

## ACTIONS ARISING FROM THE TECHNICAL AIRSPACE DESIGN WORKSHOP

Members included representatives from BAC, Airservices Australia, Virgin Australia, Aircraft Noise Ombudsman, the Brisbane Airport Community Aviation Consultation Group (BACACG), the Brisbane Flight Path Community Alliance, and the broader community

Actions	Outcome	Responsible	Timeframe
<b>EIS</b>			
Investigate if Turboprops were included in the ANEF and N70 noise modelling in the EIS and were they calibrated with actuals?	Turboprops were included in the modelling for the ANEF and N70s but were not calibrated with actuals like the jets were. Note that jets were calibrated only for the N70s but not the ANECs.	BAC	Actioned at workshop
Who was responsible for the decision of the modes of operation being mixed parallel simultaneous operations?	This was ultimately a decision by BAC as it was considered the most efficient operational mode and provided the long-term capacity that future growth required. Preferred over-the-bay operations, and not using the new runway to the south between 10pm-6am, were noise abatements implemented to balance community needs.	BAC	Actioned at workshop
Explore if any mapping of community infrastructure occurred outside the constraints of the 70 Contour and what is shown in the EIS		BAC	Due end of March
<b>Airspace Design</b>			
Investigate the feasibility of a curved departure turn using RNP Technology (Radius to fix turn) to reduce the current wide spread of flights  Investigation to include: Fleet capability to do RF turns on departure Feasibility to have 2 separate departures overlaid to accommodate new and old aircraft nav systems (current departure and new) Airservices flight path design capability and environmental requirements CASA rules		Airservices Australia with support from BAC	To be completed by July 2021

<p>Air traffic control requirements</p> <p>If not feasible, are there other solutions from Airservices flight path design that may reduce the spread?</p>			
<p>Investigate moving the location of the RNP join point onto the new runway further north (like the old river track)</p>	<p>Airservices response was that the join point was located to meet Airservices operational safety requirements, ICAO and CASA standards for parallel runways, and to be within the EIS chevron airspace.</p> <p>The shape of the curved path and where it turns onto final must provide for a safe breakout area which is clear of other aircraft. A closer intercept does not achieve this. There were overseas examples reviewed to determine how this could be achieved.</p> <p>To ensure aircraft computers do not activate emergency procedures, due to warnings being triggered when aircraft are pointing towards each other at the same height, the final intercept on the new runway must be staggered with the final intercept on the legacy runway</p> <p>Consistency required with the EIS. Following the pre-existing river track cannot be flown to the new runway as the turn is too tight and for the reasons above</p> <p>Given the above, the path chosen must be within the chevron airspace in the EIS</p>	<p>Airservices Australia</p>	<p>Actioned at workshop however further discussion was agreed</p>
<p>Investigate the possibility for jets to conduct an earlier right hand turn on departure off the new runway.</p>	<p>Airservices response was that an early jet right turn does not meet Airservices operational safety requirements for arriving aircraft nor for separation with departing turbo props.</p> <p>The jets and turbo props must have sufficient track miles to climb over the arriving aircraft. An</p>	<p>Airservices Australia</p>	<p>Actioned at workshop</p>

	<p>earlier turn by the jets would require the turbo props to turn to the north earlier and would not achieve the height required over the arrivals. This also places the turbo props in the path of any arriving aircraft subject to breakout.</p> <p>The departing turbo props must be separated from the departing jets. Turbo props are slower so once they are airborne they must be turned out of the way of the jets. Then the jets must go straight ahead long enough to get them above the turbo props before they cross.</p> <p>An earlier right-hand turn would mean separation would not be met in all these examples.</p> <p>Turbo props are a significant proportion of the departing mix of aircraft so the solutions need to be systemic ie standard and consistent procedures for air traffic control to use to ensure the traffic can be managed safely.</p>		
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<p>Understand the location of the 01L arrivals path and join from the North (why it is located over Brookfield?)</p>	<p>Airservices explained the arrival route for the long (instrument landing system approach) to the new runway during northerly winds is as far to the west as it can be due to Amberley military airspace.</p> <p>Airservices must keep aircraft outside the military airspace as they do not have visibility of military operations.</p> <p>The arrivals path must be located in it's current location to link the existing route with the required distance from the airport that aircraft must intercept the runway centreline while ensuring that any turns in the path allow for all aircraft performance requirements.</p>	<p>Airservices Australia</p>	<p>Actioned at workshop</p>
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Analysis of setting segregated operations as the default for Brisbane Airport with/without tactical overflow when peak demand criteria exceeded

With a particular focus on the proposal from the community to have a specific segregated mode in northerly and southerly flow as follows:

Northerly winds

Arrivals on the legacy only over the community and departures on the new runway over the bay

Southerly winds

Aircraft departing on Legacy over the community and arriving onto the new runway over the bay

Additional considerations to include:

What was determined during the EIS and the final airspace design

Consistency with modes provided during EIS consultation and community update program

Review of airfield simulations from final airspace design mode considerations – including the need for a racetrack pattern on the taxiways due to airfield constraints

If such a change was considered operationally feasible what would be the overall benefits/impacts for the Brisbane community,

Would it meet the Airservices environmental requirements?

BAC with the support of Airservices Australia

To be completed by June 2021

<p>Investigate if creating a more specific departure profile will result in aircraft performing higher.</p> <p>The investigation to include:</p> <p>The effectiveness of current NAP initiatives including reduction of speed to 250kt on pilot behaviour</p> <p>If the proposed departure procedure will result in quantitative change to aircraft profiles and reduction in aircraft noise</p>		BAC with support from Airservices.	To be completed by Sep 2021
<b>Compliance and Monitoring</b>			
<p>An audit of operations including height of aircraft on arrival, and frequency of movements. Priority focus on the operations between Samford and different waypoints to the connection onto the ILS</p> <p>The audit to consider</p> <p>Aircraft heights on arrival compared to the flight path procedures and address any differences</p> <p>Is there anything that can be done to increase heights in the arrival procedure over Samford and surrounding areas?</p> <p>Number of movements with a focus on how the ILS (long) and RNP AR (short) flight paths are being used compared to what was expected prior to runway opening and determine how an equitable distribution may be achieved</p>		BAC with support from Airservices.	To be completed by March 2021
<b>Health</b>			
<p>Concerns raised regarding potential health impacts on tank water in residential areas from aircraft related emissions. Investigation into existing/ available research</p>		BAC	To be completed by March 2021
<b>Community Engagement</b>			
<p>All parties to reconvene to discuss preliminary investigation results, the outcomes of completed</p>		ALL	May 2021

investigations and any additional operational improvements which have been raised since meeting.			
Confirmation of Post Implementation Review timeline		Airservices Australia	March 2021
Actions to be published on BAC website and updated accordingly.		ALL	Friday 26 February
Actions to be a standing agenda item on BACACG		BAC	March 2021
Attending community representatives share actions with their community.		ALL	March 2021