

# TOWNSVILLE AIRPORT

### TRAFFIC MANAGEMENT PLAN – FINAL STAGE

### Implementation of Standard Instrument Departure and Standard Instrument Arrival Flight Paths.

Airservices and the Department of Defence are implementing changes to improve the safety and efficiency of aircraft operations for arriving and departing flights at Townsville Airport.

Since May 2017 this has included high altitude flight path changes, changes to traffic management procedures, and re-aligning the satellite-based area navigation approach (RNAV) to Runway 19 for aircraft landing at the airport when approaching from the north.

The final stage of the Traffic Management Plan provides predictable and segregated flight paths that connect aircraft from the airport to and from high level routes. This component is the proposed implementation of Standard Instrument Departures and Standard Instrument Arrivals.

## WHAT IS THE CHANGE AND WHY IS IT NEEDED?

The proposed Standard Instrument Departures (SIDs) and Standard Instrument Arrivals (STARs) are predictable and segregated flight paths that are designed to strict regulatory standards to keep aircraft in a defined corridor using the latest satellite navigation technology.

This allows improved management of aircraft operations by aircraft and air traffic control systems, reducing pilot and air traffic control workload and resulting in reduced fuel burn and lower emissions.

The proposed flight paths are required to meet the Civil Aviation Safety Authority (CASA) mandate to use Global Positioning System (GPS) as the primary means of navigation across Australian airports.

SIDs connect departing aircraft to their routes to destination. STARs connect arriving aircraft to approaches including satellite based area navigation approaches (RNAV) which guide the aircraft to the runway in all weather conditions.

#### WHAT IS GOING TO CHANGE?

Flight paths are now being designed to meet the GPS design rules. This will result in increased concentration of flights and some flight path changes, including later turns off the runway to the south of the airport.

# WILL THERE BE ANY CHANGE IN AIRCRAFT NOISE OR TRACKING?

Some residents may experience increased levels of aircraft noise.

Some residents who have not previously experienced concentrated overflight by turbo propeller and jet aircraft will now be overflown by these aircraft.

To minimise the possibility of affecting communities currently not exposed to turbo propeller and jet aircraft noise, where possible flight paths have been designed to replicate existing flight paths and/or have been designed over water.

#### WILL THERE BE ANY CHANGE IN AIRCRAFT NOISE OR TRACKING? PART 1 - ARRIVALS LANDING ONTO THE RUNWAY FROM THE SOUTH (refer Figures 1a, 1b and 2)

Residents in isolated properties north of **Reid River** and south west of **Toonpan** may notice increased concentration and changes to aircraft tracking for up to 35 arriving aircraft per day, at or above 6,000 feet.

While these aircraft will appear to be at a relatively high altitude and noise levels will be below 60 decibels (dB(A)) they may be noticeable due to the low ambient noise in these areas, particularly at night.

For around 5-10 weeks of the year when the military airspace west of the airport is active, residents in the **Garbutt** and **Annandale** areas will notice concentrated overflight from approximately 11 arrivals per day at approximately 7,000 - 8,000 feet. Most will be turbo propeller aircraft. During these periods **Oak Valley** residents will notice these aircraft at lower altitudes of around 5,000 feet on a concentrated flight path. Noise levels over these areas will be below 60 decibels (dB(A)) but may still be noticeable in the **Oak Valley** area due to low ambient noise levels.

Residents in the Horseshoe Lagoon, Shirbourne, Upper Haughton, and Major's Creek areas may notice new overflight and concentration from approximately 11 arriving aircraft per day at approximately 8,000 - 11,000 feet.

While these aircraft will be at a relatively high altitude and noise levels will be below 60 decibels (dB(A)) overflight may be noticeable due to the low ambient noise in these areas, particularly at night.

Residents in the **Bluewater Park**, **Blue Hills** and **Toomula** areas may notice that approximately 11 arriving aircraft per day are tracking 1.5km further to the west at 8,000 - 10,000 feet on a concentrated flight path.

Residents to the south of **Hervey Range** will also notice a change in and concentration of overflight by these aircraft at approximately 6,000 feet with noise levels below 60 decibels (dB(A)). Noise levels may still be noticeable due to low ambient noise levels. Townsville Airport Implementation of SIDS and STARS



**Figure 1a:** Proposed flight path corridors for aircraft landing onto the runway via the satellite based area navigation RNAV approach (red) when aircraft are landing onto the runway from the south. Proposed standard instrument arrival flight paths from 23 May 2019 (yellow)

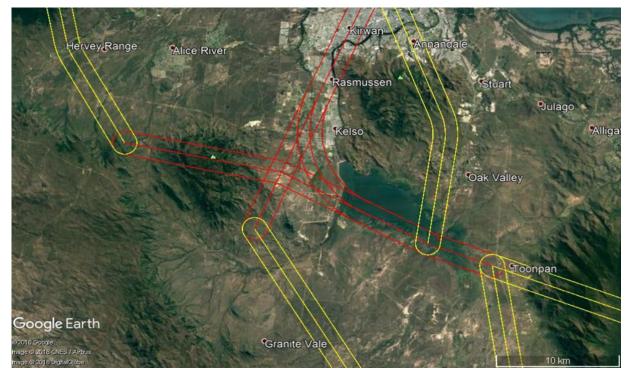


Figure 1b: Proposed flight path corridors as in Figure 1a close up.

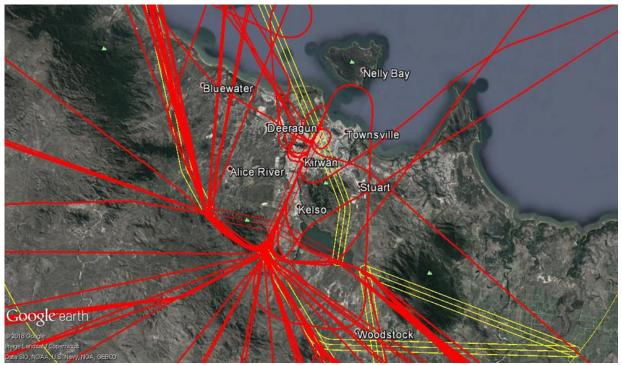


Figure 2: Proposed standard instrument arrival flight path corridors from 23 May 2019 shown above (yellow) with a sample of existing arrival flight tracks (red) to show changes to overflight.

#### WILL THERE BE ANY CHANGE IN AIRCRAFT NOISE TRACKING? PART 2 – ARRIVALS LANDING ONTO THE RUNWAY FROM THE NORTH (refer Figures 3 and 4)

Residents in the **Palm Island** area may notice a change to tracking and increased concentration of arriving aircraft with noise levels below 60 decibels (dB(A)). Approximately 13 turbo propeller and 7 jet arriving aircraft per day will overfly within 1.2km of residential areas (refer Figures 3 and 4). Residents to the south east of **Mt Elliot** may notice changes to tracking and concentration of arrival overflight by approximately 13 turbo propeller and 7 jet aircraft per day. While these aircraft will be at a relatively high altitude and noise levels will be below 60 decibels (dB(A)), they may be noticeable due to the low ambient noise in these areas, particularly at night.



Figure 3: Proposed flight path corridors for aircraft landing via the satellite based area navigation approach (RNAV) (red) when aircraft are landing onto the runway from the north. Proposed standard instrument arrival flight paths from 23 May 2019 (yellow).

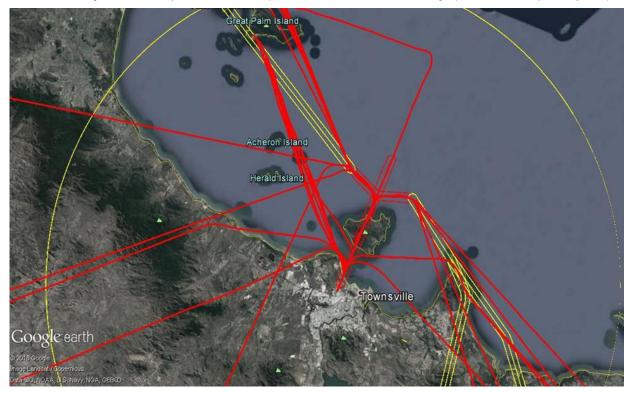


Figure 4: Proposed standard instrument arrival flight paths from 23 May 2019 shown above (yellow) with a sample of existing flight tracks (red) to show changes to overflight.

#### WILL THERE BE ANY CHANGE IN AIRCRAFT NOISE OR TRACKING?

#### PART 3 – DEPARTURES FROM THE RUNWAY TO THE NORTH (refer Figures 5a, 5b and 6)

Residents in the **Picnic Bay** area may notice a change to departing aircraft tracking over water at existing noise levels. Aircraft that were previously spread out will generally be more concentrated over water just south of the Picnic Bay residential area.

There may be an occasional larger aircraft flying over the residential area due to need for the aircraft to make a larger turn at higher speeds. Most aircraft will be turbo propeller and medium jets turning over water.

Residents in the **West Point** area may notice a change to departing aircraft tracking over water at existing noise levels. Aircraft that were previously spread out will be concentrated over water just to the west of the West Point residential area. Residents in the **Saunders Beach, Yabulu, Black River** and **Rangewood** areas may notice concentrated flight paths overhead, but noise levels will be below 60 decibels (dB(A)). While departing aircraft will generally be above 8,000 – 9000 feet, aircraft noise may be noticeable in these areas due to low ambient noise levels, particularly at night.

Residents in the **Cape Cleveland** and **Cungulla** areas may notice concentration of north bound arriving aircraft at around 6000 feet, approximately 4km east of residential areas over water, and south bound departing aircraft at higher altitudes, approximately 2km east of residential areas with noise levels below 60 decibels (dB(A)).

While not directly overflown by aircraft, the low ambient noise levels in these areas, particularly at night, may result in noise levels appearing louder relative to background noise.

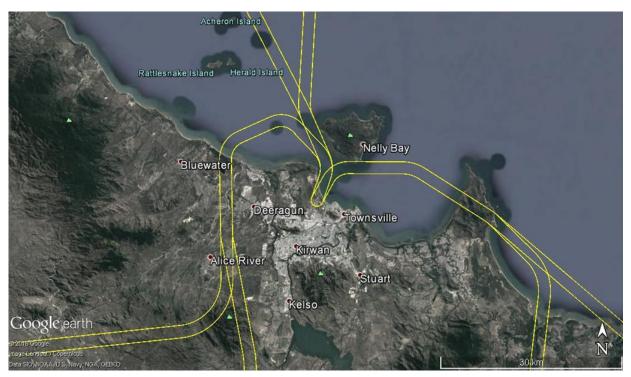


Figure 5a: Proposed standard instrument departure flight path corridors for aircraft departing the runway to the north and then to destinations north, south and west from 23 May 2019 (yellow).

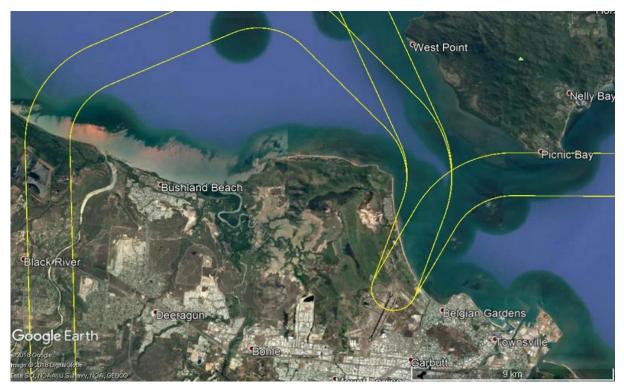


Figure 5b: Proposed standard instrument departure flight path corridors as in Figure 5a close up.

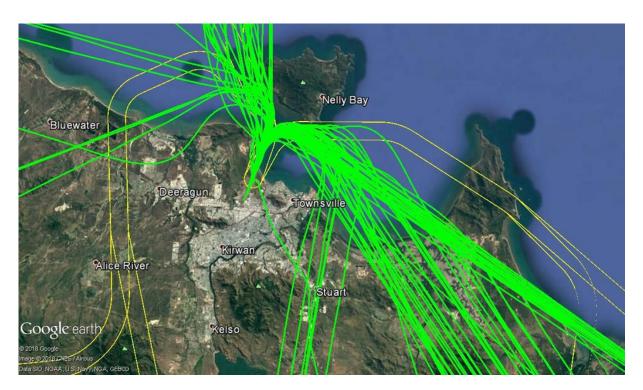


Figure 6: Proposed standard departure flight paths from 23 May 2019 shown above (yellow) with a sample of existing flight tracks (green) to show changes to overflight.

#### PART 4 – DEPARTURES FROM THE RUNWAY TO THE SOUTH (refer Figures 7 and 8)

Residents in the **Annandale** and **Aitkenvale** areas currently experience overflight from occasional aircraft including military helicopters. They may now be occasionally overflown by turbo propeller and jet departures. The noise associated with the jet aircraft may increase by more than 5 decibels (dB(A)) to be above 70 decibels (dB(A)).

Residents in the **Vincent** area may be occasionally overflown by departing jet and additional turbo propeller aircraft, with noise levels from the jets at above 70 decibels (dB(A)). Residents in the **Wulguru**, **Stuart**, **Julago** and **Alligator Creek** areas will be overflown by approximately 8 turbo propeller aircraft departures per day and occasional jets. Noise levels may increase by more than 5 decibels (dB(A)) to be above 60 decibels (dB(A)). Residents in these areas may also notice changes to aircraft tracking and increased concentration of flight paths overhead.

Residents in the **Kirwan**, **Condon**, and **Gumlow** areas will notice increased concentration and additional departure overflight with no change to existing noise levels. Approximately 8 jets and 8 turboprops will overfly these areas per day.

Residents of **Thuringowa**, **Bohle Plains**, **Rangewood** and **Yabulu** areas currently experience overflight from occasional aircraft, including military helicopters. On a busy day these areas ma7y be overflown by up to 5 jet and 8 turbo propeller aircraft, which will be departing on a concentrated flight path. Noise levels from the jet aircraft may be above 60 decibels (dB(A)).



Figure 7: Proposed standard instrument departure flight path corridors for aircraft departing the runway to the south and then to destinations north, south and west from 23 May 2019 (yellow).

Note: there will be a spread of aircraft tracks expected over the Vincent, Gulliver, Aitkenvale, and Annandale areas due to variation of aircraft turning off the runway.



Figure 8: Proposed standard departure flight paths shown above (yellow) with a sample of existing flight tracks (green) to show changes to overflight from 23 May 2019.

#### WHEN WILL THIS CHANGE OCCUR?

The SIDs and STARs are proposed for implementation on 23 May 2019.

#### HOW CAN I HAVE MY SAY?

To provide feedback and/or register interest in receiving information on flight path changes, please contact Airservices Noise Complaints and Information Service (NCIS) on:

- 1800 802 584 (free call)
- 131 450 (interpreter service)
- online at: <u>https://complaints.bksv.com/asa</u>

Feedback closes on 7 December 2018.