

## HOBART AIRSPACE DESIGN

## SMOOTH ISLAND COMMUNITY

Airservices has undertaken a review of the Hobart Airport Standard Instrument Departures (SIDs) and Standard Instrument Arrivals (STARs) for Runway 12 and Runway 30, with safety of air navigation as our primary consideration. While the current flight path design is safe, Airservices has identified opportunities to improve safety while minimising the effect of aircraft noise on the community, where possible.

Airservices has prepared Fact Sheets for specific communities located within areas affected by proposed flight path designs to provide further information regarding what you will see and hear. Consultation commenced on 31 October 2018 and is open until 21 December 2018. The proposed designs can be found by following this <a href="link">link</a> on the Airservices website or <a href="http://www.airservicesaustralia.com/projects/flight-path-changes/hobart-airport-standard-arrivals-and-departures/</a>

# HOW ARE THE RUNWAYS USED AT HOBART INTERNATIONAL AIRPORT?

The operational pattern of Hobart Airport is highly seasonal due to prevailing winds and weather patterns. Hobart Airport has one runway, which is aligned northwest known as Runway 30 and southeast known as Runway 12.

In winter months the airport tends to operate in a north-westerly flow, with aircraft landing and taking off on Runway 30 in the same direction, whereas during the summer months, operations are more evenly distributed to both Runway 30 and Runway 12. This is because aircraft need to land and take-off into wind as much as possible.

# HOW WILL IT BE DIFFERENT FROM WHAT I EXPERIENCE TODAY?

The proposed design introduces separate SIDs for light aircraft and jet aircraft. It also includes the introduction of Smart Tracking STAR approaches for both runways. These are in addition to the satellite area navigation approaches (RNAV) currently in use.

Smart Tracking aircraft fly with greater accuracy than those using conventional navigation means, providing vertical and lateral guidance. The satellite technology makes air travel safer, with fewer emissions and is more dependable in all weather conditions.

Aircraft flying the Smart Tracking approach must meet regulatory standards for approval to fly this flight path. Most airlines in Australia have this approval.

The following are the proposed flight path designs for Runway 30 and Runway 12 that affect the Smooth Island area. It is important to note that there will be times when aircraft will fly paths that are different to the proposed flight paths due to operational reasons.

Due to the proximity of Smooth Island to the extended runway centreline used by aircraft to establish on the approaches or continue on the departures, residents will continue to experience arrivals for Runway 12 and departures for Runway 30.

#### Runway 30 (Figures 1 and 3)

When Runway 30 is used for arrivals, aircraft will arrive on a northern flight path - this flight path will be used for jet aircraft arriving from locations such as Sydney and Brisbane, flying the RNAV approach.

This flight path will join the RNAV flight path, approximately 4 km to the northwest of Smooth Island.

There will be a reduction of the total number of arriving flights on these flight paths, down from **38** to approximately **21** per day due to some jet aircraft using the new Smart Tracking arrival.



### Runway 12 (Figures 2 and 4)

When Runway 12 is used for departures, the flight path will be 7 km to the northwest of Smooth Island.

## **Flight Path Corridors**

The current and proposed flight paths are presented as 'flight path corridors'. The corridors contain the flight path track in the centre and an area either side of the track, where aircraft can be expected to operate. This is because aircraft performance can vary across aircraft types, operators and in different weather conditions.



Figure 1: Runway 30 Arrival Operations

Key: Current Arrivals Proposed Arrivals

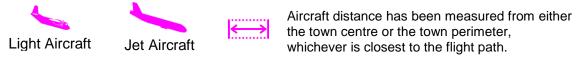


Figure 2: Runway 12 Departure Operations

**Key:** Ourrent Departures Proposed Departures



## WHAT WILL I SEE (AIRCRAFT MOVEMENTS, DISTANCES AND HEIGHTS)?



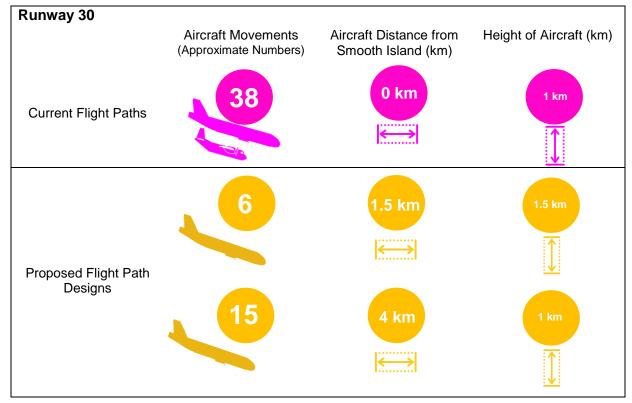


Figure 3: Runway 30 Operations

**Key:** • Current Arrivals • Proposed Arrivals

On a busy day, residents of Smooth Island will notice approximately **6** jet aircraft arriving 1.5 km to the north, at a height of 1.5 km and approximately **15** jet aircraft arriving 4 km to the northwest, at a height 1 km.



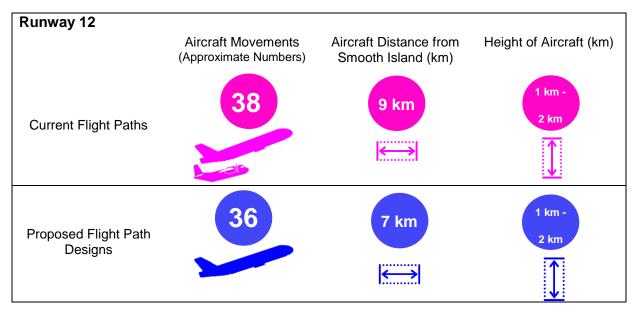


Figure 4: Runway 12 Operations

Key: Current Departures
Proposed Departures

Residents of Smooth Island can expect to see approximately **36** jet aircraft departing 7 km to the northwest, at a height of up to 2km.



#### WHAT WILL I HEAR?

Based on noise modelling<sup>1</sup> on a busy summer day, Figure 5 depicts the current noise modelling map of Smooth Island on a summer day, which shows between 5 (pink dots) and 20 (purple dots) noise events over 60 decibels<sup>2</sup>.

**Note**: Summer data is taken from the period prior to March 2018 flight path changes to Runway 30 STAR.

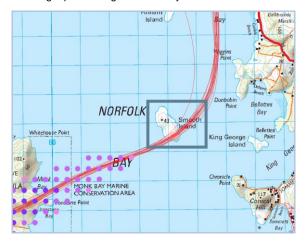


Figure 5: Current 60 decibel map (Summer)

Figure 6 depicts the current noise modelling map of Smooth Island on a busy winter day, which shows significant noise events over 60 decibels.

**Note**: Winter data is taken from the period after March 2018 flight path changes to Runway 30 STAR.

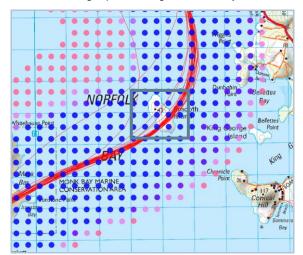


Figure 6: Current 60 decibel map (Winter)

Figure 7 presents the proposed noise modelling map for Smooth Island on a busy winter day, which shows between 5 (pink dots) to 10 (light purple dots) noise events over 60 decibels.

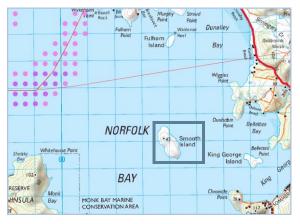


Figure 7: Proposed 60 decibel map (Summer)

Figure 8 presents the proposed noise modelling map for Smooth Island on a busy winter day, which shows between 5 (pink dots) and 20 (purple dots) noise events over 60 decibels.

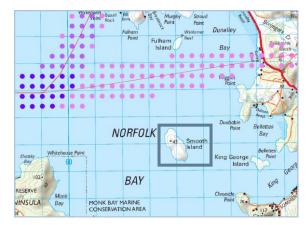


Figure 8: Proposed 60 decibel map for (Winter)

The range of noise levels associated with different everyday activities is depicted in Figure 9.

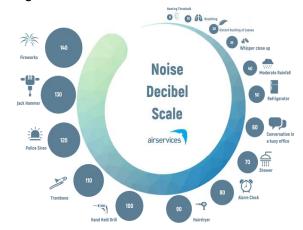


Figure 9: Noise Decibel Scale (Source: Noise Navigator® Sound Level Database) provides examples of the level of noise (decibels) that various activities and equipment emit, and communities may experience. The diagram is not designed to illustrate the entire effect of aircraft operations.

<sup>&</sup>lt;sup>1</sup> Aviation Environment Design Tool (FAA)

<sup>&</sup>lt;sup>2</sup> Australian Standard 2021:2015



### WHEN WILL THIS CHANGE OCCUR?

The proposed flight path designs are open for stakeholder feedback from 31 October and have now been extended until 21 December 2018.

An implementation date will be determined once all the feedback is considered and the flight path designs are finalised.

### WHERE CAN I GET MORE INFORMATION?

On-site community consultation will occur in the broader Hobart area between 15 and 21 November 2018. Dates and locations are available on the <u>Airservices website</u>.

#### **HOW CAN I HAVE MY SAY?**

To provide feedback and/or register interest in receiving information on flight path changes for the Hobart area, contact either:

Tania Parkes Consulting:

- taniaparkes@taniaparkes.com.au
- 1800 172 173 (free call), or

Airservices Noise Complaints and Information Service (NCIS):

- 1800 802 584 (free call), an interpreter service is also available on 131 450
- Our online form at: https://feedback.emsbk.com/asa

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