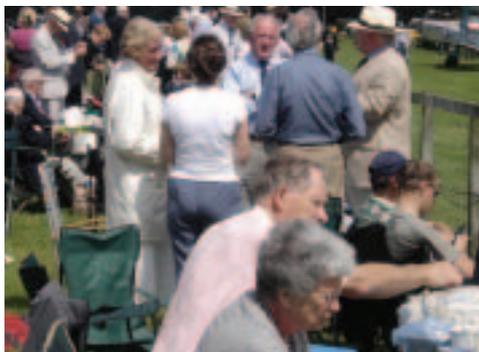


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# NEWS

## ROUND UP...

**GUILD SUNDAY.** A number of senior Guild members attended Guild Sunday at St Michael's, Cornhill, on 26th July. They are shown in the accompanying photograph; from the left, Warden Tudor Owen, IPM Rick Peacock-Edwards, the Master, Past Master Chris Hodgkinson, Liveryman Norman Hutchings, Seb Pooley, Laurence Nicolas, Mrs Tina Peacock-Edwards, the Master's Lady, Maria Evans, Mrs Alison Hodgkinson, Mrs Iris Hutchings and Mrs Emma Pooley.



**CITY LIVERY YACHT CLUB EAST COAST REGATTA.** Past Master Grayburn and his crew of Past Masters Hodgkinson and Mauleverer, and spouses, won the 2009 City Livery Yacht Club East Coast Regatta held at Burnham on Crouch on 4th July. This is the second time running that they have won this event. The photos show their winning yacht, Ocean Spirit II, at the beginning of the race before the wind increased, and the victorious crew holding their trophy in front of a portrait of the Guild's Patron.



**BBMF DINNER.** Assistant Dorothy Pooley writes: 'The dinner at Woodhall Spa held on 3rd July was an amazing event. Organised by the BBMF to raise funds for a permanent memorial to the crews of Bomber Command, it was held at the Petwood House Hotel which was once an RAF Officer's Mess. Guests were greeted to a marvellous flypast by the BBMF Lancaster whilst enjoying their pre-prandial champagne and then dined in style on delectable food prepared by four London chefs who had travelled up to the hotel to cook the food and worked for nothing to increase the fund-raising potential of the dinner.'

I was fortunate enough to join the IPM and the Faulkners at their table and other Guild members I saw there include the Vachers and the Master Elect. After dinner, we were entertained by a talk from Tony Iverson about being a 'Bomber Boy' and then David Shepherd the artist. Earlier in the evening a couple of his drawings had been auctioned and earlier in the day the IPM and I had visited the display of David's paintings, held in the BBMF hangar at Coningsby, also to raise funds for the same good cause.

All in all from the raffle, auction, display and the dinner, £50,000 have been raised towards the target sum of £2m. It was such a splendid evening that I was surprised not to see more Guild members there!



**GUILD OF AVIATION ARTISTS.** The Master, Rear Admiral Colin Cooke-Priest, opened the Guild of Aviation Artist's summer exhibition on Monday 20th July. The exhibition is titled 'Aviation Paintings of the year 2009'. The photos show the Lord Mayor of Westminster, Councilor Duncan Sandys, the Master's Lady, the Master and

Michael Turner, President of the Guild of Aviation Artists, at the opening ceremony, and Past Master Duncan Simpson making a presentation to Michael Turner. Some of the wonderful paintings can be seen in the background.

**FLY2HELP DINNER, HOUSE OF COMMONS, 25 NOV.** The IPM, Air Commodore Rick Peacock-Edwards, has asked that Guild members be made aware of a Charity Gala Dinner to be held in the House of Commons on Wednesday 25th November, hosted by 'fly2help'. 'fly 2help' is a charity that aims to lift people's horizons via the medium of flight, its core focus being disadvantaged youngsters. It is committed to supporting anyone who could benefit, typically the terminally ill, chronically sick and bereaved, those who have suffered extreme neglect and abuse, and those who face exclusion from society as a result of mental ill-health, sickness, disability, injury or poverty. Youngsters and their families/carers are given an opportunity to visit 'fly2help' at Kemble Airport where they receive their own bespoke event day, including an exhilarating flight. The theme of the Dinner will be 'Celebrating the Spitfire's Operational Debut' and the principal Guest Speaker will be Captain Eric Brown CBE DSC AFC FRAeS RN. An individual ticket will cost £150 and a full table of 10 receives a 10% discount at £1350. For tickets please contact 'fly2help' on 01285 770821, email [info@fly2help.org](mailto:info@fly2help.org).



**GUILD LADIES VISIT THE ROYAL MEWS.**

Sue Cooke-Priest writes: 'Undeterred by the monsoon conditions whilst embarking in taxis,

39 ladies joined me on the 24th July for lunch at the RAF Club followed by a private tour of the Royal Mews. We were shown the State coaches, carriages and amazing harnesses and uniforms used for State occasions. The 'Piece de Resistance' had to be the Golden State Coach, a truly remarkable example of the art of coach building. The only disappointment was that the magnificent horses, that I know a number of the ladies had looked forward to seeing, had left for their summer break in green pastures that morning. Despite this, it was a fascinating visit.'

# The Master writes ...

COLIN COOKE-PRIEST

**P**enning this message on one of August's hottest days, it is a salutary thought that by the time it reaches your in-boxes my Master's year will be more than half done! The year, like the proverbial 'thousand ages' is, indeed 'like an evening gone'. So what's to report?

Well firstly, you will all by now have had a chance to study our Strategic Review. As I said in my last message many of the issues raised are already being firmly addressed. Others will inevitably take longer. However your executive, and I stress your executive, cannot work in a vacuum. A dedicated team, full time, part time, honorary and just plain interested strive to deliver what is best for the Guild and all that it stands for. But we cannot always get it right. Feedback, formal or informal, would be hugely welcome.

One area in which I was particularly keen to see progress is, right now, in front of you, The Guild News. Under her stewardship Linda Jones progressed our House Magazine to an entirely new level, wherein it is now both very widely read, greatly admired and even envied! A hard act to follow. However success generates opportunity and a number of us had come to the conclusion that, given such widespread distribution and readership, we were now missing a trick both in terms of coverage of our overseas Regions and of what one might describe as more detailed professional issues. Although he will almost certainly cavil at letting me say it, I believe that our new Editor, Tom Eeles, has met the challenge admirably. I very much hope that our overseas members will enjoy the greater coverage of their parts of the world and that those of you still actively engaged in the profession will be stimulated by the increased technical content. However, never forget that the luckless editor can only be as good as the material with which he is provided, so as well as letting us have feedback on your views of your Guild News, don't forget your own contributions!

In this mid-tour message I intend to stick with the Regions, our newest Region in particular. Having just returned from the inaugural formal Master's visit to Canada I can only say that I was immensely impressed by what has been achieved by a very small number of enthusiastic and dedicated people on less than a shoestring. Our other overseas Regions having been set up many years ago,

it is easy to forget that they too once had to wrestle with the 'what's in it for me' syndrome, as they struggled to build up a basic core membership. They too had to massage our constitution and our traditions, firmly rooted in the City of London, into a language and shape acceptable both to their national identities and the City heritage. So what can we do to help? I urge you all, who have experienced the international reach of the Guild, and who have enjoyed the professional and social benefits of our worldwide membership, to miss no chance, should the opportunity occur, to spread the word to our Canadian colleagues.

Regretably I have to finish on a sad note. Those of you who knew him will by now be aware of the passing of Jack Smith. It might seem invidious to single out one individual since nothing is so certain as that we all have to take up a final appointment, but the contribution of this giant of a man, both to the Hong Kong Region and to the Guild as a whole merits special mention.

Jack Smith started his flying career serving with the Fleet Air Arm for eight years, before joining, first British Eagle and then in 1968, Cathay Pacific. He joined the Guild in 1979 and became a Liveryman in 1988. He was one of the founding members of the Hong Kong region in 1982 and subsequently became its third Chairman, serving for two years between 1989-91. He also filled the posts of Secretary, Treasurer and Administrator, this latter role only given up very grudgingly due to ill health earlier this year. He was awarded Master Air Pilot Certificate no. 741 in March 1998 and the Guild Award of Merit for 2001.

For many Jack was the visible face of the Hong Kong region. He came to London four times a year to coincide with all the major Guild events and would invariably treat the office team to a RUM - a 'Regional Update Meeting' to the uninitiated! - at the Cittie of Yorke. If Helen was in town at the same time she would join them to ensure good order. Two years ago the then Chairman of the Region, Captain Peter Robinson provided a report covering the 25th anniversary of the founding of the Region for Guild News. He wrote as follows:

'In terms of length of service to the Region, nobody comes close to Jack's contribution. He was one of the founding members, has



served as Secretary, Treasurer, more than once, and very notably has been the Region's Administrator for the past 14 years. Jack's special contribution was recognised in 2001 when he received the Guild's Award of Merit for services to the Guild. He maintains his active interest in the Guild and in the region, despite having 'retired' over a decade ago. Those of us who have recently had the honour of serving as the Region's Chairman find it hard to imagine how we could possibly do the job without Jack's guidance and sagely advice.' That says it all.

Jack finally lost his long, hard battle on the 18th August, surrounded by his family. The Guild has lost a true friend and our thoughts are with Helen, his family and the Region that he so vigorously championed. 

## The General Aviation Safety Council (GASCo)

The current GASCo CE is retiring shortly at his own request and the Board wishes to appoint a successor. Candidates for the appointment should have a wide general aviation background, including both practical and administrative responsibilities in an executive appointment. Experience as a professional and/or recreational pilot would be a considerable advantage. The salary offered will be circa £40,000. A detailed Job Specification is posted on the GASCo website at [www.GASCo.org.uk](http://www.GASCo.org.uk).

An initial application is required by email only, and must include a comprehensive CV highlighting relevant activities. It should be submitted by 1st November 2009 to:

[applications@gen-av-safety.demon.co.uk](mailto:applications@gen-av-safety.demon.co.uk)

# Clerk's column

PAUL TACON

*Learned Clerk*

## BRIEFING FOR COURT ASSISTANT CANDIDATES

As was mentioned in the August edition of Guild News, there will be a Briefing at the Guild office for all those who may wish to stand for election as an Assistant to the Court in the forthcoming elections. The Candidacy Papers are contained in this edition of Guild News and the Election Ballot papers will be in the December edition.

Any Liveryman is eligible to stand for election and may submit his candidacy without attending the Briefing. It is, however, recommended that anybody wishing to stand should try to attend the Briefing in order to confirm whether the role of Assistant will be what you expect - and to understand what will be expected of you in that role.

The Briefing will take place at 16.00 on Fri 23 October. Anybody wishing to attend is asked to confirm by email to the Guild office.

## Report of the Education and Training Committee meeting held on Tuesday 14th July 2009

DOROTHY POOLEY, CHAIRMAN

Mike Smethers from the CAA, who has responsibility for EASA matters within the CAA, gave a briefing to members of both the E&TC and the TASC. He explained that we are currently in a transitional period which could last until 2015. Despite the Agency's intentions to implement licensing regulations by 2012, there is likely to be a delay on this and on the aerodromes rules. The briefing clarified the position that it is EASA who prepare rules, but National Aviation Authorities who implement them, leaving EASA with a further role of standardising that implementation. EASA has received a lot of bad press recently and it is clear that the EC has underestimated the amount of work that would be required to convert the JAA rules into EU rules.

Following the briefing which took up around 50% of the time available for the meeting, short reports were received from the various sub-committees and representative bodies. Concern was

## JACK SMITH

Sadly, Guild Court members heard last month of the death of Capt Jack Smith. Jack was a Liveryman and Past Chairman of the Guild in Hong Kong, although was more well known in his role as the Administrator for the HK Region. In this role, Jack was the embodiment of the Guild in HK. He also did a lot of charitable work for handicapped children through the charity 'The Sunnyside Club'. Further detail about Jack and his huge contribution to the Guild is contained in the Master's Message and also on the HK Page of the website where there is a tribute page to him.

Jack's funeral was held in Hong Kong, however, it is the wish of many Guild members and of his wife, Helen, that a Memorial Service to Jack will take place in UK for those who were unable to attend his service in HK.

The Memorial Service will be held at 14.30 on Wednesday 28 October at St Michael's, Cornhill. Those wishing to attend are asked to notify (by email) the Guild office in order that we may have an approximate number of anticipated attendance. 

expressed by various members of the committee regarding the costs of undertaking the Morrisby tests that are currently borne by the prospective candidates short-listed for the Somers Scholarship. The general feeling of the meeting was that it would be highly desirable for the Guild to offset some of that cost (say £60 per candidate), as candidates will have already had to pay travel and accommodation costs and bear the cost of obtaining a Class 1 medical (around £400) in order to attend this phase of the selection process.

The three position papers previously presented to the Court have been recast into a uniform format by Harvey Crush, but still need a few small amendments before the Committee submits them in final form to the Court. 

# Gazette

APPROVED BY THE COURT ON  
10th SEPTEMBER 2009

## ADMISSIONS

### As Upper Freeman

Squadron Leader Keven Ashley GAMBOLD (OS)  
Justyn Glen-Davis GORMAN  
Mawgan David GRACE (HK)  
Captain Peter Anthony HOLSTEIN (AUS)  
Captain Jeremy Victor MORGAN  
Robert Clive RICKWOOD  
Captain Laurie James SHAW (HK)  
Eeva Kristiina TERVO  
Captain David George WHITE (OS)  
Captain Robert Gwyn Lewis WILLIAMS  
Captain David COLES (CAN)  
Wing Commander Ian MACPHERSON (NZ)

### As Freeman

Christine Susan MILNER  
Richard Charles PIPER  
David Edmond STOKES  
Christopher Paul TAYLOR  
Dr Declan Martin TIERNAN

### As Honorary Freeman

Lady Cobham

### As Associate

Kurt James KRANEN (AUS)  
Linda Mary FAULKNER

## ACKNOWLEDGED BY THE COURT 10 September 2009

### REGRADE

#### To Livery

Christopher James Colvin HUTCHINSON  
Edward Keith Brian WARBURTON  
Humphrey John WALTERS  
Graham Anthony FORBES (HK)

### DECEASED

Geoffrey Charles KIRRAGE  
Ralph Lewis MESSENT  
Captain Jack Gordon Leslie SMITH (HK)  
Christopher William WOOD

### RESIGNATIONS

Bruce Robert ALABASTER (NZ)  
Brian Charles GILKISON (NZ)  
Mark HAMWEE  
Keith Roger MILLER  
Patrick Grant WILLS  
Denis William WOOLLEY

# TROPHIES AND AWARDS 2009

The following are the awards approved by the Court of the Guild for 2009. The recipients will be formally presented with their award at the Guild's Trophies and Awards Banquet to be held at Guildhall, London, on Thursday, 29 October.

## LIFETIME CONTRIBUTION TO THE AEROSPACE INDUSTRY

**The Guild Award of Honour** - not awarded. Awarded to an individual who has made an outstanding lifetime contribution to aviation.

## FLIGHT TEST

### **The Derry & Richards Memorial Medal**

Awarded to a test pilot who has made an outstanding contribution in advancing the art and science of aviation.

**Iain Young MBE BSc FRAeS**

## TRAINING

### **The Sir Alan Cobham Memorial Award**

Awarded to the most meritorious student pilot graduating from a college or school of civil or military aviation and nominated by the Principal or Commanding Officer. Particular consideration will be given to the candidate's progress during the course, including qualities of character, leadership, involvement in sport, recreation and voluntary service, in addition to flying and academic achievement.

**Vincent Dusseau**

### **The CFS Guild Trophy**

A periodic award to an individual, group or organisation that, in the opinion of the Court of the Guild and with the endorsement of the Central Flying School, has made an outstanding contribution toward the achievement of excellence in the delivery of military flying training or instructional standards.

**Hawk Synthetic Training Facility Staff, RAF Valley**  
**(BAE Systems (HST) Ltd)**

### **The Pike Trophy**

Awarded to an individual who has made an outstanding contribution to the maintenance of high standards of civil flying instruction and safety, taking into account working conditions and opportunities.

**Captain Richard (Dickie) Bird FRAeS**

**The John Landymore Trophy** Awarded to the outstanding candidate of that year for a Guild PPL Scholarship.

**Courtney Challis**

## FLIGHT OPERATIONS

### **The Sir Barnes Wallis Medal**

Awarded in recognition of an exceptional and innovative contribution to aviation.

**Timothy Prince OBE FRAeS**

### **The Grand Master's Medal** - not awarded

Awarded to a pilot under the age of 30 for outstanding achievement and endeavour in any field of flying activity.

**The Master's Commendation** - awarded twice Awarded at the discretion of the Master for commendable achievement in any sector of aviation.

**Squadron Leader Alistair (Al) Pinner MBE BSc RAF,**  
**Captain Roland (Rolie) James DSM(Oman)**  
**BA(Hons)**

### **The Brackley Memorial Trophy**

Awarded to an individual, a complete aircraft crew, or an organisation, for an act or acts of outstanding flying skill, which have contributed to the operational development of air transport or transport aircraft or new techniques in air transport flying.

**Squadron Leader Keith Hewitt MBE RAF**

### **The Johnston Memorial Trophy**

Awarded to an individual, a complete aircraft crew, or an organisation, for an outstanding performance of airmanship, for the operation of airborne systems or for the development of air navigation techniques and equipment.

**5 (AC) Squadron RAF**

### **The Guild Sword of Honour** - not awarded

Awarded for an outstanding contribution to any sector of General Aviation (all elements of Civil Aviation other than Air Transport), whether in the air or on the ground.

## SAFETY AND SURVIVAL

### **The Sir James Martin Award**

Awarded to an individual, a group, team or organisation, which has made an outstanding, original and practical contribution leading to the safer operation of aircraft or the survival of aircrew or passengers.

**Flight Lieutenant Emily Rickards RAF**

### **The Cumberbatch Trophy** - not awarded

Awarded to an individual, a team, group or organisation for an outstanding contribution to air safety, whether by the development of techniques contributing to safer flight, by improvements in ground equipment and services or by improvements in aircraft and component design.

## FOR OUTSTANDING COURAGE OR DEVOTION TO DUTY IN THE AIR

### **The Grand Master's Commendation**

Awarded at the discretion of the Grand Master for an act of valour or outstanding services in the air.

**Crew of 'Blackcat 22' (RAF Chinook)**

### **The Hugh Gordon-Burge Memorial Award**

Awarded to a member or members of a crew whose outstanding behaviour and action contributed to the saving of their aircraft or passengers.

**Crews of 'Ultimate 21 Flight' (RAF Chinooks 'Ultimate 21' and 'Ultimate 22')**

### **The Prince Philip Helicopter Rescue Award**

Awarded to an individual member of a helicopter crew, a complete crew or the crews of multiple helicopters, for an act of outstanding courage or devotion to duty in the course of land or sea search and rescue operations.

**Crew of 'Rescue 193' (RN Sea King, 771 NAS)**

### **The Guild Award for Gallantry** - not awarded

Awarded to an individual, or crew of an aircraft, in any field of aviation for an outstanding act of gallantry. It is intended that this should be awarded on rare occasions for any act considered worthy of the award as soon as the facts of the event are clear. Awarded at the discretion of the Master and on the advice of the Trophies and Awards Committee.

## GUILD ONLY

### **The Guild Award of Merit**

Awarded for meritorious service to the Guild.

**Captain R Felix LVO FRAeS**

## REGIONAL AWARDS

### **The Grand Master's Australian Medal**

Awarded to an individual, a group or organisation involved in any branch of aviation in the Australian Region or to Australian nationals abroad, who or which has made a meritorious contribution to any aviation activity, either by displaying technical excellence or by the development of a procedure or operational technique of an outstanding nature.

**School of Air Warfare RAAF**

### **The Australian Bi-Centennial Award**

Awarded as an ongoing commemoration of the Australian Bi-centenary, to recognise an outstanding individual contribution to Australian aviation.

**Peter W Nottage**

### **Jim Cowan Memorial Award** - not awarded

The recipient will be a young pilot (no specific age limit) who is an Australian citizen or a permanent resident in Australia, holding a civil Commercial Pilot Licence or higher, or military pilot qualification and is engaged in the profession as a pilot in Australia or on temporary posting overseas and has, in the opinion of the Australian Region Trophies and Awards Sub-Committee, with the endorsement of the Guild Trophies and Awards Committee, made an outstanding individual contribution to aviation or whose achievements in aviation are truly noteworthy.

### **The Jean Batten Memorial Award**

Awarded in memory of the late Liveryman Miss Jean Batten, to recognise an outstanding individual contribution to New Zealand aviation.

**Squadron Leader Jim Rankin DSD MSc RNZAF**

## AVIATION MEDIA

### **The Guild of Air Pilots and Air Navigators Award for Aviation Journalism**

Awarded to an individual journalist, publication or organisation for an outstanding contribution to the promotion or public awareness of aviation in general or of any important aspect of aviation activity.

**Flight International**

## THE MASTER'S AWARDS

### **The Master's Medal** - awarded twice

Awarded to any person in aviation, at any time, for an act or other achievement in aviation considered worthy of the Medal, as soon as the facts of the event are clear. This is intended to be an immediate award, made at the discretion of the Master and on the advice of the Trophies and Awards Committee.

**Crew of US Airways 'Flight 1549'**

**Charles (Chalkie) Stobbart**

### **The Master's Special Commendation**

- an extra award for 2009

**Crew of 'CanJet Flight 918'** 

# Guild Garden Party, Sunday 2nd August

ASSISTANT TOM EELES, PHOTOS COURTESY TOM EELES AND DICKIE DUCKETT

Despite the lack of the Met Office's much hyped 'Barbecue Summer', Sunday 2nd August was a classic English summer's day at Old Warden, where the Guild held its annual Garden Party, the Shuttleworth Collection Military Pageant Air Display was staged and the Hunter Pilots and Airfield Construction Branch Reunions took place. The bright sunshine and puffy cumulus clouds cruising overhead made it a perfect setting for all these events. No fewer than 210 Guild members and their guests attended, including the Master and his Lady, the Immediate Past Master, the Master Elect and 2 Wardens. Some 85 cars, expertly marshalled by members of the local Air Training Corps Squadron who rightly deserve a special mention, and a number of the Guild's Flying Club light aircraft delivered Guild members and their guests to the event. Champagne corks popped, pilots who flew in sipped ginger beer, ladies in elegant summer dresses mingled with gentlemen in tropical suits and panama hats. Exotic picnics were in abundance. It was a scene reminiscent of the golden days of aviation in the 1930s. A number of Guild members who had flown Hunters in their youth also visited the Hunter Pilot's Reunion, where some 584 Hunter pilots had gathered in one of the hangars, along with past members of the Airfield Construction Branch. Doubtless many lies and war stories were exchanged and it was fitting that a Hunter FGA9 performed in the flying display.

We were treated to a wonderful flying display which included a wide range of diverse aircraft, ranging from the jets - Hunter FGA 9, Vampire T11, Gnat T1, Jet Provost, - to classic piston engine light aircraft - Chipmunk, Tiger Moth, Tutor, and Magister. The Shuttleworth's World War One aircraft, SE5A, Avro 504K and Bristol F2B Fighter all performed with exuberance. A particularly interesting formation was the inter-war German contingent of Bucker Jungmann, Bucker Bestmann, Klemm 35D and Focke Wulf

FW 44 Stieglitz. An immaculate pair of Ryan PT22 Recruit trainers added an interesting transatlantic flavour, but courted disfavour from the Master and his party by providing a generous slipstream into the Guild's enclosure after starting! A Westland Wasp helicopter buzzed angrily along the crowd line, immediately attracting the Master's attention. A beautifully restored Avro Anson, in civil livery, brought back memories to the writer of flights hitched (illegally) as a schoolboy when my parents were based at RAF Cranwell. The piston engine 'heavy metal' brigade, Gloster Gladiator, Hawker Hind, Westland Lysander, Spitfire and 2 Hurricanes were all displayed with great skill and elan.

Sadly, the wind obstinately refused to reduce to a level that would have permitted the 'Edwardians' - the aircraft from the dawn of aviation - Bristol Boxkite, Avro Triplane, Blackburn Monoplane, Deperdussin, and Bleriot - to fly until about 7 pm. By this time many of those who had flown in or who had traveled some distance by car had departed for home. But never mind. We were also treated to a 'drive-by' of the Shuttleworth Collection of eclectic classic, vintage and veteran vehicles, suitably manned by individuals in appropriate period costume, pursued energetically by a perspiring individual on a Victorian quadricycle.

At the end of the display visiting aircraft were despatched to their home airfields with commendable efficiency and lack of fuss. Arriving and departing by air at the Garden Party was without doubt the best way to attend this event, as we watched the lines of cars crawling away whilst we set heading for home. All in all, a wonderful day; Assistant Mike Glover deserves enormous thanks and congratulations for making the arrangements. 

The Edwardians - Bristol Boxkite and Avro Triplane, in action.



The immaculate Avro Tutor taxis past the Guild's enclosure.



The Master Elect explains the finer points of displaying an historic aircraft to the Junior Warden.



The Drive By of veteran vehicles.

The Guild's enclosure, with Guild members enjoying their picnics.



The Editor's party arrives by air.



# PROFILE

## Captain Jock Lowe

### PAST MASTER

PAT MALONE

**K**ibblesworth was a one-street mining village in the Durham coalfields where boys coming of working age traditionally laboured in the brickworks or went down the pit. There in the waning years of World War Two was born William Dennis Lowe, son of a Co-op sales rep and a woman of coal mining stock, profoundly working class Geordies whose idea of success was for him to stay at school beyond the age of 15.

Dennis Lowe was always set apart. He was the first boy at Kibblesworth Junior Mixed and Infants School to pass the eleven-plus exam for six years. At Chester-le-Street Grammar he shone at science, and winning a place at Birmingham University made him a rarity in his circle. But that was just the start. We know him today as Captain 'Jock' Lowe, the first man since Sir Sefton Brancker in 1929 to be President of the Royal Aeronautical Society and Master of the Guild of Air Pilots and Air Navigators, Concorde Chief Pilot and indeed the world's longest-serving Concorde pilot, Director of Flight Operations for British Airways, lecturer, broadcaster and tireless cheerleader for aviation in all its forms. A flyer to the bone, he keeps a half share in a Chipmunk and a tenth share in a Bolkow Monsun at Booker.

More than any other, Jock Lowe was 'Captain Concorde'. She was the reason he stayed in aviation; he flew her, he trained on her, he managed the fleet and was a major force in turning her from white elephant to golden eagle, producing in one year 25% of BA's profits from 5% of turnover. It comes as a surprise, therefore, when he says he always thought her a commercial blind alley, he knew she could never be an overall financial success, and that we're unlikely to see her like again - the era of the large supersonic passenger transport died with her.

"That's not to say Concorde was a failure," Capt Lowe says. "They didn't take many passengers to the moon, but the Apollo programme was no failure. We, the British and French, had gone for speed as the route to success in commercial aviation, based on the fact that all

previously successful aircraft had gone faster. But they'd also been bigger, so the jumbo was the real commercial breakthrough. Perhaps we tried to do too much, we tried to make a technical success - which undoubtedly it was by any measure - as well as a commercial success. But look what we had! An international icon, the very embodiment of national pride. We would all be poorer if we hadn't had Concorde."

Birmingham University had one of the best chemical engineering departments, and impressed Capt Lowe with its thriving social scene. On his first day, a fellow student's question: 'And what's your name, Jock?' gave him a nickname for life. He got a 2:1 and decided to go for a PhD, sponsored by the Ministry of Aviation's Rocket Propulsion Establishment.

"In the first term of my PhD there were eight of us sharing a flat, and one evening some of them came in and said, 'We're a bit short for the Air Squadron list, can we put your name down?' And I thought, okay - and that was it. Had I not been in that night, my life might have gone in a completely different direction.

"We all went to RAF Shawbury and everyone was to have a flight in a Chipmunk. It was my first time in an aeroplane, and I was sick. But I was also intrigued and interested, and I was not sick again. I went solo fairly quickly and started doing aerobatics. I did about 250 hours in the UAS, and got to like flying more and more. I won the squadron aerobatic competition, then the area competition, then the national competition, the Hack Trophy, at Little Rissington. It was named for the man who designed Hack Cough Sweets and I've still got the watch he gave us."

After getting his PhD Capt Lowe went looking for work. "I was offered a job at Mars in Slough as a production engineer, and they paid twice as much as anybody else," he says. "I had a two-day interview and they gave me a big bag of chocolates to take away. I was taking them to a girlfriend who was a stewardess with BEA, and on the way I drove past Heathrow. It was dusk - there were no fences in those days - and I saw all the lights, red and green, and the aeroplanes coming and going, and I thought, you know, if I don't try flying as a career, every time I fly from now on I'm going to regret not trying..."

I was lucky enough to be offered a place on the BEA/BOAC sponsored training scheme at Oxford. So I put on my blazer and went back to school, back to first principles of flying. It was all a bit



unexciting, so I was soon having second thoughts. But on my 25th birthday, on a Saturday afternoon in 1969, I switched on the TV and watched Concorde take off for the first time. I thought to myself, that's it! That's what I'm going to do.

Then we went to Shannon to train on the VC10 and my first flight was with Bob Knights, who'd been a Pathfinder pilot, did a lot of missions and had aeroplanes shot out from under him. He was determined to get this VC10 up to 50,000 feet and the flight engineer was determined to stop him - the Conways didn't like it, they were banging away like fury, and these two were fighting over the throttles. And I thought, what have I got myself into here? Bob Knights got it up to 48,500 feet and it would climb no more - but it was an interesting introduction, a good foundation for knowing the aeroplane.

"During training I went to Doha, Dubai, Lagos, all around Africa, and there were some very knowledgeable pilots, many of them ex-wartime, who knew how to fly aeroplanes. I did the flight navigators course, learning astro-navigation, using the sextant, Loran, and Consol, and after that I could fly to America. I used to go westbound to Australia once a month - New York, LA, Honolulu, Fiji, Sydney, Melbourne, turn round and come back again. What a job to have!"

In 1975, a year before Concorde was due to come into service with BA, Capt Lowe wangled a couple of flights with test pilots John Cochrane and Brian Trubshaw. "They wanted some line pilots to fly it and asked Balpa," he says. "I walked around the corner of the hangar at Fairford on a misty February day, and there she was, looking absolutely gorgeous - I'd never seen her before, and 45 minutes later I was in the left seat, taxiing out. My first



flight simulated a heavyweight 31L take-off from New York, where we bank just after lift-off for noise abatement. They thought well, if some dumb third pilot from BA can do it, anybody can.

"I managed to get on the first BA first officers' course which started on June 1st 1976. In that legendary hot summer we were down at Filton working very hard; I'd been right around the academic merry-go-round, but this was the most intense learning experience I'd had. North was still north on the compass but everything else was new. The systems were all particular to Concorde - it's still an aeroplane, with electrics and hydraulics and air conditioning and fuel, but they were far more complex than anything before them, and all different. We trained in the aircraft at Brize Norton - we did 40 landings each in those days, then went route flying with a cadre of training pilots on the Bahrain run, and after about six months I started to instruct the next course."

Capt Lowe designed an approach profile in order to minimise fuel burn, always critical on Concorde. "I just fiddled about with flexicurves," he says, "and by having the INS spots in the right place you could do a continuous turn onto finals with the radius of turn constantly changing as the speed decreased. I negotiated it through with air traffic control at Heathrow and we were cleared from Ockham to do our own approach, so we'd plug it into the INS and off it flew. And very kindly BA gave me a staff suggestion payment of £5,000 for

that, which I was very pleased with, and so were they because it saved about a million quid a year."

Concorde lost money from the start and there were constant debates about whether it could continue. "A few months later there was a reorganisation and Concorde division was formed with the technical boss Brian Walpole as general manager and me as his number two," Capt Lowe says. "It was May of '82, I was 38 years old and we were pitched in at the deep end. The government had announced they were going to take away all financial help, which was

running at £20 million a year - the Farnborough test rig and support to Rolls Royce and BAC - and everybody thought that was it. We were losing money, there were no new routes, and it couldn't stand the loss of another £20 million.

"I got some market research done asking the passengers if they knew what the fare was. Most of them had no idea, and many guesses came in higher than they actually were. So I thought, let's charge them what they think they're paying. - there was a fairly fixed volume, we had to get as much as we could from them. So we just added a few more percent to the fares every two or three months, and the load factors started to increase.

"Then we looked at New York and asked why we had two flights there in the morning. We'd been told there was congestion in the evening, and thunderstorms, but that had last been looked at ten years before. We talked to air traffic control, and lo and behold there weren't any delays at five to seven o'clock, and there were five days a year when they got thunderstorms coming through. So we moved one of the flights from London to the evening, and that was probably the biggest breakthrough after the fare increases because we now had an evening market.

"In the first year the support was planned at £17 million but it came in at £10 million because everybody got the message on costs. It was a great time because we could see the revenue going up, and amazingly

the load factors were going up, too. Then we started the charter flights. Brian Calvert, the technical manager who had introduced the aeroplane, had retired and did a charter for his local pub. They all paid £100 for a trip round the bay. So we thought, why don't we do more charter? It's seen as the rich man's toy, but if we can make it 'the achievable dream' for everybody, we might change people's perceptions. Out of that, the charter blossomed. Concorde to New York and QE2 back was another breakthrough. Then we did the first round the world trip. We charged John Player £1.2 million, which was a huge mark-up because it was a big marketing and operational risk. But eventually some round-the-world charter operators were getting \$50,000 a passenger. There was demand almost throughout the world, and in the end the aeroplane went to 250 destinations. Everywhere there was spin-off publicity for BA, and it very quickly became the flagship.

"Operating profit figures came in and they exceeded everybody's expectations by a factor of ten. Eventually they went to £50 million. We saw enormous losses turn into enormous profits, we saw people who had been against it become supporters."

In 1986 Capt Lowe was asked to become General Manager of Operations Control. Ops Control is a small team of about 90 people, the spider in the centre of the BA web, which runs the whole show, allocating aeroplanes to flights, fixing maintenance time and troubleshooting problems.

"I hadn't been in the job more than a couple of weeks, it was a Friday night and I went in at 7pm to say cheerio for the weekend. A call came in from Terminal Four to say there was a jumbo that needed an engine change, which meant an aircraft change for that flight, it was going to be tight to get it out before the curfew. Then a cabin crew refused to operate down to Johannesburg because the upper deck hadn't been blocked off as it should have been and they didn't have a rest area. Then we got a call from Geneva to say a 757 had a vibration and probably needed an engine change, then Syria closed its airspace - there's about 20 aeroplanes about to go through Syrian airspace and they've all got to be contacted and in some cases diverted. Are there crews at the place you divert the planes to because they'll be out of time? Then Heathrow Tower called to say the runway lights had failed - it's winter - and where do you want the aircraft diverted to, Gatwick,

Manchester, Stansted? That last call came in at 7:25, so all this had happened in 25 minutes. This small team prioritised, allocated and sorted it out, and I just sat back in amazement and watched them deal with multiple crises that would knock most people off their chairs. That was my introduction to Ops Control.

"I did that until '89 and had some great times - they were the best team I ever worked with, the most professional, the most fun-loving.

"After that, for some reason they made me chief pilot for Concorde, DC-10 and Tristar, which effectively meant I could dodge the seniority rules and move to the left seat on Concorde. Then one day I was at home in Marlow moving a compost heap and I had a call from Colin Marshall asking if I'd be Director of Flight Operations. That was one of the top jobs you could hope for, so I employed a gardener to finish moving the compost and went to work. We undoubtedly had the best standards, but there was a lot to do. It had to become more efficient, safety had to be improved even further, and we had to improve morale. Pilots are a cynical lot - when you're sitting for 12 hours and you're tired, and things don't work, the ground starter doesn't turn up, the catering's not right or the push-back's late or people have been upgraded incorrectly, there are lots of things that impact on your thoughts.

Life changed for Capt Lowe when Robert Ayling took over as Chief Executive. The two did not see eye to eye over many things, including the notorious 'ethnic tailfin' branding, and Capt Lowe found himself back as Commercial Manager for Concorde.

"I did a lot to protect Concorde's patch, and I can lay a degree of ownership to the fact that Concorde's tail was never painted in funny colours. I kept insisting that we had a Union Jack on it, it had to be based on some part of our heritage. I said they had to be mostly white for heat dissipation purposes, which is correct for the fuselage and the wings, but for the tail I used a bit of licence. And I absolutely insisted they all had to be the same. It didn't endear me to the CEO, but he didn't push to point too far.

"But this is one of the things about Concorde - it wasn't just for BA, it wasn't just for the Concorde fleet, it wasn't even for aviation. It was iconic for the nation, and for us who worked with her in particular. We felt, I felt, an extra responsibility, that actually the whole country paid for this aeroplane to be built,

and people had a degree of emotional engagement with it. It was that achievable dream, and you couldn't buy anything better.

Capt Lowe had just returned from a secondment as Operations Director of Olympic Airways when the Paris crash happened, and later, after the aircraft returned to service and it was decided to cease flights, he thought it would be a good time to retire. "Rod Eddington called me in to try to find a way to keep one or two Concorde flying for high days and holidays," he says. But the enthusiasm had gone from the upper echelons of the airline, they didn't have the will to make it work. It had been losing money, they were running only one flight a day, load factors weren't coming back, the thing had run out of steam. Eddington very kindly invited me on the last charter flight, so I had the finale, if you like.

"But you know, if you'd said to me in 1976 that Concorde was going to have 27 years and you're going to make half a billion pounds net profit, I would have taken your hand off. It would have stopped now

anyway - a large chunk of the passengers were American bankers, and this recession would have put an end to it."

And it will not come again. "It's got the laws of physics against it," says Capt Lowe. "You've got noise on take-off and landing, the range, which will always be less than subsonic, you've got emissions in the upper atmosphere which could be far more significant than in the troposphere, and not least you've got cost of development and the political problems that arise from supersonic overflights, be it water or land.

"There may be at some stage, when we get into growth again, a supersonic business jet, but major iconic engineering programmes like Concorde are out of vogue. The Americans are trying to bring it back with putting a man on the moon, but it's been done; maybe there's not the opportunity now to have national flagship programmes in engineering, as my generation had. Perhaps we need to look for that elsewhere, maybe in medicine - and perhaps it should be less about patriotism and nationalism, and more about human endeavour." 



# BREAKING THE HENSHAW RECORD

WARDEN HIS HONOUR JUDGE TUDOR OWEN

"And still, over 40 years later, I would challenge any pilot to fly any aircraft in the world with no more than 200 horse-power to the Cape and back in less time than I did in XF in 1939" - ALEX HENSHAW, 1980.



*Chalkie's triumphant arrival back at Cape Town, greeted by his wife.*

Several pilots planned and then abandoned attempts, and even more pipe-dreamed, but the Cape Records remained unbroken. In our modern world in which 'health & safety' considerations increasingly restrict the spirit of adventure embodied in people like Alex Henshaw, many had come to believe the records would stand forever.

And then, in the 70th anniversary year of the Cape Flights, South African pilot Charles 'Chalkie' Stobart picked up Henshaw's gauntlet and secured a place in aviation history.

On Thursday evening 7 May, Chalkie and his team waited at Cape Town International. The carefully calculated take-off time came, and went. Another three frustrating hours passed before 2303Z when the coastal fog lifted just long enough for Chalkie to be cleared to take off on the first leg of his attempt on the records.

## Friday 8 May

By dawn, Namibia was behind him, the daylight and empty skies over Angola allowing an opportunity to relax a little as he flew the home-built Osprey GP-4 towards the Democratic Republic of Congo (DRC) and then on to his first fuel-stop at Brazzaville.

It was the longest leg - 9 hrs 51 mins. Tiring enough in a light aircraft as the first leg of

the outbound flight, but it would also be the last leg of the return journey three days and very little sleep later. Still, despite headwinds, he'd gained almost half an hour on Henshaw's time.

Then a hitch. Brazzaville should have been a one hour stop but his delayed departure from Cape Town meant the airport closed while he was on the ground - the President was departing for South Africa to attend Jacob Zuma's inauguration. More than two hours of precious time slipped away - and Henshaw pulled ahead.

Towering cumulonimbus of the Inter Tropical Convergence Zone lay ahead of the diminutive GP-4 as Chalkie headed for Franceville (Gabon) and then Yaoundé (Cameroon). Beneath him were immense rain forests but, if he was to have any prospect of beating the Cape Records then, like Henshaw before him, he had to take the most direct route and ignore what lay below.

More than 11,000 people around the world followed progress on the Henshaw-Challenge website which included a map showing Chalkie's current position as well as Henshaw's position after the same elapsed time. Those of us monitoring progress were alarmed when it appeared that Chalkie had turned back. After a very long fifteen minutes, it was a relief to see that he was still on course. The satellite tracking system became confused when the aircraft crossed the equator - Henshaw and

Stobart were actually running neck and neck. The prototype tracking unit was not intended for flight, nor even for use north of the equator - it was being developed for tracking elephants!

After Libreville, where Henshaw made his second fuel stop, the weather was kind, giving Chalkie a clear run to his third fuel stop at Kano in northern Nigeria.

"The initial plan was to have two fuel stops, one in Brazzaville and one in Tamanrasset (Algeria), but all attempts to have avgas delivered to Tamanrasset came to naught, so I settled on Brazzaville, Kano and Algiers", says Chalkie.

After 5 hrs 51 mins at an average speed 180 kts, Chalkie landed at Kano shortly before 1700Z. It should have been a quick stop - avgas trucked from Lagos was waiting - but it took over two hours, and a 'forceful' telephone call to the flight clearance specialists, before he was back in the air.

"I didn't have sufficient funds to position ground crew at all the fuel stops who could 'smooth out' African bureaucracy, so every planned one-hour stop became two hours. That added close to six hours to the round-trip," says Chalkie.

Night fell as he flew over the desolate landscape, crossing the Niger, onwards into Algeria and the Sahara Desert.

## Saturday 9 May

The leg to Algiers took him into the small hours of Saturday morning: a lone aviator flying at night across the vast and inhospitable Sahara in a single engine aircraft - very different from his professional life as a South African Airways A340 captain!

He'd hoped to take advantage of the full moon when crossing the Sahara but a FL110 cloudbase meant he was continuously in and out of cloud and, to make matters worse, an intense desert sandstorm filled the sky.

The long demanding hours of night flying in IMC made this leg particularly tiring. The lightweight Aero Sport Power engine moved the centre of gravity close to the aft limit. That made the aircraft extremely sensitive in pitch - and beyond the capability of the very basic autopilot (a late addition) to handle pitch inputs when heavy with fuel, pilot and survival gear.

Hours spent trying unsuccessfully to programme the pitch channel to cope helped to keep him awake, but the aircraft porpoised violently each time he tried. That, and the effects of two different energy drinks which disagreed with each other led, for the first time in thirty years flying, to Chalkie being badly airsick.

He eventually decided to tell the EFIS that

no pitch servo was fitted. "That allowed me to use the roll channel as a wing-leveler which eased my workload", explains Chalkie. "But, until the ferry tank was empty and the CG moved forward, the aircraft had to be flown for literally every second. Any pitch disturbance had to be quickly corrected before it became exponential."

Before dawn, Chalkie arrived in Algiers. The exhausting leg had taken 8 hours 41 mins; average speed 173 kts. The plan was to take a quick power nap under the wing and be airborne again within thirty minutes but slow refuelling and ground-handling resulted, yet again, in losing more than two hours on the ground.

Airborne again, he was almost immediately over the Mediterranean for the two hour crossing to Spain. Auto-rough? Not for an experienced single-engine pilot who in 1992 flew his vintage Fairchild F24W from Johannesburg to Oshkosh (Wisconsin) and back, and repeated the trip in 2003 in his home-built RV-6 to celebrate the centenary of aviation.

By now, Chalkie had been in the air for 26 of the past 33 hours. He began to mentally prepare himself to deal with the French controllers in the busy European skies. Was there something unusual about his flight? Yes, he explained. Ah la la! The French skies immediately opened and he was given almost direct routings across France. Routing west of Paris, he was soon over water again - the English Channel.

On this leg, the brand new Stormscope purchased for the flight had stopped working, and his radio began to fail on some frequencies, but thankfully the Canadian-built 195 hp engine continued to run faultlessly.

Approaching the UK, his radio failed almost completely. Squawking 7600 and transmitting blind that he was coming into Southend, Chalkie touched down at 1139Z - 36 hours and 36 minutes after leaving Cape Town.

A surprisingly alert looking Chalkie emerged from the cramped cockpit he shared with a large ferry tank and acknowledged our cheers. He looked as if he had just landed after a short cross-country

hop - not a gruelling flight from the Southern Hemisphere.

After calling his wife on his mobile to say that he'd landed safely, Chalkie was welcomed and congratulated by Alex Henshaw Jnr and by IPM Rick Peacock-Edwards on behalf of the Guild.

He must be exhausted? "I don't really feel tired - but my bum's numb. It's a long time to sit on half an inch of foam!"

Chalkie was driven off to a nearby hotel, sure he would not be able to sleep. That changed the moment his head touched the pillow.

While he slept his UK team carefully checked the GP-4, changing the oil filter and spark plugs. The comms problem was traced to a loose battery connection, but the Stormscope could not be fixed. Nor could the sat-phone which had been damaged when thrown about the cockpit during the earlier porpoising.

Body clock still ticking, he awoke moments before his wake-up call exactly ten hours later, ready to begin the long return flight to Cape Town and, he hoped, a new record.

Sunday 10 May

At 0205 hrs Chalkie took off again, this time being routed east of Paris airspace before retracing the route he had taken just 18 hours before.

Over southern France before dawn, he noticed curious flashes in his strobe lights; the rain on the canopy also looked strange. Ice? Not according to the temperature probe. Using his torch, he saw white flecks of ice forming on the wing, and the canopy suddenly crazed over. He immediately descended to 9000 feet. Then he remembered. At Southend, he'd complained that the fresh air vents made the unheated aircraft too cold. The NACA ducts had been taped over which made the cockpit more comfortable - but also protected the temperature sender from the freezing outside air.

Dawn broke as he crossed the Mediterranean coast and, two hours later, Chalkie touched down in Algiers at 0737Z. The leg had taken 5 hrs 31 mins. ATC diversions and headwinds resulted in the slowest airspeed of his entire flight, an average of just 162 kts.

The inevitable paperwork and



*Chalkie is greeted on arrival at Southend by the IPM, Air Commodore Rick Peacock-Edwards, and Warden His Honour Judge Tudor Owen*

refuelling delays kept him on the ground for just under two hours, which meant he was now six hours behind schedule. However, Henshaw had spent 27 hours in Cape Town between outbound and inbound legs so, at this stage, Chalkie was still fifteen hours ahead of the record.

Crossing the Sahara seemed quicker in daylight but, even at FL130 (IFR minimum), fine dust and heat haze meant hours of instrument flying an aircraft so sensitive that the stick could not be released for even a couple of seconds.

The dust and heat haze of the Sahara were replaced by heavy cloud as he made his way towards Kano, where he did an instrument let-down at 1824Z.

Ground handling was much improved after the debacle on the way up but the weather ahead was a cause for concern - a line of thunderstorms stretched across the Nigeria-Cameroon border and without a working Stormscope it would be more difficult to avoid them.

His team in South Africa offered suggestions. Delaying departure until daylight was one possibility, but that would cost ten hours. Diverting to the western coastline and flying across Cameroon, would avoid the notorious equatorial thunderstorms - but again at the price of losing precious time.

It was Chalkie who would be flying so the final decision had to be his. By 2015Z the clouds were beginning to part and the experienced long-distance aviator made it: no deviation from the planned route home.

Airborne from Kano at 2044Z, the moonlight allowed him to see developments in the clouds. Within half an hour, his prayers were answered - a gap in the thunderstorms through which he could pass with only minimal diversion.

Crossing the equator was an obvious psychological boost and all continued to go well to the next fuel-stop.

After refuelling at Brazzaville (Congo), the last and longest leg of his journey was about



*Arrival at Southend in record time.*

to begin. It had taken almost ten hours on the way up and any major diversions now, or even a sustained headwind, would put Cape Town out of reach.

### **Monday 11 May**

Airborne at 0444Z, he was almost immediately presented with an obstacle by the DRC controllers. Having been cleared through as per his flight plan by one controller, a different voice came on the radio and demanded his reference number. It ended 08. The controller claimed it was a 2008 clearance and demanded he head west to Luanda - a major diversion. Attempts at reasoning had no effect; the controller became increasingly insistent, and then irate. Chalkie finally agreed to route via Luanda - although he had no intention of doing so. "It's about the most congested and worst controlled airspace in Africa, so I elected to stick to my flight plan and route direct."

All was quiet for a while after he entered Angolan airspace. Perhaps the DRC controller had not spoken to the Angolan controller again? Fingers crossed. The silence was broken by a controller referring to an 'interdiction.' Angola is a big country and for the next four hours, as he pressed on along his planned route, he had visions of cannon shells suddenly cutting through his wings. "It made me a nervous boy, but avoided a long detour over Luanda."

In southern Angola, cumulous clouds were building ominously and, as he penetrated the cloud and rain, the alternator tripped leaving him in deep IMC with limited battery power remaining for the EFIS. Resetting the

alternator would require switching the battery master off and he did not want to risk losing the EFIS. There was an alternate power source but, because the switch went through an 'off' position, he lost the EFIS. In the 30 seconds before he looked again at the standby artificial horizon, the aircraft was already banked thirty degrees.

Not surprisingly, the friendly voices of the ATNS controllers as he entered first Namibian and then South African airspace were an especially welcome relief to the by now very tired pilot.

Tail-winds gradually increased ground speed to 200 kts and by the time he crossed the South Africa border he was making 210 kts. Fatigue pulling him down and the excitement of the home straight boosting him, Chalkie was tracked passing Clanwilliam in the Northern Cape at an incredible 215 kts which he maintained until established on the Cape Town glideslope.

Crossing the threshold at 1420Z, he tried to round out - but the stick would not come back. Out of sight of television crews and supporters waiting to greet him, the GP-4 flopped inelegantly onto all three wheels. The damaged and unusable sat-phone had slipped between the stick and seat!

"Charlie Lima Charlie, welcome back to Cape Town" said the controller, adding: "What do you plan to do next weekend?"

The round trip from take-off to touchdown had taken 3 days 15 hours 17 minutes - beating Henshaw's time by 18 hours and 59 minutes.

Although justifiably elated by his own

success, the magnanimous victor paid tribute to the man who inspired him: "In some ways my flight was easier, in others more difficult and frustrating. The fact that I reduced the time taken by Alex Henshaw does nothing to reduce his astounding achievement. I honestly believe that there are no adjectives adequate enough to describe what Alex Henshaw achieved."

A small minority scoff at breaking Henshaw's records with the assistance of modern avionics, GPS and landing aids. Let them scoff. It took 70 years before someone had the essential combination of skill, commitment, stamina and courage to rise to Henshaw's challenge.

Others may, hopefully, now be inspired to try to beat the new record, learning from his experiences how time could be saved, particularly at fuel stops. Chalkie Stobbart has paved the way for them - and shown that a spirit of adventure still exists amongst today's aviators.

*The cramped cockpit, with the overload fuel tank in the right hand seat.*



### **My Father would have been the first to congratulate Chalkie on this magnificent achievement.**

To fly night, day and night for 36 hours in a most uncomfortable aircraft, rest for only 14 hours and then do the same again on the return is a quite extraordinary feat of airmanship, and displays great courage, determination and self-discipline, to the point of complete exhaustion.

Many people said my Father's record should have been left sacrosanct. He did not believe that, otherwise he would not have issued the challenge in his 1980 book "The Flight Of The Mew Gull," and nor do I.

Yes conditions were totally different 70 years ago. Things have certainly changed, some for the good and some not so good.

Chalkie did not have the navigational problems and, had his autopilot worked properly, it would have made life a little easier for him. At Southend, Chalkie jokingly said that if the Stormscope was not fixed he was not returning to Cape Town; my Father did not have that luxury. However, the Stormscope was not fixed but Chalkie had the courage to go anyway.

On the other side of the coin my Father could not have coped with air traffic control directing him here, there, and everywhere, so at least he was able to fly a direct course to each airfield other than Oran. It was bureaucracy that finally stopped him flying in 1948.

All that said, my Father did the outward journey in 39 hours 23 minutes to Chalkie's 36 hours 35 minutes, and the flying times were 30 hours 28 minutes and 28 hours 38 minutes respectively. The times on the return journey were more or less the same, so the records were beaten both in the air and on the ground despite the bureaucracy in Africa costing Chalkie 8 hours even with one less fuel-stop..

Both flights were quite extraordinary, both had difficult aircraft to fly and both had problems of one sort or another.

And do not forget that my Father was only 26 years old whereas Chalkie is 60. In this context, Chalkie returned to Cape Town after only 10 hours sleep during the 14 hours turn-round, whereas my Father had two good breaks at Gao and a 27 hour stop-over at Cape Town, so I think Chalkie's flight, for endurance, far exceeds my Father's.

I am a little sad that at last someone has broken my Father's records which stood for over 70 years, but they have gone to a charming, unassuming, very professional pilot with courage, determination and skill.

My Father was a man of his time and Chalkie is certainly a man of his time.

### **Alex Henshaw**

# REACH FOR THE ISLANDS A dawn to dusk challenge RAISING FUNDS FOR FLYING SCHOLARSHIPS FOR THE DISABLED

ASSISTANT DIANA GREEN

PHOTOS COURTESY STUART COOK

**O**n June 18 2009, four intrepid pilots undertook a unique challenge. Inspired by the example of renowned aviatrix Liveryman Polly Vacher, they flew their respective aircraft (two Cessna 210s and two Aztecs) in tight formation around all the British Islands in a single day.

The flight, which had to be completed within the Pooley's Dawn to Dusk Challenge framework, had several aims: to win the competition and thereby raise funds for and the profile of Flying Scholarships for the Disabled (FSD), to provide a personal challenge to the four owner pilots, and to demonstrate to those of us included in this ambitious flight, including four disabled FSD scholars, that new boundaries can be set with ambition, determination, thorough pre-flight planning and great teamwork..

All of these objectives were met, (although at the time of writing we are waiting to hear the results of the Dawn to Dusk competition). We left Jersey at 04.33 (the definition of dawn) and, 15 airfields and 14 islands later we landed at Inverness, at 21.10, that is 20 minutes before the airfield closed and before the official "Dusk" allowed by the Pooley's challenge.

## **The Team of 12:**

*The team included the four owner pilots:*

Edwin Brenninkmeyer, (Cessna 210 and lead pilot).

Dierk Reuter (Cessna 210).

Robert Lough (Aztec).

Timothy Nathan (Aztec and Freeman of the Guild).

4 Disabled Scholars:

Caroline Begg (sponsored by GAPAN in 2008), Steve Hopwood, Andy Lewis and Emma Suddaby.

*Plus 4 others:*

Alan Rosser, (test pilot and formation trainer, Marshall's Aerospace).

Stuart Cook, professional photographer who recorded the flight for the competition.

Farzim Nasari, representing one of the major sponsors.

*Approaching Tiree in the last of the good weather.*



And myself, a Trustee of FSD, responsible for project managing the flight.

Each aircraft carried one FSD scholar. I was privileged to fly with the lead pilot Edwin.

The flight itself provided additional tests of the excellent airmanship of the owner pilots not least the deteriorating weather as we headed for the Scottish islands.

It also provided an opportunity for further personal development on the part of the four disabled scholars. They became the undoubted stars of the flight when we were met at almost all the airfields by the local press and broadcasting media, (even being interviewed at the end of an exhausting day, at Inverness, by Radio Cornwall). Three scholars also benefitted from some "hands on" experience under expert tuition during the flight. And for the rest of the team, and all those we met on route, they were the living example of the way that FSD provides a life transforming experience to disabled people by offering to them the opportunity to learn to fly to solo or licence standard.

Caroline Begg, sponsored by GAPAN in 2008, who had hereditary spastic paraplegia diagnosed at the age of three, grew in confidence during her 6 weeks flight training in South Africa where she flew to solo standard. She received her "wings" from Prince Faisal, representing the Patron of FSD, Queen Noor of Jordan at the

presentation ceremony at RIAT in July this year.

Andy Lewis (ex Parachute regiment) who had a leg amputated following an accident said :

"After a gruelling selection at Cranwell, I spent two months at Goodwood Aerodrome and gained my NPPL with no restrictions. This is where my life changed and I knew that with the right attitude and commitment and self confidence I could achieve anything now"...

## **Pre-flight planning**

I joined the four owner-pilots on the core team in February 2009. My task was to act as overall project manager ensuring that all the elements of planning for the flight were in place. This essentially meant ensuring coordination of all the efforts of team members (carried out by weekly conference calls), co-ordinate PR, as well as trying to line up "celebrities" to accompany us and sort out all the logistics at the starting point in Jersey and the destination at Inverness.



*Very early morning briefing at Jersey.*



so only allowed one aircraft to touch and go, while the other three remained off-shore in formation. As part of planning it had been agreed that if only one aircraft could land, it should be the same aircraft, carrying the photographer of record. Timothy Nathan drew the short straw. By the time of the fifth such exercise (the others being Bembridge, Scillies and Sumburgh), the process was carried out with excellent precision. It involved Timothy slipping into box as box came forward to wing, allowing him to drop out of the formation, complete the touch and go, keeping the formation in view and then climb away and join up with the rest of the formation.

In April, we organised a day of formation practice at Kemble. With the able assistance of Al Rosser, the essential elements of the formation were agreed and practiced: a box formation with the two 210s in lead and box and the two Aztecs on the wings. This was practiced, together with an impressive “run and break” procedure for approaching each airfield. Kemble was the first of all the airfields we used to waive landing fees to help us achieve our fund-raising target.

Just how essential pre-flight planning is for a complex flight was underlined by two examples. First, the weather decision. Given the dawn start, the Radisson Waterfront hotel in Jersey (one of our sponsors) wanted five days notice of whether we intended to use the 16 rooms I had reserved! Even the most optimistic pilot knows it is impossible to make a VFR go-no go weather decision covering a route from Jersey to Shetland five days ahead! We were lucky to recruit the assistance of Simon Keeling of the Weather School to help us make that decision. His forecast (pleasant in the south but barely flyable in the north) was spot on and helped us be prepared.

The second example was fuel: after months of careful planning, we discovered two days before the flight that the Scillies had no Avgas facilities. Our next planned refuelling stop after the Scillies was Ronaldsway but some of the aircraft would struggle to get there with sufficient reserves. Mona (the intermediate stop) had no fuel. Where to get fuel at 07.30hrs? After several phone calls, Haverfordwest stepped into the breach; fuel was available on a self-service basis and would we like them to open up and provide us with a cooked English breakfast to give us some personal fuel for the long journey!!!! It was worth doing a second

mainland landing to ensure aircraft and people were well fuelled for the long journey ahead!

### The Route

Jersey, Guernsey, Alderney, Bembridge, Scillies, Haverfordwest, Mona, Ronaldsway (Isle of Man), Newtownards, Islay, Benbecula, Stornoway Cape Wrath, Kirkwall, Sumburgh and Inverness.

### The actual flight

The day before the flight we all met up in Cambridge at Marshall's where we were treated to an excellent lunch in the new Business Aviation Centre. After the distribution to the pilots of Sennheiser Headsets, Oris watches and super red Jays flying suits (from some of our sponsors) and the first of many photocalls, we set off in formation for Jersey. We were met on arrival by BBC radio and TV and after endless interviews, the aircraft were refuelled and we headed for the hotel and bed.

On 18th June, after breakfast on the run at 03.15hrs and a briefing at 04.00hrs the aircraft were lined up on the Jersey runway in their diamond formation at 04.30hrs. Jersey Airport pulled out all the stops with volunteers from Operations, AFS and ATC and the Aeroclub all turning up to get us safely away. Taking off as the sun rose over the island is a sight I for one will never forget.

Guernsey was similarly helpful and pulled in a dozen volunteers there and at Alderney. They were very nervous about aircraft noise in the middle of the night

After the flight to the Scillies and the welcome breakfast at Haverfordwest, we set off in a straight line for Mona, the only RAF airfield on our route. It's an odd place; a runway and a control tower but the welcome was warm even if the wind was cold! We were greeted by a press photographer and a Hawk doing circuits!

Ronaldsway and Newtownards followed with the usual warm welcome and media interest. Then our next refuelling airfield was Islay. By this time, the storm clouds which became a feature of the rest of the day had begun to gather. The arrival at Benbecula was the first real weather challenge and was the only airfield at which Edwin had to call for a formation break. Timothy reported later that, having volunteered to arrive last, by the time he landed the rain was so heavy that he could barely see the runway edge lights.

Stornoway was seriously wet. Some of us sheltered under the Cessna wings and tried to keep our feet dry, while the scholars fearlessly did their media interviews in the torrential downpour!

Under Edwin's fine leadership, the formation managed to keep relatively clear of the bad weather until we reached a point half way between Stornoway and



*The whole Reach for the Islands team at RAF Mona, Anglesey.*



and break with 20 minutes to spare before the Dusk deadline. Exhausted and exhilarated, and after yet another radio interview, we headed for the hotel, food and bed.

### **The fundraising challenge**

As this account shows, the team achieved most of the initial aims. Our success was heavily dependent on the help and support we had from a wide range of people and organisations, at each stage of the flight. We set an ambitious target of raising £40,000 for FSD. By the end of the flight we had raised a substantial portion of this, but were short of the target by a few thousand pounds. The donations, large and small, came from organisations and from private individuals, including the apron manager at Inverness who handed me a £20 note to add to our collection because he had been inspired by the scholars! Given the current economic difficulties, this is no mean achievement. If you would like to help us go the final mile, please go to [www.reachfortheislands.org.uk](http://www.reachfortheislands.org.uk) and add to the total!

In the final debrief, a few days after the flight, we agreed that part of the success of the challenge was that many of those who provided us with support did effectively act like and feel like members of the wider team. All of us learned something positive from the flight, about leadership and good airmanship, about recognising and using the multiple talents of the team and the joy of setting and achieving demanding personal flying challenges. As we listed the lessons to be learned, our thoughts inevitably turned to next year. What might be a different and even more demanding challenge for 2010? 

*Refuelling at a wet Stornorway.*



Cape Wrath. There we hit an embedded heavy rain storm which made visual contact impossible. The team successfully put into practice the formation break procedure, (flying and communication) and assisted by Dierk's TCAS system was able to re-assemble in the box formation by the time we reached Cape Wrath and make track for Kirkwall. Here, the impeccable time keeping fell apart under a combination of factors beyond our control, including press photographers, security, welcoming managers, and a commercial transport aircraft which did an accelerate-stop on the runway! This further delayed us, as did the request to do a formation fly-by for a photo-shoot. Reaching Inverness via Shetland before Dusk was looking increasingly unlikely. This led to the decision to do a touch and go at Sumburgh and Timothy once again peeled off, did the touch and go and rejoined the formation with grace and style.

With the minutes ticking away and the weather worsening we headed for our final

destination of Inverness. This was probably the most testing part of the flight as it combined low cloud and high ground at the end of a very long and demanding flight. But with Edwin's leadership and the skilled airmanship of the team, we landed at Inverness, doing perhaps the best run

*En route to Inverness over the wilds of Caithness.*



# Abbotsford Airshow

CANADA REGION

Colin Cooke-Priest, Master of GAPAN, flew to Vancouver to attend a Directors' meeting and to take part in the opening of the 2009 Abbotsford Airshow. While in Canada, he announced that the Guild would award the Master's Commendation to the crew of the CanJet Airlines 737-800 that was hijacked in Montego Bay on April 19th. He also presented illuminated scrolls to the Canadian Forces' Snowbirds designating them an Affiliated Unit and to the Abbotsford International Airshow on the centennial of flight in Canada. Press releases were issued for these three awards.

On Friday August 7th, Colin also met with executive members of the Air Canada Pilots' Association to discuss areas of cooperation and mutual benefit.

Accompanied by John Burley, Chairman, and Air New Zealand's Captain Allan Boyce (Assistant to the Court), Colin also visited Coastal Pacific Aviation and toured Cascade Aerospace with its founder, Barry Marsden.

On Saturday August 8th, Colin and his

wife, Sue, visited Victoria courtesy of Jamie Molloy, Vice President of Harbour Air Seaplanes. As a retired Royal Navy Rear Admiral and a marine aviator of several decades experience, Colin enjoys flying close to the ocean. We hope the Straits of Georgia sufficed! 



Photo by Maj S. Thompson



*Maj. Chris Bard, Commanding Officer and Team Lead, Canadian Forces' Snowbirds, accepts certificate from Colin Cooke-Priest, Master of the Guild. The illuminated scroll conveys "Wishes for a long and distinguished partnership in the promotion of excellence in aviation in Canada".*

*Snowbird Formation*



Photo by Katsuhiko Tokunaga



# The Sea and the Sky

P.C. FYNES

**F**loatplanes in Canada? You're already dreaming of majestic mountains, wilderness lakes and an old floatplane gently bobbing at the dock. Chances are you are not thinking of a modern inter-city airline, nor imagining such a company would have EASA certification, but Vancouver-based Harbour Air Seaplanes is just such an operator.

Formed as an air taxi service in 1982 by Greg McDougall with two partners and a pair of aircraft, HAS today has the largest all-floatplane fleet in the world and flies close to 300,000 passengers annually. Scheduled services began in 1995 with flights between Vancouver and Victoria harbours. In 2007, the company decided to test the waters in Europe by dipping a toe in the Mediterranean and Harbour Air Malta was formed. HAM now flies scheduled services from Valetta's Grand Harbour to Gozo Island and regular flights to Sicily are imminent.

"We take the bush out of bush flying" notes Jamie Molloy, Harbour Air's Vice President, Aviation and Corporate Safety. Independent customer satisfaction surveys yield results that would make any airline executive's eyeballs pop. To best serve the travelling public, Harbour Air operates its own reservations centre and has constructed new seaplane terminals and restaurants (Richmond's "Flying Beaver" and Victoria's "Flying Otter") and the ancillary facilities such as ramps, docks and fuel tanks. To keep the growing fleet in pristine condition, this year the company doubled the size of its maintenance facility at Vancouver International Airport.

For Harbour Air, its subsidiary North Pacific Seaplanes (based in Prince Rupert, B.C.) and joint venture Harbour Air Malta, the backbone of the fleet is the de Havilland Canada floatplane. In total, 15 DHC-2 Beavers and 18 DHC-3T Otters are on strength with DHC-6 Twin Otters being leased when the need arises.

Like all Beaver operators, Harbour Air remains impressed by the reliability of the airframe and Pratt & Whitney's 450 hp Junior Wasp radial engine. Over the years, HAS has initiated several updates, ranging from extra windows in the six passenger cabin to a

limited STC for an improved fuel/oil shut-off lever.

Although the DHC-3 first flew with a 600 hp radial, Harbour Air's fleet has been re-engined with Pratt & Whitney Canada PT-6 34 turboprops of 750 hp. To maintain centre-of-gravity limits, the lighter powerplant is installed in an extended nose and a ventral tail fin is added. The fleet also has aerodynamic modifications such as re-profiled leading edges and drooped wingtips which, combined with the extra horsepower and a reversing propeller, deliver super-STOL performance. Gross weight has also increased from 7,190 lbs. to 9,000 lbs. Harbour Air Otters have elegant fourteen passenger interiors with leather seats and panoramic bubble windows. Up front, the pilot has a comfortable 'office' complete with an ergonomically mounted avionics stack and a Garmin 295 GPS moving map display.

The turboprop installation has made the Otter pilot's job of taxiing and docking much easier as reverse thrust can be used to counter the effects of wind and current. "You must remember that when an aircraft is taxiing on the water, it's really just another boat" says Molloy. Like all single engine



floatplanes, the DHC-3T is steered by retractable water rudders (hinged to the back of the floats) which are interconnected with the pilot's flying rudder pedals. Since the heels of the floats are subjected to intense buffeting on takeoff and landing, the water rudders are only extended for taxiing and docking.

There is an art to flying floatplanes and Harbour Air only recruits the cream. Minimum requirements are 1,500 hours total time with at least one-third in floatplanes. The new-hire will receive type-specific training, 50 hours of line indoctrination and an underwater egress course. Recurrent training including hood flying and 'deadstick' landings is conducted every six months. The

majority of the group has 5,000+ hours experience and turnover is low since working conditions are excellent: four day workweek, home every night, and salary plus overtime pay.

Although not required for a Canadian Part 703 operator, Harbour Air instituted a Safety Management System (SMS) in 2004 and tracked all operational incidents. A year later, following Molloy's presentations to Lloyds in London, HAS was rewarded with a 20% reduction in insurance premiums. "We're not risk takers, we're risk managers" he notes.

Molloy applies technology in interesting and innovative ways. Some of HAS' business is ad hoc charter to remote lakes and inlets along the Pacific Coast. Pilots have the opportunity to first 'fly' the trip in 3D using Google Earth Pro and even the airways and control zones are superimposed on the



Jamie Molloy in Harbour Air Beaver between flights.

routing in gossamer hues. Once the flight actually departs, HAS Flight Operations can monitor the flight's position, speed and altitude using the TracPlus Global satellite system.

Harbour Air was once again a trend-setter when in 2007 it became the first N. American air carrier to fully offset its greenhouse gas emissions. Molloy, who studied environmental science at university, can tick off the various modes of transport between Vancouver and Victoria on his fingers and from memory quote, in kilograms per passenger, the carbon produced. The turbine-powered Otter is the cleanest option by far and the clever 'Carbon Neutral' logo on Harbour Air floatplanes publicizes the company's commitment to the environment.

Harbour Air's growth in British Columbia and Europe seems as inexorable as wind or tide and signifies they are no ordinary floatplane operator. Since floatplanes helped establish aviation in the early years, they are today sometimes viewed as unsophisticated aircraft. In certain applications, however, floatplanes are still the most practical form of transportation and Harbour Air has demonstrated that an old idea joined with new technology and enthusiastic staff, can deliver startling results.

The next time you feel the urge to go down again "To the lonely sea and the sky" let Harbour Air's professionals fly you in comfort; they have a turbine Otter and a GPS to steer her by. 

# Some reasons why the Guild is so necessary to pilots... A CANADIAN VIEWPOINT

LIVERYMAN PETER DUFFEY, CANADIAN REGION

Most pilots are pragmatists, and often query what advantage there could be in joining the Guild of Air Pilots and Air Navigators. For those who are members the answer is already clear. The opportunity to contribute to the development of aviation attracts pilots who know they can help, and those who wish to achieve a greater understanding. There is no better way to associate with one's peers. The opportunity for self-development is outstanding.

The Guild was founded by a small group of pilots in Britain during the twenties, at a time when the professional interests of those who flew were unrecognized, and unrepresented. The Guild has a unique status. A knowledge base that draws upon pilots who fly in every field of aviation, military or civil, amateur or professional. Members' experience covers the widest range of expertise, and achievement in all these fields.

It is worth considering why the Guild is truly unique, and fills a special place in the aviation world.

The wide range of membership from so many different piloting sources allows a perspective that does not exist elsewhere. This pool of experience allows the Guild to achieve a balance that is unhampered by the industrial pressures felt by unions that negotiate conditions of service, or by other organizations that dilute pilots' views.

The predominant concerns of the Guild are safety, and education. As the users of the world's airspace, pilots are the first to experience the effect of poor policy making, and bad planning.

Those needing guidance on the myriad of problems associated with the aviation world ignore the Guild's views at their peril.

An example of regular Guild activities can be obtained by looking at the very wide range of subjects that are under active examination by the Technical Committee. Many of these are of course also the

subject of work by professional associations, unions, and the international bodies, such as ICAO, and IFALPA. Apart from the latter two, there is usually an unfortunate national or regional concentration of interests.

Aviation has contributed to the shrinking of the world, allowing trade, and social contact that would have been hard to imagine in the nineteenth century. Despite modern development in the marine world it still takes many days to cross the Atlantic. Recently airline passengers were able to do this in a couple of hours whilst sipping champagne.

The Guild has recognized the need for a truly international membership, to receive input from pilots throughout the world. At this time there are branches in Australia, Hong Kong, New Zealand, and now Canada, This process will continue, as pilots realize the need for a way to have their voices heard. The technical developments and airspace changes that are imminent will modify much of the existing flight environment for pilots. This is not confined to one area of the world.

So what makes the Guild so special? That it combines the knowledge of so many experienced, and current, pilots to give a balanced and expert input to further the development of flight, and improve safety. This is provided unmodified by political or industrial pressures. The Guild can help to get things done or stopped.

The use of UAVs for example will affect Canadian pilots, even if they perhaps don't recognize this now. ADS-B adoption will have many effects. GPS updates, Russian GNSS, and the imminent Chinese and European versions will create a world-wide change.

Education is a very important subject, and

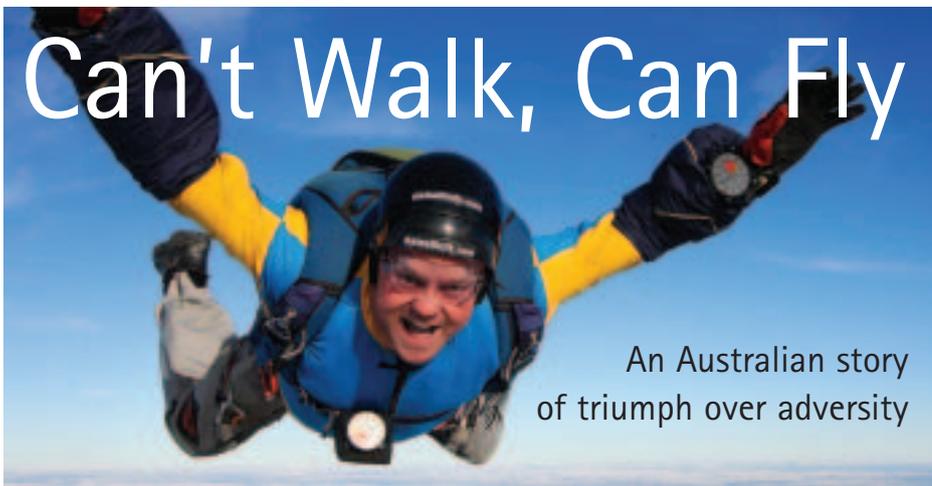


reading those minutes you can detect the current worries about complexity, and deficiencies in training.

Yes, an annual subscription seems a disincentive. Paying twice or even three times for the same thing being done by one or other organizations? But without clearly defined reasons for joining the Guild any monetary consideration becomes redundant. The Guild also provides opportunity for personal development, through the acquisition of knowledge at many levels.

How do we convince Canadian or international pilots that they need the Guild? And that the Guild needs them? That our collective wisdom needs their input? That they can benefit from this process?

The Guild in the UK has a place in the aviation spectrum earned by decades of input, contact with industry, and government, whereas in Canada it is almost unknown. It took many years for the Guild to be respected, and accepted as it is today, and the Guild (Canada) can lean on that respect, whilst earning it too. That is why we will be silly to reinvent the wheel on each subject, and will need to keep very close liaison with the Guild in the UK. I would hope that the regular committees in the UK would be ready for Canadian input on technical and training matters, to establish a vibrant two-way exchange. 



**D**ale Elliott has just achieved an Australian first. In May 2009, he became Australia's first paraplegic solo skydiver. And dismiss images of a wheelchair plummeting earthwards from your mind – that's parked at the drop zone, waiting. Without legs that work, Dale has engineered an ingenious solution to land safely on his rear. It's been a long journey to this point.

At the recent Australian Parachute Federation of Australia conference in Brisbane, conference delegates gave the down-sitting Dale a standing ovation after hearing his story. He started flying as a year 11 student when he was 16; went solo in January 1992, and got his PPL about a year later. He joined the army, attending the school of artillery at Manly, a 'fantastic experience', and then took on an apprenticeship as a LAME in '94-'95.

'It was really tough then to get a job as a pilot', he says, 'You had to have been flying for about six to seven years'. During his apprenticeship, he continued to fly, dropping skydivers at weekends, and completing his night-VFR and twin-engine CIR ratings. 'It was all working out really well.' Achieving this 'first' began six years ago, when, Dale recounts, he was a commercial pilot looking to get his hours up before trying for the airlines.

He recalls that time vividly: on 23 December 2002, he was in an Aero Commander, flying through 8,000ft, and through the window in the roof, he could see the stars. He remembers thanking these constellations out loud that night. 'I'm 26 years old; I've been married to a wonderful woman for six years; and I've realised the dream I've had ever since I was eight or nine of being a pilot. It doesn't get much better than this.'

Three days later, Dale and wife Erika were spending Christmas with the family at Waikerie in South Australia's Riverland,

where he grew up. On Boxing Day, he went for a spin on his cousin's Yamaha R6 motorbike. 'I've ridden bikes on my parents' farm since I was eight, but I swerved to miss a dog, and came off. I wasn't going fast, but I knew something was wrong when I couldn't feel my legs.'

That 'something' was damage to his spinal cord at T10 (the tenth of twelve thoracic vertebrae), which left him a paraplegic and reliant on a wheelchair. It's also, according to Dale, the most common break following motorcycle accidents, because the thoracic and lumbar vertebrae (T10-L2) at the base of the rib cage are in a region where the spine is most flexible, and therefore more prone to injury. (Quadriplegic injury likewise most commonly occurs in the region of the cervical vertebrae [C5-C7] of the neck.)

With typical determination, his stay in rehab in Adelaide was remarkably short. 'It's all about taking some control back', he explains, necessary to counter the feelings of depression and hopelessness which for many follow spinal cord injury.

He was soon back working for an aircraft charter company in Adelaide in charge of pilots' rosters and schedules. 'I was one, and now had to manage them,' he explains ruefully. But, determined to set himself more challenges, Dale decided to resume skydiving. Flying jump planes had been a way of getting some extra flying hours before his accident, and he had done 37 jumps before as an 'able-bod'. Solo, as a paraplegic, was something completely

different. With the support of Alan Gray of Adelaide Tandem Skydiving, Greg Smith of SA Skydiving, and instructor and photographer, Curtis Morton, Dale set about learning how to skydive as a paraplegic. 'There was no manual on this, so we had to go back to basics,' he explains. 'I managed to track down a South African guy by the name of Peter Hewitt. He's also a para and he's now done about 120 jumps', so he's given some great advice.

Dale's T10 paraplegia means that his abdominal core strength is compromised, and balance is affected - and, both legs are paralysed. Skydiving conventionally requires all of these abilities, for manoeuvrability in the air, and for landing. Developing his gear has been very much a process of trial and error. His pants rigging came about as an answer to the question: 'What can I do in a matter of minutes to get my legs up out of the way?' He needs control of his legs in launching himself out of the plane, and especially for landing, so that he can pull his legs up out of the way, and land safely on his rear.

'I was an aircraft engineer, and worked with a lot of fibreglass, sitting my CASA exams for composite materials. I also cut my teeth on gliders at Waikerie—I used to go and help with the glider repairs. They're some of the best fibreglass repair guys in Australia.' All this put him in good stead for dealing with the unique situation of jumping with paralysed legs.

The irony of developing his equipment didn't escape Dale. A month before his



Dale Elliott prepares for another flight



first jump, he was swathed in a full plaster cast, looking very much like the 'seen-after' shots of a disastrous jump. The plaster cast was inspired by a 70's military movie he tracked down on YouTube, which showed how to make an arm cast on the battlefield. 'The plaster cast worked perfectly,' Dale says, as the mould for making the fibreglass braces. These custom-made fibreglass braces fit into the legs of a pair of motocross pants, which are further modified with extra padding to cushion his rear on landing. The braces keep his legs rigid when necessary, and the cords on the braces pull his legs up out of the way for landing.

The Mark 1 braces have scored a few bumps and crashes – and they're beginning to show some fatigue cracks – so it's now on to braces Mark 11. Dale is planning on making these from 5mm polypropylene plastic, working on the theory that they will be much more flexible and durable. Fellow paraplegic skydiver, Peter Hewitt, has had a special polypro orthopaedic pair made, but the \$1000 cost of these is a deterrent. Dale's working on making his own; 'This stuff (polypropylene) is great to work with. All I need is an angle-grinder; a jigsaw; and a commercial-sized oven.'

He also dives with a modified parachute donated by Parachutes Australia; the harness is adapted to allow for his

different body position. Whereas able-bodied skydivers adopt an arched position to remain stable in freefall, Dale needs to concentrate more on using his upper body to deflect air and stay in a stable position. His arms are far more active.

Fitness is also a big thing for Dale. Preparation for his first solo attempt focused on building up strength and improving his circulation. 'You need strength to move around the plane,' he explains, 'and then there's the 10-15kg chute to consider as well.' So in the lead-up to the jump, he was doing 20-30km hand cycle rides, getting his heart rate up over two to three hours. Mastering these complexities, and coming up with the means to skydive as a paraplegic is no different, Dale argues, 'when, as a pilot, you first get in a plane and look at all the instruments. You've got to chunk it, and break it down, taking one thing at a time.'

Dale's also a sit-down stand-up comic, who has braved hecklers at various comedy venues; and a motivational speaker. Following his appearance at the Brisbane conference, he flies to New Zealand in late June. He's excited by that prospect, because two NZ companies have offered to sponsor his equipment: NZ Aerosports are providing a new Icarus Safire2 canopy; and Deepseed are making a customised jump suit. The braces fitted to external leg pockets in the new suit will

give much more flexibility in preparing for a jump. He'll talk to employees of both companies about his skydiving journey. Then there's the future challenge planned for 2012. He figures it would make quite a statement for those with disabilities if he and fellow para skydiver Peter Hewitt were to skydive into the stadium for the opening of the 2012 London Paralympic Games.

From his contact with the UK Parachute Association, he's found that they don't have any paraplegic skydivers, so he and Peter are planning on putting a proposal to the Games opening committee when it's convened by the London organisers later this year. 'Peter and I have to get together and get to know each other's style and fall rates in the sky, and we'll need demonstration licences, which require strict examination and landing accuracy skills.'

As Flight Safety went to press, Dale gained his 'A' licence, and is now a qualified skydiver.

According to CEO of the Australian Parachute Federation, Susan Bostock, 'Dale's nailed it (his solo certification). It's quite mind-boggling,' she says. 'It's difficult enough for able-bodied skydivers.' The 'it' Susan refers to is the accuracy required for solo certification – to achieve this, skydivers must land within 25 metres of the target in the drop zone on 10 occasions. 'Some people who become paraplegics lock themselves away, and become recluses, but Dale's different. He just says, "This is the card I've been dealt", and makes the most of it.' Recently, CASA has been working closely with parachute bodies such as the APF, on a range of safety procedures including cloud jumping procedures manuals, and aircraft operation and maintenance issues. 

***This article is reprinted from Flight Safety Australia July - August 2009, with the kind permission of Flight Safety Australia editor Margo Marchbank.***

# The Future Flight Deck - Is It Here?

PAST MASTER PETER BUGGÉ

Some fifteen years ago members of the Guild Technical and Air Safety Committee joined with the Flight Operations Group of the Royal Aeronautical Society and wrote a joint Paper called The Future Flight Deck. It was edited in 2005 before being put on the Guild website where it can be found under Aviation Matters > Guild Policy and Comment > Study Papers. At the time the Paper was right up to date and relevant since many members of both committees were actively flying the new generation of 'glass cockpit' aircraft while still having considerable experience of older piston, prop-jet and jet powered aircraft, both civil and military. Some of the comment about the practical operation of these new aircraft was fairly outspoken and rightly so, but the philosophy of the autonomous aircraft and the future use of computer technology was also explored. It was with some trepidation that I recently attended a lecture on the A350 flight deck design given by Captain Jean-Michel Roy of Airbus at the Society's premises at 4, Hamilton Place, to find out whether any of the ideas expressed 15 years ago had come to fruition.

While much detail was given during the lecture no more than a broad outline of significant points could be noted for discussion here but the overall impression was that the technology in the A350 is similar to that of the A320, as is much of the operating philosophy. What has changed is the way in which the technology is now used so that the operation is far more intuitive especially in certain significant areas. The Paper is heavily critical of the methods of inputting information to the Flight Management System (FMS) using inappropriate 'alpha-numeric' keyboards often requiring far too much typing (in the Paper, paras 2-4 and 6-7 refer) so I was delighted to see there is a 'querty' keyboard, trackball and menu system on the A350. Arguably the most important change of all, this allows a more natural pilot/machine interface that will be familiar to anyone with a home PC.

A cause of high workload at inappropriate times on earlier aircraft was the interface between paper and electronic data. For example, take off performance figures were extracted from charts and paper references and inserted into the FMS, giving plenty of

scope for error, and electronic displays of take off and climb speeds were then generated on the Primary Flying Display (PFD). One of the reasons for doing it this way was the limitations on computer power and database accuracy available 15 or 20 years ago and, although less of a problem now, long design and manufacturing lead times still mean that computer power in the aircraft is far less than one would expect. Airbus have mitigated the problem by providing laptop docking positions for each pilot so that up-to-date databases can be held in the laptops; these can use the latest computer technology to store and generate data regardless of the standard of the aircraft's built-in architecture. Operator-specific manuals, charts and company procedures can be held in the laptops so the emphasis seems at last to have changed from one that was still largely paper based to one that is now computer based. That goes for check lists too, already shown on the screens in the A320 operation, which have been developed further on the A350. A nice idea is the facility to use a centre screen easily visible to both pilots for briefing on letdowns or other stages of flight where both pilots need to look at and discuss the same information. There may be an argument for keeping a very simple hardcopy emergency checklist on the flight deck - how to land on water for example - but everything else can now be computer generated and used digitally. In The Future Flight Deck it was suggested (para 2-15) that the interface with communications equipment could be improved and that has been done on the A350. Each pilot has a dedicated panel with a screen showing the radio frequencies in use together with all the available facilities which should minimise the chances of incorrect selection. Datalink is also an integral part of the design.

The main displays are on screens eight inches by six inches, rather than the traditional six by six, allowing extra information such as a vertical profile below the Navigation Display to be displayed, and there are more screens than the six on the A320 with much more versatility to display information on the most suitable screen for the particular situation or stage of flight. Airbus have developed their philosophy of using simple numbers for control settings - for example flap/slat settings on all Airbus aircraft are controlled



by an identically labelled lever with a common method of operation regardless of the actual extension in degrees of the high-lift devices on each type - and now show percentage power rather than N1 or EPR on the engine gauges, so whichever engine variant is fitted to an aircraft the power settings will have the same indications.

External cameras have been slowly making their way onto aircraft for some time and the A350 utilises an external view looking from the fin forward over the top of the fuselage to assist in taxiing. Captain Roy showed a short video of the camera being used in conjunction with a large scale taxi chart displayed on one of the screens which was quite impressive. It's still no substitute for looking out of the window, of course, but surely has its uses! A camera is also used to monitor the cabin side of the flight deck door, and the cabin itself. A HUD display is an optional extra but there was no time to discuss this in detail. However, HUDs were definitely thought to be a good thing in the Paper (para 6-4).

So what hasn't changed for the better? The roof panel still has safety critical switches on it (para 2-11) and there are the same error-prone multifunction knobs on the glareshield panel to control the autopilots, autothrust and flight directors (para 2-14). In view of current health concerns over the effects of prolonged exposure to bleed air, perhaps the fact that the pressurisation and air conditioning is unchanged from earlier designs will cause concern in some quarters. There is no longer a pitch trim wheel, instead there are electric elevator trim switches and a trim position indicator. Although Airbus don't use an elevator trim in the conventional way it might be argued that another feedback cue has been lost. On the whole, though, I was much encouraged by the changes which make the A350 flight deck so much more user friendly than the A320. The Guild and the Royal Aeronautical Society can take great pride that the ideas expressed by their members fifteen years ago were right on target and although the Future Flight Deck isn't quite here yet the A350 is definitely a step in the right direction. 

# BLÉRIOT CENTENARY

## 25th July 2009

PAST MASTER CHRIS HODGKINSON

As many Sunday newspapers highlighted the following day, the re-creation of Blériot's epic flight over the English Channel a century ago was successfully completed by another French pilot, Edmond Salis, flying a restored Blériot XI monoplane to commemorate the centenary of the first cross-Channel flight. The pioneering Frenchman Louis Blériot had flown without instruments or a compass from the Sangatte cliffs near Calais to Dover Castle in Kent on 25 July 1909.

Exactly 100 years later, a flotilla of ancient and modern flying machines began crossing the Channel from dawn including monoplanes built by Blériot. In France la Patrouille de France (French Air Force Display Team) performed over Blériot Plage in Calais and the Red Arrows took part in a pageant at Dover Castle, close to which Blériot had landed.

Sadly rather less publicity for participating in the celebration was generated by the 250+ microlights that took part to mark the 100th anniversary of a feat that amazed Europe. This was a great shame since a huge effort had been made by the many pilots and 'backseaters'. There was a contingent of 94 British microlights, 128 French and around 28 Belgians. While the Brits started from Calais the French entrants sensibly started at Berck sur Mer, a small uncontrolled airfield some 10 kms south of Le Touquet, a feature that the British contingent at fully controlled Calais would view with mounting enthusiasm as the morning wore on.

My son-in-law Sebastian Pooley and I had been invited to be 'backseaters' for the cost of an article. We should have arrived in Calais by microlight on Friday, but the

forecast was for strong winds and poor vis that day, so fortunately we were offered a ride from the Tiger Club at Headcorn taking Le Shuttle on Thursday afternoon. Friday was a relaxing day walking round Calais, a little tasting with a friendly wine merchant and then a Civic welcome at 8pm in the Town Hall, which is a most imposing building.

Interestingly the many speeches lasted 45 minutes while the champagne was warming on the adjacent bar. Shortly after the reception began in earnest, we left for a Gallic feast at Au Cote d'Argent - definitely recommended.

Saturday dawned relatively clear and much less breezy and the detailed flight briefing took place in a hangar at 0800, given by Liveryman Keith Negal, Chairman of the British Microlight Association. At long last I met my pilot Andy Oliver, who it transpires, appropriately works as an IT consultant in the aviation sector. Andy was nearing the end of a two week holiday flying around Europe, and by the time he eventually got home to Devon on Saturday night, he had flown 2385 miles, visiting 29 airfields at an average of around 65 mph. He owns the immaculate Pegasus GT450; Pegasus is effectively the only UK microlight manufacturer he informed me.

The aircraft were split into six main groups with generally the slowest first but it became evident very early on that the views of the local air traffic control and the needs of the pilots were never going to coalesce. It became apparent listening to the radio, that the single controller was overwhelmed as she handled Ground, Tower and Approach to mid Channel - more controllers for the day? We were in Group 5 and finally fired up at about 1300



Andy Oliver's  
immaculate  
Pegasus GT450

following one long ban on take-off while the Alpha Jets of la Patrouille de France entertained the crowds at the beach. This extended delay at least permitted the chance to view the many and varied types of microlights taking part.

At last we were airborne and climbing towards Calais town and then out over the Channel. Having only been in a microlight once before in the warm climes over the Victoria Falls clothed in a simple flying suit, I felt sure that the heavily insulated suit I was wearing would be more than adequate. Wrong! You need proper boots and gloves at 5500 feet where we cruised for a while in order to ensure a glide to one side of the Dover Straits should the engine fail.

100 years earlier Blériot had managed to get over the cliffs at Dover when the wind caught his plane and whirled him around two or three times. With his altitude at about 65 feet (20 metres) and being driven by the wind, he immediately cut the engine and dropped to the ground! Blériot commented "At the risk of smashing everything, I cut the ignition at 20 metres. Now it was up to chance. The landing gear took it rather badly, the propeller was damaged, but my word, so what? I HAD CROSSED THE CHANNEL!" British Customs had no provision for a landing other than by ship, so Blériot was logged in as a ship's Master and the XI as a yacht.

Since the celebrations for Blériot were taking place also at Dover Castle, we headed towards Deal to the east of Dover, before turning for the old RAF Lashenden (Headcorn) landing around an hour after take-off. During WWII, Lashenden was home to the United States Army Air Forces Ninth Air Force 354th Fighter Group. While many of the UK aircraft landed here, the French had made their way to Damyns Hall Aerodrome near Rochester.

The flight had taken around an hour and had been a great experience. For Guild



The Town Hall, Calais.

British registered Foxbat, built in Russia



Brian Milton's flexwing Pegasus Quantum 912 Sport in which Brian made the first microlight world circumnavigation in 1998.

historians, it was appropriate that several members should have taken part in the occasion, as there is a photograph in our archives room at Cobham House taken in 1934 of a luncheon to celebrate the 25th anniversary of Blériot's crossing, which

includes Blériot himself.

For those who might be tempted to take up microlighting, the licence requirements are the same as for any other GA licence except that it costs about half as much per hour. If you already have a licence, the

conversion is much cheaper, especially if you go 3-axis (ie Foxbat or Icarus style). But then real microlighting is flexwing according to the officianados and they sniff a bit at 'indoor flyers'. 

## KEEPING SKILLS ALIVE FOR THE NEXT GENERATION

The Historic Aircraft Association (HAA) was founded in the dark days of the late 1970s, following a series of air display accidents, particularly featuring 'warbirds.' At the time they had a casualty rate far in excess of today, despite a lot fewer aeroplanes flying.

It was an early attempt at 'self-policing' with pilots and engineers combining their knowledge and working alongside the legislators to offer a training and safety framework – and it worked. Over the past three decades the accident level for older types has fallen by over 70 percent.

At the core of the Association is the knowledge and expertise of its members. Many, including Wally Epton, Dick Felix, Dr. Michael Fopp, Ken Peters, Rick Peacock-Edwards and Cliff Spink, are also members of the Guild. They are among 150 active HAA pilots and engineers who continue to further the safe flying, restoration and preservation of historic and heritage aircraft in the UK.

In the UK there are some 1700 aircraft on the register built before 1960, which could be classified as being vintage or historic. Of these about 640 were built before 1946. They vary in size from the 7.5hp English Electric Wren from the 1920s Lympne trials, up to the mighty Vulcan.

However just as in the earliest years of the Historic Aircraft Association, there is an ongoing need to ensure that new pilots and engineers operating vintage and classic aircraft are fully briefed for the new challenges they will face.

In the past, the HAA focussed on ensuring that 'first generation' skills gained in the original operation of types were handed down or properly recorded. However the 'second generation' thus trained, is also now maturing. While many previously learned their core skills while employed in the Armed Forces, the numbers of the 'third generation' with that military-based expertise is also significantly reduced.

Thankfully there is no shortage of younger pilots who are keen to convert onto older types, often as a diversion from a chosen career path with airlines. As a centralised source of information on the very different flying, displaying and engineering procedures for older types, the HAA remains now as ever, an important resource to operators in both the UK and further afield.

Nowhere is this better demonstrated than at the

forthcoming HAA Seminar which will be held at the RAF Museum, Hendon on Sunday 15th November. The subjects will this year have a nautical slant (or is it a list) in celebration of 100 years of naval aviation. In addition to information on engineering and displaying a range of types, it will also include the first hand memories of Fairey Swordfish operation by John Moffat, whose aeroplane was credited with disabling the Bismark. GAPAN members can take part in this year's Symposium at the same price as HAA members and will at the same time be extended a complementary membership of the HAA till March 2010. More information on this offer can be found at [www.haa-uk.aero](http://www.haa-uk.aero) 



HAA members visiting the 11 Group Battle of Britain bunker at RAF Uxbridge.

# Getting the Pig on the Dance Floor

LUDO FORRER, BRIZE NORTON, 22 JULY 2009

Words can hardly do justice to the spectacle of witnessing the RAF's most pointy aircraft in their natural habitat - just feet away in close formation at 300 miles-an-hour. A highlight of an unforgettable Guild visit to RAF Brize Norton in July this year.

Sqn Ldr Caterina Thompson, our host, warmly welcomed a good cross-section of Guild members on a damp summer's day in Oxfordshire. An RAF coach then whisked the group to the 99 Squadron lecture theatre where Wing Cdr Steve Foster-Bazin, OC Ops Wing, gave a brief on the activities at Brize Norton.

Home to No.2 Flying Training School upon its opening in 1937, the airfield subsequently housed the Heavy Glider Conversion Unit, acted as a base for successful D-Day missions, and the RAF's Transport Command Development Unit. It was passed to the Americans in 1952, and developed from a modest post-war airbase into the expansive airport it is today. RAF Brize Norton is home to three main squadrons: 101 Squadron operating 15 VC10s, 216 Squadron running 9 TriStars and 99 Squadron with 6 constantly tasked Boeing C17s.

In addition to these core activities, more than 30 flights are provided annually by charter airlines. Even though heading for sun and (lots of) sand, these flights are no holiday trips. It's a very busy airbase; as duty was rotated in Iraq, more than 22,000 troops would pass through Brize Norton in just 8 weeks. Currently the so-called "Air Bridge", between the UK and Afghanistan, carries around 32,000 tonnes of freight and a whopping 223,000 passengers annually.

As well as the three regular squadrons on site, other residents include the Joint Air Delivery and Test and Evaluation Unit, the Defence Movements School and No.1 Parachute Training School (who carry out around 13,000 descents a year) including the RAF Falcons parachute display team.

## The Future of BZN

The 1st aircraft of the Future Strategic Tanker Aircraft (FSTA) will be delivered to Brize in October 2011, with a full capability of nine aircraft in May 2014. These A330 aircraft will be fitted with a defensive aids suite enabling use in operational theatres and are seven times quieter than the VC10 (restricted from flying into certain airfields due to noise) - a significant capability enhancement. A quarter of FSTA pilots will

be civilians, acting as RAF Reserve Officers when operating the aircraft for the RAF.

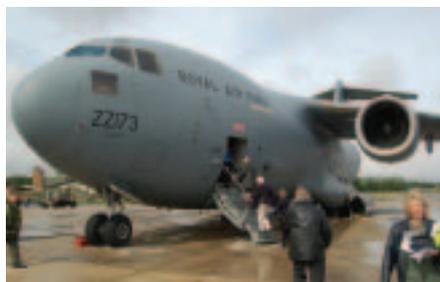
The tactical and strategic airlift aircraft, A400M is also due to join the Brize Norton fleet - falling-in between the C130 and C17 aircraft. First aircraft delivery was planned for March 2014, with December 2014 as the In Service Date with 7 aircraft delivered - however with the programme around 3 years behind schedule this may well move 'to the right'.

### Future aircraft at Brize:

9	A330 (FSTA)
24	C130J
25	A400M
6	C17
> 64	Charter aircraft per year

All these new aircraft represent a major increase in operations from the base, however most of these aircraft will be on deployed operations.

The Master led a vote of thanks to our hosts, concluding a very insightful presentation, and so we headed for the first aircraft visit of the day.



### C17 Globemaster

Immediately after their arrival ceremony in 2001, the first C17s to arrive at the base were filled with freight and promptly despatched for Iraq - a level of use that has not wavered since. As the Guild group approached a towering C17 being prepared for imminent flight to an exercise in the US, it became clear just how routinely these aircraft endure harsh environments - the leading edges visibly blasted from operations in hot sandy places.

Initially four C17s were on a seven-year loan from the US as a stop-gap for the A400M, but their effectiveness was such that all four plus an additional two Globemasters were bought by the RAF last year.

Climbing up the internal staircase to the cockpit, Flight Lt Andy Crichton gave a tour of the flight deck. Andy highlighted the

Heads-Up Display (HUD) as particularly useful, especially when landing in poor visibility. On approach, a horizontal line shows a representation of the runway threshold, and the flight path vector is shown by a circle with tick marks (the 'pig'). So the idea is to use a little imagination and 'get the pig on the dance floor' by setting the Rate of Descent with power - the huge flaps directing engine thrust to provide a significant vertical thrust vector. Once the rate of descent and HUD picture are set, just a nudge of power is added on touch down, with no flare!



The C17's performance is nothing short of remarkable - at a landing weight of 130,000lbs it has a landing roll of just 3000ft (915m).

Back in the hold, Sqn Ldr Stu Lindsell gave an overview of the C17 platform. It can carry 80 tonnes - eight times the payload of a Hercules. That equates to 2 Lynx helicopters, 3 apaches, one Chinook or a Challenger 2 tank. The C17 has a sporting turn around time too, allowing for offloading and post-flight servicing, in as little as eight hours.

Load master Flight Sergeant Jase Penn, the third member of crew (along with the two pilots) gave a demonstration of the flexibility of the cavernous C17 cargo hold. Quick change roller rails were shown to be rapidly and easily configured - in seconds, rather than hours on previous aircraft. The onboard winch is capable of hauling aboard a massive 100,000lbs.

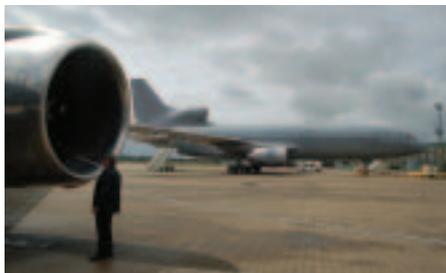


With all of these impressive capabilities, the C17 is most publicly identified as the large grey aircraft seen at RAF Lyneham, carrying out the sad task of repatriating fallen servicemen and women.

The C17 currently conducts operations to Afghanistan via an en route fuel stop, as it has no Air-to-Air Refuelling (AAR) capability. So this was not to be the Guild transport for the day; onwards to the next Squadron.

#### Lockheed L-1011 TriStar

216 Squadron dates back to 1917: as 16 Squadron RNAS it was inherited by a new RAF in 1918 as 216 Squadron, with the motto "Bearing Gifts". Formed as a night bomber squadron, it flew DH10s, then in 1942 flying Dakotas until 1949. In 1955 the Comet joined the squadron, and finally in 1984 the Lockheed TriStar arrived, providing an air transport and AAR capability.



Of the TriStar Fleet (3 C2s, 4 KCs and 2 Ks), the C2s variants are ex-Pan Am jets and used primarily for air transport. Operation Herrick is the squadron's bread and butter, a 7hr15min flight into Kandahar five to seven times per week, with over 200 passengers on board. When asked about the biggest challenge faced on these missions "Staying awake!" the crew responded.

Flight Lt Ed Johnson, Master Engineer Dave Simpson and Chief Tech Si Camm showed us aboard a TriStar KC1 (serial ZD950). What the C1 lacks in contrast to the C17, is a fuel tank inerting system - to prevent build up of combustible gases as fuel is used. This is however being fitted to the TriStar's replacement, the FSTA.

Typically capable of donating about 40 of 110 tonnes take-off fuel - at a massive 3 tonnes per minute (faster than any other tanker) - the aircraft itself burns around 8 tonnes per hour. The traffic light system on the refuelling outlet gives refuelling status to 'refuellees': Red: Stand off, Amber: Stand by, Green: Fuel. At the front end the view is good, the TriStar boasting one of the biggest windshields of any airliner flight deck!

#### VC10 101 SQN:

The day culminated in a visit to 101 Squadron, home of the VC10. Formed in 1917, 101 Squadron suffered the highest casualty rate of WWII Bomber Command, as the largest squadron in the RAF. Spanning all but the inception of powered flight, the squadron has seen a vast array of

aircraft from the Bristol Blenheim (1939-41) to the Vulcan (1957-82) and since 1984 the VC10. The youngest VC10 in the fleet is 39 years old!

The VC10 'K3' and 'K4' are "3-point" airframes, allowing refuelling from either wing or the fuselage. The wing hoses can transfer fuel at up to one tonne per minute and are used to refuel tactical fast-jet aircraft. The fuselage-mounted Hose Drum Unit can transfer fuel twice as fast and is usually used to refuel 'heavy' strategic aircraft.

A primary duty is to support border patrol Tornado F3s, who see one or two nose-ey Russian Bears per month - not the cute furry kind - to which the RAF always responds.

In June, a VC10 from 101 Squadron returned from Iraq, to end the longest deployment in RAF history, with 19 years continual operational service in the Gulf.

The 'DOT sheet' described our tasking. The sortie was to be flown in AAR Area 5. Typically the tanker sets up a racetrack pattern, 12nm wide, for a fuelling orbit. We were to practice consolidation, AAR between two tanker aircraft. We would rendezvous with and fuel Tornado GR4s and Typhoons from RAF Coningsby, recovering to BZN, leading another tanker in to a visual landing, via a "let-down recovery". This is an approach where an aircraft leads a 'blind' aircraft towards the runway, so that in case of navigation problems in poor weather, they can land safely.

After passing through the typical airport passenger terminal, we walked out to our aircraft, a VC10 C1K variant, APU running and all crew busy in preparation for the imminent sortie. As an original VC10, our transport, XV101, bears the name of a Victoria Cross recipient Major Lanoe Hawker VC DSO.



Boarding the aircraft the spacious cabin, large areas of shiny white flooring highlight the absence of most of the original seating. Just a few rows of seats immediately aft of the cockpit, three seats half way down the 92ft cabin and at the rear ten more rows of aft facing seats tucked into the tail. Aft facing seats for air transport were adopted by the RAF in 1945 to improve survivability in the event of an accident - a comforting thought.

The furthest aft two seats in the aircraft are manned by crew, monitoring the port

engines visually during take-off - communicating to the Captain (Flt Lt David Hamilton) via headset.

Sgt Si Hey, Sgt Italy and SAC Danny Knowles prepared the cabin for departure - providing an entertaining standard passenger brief, in green flying suits.

At 1240Z a loud, piercing whine resounded through the cabin as the low bypass turbofans were wound up for take-off. Apart from the slightly unusual feeling of being pulled forwards as the 138 tonne aircraft accelerated along the runway, the take-off and climb was similar to any airline departure.

After an hour of stable flight, we hit what felt like light to moderate turbulence. It soon transpired that the yawing motions and lots of small rpm changes were in fact due to the 'consolidation' practice already taking place with another VC10 just feet ahead of us. The seat belt signs were turned off and in small groups we visited the cockpit. As we stooped into the flight deck an amazing sight greeted us - the 4 tail mounted engines of another VC10 filling the windshield, so close that the horizontal stabilizer of the aircraft ahead was out of view above. More discrete yet intense activity was taking place - a bead of sweat on the handling pilot's forehead as he continually made adjustments to thrust, attitude and bank absolutely focussed on making the connection with the tanker ahead. Just beyond our refuelling probe, the wandering receptacle of the 80ft hose from the tanker in front - so close that one could imagine reaching out and touching it.



The pilot's eyes still fixed on the probe, now just 5-10 feet ahead, quick adjustments of power and bank being applied, the rudder pedals being employed to accurately line up - then, a blast of power and immediately back on the throttle to edge up to and into the probe. Bleeding off the 5 knots or so of overtake, the T-tail of the VC10 in front cast a shadow over our windshield... at a zero-feet formation at 270 knots!

Our position relative to the tanker ahead puts our aircraft's tail plane in the downwash of the main wing in front, initially causing the oscillations in pitch that were felt earlier. The downwash is trimmed-out and the aircraft flies normally.

At 1400Z the excitement levels in the cabin

are brought up a notch - 2 Typhoons appear behind the left wing, in echelon left formation, as we formate 100ft to the right of the VC10 ahead.

Tanker sorties typically operate in a cell, with two or more tankers working together, one about a nautical mile behind the lead tanker, which instructs jets in need of refuelling where to go.



We refuel one of the Typhoons from the left wing pod - just visible through the cabin windows, face pressed up against the Perspex. Refuelling doesn't take long and the fighter breaks off overhead us to the right.

At 1430Z the rumble of turbulence begins again as flying pilot Sqd Ldr Al Scott slips the VC10 into the wake of the tanker ahead for more practice consolidation.

No sooner does the rumble stop then we are joined by two more Typhoons, looking sleek and agile in comparison to the 40 year old tanker. With a Typhoon just 10 feet from our left wing, lunch is served.

Now our fellow VC10 extends all three refuelling hoses and the two Typhoons move up to refuel simultaneously, one on each wing. They stay in position for about 20 minutes (enough to fill a Typhoon from near empty) and simultaneously break off from the feed to pull up and over us, again turning into specks in the distance punctuating a backdrop of beautiful blue sky underlined by a layer of scattered cloud.



At 15:43Z a Tornado F3 appears on the left side and formates just a few feet off the wingtip. The WSO waves back at us as the pilot drops a wing to slip underneath our fuselage to receive from the right side pod. A few minutes later a tandem-seat Typhoon approaches our port side and starts to refuel from the left wing pod. Soon after, the Tornado, having had its fill, breaks off high and right with afterburners trailing cones of flame, loud enough to be heard in our cabin.

At 15:53Z Typhoon ZJ931 formates on the right wingtip - close enough to read the name of the pilot stencilled below the canopy. "Flt Lt E Smith" put on a display of precision flying, just feet from our right



wingtip, demonstrating the airbrake and even finding a free hand to wave!

At 15:59Z Tornado 018 formates on our left wingtip, and the Typhoon on the left pod breaks-off from the feed and formates as wing-man to the Typhoon still on our right wing, just as another Tornado comes in to receive from the right wing pod. It's getting busy!

Ten minutes later the Typhoons still in close formation on the right wingtip break off to the right, with a friendly wave.

At 16:12Z a Tornado starts fuelling from our right-hand pod for just under ten minutes, studied by a smiling face at each cabin window.



As the Tornado detaches it is joined by a wingman and breaks up and over us to the left, again with waves from all four crew.

A short time later our fellow VC10 formates on our right wing for the let-down recovery back to Brize Norton, with comments in the cabin of "absolutely fantastic!" and "incredible!" we start to descend.

A friendly "Ladies and gents, could you please take your seats again now please!" from the cabin crew signifies the last few moments of an amazing trip. The final descent arrested with a great handful of power, letting in the VC10 on our wing before repositioning for our final approach.

Flaps and gear go down as we position downwind. The amount of power increases still and in the cabin, voices have to be raised in order to be heard.

At 17:29 the tyres touch down back at Brize Norton and strangely after several hours aboard an airliner we find ourselves back where we started - but what a day! 🛩️



## GYM Doolittle Beer Evening LUDO FORRER

The second memorial beer evening, on Thursday 3rd September was a laughter filled event at The Couch pub in central London, saluting James Doolittle, a pioneer of aviation. 'Jimmy' Doolittle's studies in the 1920s revealed that pilots required information external to the cockpit to determine wind speed and direction. He was first pilot to perform an outside loop - something previously thought to be fatal! Along with holding the air speed record and all major flying trophies, he also contributed a great deal to instrument flying having carried out the first instrument landing using systems he himself had

developed. All this before distinguished acts of leadership in the US Air Force which made him a household name in the states.

As well as socialising with GYM members (and welcoming new Guild Member and BA First Officer Charlie Waters), the GYM Committee used the opportunity to discuss GYM business and future events.

If you are a member of the Guild, under 35 years old and didn't receive notification of the Doolittle Beer Evening please send and email with the subject 'Add GYM list' including your name and contact email address to Ludo at [events@gapanym.org](mailto:events@gapanym.org).

The next memorial beer evening, at a venue and date to be decided will be advertised by GYM e-newsletter and the website - the GYM Committee look forward to seeing you there! 🛩️