



THE HONOURABLE COMPANY OF  
**AIR PILOTS**

# **TROPHIES AND AWARDS 2018**

## **AWARDS**

**TERMS OF REFERENCE  
WINNERS AND CITATIONS**

**SCHOLARSHIP WINNERS**

**MASTER AIR PILOT CERTIFICATE AWARDS  
MASTER AIR NAVIGATOR CERTIFICATE AWARDS  
MASTER REARCREW CERTIFICATE AWARDS**



# **AWARDS TERMS OF REFERENCE**

## **LIFETIME CONTRIBUTION TO THE AEROSPACE INDUSTRY**

### **The Award of Honour**

Awarded to an individual who has made an outstanding lifetime contribution to aviation.

2018 awarded to: **ROYAL AIR FORCE AEROBATIC TEAM**

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

### **The Award for Gallantry**

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.

2018 not awarded

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

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

2018 awarded to: **216 FLIGHT – LIEUTENANT AMY GILMORE RN  
CHIEF PETTY OFFICER IAN TOMS**

### **The Master's Medal**

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

2018 not awarded

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

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

2018 awarded to: **FLIGHT LIEUTENANT BEN WALLIS AFC RAF**

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

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

2018 awarded to: **HONG KONG GOVERNMENT FLYING SERVICE**

## **FLIGHT OPERATIONS**

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

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

2018 awarded to: **AIR VICE-MARSHAL SIMON 'ROCKY' ROCHELLE OBE DFC RAF**

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

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

2018 awarded to: **CAPTAIN ALEXANDER HORRELL USAF**

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

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

2018 three awarded to: **GROUP CAPTAIN JOHN MIDDLETON OBE RAF**  
**SQUADRON LEADER MIKE LING MBE RAF**  
**MAJOR DENNIS W SHARF CD**

### **The Brackley Memorial Trophy**

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

2018 not awarded

### **The Johnston Memorial Trophy**

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

2018 awarded to: **700X NAVAL AIR SQUADRON**

### **The Sword of Honour**

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

2018 awarded to: **GERRY HERMER AFC**

### **The Hanna Trophy**

Awarded for an outstanding contribution to the art of display flying of historic, vintage or modern fighter or combat aircraft.

2018 awarded to: **LEE PROUDFOOT**

### **The Myles Bickerton Trophy**

Awarded for outstanding achievement in any sector of General Aviation.

2018 not awarded

## **FLIGHT TEST**

### **The Derry and Richards Memorial Medal**

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

2018 awarded to: **FRANK CHAPMAN**

### **The Eric 'Winkle' Brown Memorial Trophy**

Awarded for commendable achievement or contribution by an individual or team to the operational assessment or development of a manned aircraft type(s) or airborne system(s).

2018 awarded to: **ROGER BAILEY**

## **SAFETY AND SURVIVAL**

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

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

2018 awarded to: **DR DONOUGH WILSON**

### **The Cumberbatch Trophy**

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

2018 awarded to: **MICHAEL O'DONOGHUE CBE**

## **FLYING TRAINING**

### **The Glover Trophy**

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.

2018 not awarded

### **The Central Flying School Trophy**

A periodic award to an individual, group or organisation that, in the opinion of the Court of the Company, 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.

2018 awarded twice to: **SQUADRON LEADER JOHN BENSON-COOPER RNZAF  
653 SQUADRON ARMY AIR CORPS**

### **The Pike Trophy**

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

2018 not awarded

### **The John Landymore Trophy**

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

2018 awarded to: **AMY PALMER**

## **COMPANY ONLY**

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

Awarded for meritorious service to the Company.

2018 awarded twice to: **DONNA FARQUHAR  
CAPTAIN BARRY MITCHELL**

## **REGIONAL AWARDS**

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

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

2018 awarded to: **JAMES ERIC THURSTAN**

**The Australian Bi-Centennial Award**

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

2018 awarded to: **WING COMMANDER IAN MALLETT DFC RAAF (retd)**

**The Jean Batten Memorial Award**

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

2018 not awarded

**AVIATION MEDIA**

**The Award for Aviation Journalism**

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

2018 awarded to: **DAVID LEARMOUNT**

## **Citations are listed in the order of presentation**

### **CITATIONS**

#### **The Award of Honour**

##### **ROYAL AIR FORCE AEROBATIC TEAM**

For over 50 years the Royal Air Force Aerobatic Team has been performing both in the UK and, at various times, in most countries around the world. The team is globally famous, they are ambassadors for the UK and they have, for so many years, been perhaps the most visible example of British expertise and excellence in aviation. As an example of their professionalism and achievement throughout their 50+ years as a British Icon, a summary of their achievement during two major overseas tours in 2016 and 2017 reflects the team's overall achievement over so many years.

In 2016 and 2017 the team flew two major back-to-back overseas tours within a year of one another flying over 28,000 miles and visiting 20 countries across Europe, the Middle East and Asia Pacific. The tours showcased the RAF's flying skills, engineering excellence and ability to support global fast jet deployments. However, they were also a phenomenal boost for the FCO, DIT and the Government's GREAT campaign which promotes education, tourism, engineering and iconic British companies and brands. The interest that the Team generates was surpassed beyond all expectation. In 2016 alone, it was seen by 1.2 billion people either live at display venues or through online and TV media channels.

The two tours showcased the RAF's flying, engineering and expeditionary excellence. However, the Red Arrows also flew the flag across the world as true ambassadors promoting the nation in the skies, Embassies, High Commissions, schools, universities and businesses. They reflect activities in more recent years, but they also reflect the outstanding contribution to aviation during the last 50 years. In this centenary year of the Royal Air Force the Red Arrows are again leading the celebrations that are so ably demonstrating the role of the Royal Air Force to the public. For their excellence and achievement throughout their 50-plus years of existence, the Royal Air Force Aerobatic Team is awarded the Honourable Company of Air Pilots Award of Honour in recognition of its enduring contribution to excellence in aviation.

#### **The Derry and Richards Memorial Medal**

##### **FRANK CHAPMAN**

Liveryman Frank Chapman has been involved in flight test as an experimental test pilot since completing test pilot training with the French Ecole du Personnel d'Essai et de Reception (EPNER) in 1990.

Frank began his aviation career flying with the University Air Squadron whilst studying for a degree in engineering science at Oxford. Following fast jet training he flew both Harriers and F4 Phantoms on operational tours with the Royal Air Force in Germany between 1983 and 1989 before being selected for the French test pilot course. He then spent two years at RAE Farnborough where he was primarily involved in the development of electro-optical systems and Head-up displays, flying the Buccaneer, Jaguar, and Hunter. In 1992 Frank was posted, on exchange with the USAF, to Eglin AFB in Florida where he flew more than 1000 hours in the F-16 on trials including flight envelope expansion and weapon system integration.

In 1997 Frank retired from the Royal Air Force and spent the next six years flying A320s and A330s as an airline pilot with Monarch Airlines. This experience was ideal preparation for the next stage of his career as in 2004 he was recruited by Airbus and joined the flight test team in Toulouse as an experimental test pilot.

Frank was fully established by the time of the first flight of the A380 in 2005, and participated in much of the flight test programme of that aircraft as well as conducting production and development flight tests on all the other Airbus types. Subsequently he was nominated as a project pilot for the A350 and was involved in all aspects of that aircraft's cockpit development whilst also taking a significant part in the on-going flight test programme of the A400M. In 2013 flight testing of the A350-900 began and Frank was one of the principal pilots, carrying out envelope expansion and handling qualities testing as well as systems development, leading to successful certification and entry into service in 2014. Frank then became the lead pilot for the A350-1000 providing operational input to the development and then conducting the first flight of that aircraft in November 2016. He was a lead pilot throughout the flight testing of the 350-1000 which culminated in the successful certification of the aircraft in 2017 and its entry into service at the beginning of this year.

In addition to his test flying, Frank is also an accomplished display pilot having displayed A350 and A380 at a number of commercial air shows, but also as a regular display pilot of vintage aircraft at the Shuttleworth Collection.

For his dedicated contribution to aircraft design, development, and flight testing, both military and civilian, Frank Chapman is a worthy recipient of the Derry & Richards Memorial Medal.

### **The Eric 'Winkle' Brown Memorial Trophy ROGER BAILEY**

'Dodge' joined the Royal Air Force straight from school to train as a pilot in 1969. During his training he flew the Chipmunk, Jet Provost, Gnat and Varsity aircraft. He was posted to the C-130 Hercules and served with Nos 48 & 24 Squadrons, and 242 OCU as Co-pilot, Captain, and Training Captain respectively. After the C-130 he attended the Central Flying School to train as a Qualified Flying Instructor on the Bulldog and subsequently served on the Universities of Glasgow and Strathclyde Air Squadron and Bulldog Standards Flight. Next he attended the United States Air Force Test Pilot School as an exchange student and there flew over twenty types including the T38, A37, F4 and A7. After graduating in December 1986 he joined Flight Systems Squadron at the Royal Aircraft Establishment, Bedford where he flew BAC 1-11, HS 748, Viscount, Hawk and Tornado aircraft and completed a rotary wing conversion on to the Gazelle. He was appointed the Officer Commanding Aerospace Research Squadron in 1988 and retired from the Royal Air Force in December 1989.

After leaving the RAF he joined the then College of Aeronautics as Chief Test Pilot. He was Head of Flight Operations for Cranfield University's National Flying Laboratory Centre which operates Cranfield's Jetstream and the BAE Systems Flying Test Bed under an Air Operator Certificate; and as Chief Test Pilot he was responsible for any Cranfield test flying activity. He joined the Shuttleworth collection as a volunteer pilot in 1989 and has been Chief Pilot since the 2011 season. Dodge is the only pilot currently cleared to fly all the Collection's types.

In addition to his duties as Chief Test Pilot at Cranfield, 'Dodge' brought those skills to the management of the flying of the aircraft in the Shuttleworth Collection. He approached this whole, exceptionally diverse, collection of aircraft with the Test Piloting

skills he had built up over so many years by re-designing the whole system of flying operations of the Collection's aircraft to ensure an effective and safe manner of operation was sustained across the aircraft types and pilots. There are three aircraft that, due to his special ability and knowledge, are now able to be flown by other pilots and are thus capable of being displayed regularly:

The 1931 Desoutter; the 1918 Sopwith Camel; the 1936 DH 88 Comet.

'Dodge' Bailey was also instrumental in keeping the Shuttleworth Collection viable following the Shoreham disaster by, again, using his Test Pilot background and meticulous preparation, putting in place revised procedures to secure the necessary permissions and implement the various changes required subsequent to that disaster. Without his skill as both a Test Pilot and manager of the flying aspects of the Shuttleworth Collection, it is suggested that the whole venture might have been at risk.

For his commendable contribution to test and evaluation flying, Roger 'Dodge' Bailey is awarded the Eric 'Winkle' Brown Memorial Trophy.

### **The John Landymore Trophy**

#### **AMY PALMER**

Amy Palmer won the Air Pilots Benevolent Fund PPL Scholarship and completed her training with Ulster Flying Club.

From the initial impression that she made upon the scholarship selection committee to the approach she adopted during her flying training, Amy was exemplary. Her ground school results were top class and her whole approach to the learning process and personal application required to be a proficient and able pilot were present from the outset. Amy's enthusiasm and determination to achieve her goal was evident to her ground and flying instructors. Her attitude was always positive and she was a pleasure to teach.

As a result of her personal qualities and professional, competent approach to flying demonstrated during her training for a PPL, Amy Palmer is awarded the John Landymore Trophy for 2018.

### **The Award for Aviation Journalism**

#### **DAVID LEARMOUNT**

Since 1979 David Learmount has arguably been the most influential aviation safety journalist of his era. In addition to his well informed writing he has served the industry well as the person to be called by radio and television.

Prior to applying to join the Royal Air Force in 1969, he had already achieved a PPL, IMC rating and night rating. This he had achieved at his own expense having joined BEA as cabin crew on Tridents and Comet 4Bs until he had earned enough to pay for his licence and endorsements at the Airways Flying Club. Dual cost £5 10s and solo £4 10s – those were the days!

He served in the RAF for 10 years until he lost his medical category as a pilot. Operationally he flew the Hercules and his final tour was as a QFI on Jet Provosts.

He joined Flight International initially as their Air Transport Reporter, but almost immediately took over the annual safety review, and wrote up operational news of all kinds – an area that really interested him. Two years later he was appointed Air

Transport Editor and did that job until the new post of Operations and Safety Editor was created especially for him in 1992.

As soon as he had arrived at Flight International, David became the first point of contact when the broadcasting media rang the office, 'when things went wrong', for an explanation. It rapidly became evident that he had a knack for explaining things in words of one syllable.

Over the 38 years he has served at Flight International both fulltime and now as a Consultant, his knowledgeable writing and in this digital era now his blog, have provided in depth analyses of the failures and remedies in commercial aviation. The quality of his research and writing during this time has made him a figure known and respected across the aeronautical world.

In addition to his new role as Consulting Editor to Flight Global and freelance aviation Consultant, David is busy with his own blog.

David's long and renown career is appropriately recognized by the Company's Award for Aviation Journalism.

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

##### **DONNA FARQUHAR**

Donna Farquhar ran the administration for Air Show Canada through the 1990's and continued in the same role for Aerospace North America to 2004. She then took on the position of Administrator for the British Columbia Aviation Council and continues in that role today. For some years she also helped in the administration of the Abbotsford international Air Show on a seasonal basis. In 2008 and 2009 she played a pivotal role in establishing the Canadian Regional organisation for the Guild of Air Pilots and Navigators, followed by its expansion to the whole of North America. Her position as Administrator for the Honourable Company of Air Pilots North American Region continues today.

Donna is an invaluable force for continuity with Air Pilots NA by management of all the administrative functions. She is key to the financial management of the Region as well as keeping the board abreast of board meetings, suitable agendas and facilitating regular calls. Additionally, Donna renders invaluable support to the Trophies and Awards submissions from the Region. Every regional Chairman has relied upon Donna since the Region was founded. Her career has been a unique and valuable contribution to aviation in British Columbia and North America.

For her very significant contribution both to the founding of the North American Region of the Air Pilots and to the continuing close relationship and management of the Region Donna Farquhar is awarded the Sir Alan Cobham Memorial Award.

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

##### **CAPTAIN BARRY MITCHELL**

Liveryman Barry Mitchell joined the then Guild of Air Pilots and Air Navigators in New Zealand in 1989, the year that the New Zealand Region was founded. He has been a life-long stalwart of the Region ever since.

Barry's flying career began as a pilot in the RNZAF before he joined Air New Zealand, where he flew until retirement age. Soon after joining the Guild (as was) he volunteered for the role of Regional Administrator in 1991 and has remained in that role – together

with other roles – since that time. He became acting Chairman in 1989, was Deputy Chairman in 2007 and stood-in as Treasurer (for two years) in 2015 – all while fulfilling the role of Regional Administrator. He has been instrumental in, and fundamental to, the successful existence of the New Zealand Region – and, indeed, if it had not been for his obliging retention of his administrative role in latter years, the Region may have ceased to exist.

The New Zealand Region undoubtedly owes its continued existence to Barry Mitchell, who has given 28 years of selfless service to the Guild and Company in New Zealand. He epitomises the ethos behind the Sir Alan Cobham Memorial Award and is a most deserving recipient of the Company's recognition by this award.

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

#### **JAMES ERIC THURSTAN**

Jim's aviation career began in 1955 as an apprentice engineer, this training culminating in the award on graduation of the Arthur Baird Shield as Dux of the Qantas Technical School. Following qualification on the airframe and engines of the Boeing B707-300, Lockheed L1049 and L188, Jim was posted to Route Stations which was a rare award for a newly graduated engineer! Service throughout the Qantas network saw him gain extensions on the BOAC B707-400 & VC10 and ANZ DC8-52 with his final post being Maintenance Manager Mauritius.

In 1970 he commenced flying as Flight Engineer on the B707, finally retiring as a Senior Check & Training Engineer on the B747. After retirement, he worked as a simulator instructor at Qantas for 6 years. However, in 1993 he became Senior Project Engineer on the Historical Aircraft Restoration Society's (HARS) Lockheed Super Constellation restoration in Tucson, Arizona. Jim supervised and worked on the aircraft while also co-developing the technical course for the aircrew who would eventually fly the aircraft trans-Pacific and subsequently within Australia. He also qualified and flew as flight engineer on this aircraft.

In 1987, a South Australian replica Fokker VIIb/3m "Southern Cross II" VH-USU was completed and flown to commemorate the inaugural trans-Pacific crossing by the original Southern Cross in 1928. She is the largest reproduction aircraft in the world and carries the original registration. Unfortunately, in May 2002, the starboard wheel became detached on takeoff and during the subsequent crash landing approximately 3m of the starboard wingtip was broken off. After a series of negotiations for her repair, in 2010 she was trucked to HARS at Illawarra regional Airport and repairs commenced.

Jim Thurstan became the Project Engineer for the aircraft. Under the guidance of Bill Whitney, designer of the SCII, and Captain Bruce Simpson, certifying engineer, Jim has led the team through a complete engineering audit of the aircraft including modification to the tail area and repair of the airframe. The crowning glory has been the repair of the wing to airworthy standard! Using FAA data as best practice, model and prototype repairs to gauge bonding, materials, methods and failure paths, new outer spars were scarfed onto the old wing with attendant manufacture of ribs and re-skinning. Stress testing of the wing with pallets of house-bricks being forked in and positioned by enthusiastic members of the local squadron of Australian Air Force Cadets was completed and in May 2018, the wing was mated with the fuselage.

Throughout this painstaking process, Jim's leadership, practical approach and exhausting research has enabled an aircraft considered iconic in the history of Australian aviation to once again be capable of taking to the air.

For his innovation and methodology in aircraft engineering Jim Thurstan is awarded the Grand Master's Australian Medal.

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

#### **WING COMMANDER IAN MALLETT DFC RAAF (retd)**

Ian Mallett retired from the Royal Australian Air Force in the late 1980s, having flown transport aeroplanes (Lockheed Hercules) and the Boeing 707 VIP Transport, and being involved in the development of advanced navigation systems for military aviation.

On retirement from the RAAF, Ian Mallett joined the then-Civil Aviation Authority in the role of Airways Surveyor, with responsibility for navigation procedures and aircraft separation systems. At this time the civil air transport world was beginning to investigate the potential for the civil use of the Global Positioning System under development by the US military, and this became Ian's special area of expertise for the following 25 years.

He has been Australia's leading light in the development of space-based navigation, leading the charge in the transition from ground-based radio navigation aids to a global system that initially was dependent on the satellite constellation of the US military, to one that now encompasses at least three sets of satellites launched by three national and international groupings, able to provide a navigational accuracy of the order of a millimetre horizontally and a few centimetres vertically, 99% of the time over 98+% of the earth's surface.

It was Ian's involvement in working groups and international expert panels of the International Civil Aviation Organisation that not only developed the systems and standards we now enjoy worldwide, but encouraged Australia to be a leading light in the process. Whilst some members of the expert panels advocated for using the new technology to overlay the newly-available accuracy on the existing instrument approach procedures, Ian and others argued successfully for developing the now-familiar patterns for three-dimensional navigation using a succession of precisely-defined points in space that could follow a curved path or a series of straight segments that could lead an aircraft to a straight-in approach to a runway. These approaches allowed lower decision heights for most runways, and the ability to fly an instrument approach to runways that never previously had the capability for an instrument approach. More recently, Ian's work has led to the ability to provide vertical guidance at least equal to that provided by a Category III Instrument Landing System, to almost any runway, anywhere in the world, without expensive and sensitive ground-based infrastructure, or to permit a single facility to provide corrections to the satellite-generated signal that could serve tens of runways within a radius of up to 25 kilometres.

Ian Mallett retired from the Civil Aviation Safety Authority in 2017.

For his work in developing these international standard procedures and increasing the safety and accuracy of aerial navigation, Ian Mallett DFC is awarded the Australian Bicentennial Award.

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

#### **GROUP CAPTAIN JOHN MIDDLETON OBE RAF**

Group Captain Middleton has given a lifetime of service to the Royal Air Force and is currently the longest serving and oldest officer in uniform, yet continues to display the energy of a man half his age.

His career started in October 1967 when he served 3 years as a Flight Cadet at RAF College Cranwell before commencing service as a Navigator on the F4 Phantom on 31 Sqn. He qualified as a Qualified Weapons Instructor (QWI) and taught on the Phantom OCU, completing 1275 hours on type. Unusually, he was then selected for Pilot training, which he completed in 1983 and was posted to the Tornado GR1 Weapons Conversion Unit at Honington. He completed 580 hours on the GR1 in QWI and Staneval roles.

In January 1987, he was posted to the F3 Operational Evaluation Unit before serving as a QWI on 5 Sqn. Staff work at the Ministry of Defence beckoned and he was posted to the Operational Requirements staff where he was responsible for, inter alia, the Advanced Short Range Air-to-Air Missile programme. In 1992, he was appointed OC 25F Sqn and had a busy and challenging tour including leading 2 operational deployments to Italy as part of Operation Deny Flight and training deployments to Red Flag and Singapore. He completed 1640 hrs on the F3, 133 of which were flown on 36 operational missions. In October 1995, he was selected for the prestigious role of Executive Officer to the Chief of the Air Staff and was involved in staffing, inter alia, the Strategic Defence and Security Review to protect RAF interests. In May 1998, he was posted to Ramstein as the Deputy Chief of Staff for NATO's North Region Operations, representing the Service and the UK in this demanding and high profile role.

In 2003, John decided to change track and was selected for the role of Senior Schools Liaison Officer based at RAF Linton-on-Ouse. Applying the same professionalism and zeal to this role as he had to his previous flying duties, he championed 29 officer entrants into the RAF and was a great advocate for the Service across a range of schools and colleges.

Clearly enjoying working with the next generation, John then applied to join the RAF Air Cadets as a Regional Commandant in the North, responsible for thousands of young air cadets and their supporting adult volunteers. In this role, he applied his now trademark visionary approach to a vast range of initiatives and genuinely changed the landscape, modernising facilities and processes to deliver a more effective air cadet experience. Still driven by a passion for all things aviation, his focus on introducing the Qualified Aerospace Instructor Course (QAIC) for senior cadets resulted in a high-quality course which is the envy of other Cadet Forces. He championed the use of Sectors (Squadrons working together to share resources), was the driving force behind the development of the internal IT system (BADER), and co-authored a strategic review of gliding which set foundations for a sustainable aviation offer. He also worked to engage local disadvantaged young people in the joy of aviation and was appointed an Officer of the British Empire in recognition of his efforts.

In his final role, John was appointed as the Commandant of 2 Flying Training School at RAF Syerston, responsible for the delivery of cadet gliding at 25 Volunteer Gliding Squadrons. Sadly, within 3 months of assuming command, the entire glider fleet was paused due to technical assurance concerns and the next 4 years were probably some of the most challenging of his career. Forced to reduce the footprint to 11 VGS and recover only a proportion of the Viking and Vigilant fleets, Middleton had to completely re-think the delivery of cadet gliding. Whilst planning and implementing a complex and highly controversial restructure and recovery programme, which attracted regular Ministerial attention, he and his team also designed a new, progressive training syllabus and introduced high quality Part Task Trainers to the training. He also initiated an annual Aerospace Camp which, in RAF100, will see over 750 cadets and staff at Syerston experiencing a wide range of aerospace STEM activities for the week. John has worked tirelessly to champion the cause of cadet gliding and the wider aviation offer and has also advocated the establishment of a privately-funded, state-of-the-art

Aviation Academy, which will bring new training opportunities to local youth and cadets alike. This sits at the centre of the RAF100 Inspire Legacy proposition – The Trenchard Group.

In sum, John Middleton has made an indelible mark on the RAF and its Cadet Force and his enduring commitment merits recognition of the highest order. His legacy is visible wherever you look across the RAF Air Cadets and the next generation of aviators are indebted to him for his vision, passion and unerring belief in the power of flight to inspire; something he has done for thousands over his long and distinguished career and, in recognition of which, he is awarded the Master's Commendation.

### **The Master's Commendation** **SQUADRON LEADER MIKE LING MBE RAF**

Sqn Ldr Ling spent nine years on the Red Arrows team, including six as Red 10, and has landed a red Hawk in 46 countries and been involved in 640 displays. A stalwart of the team, Sqn Ldr Ling was recalled to the Red Arrows for the 2018 season as Red 3 following a tragic accident. Sqn Ldr Ling's willingness to fill the gap was typical of his commitment to the long-term success of the Red Arrows.

But it is for his role in promoting the best of British science, engineering and education around the world that this award seeks to recognise, including his tireless dedication to using social media to highlight the work of the team, often with eye-catching photography.

This, combined with his role as Red 10 – the team's supervisor tasked with monitoring safety flying with the display pilots as a mentor – made him one of the most recognised faces on the UK display circuit. Red 10's job is crucial because it also entails ensuring nothing untoward is going to affect the team such as airspace infringements, and to act as the go-between linking the team and the display director as well as commentating during the display itself.

The role has enabled Sqn Ldr Ling to meet tens of thousands of people on the ground around the world and provide an inspiration to future generations of aviators and others interested in aerospace as a career, such as Air Cadets.

Ling was himself a member of 2427 (Biggin Hill) Squadron Air Training Corps, reaching the rank of Cadet Warrant Officer and receiving a Royal Air Force Flying Scholarship. He cites meeting the great Ray Hanna – another former Red Arrow – at the Biggin Hill Air Fair, as well as his beloved Red Arrows, for inspiring his service career.

After completing the first stages of flying training, he was posted to 72 (R) Squadron at RAF Linton-on-Ouse where he became a Qualified Flying Instructor on the Tucano TMk1 aircraft, teaching basic fast-jet flying to future pilots. He then completed NATO Flying Training in Canada on the Hawk 115 aircraft, after which he was posted to the Tornado F3 and joined 111 (F) Squadron based at RAF Leuchars in Scotland. Here he played an active part in the air defence of the United Kingdom and the Falkland Islands on Quick Reaction Alert duties, as well as participating in major training exercises in the UK, Belgium, India and Denmark.

Joining the Red Arrows for the 2008 Season, he was selected for the Synchro Pair for the 2009 and 2010 Seasons. He was injured that year while ejecting from his Hawk during a training exercise in Crete. He recovered from his injuries and began flying again the following year.

Promoted to Squadron Leader on leaving the team, he became the Subject Matter Expert for the future UK Military Flying Training System while being a part-time pilot with No 1 Air Experience Flight at MOD St Athan, flying air cadets in the Grob 115E Tutor, before being recalled to the Red Arrows.

In recognition of his dedication to duty and tireless support for promoting the Red Arrows and the 'Best of British' abroad, particularly embracing the opportunity social media presents to reach new audiences, Squadron Leader Ling is awarded the Master's Commendation.

### **The Master's Commendation MAJOR DENNIS W SHARF CD**

Major Scharf joined the Royal Canadian Air Force (RCAF) in 1991. In a career that spans 27 years, he has dedicated himself to advancing the RCAF's Search and Rescue (SAR) programme with over 7500 flight hours and 117 operational SAR missions.

Maj Scharf's commitment to aviation professionalism started early, he graduated as the top pilot of his 'wings' course. Following CC130 Training, he commenced operational SAR flying with 435 Squadron in Winnipeg. In 1996, Maj Scharf carried out his first operational SAR mission delivering life-saving assistance to a critically injured Inuit trapper who had suffered an axe injury. In the 20 subsequent years, Maj Scharf would spend an estimated forty thousand hours on call, ready to take-off in as little as 30 minutes "so that others may live". Ultimately, he would be called upon to fly on 117 operational SAR missions. One of the most notable occurred near Pine Lake, Alberta; after locating a crashed aircraft, he dispatched his SAR Technicians by parachute to deliver life-saving assistance. When one of these technicians broke both legs upon landing, his efforts overhead the scene enabled the rescue of the original victims as well as his own crewmember. During Manitoba's Flood of the Century, Maj Scharf was recognized for saving lives by utilizing his unique SAR skills to turn night into day dropping parachute flares to assist relief workers. A qualified Search Master (SM), he has been integral to the coordination of major air search operations and is called upon often to train new SMs.

Maj Scharf's commitment to rescue has extended beyond the Canadian border. In 1996, he delivered aid to refugees in Tanzania. In 1998, he flew relief missions into Honduras after Hurricane Mitch. In 2008, he supported the US SAR effort in Louisiana following Hurricane Gustav which had stranded millions.

In spite of his impressive operational achievements, Maj Scharf's biggest impact to the RCAF SAR programme has come through his devotion to excellence in both flight instruction and safety. A qualified Instructor and Check Pilot, he has been instrumental in the formation of both individual SAR pilots as well as in the development of entire SAR crews. A calm professional aviator, his capacity to instruct, mentor and lead varied personalities is unsurpassed; his instructional efforts at 435 Sqn alone have culminated in the development of over 100 RCAF pilots. Concurrent to his instructional accomplishments, he was influential in the development and implementation of the RCAF Human Performance in Military Aviation Programme which is now used Air Force wide to ensure increased operational effectiveness through individual and team performance training. In his role as a SAR Staff Officer he is indispensable in providing operational subject matter expertise to the Fixed Wing SAR transition team thereby ensuring the future success of RCAF SAR as it transitions to a technologically advanced SAR fleet.

Major Scharf has demonstrated a passion and commitment to SAR through both his operational and instructional attention. A leader, innovator and mentor, his achievements are more than deserving of recognition and he is accordingly awarded the Master's Commendation.

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

#### **AIR VICE-MARSHAL SIMON 'ROCKY' ROCHELLE OBE DFC RAF**

In March 2017, AVM Simon 'Rocky' Rochelle initiated a paradigm shift in the application of air and space power. Seizing the initiative within Departmental underspend, demonstrating ambition to begin a narrative that would continue through our next 100 years, and evidencing a peerless innovative approach, Rocky placed onto contract an earth observation small-satellite in one week. Some 8 short months later, the small-satellite was launched into low earth orbit and is now transmitting full motion video (a technical first) and colour imagery. In delivering what is now known as 'Project Primus', Rocky has transformed the Ministry of Defence's space capability and standing across the space community.

Rocky's innovative approach has been underpinned by unmatched energy, a willingness to take risk, empower subordinates, and an advocacy for disruptive thinking. Rocky's vision to energise the RAF's space ambition has inspired colleagues, industrialists and international partners and has necessitated Ministerial engagement, international stakeholder management, and the mentoring of Defence's emerging space cadre.

Evidencing an altogether exceptional contribution to Air Power, and despite responsibility for a substantial portfolio, Rocky has successfully positioned Air as the 4\* lead for space governance and himself as Senior Responsible Officer for the space capability. In doing so, he has developed a broad international stakeholder network, established Space-related Programme Boards and securing resources that will ensure this capability endures. Thinking wider, Rocky linked project PRIMUS with the requirement for an Enhanced Space Operation's Centre.

Whilst 'Project Primus' was initiated to design, develop, deliver and operate a future warfighting constellation of small-satellites, the enhanced operations centre will fuse data from multiple sources and delivers warnings, forecasts and analysis to a variety of customers across Defence and other Government Departments. Under Rocky's leadership, the space operations centre will become essential as Air Command moves to exploiting emerging space capabilities, including UK launch, and as understanding of our growing reliance on services delivered from and through space for all military activities spreads across Defence.

As a result of AVM Rocky Rochelle's efforts, the Royal Air Force finds itself at the forefront of thinking on acquisition agility, disruptive thinking and innovation. AVM Rocky Rochelle is accordingly recognised for his innovative approach and individual and exceptional contribution to aviation by the award of the Sir Barnes Wallis Medal.

### **The Hanna Trophy**

#### **LEE PROUDFOOT**

Lee Proudfoot was taught to fly by his father in the early 80s on the Stampe, Cap 10 and Harvard. His father was an ex RAF Instructor and taught Lee in a very disciplined way, demanding high standards and precision, qualities that have been the hallmark of his flying ever since. Even before the issue of his PPL in 1986 Lee was showing a particular aptitude and skill for aerobatics and formation flying. What marked him as a

special talent for display aerobatics was his totally calm and measured approach with a maturity well beyond his years.

His skill and maturity were recognised very early by the flying display community and consequently Lee first started display flying at air shows in 1988. Further identified as having the capacity and formation skills required Lee was recruited into one of the professional formation teams of that time and he became a professional display pilot in 1991. In this capacity he displayed throughout Europe and Asia. Being a largely summer profession, during the display closed season he spent 7 very exciting and cold Austral summers flying in the Antarctic as Chief Pilot for the British Antarctic Survey. During the early 1990's he also started to fly and display vintage aircraft and his flying was quickly rated as outstanding for both content, safety and a sympathetic appreciation for the age of the aircraft. He took a permanent position with the Breitling Fighters formation display team for 4 years flying first the Spitfire and then the Mustang aircraft. This team of four WWII fighter aircraft was recognised as being the exemplar of such display flying. Lee has continued to be a benchmark for display pilots with his modest and measured approach and outstanding skill as a pilot. He has been a CAA Display Evaluator for many years, and there are a multitude of new display pilots who have benefited from his advice and flying instruction in the Harvard and Spitfire. He has displayed many different types of vintage aircraft including various marks of Spitfire, Hurricane, Bearcat, Wildcat, Hellcat, Thunderbolt, Blenheim, Mustang and Lysander. More recently, he was responsible for flying an Islander aircraft in the Austrian aerial action sequence in the Bond Movie 'Spectre'. While spectacular these sequences were underpinned by Lee's totally professional approach and his attention to both detail and safety. He has flown more than 12,000 hours in over 60 different types of aircraft.

On the ground Lee Proudfoot is modest and not given to extravagance in any way, but in the air he displays with precision, flair and passion, qualities that are clearly identified with the Hanna Trophy, of which he is accordingly a very worthy recipient.

### **The Johnston Memorial Trophy 700X NAVAL AIR SQUADRON**

700X Naval Air Squadron formed at the outbreak of World War Two and initially operated catapult launched float-planes from battleships at sea; in peacetime, it took on the mantle of an Intensive Flying Trials Unit (IFTU) and over the years has brought the majority of the Fleet Air Arm's frontline fixed and rotary wing aircraft into service; from Scimitar to Sea Harrier and Whirlwind to Merlin.

Up until 2017, and in its latest guise as a small unit of only fourteen permanent staff as the Royal Navy's only Unmanned Air Vehicle (UAV) unit, 700X Naval Air Squadron was charged with operating the catapult launched Scan Eagle Reconnaissance Maritime (SERM) UAV from Type 23 frigates, successfully integrating the capability with Carrier Battle Groups and manned aviation on operations in and around the Arabian Gulf. Having flown in excess of 2700 hours from eight platforms over a three year period, the Squadron proved the utility, capability and flexibility of unmanned air systems at sea and in so doing has laid firm foundations for the provision of future UAVs in naval service.

The Squadron is now at the forefront of innovation with Commercial of the Shelf (COTS) mini UAS (Class 1B). Recognising the pressure on resource, 700X Naval Air Squadron have been instrumental in identifying that inexpensive, arguably disposable, COTS mini systems could achieve a simple but highly effective 'eye in the sky' capability that could be operated from the smallest of vessels. Driving a programme of procuring, categorising and testing these systems, they have established their utility and

exploitation in the defence environment, particularly in the demanding and complex maritime context. Originally intended for simple non-operational missions, it soon became clear that there are a multitude of scenarios in which they could be employed from ice navigation in Antarctica, Boarding Party over-watch to maritime Improvised Explosive Device (IED) clearance.

Whilst simple and intuitive to fly, operators of the COTS mini systems still require training and here, taking Civil Aviation Authority (CAA) training as a basis, the Squadron developed a Defence Systems Approach to Training (DSAT) compliant and Military Aviation Authority (MAA) approved training course. It has proven a huge success, with demand from across the MoD far exceeding expectations with the Squadron training its anticipated annual quota in the first six months of delivery.

700X Naval Air Squadron has provided the delivery aspect in what has been a paradigm shift in Fleet Air Arm involvement with unmanned aviation. Their drive in turning the Urgent Operational Requirement of ScanEagle into a deployed reality has been the key in re-opening eyes to the capability and potential of the UAV in the maritime and littoral. They have established themselves as the pan-Defence Centre of Excellence for Class 1B UAS, supporting every colour uniform in a variety of cutting edge trials and roles and have provided a baseline for operators as these systems proliferate, to engender an ethos of flight safety which is essential to the integration of unmanned systems into the manned aviation environment.

Throughout naval aviation history 700X Naval Air Squadron have been at the forefront of trials and development flying, and the outstanding efforts in the pursuit of unmanned air capability at sea and in the wider defence environment personifies the determination, flexibility and 'can do' attitude that is in the finest traditions of the Fleet Air Arm and make them worthy recipients of the Johnston Memorial Trophy.

### **The Cumberbatch Trophy**

#### **MICHAEL O'DONOGHUE CBE**

Mike O'Donoghue had a distinguished career in the Army Air Corps as a pilot, flying instructor, commander and staff officer. His final appointment was as Commandant of tri-service Defence Helicopter Flying School at RAF Shawbury. Following his retirement Mike was appointed as the Chief Executive of GASCo in 2010.

Apart from monitoring the production of the GASCo quarterly magazine, 'Flight Safety', and its on-line equivalent 'Flight Safety Extra', Mike has had all the usual responsibilities of a CE, such as staffing, budgets, annual reports, representing GASCo on appropriate committees and linking with similar organisation worldwide. Above all he has a responsibility for ensuring that the objectives and aims of the Board and Council are met.

The enormous strides made by GASCo over the past eight years and the very high regard in which it is held by the GA community is very much due to the commitment, hard work and interpersonal skills of an outstanding Chief Executive.

However his most impressive achievement has been in the field of GA flight safety where his contribution has been outstanding.

Shortly before he joined GASCo the CAA had announced that it was to stop direct involvement in organizing and running their Flight Safety Evenings (FSEs). The GASCo Board decided that FSEs were an important part of flight safety and therefore GASCo successfully negotiated with the CAA to continue running FSEs under contract.

On taking over as CE Mike's immediate task was to recruit Regional Safety Officers (RSOs) to cover the country and to devise a GASCo format for the FSEs. This he did with such energy and enthusiasm that seven RSOs were quickly recruited and trained and year on year the number of FSEs increased to well in excess of the number contracted to the CAA. One has even been delivered in Australia where a RSO, whose day job is as an airline pilot, had a stopover.

In addition to the FSEs Mike continues to organize a series of Flight Safety Seminars. The annual Weather Seminar at the Met Office is usually over-subscribed and the Sea Survival Seminar held in conjunction with the RNLI is also very popular.

The CAA has recently worked with GASCo to develop an 'Airspace Infringement Awareness Course'. This is a unique training package offered to pilots who have made a minor infringement of controlled airspace and GASCo has been contracted by the CAA with delivery of these day long courses.

For his outstanding contribution to aviation safety, during an extensive aviation career, Mike O'Donoghue is awarded the Cumberbatch Trophy.

### **The Sword of Honour GERRY HERMER AFC**

Gerry Hermer's career in aviation has spanned more than 5 decades. He began as an Engineering Officer in the Royal Air Force before training as a Search and Rescue pilot. He flew the Wessex and the Sea King and also qualified as an instructor on Gazelles. Always at the front, he was awarded the Air Force Cross in 1977 for rescuing the crew of a sinking German ship over 70 miles off Flamborough Head. In treacherous weather conditions with gale force winds, snow and hail, he had to refuel twice offshore; on an oil platform and on the deck of a rolling tanker. Following a distinguished military career Gerry established two successful aviation businesses based in Norwich. The high standards that he insisted on made his companies respected throughout the aviation industry. Ever forward thinking, he was the driving force behind the establishment of the first Norfolk Police Helicopter Unit in 1990.

In 1996 Gerry went on to start the East Anglian Air Ambulance (EAAA). With his experience in Search and Rescue, Gerry recognised the potential of a helicopter-based medical service. Working with a small group who shared his vision, he developed the service from scratch. The first aircraft began flying in 2001, one day a week. Gerry continued to supply aircraft and pilots for over 10 years, often flying the Air Ambulance himself. Working as both a pilot and a supplier, Gerry was acutely aware of the requirements and demands placed on the aircraft and its crew. This allowed him to develop HEMS focussed procedures and techniques as well as address safety issues at a national level. Much of his early work set the foundations for the success of the UK's HEMS sector today.

On retiring from business life Gerry selflessly continued his relationship with EAAA as the Aviation Consultant and was central in moving the Charity forward. The EAAA now operates two aircraft, seven days a week, from two bases; in 2017 EAAA launched almost 3000 Air Ambulance missions providing vital emergency medical support of the community. Gerry's passion, knowledge and experience enabled him to pursue continuous improvements to the safety and efficiency of the service. Innovations included the introduction of new in-flight communications and new helipad lighting, exemplifying Gerry's innovation and professional acumen. At a national level, Gerry's commitment to the UK air ambulance community has been extraordinary and unequalled. It was Gerry's expertise, energy, and tenacity which was pivotal in

coordinating the inputs of the aircraft contractor and UK Civil Aviation Authority in order to introduce safely, night HEMS missions in May 2013, a new operational capability to the UK.

Gerry has only recently retired, having worked into his 70th decade. He is well known throughout the industry, earning respect and admiration for his remarkable achievements. His tireless work ethic, utter professionalism, selfless commitment and boundless energy, throughout a lifetime of service to aviation, makes him a role model in UK aviation and an example to all who know him. For his outstanding contribution to General Aviation, Gerry Hermer is awarded the Sword of Honour.

### **The Sir James Martin Award DR DONOUGH WILSON**

Dr Donough Wilson is innovation lead for advanced artificial intelligence focused military and civil future cockpits, and augmented intelligence cyber-physical flight control, mission management and combat management systems, at aviation and defence innovation consultants, VIVID/futureVision.

As an instrument rated commercially licenced flight instructor of over 30 years and 3000+ hours experience; a specialist in aviation human factors; a very experienced CGI digital visual information designer; and a pioneer in shared-intelligence human / machine flight control interfaces, Dr Wilson's contributions to the future of global aviation safety and cockpit design have been significant.

He was the first to propose (at RAeS/CEAS conference) the protocols for the autonomous satellite tracking and download of aircraft black-box flight data and cockpit voice recorder data to the computers of aviation authorities and accident investigators, triggered when an airliner diverges from its assigned track and altitude by a specific exceedance of allowable pilot error (having first unsuccessfully alerted the crew to the divergence) – a proposal which gained significant traction following the loss of Air France flight A447 and Malaysian Airlines MH370, and which has now gone into development. His revolutionary design for the defence system protecting ultra-low flying military aircraft against high-powered asymmetric pulse energy and laser energy attack was the preferred choice for onward development.

Dr. Wilson's passion is aviation safety. In a research and development programme spanning, to date, over eighteen years, he was the first to challenge long held aviation legacy conventions when defining the five intrinsically linked factors inherent to all controlled flight into terrain (CFIT) and loss of control (LoC) aviation disasters. This work, which continues, highlights and addresses the causal issues underpinning the frailty of human decision making when in unnatural and alien environments such as a violent, turbulent, tropical thunderstorm in IMC at night. This work explains the root physiological human factors causes of 'pilot error' and why accidents happen – with two key outcomes being that cognitive failure (and the associated bewilderment), are factors in all fatal CFIT and LoC incidents; and that they are not a reflection of an individual's weakness or failing. Cognitive degradation is a natural consequence of human evolution; a factor of a relict defence mechanism passed on to us genetically from our earliest human ancestors – and over which no pilot has any control, because no amount of training can overcome 5+ million years of human evolution. The consequences of this is that, when certain events conspire, every human, including every pilot, could be susceptible to the physiological factors causing CFIT or LoC.

In defining a solution, Dr. Wilson argues that the design of flight control instruments have long been based on the [erroneous] assumption that the pilot is always capable

of lucid thought and the ability to extract and mentally process information – no matter what the meteorological extremes encountered. He also argues that some glass-cockpit flight control instruments are too closely allied to the mechanical instruments they've replaced – being mainly digital replications of mechanical instrument forms, and as such, retaining inherent issues of the mechanical originals: issues known to have been factors in fatal loss of control and control reversal accidents.

Addressing these issues, Dr. Wilson was the first to propose that the process of military and commercial aviation (and much corporate aviation), is 'narrative' based. There being a strict linear sequence – a narrative – of distinct individual phases, each of which has individual control and information needs, even in diversion and emergency scenarios. He was the first to propose completely new visually integrated variable intensity pilot / aircraft interface displays; highly intuitive congruent displays which require no pilot calculations, mental interpretation, or any extensive training to operate, and which enable two-way joint control and communication between human and machine. In the latest development of this work, he is the first to propose the integration of aircraft-wide cyber-physical systems and embedded artificial intelligence (AI), enabling the aircraft itself to monitor adherence to the required 3D trajectory, so that the aircraft itself becomes part of the flight management and control team, with an interest (albeit artificial) in its own survival and the safe outcome of the flight – whatever meteorological extremes are encountered. The core objective of this is *not* to take the pilot out of the process of flight, but to take pilot-error out of the process of flight.

Dr. Wilson is the leading innovator and advocate for future 'shared intelligence' digital cockpits where pilot, cyber-physical technology, and AI work as a team to ensure optimum 3D flight, mission delivery, and approach accuracy; optimum fuel economy; minimum environmental impact; and above all, absolute flight safety. He continues to present extensively at aviation industry conferences on new game-changing thinking to develop next-generation aircraft which provide absolute passenger safety and eliminate *any* potential for CFIT or LoC.

For his outstanding practical contribution leading to the safer operation of aircraft, Dr Donough Wilson is awarded the Sir James Martin Award.

### **The Central Flying School Trophy SQUADRON LEADER JOHN BENSON-COOPER RNZAF**

This year No. 42 Squadron of the Royal New Zealand Air Force is celebrating its 75th year since being established in Rongotai, Wellington. Impressively just under half of the Squadron's history has the name 'John Benson-Cooper' embedded in its pages. For the past 36 years Sqn Ldr Benson-Cooper has dedicated his military career to the continued development of multi-engine fixed wing pilot training in the RNZAF.

Sqn Ldr Benson-Cooper has held various roles through-out No. 42 Squadron, most of which have revolved around the development and delivery of ground, flight and synthetic training. In each role he has championed instruction by leading the development of standards, techniques and content for every course that he has been involved in. In both the air, and on the ground, Sqn Ldr Benson-Cooper has continuously delivered a high standard of instruction and has done so with professionalism, gusto and a relentless commitment to upholding the highest of flying standards.

For many years Sqn Ldr Benson-Cooper has been the lead A-Category flying instructor for the Squadron, acting as a Central Flying School agent in assessing the instructional standards of the unit's flying instructors. He remains an expert in flight instruction

specific to multi-engine flying and his instructional techniques have solidified into Squadron documentation which are now taught to every Squadron flying instructor. Sqn Ldr Benson-Cooper is dedicated in ensuring No. 42 Squadron delivers the leading edge of flight training in the RNZAF and maintains a proactive cycle of improvement for each course the Squadron delivers. He regularly challenges routine, continuously striving for improvement and raising the standards of all of those around him.

Sqn Ldr Benson-Cooper's sphere of influence stretches wide across the RNZAF. Nearly every serving fixed wing pilot has at some point in their careers been instructed by Sqn Ldr Benson-Cooper. His name is synonymous with flying instruction in the RNZAF, and is normally the first reference in multi-engine fixed wing instruction. As Sqn Ldr Benson-Cooper approaches 10,000 hours of 42 Squadron flying, it cannot be denied that there has never been a more influential instructor to serve on the Squadron. His commitment is unyielding, and his influence will continue for many years beyond his eventual departure, making Squadron Leader John Benson-Cooper a worthy recipient of the Central Flying School Trophy.

### **The Central Flying School Trophy 653 SQUADRON ARMY AIR CORPS**

Over the last 10 years 653 Sqn has trained and prepared all Apache aircrew for immediate deployment initially on Op HERRICK and then to hold the highest readiness for tasks across the spectrum of warfare, at the heart of Army and Defence capability.

Exceptional training standards underpinned the Apache's and Attack Helicopter Force's (AHF) success on operations in Afghanistan and Libya where the Apache became the close support aircraft of choice and was faced with the most challenging of engagements requiring the judgement, procedures and skills first taught on 653 Sqn. The Apache Conversion to Role (CTR) training course remains the 'crown jewels' of Apache capability and its graduates continue to excel. By delivering fully qualified operational aircrew to the frontline Sqns, it is possible to safely sustain a continuous readiness model and deliver the most challenging of collective training in support to UKSF, 16 Air Assault Brigade and 3 Division.

Success is a result of ethos, and its unrelenting pursuit of excellence has been critical to the Sqn winning the numerous battles facing any training organisation in uncertain and austere times. 653 Sqn attracts vocationally driven and dedicated instructors with deep operational experience in all environments. This team has adapted the CTR syllabus to meet changing threats and developing doctrine. For example, the Sqn recently integrated live GPS jamming training on RAF Spadeadam, and invented a triangulation technique for locating emitters. The Sqn provides experts on Weapons, Electronic Warfare and Tactics, Techniques and Procedures. It has SMEs in urban and contested, degraded and operationally limited (CDO) environments. A Sqn team was tasked recently to visit and advise a UK ally on Apache employment countering an insurgent threat. The Sqn provides tireless support to Army Capability, DE&S, RTSA and DOSG as well as industry partners.

Innovation has been critical to success. Simulators have been networked and pushed hard to expose crews to the most challenging of threats, missions and environments. The military simulator instructors double-hat as Range Conducting Officers for Sqn live firing training and fill key AHF SME roles in SERE and JPR. Innovation has also been shown by delivering flying instruction using a mix of QHIs and non-CFS Weapons and EW instructors – exploiting the freshness of frontline aircrew instructors and leaning on the supervisory and instructional skills of CFS trained QHIs. All-student 'mutual' pairs missions are used to generate confidence – the staff monitor crew performance in real-

time with the Collective Training System and through After-Action Reviews of sight and sensor imagery. The Sqn is well integrated with civilian aircraft engineers, civilian simulator staff and civilian QHIs. Fully established with hardworking military ground crew and communications specialists as well as a support team, the Sqn can deploy for long periods in the UK and to the USA where it exploits extensive desert ranges to deliver operational weapons and environmental training. The Sqn also continues to innovate in areas of electronic student performance monitoring and record keeping.

The pressure on the Sqn to deliver has been relentless. During Op HERRICK crews were required just in time for operational deployments, and currently Apache aircrew growth remains critical ahead of Apache E-Model transition. The Sqn has never failed - it absorbed the pressure placed on it with stoic humour, prioritising and showing incredible flexibility in the face of financial, manning, weather, serviceability and Air Transport challenges. The Sqn has an impeccable safety record and was recently graded very highly by the CFS Agents in Army Aviation Standards. With a real heart for community engagement the Sqn enjoys the freedom of Aldeburgh, always finding time to support community events and charities.

653 Sqn's professionalism and work ethic have been exceptional and its contribution remains utterly critical to the current and future success of the AHF. It is accordingly awarded the Central Flying School Trophy.

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

#### **CAPTAIN ALEXANDER HORRELL USAF**

Captain Alexander Horrell is a collegiate golfer and Massachusetts Institute of Technology graduate, Captain Horrell has made profound contributions to the 661st Aeronautical Systems Squadron as a Developmental Engineer and serves as the squadron's Quality Assurance Flight Commander. He leads a team of military, civilian, and contractor personnel to do the impossible!

Captain Horrell leverages engineering acumen to mitigate intangible threats with profound solutions. In 2017, Captain Horrell's Quality Assurance Flight fielded 100 quick reaction capabilities in a matter of months versus the years that it would have taken via traditional acquisition processes. The Vice Chief of Staff of the Air Force prioritized counter-unmanned aerial systems capabilities and Captain Horrell was appointed to lead a 44-member quick reaction team to create, validate, and field a \$465K counter-unmanned aerial system capability in under 4 months. This capability is actively protecting over 9K coalition forces throughout Central Command. Captain Horrell's test team isolated emitter array anomalies and eliminated radio frequency spectrum noises. This action doubled the emitter beam count and increased frequency ranges 33%. The emitter beam count detects each time the radio frequency beam is interrupted and relays the information to the system receiver. In doing so, the mission system can adapt and create new transmit solutions, effectively adapting on the fly to evolving countermeasures.

Captain Horrell vetted an improved Line-of-Sight video downlink on three HH-60 helicopters. This new capability enables aircrews to transmit situational awareness video to facilitate rescue and recovery of downed Airmen. A new datalink capability was added that doubled transmit ranges to improve search and rescue support. The acquisition, integration, validation, and aircraft modification was completed in under 2 months.

Captain Horrell led an effort and remedied a traffic clearance and avoidance system technical assistance request within 30 days. His team's solution sustained 'Operation

Inherent Resolve' combat forces, while de-conflicting hazardous air traffic in highly-congested airspace. Furthermore, Captain Horrell has personally flown over 30 flight test sorties and earned his first aerial achievement medal.

Finally, Captain Horrell created the squadron's first joint forces electronic warfare exercise. This exercise pitted the best electronic warfare weapon systems against one another. The exercise lasted 1 month, spanning across 3 agencies. Every aspect of electronic attack principles and theory were put to the test. This endeavour validated a \$10M counter-radar system. Captain Horrell's effort pushed the limits of non-kinetic warfare and the new lessons-learned, tactics, techniques, and procedures became the foundation for new electronic warfare doctrine.

For his outstanding achievement and endeavour in a number of fields of engineering and flight testing, Captain Horrell is awarded the Grand Master's Medal.

### **The Grand Master's Commendation 216 FLIGHT – 815 NAVAL AIR SQUADRON**

The widespread media coverage for the UK's response into the devastating impact of Hurricanes Irma and Maria in Sep 17 would show a largescale military response, spearheaded by HMS Ocean with her ships company and air group comprising of RN, RM, RAF and Army personnel.

However, prior to her arrival there was a single UK asset on station, RFA Mounts Bay, with her sole Wildcat HMA Mk2 of 216 Flight 815 NAS embarked. The role of the Wildcat and 216 Flight in the immediate aftermath of the disaster was pivotal in providing critical lifesaving support to the Caribbean Islands whilst also gathering essential information, shaping the follow-on support from the UK military.

The exceptional work of this small team cannot be understated and the success of the onward operation of 'Op Ruman' was only achieved by the extraordinary effort and work they delivered. This was a whole flight achievement, with 216 Flight collectively deserved of recognition. However, 2 individuals were key to this team's success; Lt Amy Gilmore RN (Flight Commander) and CPO Ian Toms (Flight Senior Maintenance Rating). Individual citations are below:

#### **Lieutenant Amy Gilmore RN – Flight Commander 216 Flight**

Under Lt Amy Gilmore's leadership and motivation, 216 Flt was able to fly for over 90 hours during the operation with 100% serviceability achieved, covering 60 sorties and four countries, and having a real and measurable effect on the lives of those affected by Irma and Maria. In total, her Wildcat – the first to ever deploy to the Caribbean JOA for disaster relief operations, and the only UK aircraft operating in theatre in the early stages of 'Op Ruman' – delivered over 37 tonnes of fresh water, food, medical supplies and building materials for shelter construction, as well as conducting over 250 personnel transfers, in a hot and humid environment – all on her first deployment as Flight Commander.

Her well-considered Captaincy decisions meant veering from standard flying regulations on occasion to ensure the continued and timely delivery of aid to where it was needed most. Operating in an unfamiliar environment, without air traffic control and poor radio communications Gilmore's decision making skills as aircraft commander were fully exercised in balancing and reducing the risks involved to select safe landing sites in the dense confines of the rain forest while offering a safe route out for VPs.

In addition to delivering humanitarian aid Gilmore was instrumental in utilising her Wildcat to conduct reconnaissance and gather still and video footage of the devastation. Without a dedicated photographer onboard, MNTS relied on Gilmore's early stills to inform PJHQ and a waiting media of the situation on the ground, offering reassurance and shaping UKs response to the developing requirements for aid.

Lt Gilmore's performance throughout 'Op Ruman' was of the highest calibre; her knowledge, experience and aviation guidance to RFA Mounts Bay's Command Team and to her own Flight led to safe, sustained and exemplary flying. The lives of many thousands of people in the UK Overseas Territories were improved as a direct result of her actions.

### **Chief Petty Officer Ian Toms – Senior Maintenance Rating 216 Flight**

CPO Ian Toms directed a small team of 9 engineers in achieving unprecedented operational Wildcat serviceability whilst embarked on RFA MOUNTS BAY as the Flight Senior Maintenance Rating (SMR). His meticulous planning of aircraft maintenance and organisation of manpower requirements, coupled with his ever-enthusiastic leadership, resulted in ZZ530 achieving over 90 flying hours over the course of 29 days, with a 100% serviceability rate.

Vitality, CPO Toms was able to grasp instinctively the importance of fatigue management and despite the operational pressures and inevitable intensity of activity, initiated numerous safeguards for the team. One example was his use of enforced 'turn-around servicing' procedures, ensuring that maximum hours were made available on the aircraft and, cleverly, that the aircrew were forced to shut down for a break during the day deck cycle.

Over 1010 man hours of aircraft maintenance supported over 50 sorties for the single Wildcat helicopter which alone delivered 37 tonnes of aid and moved over 250 personnel across 4 different territories. CPO Toms achieved outstanding results through his leadership and engineering expertise, having a direct and tangible effect on peoples' lives.

These two key individuals, representing the whole of 216 Flight, are deserving recipients of the Grand Master's Commendation for outstanding service in the air.

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

#### **FLIGHT LIEUTENANT BEN WALLIS AFC RAF**

As the Royal Danish Air Force (RDAF) Merlin Exchange Officer, Flight Lieutenant Ben Wallis was conducting a night instructional conversion course sortie on 16 March 2016 consisting of low level handling, navigation and landings and take-offs from confined areas. On departure from a confined area within a forest, using 95-100% power and at 30 knots airspeed, the student declared "Safe Twin Engine", at which point Wallis raised the landing gear and began setting up the navigation equipment and radios for the next phase of the sortie. At this point the crew heard a loud bang, felt a jolt and the aircraft experienced a sideways yawing moment. Wallis immediately lowered the landing gear, and as aircraft captain, took positive control from the student, who had been handling the aircraft until that time, and attempted to achieve a safe flying configuration. The student pilot noted that the aircraft instruments displayed zero power reaching the aircraft rotors and a correspondingly low rotor speed, indicative of a complete and total mechanical failure of the drive to the main gearbox from all three engines. Wallis immediately recognised the severity of this catastrophic and terminal emergency and initiated an aggressive flare from only 80 knots and at just 120 feet above the trees.

These prompt actions had a rapid and likely life-saving effect, increasing the rotor speed from below the minimum emergency limit back to within the normal range. In addition, Wallis had the capacity and foresight to turn the aircraft to the right in an attempt to land in a clear area, despite being below the minimum altitude at which such a manoeuvre would normally be attempted. In the final stages of the emergency, he displayed supreme calm and capacity by confirming once again that all three aircraft engines continued to read zero torque. With the ground only seconds away Wallis instructed his crew to brace, thereby allowing them to prepare for impact. At just 30 feet above ground level, he straightened up the aircraft and conducted a full auto-rotative engine-off landing coming to rest on a downward slope after approximately 50 metres. The Flight Data Recorder indicated that from onset of the failure to wheels down was just 15 seconds. An extraordinary display of airmanship at any time but particularly noteworthy given this critical emergency occurred at night and at low level.

Wallis' almost immediate and accurate assessment of the situation, its severity and ultimately the terminal nature of events displayed capacity and captaincy of the highest order. Likewise, his subsequent immediate and correct recovery actions, at night, and with a student pilot in the other seat, displayed exceptional handling skill and leadership under pressure. Wallis' considerable flying ability came to the fore in the most challenging of situations. The fact that this emergency was an extremely rare occurrence, which occurred at night, over difficult terrain, and on an instructional sortie, makes his actions in saving his aircraft and crew truly remarkable. To have the capacity and skill to take control from his student, from a 'heads down' position, diagnose the problem, carry out swift and correct recovery actions, issue a warning to his crew and conduct a safe landing in the space of 15 seconds is truly impressive. Flight Lieutenant Wallis' exceptional skill as a pilot, instructor and aircraft captain undoubtedly saved his aircraft and the lives of all the crew. He is accordingly awarded the Hugh Gordon-Burge Memorial Award.

### **The Prince Philip Helicopter Rescue Award HONG KONG GOVERNMENT FLYING SERVICE**

Typhoon Hato hit Hong Kong on 23 August 2017, bringing a No 10 signal and severe weather conditions to the region. At 1315L GFS was informed by the HK Maritime Rescue Coordination Centre (MRCC) that multiple distress signals had been received from an area of the South China Sea some 30 km SW of Hong Kong. Only later did it become clear that 17 vessels had reported being in distress, with over 100 crew requiring assistance. Over the course of the next two days GFS launched 16 helicopter and 5 fixed wing missions, eventually rescuing 50 survivors in gruelling conditions from 6 vessels that had sunk or were aground.

Two Super Pumas were rapidly deployed and (Rescue 34 & 84) arrived on scene at 1422 & 1426 after battling through severe weather enroute. The rescue scene was utter chaos, and it gradually became apparent that numerous cargo vessels had been sunk or driven by the storm force winds and high seas onto several rocky islands including Sanjiaoshan Dao and Guishan Dao. The first vessel to be located was the 100m cargo vessel 'Xin Ke 11', which was broken in half, with the stern section being spun by the waves and listing badly. Despite the 6m swell and pounding seas, the crew of Rescue 34 eventually managed to rescue 14 survivors from the remains of the vessel and return to GFS by 1500.

The second helicopter, Rescue 84, spotted a semi-submerged ship, the 120m 'SE Panthea', and managed to rescue 2 exhausted survivors in lifevests from the nearby waves, followed by another 5 from a drifting liferaft. Debris and diesel were constant hazards for the rescuers. R84 finally arrived at GFS at 1645. The next helicopter to

arrive on scene was R65 at 1520, tasked with a rescue from cargo vessel 'Solid 2'. At this point there were 3 helicopters all working together on separate rescues in the same area, with poor weather and obstacles compounding the risk levels.

R65 spotted another floating survivor amidst the wreckage, and with no little difficulty managed to recover his oil covered, barely conscious body from the water. Given his deteriorating condition he was immediately flown back to GFS. Crews were changed at GFS and the fourth and fifth helicopters arrived on scene at 1530 and 1650, and once more battled the atrocious conditions to search, locate and rescue two and one more floating survivors respectively, returning to GFS with them by 1600 and 1800.

Still the mission went on. R87 launched at 1725 and again located merchant vessel 'SE Panthea' now aground on a small island, being rolled by the pounding waves, with swinging derrick cranes and flailing cables compounding the hazards for the rescue crews. The rescue was necessarily protracted, and 12 of the 16 seamen were recovered before the helicopter suffered a mechanical problem which forced the crew to leave the scene and return to GFS. Fortunately, R81 was on hand to recover the remaining 4 survivors and return to GFS as night was falling.

Given the appalling conditions and hazardous environment, the decision was made to suspend the operation overnight. Mindful that more lives could be at peril, however, the operation resumed at first light on 24 Aug, R62 arriving on scene at 0530 to conduct a full search of the area. Nine more survivors were located and rescued from stranded vessels and rocky shorelines and returned to GFS, bringing the total saved by helicopter to 50 persons. Search operations continued throughout the day, including both helicopter and fixed wing aircraft but no more survivors were located. MRCC later confirmed that further survivors had been picked up by surface rescue units, but 1 crewman was confirmed dead, and to this day there are still at least 8 more persons still missing, suspected deceased.

This was an unprecedented rescue operation in the recent history of the region, involving multiple distressed vessels and large numbers of survivors. The rescue crews had to contend with severe weather and a hazardous environment, as well as making decisions based on fragmented information. Despite these obstacles, all rescue crews involved displayed exemplary skills, professionalism and coordination to save the lives of these 50 souls. Multiple helicopters and crews were involved in this extensive rescue operation and, accordingly, the entire Hong Kong Government Flying Service is awarded the Prince Philip Helicopter Rescue award in recognition of its combined performance and the outstanding devotion to duty demonstrated by all its crews.

## **MASTER'S REGIONAL AWARDS**

Selected by the Regional Executive in each Region and presented in the Region by the Master during the annual Tour.

**AUSTRALIAN REGION** – Robert Moore OAM

**NEW ZEALAND REGION** – Wing Commander Brett Clayton RNZAF

**HONG KONG REGION** – Graham Forbes

**NORTH AMERICAN REGION** – Coulson Aviation

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### **ACADEMIC BURSARIES (CITY UNIVERSITY)**

Awarded for MSc study at City University

#### **Air Transport Management**

Nadeem Bandali  
Timothy Gibson

#### **Air Safety Management**

Matthew Boraman  
Judith Hallam

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# SCHOLARSHIP WINNERS

## FLYING INSTRUCTOR (RESTRICTED) - FI(R)

SWIRE	-	Finian Salter
FOYLE	-	Daniel Dedman

## PRIVATE PILOT LICENCE – PPL

AIR BP 'STERLING'	-	Stephen Daly
TAG FARNBOROUGH AIRPORT	-	Reshe Harrison
GRAYBURN	-	Jake Kenny
CADOGAN	-	Fahim Ahmed
SIR SEFTON BRANCKER	-	Suleman Hussain
AIR PILOTS BENEVOLENT FUND	-	Amy Palmer
AIR PILOTS BENEVOLENT FUND	-	Tsungirirai Maruta

## AIR PILOTS GLIDING SCHOLARSHIPS

VIRGIN ATLANTIC	-	Yugesh Sundharam
VIRGIN ATLANTIC	-	Simon Goodden
AIR PILOTS FLYING CLUB	-	Gavin O'Dwyer
AIR PILOTS FLYING CLUB	-	Thomas Barham
AIR PILOTS FLYING CLUB	-	Kieran Shingler
DIAMOND JUBILEE (AST)	-	Josh Fagan
DIAMOND JUBILEE (AST)	-	Emma McNeil
DIAMOND JUBILEE (AST)	-	Ross Bradley
DIAMOND JUBILEE (AST)	-	Harry Pink
DIAMOND JUBILEE (AST)	-	Fraser Barnes
DIAMOND JUBILEE (AST)	-	Megan Ip
DIAMOND JUBILEE (AST)	-	Ellis Collins
DIAMOND JUBILEE (AST)	-	Sean Johnson

**MASTER AIR PILOT  
MASTER AIR NAVIGATOR  
MASTER REARCREW**

**CERTIFICATES**

Certificates were either presented (following earlier award notification) or awarded to the following recipients in 2018:

**MASTER AIR PILOT**

Captain Derek Simon CLARKE	1091
Garry Trevenen SAMPSON	1188
Major Mark Edgar McCULLINS	1211
John Stuart HEMMINGS	1213
Captain Alan Peter MERDITH	1215
Captain Colin McHATTIE	1224
Captain Martin George PATTINSON	1225
Flight Lieutenant Gregory Benedict LINGS	1227
Captain Ray SMITH	1228
Rear Admiral Keith Edward BLOUNT	1229
Flight Lieutenant Duncan WRIGHT	1231
Lieutenant Commander Graeme McCUTCHEON	1232
Major Edward Marc Le GRESLEY	1234
Ronald Edwin LAWFORD	1235
Lieutenant David-John Edward GIBBS	1236
Ian Raymond THOMPSON	1237
Captain David Anthony HUGHES	1238
Captain Christopher MARREN	1239
Flight Lieutenant Keith FREWIN	1240

**MASTER AIR NAVIGATOR**

Lieutenant Commander Robin Leslie SUCKLING	1209
Flight Lieutenant Ian Tyas ABSON	1230

**MASTER REARCREW**

Laurence SLATER	1233
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