23Feb15

TO: IGC Delegates/Bureau
CC: ANDS Committee, GFAC
SUBJ: ANDS and other annual reports on RTCA, EnvCom & ICG
FROM: Bernald S. Smith
FAI & SSA RTCA representative
FAI Navigation Expert
OSTIV TSP member
UNOOSA's ICG FAI representative
emeritus NAA & IGC FAI EnvCom delegate/VP
emeritus FAI's IGC ANDS Chairman

Acronyms in Appendix II

ACTION ITEM - Current GFAC members and the expiry dates of their 3-year terms of office are Ian Strachan (UK-IGC meeting of 2017), Angel Casado (Spain-IGC meeting of 2017), Tim Shirley (Australia-IGC meeting of 2015), Hans Trautenberg (Germany IGC meeting of 2015) and Marc Ramsey (USA-IGC meeting of 2016). Nominations by ANDS will be presented at your meeting for your consideration for election to fill the expiring terms.

RTCA - As usual, we continue with SC-186 (ADS-B), SC159 (GPS), SC228 (UASs & UAVs) and to a very much lesser extent with other SCs. Many RTCA meetings include intensive EUROCAE participation. ION and CGSIC continue to be meetings attended because of their pertinence to GNSS with one of each in Tampa, FL - USA, which I attended last fall.

What's happening with GPS, ADS-B and UAS? For some comment on the latter see Appendix I. Rulemaking and RTCA work on them all is hot and heavy. For limited access to documents etc. with extensive details about the work, contact this writer.

As of February 2015, the GPS constellation consisted of 32 Block II/IIA/IIR/IIR-M satellites. There are 28 GLONASS satellites in orbit. 24 are operational so it is fully operational. BeiDou is only regionally operational. QZSS is initially operational. Galileo remains a long way from being initially operational.

UNOOSA ICG - I attended the UNOOSA's ICG meeting in Prague, Czech Republic 9-14Nov14, as FAI's representative. I hope to encourage an FAI office staff member to accompany me to the next meeting this fall in Boulder, CO - USA. Issues are the usual: proliferating number of satellite positioning systems and their hopeful compatibility (lack of interference with each other), and interchangeability & interoperability with each other. Increased attention is being given to the coming of UAS/UAV to navigable airspace without "in place" regulatory procedures.

FAI ENVIRONMENTAL COMMISSION - As Vice President of the FAI's EnvCom, I attended as NAA/IGC delegate/representative the EnvCom meeting at the Aeroclub de France in Paris on Saturday 14Feb15. Attendees included both the FAI's Secretary-General and the Members/Services Manager and delegates from Sweden, UK, Italy, the USA & IGC (me), France, Russia, Germany and a rep from Hungary.

Pierre Duval (France) and Diana King (UK) were respectively re-elected as President and Secretary. Russia's Sergey Ananov was elected VP. As previously announced, I retired from the FAI EnvCom effective the end of the meeting.

Of the 4 received, the nomination from Russia for an individual for the FAI's Angelo D'Arrigo diploma was approved.

Hungary presented a very interesting proposal (Green Airport Event) for putting into practice the commitment of the FAI Commissions towards environmental protection. It was accepted and will be presented to the ASCs and ExBd for consideration and adoption.

Piston Aviation Fuels Initiative (PAFI) lives! Getting the lead out of fuel is its objective. Smith reported that the FAA has selected four fuels; one each from Shell and TOTAL, and two from Swift Fuels. They will start with ground testing before proceeding with actual flight tests.

s/Bernald

- end of report -

APPENDIX I -- UAVs and the UASs

The paragraph below* represents the position I have taken with RTCA SC228 and the FAA folks thereon re UAS/UAVs. We do recognize that the potential of unlimited flight of UAVs below 400' poses a significant threat because many airsport folks, including modelers, are involved in utilizing that airspace. A 55lb (or kg) limit does not seem to take into account that such weight could not only bring down a glider; 20lbs striking the horizontal stabilizer brought down a UAL Viscount about 50 years ago.

If UAVs cannot "see and avoid", they essentially pose a much higher risk to the aviating public than wildlife which while not having to bother with the FARs, can and does practice "see and avoid".

There is also concern about how the FAA plans to handle any enforcement issues with UAVs. What training will be required of UAV operators; e.g, will they be required to pass the private pilot FAA written exam? Will there be a new exam for UAV operators that requires a demonstrated knowledge of Part 91.

Non-commercial/commercial/hobbyist is an area of word definition adding to the complexity of dealing with this matter. We have to be aware of our airsport Clubs and FBOs.

*
In the USA, in all airspace AGL below 60K', in VMC conditions, whether on an IFR flight plan or VFR flight, the pilot is required to look out to assure separation from other users of airspace. SSA has always concurred with this and believes it must continue to apply to all, including new, airspace users. Classes E and G airspace are vital to the operation of gliders such that any users of such airspace must have the same lookout capability that the pilots of gliders do as stated above.

Appendix II
ACRONYMS & DEFINITIONS
(a modest list)

ADS-B	- Automatic Dependent Surveillance - Broadcast
ANDS	- Airspace, Navigation & Display Systems.
BeiDou	- Chinese satellite system
CANS	- Commission on Airspace and Navigation Systems (defunct)
CGSIC	- Civil GNSS Service Interface Committee
EASA	- European Aviation Safety Agency
EGU	- European Gliding Union
EnvCom	- FAI's Environmental Commission
EUROCAE	- European Organization for Civil Aviation Equipment
FAA	- Federal Aviation Administration
FAI	- Federation Aeronautique Internationale
Galileo	- European Satellite Positioning System
GFAC	- GNSS Flight Recorder Approval Committee
GLONASS	- Global Orbiting Navigation Satellite System (Russia)
GNSS	- Global Navigation Satellite System
GPS	- Global Positioning System (USA)
ICG	- International Committee on GNSS (United Nations)
IGC	- International Gliding Commission
ION	- Institute of Navigation
NAA	- National Aeronautic Association
NEG	- Navigation Expert Group
OSTIV	- Organization Scientifique et Technique Internationale du Val a Voile
QZSS	- Quasi-Zenith Satellite System (Japan)
RTCA	- no separate meaning, a private non-profit corporation addressing aviation requirements and technical concepts to advance the art and science of aviation and aviation electronic systems for the benefit of the public, with nearly 300 volunteer organizations, more than 25% of which are non-US, from the entire worldwide aviation community, functioning as a Federal Advisory Committee, to develop consensus-based recommendations on contemporary aviation issues, whose documents are most often used as the basis of government-issued TSOs
SC	- Special Committee
SSA	- Soaring Society of America
SSF	- Soaring Safety Foundation
UAS	- Unmanned Aircraft System
UAV	- Unmanned Aerial Vehicle
UNOOSA	- United Nations Office for Outer Space Affairs