

## **CASA OAR Broome and Karratha Airspace Review (2019) – AusALPA Feedback**

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The Australian Airline Pilots' Association (AusALPA) is the Member Association for Australia and a key member of the International Federation of Airline Pilot Associations (IFALPA) which represents over 100,000 pilots in 100 countries. We represent more than 7,100 professional pilots within Australia on safety and technical matters. Our membership places a very strong expectation of rational, risk and evidence-based safety behaviour on our government agencies and processes and we regard our participation in the work of the Australia's safety-related agencies as essential to ensuring that our policy makers get the best of independent safety and technical advice.

AusALPA welcomes the opportunity to contribute feedback to the latest Broome and Karratha Airspace Reviews.

### **Airspace Classification - General Comments**

Class E airspace is effectively controlled airspace for IFR aircraft and uncontrolled airspace for VFR aircraft (akin Class G airspace). Generally speaking, we do not favour Class E airspace when compared to Class C airspace. This is especially the case for Lower Level (LL) use of Class E, due to greater prevalence of VFR aircraft in lower airspace.

At altitudes and airspace where there is a prevalence of VFR traffic, AusALPA and our members recognise that the benefits of Class E are outweighed by the increased risks and operational inefficiencies that Class E introduces. That is to say, we believe that with a decrease in altitude, Class E airspace represents an increasing level to risk.

Airspace hubs (i.e. aerodromes) further heighten the likelihood of inappropriate separation encounters between VFR and IFR aircraft, further reducing safety margins. We believe that our airspace classification concerns and positions are only exacerbated by the traffic mix at the Broome and Karratha aerodromes.

AusALPA disputes that Class E is a solution to an issue for equity of access for VFR aircraft. We note that this has repeatedly been a reason provided in separate airspace reform initiatives by Airservices and yet, it is without question that transponder-equipped VFR aircraft are able to simply obtain a clearance to enter and operate in Class C as easily as an IFR aircraft can.

### **Class E over Class D Aerodromes**

Both Australian and overseas/international pilot associations have for many years opposed the airspace model of Class E over Class D aerodromes. We wish to reiterate our firm view that this airspace model is problematic and constitutes a real deterioration in safety, when compared to our preferred regional tower control zones airspace model of Class C over Class D. There exists a great variety of examples that demonstrate that E over D is an unsatisfactory airspace model and how it contributes rather than mitigates unsafe circumstances. AusALPA has previously provided and described some of these to the OAR and we consider them to be as equally relevant for this review.

One such example would be the delays and confusion caused to aircraft during take-off and departure due to uncontrolled VFR aircraft, visible on TCAS displays, operating through the intended departure tracks from RWYs or SIDs. During the approach and arrival phase of flight for IFR aircraft, unresponsive VFR aircraft can pose a safety risk due to separation issues, increase workload, and cause distraction from other duties.

Reliance upon VFR airmanship and listening-out cannot obviate these scenarios from occurring. Whilst it may not become the norm, there certainly cannot be assurances that it won't occur and

therefore that levels of efficiency will not be adversely affected. From a safety perspective, relying on “see and avoid” can never reduce collision risk to ALARP.

Other locations without primary radar can and do currently enjoy an airspace model of Class C over Class D (e.g. Alice Springs).

### **Airspace Design and Standardisation**

AusALPA supports standardisation initiatives in principle. However, we are also quite cognisant that a blanket rule to standardise can obviate the genuine reasons why some non-standardisation exists. Standardisation is a worthy goal, but only when it can be shown to maintain risk to ALARP.

Standardisation should be fit for purpose and not the cause of any deterioration in the net level of system safety. We note that there is currently a great deal of discussion already ongoing within the industry related to airspace design and classification for regional towered aerodromes and that some of this relates directly to standardisation.

Considering this, it is important that the Broome and Karratha airspace review not occur in isolation from the broader airspace reform conversation. Moreover, it is appropriate that it align as much as practicable with the broader airspace design and classification reform outcomes and that they all be considered concurrently. Indeed, this review can actually help to better inform that broader reform initiative and discussion.

With regards to the broader airspace reform proposals, Airservices have stated an aim to standardise the base level at which enroute control ceases and the upper limit of Class D tower control zones exist. This particular aspect of those reform proposals has been both problematic and controversial. The Airservices preferred level of A045 has already been acknowledged as unworkable by way of the fact that at some locations a different solution has already been deemed necessary and subsequently implemented. Refer to AIC H25/19. Those particular late changes have introduced inconsistencies, diminished standardisation, reversed some of the so-called benefits and increased confusion for airspace users. AusALPA believes that this has occurred due to ill-conceived and ill-considered proposals and thus, we stress the need to avoid adding further complexity and confusion to the overall situation with this Broome and Karratha review.

Ideally the enroute-tower control level would be standardised for all or most of the regional Class D aerodromes. Given that AIC H25/19 illustrates that any choice of a level for standardisation below A065 is unworkable, and that the current enroute LL for Broome and Karratha is A055, AusALPA believes that the upper limit of the Class D controls at these aerodromes must necessarily be raised.

### **Operational Complexity and Flight Deck Workload**

AusALPA recognises that changes of airspace classification and associated frequency transfers in critical phases of flight are aspects that increase operational complexity, workload and risks. During non-tower hours at Broome and Karratha, the airspace classification and complexity is increased by a relatively low transition between Class G and Class E.

Whilst it is true that the vast majority of regular public transport operations for Broome and Karratha occur during tower hours, there are also many other IFR high powered aircraft operations which occur outside tower hours. AusALPA member pilots have noted that during non-tower periods, there can be issues as a result of the proximity of the CTA base (LL of CTA) to the field elevation.

For take-off, there is relatively minimal time before the aircraft is approaching the base of CTA. During this period, CTAF issues, the departure call and a CTA clearance all need to be managed along

with aircraft configuration requirements. Requests for clearance to enter CTA prior to take off are generally not granted.

For aircraft on descent and approach, the ICAO Doc 9931 is relevant and outlines Continuous Descent Operations (CDO) and provides extensive guidance on CDO. While it is written primarily in the context of operations within controlled airspace, the principles apply equally to operations that transition between CTA and OCTA, and therefore should be considered for airspace design and review as well.

One of the important aspects underpinning safe CDO is the concept premise of flight crew having the time and situational awareness to manage the aircraft flight path and energy state. Avoiding disruptions is a high priority, as is the need for unambiguous ATC communications. AusALPA members are particularly concerned about the operational and safety consequences of exiting controlled airspace at very low levels while executing CDO, simply due to the need to identify traffic OCTA and to self-separate coincident with the aircraft positioning and energy management requirements to commence an IFP.

### **AusALPA Proposes**

AusALPA believes that CTA LL aspects of the current airspace design increase workload and distractions for both ATC and pilots and therefore, we propose that the LL of the enroute control is raised. Furthermore, we propose that this level is standardised with the enroute control CTA LL for the regional Class D aerodromes and with the CTA LL over Ayers Rock aerodrome. However, this particular level is currently undetermined and being reviewed and as such, we reserve the right to comment further when greater detail on this aspect is revealed.

We propose that the airspace classification of Class E should not exist below the transition level and that the LL of E is ideally standardised commensurate with the separate proposal for continental Class E at FL125. (Airservices Airspace Modernisation Project Tranche Two). However regarding the proposal for continental Class E to be lowered to FL125, we note that there are still unanswered questions as to the sufficient coverage of surveillance and VHF comms, and therefore the appropriateness of the details of that separate airspace proposal.

Ideally the airspace below continental Class E, and above the Broome and Karratha tower control zones should be Class C airspace. This is due to our firm belief that Class E airspace at lower altitudes is unacceptable on a safety basis. However, an alternative proposal to that airspace model, and the current arrangement, would be for the upper level of Class D to be raised above the transition level and up to the base of continental Class E.

We consider that the level in which airspace transitions from one classification to another need not be coincident with the level for tower/enroute control transitions. For example, the Class D to Class E level could be FL125 whilst the level for tower to enroute control change could be at A085. I.e. within the Class D classification.

### **Conclusions**

This airspace review is essentially linked to the proposals and considerations found within Airservices Airspace Modernisation Project (AMP). AusALPA believes It would be remiss of the OAR to not consider these together in making any decisions and recommendations.

There are still many unanswered questions already posed through the AMP that we believe require a resolution prior to progressing final decisions for the Broome and Karratha airspace review. These are:

- What is, and will be, the acceptable level of the LL of enroute control over the regional Class D aerodromes?
- Is there sufficient surveillance and VHF comms coverage in continental airspace to allow continental Class E to be lowered to FL125?

AusALPA believes that this airspace review is an opportunity for the OAR to take action in removing the unacceptable risks to aviation safety posed by Class E airspace over regional Class D aerodromes. If this model of airspace is removed from Broome and Karratha, it will only continue to be currently utilised for Avalon aerodrome.

It should be recognised that Class E airspace below the transition level facilitates unacceptable risks whilst providing too little in the way of discernible benefits for airspace users. This is especially so when in the vicinity of aerodromes.