



# THE AIR LEAGUE

*'Aviation for everyone'*

**UK Youth in Aviation; A guide to the organisations supporting and developing tomorrow's aerospace professionals**



**BRITISH  
GLIDING  
ASSOCIATION**



**The Royal Aero Club Trust**  
advancing the cause of air sport and aviation

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## **Introduction**

It is well known that the UK aerospace industry is number one in Europe and second only to the US globally. Many of the advances in civil and military aviation owe their success to British ingenuity and the future offers many exciting prospects not least in UAS technology, satellites and advanced propulsion systems. As a result, aviation and, more broadly, aerospace industries remain a key part of the British economy and a stimulus to research in both industry and higher educational establishments.

This can only continue if there is a constant supply of highly motivated young people willing to support this thriving and diverse industry by entering the industry in all manner of roles; aircrew, engineers, commercial specialists; finance, marketing, human resources and public relations. Aviation has it all and is an industry that we want to be accessible to everyone.

However, despite a promising future, the UK's standing as a leading player in aerospace is by no means guaranteed and a firm commitment from government is needed to ensure future competitiveness, something which this paper will outline in the pages that follow.

## **Support from voluntary/charitable organisation**

What is less well known, is the number of small organisations who, through their tireless commitment and dedication, (often on a voluntary basis) are supporting today's youth through a multitude of schemes and initiatives associated with aviation. However, these organisations (which we will outline in detail below) are not substitutes for government investment in skills and training and should not be thought of as institutions which could 'fill the gap' due to budget reductions. Rather, we wish to highlight to interested stakeholders the impact that these organisations have not only in helping the UK economy by fostering an interest (and potentially a career) in aerospace but the broader benefits to society they deliver; opportunity for all, not least in using the joy of flying as a tool for personal development.

So many careers continue to attract a stereo-typed caricature of previous generations. All of the organisations which we highlight below are committed to making aerospace available to all members of society, from all walks of life.

## Keeping Britain at the forefront of aviation – an economic imperative

*To ensure future competitiveness, investment must remain high in training and there must be real incentives for aerospace companies to operate in the UK.*

The proven demand for UAS technology, innovative flight management systems, future space technology and stealth aircraft will ensure that the technology involved in aerospace continues to develop at a rapid pace. As this technology evolves and indeed new technologies emerge, aerospace companies will need a larger proportion of their workforce to have a more diverse skill set. If we do not generate an effective pipeline of young people with the right skills to perform these roles in the future, it is likely that employers will have to import talent. This is a highly politicised issue: while polls indicate a large percentage of the UK population believe immigration is at unacceptable levels, big business has put forward the view that an arbitrary cap on immigration would damage the UK's economic recovery due to skills shortages in key areas relating to aerospace. It is clear, therefore, that more needs to be done to promote an interest in areas of study that are critical to aviation. The fact that not enough people are studying subjects in science, technology, engineering and mathematics (STEM subjects) is well documented. Making progress on this is crucial in order to drive UK competitiveness and to stop the reliance on many businesses importing talent in order to plug skills shortages.

**Future Britain should be a centre of excellence for aeronautics and high-end engineering as much as working in the City. As we emerge from recession, it would be folly to cut back on science, vocational education and R & D when these are launch pads for future success.** (Oxford Economics study in 2009 showed Air Transport and Defence produced sector multipliers of 2.4 and 2.3 compared to 2.2 for Banking and Finance. i.e. every £100 million invested in Air Transport creates a gross output of £240 million for the economy.)

However, recent years have shown that government spending in areas such as R & D has fallen behind competing nations, despite the UK's high levels of expenditure on pure science. Aerospace companies are well-motivated towards investing in partnership with government in order to generate the technological edge to gain international competitive advantage in product development, manufacturing and value creation.

We believe that the government should address skills shortages by up-skilling the UK work force, equipping them with the skills that are needed not just for today but for tomorrow; skills for innovation and new product delivery.

We believe that in order to really achieve innovation in the UK aerospace industry, investment needs to be made in education, research and training in newly emerged technology areas such as composite materials, propulsion and low carbon, which is, at present, limited.

**As we re-emerge from recession, now is the time to take stock of the UK aviation industry's steadfast contribution to UK plc. It is vital that time, money and experience is invested in young people, who, whatever their role in the aerospace industry, will rise to the challenges in the decades ahead and ensure the UK remains at the leading edge.**

## **Youth in Aviation: The broader implications for society**

All of the organisations that are profiled below seek to open the door of opportunity to young people from all walks of life. They demonstrate that involvement in aviation is not just for the privileged few. It is thanks to these organisations below that there are no financial barriers to experiencing aviation at first hand – and enjoying the benefits that it brings in terms of personal development.

There is a perception that today's youth can often be found 'hanging around on street corners'. Whilst this phrase may seem a cliché, it summarises a problem facing our communities. The lack of a constructive activity to engage in is often cited as the reason why many youngsters find themselves in a negative 'spiral dive' towards an unsatisfactory view of their obligations to society.

The organisations profiled below provide a wide range of clearly structured activities often using engineering projects and flying experience in light aircraft and gliders. Participants do not simply turn up and fly, it requires commitment and determination on the part of the individuals to access the opportunities provided by these organisations.

In addition, whilst the UK labour market has performed better than in previous recessions and compared with our international competitors – it remains fragile. Spare capacity in companies and slow economic growth means that getting 'a foot on the career ladder' has become very difficult.

It is well documented that learning new skills and gaining qualifications bring with them a sense of achievement and broadened horizons. Take, for instance, the youngster from an ordinary background flying solo in a glider and gaining his wings, before even being eligible for a provisional driving licence.

It is important to point out that all the organisations described below promote activities which improve self-knowledge and confidence, develop hidden talents and potential, enhance quality of life and contribute to the realisation of dreams and aspirations. Fundamentally, this drastically improves employability and citizenship.

For some individuals, involvement in these organisations marks a first step towards a career in engineering or aviation. Yet, it should be remembered that for others, it represents an opportunity to make the most of their potential as individuals in whatever walk of life they choose to follow.

## The Air League **LEADING EDGE** >

The Air League has been encouraging air-mindedness in young people since its foundation in 1909 and this effort was formally recognised with the creation of the Air League Educational Trust (ALET), a registered charity, in 1968.

The Air League works to involve young people in aviation through a number of initiatives. Firstly, in terms of financial support, the Air League Educational Trust awards flying and gliding scholarships to allow individuals to experience the thrill and sense of achievement involved in flying solo. There are also bursary schemes for flying and gliding which aim to assist young people who have already learnt to fly. These allow them to improve their skills by working towards their next goal. The Trust also awards engineering scholarships to encourage young people to take an engineering degree. All this would not be possible without the generous support from industry; numerous aerospace firms have supported the League throughout the years and on average, over £100,000 worth of assistance is awarded each year.

The Air League also supports youth in aviation by convening the UK Youth in Aviation Panel, on which, sit representatives from all of the organisations mentioned in this paper. The Youth in Aviation Panel is a valuable forum for these organisations to network, share knowledge, champion best practice and decide upon the common goals and strategy concerning UK Youth in Aviation.

### ***The Air League Diversionary Flying Scheme***

This is one of the Air League's newest initiatives, jointly run with Nacro, the crime reduction charity, in conjunction with the Air Cadet Organisation (ACO) and British Gliding Association (BGA). Sitting at the heart of this initiative is the belief that flying can be used as a means to re-engage young people who have dropped out of mainstream education. Many of the 16 to 18 year-olds on the Air League Diversionary Flying Scheme (ALDFS) have achieved few or no qualifications and are not in education, employment or training (NEET). Fundamentally, the scheme has been set up to enable a unique and empowering opportunity to young people

who never thought it was possible for them to achieve limited qualifications, let alone successfully fly a glider to solo standard.

The scheme started with 20 young people being selected to undergo a personal development, team building and selection course. Of these, 3 were selected for a gliding scholarship and they were trained to solo standard. Two things emerged: Firstly, unlike other courses all the candidates stuck through to the end to get the certificate recording their achievement. Secondly, it confirmed the League's long held view that flying is a great leveller – it is not elitist, it requires a combination of dexterity, application, and mental organisation. In return, it provides a tremendous sense of achievement and boost to individual confidence and potential. It is hoped that, should sufficient funding be found, the Air League Diversionary Flying Scheme will be in a position to be rolled out nation-wide.

## The Air Cadet Organisation



The Air Cadet Organisation (ACO) comprises the Air Training Corps (ATC) and the RAF sections of the Combined Cadet Force (CCF). Cadets are based at 1156 units throughout the UK and 4 locations overseas. Currently, there are over 45000 cadets supported by over 11000 adult volunteers.

The mission of the ACO is to be a modern, dynamic, sustainable air-minded youth organisation that offers fun and challenging opportunities. In fulfilling this mission, cadets undertake a wide range of activities including adventure training, sport, target shooting, camps, first aid and music. However, at the heart of cadet activity and the key element of cadet training is aviation and experiencing the thrill of flying. In this respect, the work of Air Experience Flights and Volunteer Gliding Squadrons located all across the UK is invaluable and these units give youngsters their first taste of flying.

In addition, cadets have access to a wide range of training and education of potential benefit to wider society. All cadets complete First Aid training and more than 50% complete Duke of Edinburgh's awards. A recent initiative has introduced BTECs, equivalent to 2 or 4 GCSEs, in Aviation, Music, and Public Service. All cadets work towards the Aviation BTEC.

Today in the UK there are over half a million people who have been in the Air Cadets. As with most of the organisations listed in this paper, the exact benefits of participation in the ACO to the community at large are hard to quantify. However, the Government Ten Year Strategy for Positive Activities for Young People, published in July 2007, describes the qualities of the 'Positive Activities' that improve future outcomes for young people. The

characteristics and nature of air cadet activities directly matches the characteristics of the 'Positive Activities' set out in the Strategy.

**Additionally, there is evidence that air cadets are 10 times less likely to be involved in crime than young people at large.**

## The Royal Aeronautical Society



The Royal Aeronautical Society (RAeS) is the professional body dedicated to furthering the art and science of aeronautics. The RAeS has 17,000 members - including over 4000 young members - worldwide. For a number of years, the Royal Aeronautical Society has been involved in a wide range of activities which aim to inspire young people to explore the world of aerospace; provide in-depth, impartial careers information and guidance; and support the professional development of early career professionals.

Through the Society's dedicated Careers and Education department, Young Persons' Board and associated committees we have built up a network of Society volunteers and staff with diverse backgrounds including aerospace, education and careers, working towards the same goal: to attract and retain a continuing supply of talented people into aerospace in the 21<sup>st</sup> Century. Our activities include:

Careers Centre – providing impartial advice and guidance to individuals, education and careers professionals on aerospace and aviation career pathways since 1997

Careers website: [www.careersinaerospace.com](http://www.careersinaerospace.com), in partnership with A|D|S

Centennial Scholarship Fund, Travel Grants and Young People's Medals and awards

Schools Build-a-Plane Challenge – our flagship schools programme, a partnership with Boeing and the Light Aircraft Association, to bring the art of building and selling real light aircraft into UK secondary schools

Cool Aeronautics events for primary schools

Other conferences, events and competitions, including the Young Members conference for young professionals, and working with other like-minded organisations

## The Guild of Air Pilots and Navigators



The Guild Young Members Group, "GYM" is open to all members of the Guild aged 35 and under. The GYM Committee aim to support and encourage young people involved in piloting, navigation and aviation in general through a number of initiatives. The GYM have four key aims: to generate interest in the Guild, piloting, navigation and aviation in young people, to assist Young Members in their development, helping them become more competent and professional in Air Piloting and Air Navigation, to encourage the participation and networking of Young Members and to represent Young Members of The Guild at exhibitions and events.

### *The Guild Flying Scholarship Programme*

The Guild flying scholarships and bursaries provide a unique opportunity for people who would like to become pilots or to further their qualifications as pilots. PPL scholarships (Fixed Wing) cover all aspects of training up to licence issue for a candidate who is prepared to dedicate a considerable part of the summer to gaining their PPL. Providing up to 45 hours of flying, these scholarships can take a candidate with little or no experience, to completion of their flying licence during the course of the summer. In addition, the Guild offers a Flight Instructor Rating (Fixed Wing) scholarship which covers all direct training and examination costs for the candidate as they achieve their Fixed Wing Instructor Rating. A Rotary Wing Instructor scholarship is also awarded as are bursaries which cover some, but not all, of the cost associated with gaining an instructor qualification. Finally, the Guild, in association with European Pilot Selection & Training (EPST), offers a number of Jet Orientation courses, specifically designed to prepare newly qualified professional pilots for employment with an airline. The Guild awards three bursaries each year at City University to students already enrolled on aviation related MSc courses.

## Royal Aero Club



## **The Royal Aero Club Trust**

advancing the cause of air sport and aviation

The Royal Aero Club of the United Kingdom (RAeC) is the national co-ordinating body for Air Sport in the United Kingdom and in the guise of The Royal Aero Club Trust, it offers a number of bursaries and grants as part of its Flying for Youth program.

The scheme is divided into two categories of Bursaries: Flying Bursaries/Grants for those wishing to advance from one recognised level of air sport to the next higher level and wish to upgrade their existing qualifications and also Flight Simulator Bursaries/Grants for Computer

Flight Simulation enthusiasts wishing to gain practical experience of flying or an air sport. The schemes and the bursaries comprise all types of air sports and aviation-related activities including: paragliding, gliding, aircraft, helicopter, fixed wing aircraft and building and flying model-aeroplanes.

## British Gliding Association



Gliding is a sporting and recreational activity exploring the potential of unpowered flight. Gliding is a challenging, rewarding and accessible sport open to all. There are over 9,000 flying members with a further 25,000 people participating in gliding each year with around 150 newly qualified pilots each year. Member clubs operate 2300 gliders completing some 316,000 launches per year and, in a good season, achieving some 1.5 million kilometres of cross-country flying; flights over 200 miles, with pilots landing back at their home airfield, are quite normal in nice weather. Pilots regularly operate above 10,000 feet, and in some areas for specific height gain flights, altitude exceeds 19,500 feet.

In addition to all the skills involved with learning to fly, soar and race a glider, there are many skills for a young person to attain. Gliding is a volunteer-run sport; it takes at least three people to get one person airborne. Everyone who aspires to fly gliders becomes a valued member of the team; the safety culture is built on everyone taking responsibility for their own actions, developing a level of situational awareness, anticipation and the ability to problem solve in a practical manner, often in quite short time frames. Getting involved with gliding is a great way of improving a person's confidence. In addition to providing flying facilities for club members, many clubs work with very specific groups of people – often with remarkable results.

Borders Gliding Club ran a week long course for young people who were or were close to being excluded from school (i.e. NEETs). At the beginning of the week, the gliding instructors were wondering how they were to deal with these individuals who had no respect for anything, least of all themselves. They were shown what was expected of them, how to help launch gliders and given control of a glider in the air. Crucially they were generally shown what they were capable of and trusted to do what was asked of them. The transformation was remarkable; no-one had believed it possible. By the end of the week the young people had embraced their responsibilities and had developed a belief in themselves and their own abilities. Other gliding clubs in Leicestershire and Nottinghamshire are currently working with young people involved with NACRO, with the aim of helping them to stay out of the criminal justice system.

Gliding is proving to be a valuable tool for young soldiers' rehabilitation following life changing injuries in Afghanistan. Wyvern Gliding Club, part of the Army Gliding Association, is providing

gliding as part of 'BattleBack', the Tri-Service initiative which aims to improve and formalise the use of adventurous training and sport in the aftercare of wounded Service personnel. Several participants have already flown solo. Major Martin Colclough, who runs the BattleBack programme, said of gliding "Flying is superb for rehabilitation and the quicker we can get them flying solo the better, because psychologically there is a sense of real independence."

Other schemes and initiatives which our member clubs have taken part in include the BIS Festival of Learning to encourage those living in rural areas with higher levels of deprivation the opportunity to take part in informal learning activities - 20 clubs; 423 participants.

Gliding is all about teamwork and has great personal development potential; individuals take responsibility both for their own flying and for tasks within a volunteer framework. Many glider pilots, many having started their active flying careers in gliding, work within the aerospace industry or as pilots or engineers in aviation (military and civilian), giving the young pilot ample opportunity to work with experienced professionals from aviation organisations.



## **Aerobility**

One in 20 young people in the UK has a disability and Aerobility are here to represent them, using aviation as a tool to improve their lives. The charity was founded in 1993 to represent the needs of disabled pilots and was called the British Disabled Flying Association ('BDFFA'). Achieving charitable status in 2000, the organisation has evolved in both its activities and its perception within the aviation and disabled communities. This change led to a full rebrand and rename of the charity in 2010, with a single word to encapsulate, define and summarise the goal of the organisation. By combining the charity's core attributes; aerospace and ability, the new name 'Aerobility' was born.

Aerobility enables disabled and profoundly ill adults and children to experience aviation. Flying offers a complete change for the disabled, stretching horizons in every sense and the outcomes of flying training include a realisation of ability and that life is very much for living.

Through the support of members and sponsors, Aerobility has been able to buy three aircraft. The charity now owns and operates two Piper Warrior four seat aircraft, a two seat aerobatic Bulldog and leases 2 further aircraft to meet demand. These aircraft are fully customised and adapted so that they can be flown by people with all types of disabilities. From five centres across the UK, Aerobility is able to offer, 'Experience of a lifetime' trial flights and red letter

days, Aircraft hire for disabled licence holders, Flying Days for other disability charities and specialist PPL flying training for disabled members and injured service personnel. Recently, Aerobility launched a program ' Young Sparks' introducing young disabled people to aviation, resulting in the charity working with around 150 disabled young people in 2010. Typical outcomes include the realisation that "if I can fly, what else can I do?" and that the aviation industry is potentially a future hobby or even a future career.

As a result of Aerobility aircraft attendance at major public events, representatives from Aerobility have come into contact with hundreds of nondisabled young people and also brought them closer to aviation and demystified disability for them. Aerobility operates on a strictly not-for-profit basis and all of its flight training is conducted at cost. It also offers a hardship scheme whereby those with low financial capability also get the chance to participate.

## **The Scout Association – Air Scouts**



For over 100 hundred years, The Scout Association in the UK has been providing adventurous activities and personal development opportunities for young people, guided by volunteer adult leadership teams. Currently there are about 400,000 young people aged 6-25 across the UK. Personal development means promoting the physical, intellectual, social and spiritual well-being of the individual, and helping them achieve their full potential as responsible citizens and as members of their local, national and international communities as evidenced by the many and diverse community projects that Scouting is involved with from international development and relief projects to local eco-projects.

In Scouting, we believe that young people develop most when they are 'learning by doing,' when they are given responsibility, work in teams, take acceptable risks and learn to think for themselves. Young people in Scouting are encouraged to engage in the decision making processes and we support and encourage involvement in the work of the British Youth Council, the various national Youth Parliaments and other such democratic channels to become active citizens.

One of the ways of delivering Scouting is via Air Scouting. There are Air Scout Groups/ Explorer Scout Units scattered across the UK, which represent about 1.5% of the total Scout section membership (2010), and up to 60 Groups/Units are able to receive recognition status by the Royal Air Force under a long standing MOD supported scheme. This recognition means that they have access to opportunities for flying and some training support from the RAF. These specialist Groups and Units base their programme delivery around a wide variety of air activities and attempt to be their local "centres of excellence" in introducing young

people to the different air activities available. Many other Scout Troops have an Air Scout Patrol in them and are encouraged to have air activities as part of their Balanced Programme.

Core Air Scouting activities include gliding (with assistance from the British Gliding Association Clubs), Powered flying, (with support from the Light Aircraft Association, British Microlight Association and RAF Air Experience Flights), parascending (in cooperation with the British Hang Gliding and Paragliding Association) and finally, hovercrafting. All of these activities are also available to any young person within the Association regardless of whether they belong to an Air Scout Group or not. With all of these activities on offer, Air Scouting is on the rise, with 2010 seeing an 18% increase in participation since 2009.

## Light Aircraft Association – Youth & Education Support



The LAA sponsors flight training through the Armstrong-Isaacs Scholarship, and has recently set up the Light Aircraft Association Educational Trust to help with its extensive programme of Youth Aviation activities. Every year, through the generosity of LAA members, several hundred youngsters from all over Britain receive free air experience flights in a light aircraft, under the Young Aviators programme, which has now been running for some 12 years.

Youth & Education Support (YES) is the branch of the LAA with a particular responsibility for Youth Aviation, and its members have produced an extensive range of activities and resources to help encourage youngsters to develop an interest in all aspects of aviation, from making simple gliders to building light aircraft and flying in them.

The pioneering UK Youth Build-a-Plane initiative to celebrate the centenary of powered flight in 2003 involved youngsters from all over the UK building a light aircraft from a kit under supervision by LAA members, and then flying in it. This scheme has now expanded to another four independently-funded aircraft currently being built or already flying, while a further four are being built in schools with LAA supervision, through the RAeS-Boeing Schools Build-a-Plane Challenge scheme.

Training sessions in Aeronautics, Navigation and Meteorology for Scout group members are organised at weekend Aviation Camps, with the opportunity of a flight in a light aircraft to practice the navigation skills and experience aircraft controls in flight. Airfield Days are organised for school pupils from Primary to Sixth-form to learn about the wide range of businesses using their local airfield, and to appreciate its economic importance to the area.

The annual YES Youth Aviation Conference, now in its fourth year, offers an opportunity for many organisations involved in aviation, either as a career or as a leisure activity, to share information and publicise the opportunities they offer, while YES also involves the public at all sort of events from local fetes to the Farnborough Airshow, with activities from pedal plane rides for toddlers, through constructing and flying model gliders, sampling ground-school sessions, to cockpit 'tours' of the Build-a-Plane aircraft and advice on aviation careers.

In this way, the LAA and YES helps young people primarily to enjoy aviation, as well as to appreciate the value of it as a potential career or life-long interest.



## **Heartstone – Festival of Flight**

Heartstone is a UK-based non-profit organisation which builds contact, communication and understanding across different nationalities and cultures challenging many forms of prejudice and intolerance.

'Festival of Flight – Ultimate Skills, Open Spirit' is a photo documentary exhibition which celebrates the thrill and passion of flight. The exhibition begins with birds, the starting inspiration for flight, moving on to legends and stories about flying from countries around the world, which presents the stories of pioneers who fought major obstacles, including prejudice, to fulfil their ambitions, and ends with aircraft at the pinnacle of flight technology today. Along the way, the exhibition includes different examples of aviation today with the purpose of demonstrating that behind the aircraft are real people from diverse walks of life.

The exhibition, which is now running in many authorities across the UK, is targeted at schools and youth groups and aims to give young people in these areas the chance to create the final part of the Festival of Flight exhibition by developing their own project; discussing obstacles and how they have been overcome.

The exhibition aims to reach all children and young people to raise aspirations as well as introduce them to aviation and how people have overcome major obstacles, including racial prejudice, in order to fulfil their dream to fly.



## Brooklands Museum

Brooklands Museum is an independent charitable trust, established in 1987, whose aim is to conserve, protect and interpret the unique heritage of the Brooklands site and to use that heritage to inspire and educate future generations.

Brooklands was one of the most prolific aircraft sites in Europe during the 20th Century, with over 18,500 aircraft produced or assembled in the factories there. The Museum's collection of Brooklands aircraft spans over a hundred years of aviation and ranges from a replica of the aeroplane in which Alliot Verdon Roe carried out pioneering flight trials in 1908 to Concorde G-BBDG.

The Museum is supported by a large number of volunteers, over 700 in total, who take on various roles including maintenance, front of house, conservation and education to name but a few, and employs a total of 20 full time equivalent staff.

The Education Service at Brooklands Museum has been running for over 20 years and provides an array of activities and resources for school visits. These account for approximately 9,000 children per annum, out of our total visitors of just over 120,000 in 2010. Most of our present school visitors are from Key Stages 1 and 2, and activities on offer cover topics such as 'Materials', 'Forces', 'History of Transport', 'Britain since 1930' and 'World War Two'.

Brooklands has established strong links with other education providers in our area and work in partnership with Brooklands College students studying Motorsport and Aero Engineering and, more recently, with the University of Surrey, where a group of students and lecturers formed a Concorde support group on arrival of the aircraft at Brooklands in 2004.

They have also run several 'Engineering Taster Days' in conjunction with the University of Surrey, through a funded project by EPSRC to create a Formula 1 Simulator and restore the Concorde Simulator originally used to train British Concorde pilots. This involved developing a day of activities aimed at encouraging the younger generation to consider a career in engineering

The Museum is also committed to encourage volunteering within the younger generation, in the hope of ensuring that skills and expertise from our more senior volunteers are passed on. We have developed a strong programme of work-based activities for "work experience students" and teenagers undertaking the "Duke of Edinburgh" Award. More recently, we have been working in partnership with the Surrey Youth Development team, delivering work-based activities to teenagers undergoing court proceedings.

We also host annually a Youth Aviation Conference, where various organisations involved in aviation have the opportunity to meet and promote their activities; we contribute to various UK based events like 'Wings and Wheels' at Dunsfold and various other air shows.

We strongly believe that through the strong attraction of aviation-based activities and the support of a 'second to none' team of volunteers, we can help to raise aspirations and awareness of opportunities in the aviation industry in the younger generation.

## **Fly2Help**



Fly2help is a flying charity dedicated to helping those who have suffered disaster, difficulty or tragedy by allowing them to experience the joy of flying.

Fly2help's principle educational programme in conjunction with Cotswold Airport Aviation Services is the provision of 10 Aviation Scholarships per year to children aged between 14 and 18 years old. The aim of this scheme is to provide the Scholars with a broad knowledge of the opportunities available to them in aviation by exposing them to as many facets of the aviation industry as possible, during a 2 week period over the Easter holiday period.

In common with most of the organisations profiled in this paper, fly2help often acts as a catalyst to produce positive changes in people's attitudes and life. The opportunity to experience the liberation and freedom of flight can inspire, develop imagination and stretch personal boundaries, helping individuals to discover new benefits through renewed self-determination.



## **RAF Museum – Advanced Modern Apprenticeship Programme**

The Royal Air Force Museum is a charitable trust which exists to promote the history and traditions of the Royal Air Force; to educate present and future generations about its values and ethos and to encourage young people to understand aviation, science and technology.

Having identified a skills gap both for itself and many other museums, aircraft operators and local businesses, the Royal Air Force Museum, took the decision in 2004 to set up an Apprentice Programme. A partnership was formed with Telford College of Art & Technology (TCAT), the local further education college, providing academic training.

Each of the museums apprentices work hand in hand with a Master Craftsman who mentors them through their daily tasks and once deemed competent, each are given a specialist heritage aviation project. This in-house training and development leads to the achievement of NVQ level 3 in Aeronautical Engineering (Assessed and Verified independently by specialists from TCAT). The aircraft technician apprentices then attend TCAT where they study towards the BTEC National Certificate in Engineering Operations and Maintenance.

Without doubt the Apprentice Scheme is an enormous success. Its apprentices have received many accolades and routinely produce high quality work which is enthusiastically embodied within Museum exhibits.

On successful completion of their Engineering Foundation Degrees, apprentices have the option to take a fast track BEng(Hons) degree and go on to achieve Chartered Engineer status. For future employers this provides graduates who are far from typical. These young engineers will have a familiarity with how tools are used, project management and budgeting, how the aviation industry works, how to talk to its people, how to solve problems and think on their feet.

The Museum is determined to preserve heritage aviation skills by increasing the number of apprenticeships it offers and the Museum is undertaking ongoing fundraising to enable the continued availability and ongoing development of the Apprentice Programme. The vision is to create the physical and staffing facilities to train up to ten apprentices at any one time.

## Conclusion

This position paper is not an end in itself; it is part of an ongoing process. The organisations profiled in this paper cannot eradicate anti-social behaviour within today's youth, nor guarantee them with a job in a leading aerospace firm. All of these organisations do, however, **substantially increase the prospects** for all youngsters who choose to get involved with the programmes they offer.

At a time when cutbacks are being made to many schemes that have a direct impact on all aspects of public policy, organisations such as the ones profiled above need to be championed and as such we have a few key recommendations:

## Key recommendations

**Link industry and volunteering:** Government needs to promote and help foster links between the aviation industry and the voluntary organisations associated with it. The aviation industry can only remain competitive if there is a constant supply of highly motivated young people ‘waiting in the wings’. We believe forging a closer link between industry and voluntary organisations will be an excellent way for aviation employees to use their insight and expertise to guide and develop future talent for UK industry.

**Social development and integration through volunteer organisations:** Volunteering is the perfect vehicle for not only the development of others but the social development of the volunteer too. We applaud the Government’s flagship initiative aiming to entrench a strong sense of civic responsibility within society. However, we’d like to hear more detail about how the barriers to volunteering are being broken down: bureaucracy, vetting, insurance and health and safety demands are all still very real prohibitory factors that might blight the potential impact of this progressive policy. Extension of schemes like the “BIS Festival of Learning” program directed through the organisations listed in this document, would build on proven successes in social integration and development.

**Maintain investment in aerospace R & D:** Despite the UK’s high levels of expenditure on pure science, government spending in areas such as aviation R&D has fallen behind competing nations. Whilst we are aware of the current economic climate, we urge politicians to remember that a recent Oxford Economics survey showed that Air Transport and Defence produced sector multipliers of 2.4 and 2.3 compared to 2.2 for Banking and Finance. Investment in aviation activities will ensure the UK remains at the heart of technology, innovation and highly skilled industries in an increasingly global market. In short, future Britain should be a centre of excellence for aeronautics and high-end engineering as much as working in the City.

**Encourage aviation and aerospace as part of formal education:** Further links must be created between the education system and the organisations profiled in this paper. The “grass roots” activities offered by the above organisations are clearly structured with well defined aims and objectives. More needs to be done to link activities such as learning to fly and maintain aircraft with the Science, Technology, Engineering and Mathematics subjects that are part of the ‘formal’ curriculum. Whilst the former instils a sense of self-confidence in a youngster, the latter could further entrench this by harnessing it; informing the young individual about the myriad of opportunities within aviation and the skills and experience needed to enter the industry. The role of museums, apprenticeships, recreational and sport flying should not be underestimated in their ability to inspire the young. In addition, we would like the government to carefully consider the existing VAT rules that apply to flying training, rules which are, at present, at odds with other types of professional training. Finally, we

encourage the government to further support education outreach/strategic philanthropy programmes. The benefits to the sponsor have been proven and this is something we would like the government to note when considering the provision of specialist aviation academies across the UK.

Further copies of this document can be downloaded at [www.airleague.co.uk](http://www.airleague.co.uk)

For further information or to discuss any of these items please contact The Air League via [events@airleague.co.uk](mailto:events@airleague.co.uk) who will be delighted to put you in touch with the relevant representative from the organisations listed.