



EUROPEAN GLIDING UNION

Representative Organisation of European Glider Pilots

FIRST CONFERENCE OF THE EGU AIRSPACE GROUP
Saturday 2005-10-29, Sportschule, Niederrad

Attendants EGU Airspace Group: Günter Bertram (GB/ DE), Emil Blumer (EB/CH), Robert Danewid (RD/SE), Francois van Haaff (FvH, chairman), Mogens Hansen (MH/DK), Ben van der Klein (BvdK/NL), Jouni Laukkanen (JL/FI), Lars Oyno (LO/NO), Nicolas Vaunois (NV/FR), Carr Withall (CW/GB).

Apologies: Luc Beerts (BE), Aldo Cernezzi (IT), Vladimir Foltin (SK).

Attendants EGU Executive Board: Emil Blumer, Matthias Borgmeier, Francois van Haaff, Patrick Pauwels.

Apologies: Jannes Neumann, David Roberts, Roland Stuck.

Apology: Peter Eriksen, former president EGU.

The facilities at the Sportschule and the lodging at the Ibis hotel in Kelsterbach were arranged by Matthias Borgmeier.

Because a complete report of the exchange of information and the ensuing discussions would be far too long to describe, a short report per subject will be given here. The representatives are encouraged to contact each other for detailed information when required.

General

The following general remarks apply to all issues, discussed during the meeting.

- What is the meaning of the S in ATS really? This S means SERVICE, for all airspace users.
- An * indicates that details are given in an annex.
- Many subjects dealt with here have a mutual relationship, like transponders and R/T.
- Time and again politics and money came up as background sources of problems.
- Short, medium and long term problems must be distinguished. Typical example: FLARM, transponders and ADS-B.
- Similarly 'hard' solutions must not solve 'soft' (organisational, disciplinary) problems.
- Is gliding dangerous? The meeting agrees that gliding, like any sport, is not without a certain risk, but that this risk is more than acceptable. All risks can never be covered anyway. Where can one find applicable figures for risk calculations? Action: all

ACAS.

ACAS is a stand alone, last resort protection system, but via ICAO Annex 6 it has an important impact in so far that non-transponder traffic is supposed to be separated from ACAS traffic.

ADS-B

The French gliding federation FFVV intends to organise a forum on future systems, especially ADS-B. FvH thinks that this is a good idea, but he warns for the complexity of the details of ADS-B, like the various link systems, the relationship with VHF radio, ACAS and Extended Squitter.

EGU Airspace Data Base.

The meeting was not enthusiastic about the idea of an EGU Airspace Data Base. In France talks are going on about help from official channels, in Germany also help is sought from the authorities. Important points are the cost, accuracy and liability. The Open Air format is recognised as one of the possibilities.

The meeting concludes that the EGU should make contact with the makers of See You and WinPilot and offer help. Action: FvH

FLARM

EB gives a summary of the properties of FLARM. In short FLARM is relatively cheap, it has a low power consumption and its use has been proven. EB has more than 150 h experience with FLARM. More than 3000 units have been delivered and 90 % of the Swiss glider fleet has now been equipped. The new LX 7007 will incorporate FLARM. Voice warnings are possible via a PDA or a separate voice box. A formal problem remains the Short Range Device (SRD) transmission system that is not destined for aviation purposes, although the low power level will probably not create any problems. The Swiss authorities have approved this aviation use of SRD because of the importance of safety. This can possibly be used as a good precedent in other countries.

FLARM can best be seen as separate from transponders. It is available now. One life saved will already make it more than worthwhile. The software will be updated every year.

ICAO Airspace Classification

-- The EGU has requested Europe Air Sports to ask the FAI to ask ICAO to consider an abolishment of the ICAO requirement for traffic information VFR-VFR, because this has been used by controllers to refuse entry clearances into Class D airspace, because of the work load involved. PE has forwarded the request to Eurocontrol.

-- Is VFR flight in Class E acceptable? That depends on the density of the IFR traffic. What is an acceptable risk (probability times severity of consequences) level? 10⁻⁶? Also see TMZ and the Criteria Catalogue "The present airspace situation".

-- France intends to introduce Class E+ as a form of TMZ.

Papers.

-- The paper "What's on in the Air?" by FvH was discussed, approved and considered useful as a preparation for this kind of meetings, where basic information should not be re-discussed.

-- See <http://www.daec.de/downloadfiles/aul/positionpaper.pdf> for a description of the German Criteria Catalogue.

Present airspace situation.

-- NV presented an overview of the very complex situation in France. The airspace problems have increased in FR after the mid-air over Pic St Loup in 1998 and Quiberon in 1999. The Bureau Enquête Accidents has recommended that areas with "significant public air transport" shall be Class D as a minimum. The result is that all CTR's are Class D, even when there are only a few IFR flights per day. The fact that insurance companies of the Low Cost Carriers seems to require that LCC flights are fully controlled. A form for protesting against this is on the FFVV website.

Problematic is the general trend to isolate VFR traffic, to increase the amount of controlled airspace and to decrease the amount of Class E airspace.

-- Who pays ATC? The airports or the carrier? Must a difference be made between TWR/APP function and en-route functions?

-- EB reported on the problems, caused in the Zürich TMA, by the relatively poor climb performance of the A 340. Several gliding clubs in the north-west of Switzerland are now severely hampered. In the meantime the Swiss Gliding Federation has addressed a position paper on AIC 008/2005 to the Swiss Civil Aviation Authority. A basic point is the climb rates, which are used in a too conservative way. We clearly need an airspace design specialist. Action: FvH

-- Is VFR acceptable for commercial traffic at all? It seems that commercial pilots have said to sports pilots: "I cannot see you". See ACAS and Class E above.

-- GB presented the German Criteria Catalogue for a well defined classification of the (German) airspace, made up in good co-operation between the German authorities and the German Aero Club (DAeC). Parameters: incidents, IFR movements, traffic composition, concentration of traffic. Important topic: the Transponder Mandatory Zone (TMZ), which works well in several places already, as a good compromise between Class D and Class E.*

-- The principle of Flexible Use of Airspace is being introduced, but by far not enough yet. The military could do much better here, but we must remember that the air forces are our friends in so far that they

want to keep flying VFR as well. The Royal Netherlands' Air Force has published a report that proves that VFR flight still is possible on condition that special looking methods are applied.

-- In Sweden sectors can be opened by telephone, per day. Their status is monitored via ATIS. Some sectors give access to Class G airspace. In Denmark the same system exists, with requests via R/T. In Finland ultra-light pilots should improve their R/T to keep up the image of the VFR pilot.

-- The meeting agreed that all air sports together should show the need for, and the feasibility of, maintaining the principle of VFR flight.

-- In France a few times airspace has been reserved for a gliding competition, excluding other VFR flight. Such misunderstandings must be prevented.

-- Discipline is important. It is beautifully demonstrated by accumulated OLC recordings.

Radio and R/T

-- 8.33 kHz is being planned below FL 195. However GB has indications that TWR, GND, APP, AFIS and VOLMET will remain in 25 kHz.

-- In principle two 8.33 kHz sets are required above FL 195, but, because of the special conditions for VFR flight above FL 195, it should be possible to agree on national arrangements. In the UK about 80 flights are made above FL 195, in Sweden about 20, in Slovakia about 15. We should not make too much of a point of 8.33 above FL 195, because of the importance of 25 kHz below that level.

-- We should not be afraid to accept R/T licences if these are required to fly in controlled airspace, but it was recognised that R/T is an extra load for the pilots, especially when they fly single seaters..

-- Radio contact may not be necessary to fly in controlled airspace if arrangements for special sectors are made per telephone per day. This is done in Sweden, but it was recognised that Sweden is a big country, where such an arrangement may be easier to make than in the Core Area of Europe.

-- The Bale area is controlled by France, so ATC there speaks English and French. However the local language on ground is German. The Swiss Gliding Federation therefore recommends its glider pilots only to use English R/T there.

-- Is a simplified phraseology for VFR desirable? Some countries have a simplified R/T examination, valid for VFR flying only.

-- FvH will make a draft questionnaire on the airspace situation in the EGU member states.

-- GB and FvH don't agree on precise prices of 8.33 radios, but according to GB the Filser ATR-833 costs 1728 ex VAT, the Dittel FSG-90 according to FvH EUR 3248, including VAT.

-- FvH mentions that Eurocontrol has been reminded several times that a depreciation period of 15 years should be applicable to all 25 kHz radios as usual.

-- SES planning sheets show Satellite/Terrestrial Wide Band communication past 2015, or all 8.33.

Single European Sky.

-- The fact that VFR (wave) flights will, in the future, only be possible in airspace reservations (>FL 285) and in reserved airspace or via special arrangements, or with a clearance or in corridors (between FL 195 and FL 285) was considered acceptable.

All airspace above FL 195 to be Class C in principle, but it looks that some countries will simply not comply.

Much more important is the fact that the airspace up to FL 195 will be reviewed, with preferences for Class E and G up to a certain division level (mostly FL 95, 115 or 135) and Class C and D above that up to FL 195. Probably not much will change, but where that will be the case all have to be vigilant that an acceptable amount of E and G will remain.

Planning date: 2006-04-13.

Basic information: (EC)549/2004 and 551/2004.

-- EASA will in the future encompass ATM and airports as well.

Actual radar traffic at Frankfurt can be seen at www.dfs.de, be it with half an hour delay for security reasons.

-- We must remember that many of the present problems, like the need for Mode S and 8.33 kHz radio, only apply to the Core Area of Europe. It is not impossible that these countries will go to ADS-B directly, but then the choice between Mode S Extended Squitter and VDL-4 will have to be solved first.

Transponders.

-- BvdK presented the Dutch 'Road Map'* for a sensible, well controlled introduction of transponders. A typical problem is the fact that new transponders shall be of the Mode S type because of the garbling

problem (St Auban trials), but these transponders will work in Mode A/C as long as the ground (surveillance) structure has not transitioned to Mode S. This cancels the advantage of Mode S, even apart from other problems like the power consumption and Mode A code shortage.

-- In France about 10 % of the glider fleet is now transponder equipped. The French DGAC gives a subsidy of EUR 1000 per transponder.

-- See <http://www.stna.aviation-civile.gouv.fr/actualites/revues/revue62/62pgarticle2/fr62art2.html> for the report on the garbling trials over St Auban .

-- We agreed that controllers say that they want to see us, but on the other hand they don't want to be involved with VFR traffic (in E, F and G) and they are afraid of the extra R/T load.

-- The importance of the development of a Low Power transponder (part of the Road Map) was stressed. FvH expects EUROCAE to review the Minimum Operational Performance Specifications (MOPS) of the LAST in this sense.

-- We must remember that transponders are useful, even without radar coverage, because of ACAS. In that respect one wonders if it is not sensible to put the antenna on top of the fuselage. Antenna mounting on the underside of the fuselage, usually just behind the wheel, is standard, but mind damage when rolling the fuselage into the trailer.

-- The Garrecht VT-01 has now been certified, even in two classes. Class 1 for altitudes up to 40.000 ft, Class 2 (LAST) for altitudes up to 15.000 ft.

UAV's

-- Clearly most countries have now UAV activity. The problem for us lies in UAV flights in uncontrolled airspace. FvH mentions that it seems unreasonable if we would have to give up (VFR flight) liberties because UAV's cannot see-and-avoid.

-- In France UAV's fly in Military airspace only, in the UK a special area is reserved for UAV's. In Switzerland UAV's are not allowed to fly VFR in Class E and G, unless with an accompanying aircraft to guarantee "See and Avoid".

-- Are UAV's aircraft, legally speaking?

Main conclusions.

-- Closely monitor the airspace developments in your country, stay in contact with your authorities and be conversant with the topics, which sometimes are very diverse, from airspace classification via 8.33 radio to Mode S.

-- Co-operate in the effort to keep the size of Class A ... D acceptable (national decisions!), and in the effort to keep VFR (see-and-avoid) flight possible.

-- Introduce controllers to gliding. In Sweden courses are organised over several days, without cost for the controllers. Most controllers (understandably) have no idea what gliding is.

-- The principle of HX (validity of restrictions at certain hours only) often seems to be forgotten as a useful tool.

-- Awareness campaigns are useful to make commercial pilots aware of the need of a good look-out in all airspace where also VFR traffic may be present.

-- Try to avoid a confusion between the short, medium and long term future.

-- Don't forget to quantify, when analysing problems. All too often decisions are taken on a sentimental/political basis.

-- Exchange information on UAV activity.

-- Report See You/WinPilot map inaccuracies.

Annexes.

-- Road Map (Ben van der Klein, Power Point presentation)

-- Airspace in France (Nicolas Vaunois, Power Point presentation)

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EGU TO Airspace