AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION

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RE: Proposal to lower Class E airspace on the east coast of Australia.

The Australian Sport Rotorcraft Association [ASRA] opposes the change to Class E airspace proposed by Airservices Australia because it will decrease the safety for our members while adding substantial compliance costs. In addition, our legal advice is that the proposed change where the Class E base is referenced to ground level is a legal absurdity and likely to be unenforceable if challenged in court.

ASRA was disappointed to have learnt about this proposal through social media and would have expected Airservices to have engaged in discussion with the various sport aviation bodies around the country much earlier than the current timeframe for comment allows. Every sport aviation body in Australia is heavily represented on the east coast of Australia and will be significantly impacted should this proposal proceed. The short deadline for responses from the aviation sector also clearly demonstrates that Airservices Australia is not serious about meaningful consultation.

After reading the Airservices proposal document it appears the **"CHANGE PRINCIPLES"** and **"SERVICE OUTCOMES"** are framed to suit the needs of commercial aviation and **"leverage the implementation of Air Traffic Management [ATM] technologies**" is clearly aimed at recreational aviation. Our reaction to this proposal is based on the impact it will have on ASRA members, particularly those flying in the proposed Class E corridor.

The three major issues that ASRA has with the proposed airspace change are as follows:

First, most ASRA members do not have transponders and many fly older aircraft that do not generate sufficient engine-driven electrical power to safely accommodate the addition of a Mode S transponder' [CAO 20.18 section 9E.3(d)] and potentially Mode S Extended Squitter ADSB capable transponder' [CAO 20.18 section 9E] to their existing instrument panel. We note that the transponder MUST be switched on at all stages of flight [CAO section 9B.5].

Aircraft that can be upgraded must do so at considerable cost in purchasing the transponder and paying to have them professionally fitted.

Second, ASRA anticipates that the compliance cost together with the legal and practical limitations in complying with the proposed changes will force more recreational aircraft to fly below 1500' AGL and increase the risk of interference and collision.

In addition, by referencing the base of Class E to AGL, aircraft without a transponder, flying over undulating terrain will be unable to fly ‘straight and level’ above 1500’ AGL to conserve their fuel and maximise their glide options if an engine failure occurs.

So recreational pilots without transponders will be forced to choose between their safety by flying above 1500’ AGL and compliance with the proposed Class E changes.

Third, it will be operationally impossible for our members to comply with the 1500’ AGL base requirement without flying at a considerably lower altitude to compensate for the inherent errors in their altimeters and GPS instruments.

Until this proposed change by Airservices, ‘height’ was always referenced to AGL, whereas 'altitude' was referenced to AMSL below the FL 10 transitional altitude.

Very few people in GA and probably no-one in recreational aviation have radar altimeters which are the only means of giving a true height (AGL) reading provided the aircraft is not banked.

Also, the Mode S Extended Squitter ADSB-capable transponder will in 99% of cases, be establishing it's altitude by use of a sealed internal "blind encoder" which is permanently set at the factory at a fixed setting of 29.92 inches of mercury / 1013 Millibars. So the transponder will always be transmitting an altitude determined against Standard ISA conditions, regardless of the actual height above terrain or the actual local QNH.

Many ASRA members fly gyroplanes fitted with cockpit pods. These pods have noticeably lower static pressures behind the instrument panels, which among other things, cause their ASI's and altimeters to over-read, and the "blind encoder" will be no different, meaning that the gyro at any given moment may be transmitting a false altitude reading (usually too high) and therefore electronically telling ATC it is higher than it actually is. So, the gyro may be transmitting an electronic record of flying above 1500' whereas it may flying at a significantly lower altitude. Furthermore, gyroplanes registered with ASRA are not required to fit “certified” altimeters, nor are they required to be “sensitive. They should however, be capable of maintaining an altitude within the allowable altitude tolerances for VFR flight, and they do.

GPS devices showing altitude won't improve the accuracy either, because they calculate height based off a calculated Mean Sea Level, which will only coincide with real height or altitude when the area QNH is 1013.

These three points clearly explain why ASRA believes that the proposed Class E change will decrease the safety for our members while adding substantial compliance costs.

In response to the“ **BENEFITS TO AIRSPACE USERS**” listed in the proposal, ASRA makes the following comments;

Delivery of the AMP will ensure closer alignment to the International Civil Aviation Organisation [ICAO] system and proven United States practice of airspace management.

The use of the United States as an example on which to model our airspace is misleading considering VFR aircraft in the USA are not required to carry a transponder or radio when operating under 10,000'.

Improved safety for Regular Public Transport [RPT] and other airspace users – reducing complexity for pilots and controllers.

Members of ASRA and all other pilots not willing to fit transponders will be compressed into a very thin band of Class G airspace below Class E. This will not improve safety for "other airspace users."

Enable enhanced surveillance service.

If radar coverage is available to all new entrants into Class E airspace one would expect the workload of ATC to be dramatically increased. This would be counterproductive to the proposals objective.

Class E does not restrict access for VFR aircraft.

While the proposal will not restrict access to Class E, it will come at a cost. Less than 5% of our gyroplane fleet are currently fitted with transponders so the cost to our members will be significant.

Controlled airspace containment and separation for IFR flights.

Controlled airspace separation for IFR flights containment is already available. And based on the very low number of incidents in our incident register, adequate within the current airspace.

Fosters equitable access for airspace users.

This statement that the proposal is equitable is based on the premise that all aircraft are already compliant with the conditions of this proposal. This is not true for ASRA members.

Caters for the current and future needs of airspace users.

Considering that the majority of sport aviation associations don't support the proposal it's difficult to understand how Airservices arrived at this conclusion.

Improved use and value of existing investments [e.g. ADS-B, ACAS]

Many of our members have followed the CASA initiative and purchased portable ADS-B in and out devices [e.g. sky echo 2] to enhance their visibility in Class G airspace. If this proposal was to proceed the value of these existing investments would prove worthless in Class E airspace.

Facilitates Continuous Descent Operations

This I believe will only apply to commercial aircraft and has no advantage for sport aviation.

SUMMARY

- The cost of a transponder and radio upgrade will be prohibitive to many of our members.
- There is very little evidence supporting the need for such a major airspace adjustment and how it will benefit sport aviation pilots.
- No practical way for sport aviation pilots or ATC to accurately determine an upper limit in Class G of 1500’ AGL over heavily undulating terrain.
- The compression of non-compliant aircraft into a thin strip of Class G under Class E airspace will jeopardise pilot safety.
- Nowhere near enough time for all pilots to make their aircraft compliant should they wish to.

Therefore based on member feedback and the information available, ASRA opposes the case for reducing Class E airspace from 8500’LL down to 1500’AGL on the East coast of Australia.

ASRA appreciates the efforts of Airservices and CASA in making the skies a safer place to fly and we look forward to working collaboratively on this and other projects in the future.

Regards Rick Elliott

ASRA President