

THE GUILD OF AIR PILOTS AND AIR NAVIGATORS







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: Air Commodore R S Peacock-Edwards CBE AFC FRAeS FCIM

Clerk: Paul J Tacon BA FCIS

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

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

EDITOR:

Linda Jones

FUNCTION PHOTOGRAPHY: Gerald Sharp Photography View images and order prints on-line. TELEPHONE: 020 8599 5070 EMAIL: *info@sharpphoto.co.uk* WEBSITE: *www.sharpphoto.co.uk*

PRINTED BY: Printed Solutions Ltd 01494 478870

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

EDITORIAL CONTRIBUTIONS: The copy deadline for the February 2009 edition of Guild News is 1 January 2009 and should be sent to: The Editor, Guild News, Cobham House, 9 Warwick Court, Gray's Inn, London WC1R 5DJ.

> TELEPHONE: 020 7404 4032 FAX NO: 020 7404 4035 EMAIL: gapan@gapan.org WEBSITE: www.gapan.org

Guild Diary

	DECEMBER 2008
4 9 12 12 12 12 12 17	Aptitude AssessmentRAF Cranwell5th Technical and Air Safety CommitteeCobham House8th General Purposes and Finance CommitteeCobham HouseNew Members' BriefingCobham HouseGuild Carol ServiceSt Michael's CornhillChristmas SupperThe Counting HouseGuild ClosesSt Michael's Conting House
	ARY 2009
5 13 14 21 22 22 22	Guild OpensCobham House5th Education and Training CommitteeCobham HouseTrophies and Awards CommitteeCobham HouseBenevolent Fund Board of ManagementRAF Club9th General Purposes and Finance CommitteeCobham House5th Court MeetingCutlers' HallCourt Election DinnerCutlers' Hall
FEBRU	JARY 2009
3 5 12 19 24	Combined Courts' LunchCutlers' HallUK Henshaw DinnerRAF Museum, HendonSouth African Henshaw DinnerAFB Ysterplaat, Cape Town10th General Purposes and Finance CommitteeCobham House6th Technical and Air Safety CommitteeCobham House
MARC	H 2009
10 12 12 19 19 26 27 27	6th Education and Training CommitteeCobham House11th General Purposes and Finance CommitteeCobham House6th Court MeetingCutlers' HallAnnual Guild ServiceSt Michael's CornhillAGM, Installation and SupperMerchant Taylors' HallLord Mayor's Dinner for MastersMansion HouseUnited Guilds ServiceSt Paul's CathedralLunch with Fan Makers' CompanySkinners' Hall
APRIL	
TBA 7 7 16 29 29	Aptitude AssessmentRAF Cranwell1st Technical and Air Safety CommitteeCobham HouseBenevolent Fund Board of ManagementCobham House1st General Purposes and Finance CommitteeCobham HouseGuild Luncheon ClubRAF ClubCobham LectureRoyal Aeronautical Society
MAY 2	
12 14 14 27	1st Education and Training CommitteeCobham House2nd General Purposes and Finance CommitteeCobham House1st Court MeetingCutlers' HallLivery DinnerDrapers' Hall
Guild	Visits Programme 2009
20 Jan	uary Dunlop Aircraft Tyres, Birmingham
11 Febi	Red Arrows, RAF Scampton
27 Mai	Ch David Shepherd's Studio, East Grinstead
18-19 1	May Airbus, Toulouse

Please see the Flyers accompanying this and previous editions of Guild News *or contact Assistant Michael Glover at* MJAG2001@aol.com

Cover picture: the crew of HMS Gannet Search and Rescue flight 'Rescue 177' were winners of the Guild's prestigious Prince Philip Helicopter Rescue Award. The crew consists of (L-R): Lt Cdr Martin Lanni (Aircraft Captain), Lt Ian Campbell (Co-Pilot), FS Euan Gibson (Winchman), Lt Cdr Martin Ford (Observer). Turn to page 21 to read about their incredible story. (Photo: Ministry of Defence ©)

CONTENTS

In this edition of Guild News

4/5

News round up & Letters to the editor





12-13 ATPL training ... modular or integrated?



6 The Master writes ...



14-15 Freddy Tymms lecture ... Virgin Galactic is ... go!





24 Visit to RAF Centre for Aviation Medicine



24 "Big Mug" Loving Cup remembers Sir Arthur Marshall



- 7-9 Trophies and Awards ... the banquet
- **10** Technical briefing & Gazette
- **11 Clerk's column** ... the Livery explained



Sabre rattling On one of the few reasonable days in August two exiting aircraft took to the skies together at 6,500 ft over Grafham Water, south west of RAF Wyton. Warden Cliff Spink flew a F86 Sabre in formation with a Velocity Elite at an indicated airspeed of 160 kts. The Lycoming engine was burning 40 litres an hour at 55% power with the Sabre somewhat more. The Velocity, with a range of 1,100 nautical miles, is based at North Weald and with only 400 hours on the Hobbs meter and a time before overhaul of 2,000 hours there is much spare capacity for additional flying hours. Liveryman Denis Wood, co-owner of the Velocity with Freeman Jack Berkin, says: "We are confident that there is no other four seat light aircraft that can match the Velocity's speed, range and economy. If any Guild member would like to join our small group and fly this amazing aircraft for a modest annual contribution towards the fixed costs, please contact me or Jack at jack.berkin@virgin.net or dm.wood@libertysurf.fr

Do you play Duplicate Bridge? If so, would you be interested in playing in pairs or teams events on behalf of the Guild in London? The 2009 Inter-Livery Bridge Competition organised and subsidised by The Worshipful Company of Makers of Playing Cards will be held on Monday, 2 March 2009 in Drapers' Hall. This is an evening event which includes two sessions of bridge and dinner. Prize giving will take place after the final session. It is hoped to enter at least one pair on behalf of the Guild and the closing date for entries is 2 February. Please contact the Clerk or Captain Arthur e-mail Creighton (by at creigharth@aol.com) if you would like to enter or need further information.

In the chair: Liveryman Caroline Gough-Cooper has taken over from Assistant Tricia Nelmes as chairman of the British Women Pilots' Association. Tricia relinquished her position at their AGM in October after completing six years in the chair. The Association was formed in 1955 to help women participate in aviation. GYM goes online and interactive It has been a busy period for the recently created Guild Young Members (GYM). Thanks to the hard work of Ludo Forrer the GYM website is now fully operational at www.gapaym.org Ludo fitted in the development work around his ATPL studies and did a very thorough job. The GYM went 'interactive' in late October when it launched its own page on the Facebook, social networking website. The Facebook page enables GYM members to 'chat' to each other online and facilitates the quick and efficient dissemination of information about upcoming events. Most of the GYM communication is already undertaken by e-mail but the Facebook page has enabled a much faster dialogue to take place. Young members have also been enjoying a busy social calendar of late. A number of members, friends and guests attended the Sir Frederick Tymms Lecture at the Royal Aeronautical Society on 16 October. Will Whitehorn, President of Virgin Galactic, explained the background and technology behind this exciting private spaceflight initiative and a number of GYM members went away with aspirations to join the space travelling elite. After the lecture the GYM contingent adjourned to a local hostelry for dinner and drinks, making the best of the opportunity to interact with like-minded young aviators. Aweek later the GYM committee and their partners joined five GYM members at the Trophies and Awards

Banquet at Guildhall. It was the first time our young members had attended this event en masse and it was refreshing to see so many young faces enjoying the traditions and pomp of this prestigious evening. On 27 October GYM committee member Steve Bridgewater represented our organisation at the Dinner for Future Leaders, hosted at Guildhall by the Guild of Reserve Forces & Cadets Association for Greater London. This offered an ideal opportunity to learn about other young members groups and extol the good work the GYM is doing on behalf of the Guild. Early November saw a sizable GYM contingent manning the Guild stand at the Flyer Flight Training show at Heathrow. A successful recruitment drive saw several new members signed up and countless more walked away from the stand enthused about the opportunities the Guild and the GYM can offer. Several GYM members were also in attendance at the Royal Aeronautical Society Careers Day on 7 November, speaking with school leavers and university students who are interested in aerospace and engineering. With plans afoot to expand the GYM activities and recruitment efforts the decision has been made to increase the size of the committee and working group. Early November saw both Oli Russell and Sarah Harding join the team. They join founder committee members Kat Hodge, Ludo Forrer, Sebastian Pooley and Stephen Bridgewater at the helm. It has been a good year for the GYM and 2009 looks to have an even brighter outlook. 🚤

New faces: it was the first time the GYM committee and some young members had attended the Trophies and Awards Banquet. Pictured here are (from left): Elspeth Mauleverer, Ludo Forrer, Kat Hodge, Ben Flewett, Emma Hodgkinson, Sebastian Pooley, Nia Jones and Steve Bridgewater.



GUILD NEWS

Dear Sir,

I was most interested to read the article 'Archives at Cobham House' by Past Master Peter Buggé (Guild News October 2008) in which he mentioned E J Lawson. Unfortunately he got the name wrong, it should have read E H Lawford, my father. The reference to B Licence 150 is correct. My father was a founder member of the Guild, being admitted as a Law Member on 1 July 1929 by election. I have his Certificate of Admission signed by the Master, Sefton Brancker, and Lawrence Wingfield, Clerk. He was also Treasurer of the Guild in the mid-1930s. I have taken the opportunity to send you a biography of my father,

Pioneer Airline Pilot, which I published a couple of years ago. It includes details of his Guild Membership and how the loss of his friends and colleagues in the crash of the R101 affected the small world of aviation professionals at the time. Perhaps you would consider a review of the book in Guild News.

Upper Freeman Hayden Lawford Etchingham East Sussex Past Master Peter Bugge replies: Having already apologised to Hayden Lawford for my lack of care in the spelling of his father's name, we have arranged to meet at Cobham House to look at the archive material there. I am looking forward to hearing from Hayden about his father's life and times and learning more about the early days of the Guild. I am sure I speak for all Guild members in expressing thanks to Hayden for taking the trouble to get in touch.

LONG SERVING MEMBERS 50 years membership Captain John J Mason

Regions

LIVERYMAN BUCK BROOKSBANK TECHNICAL AND AIR SAFETY DIRECTOR

Australian Region

he Australian Civil Aviation Safety Authority (CASA) enjoys an extensive consultation process with industry. One of these consultative processes is the Standards Consultative Committee (SCC) of which the Guild is a member with in association numerous Government representatives from CASA, the Air Transport Safety Bureau (ATSB), Airservices Australia (which provides ATC, navigation aids, radar and radio communications including weather forecasts and NOTAMS), the Minister's office and the complete range of industry.

Here is some of the work that the SCC has performed, with Guild support, in the last four months. _ The prominent aviation legal adviser Russell Miller was asked to review the relationship between CASA & the ATSB. The Guild put forward a major submission in response to his draft report. As a result of his recommendations and industry input CASA is establishing a new

Accident Liaison & Investigation Unit. The unit's primary tasks are "to enhance the delivery of consistent, standardized, risk-based oversight of the aviation industry and support the establishment of a safety programme as required by ICAO". New rules for radio procedures at non-controlled aerodromes. Australia has numerous non-controlled aerodromes. These new procedures to be implemented early in 2009 will require all aircraft. other than ultra lights to broadcast their position and intentions at aerodromes that RPT aircraft operate into. _ Alcohol and other drug testing. After extensive industry consultation the new testing regulations that allow random testing came into effect on the 29th September 2008. _ CASA has issued 33 draft notices of proposed changes to rule making, advisory/guidance material and new legislative changes since July 2008 which has required considerable Guild technical input. _ The Guild is very heavily involved in the production & presentation, in association with the ATSB & CASA, of Threat & Error Management (TEM) courses. These follow on from the former airline courses of Cockpit Resource Management (CRM). On a personal note attending one of these courses saved my life and the one hundred and fifty people behind me on my B727 into Hobart in Tasmania.



In addition to our technical work the Guild has established an annual Guild prize to be awarded to a student of Outstanding Performance in academic achievement at the Brisbane Aviation High School. The prize consists of a Certificate from the Guild, an escorted tour of a general aviation airport including the museum, the Beaufort reconstruction and an hour's introductory flight. By way of historic interest the Beaufort was only constructed in Australia to a Bristol design and some 700 were built during the Second World War. The Guild also presents an annual prize of \$150 dollars as a tool allowance to the most successful maintenance trainee at Brisbane's maintenance training school. 🚤

The Master writes ...

RICK PEACOCK-EDWARDS

am writing this latest Master's Message just before I depart on my Master's Tour of the Regions. Actually, this vear, it is more of a world tour because I will be first visiting Washington to talk at two important lunches. We have a growing number of members from the US and I am delighted that I will have the opportunity to represent the Guild in such an important city. Thereafter, I will visiting Canada be (Vancouver), New Zealand (Auckland and Wellington), Australia (Adelaide, Melbourne, Brisbane and Sydney), Hong Kong and, finally, Dubai before returning to the UK in time for the Guild Carol Service and Supper. I look forward to giving you a full report on my tour in my next and final Master's Message before I hand over to **Rear-Admiral** Colin Cooke-Priest in March 2009.

I am also writing this message with my left arm in plaster because I have unfortunately broken my wrist. Aside from it being highly inconvenient and frustrating, I am pleased to report that it hasn't overly affected my ability to carry out my duties. However, it will affect my ability to play golf in New Zealand and Australia, and that is a great pity. Since I last wrote there has been an immense amount of Guild activity in so many different areas. The Trophies and Awards Banquet was every bit as magnificent as those in previous years and you will find a full report elsewhere in this edition of Guild News. Likewise, you will also find a report on another significant event. On 2 October, I led a delegation on a visit to Marshall Aerospace, Cambridge. In the evening we had a splendid dinner in Peterhouse College at which Michael Marshall, the Chairman and CEO of Marshall Aerospasce, presented the Guild with



Remember Sir Arthur: Michael Marshall presents the Master with a Loving Cup in memory of his father, the late Sir Arthur Marshall.

a magnificent Loving Cup in memory of his father, Sir Arthur Marshall, who died last year at the age of 103. Sir Arthur was a very long serving Liveryman and had been a member of the Guild since 1931. The Loving Cup will be a fitting memorial to a great man.

In my speech at the Trophies and Awards Banquet I made mention of the 100th anniversary of powered flight in the UK, an anniversary which was celebrated on 16 October. I asked everyone to reflect, as I do to you all now, on what aviation and powered flight has done for you in your lifetimes, and how it has effectively changed so much that happens in the world. Ouite simply, the influence has been enormous. However, all too often aviation is so wrongly made to look like a cause rather than an effect and governments and others seem to use aviation as a 'whipping boy'.

Aviation has brought so much to our lives and we should not allow our profession and industry to be so unfairly criticised, as it is constantly by many influential people and organisations who or which are more ignorant than informed. I do not believe there to be another industry that does as much to develop technologies to minimize any adverse effects than flying. People certainly need to be better educated about the fact that aviation only accounts for a very small percentage of carbon emissions. Let us all be proud of what has been achieved in aviation and let us all be rather more pro-active in defending our industry from the unfair criticism that is constantly being delivered. I regard it as my duty to educate and inform, as it is the duty of others as well, and I will do all possible both now and in the future to remind people of the good things that aviation has done for the world.

In closing, I realise that you will be reading this message much closer to Christmas. I thank all of you for your continued support of the Guild. We have had a very interesting and productive year, a very good year, and we are going from strength to strength. In achieving all that we do I would like to make special mention of our excellent office staff, Ruth, Pat and Ulka, led superbly by the Clerk, Paul Tacon. Without their tireless efforts we would undoubtedly not be flourishing today as much as we are. Tina, my wife, joins me in wishing you all, and vour families, a Very Merry Christmas and a Happy New Year. May 2009 bring you health, happiness and prosperity.

Greetings: Master and Tina Peacock-Edwards send Guild members and their families their best wishes for a very Merry Christmas and a Happy New Year.



TROPHIES AND AWARDS Recognising aviation's highest fliers

LIVERYMAN LINDA JONES

viation's finest have been honoured at the Guild's event of the year, the Trophies and Awards Banquet. Thirteen awards were presented at the awards ceremony, with standing ovations reserved for the most outstanding and bravest of the recipients. The Guild Award for Gallantry was presented for the first time, going to a 28 (AC) Squadron RAF Merlin helicopter crew of four, led by Flight Lieutenant Michelle Goodman, who undertook a hazardous mission to pick up a serious casualty at Basra City. For her outstanding bravery in the face of the enemy, Flt Lt Goodman was awarded the Distinguished Flving Cross, the first time the honour has been awarded to a female pilot. Details of all the recipients and awards appear on pages 16-23.

The Master, Air Commodore Rick Peacock-Edwards, who was nursing a badly timed broken wrist, welcomed more than 600 Guild members and their guests to Guildhall on 23 October. Sir Stuart Rose, private pilot, aviation enthusiast and chairman of Marks and Spencer, was guest speaker. Masters from other Livery Companies and representatives from the Guild's Affiliated Units were also present. The Master greeted members from the Guild's three established overseas Regions, Australia, Hong Kong and New Zealand. He reserved a special welcome for those from two prospective Regions, Canada and South Africa, well as as acknowledging a strong contingent from the United States and the Middle East, many of whom were attending the banquet for the first time. Later the Master spoke with pride of the Guild's global family and its long history of



Clothed: the recent purchase of three additional robes by the Guild meant fifteen new Liverymen could be clothed by the Master at the Court meeting. They are (from left): Beryl Thorp, Richard Poppe, David Hyde, Captain David Harrison, Bruce Crawford, David Curgenven, Group Captain David McDonnell, Captain Arthur Creighton, Captain John Danning, Linda Jones, Captain Alfred Holmes, Maurice Flanagan, Lily Kar Bak Fenn, Captain John Eacott and Kathy Abbott.

overseas Regions, a relationship that is unique among the City of London Livery Companies.

At the Reception in the elegant Old Library, guests mingled and drank champagne as uniformed personnel of the London Wing of the Air Training Corps set about their organisational duties. A guard of honour was formed by the Pikemen and Musketeers of the Honourable Artillery Company, and one among them, aged 84, was undertaking his last official function before retirement.

Earlier, the Master had presided at a Court meeting in the West Crypt. He clothed fifteen new Liverymen, including Maurice Flanagan who became the 1000th person to be clothed with the Livery. The Master also presented nine Master Air Pilot Certificates and a certificate to Louise Holtby, the 2007 J N Somers Scholar for a frozen Air Transport Pilot Licence. Mrs Phyllis Somers was present at the banquet.

Supper was served in the medieval Great Hall, which is apparently the only chamber in the City of London big enough to accommodate such a large number of diners. With guests already at their tables, the Swordbearer, Captain David Pelchen, and the Beadle, Ted Prior, bearing the Mace, led the Master's party into the room to the customary slow hand clap. The Guild's Honorary Chaplain, Rev Stephen Keeble, said Grace, leaving the collective singing of the traditional sung Grace to follow the meal service. The ceremony of the Loving Cup was deftly performed and,



Wise words: the Master makes his address.

at one table, a new Loving Cup given in memory of Sir Arthur Marshall was in use. Guests were entertained by a brass quintet of the band of the Honourable Artillery Company.

In his address the Master congratulated the award winners, but singled out the military personnel for special mention. They are, he said, a reflection on our Military Services, the



Skilled and experienced pilots: Master Air Pilot Certificates were awarded to (from left) Group Captain Peter Wildman, Squadron Leader Neil Strevens, Squadron Leader Nicholas Davies, Squadron Leader Charles Sinclair, Captain Trevor Jones, Captain David Rowe, Captain Trevor MacDonald-Bennett, Captain Graham Jenkins, Captain Richard Snell and Captain Colin Cox.

high standards that are required in training, the brilliance of their achievements in the operational theatres and the worldwide esteem in which they are held. They maintained their excellence in spite of questionable support from the Government.

It had been a momentous year for UK aviation, with the centenary of the first UK flight and the RAF marking its 90th anniversary. The Master reflected on what had happened in that time and how aviation had changed the way people lived and worked. He believed space would play a major

part in developments in aviation over the next 100 years: "We can expect to see continued growth in the use of unmanned aerial vehicles and in the exploration of space. Virgin Galactic will take passengers into space and is this the forerunner of inter continental travel via space which will further shrink the world", he asked.

A little closer to home, the Master announced the Guild's involvement in the celebrations of the 70th anniversary of Alex Henshaw's singleengine solo flight from London to Cape Town. A series of events are planned, aligned to launching a new South African Region of the Guild. The entrepreneur and record breaker Richard Noble, and the man behind the successful British attempts on the world land speed records, would be the guest speaker at a dinner in Cape Town on 12 February 2009. Joining him will be Wing Commander Andy Green, an RAF fighter pilot and a Guild member and the current holder of the World Land Speed Record, who was among the diners at the Trophies and Awards Banquet.

The Master turned to the emotive issue of carbon emissions and the unfair criticisms being directed towards aviation by misinformed and self-interested organisations and individuals, many of whom were in positions of power. Some of the critics didn't necessarily fully understand what they preached or the realities of the situation. He said: "It was time to be pro-active in defending aviation and to educate and enhance the name and capabilities of what is a young but influential industry. Aviation was responsible for a very small percentage of the total carbon emissions, perhaps 2-3%. Those involved in aviation are probably doing more than any other industry to minimize the effects of carbon emissions but were not being given credit for their efforts."



Family man: new Liveryman David Hyde was accompanied by his family to the Trophies and Awards Banquet. In the picture are (from left) Sasha Hyde and her husband Richard (David's eldest son), Alice (David's daughter), David and his wife Ann, Nigel Hyde (David's middle son) and his wife Cathy.

The Master proposed a toast to the guests and to the winners of the trophies and awards.



Sir Stuart Rose responded on behalf of the guests and congratulated the award winners. His own interest in aviation was probably influenced by his father who had flown Lancasters in the latter stages of the war. Today, Sir Stuart is a frequent and enthusiastic private flyer, a hobby he hopes to do more of when he retires.

Aviation is here to stav and Sir Stuart could think of no other industry that had changed so much in such a short time, apart from the exception of the digital revolution. He was confident that the industry would continue to innovate, adapt and develop to meet the global challenges facing us all. He also paid tribute to the work of the forces in armed dangerous circumstances every day. Marks and Spencer was proud of a plaque they still displayed commemorating the purchase by the company of a Spitfire for the RAF in 1940. It was appropriately named Marksman.

Sir Stuart had much to say on the issue of carbon emissions and added a retailer's perspective to that already expressed by the Master: "The debate around aviation, air freight and carbon emissions is complex. Informed debate and not knee-jerk response is required, as we always need to be aware of the law of unintended consequences." investing is balanced out by the amount we're saving. That proves Al Gore's dictum that 'responsible business can be profitable business'".

The company was often criticised for using airfreight. "We fly in runnerbeans from Kenya, mange tout from Guatemala and asparagus from Peru because consumers want them and we are, after all, a shop. The simple fact is that if we were to grow the same vegetables in the UK, we'd have to do it under plastic or glass and pump in heat. That would result in a larger carbon footprint than we'd have by flying the vegetables thousands of miles. The other alternative is carrots, parsnips and turnips all through the winter."

By sourcing products abroad Marks and Spencer also helped sustain many communities in developing countries. The company upheld the highest standards in ethical trading and was a strong supporter of the Fairtrade Foundation. Much of what they do is reinvested back into local communities, providing schools, healthcare, accommodation and transport.

Sir Stuart proposed the traditional toast: "The Guild of Air Pilots and Air Navigators, may it flourish root and branch forever."

The Guild is grateful to the Swire Charitable Trust for its generous support of the Trophies and Awards Banquet.

Photographs taken at Guildhall can be viewed and prints ordered online direct from Gerald Sharp Photography. Visit www.sharpphoto.co.uk or telephone them on 020 8599 5070.



Career threshold: the Master with Louise Holtby, the 2007 J N Somers scholar.



Hand in glove: Mr and Mrs Andrew Martin, son of Liveryman James Martin of Martin-Baker fame, make friends with a Pikeman of the Honourable Artillery Company.



Record breaker: the Master wished Wing Commander Andy Green, pictured with his wife Emma, good luck for his attempt on a 1000 mph world land speed record next year. Andy is the only man to have gone supersonic on land.

Marks and Spencer was working towards being carbon neutral by 2012 with minimal offsetting. It was not about stopping things, but about adapting and modifying.

Sir Stuart said: "Interestingly, all our work on going green is cost neutral – the amount we're



Special guests: supper awaits for Mr M Davis (Master Coachmaker), Baroness Garden (Master World Trader), Sir Stuart Rose, guest speaker, the Master, Tina Peacock-Edwards, Mr John Peddar (Master Cutler) and his wife Margaret.

Technical briefing

C L HODGKINSON Technical Director

Charity flights I draw your attention to the Civil Aviation Authority's notice AIC 70/2008 (White 153) which lays down the requirements to be met by anyone contemplating undertaking 'charity flights'.

PELS (Personal Emergency Locating System) The satellite monitoring service for 121.5 MHz (and 243MHz) ceases in February. From that date only 406 MHz will be monitored. The decision to cease was driven in part by the high incidence of false alerts. All 406 MHz transmissions are digitally encoded with a unique ID for the owner that can be checked immediately against a central database. The UK Mission Control Centre (UKMCC) at RAF Kinloss maintains this database for UK aviation Emergency Locator Transmitters (ELTs) and Personal Locator Beacons (PLBs). The database contains supplementary information describing the emergency transmitter's use and deployment and a 24 hr emergency contact point to assist in confirming whether the alert genuine and in obtaining is operational information which could assist the search and rescue (SAR) mission. Owners of ELTs need to check their transmitters can broadcast on the new frequency, as 406 MHz beacons are superior to their analogue predecessors and with Global Navigation Satellite System (GNSS) input provide far more accurate information to rescue teams, thereby bringing help to pilots in distress much faster than was possible with the old system. And....

Flying to France in 2009? Please read this critical alert - From 1 January, all aeroplanes and helicopters must be equipped with at least one ELT of any type, or failing that, one PLB with built-in GNSS receiver. The ELT/PLB must transmit on 406 Mhz. Specific details from the Direction Générale de l'Aviation Civile (DGAC) are available at:www.sia.aviation-civile.gouv.fr/dossier/aicfrancea/AIC_A_2008_10_EN.pdf

MPL Licence The new multi-crew licence (MPL) training course, which was greeted with mixed views in many quarters, has generated some 13 pilots trained by Sterling Airlines of

Denmark. MPL trainees may only take employment with the airline with whom they completed their type conversion and sadly these pilots are about to be retrenched. Since they do not obtain a licence to permit single pilot flying, they will be restricted to finding another operator with similar or identical procedures.

ATSOCAS (Air Traffic Control Outside Controlled Airspace) A reminder that ATSOCAS will change on 12 March. All aircrew and controlling staff need to be fully familiar with the new service by that date. The changes are not simply a renaming exercise; there are many significant differences in the detail, application and responsibilities. An interactive CD, produced under the Airspace & Safety Initiative (ASI), (joint civil military group), should have been sent to all UK licensed commercial pilots, air traffic controllers and Flight Information Service Officers (FISO). UK licensed private pilots will receive the CD through a direct mail shot this winter.

Volunteers wanted – for the Technical and Air Safety Committee (TASC) and the Environmental Working Group The Guild's TASC seeks volunteers to join these two groups. If you wish to volunteer or wish to know more about the Committee, please email the office on gapan@gapan.org

Gazette

APPROVED BY THE COURT ON 13th NOVEMBER 2008

ADMISSIONS

As Upper Freeman Patricia Lea BECKMAN (OS) Peter BRADBURY AVM John Alfred CLIFFE Flt Lt Ronald Morley COX Sqn Ldr Richard Keith DRUITT (OS) Captain Simon James EWART Sqn Ldr Frederick Christopher Maxwell GIFFORD Ralf GOETTLINGER (OS) General Raymond HENAULT (OS) Basil Edward HERSOV (OS) Barry MARSDEN (OS) Captain Stephen NOUJAIM Captain Michael Charles NIXON David RATCLIFFE Flt Lt Andrew Callum Reardon ROBINS Richard William Kenneth SNELL Group Captain Andrew Mark TURNER Captain Peter TURNER Captain Michael Alistair WATT Sqn Ldr Richard James YATES

As Freeman

Graham Richard BALLS James Anderson CARRIE Jonathon Alan DUGDALE (OS) David HILL (OS) Stephen Henry HULLEY (AUS) Colonel Peter Elden JONES (OS) Skip Simon MARGETTS (OS) Michael John MILLER-SMITH David James MONKS Alan MOSS Major Graham Robert WALLER John F WHITE (OS)

As Associate

Raphael Paul AU (GYM) Thomas James DEAN (GYM) David Thomas DE KREMER (GYM) Benjamin DONALDS GYM) Sarah Elizabeth HARDING Adam James NORRIS (GYM) Matthew PLUMRIDGE (GYM) Graham James SPOONER (GYM) Jamie William TOWNES (GYM) ACKNOWLEDGED BY THE COURT ON 13TH NOVEMBER 2008

REGRADE

To Livery Miles STAPLETON William Eric WARD Kathy Hamilton ABBOTT Frank Keith WILSON-CLARK Maurice FLANAGAN Dacre Russell WATSON

REINSTATEMENT

As Freeman Anthony Reginald Henry SALMON

DECEASED

Ronald ASHFORD Harry FOGG Janos Daniel KARASZY-KULIN

RESIGNATIONS

John Anthony BARNES Russell BOND (AUS) Alex DAWSON Kevin HATTON Leslie Lewis HAYWARD (AUS) David Thomas HOY Dennis Raymond KENYON Clive LOADER Malcolm Randolph MAYES Allan Paul MERRIFIELD Harvey James ROWLERSON Imre Leonard SCHWAIGER Ben David SIMPSON (AUS) Timothy STEEDS

FORFEIT ALL BENEFITS

Julian Edward John HICKMAN Ian Cameron MACGREGOR Duncan James MACNIVEN Peter OWEN Christopher Edward STRINGER Menno Nol VAN DER WERF (OS) Ameed VERSACE

Clerk's Column

PAUL TACON Learned Clerk

The Livery process and significance within the Guild

he Livery is, of course, at the very heart of the Guild's existence as a Livery Company. It is, therefore, an extremely important and significant element of the membership of the Guild. The total number of Liverymen permitted within the Guild is capped by the Court of Aldermen (currently at 600), so the number of Liverymen and candidates being proposed has to be closely monitored.

For the benefit of newer members or for those who are simply not aware of the process to obtain the Livery of the Guild and its significance, the following is offered as clarification:

Any Freeman of the Guild (note: 'Freeman' includes 'Upper Freeman') is eligible for nomination to the Livery Committee to become a Liveryman. A Freeman may be nominated by somebody else within the Guild, 'selected' by the Livery Committee, or may nominate himself or herself for consideration.

The Livery Committee consists of the three Wardens (not including the Master Elect) and its remit is to select a list of candidates to be proposed to the Court at each of the bi-monthly meetings. This list is normally about six names - equating to approximately 36 candidates per year. It is for the Court to decide from the list of candidates presented to it whether the individual Freemen should be offered the Livery. It is only the Court that can decide this; no individual or other committee has authority to do this. Once approved by the Court, the Master will then write personally to each Freeman concerned inviting him or her to 'take the Livery'. Acceptance of this invitation is entirely a choice of the individual.

Procedure

The procedure or processes necessary to gain the Livery, once it has been offered, are:

• Application to the Clerk of the Chamberlain's Court for the 'Freedom of the City' (if an individual is not already 'Free of the City'). Instructions and forms for this purpose are available on the Guild website

- Once the application is approved by the Court of Aldermen – a process which usually takes about four to six weeks - there follows the award of the 'Freedom of the City'. This is a ceremony which takes place in the Chamberlain's Court at Guildhall and must be attended in person. The time and date of the ceremony can be arranged with the Clerk of the Chamberlain's Court once the application has been approved – which is notified directly to the applicant following the Court at which it is proposed
- Payment of the Livery Fine This is a one-off payment to the Guild of a fee agreed by the Court of the Guild

A Freeman becomes a Liveryman on the day the 'Fine' is paid. Thereafter, the Liveryman needs to make arrangements to be invested (or 'clothed with the Livery') at a Court meeting prior to one of the Guild dinners held during the year. It is not a formality that a person's name is placed on the list for 'clothing'. Individual Liverymen must contact the Guild office to arrange this date. There are only a limited number of places available for 'clothing' at each Court meeting and therefore early booking, or notice of intent, is necessary to confirm any particular date.

The investiture (or 'clothing') ceremony is where one is publicly recognised as a Liveryman and is entered in the Livery Roll and presented with a Livery Badge. The Livery Badge is worn on the right lapel or breast and may be worn at any time when the Liveryman determines that it may identify him appropriately as being from the Guild.

Significance

There are many significant aspects to being a Liveryman of one of the City companies: Liverymen of the various Companies form the electoral roll of 'Common Hall' and are therefore eligible to vote in the Election of Sheriffs (Mid-summer Day) and to attend the Election of the Lord Mayor (Michaelmas Day) each year.

Of particular significance, however, to the Livery of the Guild - apart from the more obvious prestige and honour of the title - is that a Liveryman is able to stand for election to the Court as an Assistant and subsequently to be a Warden and ultimately, Master.

Nomination

If any Freeman of the Guild wishes to be considered for the Livery, or to nominate another Freeman for this, please either contact one of the Livery Committee direct, or the Clerk who will ensure that the Livery Committee is informed of the nomination.

Regions

Developing Canadian Region

t its November meeting, the Court approved a provisional Canadian Region of the Guild - with formal establishment taking place as and when the Constitution of The Guild of Air Pilots and Air Navigators (Canada) has been approved by the Court. The Canadian Region will be based near Vancouver with office facilities at the Abbotsford International Airshow headquarters. A warm welcome to members from the newest Region of the Guild.



ATPL training - modular or integrated?

CHRIS RADFORD

The road to the right hand seat is never easy and is always going to be expensive, but you don't have to spend a 'relative' fortune in the process. There are two main avenues of training for aspiring pilots, the modular method versus the more traditional integrated method. During my time getting into the right hand seat for an airline, I experienced both.

The integrated method is an intensive course, often set up in association with an airline. The airline sees its students through the sometimes arduous process of zero hours right up to the issue of the frozen ATPL. Integrated schools are usually 'live in' with classes containing anywhere between 5-30 students. One of the major attractions is the school's 'links' with airlines. But a word of caution! Airlines select a school to place its sponsored students and often, as one is toured around on open days, an introduction will be made to an airline affiliated class. That is not a guarantee you will be picked up straight away by any airline upon graduation. Integrated courses cost in the region of £60,000 to £80,000.

Modular training uses the same study framework as integrated courses but is broken into components: PPL, ATPL exams, CPL/IR and finally the MCC. This gives students greater flexibility as they are able to choose which course, when and where, and at a price that suits them. Course costs are in the region of £30,000 to £50,000. The result is the same, the issue of the frozen ATPL. Students need to be more proactive but can continue to work in their current job while studying at night and at weekends. Integrated courses usually get students through the syllabus more quickly than the modular route, but this all depends on the student.

My first time piloting a light aircraft was in the summer of 2002 and the trip opened a new chapter in my life. I knew flying was what I wanted to do for a living and still cannot believe I am able to fly professionally. I spent the rest of that summer looking at integrated schools simply because I did not know much about the training processes and therefore went to the major flight schools, Oxford, Cabair and Flight Training Europe, Jerez. I chose Jerez as they offered me a month's free trial and HSBC was offering a full loan for the total amount of my training. How could I refuse?

My time at Jerez was fantastic and filled with good memories. The school was equipped for a large body of students, but it was post 9/11 and the school was half full. As a result there were only five people in my class, which I saw as an advantage with more tutor time. The first month was spent in ground school, slogging my way through the intensive syllabus. The student camaraderie really encourages you, from those completing their ground exams, to those who were actually flying and training for their Instrument Rating. As much as I enjoyed my time there, my father was diagnosed with a terminal illness and I returned home to be with my family

After being at home for a few weeks I set about looking at alternative ways of continuing my training that would enable me to be closer to home. I discovered there were many places outside the big schools that offered choice for the aspiring pilot. Firstly, I had to complete my PPL. While integrated schools will take a student from zero hours to ATPL, the modular system requires students to gain their PPL first. I discovered I could complete my PPL for half the cost in the UK by training abroad. Countries such as America, South Africa, Australia and New Zealand all offer PPL training at competitive rates. However, if the wrong type of licence is picked at the onset of training, student pilots will have to pay to convert their licence to allow them to fly in Europe. I found a training organisation in Los Angeles that could offer me a UK PPL, but in America, and I subsequently had a great time flying around southern California.



Back in the UK, I needed to complete my ground exams. With a little research and a few questions, I was soon presented with many different options from which to choose. I visited Bristol Ground School and decided they were for me. The material was excellent, the feedback questions for each exam were up to date, and the on-line and phone support from the various tutors was spot on. This was perhaps the hardest part of my training. You have the material, you have the PPL, now all that stands between you and your CPL/IR training is dedication and hard work. There are no tutors everyday, nor are there structured classes, just you and your books and studying at your own pace. If there was an area I was having trouble with, I could spend more time on it without holding up classmates or taking tutors' time.

As I was studying from home the course costs were a fraction of those for the integrated method. I was not totally alone; during the course, and prior to sitting some of the exams, I headed off to Bristol Ground School HQ at Cheddar, Bristol, where I spent an intensive two weeks working through all the subjects, taking a number of mock exams and working with fellow modular students, about 30 per class. The whole process is intense but extremely rewarding for this is the time all the study comes together. I sat my first exams at the CAA's Aviation House, along with students from other modular schools around the country. I realized then just how many students were using the modular process. While not cheap, modular was for them the most convenient, flexible and cost effective way of training.

The time it takes to study for the ATPL exams varies; some students whiz through the process in six months, while others take more than a year. The system seemed to work for anyone from the class genius to the average student. As an average student I finished a year later and started focusing on building my hours to enable me to start my CPL/IR training.

The start of the CPL/IR is an exciting time as it means more time spent in the air and less with books. The modular student can train anywhere in the world for their CPL/IR. As to which school is best, there is no right answer, just what fits your needs and wallet. I wanted to benefit from a UKbased school and experience UK weather and airspace, etc. Having only flown in the USA, I had never experienced flying in rain, low clouds, overcast condition and other aspects of flying in the UK.

I elected to train with a great school based at Exeter airport. It was small, but the training was second to none and I had a list of people who had successfully passed their CPL/IR there. It was a fantastic time and it built the core foundation of my training skills I am using today as a commercial pilot. There I did not feel the time constraints of an integrated course. If the weather did not permit me to fly, I was not worrying about



VIP service: there's nothing like the 'red carpet' treatment, as Chris appreciated when he parked his little Piper at Million Air Aviation in San Antonio. He'd stopped off at San Antonio when flying from Los Angeles to New York during his 'hour-building' in the US.

After experiencing winter weather, fog, rain and gale force winds, I passed my CPL and started training for my IR. For training continuity and cost-wise, I would recommend taking the IR and CPL at the same school, where the instructors, airspace, airways, airfield and aircraft are all familiar. When you are about to undertake an intense and, sometimes stressful period of training, the last thing you need is the added pressure of getting to know a new school and its surroundings.

I passed my IR the first time. It's an incredible feeling and rates as one of the biggest achievements of my relatively short aviation career.



First cross country: during his PPL training at Long Beach, California, Chris prepares for the first cross country solo. Helping Chris plan his route from Long Beach to Carlsbad is instructor Edward Krauss.

mounting accommodation costs, food bills, competing with other students to get the first flight up with an instructor. It was client-orientated and at no point did I feel like just another number waiting its turn, a complaint that I have heard about some schools. The final part of any ATPL training, whether modular or integrated, is the Multi Crew Cooperation course, or MCC. Many students see this as a relaxed and informal time to let off some steam after months of intense training. But you should proceed with caution and do not just choose the first place cheapest with the simulator. During my research, many of the

commercial pilots said that the course could be achieved in a basic simulator as it is about crew interaction, not aircraft handling. I agree, but for me the aircraft used for my MCC course was the same aircraft I am flying now and to have had 'hands on' experience in a proper simulator was invaluable. After all this, the job applications begin and you have to know how to take rejection ... a lot of it. Have a goal and do not be deterred, network as much as you can and apply to everyone, not just the majors. I sent out close to a hundred CVs and got two job offers within six months of completing my training. I am now working for Logan Air flying the Saab 340 and I could not be happier. The flying is simply fantastic, a real mixture of procedural approaches and radar vectors onto an ILS with lots of 'hands on' opportunities. This solid base of experienced training captains and excellent co-workers has made my first experience of commercial aviation unforgettable. I go to work with a smile on my face and, most importantly, with some spare change in my wallet as my total course costs were in the region of £45,000, much of which was saved from living at home. Compare this to some of my friends at Logan who followed the integrated route with total course costs ranging from £60,000 to £80,000 and the economics speak for themselves.

There is no right or wrong way when it comes to deciding how to train for your ATPL. You must choose what feels right for you and what you can most comfortably afford. I do not know many students for whom the price was not a motivating factor in deciding. But even if the money is not an issue, the quality of training is and, as a modular student, if you are willing to do your research it can offer some of the best experience in the business.

sir frederick tymms lecture Virgin Galactic is Go!

DAVID FISHLOCK

Guild members attending this year's Sir Frederick Tymms Memorial Lecture on 16 October were treated to an exhilarating (and passionate) account of how Virgin Galactic sees its ambitious aeronautical plans developing over the coming two decades. Its target is nothing less than a flying machine that will take farepaying passengers round Planet Earth in $2^{1/2}$ -3 hours.

Vital in focusing and sustaining public interest in the Virgin Group's ambitious project will be the opportunity for wealthy tourists to experience space travel at the edge of Earth's atmosphere within a few years. Tickets cost \$200,000 a piece.

For this payment the space tourist will be medically assessed, trained, then launched into space in two stages. First, the carrier aircraft will take them to 15 km, then release their space ship, which will climb to 100 km.

Introducing his speaker, the Master, Rick Peacock-Edwards, said Will Whitehorn had joined the Virgin Group as public relations manager in 1987. For several years Whitehorn had been responsible for presenting the group's joint venture strategy, before joining a team developing the Virgin branded venture capital model for his company's global expansion. Then in 2004 Whitehorn was made president of Virgin Galactic. The Master reminded the audience that Sir Frederick Tymms had been a founding member of the Guild and its first navigator to become Master. "We're commemorating a man who was very much a pioneer of aviation in this country".

"Sir Frederick Tymms would have understood the project I'm going to tell you about quite well," the speaker began. "He had to work on some quite unique projects that happened in the '20s and early-'30s". It was an age when aviation was funded by folk with a vision rather than very large organisations. Prizes drove progress and innovation. He cited the Supermarine Spitfire, created not by the government but by the Schneider Trophy. Its entry was funded by the wife of a cotton mill owner. Only much later came government backing for the warplane.

Tymms would have recognised Virgin's project - one that many had scoffed at when it began. "Virgin Galactic has taken a prize for the 21st century and begun the process of turning it into an industrial and commercial vehicle." The talk began with a five-minute video of where the project stands today: "a trip like no other - the world's first commercial space flight," as it described itself.

Turning point for the project had been the day in 2004 when its designer Burt Rutan had won the \$10 million X-Prize for his prototype Space Ship One.

Virgin had come into this project through its branded venture capital initiatives, said Whitehorn. "We invest in lots and lots of businesses". He cited its railway activities and the four airlines in which it has a stake. In the late-1990s it began the Gaia Capitalism Project which arose from discussions between Sir Richard Branson, Virgin Group chairman, and scientist James Lovelock, about what would happen to Planet Earth over the next 20 years. They'd concluded that oil would rise significantly in price, and "carbon offset" would be no solution to global warming. The project decided it must start investing in technology in a way its manufacturers were not. "Virgin has been the most influential airline in the world on Boeing and Airbus in terms of getting them to use composites", Whitehorn claimed.

In aviation, the first project was the Global Flyer, the world's first large allcomposite jet, flown round the world by the late Steve Fossett. It used less fuel per hour at 50,000 feet than a Range Rover. This was the beginning of the testbed for the White Knight Two



carrier aircraft.

The Space Ship One and White Knight One system won the X-Prize "and became the first system to put two people into space in the space of two weeks". The plane cost \$8 million to build, fly and get to the Smithsonian Museum. The system had cost Paul Allen, its sponsor, \$30 million. Whitehorn contrasted this with space Shuttle flights at \$750 million or more.

He asserted that Boeing's Dreamliner, if constructed of 100 per cent of carbon fibre composite, would achieve fuel savings of 60 per cent instead of 30 percent.

Whitehorn said he was the one who tipped Branson off about the commercial possibilities of spaceflight, after Burt Ruten had shown him what was taking shape in his workshops. He disparaged today's spaceflight systems as dirty and expensive. "Every time the Shuttle launches it has the same environmental impact as New York for a week."

The most exciting system in space technology in the early-1960s had been the X-15 space plane, basis of a lot of the White Knight Two and Space Ship Two project. NASA was way ahead of its time with the X-15. It made 200 flights into space with only one accident; one on re-entry. The X-15 had been built before the invention of composites. But it lost out to budget problems in the race to put man on the Moon.

Virgin had decided to do something that had not been done in aviation since the late-1920s - to become its own manufacturer as well as the operator. But the company wanted \$10 million in deposits from potential space tourists before it began the final design phase. Within six months of starting Virgin Galactic it had its \$10 million entry fee - in \$200,000 deposits.

Then it began the process of finding out what its potential space tourists could do. "What we had to prove is that all of you would be capable of flying into space", he told the Guild audience. "That all of you would be capable of pulling 6 GX". Received wisdom is that as you get older you are slightly less fit, it's not easy to do. In fact, if you're very young and very healthy Gs are a lot worse then if you're a bit older. The oldest person they had centrifuged to 6 Gs was 89 -Lovelock himself. The average age of its customers was about 50 and their success rate in the centrifuge had been 94 per cent.

Turning to the system's design, Whitehorn described how they'd decided to build a much bigger mother ship than they'd originally envisaged. It would weigh 30 tonnes and be capable of carrying a 17-tonne payload to a height of 15 km. This vehicle is currently being flight tested. Its wing is the largest single piece of carbon composite ever built, a single continuous composite spar 43 metres long. Its control cables are the world's first spun carbon composite cables.

"It's got the most remarkable flying characteristics I've ever experienced", enthused Whitehorn. "We can do proper zero-G parabolas in it when customers are training for their flying experience next day. We can also take them on tight turns and give them the full 3¹/₂GZ to 6 GX experience that they'll have next day".

Space Ship Two, yet to be built, will have room for six space passengers. It will also be 100 per cent carbon composite, designed to travel to 100 km.

Virgin Galactic is envisaging three different businesses within three or four years: space tourism, scientific services, and space cargoes such as small satellites. It has already signed up to conduct experiments for the US National Oceanic and Atmospheric Administration (NOAA) which operates weather satellites. But the business about which Whitehorn rhapsodises is Virgin Galactic World Travel, a future development that could get passengers round Planet Earth in 2¹/₂-3 hours with virtually no carbon footprint. He sees this as "the big opportunity of 20 years' time."

Asked about cost, Whitehorn said that to reach the stage of profitability the company expected to invest about \$350 million - "a relatively cheap project". They had spent about \$112 million so far. About half the customers so far were pilots. They had banked \$40 million in deposits for 286 customers. The company didn't want to use these deposits to fund the project because it had promised to return them if it failed to deliver.

The number of seats they expected to sell for the first year of space tourism was about 700 working up to 5,000-6,000 a year. By year six they hoped to get the price down to about \$75,000 per ticket - about £40,000.

Asked about certification and "who's writing the rule book", Whitehorn replied "our friends at the FAA". He said the Federal Aviation Administration (FAA) and his company were making the rule book as they went along. "No-one has ever done this. We're changing the shape of an aircraft in space and turning it back into a glider at 50,000 feet". They were arm-in-arm with the FAA which had been "absolutely brilliant about it".



But if we can prove all this stuff and make it work it would change the face of aviation within the atmosphere as well, he believed. He asserted that Boeing and Airbus had to take a holistic approach to carbon fibre, instead of the "mix-and-match approach of carbon fibre and aluminium airframes".

Was his confidence shaken by the financial problems currently besetting Whitehorn responded the world? robustly that historically the fastest period of rapid change in aviation came between 1929 and 1933. Whittle had also started work on the jet engine in the early-1930s. Boeing set up its own airline to sell its aircraft. Likewise, Howard Hughes with TWA. Reflecting on customer confidence he said they'd just had their best week for ticket sales. He joked that Americans were liquidating their portfolios and deciding that the money was safer in Virgin Galactic.

How would he compare the passenger experience on offer with the Alan Shepherd flight that took the first American into space? Basically, the plan was a parabolic flight of between 110-140 km. It'll be a much nicer experience. Alan Shepherd could barely see out of the window and couldn't move around. In the few minutes of weightlessness at the top of the parabola our passengers will have the genuine freedom of the later Apollo It would also offer astronauts. no astronaut had something experienced - complete silence in space. "The thing that drives them all mental up there is the noise from the spacecraft's equipment".

Could the speaker address the trajectory as one comes over the top: the re-entry and the variable wing? Reentry's the crucial thing, Whitehorn began. We're launching at precisely 48,000 feet. Within six seconds we're supersonic. We're almost 90 degrees to the earth on the flight up; $3^{1/2}$ GZ. After about 80 seconds the rocket motor cuts out at about 300,000 feet. You then enter the trajectory. At the top of the parabola you'll have zero-G for four to six minutes. At a height of 110 km the craft changes its shape into a shuttlecock. It uses the atmosphere as a brake, rights itself, then at 50,000 feet it becomes a glider that takes about 20 minutes to land. So we're looking for pilots with fast jet experience who are also very good glider pilots. "Quite an exciting experience", he concluded.

RECOGNISING EXCEPTIONAL ACHIEVEMENTS

TROPHIES AND AWARDS PRESENTATION

hirteen awards recognising individuals or crews for their exceptional achievements were presented by Sir Stuart Rose at this year's Trophies and Awards Banquet, at Guildhall, London, on 23 October. Three of the awards were for outstanding courage or devotion to duty in the air: the Guild Award for Gallantry, the Grand Master's Commendation and the Prince Philip Helicopter Rescue Award, which was awarded twice. Two awards recognised contributions to flight operations: the Master's Commendation and the Johnston Memorial Trophy. One award came under the flight testing category, the Derry and Richards Memorial Medal. For achievement in the field of training there were four awards: the Sir Alan Cobham Memorial Award, the Central Flying School Guild Award, the Pike Trophy and the John Landymore Trophy. The importance of the aviation press was recognised with the presentation of the Guild's award for aviation journalism. Two further awards, the Guild's Award of Merit and the Grand Master's Australian Medal, were presented by the Master in Australia during last month's tour of the Regions. You can read the full citations of all the awards on the Guild's website *www.gapan.org*



The Derry and Richards Memorial Medal 2007 Winner: Peter Chandler

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

After graduating from Southampton University Peter Chandler joined the RAF in 1975. In 1981 he was one of the first pilots to transition to the Tornado and eventually became Squadron Commander on the Trinational Conversion Unit at Cottesmore. He was selected for test pilot training in 1989 and in 1992 he became tutor, then principle tutor at Empire Test Pilots' School (ETPS).

recognised at Airbus and he was asked to join the company as part of the development team. He was immediately involved in all aspects of the A380 design with particular emphasis on cockpit layout and the initial design and the development of the Onboard Information System. Airline pilots now flying the A380 in revenue service unanimously praise the usersimplicity friendliness. and intuitiveness of the A380 FMS and overall cockpit interface. This is a Peter Chandler's tribute to contribution to the design of the A380 cockpit. In addition to test flying, he has displayed the A380 at numerous air displays and trained many of the first airline pilots converting to the type. Peter's ground and flight test work has been a major factor in

Peter left the advancing the state of the art to RAF in 1994 to produce the A380's innovative cockpit Virgin design and excellent handling Atlantic flying qualities. the A340 and eventually Derry and Richards: De Havilland test became project pilot John Derry and his flight test pilot for the observer Tony Richards died in a flying Air Navigation

projects

soon

accident at the Farnborough Air Show in 1952 when their DH.110 prototype WG236, starting a demonstration from a supersonic dive, broke up and crashed during a low altitude part of the display. Prior to the accident they had contributed significantly to the supersonic flight test programme. RAFtrained John Derry had earned his wings in Canada before flying Typhoons and Tempests in the Second World War. Post-war he worked as a test pilot with Vickers Supermarine and then with de Havilland. In 1948, flying a DH.108, he became the first British pilot to break the sound barrier. Tony Richards was a trade apprentice in de Havilland's technical school before being promoted to engineering apprentice in the Flight Test department. He worked on the trials of the Heron and later the DH.110, when he flew with John Derry. In 1952 he became the first British Flight Test Observer to fly faster than sound with Derry at the controls of WG236. The Derry and Richards Memorial Medal was first presented in 1953.

The Alan Cobham Memorial Award 2007 Winner: Charles Waters



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.

Charlie Waters began training at Flight Training Europe, Jerez, in November 2006. His dedication and commitment resulted in first time passes in all the JAA examinations with a commendable average of 94.5%. Throughout his studies, he was always prepared to assist other members on his course with academic problems they were experiencing and this, combined with his good sense of humour and engaging personality, made him very popular with his colleagues and the staff. He was elected President of the Student Council, a body which provides a crucial link between management and the student body and he presided during a period of particularly difficult problems. On the flying side, Charlie was blessed with considerable natural ability and passed all his progress and skill tests at the first attempt, flying to an above average standard. He graduated in January this year and received the Managing Director's commendation for his outstanding services to the training college. He is now a First Officer flying Airbus A320s for British Airways.

Sir Alan Cobham was a true pioneer in aviation. He was a Royal Flying Corps and RAF pilot during the First World War. In 1920 he ran an air taxi service for de Havilland and later gave many people their first experience of flight through his 'joy-rides' to the public. In 1921 he completed a 5,000mile tour of Europe, followed by longdistance survey flights to the Cape, the Far East and Australia a few years later. His experiences during long distance flying led him to investigate and develop a method of extending the range of aircraft by refuelling them in the air. From this he formed the company Flight Refuelling and the RAF and the United States Air Force later adopted the techniques he perfected. Sir Alan joined the Guild in 1930 and became Master for the year 1964-1965. The Alan Cobham Prize was instituted in 1966 to try to induce younger pilots to become more technically competent. The current Memorial Prize was instituted in 1974 and awarded under new rules.

The John Landymore Trophy 2008 Winner: Thomas Dean



Awarded to the outstanding candidate of that year for a Guild PPL Scholarship. The award is recommended by the Guild Scholarship Committee.

Thomas Dean won this year's Guild scholarship sponsored by the Royal Aeronautical Society, and completed his PPL training at the flying school at RAF Marham. From the initial impression that he made upon the scholarship selection committee to the approach he adopted during his flying training, Thomas was exemplary. His ground school results were top class and his whole approach to the learning process and personal application required to be a proficient and able pilot were present from the outset. Thomas's enthusiasm and determination to achieve his goal was evident to his ground and flying instructors. His attitude was always positive and he was a pleasure to teach.

John Landymore was a cadet pilot at

The College of Air Training, Hamble, who died in a boating accident in 1962. John's parents donated the John Landymore Trophy in his memory to be presented annually, together with a cash donation. The award was first presented by the Guild in 1993.

The Central Flying School Guild Trophy 2007

Winner: Squadron Leader Peter Howlett RAF (Rtd)



Squadron Leader Howlett and his wife after the presentation.

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 flying training or instructional standards.

Squadron Leader Peter Howlett recently retired from RAF service after a remarkable continuous flying career spanning some 42 years, during which time he amassed 12,600 flying hours. Sqn Ldr Howlett joined the RAF in 1965 at the height of the Cold War and began by flying operational sorties on Vulcan bombers. He later transferred to the Canberra. However, it is as a Qualified Flying Instructor that he made his greatest mark. At his retirement, he was one of just five A1graded instructors teaching in the RAF. Sqn Ldr Howlett played the leading role in establishing the foundation of the present day Basic Fast Jet Flying Training Syllabus. He has had more influence on the pipeline of students being fed through to the frontline than any other instructor in the flying training system in recent times. On the ground, his aviation knowledge was unsurpassed. Sqn Ldr Howlett possesses a blend of professionalism and commitment.



The Pike Trophy 2007 Winner: Richard Snell

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.

Following pilot training and squadron duties in the RAF between 1954 and 1957, **Richard Snell** attended the Central Flying School (CFS) and became a QFI in 1958. In 1969 he was appointed to the post of Flight Commander Standards, Basic Flight, at CFS having become an A1 category instructor. When he left the RAF in 1974, Dickie joined the staff of the

The Master's Commendation 2007

Winner: Squadron Leader Warwick Creighton MBE RAF

Awarded at the discretion of the Master for commendable achievement in any sector of aviation.

Squadron Leader Creighton is believed to be the longest serving Helicopter Air Loadmaster in an RAF career spanning a remarkable 45 vears. His lovalty, professionalism and commitment throughout his service have earned him the respect and admiration of everyone with whom he has worked. His career began on 511 Sqn on Britannias and VC10s. Then a rotary conversion in 1971 signalled the beginning of a new era. In 1978 he was commissioned and began his long association with the Puma, which lasted until his retirement earlier this year. His quiet, leadership natural brought tremendous success and high regard in subsequent postings as the Crewman Leader on 33 Sqn, as a Wessex and Puma crewman and examiner, and a search helicopter operational tactics and trials crewman. During his career he has amassed

College of Air Training at Hamble as a commercial flying instructor training ab initio students to frozen ATPL level and was a member of a specialist team Training conducting a Captain Technique's course for British Airways. When the College closed down in 1982, Dickie became an Instructor Standards pilot at the Army Air Corps and in 1987 he joined the Civil Aviation Authority (CAA) as an examiner for all single ratings, including seaplanes and simulators. Since retiring from the CAA in 1999 he has continued in his role as a freelance instructor and examiner and has amassed a total in excess of 20,000 instructional or examiner hours. Richard's name is legendary in the industry and many pilots over the last five decades have passed through his hands. He is a natural and selfless teacher who is keen to pass on his knowledge to others.

Wing Commander Clement 'Clem' Pike was a founder member of the Guild, a member of the first Court and Master from 1949-1950. His Guild membership spanned more than 40 years. He had flown as a pilot with the Royal Flying Corps, but post-war joined Vickers as an apprentice and spent several years in the drawing offices of de Havilland. In 1927 he became a flying instructor and served with the RAF from 1939-1947. He later rejoined de Havilland and became manager of Hatfield Aerodrome. Perhaps his most lasting contribution to the Guild was the setting up under his Chairmanship of the Guild's panel of examiners and the issue of Instructors' Certificates. This followed his work on a subcommittee, along with Sir Frederick Tymms, which recommended that new conditions should be made for the issue of 'A' licences and suggested the need for an instructors' licence or endorsement. By 1932 the Guild's Certificate had obtained official recognition. 'Clem' Pike also worked in the field of flying instruction and was largely instrumental in putting training for the profession on a sound basis. This led to the establishment of the RAF Reserve Flying Training Schools which provided many pilots for the Second World War. The Pike Trophy was first presented in 1963.



8,700 rotary flying hours and a career total of 12,250 flying hours, having been twice awarded the Queen's Commendation for Valuable Service and an MBE. His leadership and mentoring has ensured that generations of RAF aircrew have been touched by his wisdom and expertise. His reputation and standing, and the genuine respect in which he is held, are all testament to what he has accomplished during his career. Sqn Ldr Creighton's dedication to duty and his leadership and organisational skills are exemplary and his contribution to the RAF over the last 45 years has been exceptional and almost without peer.

The Johnston Memorial Trophy 2007 Winner: 815 Naval Air Squadron Training Team

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.

The Royal Navy Air Squadron's 815 Training Team is recognised for an outstanding performance in air training navigation and the development of navigation techniques for the maritime Lynx helicopter. The tactical employment of rotary wing assets in Iraq and Afghanistan led to a requirement to release Army Air Corps (AAC) and RAF helicopters from Operation Banner in Northern Ireland. With military commitment due to continue until 2007, 815 NAS were tasked to investigate the feasibility of providing a multi-crew, 24-hour, all weather capability to fill the gap in aviation support to HQNI. Training commenced in January 2007 for the instructors responsible for both course design and ongoing aviation training. Crews were to be capable of operating a single pilot aircraft with maritimetrained crews by day or night in the troop support role, navigating routinely on 1:50,000 maps and to be capable of operating to unprepared landing sites. This was a new skill for the Royal Navy and one previously the preserve of specifically role-trained AAC and RAF aircrew operating dualcontrolled aircraft, normally with twin-pilot crews. With input from the Naval Commando Support Squadrons and AAC units in theatre a bespoke training course was designed, drafted and approved in short order, based on both the task at hand and the limited training period available before deployment. The task faced by the instructors was made doubly difficult as none of the allocated aircrew had previous experience of Night Vision Goggles (NVG) flying, a skill essential for the environment in which they would be operating. The huge training burden, coupled with a paucity of instructors and capable airframes, led to a protracted period of intensive day and night operations. Once deployed, the crews consistently performed to a level above and beyond that which could be expected. given the nature of the task and the lack of experience in that environment. The ability of Naval aircrews, inexperienced in role, to perform to a widely recognised high standard is testament to the training provided. Furthermore, the skills learned have been retained and have clear applications to any possible future land roles. Lieutenant Commander Alun Jones. Commanding Officer 815 Naval Air

Squadron received the award on behalf of the Training Team.

Squadron Leader Ernest Johnston, the Guild's first Deputy Master, was Chief Air Ministry Navigation Examiner and one of the most prominent navigators of his day. He died tragically in the R.101 accident in 1930 when navigating the airship on its maiden flight to India. Originally, he was a Master Mariner and served in the Royal Naval Reserve, transferring to the Airship Section. On the formation of the RAF he was appointed Captain but after the 1914-1918 War he served in the Navigation Branch of the Air Ministry, and subsequently retired from the RAF. He was appointed to the Royal Airship Works at Cardington in 1924 but also worked with Imperial Airways to help them establish European air routes. In 1927 he navigated the first Imperial Airways flight to India and back. He was navigator for both the airships R.100 and R.101. The memorial award in his name was first presented in 1931 to Francis Chichester for his amazing feat of navigation skill when flying his seaplane from New Zealand to Australia.

The Jean Batten Memorial Trophy 2007

Winner: William Ronald Tannock

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

In a career spanning more than 50 years, Ron Tannock has made an immense personal contribution to the integrity and professionalism of New Zealand (NZ) commercial aviation through periods of tumultuous change in governance and operational fundamentals. After emigrating to NZ, Ron joined the National Airways Corporation where he worked as a technical and engineering manager until 1983 when he became the General Manager, Straits Airfreight Express. Under his stewardship, this company expanded its maintenance facility to become one of the largest propeller overhaul companies in the Southern Hemisphere and a major military engineering contractor. His foresight was to ensure the company's continuing growth and prosperity when the ageing fleet, and a changed



.....Continued on page 20



competitive market, forced him to announce the end of flying operations in 1990. For ten years Ron served with distinction as General Manager, Operations, for the international division of Air New Zealand. His reputation in Air NZ is justly deserved as a superb manager and mentor, widely experienced but skilled in the detail of subordinates' duties. committed and precise in matters of safety and practicality but with a keen sense of humour, and effective in negotiation. Many of the ideas he supported have now become widespread industry practice. He has since served as Chairman of the Civil Aviation Authority of New Zealand.

New Zealander aviatrix Jean Batten

established many records during her notable flying career lasting more than 40 years. She had learned to fly in London and gained her private pilot's licence in 1930. After qualifying for a commercial pilot's licence she made her first long-distance flight to India in 1933 and the following year flew to Australia and back to England. In addition to capturing five important records and establishing four world records for any type of aircraft, Miss Batten was the first woman to make a return flight to Australia, fly solo to South America and to New Zealand and cross the South Atlantic Ocean and the Tasman Sea alone. For her services to aviation Miss Batten, a Commander of the British Empire, received many awards: among them the Seagrave Trophy, the Britannia Trophy twice. the Harmon International Trophy three times, the Order of the Southern Cross and the Order of Chevalier of the Legion of Honour. She was the first woman to the coveted Federation receive Aeronautique International medal.

The Guild Award for Aviation Journalism 2007 Winner: Hugh Field

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.

Hugh Field's aviation career began in 1950 when he joined the RAF and his first formal training in evaluation and reporting came at the Empire Test Pilots' School. This was to serve him well during his later career as a reporter and freelance aviation writer, as well as a test pilot. An Air Ministry tour in the Directorate of Flight Safety turned into an editorial job when he was given responsibility for the safety element of the training magazine Air Clues, followed by a posting to Staff College. Training there was subsequently accepted by the National Union of Journalists as an official journalism qualification which, following his RAF career, helped in his acceptance by *Flight* magazine for a post as a reporter. Hugh's decade as Associate Editor of Flight International was one of constant variety. He personally conducted the majority of the air tests on which the magazine reported, which was (in his words) 'an interesting exercise in trust and integrity'. Between 1981 and 1991, Hugh was PR Manager for British Aerospace (Commercial Aircraft) where he was the 'voice' of the BAe 146 airliner at Hatfield. In 1993, shortly after retirement from full-time journalism, Hugh, by then a Past Master of the Guild, was asked to take on editorship of *Guild News*, a post he



held almost continually until 2002. Hugh has made an outstanding contribution to the promotion and public awareness of aviation in general, during an aviation journalism career spanning 50 years and 5,000 flying hours.

The Grand Master's Commendation 2007

Winner: RAF Odiham Chinook Force *Awarded at the discretion of the Grand Master for an act of valour or outstanding services in the air.*



The RAF Odiham Chinook Force, comprising three squadrons, deployed to Afghanistan in March 2006 and has since also served on relief and evacuation operations elsewhere around the world. The imperative for each mission in Afghanistan is overwhelming and the statistics are impressive. In the last twelve months the UK Chinook Force has carried 82,316 troops, 1,976 casualties and moved over 6,188 tonnes of freight into and out of battle. The dependence on the Chinook, its crews and support personnel, in theatre is absolute. However, with this dependence comes extraordinary technical and tactical risk, beyond anything the Force has previously ever faced. Each Chinook mission involves operating the aircraft in the most extreme environmental conditions, at the very edges of the performance flight envelope. preferably by night, and against a sophisticated enemy that daily evolves its tactics. Despite grenade holes in the aircraft and rotor blades, and wheels left hanging by hydraulic pipes, the robust nature of the aircraft, the exceptional flying skills of the crews and outstanding engineering support allow aircraft to be saved and operations to continue unabated on a daily basis. It is predominantly a human effort. Eighteen year-old engineers straight out of training spend gruelling nights fixing aircraft in intrusive dust, heat and cold to ensure enough aircraft are on the line. Aircrew deploy directly from the Chinook conversion course with 250 total flying hours in their logbooks. Crewmen bear the brunt. Very few conducted have not heart resuscitation, covered a sucking chest wound or inserted an intravenous drip at 120 kts and 50 feet by night over the Ultimately, though, the desert. Chinook Force pilots are those that decide whether an aircraft lands or takes off. More often than not it is a split-second judgement with incomplete facts upon which rests up to 40 lives. For their efforts, the Chinook Force continues to attract considerable praise from those who really count - privates and lance corporals on the ground. The unmistakeable chest thumping of the Chinook rotors at speed is as motivating to the Helmand Task Force as it is frightening to the Taliban. The effect the Chinook Force achieves in theatre is high profile, prolific and profound. Group Captain Andy Turner, Station Commander RAF Odiham, received the award for their achievements and delivery of outstanding services in the air on behalf of the Chinook Force.

The Prince Philip Helicopter Rescue Award 2007

Winners: HMS Gannet Search and Rescue Flight 'Rescue 177', and 'Blackout 26' RAF Chinook Mission 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.

HMS Gannet SAR Flight 'Rescue 177' On 28 May 2007, R177 crewed by Lt Cdr Lanni, Lt Cdr Ford, Lt Campbell and Flt Sgt Gibson, was scrambled at 21.52 hrs to assist with a search for three climbers on the north side of Ben Nevis. Although it was summer, the weather was particularly challenging with a low cloud base and visibility frequently which was and dramatically reduced to 500m in heavy, blowing snow. The snow and extremely poor visibility hindered initial location of the climbers, but eventually the observer spotted a climber's torchlight and confirmation of their position. After several rescue attempts, the flying pilot lost visual references and the crew elected to reassess the situation. They landed at Fort William and embarked members of the Lochaber Mountain Rescue Team (MRT) who were deployed with the intention of affecting a land based rescue. The aircraft then returned to Fort William to pick up five more MRT members and replace a damaged set of Night Vision Goggles (NVG). At 02.20



.....Continued on page 22

the MRT on scene at the climbers' position advised the crew that conditions had abated sufficiently for the aircraft to return and attempt a further extraction. However, once on scene, the combination of poor weather and a failed landing light necessitated an abort and re-group back at Fort William. At 03.55, R177 was requested to move two further MRT members and, now in improving light as dawn approached, the crew noticed that the climbers had moved with the MRT to an area known as Echo Wall. Seizing the opportunity of a weather break, Lt Cdr Lanni decided to attempt extraction of the casualties. The tight and difficult location necessitated a high winching position to ensure clearance. Still encountering significant turbulence, and now faced with critical fuel considerations, Lt Cdr Ford was deployed five times, on each occasion using in excess of 200 ft of cable to a target area of only 3 ft by 5 ft in size. Only the highest standard of crew co-operation meant that they were able to recover three casualties and two MRT members safely. R177 eventually returned to base at 06.25 hrs after recovering all remaining MRT members. This was an extremely complicated rescue lasting more than six hours, mostly in darkness. The crew overcame difficulties ranging from severe weather to handling equipment failure and mechanical failure as well as being fuel critical. Their mettle and moral fortitude were pushed to the absolute limit to affect improbable success through exemplary teamwork and bold decision-making. They never gave up

on their casualties or MRT colleagues, ensuring all were returned to safety.

'Blackout 26' RAF Chinook Mission On 8 January 2008, 30 US and Afghan National Army troops were stranded on an island in a wadi 50 nm from Kandahar airfield, just south of the main road that runs northeast from Kandahar to Qalat. By 22.30 hrs, the troops had been wet for six and a half hours with inadequate clothing and were suffering from the cold. А medevac operation was called and both available CH47s were launched from Kandahar. However, mechanical problems with one aircraft forced both to return to base and after further assessment it was decided that it would be safer to conduct a poor weather transit with a single aircraft, and just one took off again to attempt the rescue. The plan was to run north from Kandahar to pick up the main road, follow it to the wadi interception point, then follow the wadi to the incident area. The second launch was achieved at 02.10 hrs and earlier thunderstorms had given way to moderate to heavy snow. Visibility on Night Vision Goggles (NVG) was approx 1,000m and a ground speed of 90 kts was achieved, giving an ETA of 33 minutes and transit at 100 ft was comfortable. With approx 20 nm covered the snow was starting to settle thickly on the road. Height was reduced to 30 ft and speed reduced to 45 kts ground speed (GS). Unfortunately, the tailwind resulted in just 20 kts of airspeed making snow recirculation a factor from then on. Progress became a balancing act of maintaining enough speed to keep out

of the aircraft downwash but slow enough to keep within the confines of the road and maintain forward fatiguing references. This configuration was maintained for a further 23 miles at an average GS of 40 kts. The incident location was observed from numerous vehicle lights and the troops showed 'firefly' lights to mark the landing site. Because of the snow the Handling Pilot used a line of three vehicles (lit but abandoned in the water) as a horizon bar for a crosswind whiteout landing. References were lost at 20 ft from touchdown so attitude was the maintained and landing speed/drift corrected with reference to the hover meter. While the medics and No l crewman dealt with what turned out to be 17 casualties, the decision was made to return to Kandahar IFR. rather than push on to Qalat, the troops choice. Departure had to be made on landing heading toward the high ground, until the snow cloud was cleared and some forward speed achieved in order to make a turn to heading (through 100 degrees). A maximum rate climb to 9,000 ft was then made and an uneventful return to base. Inflight visibility rules were broken more often than not during the rescue – all the aircrew had previously found themselves in similar conditions during their flying careers, but not in such poor light levels, or for such a protracted period of time. The equipment, training and individual crew performance was the difference between success and abandoning the rescue with one life, possibly two, saved.





The Guild Award for Gallantry 2008

Winner: Basra City IRT Crew – 28 (AC) Squadron RAF

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.

At 23.15 hrs on 1 June 2007, the Incident Reaction Team (IRT) based at Basra Air Station was alerted that there was a serious casualty following a mortar attack on an isolated British location in the centre of Basra City. Landing an aircraft at the location was assessed to be very high risk.

Intelligence reports had indicated a large, 'spectacular' attack would occur somewhere in Basra, with a helicopter being a possible target. Alert to the high risk, but being fully conscious of the importance of providing unfailing support to ground forces, Flt Lt Goodman and her crew of the Merlin helicopter commenced an expeditious, very low-level transit and approach to an unfamiliar and dangerous landing site, whilst under intense enemy direct and indirect fire. Despite a complex approach, with numerous obstructions and ambient conditions on the limit of aviation operations, the crew executed a landing with few visual references bringing the aircraft in next to the casualty. The medics and Aviation Reaction Force left the aircraft as four mortar rounds landed in and around the location. Despite this the crew elected to hold the aircraft on the ground as the option

with least risk. A top cover Army Air Corps Lynx helicopter was by now reporting several substantial explosions in the area. With the casualties loaded, the crew departed the site just as further explosions occurred in close vicinity to the aircraft and with the aircraft's path covered by very close friendly artillery fire, to distract enemy forces. The aircraft landed at the British Field Hospital, just 14 minutes after launch. Many IRT sorties are high risk. However, on this occasion the crew had to instantly weigh up the risk of losing the aircraft against the importance of recovering a serious casualty, which has an impact on morale throughout the Coalition. Without the IRT, the casualty would have died within 15 minutes. Despite extreme pressure, the crew made the decision displaying right determination and selflessness on a bold and daring sortie which undoubtedly saved life. For her outstanding bravery in the face of the enemy, Flt Lt Goodman was awarded the DFC, the first time the honour has been awarded to a female pilot. In recognition of their collective actions, the 28(Army Co-Operation) Squadron IRT crew, consisting of Flt Lt Michelle Goodman, Flt Lt George Williams, Sergeant Chris Parker and Sergeant Steve Thomas, are collectively awarded the Guild Award for Gallantry. 🚤

Well earned: the 2008 Scholarships winners received their certificates at Cutlers' Hall on 13 November. The presentation was made by Group Captain Roger Gault, Immediate Past Master. The proud recipients were (from left) Susan Thorne (Norman Motley Scholarship), Thomas Griffin (Benevolent Fund FI Scholarship), John Stone (Weetabix Scholarship), Adam Norris (Sir Sefton Brancker Scholarship), Jamie Townes (Grayburn Scholarship), the IPM, Thomas Dean (RAeS Guild Scholarship), Caroline Begg (Benevolent Fund FSD Scholarship). Sara Lovell (Guild MEI Bursary), Lottie Skeen (JOC EPST Scholarship) and Jaspreet Singh (JOC EPST Scholarship)



Visit to RAF Centre for Aviation Medicine

PAST MASTER ARTHUR THORNING

of eighteen Guild party members, led by the Master, visited the RAF Centre for Aviation Medicine (RAF CAM), at the invitation of the Officer Commanding, Air Commodore Bill Coker. He started the visit to RAF Henlow, which took place on 17 September, with a comprehensive introduction to RAF CAM, for which the motto is appropriately Ut Secure Volante. This was the Guild's second visit - the first was in 2002 - since the Centre was formed at RAF Henlow in 1998, bringing together facilities from Farnborough and North Luffenham.



Feeling sick: the Aviation Medicine Flight's Hawk is used to help desensitize aircrew affected by airsickness, a process that can take up to three months and involve more than twenty flights in the aircraft.

RAF CAM combines aviation medicine with occupational and environmental work. It also has two Hawk aircraft (cleared for 9.5g) based at Boscombe Down (the Aviation Medicine Flight) and still uses the centrifuge at Farnborough. A more advanced centrifuge was planned for Henlow

Big mug ASSISTANT MICHAEL GLOVER

fter a most interesting afternoon on 2 October with Marshall Aerospace, 50 of us met for a formal dinner that evening in the Combination Room (a beautiful dining room dating, in part, from College, 1460) at Peterhouse Cambridge. Michael Marshall. Chairman and CEO, and Terry Holloway, Group Support Executive, of the Marshall Group, together with

but the future of such a facility is uncertain.

RAF CAM has research programmes in aviation medicine,

some in conjunction with OinetiO and it investigates and proposes solutions to issues identified by deployed squadrons. It has an active noise and vibration division which assesses the noise environment affecting both aircrew and personnel on the ground. Air Commodore Coker explained that work is in hand, in conjunction with Kings College London, to study the effects on performance in helicopter crews in Afghanistan, who have to operate for prolonged periods at high altitudes and need to use oxygen above 10,000 feet. The Aviation Medicine Flight, in addition to its many developmental and research tasks, also has a clinical role including airsickness desensitization an programme for aircrew, which can take individuals for up to three months and over twenty flights in the Hawk - it is generally successful. RAF CAM also provides aviation medicine training for the Army and Royal Navy.

The Guild party were then led on a tour of the facilities by Flying Officer Emma Levy, who had made the arrangements for the visit. Dr Michael Trudgill gave an introduction to the work of the Aircrew Equipment Integration Group, and highlighted the difficulties experienced by operational

their wives, Sibyl and Marion, were our guests. One particular purpose of the dinner was to provide an opportunity for Michael Marshall to present a magnificent Loving Cup, accepted by the Master on behalf of the Guild, in memory of his father, Sir Arthur Marshall, who passed away last year at the age of 103. Sir Arthur was a long-time friend and supporter of the Guild (Upper Freeman in 1931 and Liveryman in 1958) and many of us will remember him, the first to do so, receiving the Guild Award of Honour at the Trophies and Awards banquet in October 2000. The Loving Cup, affectionately dubbed "The Big



Pressured: one of the four hypobaric chambers used to demonstrate the incapacitating effects of hypoxia to aircrew.

helicopter crew with heavy survival and body armour systems. Flight Lieutenant Jeff Gunn, of the RAF Regiment, showed us the Chemical, Biological, Radiological and Nuclear (CBRN) protection available to personnel - apparently just as uncomfortable as ever. Wing Commander Matthew Lewis provided a briefing on the contribution which RAF CAM makes to accident investigation, mostly for the RAF but occasionally for the other services and civil aviation. The effects of ejection are always studied carefully and human factors in accident causation and operational flying is sufficiently important that a full time psychologist is employed, and kept very busy. Last, but by no means least, Wing Commander Martin Waldron showed us the four hypobaric chambers which are used to demonstrate to aircrew the subtle, incapacitating effects of hypoxia.

The visit ended with lunch in the Officers Mess. We must thank Air Commodore Coker and his staff once again for a most interesting visit and look forward to accepting his invitation to return before another six years have elapsed.

Mug", was christened with a bottle of 1994 Chateau Lafite from Michael Marshall's private cellar and passed from hand to hand so all could examine it and, perhaps, sip the vintage claret inside. The cup is engraved "In memory of Sir Arthur Marshall OBE DL" and has a drawing of DH.60G Gipsy Moth G-AAEH commemorating the training of more than 20,000 aircrew by Marshalls on behalf of the RAF in the Second World War. This marvellous Loving Cup, I'm sure, will figure prominently on the top table at the Trophies and Awards Banquets and Livery Dinners of the Guild for many years to come.