Briefing to CANS

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Scope: Airspace matters

Avionics for Sport ac

Air Traffic Management

Briefing to CANS

Mid 2006 - DAP UK CAA proposed universal Mode S fit for all aircraft flying in UK airspace

2006 Public Consultation followed by intended ANO change late 2006

(DAP = Directorate of Airspace Policy,
Staff - Air Traffic Control background,
advised by SSR experts

ANO = Air Navigation Order,
Parliamentary legislation,
“UK aviation Law”)

Briefing to CANS

Mid 2006 - DAP UK CAA proposed universal Mode S fit

Authority (claimed) 1: DAP people quoted ICAO

"ICAO have mandated us to do this"

Electronic ID mentioned in 2002 ICAO document

DAP propose "sense and avoid" rather than "see and avoid"

Comments: 1. ICAO advises, not mandates, "differences" apply.

2. ICAO main responsibility is CAT aircraft flying in CAS

3. ATC mentality, vs VMC pilot mentality ("lookout & scan").

4. No mention of future SatNav ATM systems (already in Australia/USA)

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Authority (claimed) 1: DAP people quoted ICAO

- "ICAO have mandated us to do this"
- Electronic conspicuity / Ident
- "identify and avoid" rather than "see and avoid"
- ATC mentality rather than VMC pilot mentality

Authority (claimed) 2: UK Government paper (2002)

on growth of Commercial Air Traffic (CAT)

DAP fears risk of CAT/GA/Sport ac collision "off airways"

but, what is the quantified risk and with what ac (eg Military) ?

Conditions have changed since 2002 - Oil price, less airline growth

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- remote areas included (Wales, Cornwall, Scottish highlands)
- includes Balloons, Gliders, Hang/Para Gliders, Microlights

UK RAeC fought this proposal !

- Huge amount of work by RAeC & its Associations
- Written opposition from Associations & thousands of individuals

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Result: DAP held second consultation, dropped “all airspace” Mode S but introduced concept of Transponder Mandatory Zones (TMZ)

So far, no ANO change, DAP is “considering his position”

We have now also gone “political” and involved our MPs quoting “freedom to continue to fly”, and “disproportionality”

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Those with no or limited electrical generation:

Hang/Para gliders	= 5960 (22%)
Microlights	= 4100 (15%)
Gliders, SLMG, SSMG	= 2540 (9%
Balloons & Airships	= 1850 (7%)
Powered HG/ParaG	= 1050 (4%)

FAI Commission on Airspace and Navigation (CANS)

Future position

Keep airspace as free as possible for Sport aircraft

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but

Where restrictions apply, work to gain access

by

1. Understanding the technology
2. Use of low-cost avionics designed for Sport aircraft

(that is, not designed for airliners)

FAI Commission on Airspace and Navigation (CANS)

Radar Transponders (Mode S - Selective)

- avoid mandatory fit for Sport aircraft if possible
- but recognise existence of
  - Transponder Mandatory Zones (TMZ)
    - where these are created (after proper consultation)
- low cost Mode S versions if forced to use.
  - Battery power taken into account for
    - gliders, hang/para gliders, balloons
    - & some Microlights

FAI Commission on Airspace and Navigation (CANS)

SatNav systems

Keep under review

GPS, Galileo, GLONASS, Beidou/Compass

Understand the technology

Accuracy, area enhancements (WAAS, EGNOS etc)

Application to aviation

Cockpit displays inc Moving Map

ADS-B = Ground Stations in Australia & USA now

need for low cost ac fit for sport ac

Conclusion

1. CANS is important area

    literally vital for some sport aviation activities

2. Utilise existing knowledge

    Know airspace problems, understand technology

3. Vigilance needed to preserve airspace

4. Need to work with ICAO, Regulators, advisors