

# General Aviation Safety Promotion and Education Review Report

## Produced by Flight Operations Inspectorate (General Aviation)

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### 1 INTRODUCTION

1.1 The report of Regulatory Review of General Aviation (GA) in 2006 recommended that a review of the GA safety promotion and education programme be initiated to ensure that effort and resources were being correctly targeted. As a result, in early 2007 the Manager of the Flight Operations Inspectorate (General Aviation) Section (Mngr FOI(GA)) was tasked with establishing a group to undertake the review. It was decided that the group should consist of both CAA and industry representatives and that they should conduct their review with a blank sheet of paper with no preconceived ideas.

### 2 GROUP CONSTITUTION

2.1 Representation on the Group was:

Robb Metcalfe	CAA SRG (Mngr FOI(GA))	Chairman
John Broad	PFA (LAA from 1 Jan 08)	
Hugh Browning	BGA	
John Eagles	ALAE	
John Thorpe	GASCo	
Gordon Reid	NATS	
Geoff Weighell	BMAA	
Geoff Smith	CAA DAP	
Tony Love	CAA SRG (AWD)	
Alec Trevett	CAA SRG (ATSD)	
David Cockburn	CAA SRG (FOI(GA))	Secretary

### 3 AIM

3.1 The aim of the review is to recommend a safety promotion and education system to improve skills, knowledge and attitudes amongst the GA Community.

### 4 TERMS OF REFERENCE

4.1 The terms of reference were agreed as:

- To consider what resources are available for safety promotion in GA.
- To advise GACC how the resources may best be used to educate the GA community in safe practices.

### 5 REVIEW OF THE CURRENT SITUATION

5.1 Safety promotion and educational (SP&E) material is available in either hard copy or electronically. SP&E material is disseminated via magazines, seminars, aeronautical publications, electronic media and CAA/Industry working groups.

5.2 The Group considered that safety education does not always achieve its aim because the SP&E material is unavailable, poorly presented or difficult to access. There also appears to be a lack of co-ordination between safety initiatives, and sources of information are not always apparent. This results in “patches of ignorance” amongst the aviation community.

## **6 DELIBERATIONS**

### **6.1 Communication**

6.1.1 GA SP&E must target all Safety Critical Personnel (SCP); these include pilots, engineers, air traffic service personnel and aerodrome staff.

6.1.2 SCP appear to fit into one of four basic groups:

- The Converted. Those who are keen to absorb safety information.
- The Ignorant. Those who do not know that the information is available, or rely on out of date information but who would use it if they were aware of it and access was easy.
- The Overconfident. Those who do not think the information is relevant to them but would use it if they realised it was relevant.
- The Irresponsible. Those who are not interested and/or think they know better.

6.1.3 SP&E must target all of these groups using appropriate methods to interface with the different personality types.

6.1.4 The process must cover two levels of education; basic safety advice - covering essential information - and material to further improve the level of safety of operations.

6.1.5 Further all SP&E material should fulfil seven essential requirements. It must be:

- Authoritative
- Readily available
- Timely
- Attractive
- Concise
- Interesting
- Involving

6.1.6 Three main methods of providing SP&E are available:

- Face-to-face presentation
- Electronic media
- Hard copy material

## 6.1.7 Face-to-Face

### 6.1.7.1 Benefits

6.1.7.1.1 The message can be put directly to an audience; the smaller the audiences the more targeted and therefore relevant the information can be. Every personality type should be able to absorb the message, even the Irresponsible when the information is aimed specifically at them.

### 6.1.7.2 Disadvantages

6.1.7.2.1 Human factors are the only disadvantage of face-to-face communication, ie is the information accurate and correctly described.

### 6.1.7.3 Sources

6.1.7.3.1 Flying instructors, and examiners are the primary source of face-to-face education as are club, company or organisation safety officers. However, the contribution that can be made by experienced contemporaries must not be forgotten. Likewise, sources must ensure that the message gets to all SCP and should not limit their efforts to their own specific areas. The CAA and the GA organisations can also arrange or even provide face-to-face SP&E. Safety in aviation is a team effort.

## 6.1.8 Electronic Media

### 6.1.8.1 Benefits

6.1.8.1.1 Electronic communication has become the preferred method of information exchange for many people. Information can be presented almost immediately it has been prepared, and, if properly organised, can be accessed quickly and easily. Those who have subscribed to a service can be informed when information about any topic in which they have registered an interest is updated.

### 6.1.8.2 Disadvantages

6.1.8.2.1 Despite apparent universal use many people still do not use or are uncomfortable with electronic communication. Not all SCP have access to electronic information.

### 6.1.8.3 Sources

6.1.8.3.1 There are already vast amounts of information available from the Internet. The CAA publishes reference information on their web site, and NATS provide the AIS web site containing documents as well as NOTAMs. However, they are not the only sources. The UK Met Office, AAIB, the Airprox Board together with many other private or semi-official organisations use the Web to disseminate safety information.

6.1.8.3.2 It must also be remembered that the Internet is not the only electronic media source available. Mobile telephone technology is already in use in many industries as a method of communicating data, whilst the development of Personal Data Assistants (PDAs) and the Blackberry provide exciting opportunities.

## 6.1.9 Hard Copy

### 6.1.9.1 Benefits

6.1.9.1.1 Hard copy information will remain an essential part of any SP&E programme for the foreseeable future as many people remain resistant to IT or are unable to access electronic sources. Equally, we still all tend to prefer to pick up a hard copy magazine or document to browse in free moments rather than to switch on a computer. The removal of hard copy information, for example Safety Sense Leaflets, has most probably had a detrimental effect on GA safety. The written word

still conveys an authority the electronic one does not; printed material catches the eye and can be easily carried and accessed anywhere including in the aircraft.

#### 6.1.9.2 Disadvantages

6.1.9.2.1 Hard copy material can be slow to produce and distribute resulting in it being out of date. The writing style and the length of the material can also be off-putting to readers. Therefore, hard copy must be up to date easy to read and attractive.

#### 6.1.9.3 Sources

6.1.9.3.1 Written material can be provided from a variety of sources, for example, the CAA, aviation organisations and commercial sources, and can be presented in a number of formats.

### 6.2 Incentives

6.2.1 Whilst SP&E material can be produced and communicated, incentives may be needed to produce a change in attitudes; indeed a cultural change may be necessary to make behaving in a safe manner "cool". Achieving this will require a range of measures alongside better communication.

6.2.2 Such measures may be generically referred to as incentives, and varying forms are available.

- Advertising the consequences of failing to "buy-in" to safety messages.
- Providing positive or negative financial incentives.
- Enforcing a legal requirement to demonstrate understanding of safety messages.
- Peer pressure.

#### 6.2.3 Consequences

6.2.3.1 Safety campaigns tend to be more successful when the results of unsafe practices are displayed, even if they make people feel uncomfortable. Reminders of the consequences to others, especially families, might be more effective than just the consequences to themselves. However, care must be taken in the use of shock tactics.

#### 6.2.4 Financial

6.2.4.1 Attempts to tie insurance premiums to advanced training have been attempted but with little or no response from the insurers. Therefore, other forms of financial incentive should be investigated. Perhaps aerodromes could be persuaded to reduce landing fees to pilots holding advance qualifications, or the CAA to reduce charges to pilots similarly qualified. However, it was accepted that financial incentives are unlikely to be available on a scale to make them effective.

#### 6.2.5 Regulatory

6.2.5.1 Safety refresher training and testing could be introduced into licence renewal procedures but any alterations to the licensing requirements would involve a law change, probably having to be accepted by Europe. Therefore, any move in this direction would be a long-term measure but should not be ignored.

#### 6.2.6 Peer Pressure

6.2.6.1 Peer pressure is possibly the major factor in producing a cultural change. If we perceive that our peers look down on us because of our behaviour, many of us will change our behavioural pattern. Persuading SCP that they all have a direct responsibility to stop unsafe practices and to promote safe ones could have a major effect on safety standards.

## **6.3 GA Organisations**

6.3.1 All GA organisations should have as one of their stated primary aims, if not their main aim, the promotion of the highest safety standards and the associated education of their membership in line with this aim. The GA organisations are in a unique position to provide SP&E and to "enforce" high standards. For example the owner of a LAA permit aircraft banned from the LAA for unsafe practices/behaviour would have to spend considerably more money to obtain a CAA permit for his aircraft.

6.3.2 The GA organisations are also ideally placed to run safety evenings and training programmes.

6.3.3 It was considered that a non-regulatory safety organisation along the lines of the current GASCo was a sound idea but that it should be more proactive, taking over much of the role in face-to-face safety briefings currently undertaken by the GAI Safety FSO. This would leave the latter better placed to develop safety packages and promotional material, ensure standardisation and to undertake broader GA duties possibly reducing the need for staff increases.

6.3.4 Such a safety education and promotion organisation - possibly a reorganised GASCo - would require an appropriate constitution, defined terms of reference, and suitable funding. Currently the CAA funds GASCo to the tune of £11,000 per annum. It is envisaged that funding would still be provided for the new organisation. However, the level of CAA funding would need careful assessment and would need to keep in line with inflation. The level would almost certainly be higher than that currently received by GASCo but as the new organisation would be taking on a large part of the CAA's SP&E task this would seem reasonable.

6.3.5 The Group then considered the process whereby the agreed principles detailed above could best be achieved, and, in essence, after much debate a SP&E programme very similar to that currently in place was agreed as best practice. However, there were a number of variations that were considered beneficial. These would require a slight change to the way in which the GA organisations operate and the development of an independent GA SP&E organisation.

## **6.4 Reaching the Irresponsible**

6.4.1 Experience shows that reaching the Irresponsible will always be difficult and resource heavy; peer pressure may be the best of the few tools available to reach such people and would be cost effective as extra resources are not required. Where other methods fail the only way to educate those who refuse to be educated will be by regulation and the enforcement of the regulations through the courts.

## **7 CONCLUSIONS**

7.1 The Group concluded that a programme based on that in place but with a greater input from the GA organisations would provide the best form of SP&E and that it should use all the practical methods of communication:

### **7.1.1 Face-to-face presentations**

7.1.1.1 A programme similar to the current Safety Evening Programme should be continued but it should be devolved in great part from the CAA to the GA organisations.

7.1.1.2 GA organisations should develop safety packages, with presentations, to cover their own unique areas.

7.1.1.3 The CAA should continue to undertake a reduced Safety Evening Programme.

7.1.1.4 The CAA should continue to attend GA gatherings to provide presentations, points of contact and advice.

## 7.1.2 Electronic media

7.1.2.1 A CAA based web site should be professionally developed so that it is user friendly, attractive to use, and provides direct links to all GA appropriate sites, for example, the Airspace Safety Initiative page, the AIS site, meteorological sites, NOTAM sites, GA organisation sites. The aim should be to make the CAA site the first-call web page for all GA SCP. This would also reduce reliance on unofficial websites that can contain erroneous information.

7.1.2.2 Current web publishing should continue but with links to the aforementioned CAA GA Web Page.

7.1.2.3 GA organisations should review their own sites to ensure that the safety message is at the forefront and link to the CAA GAA Web Site.

7.1.2.4 Mobile Phone and other electronic technology should be investigated for possible future use.

## 7.1.3 Hard copy material

7.1.3.1 The CAA should reintroduce hard copy material where appropriate, for example Safety Sense Leaflets.

7.1.3.2 GASIL should revert to its original format of a monthly leaflet rather than a quarterly magazine to ensure timely notification of information.

7.1.3.3 The reintroduction of hard copy material would require a significant change in the CAA's approach to SP&E.

7.1.3.4 Hard copy SP&E must be attractive to readers, timely and not overlong.

7.2 A range of what the Group referred to generically as incentives should be developed alongside the communication programme to engender a cultural change amongst SCP, and to make safety "cool". The incentives should cover the consequences of failing to operate safely, the financial implications of safe operation, possible regulatory changes to ensure safe operations, and the employment of peer pressure to promote safety.

7.3 All the GA organisations should have safety as their primary or one of their main aims and develop programmes to promote and educate in safety matters with particular emphasis on their areas of expertise.

7.4 An independent SP&E organisation should be established - possibly based on the present GASCo - to take over a significant part of the face-to-face training currently undertaken by the CAA's safety officer. However, such a change would require additional, but relatively minor, extra total cost on the CAA. However, the increase could well be recovered in improved staff efficiencies in SRG.

## 8 RECOMMENDATIONS

8.1 It is recommended that:

8.1.1 The current SP&E activity be continued but developed to make best use of all communication methods, face-to-face, electronic and hard copy in a co-ordinated fashion.

8.1.2 Incentives to safe operation should be developed and promoted.

8.1.3 The GA organisations should have SP&E as a primary or main aim and develop initiatives and programmes for its promulgation in their unique areas of expertise.

8.1.4 An independent SP&E organisation should be established to take over a significant proportion of the CAA's Safety FSO's face-to-face presentational task.

8.1.5 A monthly hard copy GA safety leaflet should be developed or continued.

8.1.6 Hard copy versions of GA SP&E should be produced and distributed where appropriate.

8.1.7 All the safety information in hard copy should also be available electronically.

Robert Metcalfe