Report to the IGC Plenum on the FAI Commission on Airspace and Navigation Systems (CANS)

by Ian Strachan, IGC Representative to CANS, and CANS Secretary

1. Frankfurt CANS meeting. The 2009 CANS Plenary meeting was held in Frankfurt from 8-9 March. Nations represented were Austria, Canada, Finland, Germany, Spain, Sweden, UK and USA and Commissions represented were Ballooning, Gliding and Parachuting.

2. National and Commission matters of interest. The main positions and interests of the nation or organisation were presented. Some points included the following:

2.1 **Australia.** A report is in the CANS minutes on its web page www.fai.org/system/files/cans_minutes_2009.pdf. Stage 1 of the ADS-B system had become operative in 2008.

2.2 **Austria.** A PowerPoint presentation was given and is available from the CANS minutes on its web page. IGC aspects included that transponders had to be used by powered aircraft even in Category E airspace and this also applied to Motor Gliders during engine running. The EASA definition for Powered Sailplane (not Motor Glider, the FAI term) is: "an aircraft, equipped with one or more engines having, with engine(s) inoperative, the characteristics of a sailplane".

2.3 **Germany.** A PowerPoint presentation was given and is available from the CANS minutes on its web page. It was stated that a paper to Eurocontrol (from Romania) that we should oppose had suggesting flight plans for VFR flights and also pilot vetting as an anti-terrorism precaution. It was pointed out that many sport aircraft such as gliders and balloons could not file conventional flight plans because their routes were so weather-dependent. It was reported that a European Union committee was looking at the harmonisation of airspace classifications. In Germany, for a Transponder Mandatory Zone (TMZ) to be created, over 30 thousand IFR movements per year had to be shown of aircraft over a specified weight limit. Commercial Air Transport (CAT) was said to be generally taken as aircraft over 14,000 kg carrying fare-paying passengers. Finally, due to the effect of the GPS-based Flarm (Flight Alarm) system, in 2008 there had only been one mid-air glider collision in Germany, compared to 3 or 4 in earlier years.

2.4 **Sweden.** The ADS-B VDL-4 system has been installed, using money mainly from Eurocontrol (VDL-4 = VHF Data Link Mode 4, see the CANS Glossary). The numbers of Private Pilot's Licences (PPLs) were said to be declining although less costly sport aircraft such as Hang Gliders were increasing.

2.6 **UK.** The UK CAA. had pulled back from requiring Mode S transponders in all UK airspace. They were now concentrating on the establishment of Transponder Mandatory Zones (TMZ). There was also a worry that Class E airspace might be changed to Class D.
2.4 USA. Bernald Smith pointed out that in the USA, the RTCA advisory body (on which he represents FAI) carried out work before regulations were considered by Authorities such as the US FAA or ICAO. This was similar to how EUROCAE operated in Europe. On Satellite Navigation systems, he mentioned the Binary Offset Carrier (BOC) system (see the CANS Glossary) that would allow both GPS and Galileo systems to be processed on future receivers. On progress on the transition from radar-based systems to the GPS-based ADS-B in North America, testing was underway with over 400 ADS-B-equipped Commercial Air Transport aircraft from 18 airlines.

2.5 Gliding. Ian Oldaker, Bernald Smith and Ian Strachan had just attended the IGC Plenary meeting in Lausanne. Ian Strachan gave a presentation on behalf of IGC that is referenced at Annex D to the CANS minutes.

2.6 Definitions for Sporting Aircraft. EASA had its own definitions for sport aircraft such as glider and hang gliders, but ICAO had another set. The General Section (GS) of the Sporting Code had FAI's definitions for the various classes of sporting aircraft. It was suggested that these should be offered for other bodies to use.

2.7 FAI Annual Statistics. FAI made an annual request for statistics on sport flying activities. These could be used to show the large size of our movement when we are involved at National or regional level in discussions with Air Traffic Management and Regulatory Authorities. The reply-rate from FAI member nations was said to be as low as 15%, so FAI statistics on the numbers of Air Sport Persons (ASPs) and Air Vehicles were not well based, and should be improved.

2.7.1 Germany. It was reported that there are about 7500 gliders and 30,000 glider pilots, impressive figures that could be used when presenting cases for airspace freedom to Authorities.

2.7.2 UK. The numbers of the different classes of sport aircraft had been obtained from a UK CAA report on General Aviation. These showed that GA & Sport aircraft were about 96% of the total number of aircraft currently registered in the UK (table, annex to the CANS Minutes).

2.7.3 Other Nations. Numbers of air sport participants were the members of the various Associations, which should be easy to obtain. Numbers of air vehicles in the various classes including General and Sport aircraft are available from the National bodies that register such figures (including the Regulatory Authorities themselves). Some figures for Germany are referenced in an Annex to the CANS minutes.

3. CANS Policy Statement on Airspace. A resolution on Airspace had been passed by the FAI General Conference in 2006 in Chile. A CANS statement amplified the Chile statement and would be placed on the CANS web page.

3.1 Representation on Other Organisations. Bernald Smith suggested that CANS should recommend that FAI should have observer status on other organisations. These included the International Committee on GNSS (ICG), EUROCAE (the European equivalent of the US RTCA) and other Eurocontrol bodies (such as the Central European Air Traffic Services (CEATS) Coordination Group).
4. Navigation and Avionics. Ian Strachan had attended a two-day conference in London on future Air Traffic Management systems, and summarised some key points. This presentation is available on the CANS web site

4.1 London Conference. This conference was at the Royal Aeronautical Society and was called Surveillance Technology, "SurTech" for short. As well as industry, presenters were from Deutsche FlugSicherung (DFS) (Andreas Krebber), EUROCAE (David Bowen), Eurocontrol (Jean Luc Garnier, Thomas Oster, Mel Rees), European Commission (Sven Halle), FAA (Don Ward), and National Air Traffic Services (UK) (Jason Strong). Mode S radar transponders and the future transition to the GPS-based ADS-B system were comprehensively covered. A PowerPoint presentation summarising some points from the conference is on the CANS web pages.

4.1.1 Multilateration. This is where an array of relatively simple ground receiver stations is used to establish aircraft position from an number of different types of aircraft transmissions. Such transmissions could be from transponders, ADS-B or even special R/T. It appeared that Multilateration systems could be a bridge between radar transponders and the full ADS-B system of the future, and could prolong the life of radar transponders until they were eventually replaced by GNSS systems.

5. CANS Web Site. The CANS Glossary contained terms on airspace and navigation (http://www.fai.org/system/files/cans_glossary_20090413.pdf) and extracts were used during the meeting where technical definitions were useful to the subject.

6. The future. A CANS plenary is to be held 1-2 February 2010 in Frankfurt.

6.1 Status of Commission Representatives on FAI Technical Commissions. Air Sport Commission representatives on FAI technical commissions have no vote and effectively attend only as Observers. Since there are only 10 Air Sport Commissions and some 80 National FAI members, this is unfair to the Commissions, which are fundamental elements in the FAI structure. As proposed to the 2008 and 2009 IGC Plenaries, FAI By-Laws should be amended to give equal status on FAI Technical Commissions to the nominees of both ASCs and Nations. A draft amendment to By-Law 5.3.9 is at Annex A and is similar to what was sent to FAI in 2008 and 2009 but has so far failed to appear in the FAI General Conference agenda for a decision. This reflects badly on FAI procedures. It is proposed that this Annex be sent under the signature of the IGC President to the FAI Statutes Committee for action in 2010. We should insist that the matter is on the agenda of the next FAI General Conference and should not be merely set on one side as it has been over the last two years.

6.2 Increase CANS membership. Only 8 nations out of about 80 and 3 Commissions out of 10 attended the Frankfurt CANS meeting. In view of the importance of airspace to all FAI activities, this participation should be increased. It is proposed that at the Commission Presidents meetings in June and October, that increased CANS participation be raised as an agenda item.

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Annex: Proposed change to FAI By-Law 5.3.9
Dear friends

You may recall that the status of Air Sport Commission representatives on FAI Technical Commissions has been raised at the last two IGC Plenaries. This letter is a proposal for a small change to FAI By-Law 5.3.9 for decision by the next FAI General Conference.

The existing IGC ByLaw 5.3.9 says that Air Sport Commission representatives "may speak, but have no vote at such meetings". This effectively reduces them to Observer status, a position that we simply do not understand when Commissions have important roles to play across all FAI activities. In addition, it makes Commission nominees ineligible to stand for Bureau positions on Technical Commissions, which are therefore occupied exclusively by National delegates. This is particularly anomalous when there are over 80 Nations in FAI and only 10 Air Sport Commissions. The position of ASC nominees on the General Sporting Commission (CASI) is much more equitable.

The IGC position is that all nominees to FAI Technical Commissions should have equal status whether nominated by a Nation or an Air Sport Commission.

At annex is a proposal for a change to ByLaw 5.3.9. Please place this on the agenda of General Conference and for the attention the Statutes Committee so that they can consider it at their next meeting. IGC would like to be notified of the views of the Statutes Committee so that we can consider modifying our proposal if necessary.

Yours sincerely,

Bob Henderson, IGC President.    Annex: Proposal to amend ByLaw 5.3.9
Annex A to the FAI General Conference Agenda

IGC proposal to FAI to give equal status to National and Air Sport Commission nominees to FAI Technical Commissions

Background:

There are over 80 Nations in FAI but only 10 Air Sport Commissions (ASCs). The Air Sport Commissions, formed of National delegates, have a vital role to play in all FAI activities. It is therefore not understood why ASC nominees to FAI Technical Commissions have no vote, essentially having only Observer status (ByLaw 5.3.9).

However, it is noted that in the FAI General Sporting Commission (CASI), ASC nominees have equal status to those nominated by Nations.

This principle should also be followed in FAI Technical Commissions.

Proposal:

It is therefore proposed that ASC and National nominees to FAI Technical Commissions should have equal status to those nominated by Nations. A small change to ByLaw 5.3.9 is proposed below.

Existing ByLaw 5.3.9 : "Each Air Sport Commission may nominate a representative to attend meetings and to receive papers of each of the Technical Commissions. Such representatives may speak, but have no vote at such meetings."

Change 5.3.9 to : "An Air Sport Commission may nominate a delegate to a Technical Commission. Such delegates shall have the same status and voting powers as National delegates."

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