

# ALL-PARTY PARLIAMENTARY GROUP ON GENERAL AVIATION (APPG GA) SCIENCE TECHNOLOGY ENGINEERING AND MATHEMATICS (STEM) JOBS & SKILLS WORKING GROUP PROGRAMME 2019-2020

The All-Party Parliamentary Group on General Aviation (APPG GA) addresses issues that can directly or indirectly contribute to the growth and success of General Aviation in the UK. This paper describes the APPG GA STEM Jobs & Skills Working Group Programme and will be amended from time to time as agreed by the Sectoral Chair in consultation with the APPG GA executive.

## CONTENTS

1. Overview
2. Key issues
3. Role
4. Governance
5. Work programme
6. Communications, Social Media and Press
7. Time Table

## 1. OVERVIEW

The STEM Jobs & Skills Working Group was established to educate Parliament and Government, carry out research and propose policy designed to further the aims of promoting high-tech science, technology, engineering and mathematics (STEM) related aviation jobs throughout the UK. The group will function as a dedicated team of experts and parliamentarians to greater inform and coordinate the action of the whole All-Party Parliamentary Group for General Aviation when representing STEM education issues to Government.

According to the respected 2018 Boeing industry forecast of personnel demand, the world will require 790,000 new civil aviation pilots, 754,000 new maintenance technicians, and 890,000 new cabin crew to fly and maintain the world aircraft fleet over the next 20 years. In the view of the STEM Jobs & Skills Working Group the UK should be an ideal location for aviation training due to several inherent advantages. For example, English is the international language of aviation and our aviation heritage means the UK has pioneered a large number of aviation firsts.

## 2. KEY ISSUES

There are a number of significant issues that need to be addressed by the STEM Jobs & Skills Working Group. These include;

### a. Lack of clear careers pathways into aviation

Barriers exist to the recruitment of STEM qualified individuals to the UK aviation industry. The national problem with STEM recruitment is compounded by a lack of awareness of the opportunities available in the aviation industry. This issue is often exacerbated by the lack of a clear pipeline to many aviation careers and the often niche requirements that some jobs in the aviation sector

require. Traditionally, some technical areas in the industry relied on recruiting skilled personnel from the armed forces. However, some organisations are concerned that this has become more difficult than it was in the past due to the reduced numbers of service personnel being recruited by the UK military. Many have also looked to recruit overseas, particularly in European countries, however with current uncertainty in this area there is a significant concern. This is coupled with an inherited lack of investment in technical courses to support pathways into the industry.

**b. Skills shortage**

The STEM Jobs & Skills Working Group has identified that in many cases the education system is not adequately training young people in the skills that are required by the aviation industry. There is concern that the current league tables focused approach has narrowed the curriculum in schools and subjects which teach traditional 'hand skills' have suffered as a result. This combined with a lack of clear pathways into the industry and underinvestment in technical education has led to significant skills gaps.

**c. Qualifications and apprenticeships**

It is clear that problems exist in the system of aviation specific qualifications available to young people. Many aviation courses are high cost but some do not provide the specific skills and qualifications required by the aviation industry. These two factors often put young people off from taking a first step into an aviation discipline. Apprenticeships too have faced difficulty in the aviation world due to a tension between the competing requirements to provide on the job training whilst maintaining a protected environment around safety critical aviation maintenance activities.

**d. Diversity**

It is well publicised that commercial aviation consistently lags behind other industries in terms of gender diversity. There is a clear need to encourage more women and those from minority backgrounds to enter the aviation industry.

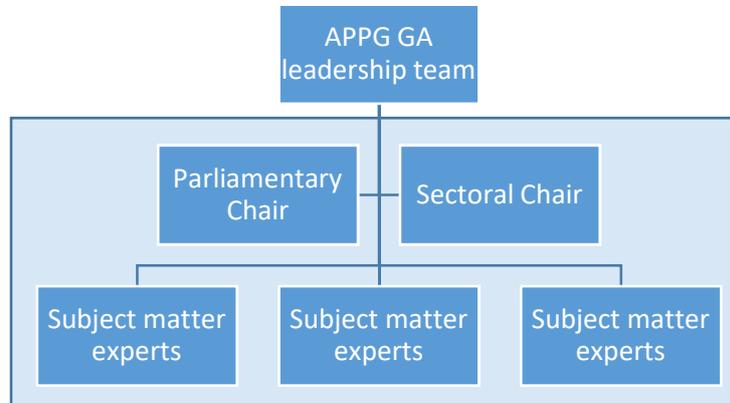
### **3. ROLE**

The STEM Jobs & Skills Working Group will identify issues that impact recruitment to the aviation industry. In doing so, the working group expects to;

- a. Consider the needs of all aspects of aviation.
- b. Liaise with all elements of the aviation industry to ensure a balanced view is delivered to Government.
- c. Ensure that the Department for Transport, Department for Education, Institute for Apprenticeships, other Government departments and Parliament are clear about the problem of STEM recruitment to the aviation industry and suggested solutions.
- d. Identify research to aid Parliament in considering issues related to STEM jobs and skills, including concerns around the recruitment pipeline for the aviation industry.

### **4. GOVERNANCE**

The STEM Jobs & Skills Working Group provides the APPG’s executive with support on matters relating to skills and recruitment to the aviation sector. The working group has a Parliamentary Chair, a Sectoral Chair and co-opted advisers who are experts on the subject matter. The Sector Chair reports to the APPG’s leadership team.



The STEM Jobs & Skills Working Group will communicate by email, phone and occasional meetings. The Sector Chair will periodically report to the leadership team as agreed from time to time. The membership of the group is outlined below.

Name	Organisation	Role
Rupa Huq MP	APPG	Parliamentary Chair
Karen Spencer	Harlow College	Sectoral Chair
Matthew Bolshaw	APPG	
Emma Booth	ADS	
Jenny Gardener	SAAB	
Air Cdre Paul Godfrey	RAF	
Tina Conacher	Air League	
Andrew Perkins	Air League	
Jo Soper	Air League	
David Stambridge	Swift Aircraft	
Stewart Luck	Youth Education Support	
Alexandra Varlyakova	London City Airport	
Jake Botham	Thomas Cook	
Rosanna Turnham	TUI	
Rachel Gardner-Poole	CAA	
John Munn	Shuttleworth Collection	
Jonny Short	Ford Aviation	

## 5. WORK PROGRAMME

During 2019 and 2020, the STEM Jobs & Skills Working Group will;

- a. Seek to identify what work has already been done by Government to assess what the current situation is with STEM recruitment and education programmes for aviation nationwide and what the future needs of the industry will be.

- b. Identify any gaps in previous projects and build on existing knowledge by consulting with the aviation industry about what its needs will be in the next 20 years.
- c. Based on this research, the group will propose solutions to create and strengthen careers and education pathways for people to enter the aviation industry.
- d. Raise awareness of the issue of STEM recruitment and education in aviation in Parliament by actively seeking meetings with Minister, asking Parliamentary Questions and tabling debates.
- e. Look at producing legislation to address the challenges identified by the aviation industry.

## 6. COMMUNICATIONS, SOCIAL MEDIA AND PRESS

The work of the group will be communicated as effectively as possible through the APPG executive. The APPG's website will reflect the importance of its work on airfields and highlight the main issues.

## 7. TIME TABLE

The work programme detailed timetable will be published as soon as it is practical to do so.