

By Email

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Mr David Wells
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Dear David,

AUSALPA SUBMISSION TO THE AIRSERVICES PROPOSAL: *AIRSPACE MODERNISATION PROGRAM*

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 7,500 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 consultation for AirServices' proposed Airspace Modernisation Program.

TRANSFER OF CONTROL RESPONSIBILITY OF SURVEILLED CLASS C AIRSPACE FROM TOWER TO ENROUTE AT FIVE REGIONAL LOCATIONS

AusALPA supports this change to the service provision responsibilities of regional Class D aerodrome airspace management and recognises that standardisation and consistency across the country can assist in efficiency of operations for both pilots and controllers. We understand that Enroute Controllers covering these locations have the benefit of ADSB and/or primary radar coverage, which can mean that they have the ability to control and separate more accurately and efficiently than procedural control.

Some AusALPA members have queried whether the change in airspace controller responsibilities at the relevant locations will affect the timely resolution of requests for specific types of approaches. Crew training and other operational requirements quite often underpin such requests and early resolution is often critical from a crew management perspective. It is not clear to us that the efficiency of requests now to be communicated through Enroute Controllers to Class D Tower Controllers and back through to the operating crews will not represent a noticeable degradation from the current situation. In any event, we hope that this is covered by the assurances from Airservices in the change proposal documents to "ensure that these changes are implemented without disruption to the delivery and efficiency of our services to industry".

PROPOSED AIRSPACE ARCHITECTURE – Vertical Limits

AusALPA supports the Airservices proposed alterations to the vertical limits of airspace classification based on the benefits outlined in the proposal documents.

PROPOSED AIRSPACE ARCHITECTURE – Lateral LIMITS

In addition to the vertical limits, AusALPA suggests that careful consideration needs to be given to the lateral limits of the proposed airspace architecture. We believe that the lateral aspects of the airspace architecture warrant review and modernisation due to the difficulties associated with remaining within controlled airspace on descent in modern aircraft and how this affects what would otherwise be an uninterrupted and relatively low-workload descent profile.

Background Considerations

In recent times, aircraft manufacturers have progressively been making great progress in increasing wing efficiency and therefore in reducing aircraft drag. Examples of these advancements include the increased fitment of winglets and advances in super critical wings. Advances of this nature mean that flight crews have to initiate descents earlier than would have been the case in decades gone by because the modern aircraft don't slow down as easily as they use to. Fuel efficiency, environmental concerns and passenger comfort militate against the excessive use of airbrakes or early configuration changes to compensate for poor airspace design. The design principles for CTA steps (lateral limits) are no longer consistent with modern aircraft descent profiles and require urgent review.

Operational Requirements

Most airline operators require their flight crew to remain within controlled airspace on descent with a 500ft buffer. This operator requirement provides an additional challenge which crews are not able to ignore. This can sometimes mean that the aircraft's descent profile cannot be continuous and requires small level off segments so to remain within this tolerance while avoiding an undesirable build-up of airspeed. This challenge is felt most acutely on straight in arrivals, where descent profiles are pretty close to, or on the lower limit (plus 500ft). Crews attest that this is a constant distraction from aircraft management and an otherwise avoidable increase in workload.

Cumulative Aspects of Descent Workload

In addition to the operational requirement to maintain a 500ft buffer to the lower limit of the controlled airspace step, flight crews have a number of other factors which can consequently or concurrently increase workload and therefore potentially reduce the cognitive attention resources of the crew and their situational awareness. Some of these other factors include the altitude requirements of STARs, inconsistency of descent altitudes provided at different locations (clearances), transition level (between Flight Levels and QNH) and the associated checks, speed requirements and the communication and acknowledgement of all these facets between the two or more flight crew on the flight deck (including checklists).

While some of these issues are beyond the scope of the proposed changes to the airspace architecture by Airservices, AusALPA considers them all to be affected by, if not a direct consequence of, systemic airspace design considerations.

Lateral Airspace Architecture Considerations

In endeavouring to progress to consistency of airspace design, it is important to note that not all locations around the nation provide clear and easy to understand controlled airspace steps. Some airports use simple circular steps while others are a diabolical concoction of lines and circles where some of the boundaries are somewhat impossible to discern in flight in older aircraft, i.e. are not aligned with a radial, or any other ground-based fix.

Notwithstanding this, AusALPA recognises that many locations have their own issues with terrain, nearby military control zones and VFR transit routes etc. Nonetheless, we would prefer to the greatest practical extent that a much higher level of consistency be achieved with airspace steps that reflect the descent profile outcomes of the aircraft manufacturers' quest for greater aerodynamic efficiency in modern aircraft. The starting point for such a review must be to examine the non-ATC restrained descent profiles (noting that operational/operator constraints often make things worse) in consultation with the various operators' performance specialists.

At the same time, AusALPA is acutely aware of the competing interests that constrain airspace design. Our major concern is to ensure that any outcome negotiated by AirServices is fully informed in regard to the economic, operational and safety consequences, particularly when considering those interests who will never bear the costs inherent in the compromises.

CONCLUSIONS

AusALPA supports the proposal to transfer control responsibility from Tower to Enroute Controllers. While not the primary safety consideration, we hope that the transition is without disruption to the delivery and efficiency of existing services to industry.

AusALPA supports the proposed vertical aspects of the proposed airspace architecture.

AusALPA believes that this airspace modernisation proposal presents an opportunity to resolve existing difficulties and inconsistencies associated with lateral aspects of the current airspace architecture. The old design principles are beginning to create reductions in operational efficiency and increases in flight crew workload.

Yours sincerely,



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