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16 July 2009

**The Hon Anthony Albanese MP  
Minister Infrastructure, Transport, Regional Development and Local  
Government**

PO Box 6022  
House of Representatives  
Parliament House  
Canberra ACT 2600  
Email: [A.Albanese.MP@aph.gov.au](mailto:A.Albanese.MP@aph.gov.au)

**Re.: Aviation Safety and White Paper**

Dear Hon. Mr Albanese,

It is understood that the Australian Government is now in the process of developing an Aviation White Paper *to guide the aviation industry's growth over the next decade and beyond. The Government's stated aim is to give industry the certainty and incentive to plan and invest for the long term, to maintain and improve our excellent aviation safety record, and to give clear commitments to travelers and airport users, and the communities affected by aviation activity.*

It has been suggested that we contact you to alert you to issues which may affect achievement of the White Paper objectives and also currently available technologies available to enhance aviation safety in the near term at minimal cost.



On the current Civil Aviation Safety Authority [CASA] website it is stated:

*"In the 35 years leading up to 2003, there was an average of one mid-air collision per year. However, since December 2007 there have been seven mid-air collisions resulting in nine fatalities."* This, clearly, portrays a disturbing trend. Needless to say, the commercial cost of such accidents to the aviation industry, and the community at large, is very large and, if a passenger carrying aircraft were to be involved, would be even more devastating and damaging to public confidence.

It is noted that the increase in collision risk, now clearly evident, has resulted in CASA undertaking several reviews including the review of Common Terminal Area Frequency [CTAF] aerodromes and training and procedures at General Aviation Airport Procedure [GAAP] aerodromes, the locations at which recent mid-air collisions had occurred<sup>1</sup>. This has resulted in two directions being issued by CASA dated July 2009.

Further, the CASA website also reports that a review to examine potential technology advances, which may assist in addressing the risk of collision is planned, stating; *"The review into the potential impact of emerging technologies in preventing mid-air collisions will take some time."* A review of this type need not take a long time as the technology is available today in the form of Traffic Information Service – Broadcast [TIS-B]<sup>2</sup>.

With available radar data over GAAP airports, cost effective TIS-B services could be readily available largely mitigating the issues being identified in GAAP, and

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<sup>1</sup>Most recent midair collisions: Bankstown: 18 Dec 2008, Moorabbin: 27 Aug 2008

<sup>2</sup> TIS-B – ground based transmission of traffic information. TIS-B is fully defined in the Minimum Operational Performance Standards [MOPS]; US FAA are deploying TIS-B integral with the Next Generation ADS-B ground infrastructure.



surrounding, airspace. Where existing radar coverage is unavailable [CTAF aerodromes] cost effective surveillance technology such as wide area multi-lateration [WAM]<sup>3</sup> could provide the required surveillance data. What is required is proactive cooperation from CASA and Airservices Australia to conduct a demonstration of this technology to Government and the aviation industry. Funds planned for paper reviews could be more effectively spent conducting a demonstration of TIS-B where quantitative data for cost benefit decisions would be readily available in a timely manner. Widespread support to this proposal is being received from industry representatives, associations and participants.

TIS-B also forms an integral transition plan toward self equipage for Automatic Dependent Surveillance – Broadcast [ADS-B] in the medium term thus providing an opportunity to accelerate opportunities made available by an end state ADS-B environment. Integration of sport and recreational industry sectors needs also to be addressed through development of standards facilitating low cost ADS-B avionics for those industry participants.

It should be noted that as a result of the Government's Joint Consultation Paper [JCP] of 2008 failing to reach a consensus on the transition to ADS-B in the near term, Airservices Australia have now decided to replace the ageing en-route radar infrastructure. It is widely felt amongst the aviation industry that the pending request for tender for the radar replacement, about to be released by Airservices Australia, should not be radar specific in nature, but rather a functional specification thus fully facilitating the opportunity to extensively evaluate all available technologies able to fulfill the aviation industry's needs in the medium term.

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<sup>3</sup> Commissioning of WAM in Tasmania is pending and Sydney basin WAM is currently planned.



It is imperative that the aviation industry be given every opportunity to embrace emerging, and potentially more cost effective, technologies including WAM, TIS-B and ADS-B in a timely manner allowing the most rapid increases in safety and efficiencies to deal with the traffic levels being experienced today without limiting any operational and commercial opportunities.

To maximise the declared White Paper objectives, the Government is encouraged to:

- a) conduct a TIS-B demonstration in a GAAP environment as soon as practicable to enable quantified, demonstrable cost-benefits to the industry that this technology is able to deliver in the near term;
- b) consider TIS-B as an integral transition mechanism toward the end state complete ADS-B environment; and
- c) ensure White Paper principles and objectives are not limited by ensuring the Airservices Australia's en-route radar replacement request for tender be functional in nature not excluding other available, cost effective, technologies.

Yours sincerely,

A handwritten signature in dark ink that reads "James McDonald". The signature is written in a cursive style and is set against a light blue background.

James McDonald  
Technical Director  
Enigma Avionics Pty Ltd

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