



The Air League Newsletter

Issue 4: July/August 2014

AIR POWER ON DISPLAY

July is the busiest time of the year for many in the professional aerospace sector as the largest air show events take place in Southern England. The Royal International Air Tattoo (11-13 July) at RAF Fairford will once again host a spectacular display on the ground and in the air, bringing together the world's biggest aerial armada of military aircraft at any public air show. The participants will include aircraft from all eras showing air power over the decades, from bi-planes through the warbirds of the Second World War, to classic jets from the 1950s, up to today's current operational aircraft, including transports, tankers and helicopters. The biggest interest this year will undoubtedly be the appearance, for the first time ever outside the USA, of the Lockheed Martin F-35 Lightning II. Three F-35Bs (two US Marines Corps and one RAF) are due to visit the UK and scheduled to fly at the RIAT air show and Farnborough International Air Show (14-20 July). The flexibility and importance of V/STOL as an operational capability will certainly be demonstrated with the very welcome return to UK skies of the native-born and bred Harrier, but this time in Spanish Navy colours.

Farnborough International will host the biggest global aerospace trade event of the year, with over 1,500 exhibitors and will include examples of the newest commercial jets as well as the latest business jets, regional aircraft, helicopters and military aircraft. The final weekday of the show, 18 July, will be "Futures Day" aimed at attracting young people, with a wide range of displays and special events to encourage a greater interest in aviation and science. There will also be an enlarged Space Zone at the show, reflecting the growing importance of this sector. Amongst the civil aircraft at FI 2014 will be the Airbus

A350 and A380, and the Boeing 787. The new Bombardier C Series 130-seat airliner is expected to make its first public appearance in Europe, if its test flying schedule allows. With few military air bases holding open days, and public viewing access at big civil airports very restricted, air shows such as RIAT and FI provide an essential opportunity for the wider public to see air power for themselves and to be exposed to civil aviation close up. All the evidence shows that air shows are as popular as ever and provide a showcase for the best that industry and the Services can offer.

RIGHT – As a part of the recent D-Day 70th Anniversary commemorations, a Royal Air Force Typhoon flew over famous battle locations carrying appropriate black and white invasion stripes with wartime roundels and codes on the fuselage. The original Hawker Typhoons of 1944, armed with four cannons, bombs and rockets, played a key role in the Normandy campaign where their low-level sweeps over enemy-held territory caused havoc to German ground forces, supply lines and airfields.



(Crown Copyright RAF photo)

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BELOW- The new AW159 Wildcat showing it in its Royal Navy configuration with 360 degree search radar and air-to-surface weapons. (AgustaWestland photo)



NEW BRITISH CAT SHOWS ITS CLAWS

The latest AgustaWestland helicopter to enter service with the British forces is the AW159 Wildcat, which is now working up crews at RNAS Yeovilton as Army Lynx and Royal Navy Super Lynx squadrons prepare to convert to the new multi-role helicopter.

The AgustaWestland factory at Yeovil, Somerset, part of the Finmeccanica Group, has been manufacturing aircraft for the British Services since 1915, and helicopters since the 1950s, and is one of the largest aerospace plants in the UK, where complete aircraft are still assembled, tested and delivered to domestic and export customers from around the world. The new AW159 is known in the UK Services as the Wildcat, and is in full production, with completed aircraft now being delivered to Yeovilton, where both the Army and Royal Navy squadrons will be co-located, when not deployed overseas or to warships. There are differences between the helicopters destined to serve with the two UK operators and those for export customers. The UK Wildcats incorporate some components, including the Main Rotor and Main Rotor Gearbox, that utilise legacy designs to reduce costs, whereas export customers will receive all-new rotors and gearboxes and a fully digital flight control system with provision for dipping sonar, which the Royal Navy has not specified, allocating such ASW capability to the larger Merlin HM2.

The Wildcats now being delivered to the two Services are fitted out to a largely common standard, but specific features required by the individual customers can be changed quickly to adapt a navy helicopter for army use and vice versa. This will considerably enhance the potential availability of the whole fleet as both share common cockpits, avionics, electro-optical and IR sensors, self defence systems and communications. As the numbers involved in this programme have gradually been culled to half the original requirement, reflecting the downsizing of the Army Air Corps and Fleet Air Arm, the need for maximum utility from the combined fleet of just 62 new helicopters has dictated high levels of aircraft and systems commonality and also joint training, maintenance and long term support for the fleet. All the Wildcat helicopters are fully marinised and the blades can be "folded" for stowage or transport, allowing maximum deployment flexibility (in C-17 aircraft or flying in route stages).

The Wildcat's engines are LHTEC CTS800s which deliver a continuous 1,281shp and incorporate experience gained from use in the naval Super Lynx and army Lynx AH9a. High power and reliability in extreme conditions are hallmarks of these rugged powerplants, and aboard the AW159 Wildcat are fitted with upward pointing low infra-red signature exhausts for added protection against surface launched missile attack. The Wildcat

airframe is manufactured at Yeovil by GKN Aerospace and incorporates advanced manufacturing techniques that include more monolithic machining, greatly reducing the number of riveted components, providing a stronger structure that is lighter while offering more protection against corrosion in a salt-laden operating environment. Much effort has gone into giving the new helicopter greater survivability through design measures that include larger crew doors to improve emergency egress, a strengthened undercarriage with optimised energy absorption, a strengthened under-floor structure with crashworthy crew and troop seats, and a new crashworthy floatation system. In terms of the threat environment, the UK Wildcat has the latest Selex Radar/Missile Warner sensors offering all round protection, localised armour, wire strike cutters, Selex chaff and flare dispensers, a Darchem IR Suppression system and a faceted tail structure to reduce the aircraft's radar cross-section. The latest generation glass cockpit is designed around four primary GE supplied 10x8 inch displays, plus two additional Integrated Standby Instrument System displays. BAE Systems supplies the IFF identification system and Automatic Flight Control System. The Mission System includes a Selex Defensive Aids Suite and 360degree active E-scan radar, a Wescam MX-15 electro-optical sensor, with an optional laser target designator and range finder, a GD Weapons and Stores Management System, a mission planning system and associated datalinks and data modem. The RN Wildcat will carry the new Future Air-to-Surface Guided Weapon (Heavy) being developed by MBDA. A new lightweight guided weapon, FASGW (L), for use against small fast moving targets, including pirate boats or even helicopters and UAVs, is being developed by Thales and will be carried in up to four missile-launch containers, each containing five missiles. Export AW159s will be capable of carrying other customer specified weapons, such as the Israeli-built Spike air-to-surface missile, already selected by South Korea. The first Army aircraft was delivered in April 2012 and first Navy aircraft in January 2013. Navy training development started in February 2013. The handover of the new Training Centre building took place in March 2013. The training courses vary for the two Services, but there is much common overlap. The In Service Date for the Army is August 2014 and January 2015 for the Royal Navy. The final UK aircraft is due to be delivered in August 2016.

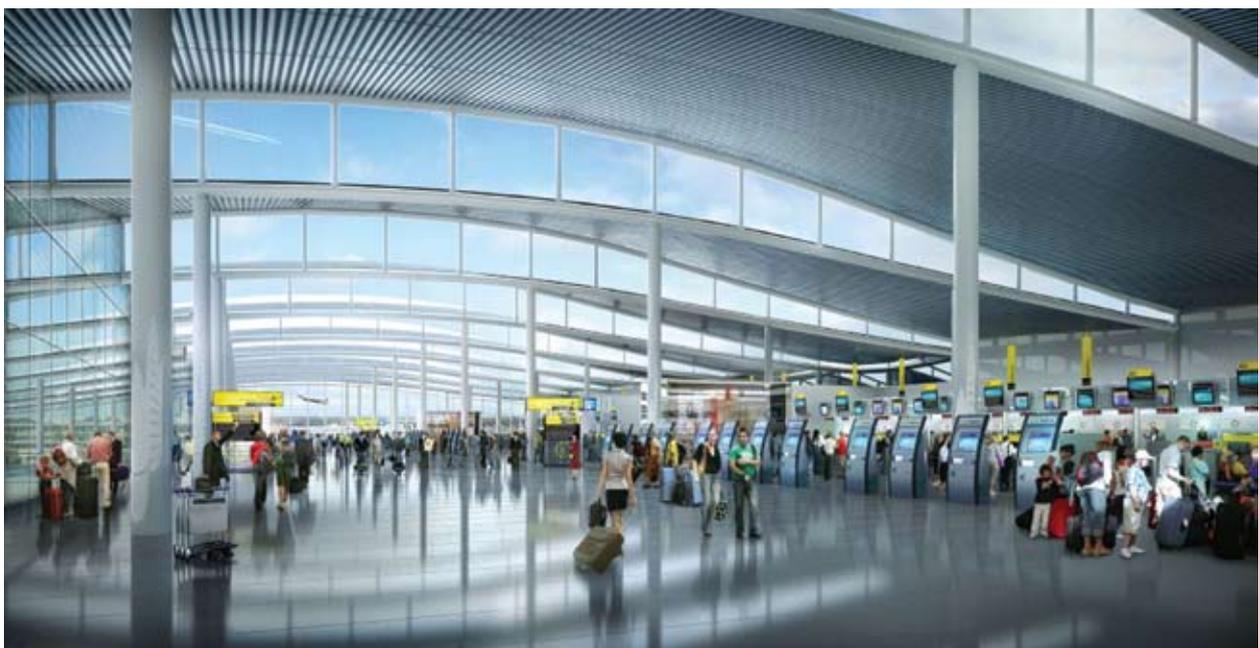
COMMENTARY *by Aeronautica*

MEETING EXPECTATIONS

The opening of the impressively massive new Terminal 2 at Heathrow illustrates once again how Britain's largest international gateway airport can deliver a world class travel experience - given half a chance to show what is possible. The speed with which this latest terminal replacement project has been accomplished, while situated in the heart of Heathrow's central "island", connected to the outside world by the same fragile road tunnel link that has existed since the 1950s, is remarkable. All the time the construction work was underway - second only in scale nationally to the Cross-Rail project - the world's busiest hub airport had to continue to function as normal, with operators that previously used Terminals 1 and 2 having to move to temporary locations at other hard-pressed terminals. Co-ordinating all this activity within the world's most constrained airport footprint underlines the innovative and "can-do" spirit of the British civil aviation community. When actually given permission to build something, we still, as a nation, tend to do it rather well. In recent times however when it comes to major infrastructure projects or huge new airports, our best architects and planners have to go abroad to undertake such contracts.

This latest enhancement at Heathrow could be part of so much more. It is to the great shame of UK politicians of all shades of political colour that they have not risen to the occasion and have instead kicked the difficult issue of runway expansion into the long grass. By the time a decision is eventually taken on where to build the extra runway capacity for London, nearly a decade will have been wasted, costs will have risen enormously and making it happen will have become even more difficult. The previous government had already given its blessing to a third runway at Heathrow, as a part of a reasonably cross-party agreement on airport strategy for the future, and it was only as a new General Election approached that the whole issue was deemed potentially toxic by all political parties, who switched to the easy way out of the conundrum and agreed to just carry on talking and consulting, in fact anything, other than making a decision. Now a Populus opinion poll, carried out in seven local boroughs around Heathrow reports 48% in favour of airport expansion and only 34% against. In addition, 57% expressed the view that they were positive about

Heathrow and its contribution to local communities and the nation, and just 6% were negative. Yet most local MPs remain opposed to any new runways. The delay imposed by the current airports inquiry has at least enabled the many alternative proposals to consolidate into just a few highly detailed and viable options, concentrating on Heathrow and Gatwick, although the Mayor of London continues to lobby for an all-new hub airport situated in the sea, to the East of London. Heathrow's Terminal 2 and Terminal 5 now provide the highest standards of airport facilities for passengers while making the most use of the space available. Providing another full-size runway will keep aircraft movements flowing well into future decades. This is what is needed, along with a second runway at Gatwick. Once Lord Davies has ruled on the options, failure to provide the new runway capacity that is essential to the future wellbeing of the nation would condemn future air travellers to growing misery and frustration and cost us all dear in business terms. Such inaction would be nothing short of a betrayal of future generations.



ABOVE- The new Terminal 2 at Heathrow is the latest upgrading designed to keep Heathrow a competitive world-class hub. The whole of the remaining Central Area, including Terminal 3, will be redeveloped next. (Heathrow image)

2014 Air League Annual Reception

On Tuesday 20th May, HRH The Duke of Edinburgh, patron of The Air League, hosted the League's Annual Reception in the splendid setting of St James's Palace. The Air League's Annual Reception is a key event in the national aviation calendar and once again it proved to be an excellent opportunity for both sponsors and recipients of the scholarships and bursaries to meet one another. The weather was lovely and the Palace apartments provided a memorable backdrop as awards were made to those who had completed 99 awards in 2013 comprising 43 flying scholarships, including The Prince Philip Flying Scholarship, four Bristow and one TAG International NPPL Scholarships, 21 flying bursaries, 25 gliding scholarships, 9 engineering scholarships and one ballooning scholarship. In addition, the Trust initiated a flying scholarship programme for disabled veterans/serving personnel together with inner city youngsters. Thanks to the stalwart support of our sponsors, the Air League now sets the standard for aerospace scholarships.



ABOVE - The Chairman and President greet the Patron on his arrival at St James's Palace



ABOVE - Siena Whiteside receiving her engineering scholarship certificate



ABOVE - Anita Neale receiving her flying bursary certificate



ABOVE - James Holland receiving the Scott-Farnie Medal



ABOVE - Miriam Pratap receiving her TAG Farnborough NPPL scholarship



ABOVE - Joe Audcent receiving the Marshall Medal



ABOVE - David Jones and David Sexton of Rescue Global receiving their framed address from the Patron

... Celebrates Aviation Excellence

The evening also recognised a number of personalities who had made outstanding contributions to aviation beginning with Norman Barber for his major contribution to the aerospace industry, Rescue Global for providing exceptional support to the Philippines famine relief effort, Angela Coleman for her fundraising on behalf of the Air League and her work within the Aviation Club, and Tracey Curtis-Taylor for flying a Boeing Steerman from Cape Town to Goodwood to emulate the flight in 1926 by Lady Mary Heath.

The Billy Deacon Search and Rescue Memorial Trophy, commemorating Billy Deacon who was posthumously awarded the George Medal in November 1997, was awarded to Winch Operator Master Aircrewman Tim

Race and Winchwoman Sergeant Rachael Robinson for recovering an injured crewmember from the fishing vessel Alf in storm force conditions on 21 March 2013.

The Marshall of Cambridge Medal was awarded to Joseph Audcent for his enthusiastic and unstinting work in support of The Air League. The Scott-Farnie Medal, for meritorious work in the field of Air Education, was awarded to James Holland. The Jeffrey Quill Medal, for meritorious work in the field of airmindedness, went to Allan Winn and the Brooklands Museum. Finally, the Air League Gold Medal went to the RAF Arrows to mark their 50th anniversary.



ABOVE – Tim Ellison receiving his Boeing disabled veteran balloon scholarship



ABOVE – Graham Bendall receiving the inaugural Airbus Helicopters Trophy



ABOVE – Mark Dunlop (on behalf of Rachel Robinson) and Tim Race receiving the Billy Deacon award



ABOVE – Andrew Perkins with Jenny Wilkins (former Principal of Skinners Academy) and Sana Patel, Roma Gajre and Farhin Mohmadarif (winners of Boeing inner city gliding scholarships)



10217 – The Chief of Air Staff, together with Ruth Shackleton and Neil Fraser, receiving the Air League Gold Medal on behalf of the Red Arrows



ABOVE – All the Air Cadet helpers with Commandant Air Cadets, Dawn McCafferty.



ABOVE – The Patron with Bridget Donaldson and Thomas Meadows

2014 FLYING SCHOLARSHIPS

Sponsor/Flying Scholarship

Recipient

The Prince Philip NPPL Flying Scholarship	Miss L Rosa from Northwich, Cheshire
TAG Farnborough Airport NPPL	Mr J Singh from Radley, Hampshire
Bristow NPPL	Miss A Davies from Milngavie, Glasgow
Bristow NPPL	Mr C Fraser from Glasgow, Lanarkshire
Bristow NPPL	Mr G Macphie from Isle of Skye, Highland
Bristow NPPL	Mr S Strachan from Salisbury, Wiltshire
BAE SYSTEMS (John Cunningham)	Mr A Bell from Glasgow, Lanarkshire
British Women Pilots Association	Miss B Pervez from High Wycombe, Buckinghamshire
Captain Colin Barnes	Mr L Malloy from Ingatestone, Essex
Eastern Airways	Miss A Collie from Aberdeen, Aberdeenshire
HQ Air Cadets (The Air Cadets Scarman)	Mr N Anandakumar from Sutton, Surrey
HQ Air Cadets (The Air Cadets Scarman)	Miss L Conder from London
HQ Air Cadets (The Air Cadets Scarman)	Mr J Davies from Neath, West Glamorgan
HQ Air Cadets (The Air Cadets Scarman)	Mr J Flanagan from Lytham, Lancashire
HQ Air Cadets (The Air Cadets Scarman)	Mr A May from Hartlepool, Durham
HQ Air Cadets (The Air Cadets Scarman)	Miss F Old from Braintree, Essex
Lady Humphrey (Andrew Humphrey)	Mrs C Sherwen from Manchester
Lucas Aerospace	Mr J Parker from Carnoustie, Angus
Robert Kronfeld	Mr K Drummond from Croydon, Surrey
Sir Arthur Marshall	Mr A Nicolai from Reading, Berkshire
D G Marshall	Mr A Johnson from Walsall, West Midlands
Sir James Martin (Martin Baker)	Miss A Harvey from Essex
Hugh Pope	Mr M Easter from Harpenden, Hertfordshire
Rhodes-Moorhouse VC	Miss K Ward from Plymouth, Devon
Royal Aeronautical Society	Mr M Stewart from Bristol
Swire Charitable Trust	Mr G Duffy from Ammanford, Carmarthenshire
Swire Charitable Trust	Mr A Feathers from Waterside, Londonderry
Swire Charitable Trust	Mr D Goldman from Liverpool, Merseyside
Swire Charitable Trust	Miss K Heslop from Darlington, County Durham
Swire Charitable Trust	Mr M Hogg from Carlisle, Cumbria
Swire Charitable Trust	Mr T Hornsby from Lancashire,
Swire Charitable Trust	Mr D Lowe from High Barnet, London
Swire Charitable Trust	Mr E Martin from Swindon, Wiltshire
Swire Charitable Trust	Miss K Dickson from Wisbech, Cambridgeshire
Swire Charitable Trust	Mr N Ramjaneer from Bradley Stoke, Bristol
Swire Charitable Trust	Mr J Young from Emmer Green, Berkshire
The Coachmakers Livery (Victor Gauntlett)	Mr A Collings from Bristol
The MacRobert Trust	Mr J King from Edinburgh
The Red Arrows Trust	Mr C Kent from Eastbourne, East Sussex

WINNERS

2014 GLIDING SCHOLARSHIPS

Sponsor/Flying Scholarship

Air League Trust
Robert Kronfeld
John Marriott
John Marriott
Darren McQuoid
Darren McQuoid

Recipient

Mr J Eveleigh from Essex
Mr J Hargreaves from Leeds, West Yorkshire
Mr B Hughes from Reigate, Surrey
Mr P Kirkwood from Berkshire
Miss A J Randalls from Kirriemuir, Angus
Miss S Taylor from Ormskirk, Lancashire
Mr J Williams from Cwmbach, Aberdare
Mr B Hachula from Peterborough, Cambridgeshire
Mr B Southern from Plymouth, Devon
Mr J Bridge from Camberley, Surrey
Mr M Otty from Wargrave, Berkshire

2014 ENGINEERING SCHOLARSHIPS

Placement Company

Airbus Helicopters UK
Boeing, Gosport
Boeing, Gosport
Booker Aviation
Heli Air
Marshall Aerospace
Marshall Aerospace
Tayside Aviation
Vector Aerospace

Recipient

Mr J Abrahams from Sevenoaks, Kent
Mr A Pandor from Ilford, Essex
Miss S Wen from Middlesex, London
Mr C Farfan from Altrincham, Cheshire
Mr L Alderson from Cumbria,
Mr J Davies from Neath, West Glamorgan
Mr P Kirkwood from Berkshire,
Mr J Cleary from Cobham, Surrey
Mr H Bell from Rochester, Kent

2014 FLYING BURSARY

Sponsor/Flying Bursary

Buckland Memorial
Sir Michael Cobham
Christophther Foyle
Mark Philip Jones Memorial
Keith Mans
Sir Michael Marshall
Sir Michael Marshall
The Red Arrows

Recipient

Mr S Petitt from West Sussex
Mr L Allen from Ealing, London
Mr J Coates from Ripon, North Yorkshire
Mr J Downing from Newport, Monmouthshire
Mr D Marshall from Kinross, Perthshire
Mr S Milligan from West Clacton, Essex
Mr H Newman from Cardiff, South Glamorgan
Mr T Slingsby from Bracknell, Berkshire
Mr M Smith from Auchmithie, Arbroath
Miss K Snell from Newport-on-Tay, Fife
Mr R G Willington from Dorridge, Solihull
Mr S Woodgate from Ripon, North Yorkshire
Mr S Richardson from Manchester
Mr B Barratt from Manchester
Mr R Gale from Portsmouth, Hampshire
Mr T Hall from Craigie, Perth
Mr B Pilgrim from Kingsley, Cheshire
Miss K Chapman from Bedale, North Yorkshire

MEMBERS' NEWS



YOUTH IN AVIATION FLYING DAY

The annual Youth in Aviation Flying Day was held at Bicester on Saturday 7 June. The storm clouds parted in mid-morning to leave an awesome day of around 120 enthusiastic young people discovering or exploring further the joy of aviation. With flights in gliders supported by The Air League and Bicester Heritage, everyone had a fantastic day.

Aerobatic displays and flights in RV's, Robins and the Fox Aerobatic glider made for a unique experience.

Many thanks to everyone for supporting this event. Particular thanks must go to Bicester Heritage for their financial support.

ABOVE - Booming sunshine, loads of gliding, great food, great people, aerobatics, aviation. Another epic day at the Air League flying day!!

RIGHT - A great display by the Pitts Special to end a memorable day. Now to the bar-b-q!



New Members

Individual Members: Mohammed Ali Alhadi, Neresh Anandakumar, Charlotte Baker, Lucinda Conder, Zander Cornish-Moore, Christopher Dobbs, James Eveleigh, Gokul Ganga-Nair, Rylan Harper, Alexander May, Christopher Rose, Jonathan Ruxton, Katherine Sheen, Dimitrios Xenias

Diary Reminders

- 11-13 July: RIAT air show
- 12-13 July: IWM Duxford Flying Legends air show
- 14-20 July: Farnborough International air show
- 22-26 July: Annual Aviation Paintings of the Year Exhibition (The Mall Gallery, London)
- 26 July: RNAS Yeovilton Air Day
- 20 October: Red Arrows 50th Anniversary Banquet
- 29 October: Youth in Aviation, House of Lords
- 26 November: Andrew Humphrey Memorial Lecture

For up-to-date information on all our activities please visit our website at www.airleague.co.uk where you can register for changes to be sent to you by email as they are announced.



THE AIR LEAGUE

Broadway House
Tothill Street
London SW1H 9NS

Tel: 020 7222 8463
Fax: 020 7222 8462

E-mail: exec@airleague.co.uk

Editor: Richard Gardner
Material for consideration for inclusion can be sent via The Air League's office.