



# DIA Air Transport Apron Procedures

OCTOBER 2023 VERSION 1.4



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# Introduction

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## General Overview

The purpose of the DIA Air Transport Apron Procedures has been produced in the interests of safety and security at Darwin International Airport and details the particulars of the procedures for aircraft parking control on the Air Transport Apron and to ensure the safety of aircraft during ground manoeuvring and aircraft servicing; and includes the following:

- Parking Bay occupancy (Apron Occupancy Charts) by aircraft type and any restrictions that apply
- Apron manoeuvring procedures, including aircraft towing guidelines
- Aircraft parking
- General aircraft servicing and turnaround procedures
- Marshalling, NIGS and aerobridges
- Pushback procedures
- Spill management procedures
- Baggage handling
- Security requirements
- Reporting incidents and accidents

The **Darwin International Airport Air Transport Apron** has 17 primary aircraft parking positions:

- Bays 1 – 12
- Bays 21 – 25

In addition to these there are secondary parking positions providing power-in/out operations and/or flexible parking combinations.

Refer to ***Attachment 1 – Air Transport Apron Layout – Sheets 1 to 3.***

Several parking positions are able to accommodate either Domestic or International services.

Daily aircraft parking is allocated in accordance with these procedures and the guidelines detailed in the DIA Terminal Operations Manual - Aircraft Parking Bay Allocation Guidelines.

The DIA Aircraft Parking Bay Allocation Guidelines details the processes for determining aircraft parking priority (e.g. by aircraft size, frequency and type of service), allocating and managing the coordination of day to day aircraft operations.

In accordance with IATA guidelines DIA is designated as a Coordinated Airport (Level 3) requiring airlines to have been allocated a slot before they can operate services to/from Darwin Airport.

The DIA Air Transport Apron Procedures is issued in accordance with the DIA Aerodrome Operations Manual – 3.6 Aircraft Parking Control.

The apron occupancy and aircraft turnaround procedures apply to all aircraft operators, handling agents, refuelling companies, and other airside tenants and stakeholders and their staff working on the airside at Darwin International Airport.

Aircraft Turnaround procedures outlined in this document are to be followed in conjunction with each individual organisations' procedures and requirements.

## References

### Regulatory Requirements

- CASA – Manual of Standards (MOS) Part 139 – Aerodromes:
  - Chapter 6 Division 4: *Aprons*
  - Chapter 8 Division 5: *Apron markings*
  - Chapter 11.14: *Aircraft parking control*
- CASA – Civil Aviation Orders:
  - Section 20.3 Air Servicing Operations – Marshalling and Parking of Aircraft
  - Section 20.9 Air Service Operations – Precautions in Refuelling, Engine and Ground Radar Operations
- CASA Instrument number CASA 24/15 – Approval to mark pilot stop lines with secondary aircraft parking positions (Darwin International Airport)

### DIA

- Terminal Operations Manual
- Engine Ground Running Management Plan
- Aerobridge Operating Guide and Procedures
- Airside Drivers' Guide and Airside Vehicle Control Handbook
- Aerodrome Manual 3.6 Aircraft Parking Control

### ADG

- Airside PPE Policy
- Airside Use of Bicycles Policy

### Airport Development Group

- Conditions of Use – Airport Development Group

DIA and ADG publications are available on the DIA website – Working on Airport - [Working at DIA | Darwin International Airport \(darwinairport.com.au\)](http://www.darwinairport.com.au)

# Definitions and Terms

<b>ADA</b>	Authority to Drive Airside
<b>Aircraft parking position or bay</b>	An open-air designated area on an apron for parking an aircraft.
<b>Air Transport Apron</b>	The defined area within the Security Restricted Area to accommodate aircraft for the purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.
<b>Aircraft Pushback</b>	The pushback of an aircraft by a tug or tractor from a designated parking bay.
<b>AVCH</b>	Airside Vehicle Control Handbook
<b>Aircraft Turnaround</b>	The servicing of an aircraft from the time it enters the bay until the aircraft pushback has been completed.
<b>Code C Aircraft</b>	Maximum wingspan 36m includes aircraft such B737 All Series; Airbus; A319, 320 & 321; Fokker F70 & 100; and Embraer E170 & 190.
<b>Code D Aircraft</b>	Maximum wingspan 52m includes aircraft such as Boeing B757 & B767.
<b>Code E Aircraft</b>	Maximum wingspan 65m includes aircraft such as Boeing B747, B777, B787 and Airbus A330, A340.
<b>Code F Aircraft</b>	Maximum wingspan 80m includes the Airbus A380 and Antonov AN-124.
<b>Conditions of Use</b>	The Conditions under which operators use the facilities and services at Darwin International Airport
<b>Emergency Shower &amp; Eye Wash Facility</b>	A facility provided for airside staff should they come into contact with, fuel, oils or other hazardous substances.
<b>Foreign Object Debris (FOD)</b>	An aviation term for refuse/debris that could potentially cause damage to staff, aircraft or equipment.
<b>Jet Blast (or Prop Wash)</b>	Exhaust from the rear of an operating jet engine (backwash from a propeller).
<b>Servicing</b>	The process of loading/unloading, refuelling, cleaning, maintenance and any other activity that is necessary for the aircraft during the turnaround phase.
<b>PPE</b>	Personal Protective Equipment – refer NTA Airside PPE Policy.
<b>VDGS</b>	Visual Docking Guidance System ( <i>note may also be referred to as AVDGS or NIGS</i> )

# Air Transport Apron Occupancy - References

## Apron Occupancy Chart – Legend

Symbol	Description
→	Parking Available
<b>AD</b>	Apron Drive Aerobridge (PBB)
<b>ET</b>	Elevating Fixed T-Head Aerobridge
<b>FH</b>	Hydrant Refuelling Available Note Bays 5 to 8 hydrant refuelling available RHS (starboard) only
<b>FT</b>	Tanker Refuelling Only
<b>NIG</b>	VDGS Nose-in Guidance System
<b>MAR</b>	Marshalling Required
<b>PSB</b>	Pilot Stop Bar
<b>TI</b>	Tail infringement over parking clearance line



## Apron Occupancy Chart – Aircraft Types

The standard ICAO Aircraft Type Codes have been used to mark parking positions on the apron, the table below details some of the common aircraft types and the applicable aircraft codes when used to designate parking positions on the Air Transport Apron Bays:

Aircraft Type	Aircraft Code
Antonov AN-124	A124
Airbus A310	A310
Airbus A319	A319
Airbus A320	A320
Airbus A321	A321
Airbus A330-200	A332 Note 2
Airbus A330-300	A333 Note 2
Airbus A330-800	A338 Note 2
Airbus A330-900	A339 Note 2
Airbus A340-300	A343
Airbus A340-600	A346
Airbus A350-900	A359
Airbus A350-1000	A35K
Airbus A380	A380
Boeing 717	B712
Boeing 727	B727
Boeing 737-300	B733 NOTE 3
Boeing 737-500	B735 NOTE 3
Boeing 737-700	B737 NOTE 3
Boeing 737-800	B738 NOTE 3
Boeing 737 Max 8	B38M NOTE 3

Aircraft Type	Aircraft Code
Boeing 747-400	B744
Boeing 747-8F	B748
Boeing 757	B757
Boeing 767	B763
Boeing 777-200	B772
Boeing 777-300	B773
Boeing 777-8	B778
Boeing 787-8	B788
Boeing 787-9	B789
Boeing 787-10	B78X
Dash 8 (All)	DH8C
Dash 8-Q400	DH8D
Douglas DC-10	DC10
Embraer EMB-120	E120
Embraer 170	E170
Embraer 190	E190
Fokker 70	F70
Fokker 100	F100
Ilyushin IL76	IL76
McDonnell Douglas MD11	MD11
SAAB 340 B	SF34

*Notes:*

- 1. Parking designations may include several types due specific requirements for refuelling, parking clearances or aerobridge requirements; or may be grouped if using the same Stop Position – refer Notes 2 and 3.*
- 2. A330 marking on Bay 1 applies to all A330 variants; Bay 3 is restricted to max size aircraft Bay A330-300 subject to the restrictions detailed in the Air Transport – Bay Occupancy Restrictions table.*
- 3. When B737 series aircraft all use a common Stop Position it is marked as B737 ALL SERIES*

## Air Transport Apron – Bay Occupancy Restrictions

The following Bay Occupancy Restrictions apply at Darwin International Airport – Air Transport Apron.

Reference Note	Restriction Details
<b>A</b>	When <u>BAY 1</u> is occupied by A380 or A124 – <u>BAY 2</u> is restricted to max Code <u>D</u> aircraft (B763)
<b>B</b>	Taxilane behind Bay 3 not available to B763 aircraft and above when A330-300 parked BAY 3 due Tail Infringement (TI)
<b>C</b>	BAY 2 restricted to B763 when A330 parked BAY 3
<b>E</b>	BAY 8 restricted to max B717/E190/F100
<b>F</b>	BAY 6A restricted to max E120
<b>G</b>	BAY 10 when E120 power-out; BAY 11 restricted to max E120
<b>H</b>	BAY 10 when SF34 power-out; Bay 11 must be VACANT
<b>I</b>	BAY 11 power-out; BAY 12 must be VACANT
<b>J</b>	BAY 12 power-out; BAY 11 must be VACANT
<b>K</b>	Pilot Stop Bars (PSB) SF34 unless otherwise marked (6A max E120)
<b>L</b>	BAYS 11 & 12 must be vacant when BAY 11A occupied
<b>M</b>	Bay 21 - B763 aircraft <u>tow on only</u>
<b>N</b>	Bay 22 restricted to max E190/F100 when Bay 21 occupied by B763

### Notes:

- BAY 11A – used as storage Bay only for up to B789 aircraft – DIA assessment and approval required for any aircraft not listed in Apron Occupancy Chart.*
- Unless approved by DIA all jet and turbo-prop aircraft above a wingspan of 20m must be pushed-back; it is the responsibility of aircraft operators to ensure that a suitable tow-bar is available or carried on board.*
- Any power-out requirements for aircraft >20m wingspan must be assessed and approved by DIA and may be subject to conditions e.g. adjacent Bay to power-out direction must be vacant.*

# 1. Air Transport Apron Occupancy Charts

## Air Transport Apron Occupancy Chart – Primary Bays 1-12

Bay	1	2	3	4	5	6	7	8	9	10	11	12
<b>Details</b>	<b>AD NIG FH</b>	<b>ET NIG FH</b>	<b>ET NIG FH</b>	<b>ET NIG FH</b>	<b>AD NIG FH</b>	<b>MAR FH</b>	<b>MAR FH</b>	<b>MAR FH</b>	<b>MAR FT</b>	<b>MAR FT</b>	<b>MAR FT</b>	<b>MAR FT</b>
<b>Bay to be Vacant</b>			3A	4A	5A	6A	7A					
<b>Aircraft</b>	<i>Refer to Apron Occupancy Chart – Legend, Apron Occupancy Chart – Aircraft Types and Air Transport Apron – Bay Occupancy Restrictions and Reference Notes</i>											
<b>AN-124</b>	→ A											
<b>A380</b>	→ A											
<b>A350-800</b>	→	→ A										
<b>A350-900</b>	→	→ A										
<b>A350-1000</b>	→	→ A										
<b>A340-600</b>	→	→ A										
<b>A340-300</b>	→	→ A										
<b>A330-200</b>	→	→ A	→ C									
<b>A330-300</b>	→	→ A	→ B, C									
<b>A330-900</b>	→	→ A										
<b>A321</b>	→	→	→	→	→							
<b>A320</b>	→	→	→	→	→	→	→		→	→	→	→
<b>A319</b>	→	→	→	→	→	→	→		→	→	→	→
<b>A310</b>	→	→	→									

Bay	1	2	3	4	5	6	7	8	9	10	11	12
Details	AD NIG FH	ET NIG FH	ET NIG FH	ET NIG FH	AD NIG FH	MAR FH	MAR FH	MAR FH	MAR FT	MAR FT	MAR FT	MAR FT
A300	→	→ A										
B747-400	→	→ A										
B747-8F	→											
B787	→	→ A										
B777-8	→	→										
B777-300	→	→ A										
B777-200	→	→ A										
B763	→	→	→									
B757	→	→	→									
B737 ALL	→	→	→	→	→	→	→		→	→	→	→
B717	→	→	→	→	→	→	→	→	→	→	→	→
F70	→	→	→	→	→	→	→	→	→	→	→	→
F100	→	→	→	→	→	→	→	→	→	→	→	→
MD11	→											
E170	→	→	→	→	→	→	→	→	→	→	→	→
E190	→	→	→	→	→	→	→	→	→	→	→	→
EMB-120	→	→						→	→	→ G, H	→ G, H	→
SAAB 340B	→	→						→	→	→	→ J	→
Dash 8 – Q400						→	→					

## Air Transport Apron Occupancy Chart – Primary Bays 21-25

Bay	21	22	23	24	25
<b>Details</b>	MAR FH	MAR FH	MAR FH	MAR FH	MAR FH
<b>Bay to be Vacant</b>			23A	24A	25A
<b>Aircraft</b>	<i>Refer to Apron Occupancy Chart – Legend, Aircraft Types and Bay Occupancy Restrictions and Reference Notes</i>				
<b>A321</b>	→	→	→	→	→
<b>A320</b>	→	→	→	→	→
<b>A319</b>	→	→	→	→	→
<b>B763</b>	→ M, N				
<b>B757</b>	→				
<b>B737 (ALL)</b>	→	→	→	→	→
<b>B717</b>	→	→	→	→	→
<b>DASH 8-100</b>	→	→			
<b>E170</b>	→	→	→	→	→
<b>E190</b>	→	→	→	→	→
<b>EMB-120</b>		→ PSB, K			
<b>F100/70</b>	→	→	→	→	→
<b>SAAB 340B</b>		→ PSB, K			

**Notes:**

1. *Prior approval required from DIA Operations for parking of aircraft not listed in the above tables.*
2. *Pilot Stop Bar and power-out operations limited to max wingspan 20m – includes following aircraft: Beech 1900, Challenger 604, Learjet 36A, Falcon 900.*
3. *SAAB 340B approved power-out operations where marked.*

## Air Transport Apron Occupancy Chart – Secondary Bays

Bay	3A	4A	5A	6A	7A	11A	21A	23A	24A	25A
<b>Details</b>	PSB FH	PSB FH	PSB FH	PSB FH	PSB FH	MAR FT	PSB FH	PSB FH	PSB FH	PSB FH
<b>Bay to be Vacant</b>	3	4	5	6	7	11 & 12	21	23	24	25
<b>Aircraft</b>	<i>Refer to Apron Occupancy Chart – Legend, Aircraft Types and Bay Occupancy Restrictions and Reference Notes</i>									
<b>A333</b>						→ L				
<b>A343</b>						→ L				
<b>B788/9</b>						→ L				
<b>B763</b>						→ L				
<b>EMB-120</b>	→ K	→ K	→ K	→ K	→ K		→ K	→ K	→ K	→ K
<b>IL76</b>						→ L				
<b>SAAB 340B</b>	→ K	→ K	→ K	→ K	→ K		→ K	→ K	→ K	→ K

### Notes:

1. Secondary Bays power in/out operations only; all aircraft use the same Key Hole marking.
2. Pilots of jet aircraft to be mindful of jet blast to adjacent Bays when during power-out.
3. Pilot Stop Bar and power-out operations limited to max wingspan 20m – includes following aircraft: Beech 1900, Challenger 604, Learjet 36A, Falcon 900.
4. Power in/out operations for aircraft with wingspan >20m must get prior approval from DIA; and adjacent Bay must be vacant.
5. Bay 11A – Storage Bay only. Prior approval required from DIA Operations for aircraft larger than B763; note depending on size of aircraft further restrictions may apply to aircraft using Bay 10.
6. Prior approval required from DIA Operations for parking of aircraft not listed in above table.

## Air Transport Apron Occupancy Chart – Helicopter Bays

Bay	H 1	H 2	H 21	H 23
<b>Bays to be Vacant</b>	1	2	21, 21A	23, 23A
<b>Aircraft</b>				
<b>Sikorsky S-92</b>	→	→	→	→

*Notes:*

1. Helicopters must park on designated parking positions unless alternative parking position is approved by the Airport Duty Manager.
2. When using a non-dedicated Helicopter parking position, the **adjacent bays must be vacant.**
3. Helicopter Pilots must follow taxi lines where available and must not transit across parking Bays.



## 2. Apron Manoeuvring

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### 2.1 Aircraft Manoeuvring

- Flight crews to be mindful of 'jet blast' and or 'prop-wash' on adjacent bays, facilities and equipment during power-out operations and adhere to all apron line markings with extreme caution during ground manoeuvring.
- Aircraft to use minimum power on apron.
- Commuter aircraft pilots must ensure either rotating beacon or strobes are illuminated and visible to aircraft ground personnel prior to commencing 'Start-up'.

### 2.2 Aircraft Towing Guidelines

- Only persons holding the appropriate category of ADA in accordance with the AVCH (and Airside Drivers Guide) are permitted to carry out aircraft towing operations.
- Prior to any towing operations to/from the Air Transport Apron or from Bay to Bay, approval must be obtained from ATC – *note AFIS/CTAF procedures currently in place 2200 to 0600.*
- **Operators must establish who is the 'person in charge' of tow** and who is responsible for requesting approval e.g. Tug Operator or Engineer on board. ATC directions must be followed at all times.
- When requesting clearance for towing, you must, identify who you are (call sign), current position and intended destination. For example:
  - WHO you are calling: *Ground*
  - WHO you are: *VH-ABC*
  - WHERE you are located: *on Bay 25*
  - What you wish to do: *Request tow from Bay 11A to Bay 1*
- At all times during a tow operation, the 'person in charge' of the aircraft towing is responsible for all radio communications; and maintain a constant 'listening watch'.
- Operators in charge of radio communications must hold a CASA Radio Operator Certificate (AROC).
- It is the responsibility of the Airline or Ground Handler that anyone involved in towing (and push back) of aircraft have undertaken suitable training and assessed as competent to carry out aircraft towing operations.
- Except when involved in the push back and/or relocating an aircraft on the Air Transport Apron via the taxilane, Drivers involved in towing operations must hold an Authority to Drive Airside (ADA) for the appropriate category e.g. CAT 3 required for taxiways.
- Aircraft under tow must comply with the standards for lighting as described in the operator's procedures manual, and/or at minimum ensure that the aircraft's anti-collision and navigation lights are switched ON and operational prior to commencing the tow.

### 2.3 Engine Runs

- All engine runs require prior approval from DIA and must be carried out in accordance with the DIA Engine Ground Running Management Plan.

## 3. Aircraft Turnaround Procedures

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The operating airline is responsible to ensure that ground handling arrangements for the turnaround of an aircraft are in place for all aircraft operations at Darwin International Airport.

The airline and/or their ground handling agent must ensure that:

- Only those personnel that are suitably trained and qualified are to perform operational duties, such as pushbacks, marshalling and general servicing, during aircraft turnarounds.
- A person should be assigned to be "in charge" (supervising) of the operations.
- All personnel involved in the turnaround and servicing of an aircraft should be briefed of their individual responsibilities.
- Personnel are briefed on the hazards associated with aircraft and vehicle movements.
- All personnel are complying with NTA Airside PPE Policy refer 10.3.

### 3.1 Prior to Aircraft Arrival

#### Bay Inspection

A thorough inspection of the aircraft bay is to be conducted (on foot) to remove any obstructions or Foreign Object Debris (**FOD**). Any spills or hazards are to be reported immediately to the duty DIA Airside Operations Officer 0402 088 145.

#### Equipment and Personnel Staging

Equipment and personnel staging are to be in accordance with DIA Airside Driving Rules and other operational or safety policies.

Tasks to be completed prior to an aircraft arrival should include:

- Confirm bay equipment availability and serviceability including chocks, cones, VDGS (or marshalling equipment), GPU (if required).
- GSE and vehicles are to be positioned behind the equipment storage and staging areas with the parking brakes applied prior to the arrival of the aircraft.
- Baggage trollies/dollies must have load secured.
- All personnel must wear appropriate Personal Protective Equipment (PPE) in accordance with the NTA Airside PPE Policy.
- All personnel on the ramp must be aware of the location of the emergency fuel shut off buttons.
- Where applicable VDGS (NIGS) activated; and aerobridges pre-positioned or in Home position.
- Aerobridge must show a green light to indicate correctly positioned.
- Prepositioned pushback tugs at the front of the bay must be behind the red tug clearance line (or parked in Equipment Storage Area).

## Docking Guidance Systems

Aerobridge Bays are equipped with Safegate Docking Guidance Systems (VDGS) – *note Apron and Aerobridge Upgrade Project in progress and are not currently available on Bays 1 and 2.*

The operation is based on laser scanning of the arriving aircraft. The systems on Bays equipped with an Apron Drive Aerobridge are interlocked with the aerobridges and will not operate unless the aerobridge is correctly parked in the Home or Pre-Position.

- DGS are operated by accessing the keypad control unit located on each bay; and switched on or off by the aircraft operator or handling agent staff.
- The aircraft operator or handling agent staff must ensure that the bay is unobstructed by vehicles or equipment and that the aerobridge is correctly positioned before the arrival of the aircraft (green light showing).
- The procedure for operating the Operator Control Panel is a 3-step process using the labelled keys.

Once the aircraft type is selected, the DGS performs a self-test and will display **WAIT** during this period (this will take approximately 5 seconds) and then display the selected aircraft type.

- Setting the DGS signifies to the flight crew that it is safe for the aircraft to enter the bay.
- The DGS captures the incoming aircraft and provides the pilot with azimuth guidance and closing rate to their designated stop position.
- When the aircraft reaches the stop position, the display unit shows **STOP**.
- The aircraft should stop within approximately 100mm either side of the STOP line.
- The **TOO FAR** signal will be displayed if the aircraft has too much 'roll' and goes more than 300mm past the STOP line. Depending on how far the aircraft has rolled, it may be unsafe to dock the aerobridge and the aircraft may need to be repositioned prior to docking the aerobridge.
- If for some reason the DGS is not required or incorrect aircraft type entered, the SHUT DOWN key will 'abort' and cancel the docking request and return the system to ready state.
- The operator should, be positioned adjacent the control unit in the event there is a requirement to activate the Emergency Stop.

**Remote VDGS** - 'Remote' Operator control panels have been installed in the BMU.

- The panels 'mirror' the control panel installations located on the Bays (note Bays 1 and 2 currently not available).
- These panels have been installed to allow operators to access and activate during 5NM Thunderstorm Alert or other adverse weather conditions, such as heavy rain.
- This allows the aircraft to taxi onto the Bay, reducing congestion in the taxilane and can minimise delays due to thunderstorm conditions.

## Aircraft Marshalling

When the aircraft parking bays is not equipped with or the VDGS is either not available, unserviceable or not calibrated for a particular type of aircraft, a marshalling service must be provided in accordance with CASA Civil Aviation Orders (CAO) Section 20.3.

- The aircraft operator or handling agent is responsible for marshalling and parking of aircraft. Note DIA staff do not provide aircraft marshalling services.
- Aircraft operators and handling agents are responsible for ensuring staff are trained and available to marshal aircraft onto the allocated parking position.
- The Marshaller Stop Line is marked with the aircraft designations that are able to operate on the respective bays.
- The aircraft designation is marked below the Marshaller Stop Line, as viewed by the Marshaller (see photo e.g. the A320 through to B738 aircraft use middle bar MSB 2).



- Several aircraft types may be marked on the same Stop Line, in particular on Fixed Aerobridge bays.
- Airside drivers must be alert to the presence of marshallers as their attention is focused on the incoming aircraft.
- Personnel must not walk or drive between and inbound aircraft and the marshaller directing the aircraft under any circumstance.
- Refer 3.5 Special Procedures – Air Transport Apron for B763 operations Bay 21; and B789 operations Bay 11A.

## **Aerobridge Operations**

Aerobridges are installed on Bays 1 – 5.

There are two types of aerobridges in use at DIA:

- Bays 1, 2 and 5 – are equipped with Apron Drive Aerobridges.
- Bays 3 and 4 – are equipped with fixed T-Head type aerobridges.
- Prior to the aircraft arrival the aerobridge must be:
  - (i) Fully retracted if fixed aerobridge; or
  - (ii) Positioned in either the Home Position or the designated Pre-Position for the apron drive aerobridges.
- Aerobridge must be showing the Green light.
- Aerobridges may only be operated by personnel who are authorised employees of the airline or handling agent; and who have been trained and certified to operate aerobridges.
- No equipment, vehicles or GSE is permitted to be in the Aerobridge Keep Clear area.

### *Aerobridge Serviceability*

When an aerobridge is out of service or cannot be fully retracted and/or cannot be moved to the correct Pre-Position the bay may be withdrawn from service or standoff parking (e.g. park short) may be approved.

Any enquiries or reports regarding the serviceability of aerobridges must be directed to the DIA Airport Duty Manager 0401 005 977.

For further aerobridge information and operating guidelines refer to the *DIA Aerobridge Operating Guide and Procedures* document.

## 3.2 Aircraft Arrival

### Positioning the Aircraft

The following procedures should be followed when positioning the aircraft onto the bay:

- The nose wheel must stop on the correct stop line for the aircraft type (note the VDGS may stop aircraft slightly short of the line if the aircraft approaches slowly and stops with little or no roll).
- On parking Bays that do not have VDGS the aircraft is marshalled and stopped on the designated stop line (refer Aircraft Marshalling).
- The tail of the aircraft **must** be within the Parking Clearance Line.

## 3.3 Aircraft Turnaround and Servicing

### Aircraft Chocking

The following procedures should be followed after the aircraft has come to a complete stop:

- Aircraft chocked – methods should be appropriate to the aircraft type and in accordance with the aircraft manufacturer and company procedures.
- Chocks should never be moved without the permission of the flight crew or lead dispatcher.
- Aircraft beacon switched-off.

### Approaching the Aircraft

The following procedures should be followed after the aircraft has been chocked:

- All operators need to be aware of the Equipment must not move towards the aircraft until the parking brakes are on, chocks are in position, engines have been shut down, anti-collision beacons are switched-off; and approval from head dispatcher given e.g. all clear “thumbs up”.
- All operators need to be aware of the safety considerations whenever approaching (or leaving) an aircraft (e.g. *Circle of Safety*), ground servicing vehicles should not be driven more than walking speed.
- Where GSE is such that operator’s vision is restricted (or is required to reverse) marshalling must be provided.
- GSE is to have parking brake applied, with gear selector in park or neutral when positioned at the aircraft; and stabilisers deployed (when applicable).
- GSE and other vehicles must not be left unattended while engines are running.
- Vehicles must not park or drive under the wing or fuselage (with the exception if refuelling vehicles) unless there is a company procedure for servicing a particular type of aircraft.
- Servicing equipment and vehicles are required to remain a safe distance of 3 metres from a parked aircraft, unless involved in servicing of that aircraft.
- Be aware of jet blast (prop wash and engine ingestion; ensure all safety distances are maintained, in particular during refuelling operations.
- Speed limit – max 10kph – on apron and adjacent airside road must be adhered to.

*Refer to the DIA Airside Drivers Guide for more detailed information regarding driving on the airside and safety around aircraft.*

## **Aerobridge Docking / Stairs**

- Aerobridges and/or mobile stairs must not move towards the aircraft until all clear (“thumbs up”) approval from the head dispatcher has been given.

*Note: Companies may have procedures in place that allows initial movement of the aerobridge following chocking of the aircraft, prior to the anti-collision beacon being switched off, the operator procedures must include a signal (e.g. ‘wave’) from the head dispatcher to the aerobridge operator that it is safe and clear for the aerobridge to approach the aircraft.*

- Operators of aerobridges (and stairs) must use caution and slow when close to the fuselage of the aircraft to ensure light contact between the aerobridge cabin/or stairs and the aircraft.
- Company door opening/closing procedures must be followed.
- All aerobridges are to be removed from the aircraft during winds greater than 100km/h.
- Aerobridges must only be operated by trained and authorised persons in accordance with *DIA Aerobridge Operating Guide and Procedures*.

## **Passenger Movements and Marshalling**

The aircraft operator or handling agent is responsible for the control, safety and security of passengers during disembarking and boarding of an aircraft, to/from Terminal Gates and Aircraft door:

- Passenger movements on the apron between aircraft and the terminal building must be closely supervised to all times to ensure that passengers follow the correct routes to and from the aircraft, ensure that the ‘No Smoking’ and use of mobile phone policies are to be strictly enforced.
- Children in particular need to be closely monitored to ensure they are accompanied by a supervising adult.
- The positioning of vehicles and equipment must allow unobstructed pathway access to and from the aircraft.
- Airlines and handling agents will need to have procedures in place for the handling for special needs, such as, wheelchairs (e.g. hi-lifts or DPL).
- Passengers should not be on the apron area while an aircraft movement is occurring close by.
- When passengers are boarding or disembarking, the route shall avoid fuelling zone areas by following designated pedestrian walkways or marked by flagging tape (or barriers); in particular when front and rear stairs are in use for dual boarding or disembarking, including when using rear stairs when parked on an aerobridge bay.
- Arriving passengers will enter the Terminal via Gate A.

## Aircraft Refuelling

Hydrant refuelling facilities are currently provided on Bays 1-8; and 21-25.

Bays 5 to 8 7 hydrant refuelling available RHS (starboard) only – these Bays should be avoided being used by Jetstar containerised A320 aircraft to mitigate congestion issues during servicing and refuelling operations.

All airside operations in the vicinity of aircraft refuelling should include the following procedures:

### ***Clear Exit Paths***

Fuelling operators and ground handling staff shall ensure equipment is positioned to allow quick removal of fuelling equipment. Vehicles and GSE shall be positioned so that there is no requirement for vehicles to reverse.

### ***Fuelling Zones***

- Vehicle engines should not be left running in the vicinity of refuelling operations
- Mobile phones, radios, PDAs or camera should not be used within 3 metre hazard zone around fuelling equipment, hydrant connection or wing vents

### ***Emergency Fuel Shut Off***

All staff must be familiar with the location and operations of the Emergency Fuel Shut Off buttons and how to contact Aviation Rescue and Fire Fighting (ARFF) service.

Emergency Fuel Shut Off buttons are located at several locations at the front of bays equipped with hydrants; and on-board hydrant refuelling vehicles. Activation of the Fuel Shut Off button in the event of an emergency will shut down all hydrant refuelling operations on the apron. Note it may take some time to reinstate.



### ***Emergency Deluge Shower and Eye Wash Facilities***

Emergency shower and eye wash facilities are provided at several locations on the Air Transport Apron. These facilities should be used by any airside personnel that come in contact with hazardous liquids or other material. Note these facilities are not to be used for general hand washing and the protective caps must be left in place at all times to ensure taps are clear of foreign objects.



*Refer Attachment 3 – Emergency Shower & Eye Wash Stations*

### ***Fuelling of GSE***

Airside Fuel Bowser facility is provided at the eastern end of the RPT Apron (adjacent the Enhanced Inspection Area). Aircraft operators and handling agents can arrange access to the fuel bowser from DIA. Fuelling of GSE or vehicles via jerry cans is not permitted on the apron or in the equipment storage areas.



## **Aircraft Servicing**

- General aircraft servicing may only proceed once the aircraft is parked on the bay, chocked and with its engines and anti-collision beacons switched off.
- Operators of toilet servicing equipment must be vigilant to ensure that there is no spillage or leakage; emptying/flushing of toilet service vehicles must be carried out at the dedicated Waste Transfer Station adjacent the airside fuel bowser.
- Elevating loaders and other servicing equipment must only be used in accordance with the company and aircraft servicing procedures; and the rules for driving airside.
- Tasks that involve working from a height of 2 metres or more are considered high risk. Operators need to identify and assess hazards and have controls in place.

## **Potable Water and Waste Dump Facilities**

- DIA provides potable water fill points for the upload of potable water to aircraft. Users must ensure the following requirements are met in use of these facilities.
  - i. point.
  - ii. Ensure any FOD around the potable water points is removed or reported to DIA.
  - iii. Ensure filling is monitored and water switched off as soon as filling is completed.
  - iv. On completion of filling, ensure that the filling hose is returned to the storage point and the hose cap is secured.
- DIA provides toilet waste dump facilities located at the eastern end of the SRA adjacent Gate Lima ACP. Users of the waste dump facility must ensure:
  - i. Only toilet waste is emptied into the macerator. Do not throw any hard rubbish items such as, cloths, bottles, rubber gloves or food into the facility.
  - ii. Ensure the area is hosed down and all waste materials washed down the pit following emptying of waste trucks/carts.
  - iii. Ensure all hoses are retracted and left tidy after each use.
- Ensure all taps are switched off.

## 3.4 Aircraft Departure

Unless prior approval has been provided by DIA, all jet aircraft with >20m wingspan are required to be parked nose-in and pushback for departure.

### Aircraft Pushback

Following completion of aircraft servicing and all vehicles, GSE, stairs, aerobridges and GPU (Bay 5) have been removed as per respective procedures and/or moved to a safe distance, the following outlines the general requirements for aircraft pushbacks:

- Only personnel trained and qualified, and holding a valid ADA are permitted to perform aircraft pushback operations.
- Category 2 ADA holders are permitted to pushback aircraft into the apron taxilane.
- Any vehicle engaged in a pushback must be authorised for use airside (AUA) and be fitted with a radio capable of communicating with ATC.
- Situational awareness must be maintained with location of other persons, equipment and infrastructure known at all times. The pushback must be stopped if safety is compromised at any stage.
- The dispatcher must closely monitor vehicle movements in the vicinity of the aircraft just prior to pushback.
- The tug operator must be in contact with ATC via radio and monitor Ground frequency 119.55 or 121.8 during pushback operations.
- When Air Traffic Services are not provided all communications and broadcasts will be on CTAF frequency 133.1.
- All radio communications must be in accordance with radio procedures.
- All signals given by the dispatcher must be followed.

### Commencement of Pushback

The following outline the requirements during the pushback sequence:

- The correct tug, towbar and bypass or shear pin must be used for the specific aircraft type to be pushed back.
- Prior to commencement of the pushback a pre-departure walk around should be undertaken to ensure it is safe to commence pushback and ascertain that:
  - (i) the area is clear of FOD
  - (ii) all aircraft service door/panels are closed and locked
  - (iii) aerobridge retracted (stairs removed); and
  - (iv) all equipment and personnel and clear of the aircraft
- Chocks removed following request from the flight crew or dispatcher.
- All chocks must be removed, aerobridge retracted (if applicable) and all equipment and personnel clear of the aircraft prior to commencing pushback.

- Following receipt of approval from ATC commence pushback following the direction of the pushback guidance lines in the direction of the nominated duty runway (refer 5.4.3 Pushback Directions).
- The maximum turning angle of the aircraft should be closely monitored during pushback to avoid over steering and potential damage to the bypass pin.
- At the completion of pushback and tow-bar disconnected from the aircraft, the pushback tug must be returned to the same bay that the aircraft is pushed back from and must not traverse along the taxiway or rear of the apron to another bay.
- All equipment must be returned to the appropriate storage or staging areas.



### Pushback Directions from Air Transport Apron Bays

- In accordance with procedures detailed in Airservices Australia AIP, ATC will provide pushback directions to aircraft operating on the Air Transport Apron.
- As per requirements for aircraft towing the nominated 'person in charge' of the pushback will contact ATC via radio and request approval for pushback.
- Following pushback request, ATC will provide the pushback directions to the aircraft, the duty Runway will dictate the pushback directions provided - and approval will generally be issued in the following format:

Call Sign – *Pushback approved Runway 29*

Call Sign – *Give way to E170 taxiing behind, pushback approved Runway 11*

- Aircraft pushbacks follow the pushback guidance line – white broken line – to the *tow-bar disconnect point* or *pushback limit line* (refer Notes 5 & 6).



*Aircraft Pushback line and disconnect marking*



*Pushback Limit marking*

**Pushback directions are outlined in the following table:**

Bays	Departures	Aircraft Pushback
1-12	RWY 11	Tail East
	RWY 29	Tail West
21- 25	All	<b>All</b> aircraft pushback to the west into the apron taxilane.  B763 on Bay 21 push back to the push back limit (or tug disconnect for Code C aircraft) and tow forward to the tug disconnect position (abeam Bay 1)

*Notes:*

- 1. Bay 1 pushback for Departure RWY 11 will be south towards TWY B2 (except for Code C aircraft refer Note 4)*
- 2. Code F aircraft – A380 and A124 – pushback from Bay 1 tail East only – for taxi and departure via TWY B2 – refer 6.0 Airbus A380 Operations*
- 3. Bay 1E pushback into taxilane towards Bay 1W*
- 4. Code C aircraft Bay 1 pushback into taxilane towards Bay 21*
- 5. Bay 22 pushback is at approx. 45-degree angle, marked with tow-bar disconnect and pushback limit lines*
- 6. Bay 25 pushback to the Pushback Limit Line and then must tow forward to the tow-bar disconnect marking abeam Bay 24*

### **Simultaneous Pushbacks**

To ensure that safe distance of no less than 75m separation (from engine to nose of another aircraft) is maintained and to avoid jet blast hazards; the following restrictions for simultaneous pushbacks apply:

Aircraft	Types	Minimum Separation Between Aircraft
Narrow-body aircraft	Code C aircraft – A320/B738	Two bays separation
Wide-body aircraft	B763 or greater	Three bays separation

*Note: There are no restrictions for simultaneous pushback when aircraft are pushing back to the west from Bays 21 – 25 and when aircraft are pushing back from Bay 2 or beyond.*

## **General Risks Associated with Pushback Operations**

All airside personnel must act responsibly towards their own personal safety and the safety of those around them; and must be particularly cautious of the following:

- Connecting or disconnecting the tow bar.
- Walking near the tow bar.
- Moving around on wet or slippery surfaces.
- Jet blast or ingestion from their aircraft, or other aircraft in the vicinity.
- Movement of other vehicles in the vicinity.
- Personnel must always maintain a high level of situational awareness and where possible avoid turning away from an aircraft during pushback.
- If an accident or incident occurs during the pushback should be stopped immediately and brakes applied. Advise ATC and DIA Operations and request assistance as required.

## **Bay Inspection**

It is the direct responsibility of airside staff to ensure that the airside and in particular the apron area is safe and clean as possible; following departure of the aircraft, airside personnel are to ensure:

- The bay is clear of FOD.
- All vehicles and equipment, including chocks and cones have been returned to appropriate storage areas.
- Any spillages on the bay are cleaned up and reported to DIA.

## 3.5 Special Procedures – Air Transport Apron

### B763 Operations – Bay 21

- B767 aircraft arriving onto Bay 21 must be marshalled and stopped short of the taxilane entry to Bay 21 at the tug connect/disconnect position (abeam) Bay 1 and are then towed onto Bay 21.
- Bay 22 restricted to E190/F100 when B767 aircraft parked on Bay 21  
*Refer Attachment 3 - Safety Bulletin 2021 01.*

### B789 Operations – Bay 11A

- B789 aircraft arriving onto Bay 11A must arrive via TWY E2 and are stopped at the entrance to the taxilane (abeam Bay 12) and towed onto Bay 11A – *refer Attachment 4 - Safety Bulletin 2021 02.*
- Bays 11 and 12 must be vacant when Bay 11A in use.

### Reduced Separation Distances

- A safety assessment is required to be completed by the Airside Manager or Aerodrome Safety & Standards Manager to reduce the minimum separation distances stated in Table 6.58(1) of the Part 139 MOS.

### Short Park – Aerobridge Bays

- Short Park positions (from the aerobridge) are available on Bays 2, 3 & 4 (subject to aircraft clear of Parking Clearance Line) due operational requirements e.g. aerobridge not available due failure, maintenance or other works.
- Aircraft must be marshalled whenever Short Park positions are used.
- Approval must be provided by DIA for any Short Park requirements.



### 4.3 Airbus A380 Operations

- Currently there are no scheduled A380 operations schedule at DIA. A380 operations are ADHOC and will generally be a diversion for a technical, medical related reason or other operations requirements.
- DIA has contacted airlines that operate A380 aircraft and who have advised that Darwin will be considered as an enroute alternate for A380 aircraft and provided operational information for Darwin Airport required for A380 operations.
- It is the responsibility for airlines operating A380 aircraft (and for other aircraft diversions), to ensure that there are suitable aircraft handling arrangements in place should an aircraft be required to divert to Darwin.
- The aircraft operator or the nominated handling agent is responsible for carrying out and/or arranging third party assistance for the aircraft servicing and passenger handling.
- A380 operations must be monitored by DIA AOO.

The following information details, the procedures and operating conditions required for A380 operations at DIA:

#### Aircraft Arrival

- Aircraft to back-track following landing or Taxiway A – outer engines on idle
- Access to RPT Apron – Bay via Taxiway B2 only – see Note 2

#### Aircraft Departure

- Regardless of duty runway, aircraft will pushback tail to the east
- Taxi via Taxiway B2 only
- Back track RWY 11/29 or via Taxiway A – outer engines on idle

*Notes:*

1. *A380 to use inboard engine only - outer engines idle thrust*
2. *If **TWY B2 is not available** for A380 e.g. works or other operational requirements and Taxiway E2 must be used for either the arrival or departure the following apply:*

##### **Arrival via TWY E2:**

- A380 must stop on TWY E2 prior to entering the taxilane
- A380 must be towed from this position to Bay 1
- Wingtip clearances to parked aircraft must be monitored by 'wing walkers'

##### **Departure via TWY E2:**

- A380 pushback tail south towards TWY B2
  - Aircraft must be towed from Bay to TWY E2
  - Wingtip clearances to parked aircraft must be monitored by 'wing walkers'
  - Aircraft to avoid jet blast and engine ingestion; aircraft to use inboard engine only; outer engines on idle thrust
3. *If **Bay 1 is not available** e.g. occupied and aircraft cannot be relocated, works or other operational requirements, the Airside Operations Manager (or the Aerodrome Safety & Standards Manager) will liaise with relevant stakeholders and assess options re a suitable area that the aircraft can park and be refuelled.*



## 4.4 Antonov An-124 Operations

- Antonov An-124 aircraft operate to or via Darwin Airport approximately 10-12 movements annually. This includes charter operations, technical stops and military movements.
- The following information details, the procedures and operating conditions required for A124 operations at DIA:

### Aircraft Arrival

- Aircraft to back-track following landing or Taxiway A – outer engines on idle
- Access to RPT Apron – Bay via Taxiway B2 only

### Aircraft Departure

- Aircraft pushback tail to the east
- Taxi via Taxiway B2 only \*
- Back track RWY 11/29 or Taxiway A – outer engines on idle
- \* DIA approval is required to taxi via TWY E2

## 4.5 Code F Aircraft Ground Handling

- All aircraft operators must have prior ground handling arrangements in place prior to planned operations and/or diversions to Darwin Airport.
- It is the responsibility of the contracted Ground Handling company to ensure that they have appropriate resources arranged, this includes passenger handling and appropriate equipment to service the aircraft.

## 5. Spill Response Procedures

Spill prevention and response to spill occurrences applies to all aircraft operators, handling agents, refuelling companies, engineers, and all other airside operators involved in the turnaround of an aircraft and/or use of equipment and vehicles on the airside.

Effective prevention and management of spills supports airside safety, protects the environment and prevents damage to apron areas.

**It is every airside operator's responsibility to have procedures in place to:**

- Avoid spills
- All airside staff to be appropriately trained in spills prevention and management in accordance with DIA Spill Management Procedures
- Know the location of spill kits
- Ensure equipment is well maintained to prevent spills
- Staff appropriately trained to operate equipment

It is the operator's responsibility to provide immediate and effective response to any spill in accordance with DIA Spills Management Procedures, including, STOP FLOW, CONTAIN and commence CLEAN UP, and notify DIA Safety One of any spill providing accurate details of location and type of spill.

Clean-up of the spill must be done in a manner that is safe for the person(s) conducting the clean-up and must be to a satisfactory standard.

In accordance with ADG Conditions of Use where the operator responsible does not complete the clean-up to a satisfactory standard, any costs incurred will be borne by the operator, this includes, labour (including callouts), cost of use of equipment and materials used in the clean-up plus any waste disposal costs. If third party costs are incurred as a result of the clean-up, the operator is responsible for these costs.

The DIA Spill Management Procedures are available on DIA website:

[Procedures, permits and resources | Darwin International Airport \(darwinairport.com.au\)](https://darwinairport.com.au)



**Spills Management generally follows these core principles:**

- > Stop Flow
- > Notify
- > Make Safe
- > Contain
- > Clean Up
- > Dispose
- > Report
- > Prevent

## 6. Baggage Handling System

### 6.1 Baggage Handling Overview

Darwin International Airport, through its Baggage Handling Agent, Daifuku is responsible for ensuring a well maintained baggage sortation system that in a timely manner will transport bags from the check-in system to the pre-defined lateral and onto a carousel for loading.

These responsibilities include:

- Maintenance of the injector belts at check-in
- Maintenance of the overall conveyor system and carousels
- Maintenance of Checked Bag Screening X Ray units
- Procedures for Out of Gauge bags and belts
- Procedures for bags that do not meet expectation in regard to Dangerous Goods

The BHS has 2 in-built x-ray machines. Specialist Baggage Operations and Security staff are on site 24/7.

All baggage is subject to checked bag screening (CBS) processes which require baggage to be x-rayed.

### 6.2 Baggage Make-Up (BMU)

The BMU comprises:

Equipment	Quantity
Make-up carousels (laterals)	3
Domestic reclaim carousels	2
Domestic/International Swing carousels	1
International reclaim carousels	1
Transfer feeder belt	1
Out of Gauge deposit area	3

The BMU is accessible 24/7 for operational reasons.

Entry into the BMU is restricted to authorised personnel only. If there is no operational requirement then access is not permitted to the BMU. All personnel in this area must display a valid ASIC or Visitor Pass (if escorted by an ASIC holder) at all times.

The BMU area is equipped with three laterals; baggage is directed to any of these three laterals via the ATR (automatic tag reader) when a bar coded thermal or lateral tag is used or a Qantas RFID tag.

Laterals are assigned to flights by Daifuku following consultation with the operators and DIA; lateral assignments are based on the schedule requirements to ensure that usage is maximised.

Airlines or Ground Handling agents must ensure baggage handling staff are present at the laterals inside the BMU at the start of the check-in process, bags are not to be sent through the BHS if staff are not monitoring bags arriving on the laterals, unattended bags circulating on the laterals can cause bag jams and wear and tear on the belt.

Multiple Airlines may be allocated onto the same baggage make-up carousel (lateral). This requires Airlines or Ground Handling agents to operate cooperatively in ensuring that all operators have access for their equipment and that the access is maintained to/from the laterals and within the BMU area. It is expected that operators work together to determine the appropriate area allocation for each aircraft that are using the lateral.

The DIA ADM will resolve any disputes regarding access on the day and any further issues can be discussed through meetings such as the Baggage Users Group, Airport Operators Committee or Ramp Safety Meeting.

Airlines or Ground Handling agents must ensure that staff are appropriately trained in the use of the BHS and are aware of safety requirements when working in the BMU the location and purpose of Emergency Stop buttons and the location of Fire Fighting Equipment and MCP (Manual Call Points).

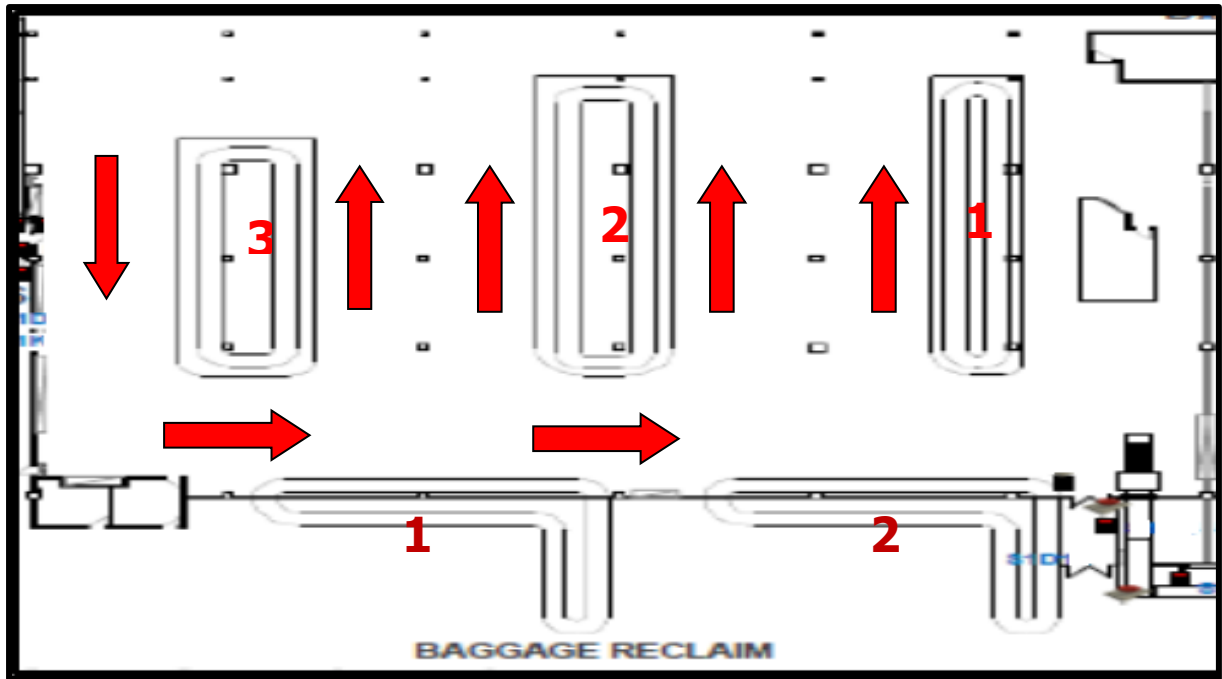
### **6.3 GSE in BMU**

The BMU is not intended as a parking/storage area. Ground Service Equipment (GSE) left in the area must only be for imminent operational needs, all other equipment must be stored in the appropriate GSE areas.

Laterals are common use and it is not permitted to set-up equipment for flights in advance that may impact on access to the lateral by another operator.

### **6.4 BMU – Vehicle Movements**

In order to ensure a safe working environment, the entry and exit areas to the BMU are in accordance with the following traffic flow diagram:



## 6.5 Baggage Reclaim

Airlines or Ground Handling agents are responsible to ensure that staff have been appropriately trained in the use and function of the Baggage Reclaim carousels.

Airlines or Ground Handling agents are responsible for ensuring that baggage is cleared from the carousel to avoid any jams or damage to bags. It is the responsibility of Airlines or Ground Handling agents to remove uncollected bags and respond to mishandled baggage issues.

Carousels are allocated in accordance with the schedule and type of service. Airlines or Ground Handling agents are to work cooperatively with each other, in particular during peak periods when there are likely to be multiple arrivals to ensure carousels are equally distributing bags within the arrivals area.

Identification of flights will be via FIDS and displayed on the monitors above the carousels.

Airlines or Ground Handling agents are responsible to ensure that the correct Arrival Carousel information is shown in FIDS at all times.

## 6.6 TIBS – Tracking Information Baggage System

DIA have introduced an automated information screen that aligns with FIDS. This system has been installed to each airside carousel. The screens provide flight information to passengers in the terminal from; 'first bag' to 'last bag' on belt. This system requires the ramp operator to select the flight information before unloading the baggage onto the carousel and select complete when offloading is completed.

*Refer to the DIA Terminal Operations Manual for additional information on the Baggage Handling System.*

## 7. Severe Weather & Thunderstorm Alerts

### 7.1 Thunderstorm Alerts

Thunderstorms and other severe weather conditions can occur at any time during the Top End Wet Season – November to April; and working on the operational area of an airport contains the risk of lightning strike.

Qantas has installed a thunderstorm alert system on the Air Transport Apron comprising of a visual light and audible horn. Qantas receives advice from Q-MET and activates the Qantas Thunderstorm Alert system when information is provided advising that the airport is likely to be affected by thunderstorm activity. The system is based on a three-stage warning as shown in the following table:

Stage	Alert Description	Recommended Actions
<b>10 NM</b> Alert	<p>Activated when thunderstorms are detected moving towards the airport and are within 10NM (19KM).</p> <p><b>WHITE Strobe</b></p> <p>+ 15 sec repeating horn - 3 beeps, 2 sec quiet, 3 beeps, 2 sec quiet, 3 beeps, then quiet for remainder of Alert.</p>	<p>Normal ramp activity continues, though the proximity of the thunderstorm should be closely monitored.</p> <p>Operators should consider implementing own procedures and prepare for the likelihood of a 5NM Thunderstorm Alert.</p>
<b>5 NM</b> ALERT	<p>Alert activated when thunderstorms are likely to impact the airport and within 5NM (9KM).</p> <p><b>BLUE Strobe</b></p> <p>+ continuous repeating horn – 3 beeps, 2 sec quiet, 3 beeps +</p>	<p>It is recommended operators activate their Thunderstorm Alert Procedures and assess if they should declare an OPERATIONS SHUTDOWN.</p> <p>The 5NM alert generally involves the removal of personnel from open areas and most servicing activities such as refuelling have ceased.</p>
<b>ALL CLEAR</b>	<p>As the storm recedes outside of 5NM from the airport the alert is downgraded to ALL CLEAR (no lights) or in some circumstances may return to 10NM Alert.</p>	<p>Operators should assess conditions and if considered safe to do so, resume normal operations.</p>

When this system is activated, it does not mean the airport is closed. DIA do not mandate or direct operators to vacate the airside though recommend that activities in open areas cease during the presence of thunderstorm activity within 5NM of the aerodrome.

It is the responsibility of each operator to assess the risks associated with working during thunderstorm conditions; and to develop appropriate procedures for their operations to be followed during thunderstorm activity and determine the timing to cease operations; and to assess when it is deemed safe to recommence operations.

In addition to the Qantas Thunderstorm Alert system installed on the Air Transport Apron operators may also receive advice from their airline operations or make an assessment from monitoring BoM weather information or subscribing to a system that tracks and provides thunderstorm alerts.

## 7.2 Strong Winds and other Severe Weather Conditions

Operators are also required to have procedures that should be implemented during other adverse weather conditions, such as strong winds.

Aerodrome warnings may be issued by the Bureau of Meteorology advising of the potential for the airport to be affected by strong winds. Operators and their staff need to be aware of the potential for strong winds to occur and have procedures to minimise their impact; procedures may include (but not limited to):

- Securing of baggage containers e.g. secured to dollies or container racks – *must not be stored/staged on the ground*
- High-lift vehicles lowered and stabilisers deployed
- Mobile stairs, maintenance stands, trailers and other similar equipment must have their stabiliser jacks (if fitted) and park brakes deployed
- Securing of other GSE and miscellaneous items

The Darwin region is located in a cyclone prone area. DIA has prepared the Aerodrome Cyclone Plan that details the actions and procedures following the activation of the plan. The Aerodrome Cyclone Plan is available on the DIA website.

[Procedures, permits and resources | Darwin International Airport \(darwinairport.com.au\)](https://www.darwinairport.com.au)

# 8. Security

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## 8.1 General Security Requirements

In accordance with the DIA Transport Security Program (TSP) the following general security requirements apply to anyone working on the airside:

- All staff performing work at the Airport have a valid Aviation Security Identity Card (ASIC);
- All visitors, including contractors' staff, have valid Visitors Cards and are, at all times, escorted by a holder of a valid ASIC;
- Procedures are in place to prevent unauthorised access to secure areas through premises controlled by the Airline or their contractor;
- All personnel working within the Security Restricted Area (RPT apron, BMU and associated areas) undergo inspection via enhanced inspection points before accessing these areas; and
- Only persons having lawful authority or operational requirement are permitted to enter designated prohibited areas on the Airport

## 8.2 Security Restricted Area

- The Air Transport Apron; BMU and associated areas are within the Security Restricted Area (SRA). All persons entering the SRA are required to be screened and enter via a screening point and sterile area (Gate 8) or an Access Control Point.
- Security screening within the Terminal consists of screening any bags/loose items or clothing on an X-Ray machine; and random and continuous Explosive Trace Detection (ETD) is also carried out at the screening point as an additional security measure.

## 8.3 Access Control Point

- Security measures are in place for vehicles and pedestrians entering the SRA via the Access Control Points (ACP) that are located at the eastern and western entry points to the SRA.
- Drivers entering this area are subject to an enhanced inspection.
- There are **3 Tiers of inspections** that carried out on a random basis and could include:
  - **Tier 1**- ASIC and face to photo check; visual inspection of vehicle and confirmation of valid ADA and AUA. Note you will not be permitted access if you do not have a valid ADA or the vehicle does not have a valid AUA.
  - **Tier 2**- Tier 1 plus ETD swabs of vehicle interior/exterior and occupants.
  - **Tier 3**- Tier 1 and 2 plus:
    - Physical search of persons or handheld detector
    - Physical search of vehicle
    - Physical inspection of goods
- Refusal to undergo screening processes at the ACPs will result in an immediate 24 hour ban from entering the SRA (RPT Apron). AFP will also be notified.



## 8.4 Gates

- Drivers of vehicles accessing airside from landside through an authorised gate are to watch for other vehicles and give right of way in accordance with Territory laws. They are to ensure that the gate is FULLY OPEN before proceeding and STOP after passing through to ensure gate is PROPERLY CLOSED before departing the area. Remember NO TAILGATING.

## 8.5 Unattended or Suspect Items

- Unattended luggage or items pose a security and safety risk to the travelling public and staff within the Darwin International Airport environment, and should be treated as suspicious. It is the responsibility of all airport users to remain vigilant and be aware of unattended items within their operating environment.
- In the event of any unattended luggage or items being located operators should immediately notify the DIA ADM (0401 005 977) or the AFP (131 AFP / 131 237).

## 9. Reporting Incidents and Accidents

### 9.1 Reporting to Darwin International Airport

All incidents/accidents and hazards are required to be reported to DIA. This includes drivers who are involved in an incident or accident.

Incidents are required to be investigated by the Operator detailing any contributing factors and corrective actions communicated to DIA Airside Manager and Health & Safety Manager within 7 days.

DIA will conduct investigations of incidents/accidents as required.

### 9.2 Reporting Accidents or Hazard

When completing an accident or hazard report or sending information to DIA the initial report should include the following details:

- Date and time
- Type of incident (hazard)
- Location of the incident (hazard)
- Description of the incident (hazard)
- Equipment details, including equipment failure (if applicable)
- If any emergency agencies are required (immediate notification required)

**In the event of a fire, contact ARFF on 8920 4899.**

- Reporting forms are available on the DIA website:

<https://www.darwinairport.com.au/corporate/safety#reporting-events>



# 10. Airside Safety

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## 10.1 Safety Promotion

In accordance with the **DIA Safety Management System (SMS)** and in the interests of general safety on the Airside, DIA will promote safety and keep stakeholders informed about safety issues through relevant training, safety, literature, participating in table top and field exercises and familiarisations.

Methods of communication may include:

- **Safety Bulletin** – A form of critical safety information that is issued when there is an urgent need to promulgate safety related information or action. This may follow the investigation of an event or a change to the operating environment.
- **Safety Newsletter** – ‘Plane and Simple’ is generally published on a quarterly basis. The Newsletter is used to discuss relevant aerodrome safety information or events along with aerodrome safety initiatives at the airport and has a wide distribution to staff, the Airport community and other safety minded organisations.
- **Safety Poster Initiatives** – The safety posters are used to highlight and promote safety information and campaigns around the airport.

Safety Bulletins and other publications are available on the DIA website:

<https://www.darwinairport.com.au/corporate/safety>

## 10.2 Airport Safety & Operations Committee

DIA holds regular Airport Safety & Operations Committee Meetings. The aim of these meetings is to develop and promote a safety culture on the airside of the airport, by facilitating cooperation between DIA and operators to ensure a safe airside environment.

Objectives of the Airport Safety & Operations Committee include:

- Establishment and discussion of local safety procedures and guidelines
- Communicate and promote safety awareness
- Review and discuss accident and incident trends with a view to identifying areas for improvement and initiating action to prevent recurrence

DIA requires all operators with a significant number of staff or sizable airside operation, to provide representation on the DIA Airport Safety & Operations Committee.

Contact the DIA Airside Manager E: [mike.clancy@ntairports.com.au](mailto:mike.clancy@ntairports.com.au) to be added to the distribution list.

## 10.3 Airside PPE Policy

Northern Territory Airports (NTA) considers the safety of staff, contractors, tenants and any other personnel affected by work activities on airport to be of paramount importance and to achieve this end has a mandatory requirement for minimum personal protective equipment (PPE) when working airside.

Broadly, the PPE policy consists of the requirement to wear high visibility clothing (shirt, vest or safety strap vest); hearing protection; and closed-in, solid sturdy footwear.

Note these are minimum requirements and for items such as footwear, operators need to consider the risk of foot injury for the type of work activity and ensure that appropriate footwear is worn that provides suitable support and has the qualities and features to protect the wearer from injury.

The PPE Policy applies to all personnel work airside. The following exemptions from the requirement to wear PPE apply:

- Staff walking to and from airside work areas via designated walkways.
- Passengers moving between aircraft and terminal under escort.
- Drivers and passengers in enclosed vehicle that are not required to get out of their vehicle while airside.
- Pilots wear white shirts directly accessing aircraft within leased areas (refer map attached to NTA PPE Policy) of the general aviation (GA) areas during daylight hours with good visibility. Must not cross aircraft manoeuvring areas, including taxiway.
- High visibility clothing applies outside of these conditions.

All operators are encouraged to comply and ensure their staff are aware of the PPE Policy requirements, failure to do so could result in cessation of work activities.

## 10.4 Airside Use of Bicycles Policy

In accordance with the NTA Airside use of bicycles policy, the use of bicycles on the airside is prohibited except for the following exemptions:

- ARFFS and Qantas employees accessing their respective workplaces along the defined route from Gate India (refer to map attached to Policy). Riders must dismount and push their bikes from Gate India to the Enhanced Inspection Area (EIA)
- Riders must present at the EIA for security inspection, which will include face-to-face ASIC check and visual inspection of bag prior to entering the SRA.
- AFP and Border Force for approved operational matters can ride on perimeter roads.

Riders must comply with the minimum PPE Policy, including High Visibility clothing must be worn.

Bicycles can never be ridden on runways, taxiways and aircraft manoeuvring areas at any time.

The NTA PPE and Bicycles Policies can be found on the DIA website:

<https://www.darwinairport.com.au/corporate/safety>

## 10.5 Compliance and Auditing

DIA may conduct audits of airport operators' systems and operational procedures, including auditing staff training to ensure that there is an appropriate level of training and supervision of staff, and maintenance of equipment to ensure compliance with Darwin International Airport policies and procedures.

## 10.6 DIA Contacts

Position	Name	Phone	Email
<b>Head of Operations</b>	Glen Dodds	0447 572 766	<a href="mailto:glen.dodds@adgnt.com.au">glen.dodds@adgnt.com.au</a>
<b>Airside Manager</b>	Mike Clancy	0423 797 355	<a href="mailto:mike.clancy@adgnt.com.au">mike.clancy@adgnt.com.au</a>
<b>Aerodrome Safety &amp; Standards Manager</b>	Bob Calaby	0402 088 163	<a href="mailto:bob.calaby@adgnt.com.au">bob.calaby@adgnt.com.au</a>
<b>Head of Terminal Operations</b>	Melanie Cobbin	0421 601 461	<a href="mailto:melanie.cobbin@adgnt.com.au">melanie.cobbin@adgnt.com.au</a>
<b>Security Manager</b>	Neil Shay	0457 143 337	<a href="mailto:neil.shay@adgnt.com.au">neil.shay@adgnt.com.au</a>
<b>Airside Operations Officer</b>	Various	0402 088 145	<a href="mailto:dia.TAoo@adgnt.com.au">dia.TAoo@adgnt.com.au</a>
<b>Airport Duty Manager</b>	Various	0401 005 977	<a href="mailto:diaadms@ntairports.com.au">diaadms@ntairports.com.au</a>
<b>Health &amp; Safety Manager</b>	Steve Caldwell	0402 782 375	<a href="mailto:steve.caldwell@ntairports.com.au">steve.caldwell@ntairports.com.au</a>
<b>Terminal Control Centre</b>	Various	8920 1805	<a href="mailto:tcc.reception@ntairports.com.au">tcc.reception@ntairports.com.au</a>

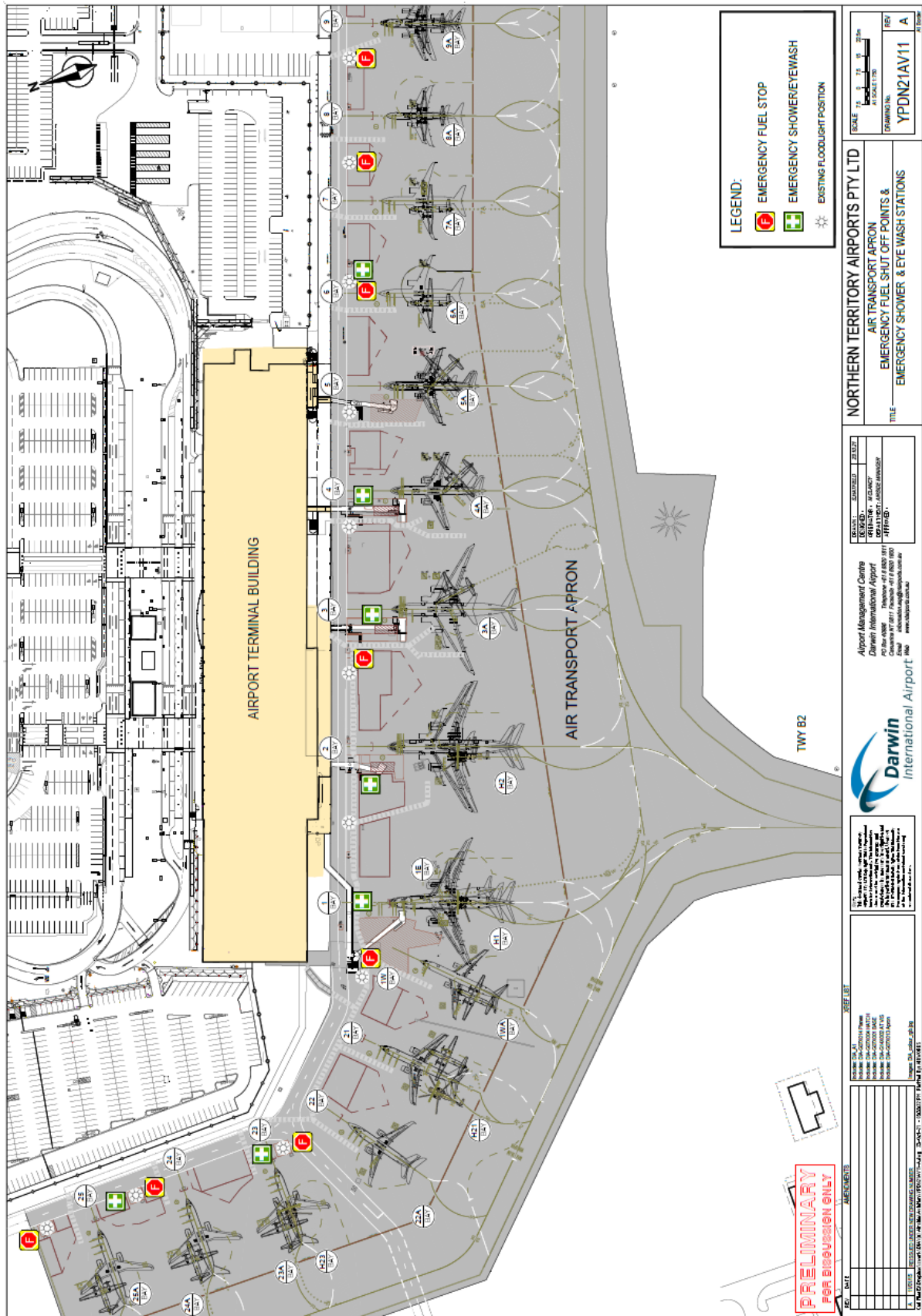









# ATTACHMENT 3 – Emergency Shower & Eye Wash Stations





# SAFETY BULLETIN

<b>Safety Bulletin No.</b>	<b>2021 01 v2</b>	<b>Date Issued</b> 10 June 2021
<b>Subject</b>	<b>Airside Operations – Air Transport Apron Bay 21 – B763 Operations</b>	
<b>Area of Concern</b>	<b>Airside</b>	
<b>Issued By</b>	Mike Clancy – Airside Operations Manager	

### Background


Due to Bay allocation restrictions resulting from COVID-19 NT Health processing procedures required for interstate arrivals, and an increase in B763 aircraft operating through Darwin a review and design of Bay 21 was carried out to provide flexible parking options for B763 aircraft.

### Bay 21 - B763 Parking Position

Bays 21 and 22 were constructed to full strength to allow for future apron expansion, including additional Code E (e.g. B789 / A330) parking Bay. This included the increased depth on the current Bays 21 and 22 providing sufficient clearance to the taxiway for larger and longer aircraft types e.g. B757 and B763 aircraft to be accommodated on the Bay.

B763 - review and design includes – Stop connect / disconnect location; new lead-in and additional Marshaller Stop line to be added.

*Note Bay 22 restricted to max F100/E190 when B763 parked on Bay 21*



### Bay 21 – B763 Arrival and Departure Procedures


Although the dimensions of Bay 21 allow for parking and servicing B763 aircraft, the taxiway that provides access to Bay 21 does not provide sufficient clearances on the south side of the centreline to allow B763 to taxi onto Bay 21; and B763 aircraft are required to be marshalled and stopped prior to entering the taxiway and towed onto Bay 21; and push-back and tow forward for departure as per the following procedures.

#### Arrival Procedure

- ATC advise aircraft parking Bay 21 and will be marshalled to stop short of the taxiway entry to Bay 21.
- Ground staff marshal the aircraft to STOP at the Tug Release (disconnect) location – refer position A – shown on Attachment 1
- Tug connected and aircraft is towed onto Bay 21 following the 2<sup>nd</sup> B767 lead-in line to Marshall Stop Line – SB1
- Refer to mp4 file showing tracking of B763 when being towed onto Bay 21 – requires Google Chrome to view – suggest downloading file:  
<https://www.dropbox.com/s/zv1x92ebwye11x0/02%20DIA%20BAY%2021%201920x1080.mp4?dl=0>

#### Aircraft Departure<sup>2</sup>

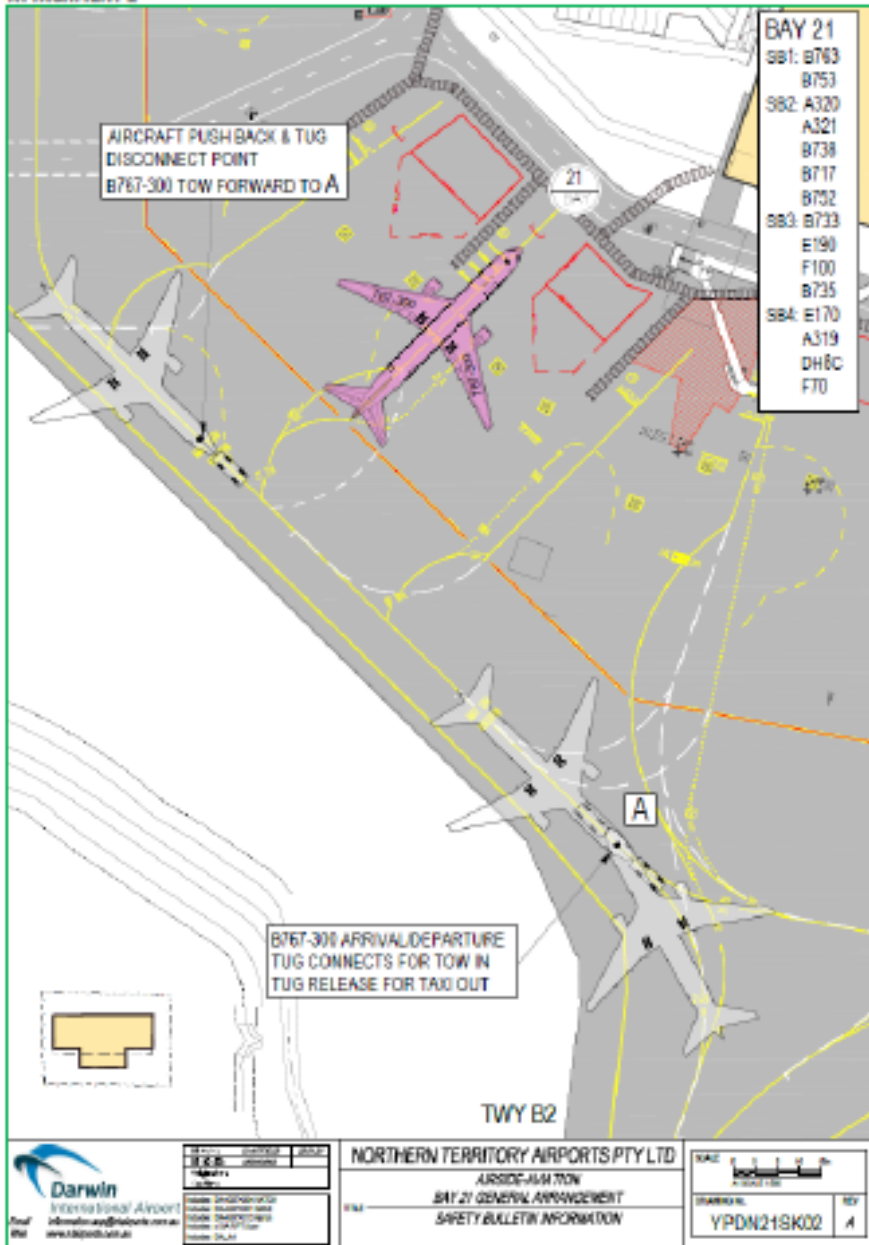
- B763 aircraft push-back tail to the west (towards Bay 22) to the push-back limit (or disconnect point for Code C aircraft)
- B763 aircraft is then towed forward to the tug release (disconnect) point – A
- B763 departs via TWY E2 or B2 depending on the duty RWY and ATC instruction
- Refer to mp4 file showing tracking of B763 when being pushed-back and towed forward from Bay 21 -  
[https://www.dropbox.com/s/q13gt26r6fmqys/DIA\\_BAY21-final.mp4?dl=0](https://www.dropbox.com/s/q13gt26r6fmqys/DIA_BAY21-final.mp4?dl=0)



THINK SAFELY, ACT SAFELY

# SAFETY BULLETIN

ATTACHMENT 1



Mike Clancy  
Airside Operations Manager  
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**THINK SAFELY, ACT SAFELY**



# SAFETY BULLETIN

Safety Bulletin No.	2021 02	Date Issued	15 February 2021
Subject	Airside Operations - RPT Apron Bay 11A – B789 Operations		
Area of Concern	Airside		
Issued By	Mike Clancy – Airside Operations Manager		

## Background

To accommodate the increased number of COVID-19 Repatriation flights there is a requirement to be able to accommodate long term parking for B789 aircraft that arrive onto RAAF Base MHS Apron and are towed from RAAF Base to Bay 11A, and positioning flights arriving onto Bay 11A for parking.

To facilitate parking B789 aircraft, amendments to the Bay markings were carried out, including - new Marshaller Stop Bar for B789; and lead-in line changed – refer Attachment 1.

Bay 11A is storage parking only for B789 and aircraft will be towed to Bay 1 for servicing and departure.

## Bay 11 A - B789 Arrival, Push-back and Towing Procedures

### 1- Arrival Procedure – Tow from RAAF Base Apron

- Following completion of disembarking and unloading on RAAF Base the B789 is towed to Bay 11A
- DIA Airside Operations Officer – Safety 1 – will provide escort from RAAF Base to Bay 11A
- Tow from RAAF Base MHS Apron to DIA Apron Bay 11A crosses RWY 18/36 and 11/29
- Safety 1 is responsible for comms with ATC and Tug operator must follow all instructions
- Route from RAAF Base to Bay 11A must be via TWY E1 and E2.
- Tow onto Bay 11A - B789 positioned on MSB1 - refer Attachment 1

### 2- Arrival Procedure – B789 Arriving onto RPT Apron – Bay 11A

- DIA to advise ATC B789 parking Bay 11A – arrival to Bay 11A must be via TWY E2
- Marshaller must be in position at Bay 11A prior to arrival of aircraft
- Aircraft Marshalled to stop at entrance to the taxiway - at the push-back limit marking abeam Bay 12
- Aircraft shuts down
- Following company procedures tug proceeds onto taxiway to connect tug
- Tow onto Bay 11A – B789 positioned on MSB 1

### Notes:

- 1- **Tug and any other vehicle must remain behind Parking Clearance Line until aircraft has stopped.** If aircraft stops in any other location e.g. stops short on TWY E2 - taxiway is considered 'live' and Tug Operator **must obtain ATC approval** to 'enter taxiway and proceed to aircraft' and approval to commence towing onto Bay 11A
- 2- When towing onto Bay 11A- prior to disconnecting tug – you must check to ensure wingtip 3m clear of airside road; and aircraft is clear of the Parking Clearance Line – reposition if required.
- 3- Bay restrictions apply when B789 aircraft Bay 11A

### 3- Towing Bay 11A – Bay 1

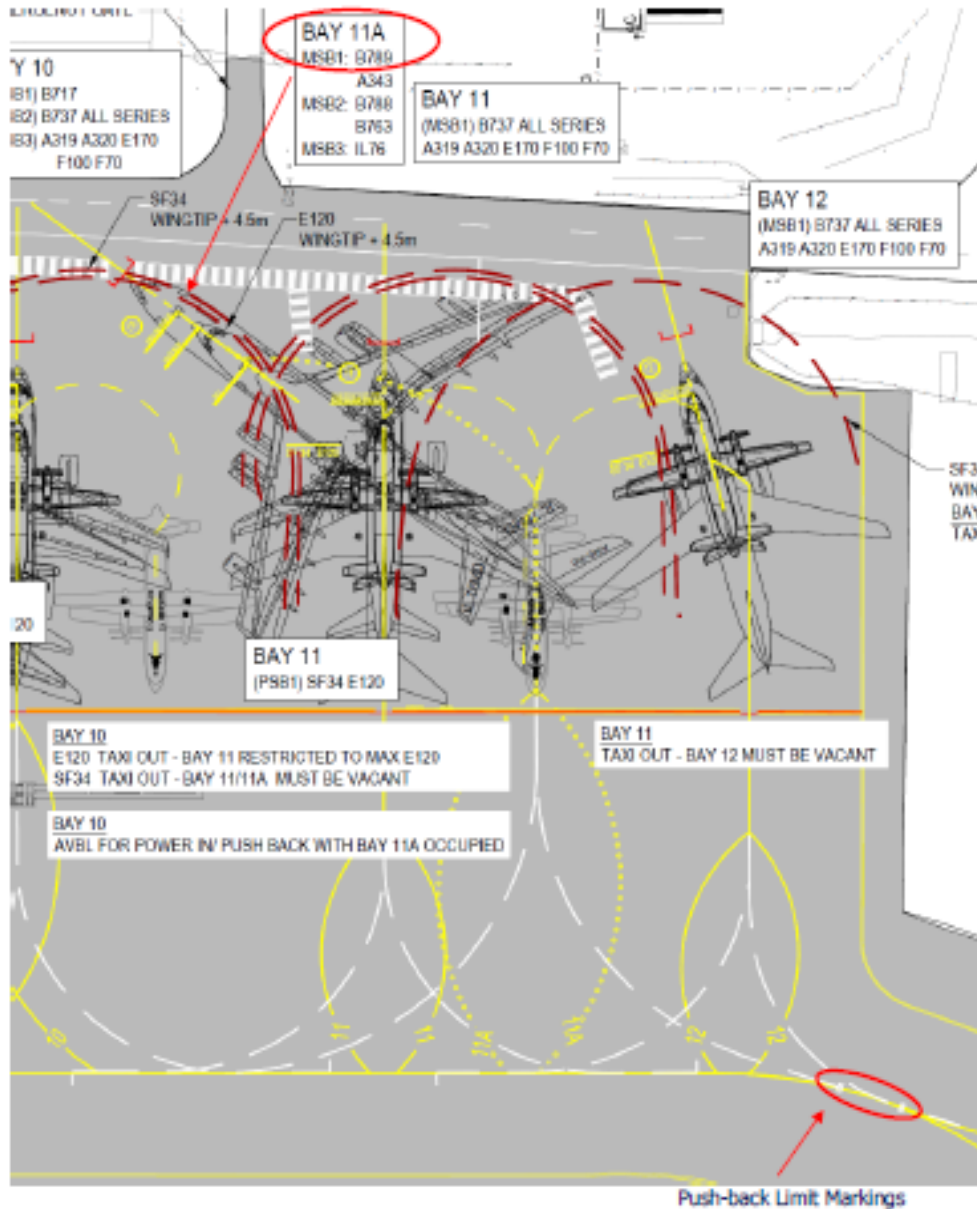
Towing B789 from Bay 11A to Bay 1 is essentially the same procedure for push-back and/or towing of any aircraft. Prior to towing aircraft obtain approval from DIA Bay 1 is vacant and available for parking B789:

- Follow company push-back and towing procedures e.g. connecting towbar, pre-departure walk-around, FOD check, equipment, and personnel clear of aircraft
- Request push-back and tow to Bay 1 clearance from ATC – including WHO you are, WHERE you are located – BAY 11A, WHAT you wish to do – "Request push-back from Bay 11A and tow to Bay 1"
- Following receipt of approval from ATC commence push-back
- Push-back to the 'push-back limit line' marking and then commence tow to Bay 1
- Advise ATC when tow complete

**THINK SAFELY, ACT SAFELY**

# SAFETY BULLETIN

## ATTACHMENT 1 – Bay 11A



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**THINK SAFELY, ACT SAFELY**