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

Reference A: Minutes of the CANS Plenary meeting 25-26 April 2012 (available on the FAI web pages)

1. CANS Plenary 2012.

1.1 Venue. The original intention was to hold the CANS Plenary immediately after the 2012 Europe Air Sports (EAS) meeting and at the same venue, in the hope that some delegates would attend both meetings. However, the EAS location was changed several times, from Dubrovnik to Frankfurt and finally to Cologne. Because of these changes, the CANS President decided that the 2012 CANS Plenary would be at FAI Headquarters in Lausanne 25-26 April 2012.

1.2 Attendance. Attendance was low, with only five delegates compared to 14 at the previous CANS Plenary. Bernald Smith attended for the USA and Ian Strachan for IGC. EB members Beat Neuenschwander and Otto Lagarhus also attended. These low numbers were disappointing but it has to be borne in mind that a discussion paper presented to the 2011 FAI General Conference by Executive Board (EB) member Neuenschwander had proposed that the work of all FAI Technical Commissions be transferred to a new structure of "Expert Groups". The paper also suggested that the functions of the General Sporting Commission (CASI) be transferred to the Commission Presidents Group.

1.3 Expert Groups. Executive Board member Neuenschwander presented on the concept of Expert Groups (EGs) which were intended to cover several subject areas of interest to FAI. These included those of CANS, which was to be replaced by two EGs, one for Airspace and the other for Navigation. Guidelines for EGs had been produced (Annex A) and were attached to the CANS minutes. The following comments were made:

1.3.1 Terms of Reference. The final version of Annex A should be added to the FAI Constitution (Statutes and By-Laws) so that it would be clear how EGs were to operate and that they would be within the FAI Constitution.

1.3.2 Airspace and Navigation subject areas. It was suggested that it was difficult to separate these two subjects because future volumes of airspace and aircraft separation depended on the accuracy of systems such as radar transponders and improvements in accuracy with GPS-based ADS-B.

1.3.3 FAI Executive Board involvement. Annex A proposes that EGs should be given tasks by the FAI Executive Board or FAI Office and should report to these bodies. However, it was pointed out that much useful activity by the present Technical Commissions took place without the involvement of these bodies.

1.4 Airspace. The airspace position was discussed and minutted (Reference A) for the following areas: Belgium, Denmark, Europe generally, Germany, Italy, Norway, Sweden, UK and USA. Some trends included increases in Controlled Airspace (CAS) at regional airports, the establishment of Radio Mandatory Zones (RMZ) and Transponder Mandatory Zones (TMZ), and the operation of Unmanned Air Vehicles (UAVs). The NextGen programme in the USA is well underway with over 700 ADS-B ground stations to be installed by the end of 2013. GPS-based ADS-B was to be mandatory for flight in North American CAS after 2020. The equivalent in Europe is the Single European Sky Advanced Research programme (SESAR) which includes Functional Airspace Blocks (FAB) for Air Traffic Management (ATM) across National boundaries.

1.5 Navigation and Avionics. The Italian delegate said that he was currently flying an Airbus equipped with ADS-B-Out on transatlantic routes. The European programme under SESAR was not as well documented as NextGen in the USA but an article in Aviation Week magazine gave January 2015 for the fit of ADS-B-Out to new Commercial Air Transport (CAT) aircraft in Europe.

1.5.1 Radio. The introduction of 8.33KHz spacing will involve major expense because new radios will be required. It was said that 8.33 KHz spacing was likely to become mandatory in Europe in 2018.

1.5.2 Low Power ADS-B for GA and Sport Aircraft. There are several projects for low-power low-cost ADS-B systems that would be suited to the Sport Aviation sector. For instance, the UK National Air Traffic Services (NATS) has a project for a Low Power ADS-B Transceiver (LPAT) which includes a battery-powered version. In the USA, a battery-powered ADS-B device is being tested under a
Memorandum of Understanding between the FAA and the Soaring Society of America (SSA). In addition, a recent draft FAA Technical Standard Order (TSO-C199) is for Low Power Surveillance Equipment (LPSE) and includes transponders, ADS-B-In and ADS-B-Out. The Flarm company is producing the more comprehensive PowerFlarm which as well as the well-known Flarm proximity warning function, allows for transponders and ADS-B. More detail on low-cost systems is in the CANS minutes.

1.6 ICAO. More liaison with (and monitoring of) ICAO was needed because ICAO recommendations to Authorities such as the FAA and EASA were crucial and often made little allowance for the many GA and Sport aircraft that operate mainly in non-regulated airspace.

1.7 CANS future. It was said to be an Executive Board decision to convert the CANS Technical Commission into two Expert Groups. However, it was pointed out that CANS (also CASI and the other Technical Commissions) still exist until FAI Statutes are changed by vote at an FAI General Conference.

2. FAI General Conference October 2012. No changes were proposed in the structure of the General Sporting Commission (CASI) or the FAI Technical Commissions except for CANS, this being the only existing FAI body proposed for change. It was therefore expected that Terms of Reference for Expert Groups would be produced in the form of additions to FAI Statutes and By-Laws (para 1.3.1 refers) and voted in the normal way. However, this was not done and a proposal to fill this gap is at Annex B. Meanwhile, at the end of the Conference the references to CANS in the FAI Constitution were removed. There are now no Terms of Reference in the FAI Constitution for members serving FAI in the Airspace and Navigation area. In my capacity as CANS Secretary I complained about this and also said to Conference that I had several reservations on the paper at Annex A that had been produced at the last CANS plenary. The paper limits Group members to 10, puts detailed control of all Groups in the hands of the Executive Board or the FAI Office (who may not have the time or expertise to exercise it), and does not allow initiatives by Groups and their members to help the interests of sport aviation without going to the EB or Office first. Finally, it was an IGC paper that created the Commission on Airspace and Navigation systems, so it is appropriate that we should put forward a proposal (annex B) to formalise the new Expert Groups which now include the Airspace and Navigation area previously covered by CANS.

Ian Strachan
IGC Representative to CANS
ian@ukiws.demon.co.uk


B. Proposed additions to FAI Statutes and By-Laws, introducing Expert Groups

This paper was presented to the FAI Technical Commission on Airspace and Navigation Systems (CANS) at their Plenary Meeting 25-26 April 2012, and published as Annex A to the CANS minutes.

1. Criteria for experts
- Persons out of FAI members, with expertise in specific areas and available to work on tasks in an honorary capacity
- No need to be a Delegate from a NAC or ASC

2. Nomination of experts
- Candidates are nominated by NACs, ASCs, or the FAI Office
- Experts are then appointed by the FAI Executive Board (EB), on recommendation made by the FAI Secretary General among nominated candidates
- If a representation of the FAI is needed in international organizations, the FAI EB will appoint experts from the groups as observers to specific organizations
- All names and contacts details (including e-mail addresses and telephone numbers) are gathered in a data list

3. Composition of expert groups
- Minimum 5 - maximum 10 experts per group
- 1 person designated as Coordinator / Point of Contact (PoC) to coordinate with the FAI Office

4. Status of experts
- Do not take decisions and do not send official letters unless instructed by the FAI EB / Office
- Do not have any special statutory rights (no rights to elect or vote)
- If needed and on request, receive a FAI business card, e.g. "FAI Expert Airspace" if they are in connection with an external third party (eg ICAO, etc…)
- At least one expert per group is invited (registration fee paid by the FAI) to attend the General Conference

5. Assignment process and tasks to the expert group
- Expert Groups are on stand-by and assignments are only carried out „on demand“
  - The group, via its PoC, is being allocated a task and a related deadline by the FAI Office
  - The PoC designates the experts to be involved - based on their expertise and qualifications
  - The PoC requests the cooperation of the chosen experts, with the help of the existing data list
  - The PoC is responsible for a timely reply to the FAI Office
  - The following tasks can be requested by the FAI Office or the EB:
    Examples: Analysis, Proposition of adequate solutions, Studies, Concepts of appropriate measures, Draft letters, etc
    - If needed, experts may directly contact other specialists, e.g. from FAI commissions etc.
    - The findings of the expert groups are being directly passed on to the FAI Office by the PoC

This scheme shows that:
1. A need for technical expertise may come to the FAI EB / FAI Office from external or internal sources
2. Once a need for expertise has been identified, the EB/FAI Office will assign a task to the appropriate EG/PoC
3. The PoC of the EG tasked by the FAI EB / FAI Office will directly report results to the FAI EB / FAI Office
4. The EB/FAI Office will then use the results formulated by the EG to address the request / need identified at the beginning of the process

Note: Considering that members of the EG are experts in their fields of expertise and are therefore exercising a technical watch, they are of course encouraged to report, through their PoC, on any significant development that might affect the practice / development of our sports.
Annex B - Proposed Terms of Reference for FAI Expert Groups - January 2013

The Terms of Reference for Expert Groups should be part of the FAI Constitution in the same way as other FAI bodies. This draft is less restrictive and gives more flexibility than that in Annex A.

New Statute 5.4.3. Expert Groups. Expert Groups are permanent FAI Working Groups on specific subjects. Subject areas are Airspace, Airworthiness, Flight Safety, Information Technology, Navigation Systems, and Regulation. Their structure and operation is similar to, but more flexible than, that which applies to FAI Technical Commissions. Other subject areas may be added by the EB on a temporary basis for later confirmation by amendment of this paragraph.

5.4.3.1 General. An FAI Expert Group shall monitor its subject area in the best interests of FAI, its Commissions and NACs, and worldwide Sport Aviation.

5.4.3.2 Membership. FAI Commissions and NACs may nominate one member to each Expert Group, with an alternate who can act if the member is not available. Other experts with particular expertise in the subject area may be co-opted if agreed by a majority of Group members. The Executive Board (EB) may also nominate a Group member. The names and contact details of members and other experts will be published by FAI in the same way as for Air Sport and Technical Commissions.

5.4.3.3 Structure and Working Method. A Chairman shall be elected by a majority of Group Members, to coordinate the proceedings of the Group and to liaise inside and outside FAI as required. A Group will normally correspond by email (including taking votes where required, based on a simple majority) and may also meet for face-to-face discussion of important issues. The Chairman will decide on a convenient meeting place, which need not be at the location of FAI but should have convenient access for those attending, such as being close to a "hub" airport. A Secretary may be nominated by the Chairman or elected by a majority of members, to draft agendas, minutes and reports before finalization by the Group. Members and other experts may correspond within and outside FAI on the subject matter of the Group, under the guidance of the Group Chairman.

5.4.3.4 Reports and Proposals. When a matter of significance to FAI or Sport Aviation generally, arises within its area of expertise, a Group shall make a report to the EB, FAI Office, Commissions, NACS and other Expert Groups, as appropriate. A Group may also be allocated specific tasks by the FAI EB, the FAI Office or the FAI General Conference. Group reports may include specific proposals, including suggested changes to FAI Documents. In addition, each Expert Group shall make a written report for the agenda of the FAI General Conference, and make a short presentation to Conference in the same way as for Air Sport and Technical Commissions. Each Expert Group is to have a web page explaining its functions and containing a list of members and other material relevant to its specialist area that could be useful to FAI members.

New By-Law 3.5.2 Expert Groups. Expert Groups are permanent FAI Working Groups on specific subjects. Subject areas are Airspace, Airworthiness, Flight Safety, Information Technology, Navigation, and Regulation. Their structure and operation is similar to, but more flexible than, FAI Technical Commissions, and is given in FAI Statute 5.4.3. More detail on FAI Expert Groups may be added to this By-Law under the normal procedures for changing By-Laws.