

To: Recipients of IGC Agenda  
From: Chairman IGC GNSS Flight Recorder Approval Committee (GFAC)

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

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

*Because this Commission is new, and airspace affects us all, this report is particularly comprehensive. Feedback is invited so that a future reporting pattern can be agreed*

1. Formalisation of CANS – IGC proposal. On 4 October 2008, the FAI General Conference in Italy, passed an addition to FAI Statutes formalising the existence of the FAI Commission on Airspace and Navigation Systems (CANS). This was based on a proposal from IGC that was placed on the 2007 General Conference agenda and passed unanimously. A preliminary CANS meeting in Paris on 19 March 2008, chaired by FAI President Pierre Portman, was held to draw up the Terms of Reference for CANS that were put forward to the 2008 FAI General Conference and confirmed.
2. Frankfurt CANS meeting. The first CANS Plenary meeting after the Commission was formalised was held in Frankfurt from 6-7 October 2008, immediately after the FAI General Conference in Italy. Ten National Delegates and three Air Sport Commission representatives were present. These were, in alphabetical order of nation, Canada (Ian Grant), Croatia (Zlatco Vukecivic), Finland (Hannu Halonen), France (Alternate Delegate Aurélie Boudier), Germany (Günter Bertram), Norway (Lars Øynu), Spain (Gabriel Gomila), Sweden (Lars Holmström), UK (Alternate Delegate Ian Strachan), USA (Bernald Smith). A proxy vote for Denmark was given to Finland. Commission representatives were Ballooning (Mathijs de Bruijn), Gliding (Ian Strachan, alternate Representative Bernald Smith) and Parachuting (Graeme Windsor). The FAI Secretariat member responsible for CANS is Rob Hughes, who attended the meeting.
3. CANS Bureau. After each member had given a short CV, voting took place for the Commission Bureau. Alternate Delegates were not eligible for the President and Vice Presidential positions because they do not have Delegate status even in the absence of the nominated Delegate (this applied to Aurélie Boudier and Ian Strachan). Ian Strachan also represented IGC, but Commission representatives are effectively Observers at Technical Commission meetings and have no vote. This clearly is not fair to Commissions, and IGC President Henderson proposed to the General Conference in Italy that this be changed in 2009, see later in para 10. After a vote, Lars Holmström was elected as President in a run-off with Bernald Smith. Under FAI rules, there can be any number of VPs, but only Hannu Halonen stood as a VP and was elected. Ian Strachan stood as Secretary and was elected.
4. National and Commission matters of interest. Each member stated the main positions and interests of the nation or organisation represented. Some points included the following, nations first and then commissions:

Canada. The Regulatory Authority Nav Canada had expanded controlled airspace round regional airports. This was class D airspace but controllers were said to treat it like class C. There was pressure to fit transponders in sport aircraft such as gliders, quoting the Glider/Bizjet collision near Reno and a GA/GA collision near Toronto (in which transponders were said not to have helped).

Croatia. Large areas of controlled airspace were near to the few numbers of big airfields. Many gliders, hang gliders and para gliders operated in country with mountains and valleys, difficult areas for radar.

Finland. Air Traffic was not as dense as in other countries, but there was much Class D airspace and a view that all IFR flight should be in D or higher. There were no Mode S facilities.

France. Complaints from city dwellers had been made, even about small planes, for a combination of noise and hazard in the event of engine failure.

Germany. Günter Bertram was employed by the Deutsche Aero Club and specialised in airspace matters. A position paper on the use of airspace was presented and was also on the web. Before a CTR could be established, 30,000 annual aircraft movements had to be shown. An annual review of airspace took place with regulators, airlines and other operators, and the DAeC was included in this review. It was said that in Germany there were some 30,000 hang- and para-glider pilots and a similar number of glider pilots. In terms of other organisations, AOPA was said not to be interested in sport aviation.

Norway. Traditionally Norway has had a very good airspace situation, but this was said to be changing. There was a view that all airports to which IFR flights could take place should have Controlled AirSpace (CAS), and that all IFR flights should be in CAS. Presently, sport aircraft such as gliders did not have to have transponders.

Spain. Service provider ENA was said not to understand light aviation. For instance, the Madrid TMA had been expanded without consultation and glider sites had been severely affected. Mode S was not an issue because ATC did not have it.

Sweden. No more air traffic radars would be built and Mode S would not be used. ADS-B VDL4 (see annex C) with 12 ground stations was in use and cover at low levels was said to be good.

UK. The UK Director of Airspace Policy had attempted to impose Mode S transponders on all aircraft in all UK airspace, irrespective of traffic density. This had been strongly resisted by the UK Royal Aero Club and its Associations. The proposals had been toned down. A PowerPoint presentation is at Annex A.

USA. The ADS-B programme was said to have started 12 years ago and the FAA is now proceeding, having published a NRPM for the future use of ADS-B (FAA NPRM 7-1 issued on 1 October 1 2007, copied on the FAI CANS web page). Criticisms of the NRPM were mainly that the timescale for the transition to ADS-B (to be achieved by 2020) was too long.

Ballooning. Problems were encountered with airspace and areas in which transponders were required.

Gliding. A PowerPoint presentation, agreed before with President Henderson, is at Annex B.

Parachuting/Australia. In terms of jumping through cloud, in some countries this was legal, in others it was not. Graeme Windsor is an Australian and noted that ADS-B ground stations were now operational in Australia. A recent Australian paper had indicated that 33 relatively simple ADS-B ground stations could replace some 451 existing beacons and VORs.

5. Publicity for CANS. It was agreed to publicise CANS to all of the 80 or so National members of FAI and to the 10 Air Sport Commissions, with a view to attracting more delegates and more information on airspace and navigation matters. The CANS Bureau drafted a "sales pitch" that was circulated to existing CANS members and in its final form was sent to all FAI Nations and Air Sport Commissions in January 2009.

6. Radar Systems. Primary radar used skin tracking and would continue in many areas. Secondary radar (SSR) was different and in the long term would probably be replaced by SatNav-based systems such as ADS-B. Mode S was only required in some countries and then only near busy airports. As reported above, in the UK there had been an attempt by the UK Director of Airspace Policy (DAP) to require it in all airspace and for all vehicles flying in this airspace. The UK DAP proposals had now been reduced in scope and concentrated on the establishment of Transponder Mandatory Zones (TMZ) which were also used in other countries such as Germany. It was pointed out that, until the older Mode A-C systems were phased out, the many extra facilities of Mode S would not be fully available. Also that radar-based collision avoidance systems such as TCAS were designed for a one-

on-one airliner encounter and not for encountering clusters of sport aircraft such as gaggles of gliders, even if they were all equipped with transponders.

7. SatNav systems. The increased accuracy of SatNav systems such as the US GPS over any radar-based system, was noted. The hope was that such systems would allow decreased separation for Commercial Air Traffic (CAT) and more flexible Air Traffic Management (ATM). Lars Holmström presented (Annex C) on the ADS-B Very High Data Link (VDL-4) system. Bernald Smith said that VDL-4 had been rejected by the USA which was going to use 1090 MHz Extended Squitter (1090ES) and 948MHz Universal Access Transceiver (UAT) (details of these systems are in the CANS Glossary at Annex E). Ian Strachan presented on the work of the IGC GFA Committee (Annex D).

8. Finance. FAI Technical Commissions had no source of their own money, but projects could be funded with the agreement of the FAI Executive Board. It was decided to apply for US\$450 per year for FAI membership of the US RTCA organisation and Bernald Smith would investigate the position on EUROCAE (see the CANS Glossary at Annex E for details of these bodies).

9. Next Meeting. The next CANS Plenum was originally scheduled to be held in Frankfurt 8-9 March 2009. However, as this report is written the CANS Bureau has proposed that this should be postponed until mid-September. This is due to a lack of new material for a March meeting since the Plenum in October 2008. Mid-September is three weeks before the 2009 FAI General Conference and will allow the CANS report to have the latest information. It will also allow the opportunity for more Nations and Commissions to be involved and more opinions to be expressed.

#### 10. Further actions.

10.1 Status of Commission Representatives on FAI Technical Commissions. As mentioned in para 3, 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 I proposed to the 2008 IGC Plenary, 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 F and is similar to what was sent to FAI in 2008 but was not on the General Conference agenda. It is proposed that this, or an improved version, be put on the agenda for the next FAI General Conference.

10.2 Increase CANS membership. Only 10 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. The CANS Bureau has prepared a letter to be sent to all FAI Nations and Commissions in an attempt to increase representation at CANS. In addition, it is proposed that at the Commission Presidents meetings in June and October, that increased CANS participation be raised as an agenda item. In addition, the matter of Commission status on technical commissions (para 10.1 above) should also be raised and support gained.

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Annexes:   A. Airspace and Mode S in the UK  
              B. IGC presentation  
              C. ADS-B VDL-4 presentation  
              D. IGC GFA Committee presentation  
              E. CANS Glossary  
              F. Proposed change to FAI By-Law 5.3.9