



ASAC

Australian Sport Aviation Confederation Incorporated

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21/06/08

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Gentlemen

re Implementation of GPS Based Avionics

Following the recent combined meeting of the ABIT and GIT working groups, ASAC has been asked to confirm its views on the implementation of GPS based avionics.

If the information provided at this meeting is correct then Australia is looking down the barrel of lose lose situation and some hard nose decisions must be made immediately.

ASAC confirms that the views of Sport Aviation have not changed. Sport Aviation supports the move to GPS based avionics and would be appalled if discussion of matters peripheral to the essential decisions were to delay the implementation of these important projects till 2028.

Sport Aviation reiterates that the requirement for a risk management and cost benefit justification has been written into law via the AAPS and is an overarching requirement written into the introduction of the ASTRA ATM Strategic Plan.

Sport Aviation points out that the principles of a risk management and cost benefit study do not allow benefits from one project to be used to justify an entirely different project. However, this requirement does not limit how Airservices or the Government might decide to spend any saving from any individual project.

These projects have been bundled up in order to justify implementation of parts of this overall initiative which cannot be justified as stand alone projects. Specifically, it seems to Sport aviation the project has been delayed while discussion on the ADS-B OUT mandate has been held.

If we are to get out of this fix some hard questions need to be asked. Sport Aviation asks – do we need an ADS-B OUT mandate before the decision to proceed? Not do we ever need a mandate – but before the decision to implement is made? Canada seems to be proceeding without one.

Sport Aviation cannot understand the delay in implementing the GNSS project. Sport Aviation believes that this project is clearly cost beneficial, that the safety outcomes are at least as good as is achieved by the current navigation aids and that all regulatory changes have been implemented or agreed. This project clearly does not need an ADS-B OUT mandate. Sport aviation urges Airservices to proceed with this project and achieve the cost savings which would follow.

Similarly, Sport Aviation believes that Airservices should proceed to replace its *en route* SSR with ADS-B.



Sport Aviation does not believe this requires an ADS-B OUT mandate. Class C airspace does not depend on a transponder mandate to implement SSR. Why does ADS-B require an ADS-B OUT Mandate?

Aircraft requiring a radar like service in Class E require a clearance to enter just as for Class C airspace. Protection of these aircraft from VFR aircraft is provided by a transponder and TCAS for large IFR aircraft and see-and-avoid for other smaller aircraft. Aircraft wishing to be so protected can fit TCAS.

The transponder mandate exists because IFR pilots want a Class C service in Class E. That is, third party protection from all traffic. Extending this approach to an ADS-B OUT mandate now threatens the whole project.

Class E airspace is exclusively *en route* airspace. A transponder requirement for VFR aircraft in this airspace has not been, and cannot be, justified on a risk management basis and is purely historical. However, there is perhaps some logic to this requirement as it enables TCAS.

Since there is no available collision avoidance equipment similar to TCAS for ADS-B and, currently, a transponder requirement is in place to enable TCAS, an ADS-B OUT mandate for VFR in Class E cannot be justified.

Accordingly, Sport Aviation points out that the replacement of *en route* SSR with ADS-B does not depend on a mandate for ADS-B OUT in Class E. This replacement can proceed simply by notification to all pilots that entry into airspace dependant on 'radar like' separation rather than procedural separation will require ADS-B OUT by a certain date.

Airservices can therefore implement both separate projects – replacement of current Nav. Aids with GNSS Nav. (with a backup network of conventional Nav. Aids) and the replacement of *en route* SSR with ADS-B and achieve the savings accruing – without waiting for an ADS-B OUT mandate – which would be difficult to implement against ANY opposition in the time line described in this recent meeting. The savings accruing can be used as desired – to subsidise the installation of ADS-B in GA aircraft as proposed. Small VFR equipped aircraft can install a single box knowing that both projects are to proceed.

If an ADS-B OUT mandate is to be regarded as necessary, the mandate which can be justified is; for all in Classes A and C and for IFR only in Class E.

ASAC has been asked to support a proposal whereby a mandatory requirement for ADS-B is imposed where currently there is a transponder requirement. ASAC will not support a proposal which is contrary to the requirement in the AAPS that all changes must be justified on a risk management and cost benefit basis – simply because significant parts of the industry want this outcome.

However, ASAC has agreed that, in the interest of cooperation, it will not oppose this proposal provided the exemption from carriage of transponders, currently available to Sport Aviation, is extended to the carriage of ADS-B OUT.

Sport Aviation would point out, however, that a requirement for ADS-B OUT in *en route* Class E cannot be justified on a risk management and cost benefit basis, is not necessary for the replacement of *en route* SSR and is contrary to the Law. As such it would be open to legal challenge.

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cc Mr. Henk Meertens AOM, Chair, Board safety and Environment Committee, Airservices
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