

DARWIN INTERNATIONAL AIRPORT Airside Drivers Guide

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Introduction

Darwin International Airport (DIA) is a Certified aerodrome; to comply with Airports Act 1996 - Control of Vehicle Movements under the Civil Aviation Safety Regulations (CASR Part 139), the Airport Operator is obliged to include in its Aerodrome Manual procedures for the control of surface vehicles operating on or near the movement area (Appendix 1 to CASR subparagraph 139.095 (a)(ii)).

The control of surface vehicles operating on or near the movement area is the responsibility of DIA. The DIA has legislative powers under the Airports (Control of On-Airport Activities) Regulations) 1997 to enforce the rules on both drivers and companies.

This Airside Drivers Guide has been produced by DIA in the interests of promoting driving safety airside. It is a quick reference guide to explain the rules which apply to all drivers operating Airside. The Airside Drivers Guide should be read in conjunction with the more detailed **Airside Vehicle Control Handbook** (AVCH) which forms part of the DIA Aerodrome Manual.

You are required to comply with the conditions outlined within the AVCH and this Guide. Failure to comply with DIA's airside driving rules may result in an accumulation of demerit points and ultimately loss of your ADA and privileges to drive airside.

Operation of vehicles airside can be more complex than landside operations. In addition to other vehicles, aircraft movements and the various activities that can be occurring simultaneously, drivers must always maintain situational awareness of aircraft operations. As a holder of a DIA ADA, you play an important part in maintaining your safety and the safety of fellow works and the travelling public alike.

To be able to drive on the movement area you will need to complete practical training and pass the DIA online test, hold a current Aviation Security Identification Card (ASIC), and hold a current State or Territory driver's licence. In some cases, a check-ride will need to be carried out with DIA Operations Officers.

This booklet covers general conditions of operating a vehicle airside on airside roads, aprons and around aircraft and the airport facilities, such as, aerobridges, baggage make-up and delivery areas and installations, such as, fuel hydrants and the safety shut-off valves, as well as airside markings and general safety tips and guidance. For those drivers required to operate on taxiways and runways, the Guide also provides important information regarding Manoeuvring Area markings, procedures, and communications.

This booklet also includes other operational, safety and security information when driving airside, including Pushback Procedure and Thunderstorm Warning System

Remember your driving is always on show to other airport stakeholders and to the travelling public. Drive safely and set the example for others.

Should you have any questions regarding airside driving rules, please contact a member of the DIA Operations Team.

Think safety, act safely

Definitions and Abbreviations

ITEM	DEFINITION
Accident	Any vehicle or equipment related accident or incident
ACP	Vehicle Access Control Points located at the eastern and
	western end entry points to the SRA
ADM	DIA Airport Duty Manager
Aeronautical Radio	Certificate issued in accordance with Civil Aviation Safety
Operator Certificate	Regulations 1998, Part 6
Airport	Means Darwin International Airport
Airside	The movement area of Darwin International Airport, adjacent terrain, roads and buildings or portions thereof, access of which is controlled, bounded by the perimeter fence
Airside Drivers Guide	This publication containing rules and procedures for driving airside, markings, airport map etc.
Airside Road	Any road within the Airside of the Airport, including roads marked on aprons
ATC	Air Traffic Control exercise control over aircraft and vehicles on Darwin International Airport. ATC services are provided by RAAF personnel.
AOO	DIA Airside Operations Officer (see TAOO)
Apron	That part of an Airport used for the purpose of enabling passengers to board, or disembark from aircraft; for loading cargo on to, or unloading cargo from, aircraft; and /or for refuelling, parking or carrying out maintenance on aircraft
ASIC	Aviation Security Identification Card which allows access to on duty personnel the enter the Airside (including Sterile and Security Restricted Areas) of DIA.
ATIS	Aerodrome Terminal Information Service – broadcasts contain essential information, such as weather and which runways are active, and any restrictions.
Authority to Drive Airside (ADA)	An ADA issued under the regulations by DIA to a driver for the purpose of driving airside.
Authority for Use Airside (AUA)	An Authority issued in accordance with the Regulations by DIA authorising a vehicle to be used on the airside.
Authorised Person	Means a person authorised under an appropriate statutory instrument for the purposes of the Airports (Control of On-Airport Activities) Regulations and includes DIA and AFP.
Authorised Signatory	An authorised signatory employed by a Vehicle Operator to sign a request for a AUA/ADA application.
AVCH	Airside Vehicle Control Handbook
BMU	Baggage Make-up Area
CASA	Civil Aviation Safety Authority
Company	The owner or other person, firm, company or corporation (including government departments or business enterprises), controlling the operations of one or more vehicles on airside, or any person who has procured such vehicle for operation by his own agents
CTAF	Common Traffic Advisory Frequency

Dangerous Driving	Means driving without due care and attention, including driving without regard for the safety of aircraft, passengers and others on the airside as is the opinion of an Authorised Officer; or persons authorised to make determination on an act that constitutes an act of dangerous driving.
DIA	Darwin International Airport
Driver	Is an person operating a vehicle on the airside of DIA
Driver's Licence	A licence to drive a vehicle issued by a State or Territory
Differ 3 Licence	Government in Australia.
Equipment	Any equipment that cannot move under its own power, and
Equipment	therefore must be pushed or towed.
Escort	An ADA holder who accompanies a vehicle and who accepts
ESCOTO	responsibility for its control at all times
FOD	Foreign Object Debris – includes any object found in an inappropriate location that, as a result of being in that location, can damage aircraft, equipment or injure personnel. FOD includes a wide range of material, including loose hardware, pavement fragments, catering supplies, building materials, rocks, pieces of luggage and even wildlife.
Frequent	At least three times per week
Handbook	The AVCH, including any appendices or attachments
Infringement Notice	An infringement notice issued by an Authorised person, following a breach of the Rules for driving airside as set out in the AVCH.
Landside	That portion of DIA not designated as airside and to which the general public normally has free access
Leased Area	An area in respect of which a tenant pays a fee under a lease for exclusive use of that area.
Low Visibility Operations	Special procedures to be implemented by ATC and the aerodrome operator to protect the runways. Activated at a trigger point when weather conditions are above the minima or the forecast is that the visibility will reduce to below 800m and/or cloud base is below 200ft. Only those vehicles with an operational requirement a permitted on the apron, these include ARFF and DIA vehicles.
Manoeuvring Area	That part of the airport used for the take-off, landing and taxiing of aircraft, excluding Aprons
Markings	A line, symbol or group of symbols/lines displayed on the surface of the Movement Area in order to convey information.
Movement Area	That part of the airport that is used for the surface movement of aircraft, including Manoeuvring Areas and Aprons (excluding airside roadways)
Perimeter Road	Means an Airside road which remains clear of the Movement Areas except at marked taxiway crossings, such as, road from Gate India to Qantas Engineering and ARFF facilities.
PPE	Personal Protective Equipment
Radio Procedures	The standard procedures adopted for communication between ATC and aircraft/vehicles.
Regulations	The Airports (Control of On-Airport Activities) Regulations 1997

Restricted Area	Any part of the airport, designated by legislation or otherwise, access to which is prohibited to persons not having lawful authority or excuse to enter the area
Runway (RWY)	A defined area for the take-off and landing of aircraft.
Runway / Taxiway Strip	A specific area on each side of the runway / taxiway designed to reduce the risk of damage to an aircraft should it run off the runway / taxiway. The runway strip is defined by white gable markers.
Security Restricted Area	Area designated by DIA, access to which is restricted to (a) persons holding an authorised identification card valid for that part if the airport and (b) having a lawful excuse for entry.
Shared Zone	The area is shared by pedestrians and vehicles.
SMC	Surface Movement Control (RAAF ATC)
Speed Limit	The maximum speed limit in a particular area as specified in this document.
Supervised vehicle	A vehicle driven under Supervision in accordance with the Rules for Drivers Operating Airside
TAOO	DIA Terminal and Airside Operations Officer
Taxilane	Means a portion of an apron designated as a taxiway and for use only to provide access to, and egress from, aircraft parking positions. For RPT jet aircraft the section of taxiway adjacent the Air Transport Apron Bays 1-12 and behind Bays 21-25 is considered a taxilane.
Taxiway (TWY)	A defined path on an aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another.
TCC	DIA Terminal Control Centre
Tracker Airside	Mobile reporting database
Vehicle Operator	The organisation, owner or driver, including government departments, or agencies or business enterprises, controlling the operation of a vehicle whether as owner, hirer or otherwise defined as being held responsible for a vehicle operated on the airside.
Vehicle	A motor vehicle, special purpose vehicle or specialised airside mobile plant or equipment that can move under its own power (excludes bicycles, skateboards and other personal mobility devices).

The Airside Driving Authority

An Authority to Drive Airside (ADA) is an authority issued by Darwin International Airport (DIA) that permits the holder of the ADA to operate a vehicle on the airside at DIA within certain designated areas, depending upon the Category of ADA the driver holds.

ADAs are issued by DIA when an applicant can demonstrate a proper and reasonable need for an ADA and has completed the DIA Airside Driving induction and successfully completed the assessment(s) for the category of ADA applied (and/or renewed) for by the applicant.

DIA reserves the right to exercise its discretion in issuing or renewing an ADA subject to the conditions outlined within the AVCH.

ADAs issued by DIA are only recognised for use airside at Darwin International Airport. Drivers from other airports must meet the initial application criteria outlined within the AVCH prior to obtaining a DIA ADA.

Who Can Drive Airside

To be eligible to hold an ADA permit, drivers must be currently employed by a vehicle operator at DIA and be able to demonstrate an operational requirement to drive unescorted access on the airside frequently.

Holders of an ADA must also:

- a) have a current and valid Aviation Security Identification Card (ASIC);
- b) have a current and valid Australian State or Territory Driver's Licence for the type of vehicle intended to be driven;
- have a thorough knowledge and understanding of airport geography, signage, markings and the rules for driving airside referenced within this Airside Drivers Guide, and contained within the AVCH;
- d) If required to operate on the Manoeuvring Area, holds an "Aeronautical Radio Operator Certificate" issued by CASA and is able to comprehend visual signals that may be issued by ATC;
- e) successfully pass the relevant DIA ADA theory and practical tests.

Categories of ADA

ADAs are issued in categories which specify the areas a driver is authorised to operate a vehicle.

Drivers must not operate a vehicle in area they are not authorised to unless they are under escort by the holder of an appropriate category of ADA. Drivers must have a valid operational requirement to operate a vehicle in a particular area.

DIA does not licence or seek to verify a person(s) competency in operating a particular piece of plant or equipment. It is the responsibility of each company to ensure their drivers are appropriately trained and qualified (and licensed where required) to operate specific vehicle types in accordance with Work Health and Safety legislation and relevant NT legislation.

Category 1 ADA is restricted to perimeter and airside roads, and unless there is a specific requirement to restrict operators to a particular area a Category 2 ADA would be issued.

Subject to any exemptions (refer Notes) the airside areas for which driving is authorised for the following Category of ADA are:

	Acronym	Airside Roads	Aprons	Taxiways	Runways
				Manoeuvri	ng Area
Category 2 Refer Note 1 and 2	CAT 2 ADA	✓	✓	×	×
Category 3 Refer Note 3	CAT 3 ADA	✓	✓	✓	×
Category 4	CAT 4 ADA	✓	✓	✓	✓

CAT 2 ADA: Airside roads and aprons

CAT 3 ADA: Airside roads, aprons and taxiways

• CAT 4 ADA: Airside roads, aprons, taxiways and runways

Notes:

- 1- CAT 2 ADA is exempt from requiring to hold a CAT 3 ADA for the purpose of pushback and relocating aircraft on the Air Transport Apron via the taxilane, subject to the pushback being in control of a person holding an AROC and in contact with ATC (or able to make CTAF broadcast).
- 2- CAT 2 ADA is exempt from requiring a CAT 3 ADA when driving on the apron taxilane within the General Aviation Apron areas.
- 3- CAT 3 ADA is exempt from requiring a CAT 4 ADA when towing aircraft across the threshold of RWY 18 to/from TWY Charlie 4 Engine Run and Compass Swing site.

Note these exemptions do not preclude the requirement to obtain clearances from ATC for pushback or tow aircraft or when crossing RWY 18/36 to TWY C4.

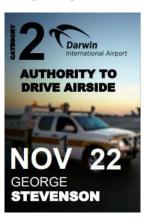
The Airside road east of the Air Transport Apron ends at Airnorth Apron, access beyond this point is via TWY Uniform 1 and Drivers must hold a CAT 3 or 4 ADA and use a vehicle fitted with ground-to-air radio.



Driving on a taxiway without the appropriate authority is a significant breach of the rules for driving airside with the driver issued an Infringement Notice and a loss of penalty points.

Obtaining an Authority to Drive Airside (ADA)





To obtain and initial or renew their existing ADA applicants are required to:

- Complete and submit the Practical Training Logbook (initial application or if expired 6 months or more) attach and upload with the online ADA Application Form.
- Successfully pass the appropriate ADA Induction and Training module that the applicant has applied for.

Before applying for a **CAT 2 ADA** applicants must:

- Satisfy the eligibility requirements to hold an ADA;
- Hold a current and valid Red ASIC;
- ✓ Hold a current valid Territory or State drivers' licence (for the type of vehicle intended to be driven;
- ✓ To have been trained to competently and safely operate a vehicle airside, near aircraft, pedestrians and other airport users;

Before applying for a **CAT 3 or CAT 4 ADA** in addition to the prerequisites for CAT 2 applicants must:

- ✓ Demonstrate on an ongoing requirement to operate a vehicle on the Manoeuvring Areas (including runways for CAT 4) on a frequent basis; and
- ✓ Hold a CASA issued Aeronautical Radio Operator Certificate (AROC)

Airside Drivers Practical Training Logbook

New applicants, or ADA holders whose ADA has been expired 6 months or more must complete Airside Drivers Logbook, which is available to download from the DIA website.

For the CAT 2 ADA:

Complete a minimum of 4 hours driving on the airside under the supervision of a CAT
 2 or above ADA holder – 3 hours daylight, 1 hour in darkness (night)

For the CAT 3 and 4 ADA:

Complete a minimum of 8 hours driving on the manoeuvring area – 6 hours in daylight,
 2 hours in darkness (night)

Applicants completing the Drivers Logbook must be under the supervision of an ADA holder whose ADA permit is at least the equivalent Category of licence being applied for.

The supervising driver/trainer is responsible to ensure ant recorded supervised hours are correctly entered, and responsible to ensure that the applicant has demonstrated competency of the requirements of the respective Category of licence being applied for, including:

CAT 2 ADA

- General rules and requirements for driving airside
- Airside vehicle speed limits
- Knowledge of the geographic limits of the CAT 2 ADA able to identify the boundaries of the manoeuvring areas
- Safety around aircraft recognise aircraft anti-collision lights, awareness of jet blast
- Aircraft pushback procedures
- Knowledge of airside markers, markings and signs
- Staging and storing requirements of GSE

CAT 3 & 4 ADA

- Knowledge of manoeuvring area markers, markings and lighting
- Knowledge of the taxiway and runway (CAT 4) system
- Aircraft towing procedures
- Radio procedures including transmission techniques and frequencies
- Demonstrate competency operating on taxiways and runways (CAT 4)

Registering for an ADA

Applicants can find access to ADA Application Forms and download the Airside Drivers Guide from the DIA website <u>Airside driving | Darwin International Airport (darwinairport.com.au)</u>

When applicants have completed the appropriate training, can register for the Airside Driving Online Induction and Assessment by emailing: <u>DIATraining@adgnt.com.au</u> (or request via the online application form) the email must include:

- Applicant full name
- Organisation name
- Name of the induction(s) you wish to register for

Applicants are required to complete and submit the online application form – signed by an Authorised Signatory – and upload the following documents:

- Current and valid ASIC
- Current and vali State or Territory Drivers Licence
- Drivers Log
- Check Ride Assessment CAT 3 & 4 Application
- AROC CAT 3 & CAT 4 ADA Application

Testing Process for the Airside Driving Authority (ADA)

DIA conducts airside driving induction and assessment of all drivers who wish to hold an ADA at Darwin International Airport. This applies to all drivers applying for their initial Airside Driving Authority, and any driver wishing to renew their existing ADA.

The **Category 1 and 2 ADA** induction and assessment process consists of a computer-based theory test consisting of multi choice questions; a practical assessment may also be conducted airside in some cases.

The **Category 3 and 4 ADA** induction and assessment process consists of:

- a) a computer-based Category 3 and 4 theory test consisting of multi choice questions (note applicants also complete CAT 1 and 2 induction and assessment);
- b) computer-based test includes geography questions on the taxiways and runways;
- c) a practical driving 'check ride' assessment conduction airside on DIA, primarily on the manoeuvring area, including the taxiway network;
- d) Category 4 practical driving assessment will include at least one runway crossing.

Applicants must answer all questions correctly and score 100% to pass the Airside Driving Induction and Assessments.

If an applicant fails to answer up to 2 questions correctly, they may immediately re-sit the entire test. If an applicant fails a second time they will be required to re-register and re-sit the induction in a period of not less than 24 hours.

The CAT 3 and CAT 4 practical assessment 'check ride' will be conducted by DIA Airside Operations personnel and requires the driver to successfully navigate relevant areas of the Manoeuvring Area as directed by the assessor.

CAT 3 and CAT 4 applicants must:

- Know the correct procedures for entering and operating on taxiways, and runways for CAT 4 ADA
- Be fluent in the correct radio procedures, frequencies and understand instructions given by Air Traffic Control
- Be able to demonstrate their knowledge of the operating environment including, recognize and understand all day and night markers, markings, and signs e.g. Movement Area Guidance Signs, holding points, runway guard lights and tower light signals.

Applicants must be assessed as competent in all areas of the practical tests to pass.

Any applicant who fails to be assessed as competent during the CAT 3 or CAT 4 practical assessment will be required to retake the assessment but may do so only after the mandatory period determined at the time, additional training under supervision may be required.

Upgrading ADA

Drivers can upgrade their Authority to Drive Airside permit to a high category ADA provided they can demonstrate an operational need to upgrade the ADA and can satisfy the eligibility requirements for that ADA.

A driver may apply to upgrade from a CAT 2 to CAT 3, or directly to a CAT 4; the holder of a CAT 3 ADA may apply to upgrade to a CAT 4 ADA.

Drivers upgrading their ADA may reduce the number of logbook hours required by taking into consideration hours already completed for their existing ADA category.

For example, and ADA holder upgrading from a CAT 2 ADA may reduce the logged hours for a new CAT 3 to 4 hours (of which at least 2 hours must be conducted during darkness of night), however applicants may still be required to submit the standard required log hours for an ADA on request by the DIA Head of Airside and/or their delegate.

Downgrading an ADA

The holder of an ADA that no longer meets the prerequisites of that category of ADA is obliged to downgrade their ADA to a category that they are eligible to meet. If a driver can no longer substantiate the need to maintain a category of ADA, they must surrender their ADA to DIA within 72 hours of notification.

An ADA may also be downgraded if the holder is subject of an investigation, a request has been made by their employer or because they have incurred a significant number of demerit points.

Driver Competency

Each employer will be responsible for training their driver/s in the safe and correct operation of any vehicle or equipment the driver is required to operate airside.

Driver/s that have not operated on the airside for a period of 3 months must be reassessed by their employer e.g. conduct a 'check ride' and if greater than 6 months must re-sit the induction/assessment(s).

General Conditions of the Authority to Drive Airside (ADA)

An Authority to Drive Airside (ADA) permit is valid for 24 calendar months from the date of issue unless specified by DIA (or is suspended or cancelled by DIA). The ADA will expire on the last day of the month of validity. Note the ADA will be aligned with the expiry date of the driver's ASIC whenever possible, and the initial issue may be for a period of less than 24 months.

If an ADA holder ceases employment with a vehicle operator at DIA, they must return their ADA to the Terminal Control Centre.

If, for whatever reason, an ADA holder's state or territory licence has been cancelled or suspended:

- a) the ADA holder must immediately advise their employer and DIA.
- b) The ADA will be suspended for the cancellation/suspension period of that State or Territory licence.

Drivers may only hold one ADA permit at a time. Where an ADA holder works for more than one employer, their ADA must be sponsored by only one company. It is the responsibility of the ADA holder to inform the sponsoring company about any other employer that they use their ADA for. The eligibility requirements to hold an ADA still apply when using an ADA for an employer outside of the original sponsoring company.

Drivers must show their ASIC, ADA and state or territory licenced to authorised DIA personnel on request and other authorised DIA representatives, such as, DIA Security Contractor when accessing the SRA via the Access Control Points. Failure to do so may result in the issuing of an Infringement Notice, demerit points against and/or suspension of a driver's ADA.

Drivers must adhere to and respect all instructions given by DIA Terminal & Airside Operations Officers (TAOO) and other authorised DIA representatives. Failure to do so may result in the issuing of an Infringement Notice, demerit points against and/or suspension of a driver's ADA.

Fit to Drive and/or Operate Equipment Airside

It is the responsibility of the driver to ensure that they are not adversely affected by a testable drug (refer DAMP) or over the counter medications that may affect performance.

Transferring an ADA

If an ADA holder working for more than one company ceases employment with their original sponsoring company, but continues to work for another employer, and is eligible to retain their ADA, their ADA they must return the original Airside Driving Authority and transfer it to their remaining employers' company by providing:

- a) a current and valid ASIC; and
- b) a current and valid state or territory licence.

When the holder of an ADA ceases employment with a vehicle operator but is subsequently rehired by another vehicle operator at DIA, the ADA holder may only transfer their ADA if the period between employers is less than 3 months without re-sitting the airside driving induction and assessment. The ADA will then be reissued with the original expiry date. On application, the driver must provide proof of:

- their eligibility requirements to hold an ADA;
- ii. a current and valid ASIC with their new employer; and
- iii. a current and valid state or territory licence

To transfer a previously held CAT 3 or 4 ADA an applicant must in addition to satisfying the requirements listed above must also provide:

- iv. statement from the new employer that their employment and role require ongoing operational requirement to operate a vehicle on the Manoeuvring Areas at Darwin International Airport on a frequent basis; and
- v. provide proof of a valid Aeronautical Radio Operator Certificate.

If the period between new employers is greater than 3 months, but less than 6 months ADA holders wishing to transfer their ADAs must re-sit the induction and assessment(s), however they are not required to resubmit a new drivers log.

Renewing an ADA

Drivers may renew their ADA at any time but are required to complete the online Airside Driving Induction and Assessment appropriate for their category of ADA (note ADA will be aligned with expiry date of ASIC).

Unless otherwise specified by DIA practical assessments are not required when renewing an ADA.

Applicants must submit applications online and upload the relevant documentation.

Airside Driving Enforcement and the Penalty Points System

Darwin International Airport Airside Vehicle Control Handbook (AVCH) provides a 'penalty points' system for breaches of the rules for operating a vehicle airside.

Any person(s) found driving or acting contrary to the conditions set out in this Guide or the AVCH may be issued with an Infringement Notice and accumulate demerit points against their ADA for each breach of the rules for driving airside.

Drivers who accumulate 12 or more points during a 24-month period will have their ADA suspended by Darwin International Airport. DIA will notify the driver's employer of the suspension or withdrawal or the issue of Infringement Notices. DIA will advise the driver in writing of the reasons for the determination and the duration of the suspension or withdrawal of the ADA.

Upon notification that their ADA has been suspended or withdrawn, the ADA holder will be required to 'show cause' as to why their ADA should not been suspended. Infringement appeals should be made in writing to the DIA Head of Operations within 14 days of the Infringement Notice.

For a complete list of offences and corresponding demerit points please see Appendix A – The Penalty Points System.

Suspension of an ADA Permit

If an ADA holder is notified by DIA that their ADA has been cancelled, withdrawn, or suspended, that driver must surrender to DIA within 72 hours of notification or if otherwise specified.

General Airside Driving Rules and Requirements

The rules for driving airside are an important part of the safety management systems that Darwin International Airport has put in place to promote the safe and orderly movement of staff, passengers, aircraft and vehicular traffic airside.

A person driving a vehicle on the airside, including a person driving a vehicle which is under supervision (escorted), must always comply with the Rules for Driving Airside' set out in Section 5 of the AVCH.

Drivers must not drive a vehicle airside unless the vehicle has a valid Authority to Use Airside affixed to the vehicle.

If the vehicle they are driving does not have a valid AUA, they must be escorted by a valid ADA holder in a vehicle that has a valid AUA affixed (see *Airside Vehicles and GSE*).

If a driver does not have a valid ADA they must be escorted, either in a vehicle by a holder of a valid ADA, or by another vehicle providing an escort.

Drivers must not drive airside unescorted if they are unable to produce a valid and current ASIC, and current state or territory drivers' licence, and cab be issued and infringement if they choose to do so.

Your safety is important to us, as a holder of an ADA you are responsible for your own safety and the safety of those around you and it is essential that you are aware of and understand the rules for driving airside, including speed limits and safety distances, in particular when operating around aircraft; and the airside markings and signs detailed in the following sections and you must know your environment and maintain situational awareness at all times.

General safety requirements include the following:

Right of Way

Aircraft, including those under tow, **have right of way at all times**.

It is important you understand the environment you work in is an aerodrome. The road system on this aerodrome will take you behind and around aircraft. You must always remain observant. You must look-out for aircraft movement, even behind you. This is especially important when driving around the General Aviation (GA) Aprons.

Drivers must drive in a safe and orderly manner that will not endanger aircraft or the safety of any other person.

Where roads or vehicle access areas are marked, vehicle should KEEP TO THE LEFT. Vehicles on airside roadways have right of way over any vehicles entering or crossing the airside roads.

Drugs and Alcohol

Drivers (and all other personnel) must not drive or operate airside while under the influence of drugs or alcohol.

No Smoking

All airside areas on Darwin International Airport are designated as a No Smoking Area. Smoking, as well as vaping and e-cigarettes, is prohibited in vehicles operating Airside.

Know where you are

The airfield is a complex environment, in particular for new and inexperienced drivers.

Category 2 drivers are NOT permitted to drive on Taxiways and Runways. If you find yourself lost – STOP where you are, someone will come by to help. If you have access to a phone, you can call DIA Operations on 0402 088 145 or 0401 005 977.

Airside PPE Policy

Remember you must always wear High Visibility Clothing and Personal Protective Equipment whenever you alight from your vehicle and only park in designated areas.

Bicycles, Scooters, Skateboards

Bicycle riders may dismount and walk their bike upon entering the airside, but riders <u>cannot</u> <u>ride</u> a bicycle airside without written permission from DIA. Refer to *ADG Airside Use of Bicycles Policy*.

Scooters, skateboards, and other personal mobility devices are prohibited airside.

Mobile Phones and Portable Devices

Drivers must not when driving airside answer or use, or attempt to answer or use, a handheld phone. All other functions including texting, video messaging, online chatting, reading messages and emailing, as well as the use of audio playing functions are prohibited.

Drivers can use a mobile phone to make or receive calls whilst driving airside <u>only</u> when using an acceptable hands-free device whereby:

- The mobile phone is secured in a fixed mounting; or
- Use of mobile phone doe not require the driver to touch or manipulate the phone in any way.

The driver of a vehicle must not, when driving airside, use, or attempt to use any portable audio devices; and the wearing and/or use of audio earphones and/or buds while driving is explicitly prohibited. Penalties apply.

No Seat, No Ride

No person shall ride on a or operate a vehicle when the passenger number is more that the designated capacity of that vehicle i.e. NO SEAT, NO RIDE.

Driving on the Airside

Access Routes

DIA provides a road system around the airport which allows for appropriate clearances from aircraft operating on the Movement Area.

Drivers operating airside must be familiar with the airside environment and must be aware of the areas that their Category of ADA permits them to operate and the rules that apply, which include the speed limits for those areas, airside road system and any restrictions that may apply; and the general airside driving rules and requirements as in this Guide.

Drivers must use marked airside roads where provided but may move off onto the apron area when servicing an aircraft, but only when in close proximity to that aircraft or parking position.

Airside Road Restrictions

Drivers must be aware of any relevant road restrictions or height restrictions when operating a vehicle or equipment airside. Please see the relevant sections in this Guide for more information.

Short Cutting

Drivers must not take short cuts across aprons and/or aircraft parking bays, cut the corners of aircraft parking bays, or take short cuts by driving under aerobridges.

Speed Limits

Speed limits can vary; however, the speed limit is clearly signposted or marked on the airside road. Where a speed limit is indicated by a sign or pavement marking that will be the maximum speed limit for that area.

It is the driver's responsibility to be aware of and maintain the designated speed limit(s) for the areas they drive on. They should also use caution and drive to suit the existing circumstances and environmental conditions.

Darwin International Airport enforces the speed and may include the use of speed detection device and Drivers can be issued infringement notices and receive demerit points in accordance with the Points Penalty System, a serious infringement could result in suspension of a drivers' ADA.

The following table details the applicable Speed Limits on the airside at DIA:

Area	Speed Limits	
Apron Areas	10 km/hr	
Airside Road adjacent Air Transport Apron	10 km/hr	
Baggage Make-up Area	5 km/hr	
Taxi-lane adjoining Northern and Southern GA Aprons	25 km/hr Refer Note 1	
Perimeter Road and elsewhere Airside DIA	25 km/hr	
	unless otherwise marked	
Taxiways	As required	
Runways	As required	
RAAF Property	In accordance with RAAF Regulations and signage	

Note:

- 1- Vehicles, including Refueller tankers are permitted to travel up to 25 km/hr when driving on the taxilane adjoining the Northern and Southern GA Aprons, provided that:
 - a) Vehicle is travelling along the marked centre line
 - b) Gives way to taxiing aircraft at all times including vacating the taxilane when aircraft approach from the rear
 - c) Restricted to maximum 10 km/hr when not driving along the centre line

Speed signs are located at various locations to remind drivers of the maximum speed.



Pedestrians on the Apron

The safety of passengers on the apron areas is paramount at all times.

Vehicles must give away to passengers moving between an aircraft and the terminal. Parts of the apron and airside road are shared by passengers and vehicles.

Drivers who observe passengers walking between the terminal 'covered walkway' and an aircraft on the apron, on their intended route to board or are disembarking an aircraft, must stop and allow the passengers proceed (unless airline/handler staff have marshalled and stopped passengers proceeding and advise vehicle operator they are clear to continue).

This is of particular importance when driving along the Air Transport Apron airside road near the marked pedestrian crossings at the Boarding Gates to each Bay.

Vehicles or ground service equipment must never be parked on marked pedestrian walkways; and drivers must not cross a passenger egress which may be marked by cones or painted lines on the apron during boarding or disembarking of an aircraft.



Height Restrictions

Height restrictions apply at various locations and are signed accordingly. They include within the baggage make-up area; and along the airside road in the vicinity of the aerobridges from Bay 1 to Bay 5.



Vehicles in excess of 3.8 metres in height must not be driven or towed along the airside road under the link from the terminal to the aerobridge.



All vehicles/equipment over the height of 3.8m must have the height clearly displayed to the operator.

Any vehicles or GSE in excess of 3.8 metres in height are required to travel around the aerobridges and the links to the terminal. Vehicles must not fully cross the Parking Clearance Line to pass around a parked aircraft i.e. must have at least part of the vehicle on the Parking Clearance Line.

Any vehicle or GSE that is required to travel beyond the Parking Clearance Line into the taxilane at the rear of the apron, must obtain clearance from ATC, or if vehicle is not equipped with a radio, must request approval from DIA and be escorted as required.

Overtaking other Vehicles

In general, overtaking a vehicle is not permitted; however, if there is an operational requirement to do so, the driver must firstly ensure that it is safe to do so, and they must:

- overtake on the right-hand side;
- not exceed the speed limit for that area;
- overtake in a safe manner;
- not use any part of the apron or Manoeuvring Area to overtake;
- not overtake on bends or corners; and
- the overtaking manoeuvre must not force any other vehicle off the road/roadway.

Towing of Rolling Stock

Drivers involved in towing rolling stock are limited to a **maximum** of:

- ✓ Four baggage trolleys and dollies (Unit Load Device, ULDs); and
- ▼ Two larger low profile type trailers (pallets).

Drivers involved in towing of rolling stock should also refer to their company's SOPs regarding the number that can be towed safely which may differ bit cannot exceed as specified above.

All rolling stock tow hitches must have:

- Tow hitches with safeguard features such as, spring loaded, collared pin or locking pin.
- Fitted with braking systems which must be used whenever the rolling stock is parked or disconnected from the tow vehicle. This includes.

Dollies and trolleys need to have park-brakes applied (or chocked), or connected in train, ensuring dolly containers are attached and properly secured.

High-lift vehicles, mobile stairs and other similar equipment must have stabilizers lowered & deployed.

Baggage/freight containers must not be left on the ground i.e. must be secured to dolly or in container racking. Pallets and other items must be either secured with pallet locks or restraining straps.

Loads Secured and Covered

When driving vehicles airside drivers are to ensure all items being carried or in a vehicle or when towing baggage/freight trolleys that their load is adequately covered or secured to prevent spillage to prevent spillage or FOD.

Any item(s) falling from a vehicle (or trolley) must be picked up immediately be the driver and secured to prevent further spillage and possible aircraft damage.

Failure to secure loose items could result in the driver being issue an Infringement Notice.

Live Taxiway Crossing

Category 1 and 2 ADA drivers are <u>not permitted</u> to enter or cross a taxiway, other than the locations marked as a 'live taxiway crossing'. Where an airside or perimeter road crosses a taxiway or taxi-lane, the airside road marking is presented in a red and white zipper pattern.

Such as where the airside road crosses Taxiways Victor and Yankee.

When approaching a 'live taxiway crossing' (and any other location that has a STOP sign) it is a mandatory requirement for all drivers to **stop and look** at a **STOP** sign and observe for any approaching aircraft, if so must <u>give way</u> until an aircraft clears or passes the Live Taxiway Crossing, this also applies when an aircraft is being towed.

Failure to stop at a STOP sign is considered a major safety breach of airside driving rules and the driver issued with an Infringement Notice that could incur up to 6 (six) penalty points.



Supervision of Unauthorised Drivers and Vehicles Airside

A driver may be permitted to drive a Vehicle airside without the appropriate authorities, <u>provided</u> the Vehicle is under supervision (escort) of an authorised Vehicle (has an AUA), and driven by a Driver and with current ADA of the appropriate category.

Drivers holding an ADA may be required to provide supervision for unauthorised drivers and vehicles by:

- a) Escorting the supervised Vehicle with an authorised Vehicle;
- b) Riding in the supervised Vehicle;
- c) Accompanying the supervised Vehicle on foot; and

d) Directing the supervised Vehicle from a vantage point as approved by the Operations Manager (e.g. Works Safety Officer monitoring works Vehicles).

The driver of the escorting Vehicle must ensure the driver of the supervised Vehicle is aware of:

- a) The requirement to keep the Vehicle being escorted at a reasonable distance behind the escorting Vehicle so that adequate supervision is provided;
- b) The route to be taken;
- c) Speed limits;
- d) Any pre-arranged signals to deal with problems that may arise;
- e) No smoking;
- f) Any restrictions on the use of mobile phones and radios;

If the number of vehicles exceeds 2 large semi-trailer type vehicles or 3 smaller monarticulated vehicles the convoy must have a second escort at the rear of the convoy.

ADA holders escorting vehicles airside are responsible for the actions of any driver and/or passengers they escort and must ensure anyone they are supervising obeys the rules contained with the AVCH, at all times. Any breaches of airside driving rules may result in an Infringement Notice being issued to the supervising ADA holders.

Anyone carrying out an escort should brief the drivers of the vehicles they are escorting and ensures that they understand the requirements when airside, you must ensure the driver understands the **GIVE WAY TO AIRCRAFT** requirements.

If a vehicle operator planning an escort is unsure of the correct procedure, they must contact DIA Operations prior to commencement.

Airside Vehicles and GSE

Authority to Use Airside Permit

An Authority to Use Airside (AUA) permit is an authority issued by Darwin International Airport that permits the operation of a motorised vehicle on the airside areas of Darwin Airport. The provisions contained in the AVCH give guidance on the management and requirements for operating vehicle(s) on the airside of the airport.

AUAs are administered and issued by the DIA TCC, and vehicle operators can also obtain information on the DIA website about how to obtain and maintain the AUA.

https://www.darwinairport.com.au/corporate/operations#airside-driving

At all times the Driver / Vehicle Operator must take out and maintain an insurance policy with an insurer insuring against any liabilities for death, personal injury or property damage incurred with the use of the vehicles airside, ensuring that:

- a. Is for an amount of not less than AUD \$20 million
- b. Must no contain any exclusionary clause relating to any airport infrastructure or aircraft or matters relating to or in connection with the operation of the vehicle on the airside.

Vehicles and GSE

A driver can only operate airside in a vehicle or motorised Ground Service Equipment (GSE) that has been authorised by DIA and complies with the conditions of the AUA as detailed in the AVCH; and must have the following:

- A current DIA Authority for Use Airside (AUA) label affixed to the windscreen or affixed externally on a piece of GSE.
- ✓ A readily identifiable, clearly displayed company logo on the side, front or rear of the vehicle/GSE.
- Clearly displayed amber/orange/yellow flashing or rotating light mounted on top of vehicle, to provide 360 degrees visibility.



Do not drive any apron equipment UNLESS you have been properly trained and authorised to operate it.

Drivers are to ensure that the vehicle they are driving airside is fully serviceable and in good working condition (e.g. not leaking oil or fuel). If your vehicle becomes immobilised during operations the following actions are to be taken:

- a) Ensure rotating beacon is switched on;
- b) Ensure that no items have spilled from the vehicle and that there is no debris on the area you have been driving. All debris is to be removed immediately (e.g. shredded tyre rubber).
- c) Make sure that any fuel/oil spill is reported and cleaned up properly.
- d) Notify the Duty Airside Operations Officer.

If the vehicle is left unattended ensure, the handbrake is on, the keys are left in the ignition and the vehicle is left unlocked.

For vehicles to be permitted onto apron areas they must be:

- a) Directly connected with the fuelling or servicing of aircraft;
- b) Carrying items that cannot be handled by normal freight trolleys;
- c) Associated with aerodrome works and under escort;
- d) Emergency Service Vehicles in emergency circumstances and under escort.

All vehicles intending to be operated on the Manoeuvring Area must also be equipped with:

e) A suitable radio able to communicate with Air Traffic Control

When a vehicle is no longer required for Airside use, the vehicle permit sticker (AUA) is to be removed and returned to DIA.

Airside Apron Markings and Signs

All drivers <u>must</u> be familiar with the meaning and form of airside marking (visual aids) and comply with what they mean.

Visual aids are cues for pilots, marshallers, air traffic controllers and airside vehicle drivers to help them provide a safe environment for aircraft operations. Visual aids comprise:

- markings, markers, and signs (visible by day); and
- lights and beacons (visible by night).

Drivers failing to comply with requirements of markings and signage may be issued with Infringement Notice and incur demerit points.

General Vehicle and Equipment Parking and Restrictions

To ensure vehicles and GSE are well clear of moving aircraft, drivers are to be aware of the allocated parking areas and restrictions in place.

Equipment Storage Areas

These areas are marked by a single unbroken red line with 'Equipment storage' marked on the side where ground service equipment (GSE) can be stored and left unattended.

EQUIPMENT STORAGE

Serviceable vehicles or GSE may be stored within an Equipment Storage area, however vehicles must be switched off when unattended. Only vehicles or GSE that is in regular use is to be stored in these areas i.e. if not in regular use they must be stored in designated off apron storage areas.

Vehicles and GSE, including passenger and engineering stairs, must have their brakes on, and stabilisers deployed (where applicable) when left on these areas.

Equipment Clearance Areas

Also known as Equipment Staging areas are marked by a single broken red line with 'Equipment Clearance' marked on the side where the vehicles or ground service equipment (GSE) can be staged prior to an aircraft arrival and are designed to provide the required clearances from an aircraft.

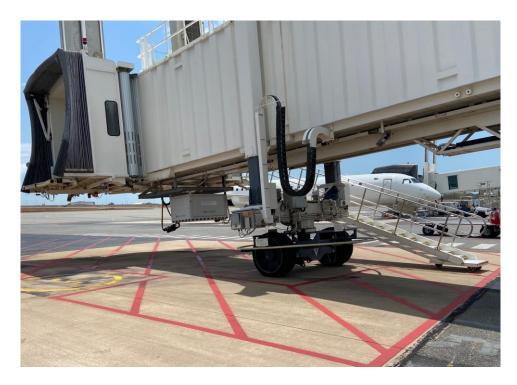


All vehicles and GSE <u>must always be attended</u> to when using this area and must be actively servicing or about to service an aircraft.

Equipment Clearance areas must remain clear of vehicles and GSE when not being used for the servicing of an aircraft.

Aerobridge Clearance Zones

The Aerobridge Clearance Zones are marked by **red hatched** areas which are located beneath and provide clearance for the movement of the Apron Drive Aerobridge on Bays 1, 2 and 5.



Vehicles and GSE are not permitted to enter and/or park or be used as a shortcut through within the Aerobridge Clearance Zone at any time.

Driving underneath an Apron Drive Aerobridge is not permitted at any time, drivers MUST DRIVE AROUND an Apron Drive Aerobridge.

Parking Clearance Line

Parking Clearance lines (also known as Aircraft Parking areas) are marked with continuous solid yellow/red/yellow line with 'Parking Clearance' marked in yellow on the side of where the aircraft are parked.

The Parking Clearance line on the Air Transport Apron marks the edge of the apron area between the apron and the taxilane to ensure the separation distances are maintained to taxiing aircraft.

Vehicles **must not** be driven past or cross this line unless authorised.



Other Parking and Storage Requirements and Restrictions

- Vehicles and equipment must not be parked within 2 metres 'airside' and 3 metres 'landside' of an airside/landside boundary fence.
- They must not be parked where they will obstruct aircraft entering or departing from the apron, or other vehicles or access to Emergency Fuel Shut Off buttons or to eye wash stations.
- Under no circumstances is equipment to be parked on passenger walkways.
- When a vehicle is left unattended in other than designated parking areas, doors must be closed but unlocked, keys in the ignition and the handbrake on. So, that it may be moved when impeding the safe movement of aircraft or other vehicles and in an emergency.

Improper parking and/or storage of GSE can result in a hazard to operations and can incur Demerit Penalty Points.

Other Visual Aids, Markings and Signage

Road Signs

Common road signs are used Airside and mean exactly what they do on public roads. Take notice of all airside signage on the Airport, particularly STOP and GIVE WAY signs and remember depending on the area SPEED LIMITS will vary.



Airside Roads

Marked by a single continuous white line on each side and a broken white line in the centre, Airside roads remain clear of aircraft and taxiways, except in areas where the road crosses a taxiway (see below, Live Taxiway Crossing).

The Airside Roads are to be always used to traverse aprons, or if driving to the defence side of the aerodrome.





Apron Service Road

Stop signs may also be painted on the ground, such as, crossing the Apron service road taxilane crossing between Bays 22 and 23. Vehicles must stop and check that is safe to proceed. Drivers must give way to aircraft at all times, including aircraft under tow.



Live Taxiway Crossing

Marked by a white "zipper" line on each side of the perimeter road crossing a "live taxiway". Drivers should use extreme caution and must **stop and look** at the STOP sign and give way to aircraft at all times, remain within the "zipper" perimeter road markings.





Tug Parking Position

Tug parking position is provided on each bay to ensure tug is clear of incoming aircraft.



Aircraft Pushback Markings and Towbar Disconnect Markings

These markings assist tug drivers to safely and accurately steer and position aircraft during push-back operations and are marked by a broken white line. The towbar disconnect line marks the position where an aircraft is towed/push backed prior to commencing an engine start and is marked by a white line.



Marshaller Stop Line

The marshaller stop line is located at the point where the nose wheel of the aircraft is to stop. Note the nosewheel location for a Pilot Stop Bar when marked on a primary aircraft parking position is located at the break in the centre-line.



Keyhole Marking

Denotes a secondary aircraft parking position. Comprises a short alignment bar, a circle in which the nose wheel is to be stopped, and a parking position designator.



Apron Edge

The same as on taxiways – provides visual evidence to define the area as well as the strength of the material used to construct the area – the area outside the lines may not be as structurally sound as the area inside the lines. The Apron Edge is marked by double yellow lines.



Helicopter Apron Edge

Helicopter apron edge marking (Double Blue Continuous Lines) is provided to identify an apron intended solely for helicopter parking (on gravel/grass surface the edge is marked by using blue cone or gable markers).

CAT 2 Drivers must never enter TWY U or the Helipad. If you need to, you must contact DIA Operations to request assistance.



Leased Area

Mainly found on General Aviation Aprons, a continuous single Lime Green line denotes the leased area.



Cones and Gable Markers

Coloured cones are used to mark the following areas:



Taxiway and Apron Edge – **yellow** cone to mark the edge of an aircraft apron area.



Unserviceability Area – **white with red band** to mark the unserviceable area. Only authorised personnel may enter these areas with extreme caution.



Helicopter Apron Edge – **blue** cone to mark the edge of the helicopter parking area.

Safety Around Aircraft

General Safety Requirements When Driving in the Vicinity of Aircraft

This section covers the rules and safety requirements when operating in the vicinity of aircraft, including around parked aircraft or when the anti-collision lights are operating indicating the aircraft is about to or has commenced pushback.

Drivers must remember that it is a requirement **to give way to all aircraft movements** even when the aircraft are under tow. Drivers must be aware of the safety distances when driving in the vicinity of aircraft (refer Appendix C: Aircraft Codes and Safety Distances).

Drivers must be aware of the following safety guidelines whilst driving around aircraft:

- Never approach or drive behind an aircraft with its engines running.
- Never drive under the wing or fuselage of an aircraft except where expressly authorised (e.g., Refuelling).
- When parking a vehicle at the side of an aircraft, care should be taken to ensure other services, such as refuelling and catering are not impeded, and the wheels should be turned away from the aircraft. Never turn towards the aircraft when intending to vacate the area.
- Drivers of airside vehicles should avoid reversing.
- If a vehicle cannot be removed safely without a reversing procedure, then the driver should take the following procedures:
 - a) Apply the handbrake and turn off the engine;
 - b) Physically check behind and above for any possible obstructions;
 - c) Ensure that a spotter/marshaller is available to stand near the vehicle to warn of any possible collision this mandatory for large vehicles, such as, catering trucks.
- When marshalling duties are being performed, drivers must ensure that they do not impede or drive near a Marshaller or the aircraft under their control.

Aircraft Movements

When aircraft is about to move – pushback or power-out - or is about to start or has its engines operating its anti-collision beacon lights will be activated.

Other indications of imminent aircraft movement are:

- a pushback tug is attached to the tow bar which is connected to the nose wheel of the aircraft;
- despatcher is in attendance, standing near the nose of the aircraft;
- ground staff, all GSE and rolling stock have been cleared from the aircraft;
- the passenger/ cargo doors are closed;
- wheel chocks removed;
- the aerobridge has been retracted (or mobile stairs removed)



Any of the above indicates that the aircraft is preparing for departure and could move at any time, drivers must keep clear and give way to an aircraft that has commenced or is about to pushback from the Bay.

If you are unsure if an aircraft us about to start-up/pushback or power-out from the Bay, STOP and wait, or take another route.

Aircraft Anti-Collision Beacons

Most aircraft are equipped with anti-collision beacons to improve visibility to others. The aircraft anti-collision beacon lights are usually found on the top in the centre or just forward of the main wings, and beneath the fuselage between or near the main landing gear.

However, drivers should be aware that on some aircraft, the anti-collision lights can be difficult to see, and drivers need to take extreme caution when operating near aircraft, this is of particular importance with turbo-prop aircraft, do not approach or proceed behind until engines have been shut down and the propeller blades have stopped moving.



The purpose of the anti-collision beacon lights is to alert ground crew and other aircraft that an engine is starting up, running or shutting down, or that the aircraft is about to start moving (see Aircraft Pushback).

Drivers <u>must not drive behind</u>, and must stay well clear of, aircraft when their anti-collision beacon lights are operating and must stop and give way to all aircraft arriving, departing or parked on the aprons when their anti-collision beacons are operating.

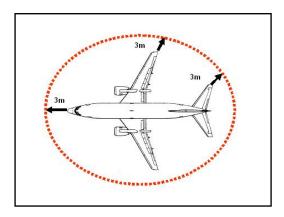
Drivers may only continue when:

- the aircraft pushes back past the parking clearance line and it is safe to continue; or
- the aircraft turns off its anti-collision beacons.

Proximity to Aircraft

Except when required for servicing of that aircraft. Drivers must not:

- drive under the aircraft (including wingtips)
- operate a vehicle with 3 metres of an part of an aircraft
- operate a vehicle within 15 metres of an aircraft refuelling point or venting point during the period of aircraft refuelling



You must always give way to aircraft at all times.

Failure to give way to an aircraft is considered a significant breach of airside driving rules and the driver issued with an Infringement Notice that could incur up to 6 (six) penalty points.

Only Category 3 and 4 ADA holders are permitted to drive on taxiways.

Push Back Procedures

Aircraft Pushback

The following steps outline the general requirements for aircraft pushbacks:

Preparing for Pushback:

- a) Only personnel trained and qualified or trainees under instruction, and holding a valid ADA are permitted to perform aircraft pushback operations;
- b) CAT 2 ADA holders are permitted to pushback aircraft into the Air Transport Apron taxilane;
- c) Any vehicle engaged in a pushback must have a valid AUA and be fitted with a radio capable of communicating with ATC;
- d) Situational awareness must be maintained with location of other persons, equipment, infrastructure and other aircraft known at all times.
- e) Th dispatcher must closely monitor vehicle movements in the vicinity of the aircraft just prior to pushback.
- f) The dispatcher/tug operator must be in contact with ATC via radio and monitor Ground frequency 119.55 or 121.8 or 133.1 during CTAF conditions.

Commencement of Pushback:

- a) The correct tug, towbar and bypass pin should be used for the specific aircraft type and series to be pushed back.
- b) Prior to the commencement of pushback, a pre-departure walkaround should be undertaken to ensure it is safe to commence pushback.
- c) The area inspected to ensure it is clear of an FOD;
- d) Chocks removed following request from flight crew or dispatcher;
- e) Check all aircraft service door/panels closed; Pitot tube covers removed;
- f) Aerobridge retracted or stairs removed to a safe distance; and all equipment and personnel clear of the aircraft prior to commencing pushback;
- g) All radio communications must be in accordance with standard radio procedures;
- h) Following receipt of approval from ATC commence pushback following the pushback guidance lines in the direction of the nominated duty runway to the towbar disconnect marking;
- i) All signals given by the dispatcher must be followed;
- j) The maximum turning angle of the aircraft should be closely monitored during pushback to avoid oversteering and potential damage to the bypass pin;
- k) Ensure safe operation of the tug when moving clear of the aircraft;
- I) At completion of pushback, the tug must be returned to the same bay that the aircraft pushed back from.
- m) All equipment must be returned to the appropriate staging or storage areas.





Refer to *DIA Air Transport Apron Procedures* for additional information on aircraft turnaround and pushback procedures.

Jet Blast and Prop Wash

Vehicle operators and personnel must always be aware of the dangers of 'Jet blast', 'Prop wash', propel injury and potential ingestion when in the proximity to operating aircraft engines.

Jet blast is rapid air movement produced by the jet engines of aircraft and is a potential hazard to vehicles, people and/or other unsecured objects behind the aircraft.

Parts of the apron may be impacted by jet blast during aircraft manoeuvring on the aprons or taxiways. Drivers should use caution whenever operating in close proximity of aircraft operations, and although safety distances can vary from different aircraft type or size, and as a guide drivers should always remain at least 75 metres away from the rear of operating aircraft to avoid being impacted by jet blast.

Engine ingestion is also a potential danger when operating in the vicinity of an operating jet engine and ground personnel need to be aware of this hazard; and should always remain at least <u>7.5 metres away from the front and to the side of engines</u> to ensure that they are clear of the hazard area.

Prop Wash can be as equally hazardous and should be treated the same as jet blast.

Aircraft Refuelling

In accordance with Civil Aviation Order 20.9 drivers must not drive within 15 metres of an aircraft refuelling point or venting point during the period of aircraft refuelling unless they are involved with servicing of that aircraft.

Drivers also need to take extreme care to ensure that they remain clear of the fuel hydrant coupling, hoses and the refuelling vehicle during servicing of the aircraft.

The use of mobile phones/ radios is not permitted with 15 metres of a hydrant point, aircraft refuelling or venting point when the aircraft is being refuelled.

In the event of an emergency during aircraft refuelling there are several Emergency Fuel Shut Off buttons located on the apron flood lighting poles adjacent aircraft parking Bays 1-8 and Bays 21-25 and located onboard the refuelling vehicle.

When activated, they shut off the underground hydrant refuelling system.

Access to the Emergency Fuel Shut Off buttons must remain clear at all times.



General Aviation and Helicopter Apron Areas

General aviation areas can be a busy place and drivers need to be aware that aircraft will be constantly moving around on the GA apron areas and drivers must use extreme caution when driving on and within the vicinity of General Aviation aprons.

Helicopters arrive and depart differently to other aircraft and as such may not be immediately seen. The rotor wash of helicopters poses the same dangers as jet blast.

Extreme caution is required when operating on a helicopter area.

Drivers must stop and not proceed if a parked helicopter has its rotor operating when parked in the helicopter apron area (unless it is loading or unloading with doors open and/or ground crew in attendance). Drivers can only proceed when the helicopter departs, or engine is switched off and its rotor stops turning.

CAT 2 drivers must not enter Taxiway Uniform, this is restricted to holders of CAT 3 ADA.

A CAT 4 ADA is required to be able to access the Helipad. Remember, you must request ATC clearance to enter these areas.



Taxiway Uniform and Helipad

Situational Awareness

The apron is a busy place, when operating on the apron and/or when in the vicinity of aircraft operations, you must remain alert and keep a constant watch on everything that is happening, or likely to happen around you.

This means not only scanning for other vehicles, pedestrians and equipment, but be on the lookout for when aircraft are moving or about to move.





Remember: All aircraft, including aircraft under tow, always have right of way.



FOD is any loose item that could be ingested into a jet engine or blown is such a manner as to damage aircraft.

Any FOD items should be removed immediately from aprons, taxiways and runways. It is the responsibility of all airside personnel to remove FOD from the airside – **GREEN** bins are located on the aprons for FOD to be collected and disposed of – do not use the FOD bins to dispose of empty oil containers or aircraft rubbish.





Spills

Spills can arise from a wide variety of sources, with the most common being ground servicing equipment and aircraft. Spills are a hazard to the operation of the airport, to the environment and for those working on the apron areas.

Drivers of all vehicles are to guard against fuel, oil or waste spills on the apron.

Under no circumstances may a vehicle be driven through a spill area. Spills are a hazard to the operation of the airport, to the environment, airport personnel and passengers. All spills must be reported to DIA Operations and cleaned up properly, failure to report and clean-up the spill will result in clean-up charges and penalty to the responsible operator in accordance with the ADG Conditions of Use.

Fuel Spill Kits are positioned along the Air Transport Apron and at various locations on other apron areas; and Spill Trailer is stored in Eastern GSE. The fuel spill response bins are provided for a quick response to spills of a petrochemical and chemical nature, such as, JETA1, AVGAS, hydraulic oil and sewerage or toilet cart spills.

Airside drivers and operators must be aware of the DIA Spill Management Procedures – refer DIA website - https://www.darwinairport.com.au/corporate/safety#spill-management-procedure to ensure correct response to a spill and the spill bin types to be used for clean-up and disposal.



Severe Weather Conditions

Thunderstorms and other severe weather conditions can occur at any time during the Top End Wet Season – October to April.

Thunderstorm Warning System

Working and driving on the operational area of an airport contains the risk of lightning strike and it is the responsibility of each stakeholder to assess the risks associated with working during thunderstorm conditions; and to develop appropriate procedures for their operations to be followed during thunderstorm activity.

Qantas has installed a thunderstorm alert system at various locations, including 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, though operators should refer and abide by their individual company procedures regarding thunderstorms.

When this system is activated, it does not mean the airport is closed. The decision and timing of an 'operations shutdown' is the responsibility of the operator.

The Qantas system is based on a three-stage warning as per the following table:

Stage	Alert Description	Recommended Actions	
	Activated when thunderstorms are detected moving towards the airport and are within 10NM (19KM).	Normal ramp activity continues, though the proximity of the thunderstorm should be closely monitored.	
10NM ALERT	 WHITE Strobe light activated + 15 sec repeating horn - 3 beeps, 2 sec quiet, 3 beeps, 2 sec quiet, 3 beeps, then quiet for remainder of Alert. 	Operators should consider implementing own procedures and prepare for the likelihood of a 5NM Thunderstorm Alert.	
5NM ALERT	Alert activated when thunderstorms are likely to impact the airport and within 5NM (9KM). BLUE Strobe light activated + continuous repeating horn – 3 beeps, 2 sec quiet, 3 beeps +	It is recommended operators activate their Thunderstorm Alert Procedures and assess if they should declare an OPERATIONS SHUTDOWN. The 5NM alert generally involves the removal of personnel from open areas and most servicing activities such as refuelling have ceased.	
ALL CLEAR	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.	Operators should assess conditions and if considered safe to do so, resume normal operations.	

Strong Winds

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 BOM 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, 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.

https://www.darwinairport.com.au/business/working-dia/procedures-permits-and-resources

Security

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 (Air Transport 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;

Security Restricted Area (SRA)

- 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.

Access Control Point (ACP)

- 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 hand held 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 (Air Transport Apron). AFP will also be notified.



Eastern ACP Inspection

Gates

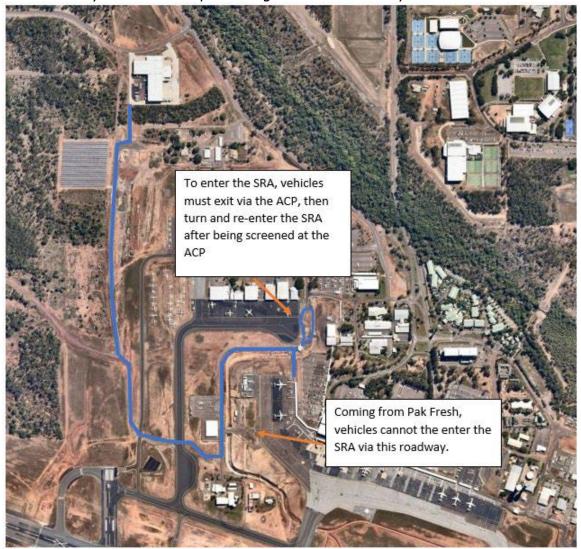
Drivers of vehicles accessing airside from landside through an authorised gate are to watch for other vehicles and give right of way in accordance with Territory laws. They are to ensure that the gate is FULLY OPEN before proceeding and STOP after passing through to ensure gate is PROPERLY CLOSED before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



Wyuna Cold Store Access

The following processes apply to vehicle access and/or freight movements between the Air Transport Apron and the Wyuna Cold Storge facility Osgood Drive.

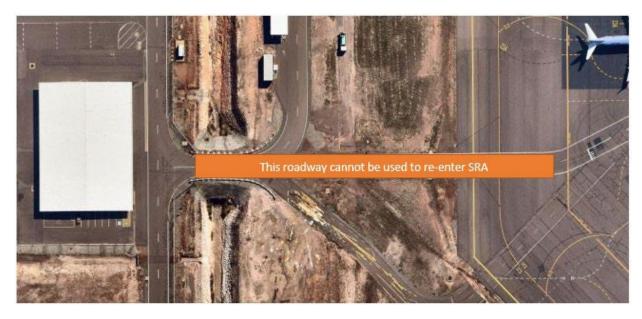
Access route to/from the Air Transport Apron and Wyuna Cold Storage facility requires
crossing of Taxiways Victor 1 and Yankee 1 at the marked 'live taxiway crossings' –
marked with red and white zipper pattern – all vehicles must STOP and check that the
taxiway is clear before proceeding to cross the taxiway.



- Access to the SRA from the Wyuna Cold Storage facility is via the Access Control Point (ACP) adjacent Gate India – refer plan.
- Note when returning from the Wyuna Cold Storage facility with or without freight –
 to the SRA (Air Transport Apron) the access road between Qantas Engineering and the
 Apron cannot be used any breach of this requirement will result in access to the gate
 being removed and Demerit Points applied.
- Note access to Wyuna Cold Storage facility is not automatic, and operators will need to demonstrate an operational requirement and received operational briefing.

ACP- Gate India





General Tips for Use of Airside Roads and Aprons

Be alert! Monitor what is happening around you. This is especially important when driving on the airside as many hazards exist.

Your situational awareness can be affected by a variety of factors including workload, boredom, fatigue, and distractions using mobile phones and other hand-held devices.

Here are some tips to ensure you stay alert:

- Plan ahead
- Don't use your mobile phone while driving
- Obey all rules for airside driving and follow the Standard Operating Procedures for your company
- Be vigilant be aware of other vehicle and aircraft movements
- Clear and open communication

Safety Summary

Your safety is important to us and as a holder of an ADA you are responsible for your own safety and the safety of those around you. Here are some points to remember:

- Aircraft have the Right of Way. It is important that you understand the environment you work in, and you must always remain observant.
- Know where your area the airside is a complex environment. Category 2 drivers are not permitted to drive on taxiways and runways.
- See and be seen Remember it is mandatory to always wear your high visibility clothing when you are on the airside. Other PPE should be worn as required by your company's Standard Operating Procedures.
- Mobile phones can be a distraction. If you must use a phone, stop your vehicle in safe location (e.g., Equipment Clearance Area) – keep the call short.
- Never text, use a portable music device or use earphones (or earbuds) when driving.





Manoeuvring Area Markers, Markings and Lights

The following Visual aids apply to Category 3 and 4 drivers.

Category 1 and 2 ADA permit holders are prohibited from accessing the Manoeuvring Area, which is classified as the Runways and Taxiways, excluding the Aprons, without an escort by a holder of an appropriate ADA permit, however CAT 1 and CAT 2 permit holders should be aware of markings and lighting systems associated with the Manoeuvring area.

Runway strip

White gable markers (rectangular) mark the edge of the graded runway strip. **Vehicles are not permitted to enter the runway strip without clearance from ATC**.



Eastern Helipad

Blue gable markers (rectangular) define the edge of the Eastern Helipad Area, this area is considered an active runway. You **must have a CAT 4 ADA** and **clearance from ATC** is required **to cross or enter the helipad**.



Movement Area Guidance Signs (MAGS)

Movement Area Guidance Signs are used to provide mandatory instructions and/or information to pilots. They are also used to alert drivers.





Runway Centre Line and Runway Edge

These markings indicate the centreline and edge of a runway.

The centerline is marked by a white broken line and the edge is a continuous white line.



New pic

Centreline and edge of Taxiway surface

These markings indicate the centre and edge of a taxiway. The centreline of a taxiway surface is marked by a continuous yellow line and the edge of the taxiway surface is a continuous double yellow line. The double yellow line also indicates low strength pavement from the outside edge.



Centre line



Edge line

Taxiway Restrictions

Certain taxiways have weight and width restrictions. These restrictions are marked on the taxiway as per the below picture.



Intermediate Holding Position Marking

Marked by a single broken yellow line the width of the taxiway, an Intermediate Holding Position is the location at a taxiway intersection where ATC requires drivers and aircraft to hold.



Runway Holding Position

These indicate the holding positions for vehicles (and aircraft) prior to entering or crossing the runway. They are defined by two continuous yellow lines and two broken yellow lines the width of the taxiway.



Note Runway Holding Position markings must not be passed without appropriate ATC clearances and Category 4 Airside Driving Authority.

Runway Guard Lights

Runway Guard Lights are provided at all intersections where a taxiway meets a runway to further alert drivers and aircraft they are approaching a Runway Holding Position.

Runway Guard Lights consist of two pairs of elevated yellow lights, one pair on each side of the taxiway which illuminate alternately.





Movement Area Lights

During night operations these coloured lights are used to mark these areas:

Apron or Taxiway Edge Lights	BLUE LIGHTS
Taxiway Centre Line	GREEN LIGHTS
Unserviceable Area	RED LIGHTS
Runway Holding Position	Three (3) inset lights showing YELLOW in the direction of the approach to the runway
Runway Edge	WHITE (& YELLOW)



RWY Holding Position Lights



Red Unserviceable Lights





Green Taxiway Centreline Lights

Category 3 and 4 Airside Driving Authority

General

When operating a vehicle on the Manoeuvring Area, drivers must have an awareness of their location, intended route and an operational understanding of aircraft movements and how they relate to their operation of that vehicle.

Drivers need to fully understand the regulations applying to all movement areas, particularly when operating on the Manoeuvring Area.

Vehicle operators must know the designations of ALL the Runways and Taxiways so they can advise ATC where they are at any time and be able to navigate any area as directed by ATC.

Before entering the Manoeuvring Area, Drivers must have:

- A clear understanding of ATC instructions and clearances; and
- Be able to monitor and operate a suitable radio and be able to communicate with ATC;
 including understanding ATC light signals; and
- Recognise and understand relevant markings, signs and lights used on the Manoeuvring Area; and
- Clear understanding of vehicle failure, radio failure and low visibility procedures; and
- A working knowledge of Darwin International Airport's runway and taxiway network including hold points.

Operating on the Manoeuvring Area

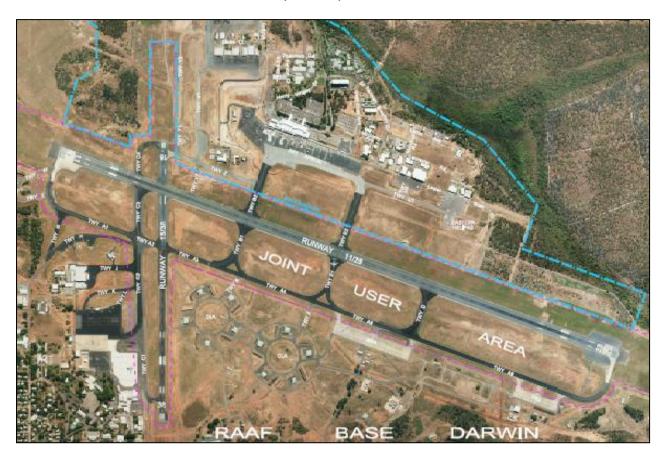
The Manoeuvring Area at DIA is those parts of the Airport used for take-off, landing, and taxiing of aircraft i.e., Runways and Taxiways excluding Aprons and is subject to a clearance by ATC.

A driver must not enter the Manoeuvring Area unless:

- They have an operational requirement to do so; and
- Is the holder of a valid CAT 3 or CAT 4 ADA permit; and
- A clearance is obtained prior to entering the Manoeuvring Area ('blanket' clearances may be issued by ATC for entering taxiways on some occasions); and
- Their vehicle displays a rotating and flashing beacon which is amber in colour and visible from 360°; and
- Their vehicle is fitted with a serviceable radio capable of receiving and transmitting on Darwin Airport ATC frequencies; and
- Maintains a "Listening Watch" at all times; and
- Drivers on the Manoeuvring area must obey all instructions given by ATC; and
- Must have a sound knowledge of the taxiway and/or runway network; and
- Be aware of safety distances and minimum clearances to operating aircraft.

Darwin International Airport has two (2) Runways. The main runway, Runway 11/29 is 3354 metres long by 60 metres wide. The cross runway, Runway 18/36 is 1524 metres long by 45 metres wide.

Runways 11/29 and 18/36 are supported by a comprehensive taxiway system to facilitate the movement of aircraft between the runways and apron areas.



Low Visibility Conditions

When aircraft movements are in progress during declared 'low visibility conditions', vehicular movements on the manoeuvring area (runways and taxiways) shall be restricted to those vehicles under the control of DIA Airport Operations Officers, ARFF personnel and other vehicles when escorted by an Airport Operations Officer.

For all low visibility operations, non-essential vehicles will not be permitted on the manoeuvring area.

Low visibility conditions are considered to exist when the visibility reduces to below 800m or shallow fog exist within the airfield boundary.

Low visibility operations generally occur at Darwin International Airport during periods of heavy rain in the wet season (November to April) though low visibility caused by fog can occur on an irregular basis but may occur at any time of the year.

Aircraft Towing

Only those personnel trained and qualified are permitted to perform aircraft towing operations.

The towing vehicle must be correctly marked and be equipped with a radio capable of twoway communication with ATC, unless escorted by an appropriately equipped vehicle or has suitable communications with a person in the aircraft who is in communication with ATC on the designated ground frequency 119.55 or 121.8

Aircraft towing must not commence without approval from ATC.

Darwin Ground	Airnorth engineering request tow E170 from Bay 21 to Airnorth hangar
ATC Response	Airnorth engineering tow approved from Bay 21 to Airnorth hangar" ATC may add further conditional instruction e.g. "Give way to
Your acknowledgement	Airnorth engineering tow from Bay 21 to Airnorth hangar

Aircraft under tow must not enter a taxiway and must not enter or cross any runway without approval from ATC.

An aircraft under tow is considered to be operating. To comply with CAR 196 (3), the operator shall activate the aircraft's anti-collision beacon and navigation lights prior to commencing the tow.

The holder of a Category 3 ADA is exempt from requiring a CAT 4 ADA when towing aircraft across the threshold of Runway 18 to/from Taxiway Charlie 4 Engine Run and Compass Swing site; runway crossings at any other locations must be under escort by a CAT 4 ADA Driver.

Refer Communications and Radio Procedures for more detail on correct radio procedures and frequencies.

Communications and Radio Procedures

General

Thorough knowledge of the aerodrome is essential to safe driving.

When operating on the aerodrome, you must maintain situational awareness, you need to be aware of your location, how that relates to your intended route and to other vehicles and aircraft that may be operating on the aerodrome and be able to effectively communicate with ATC.

The following tips are essential and assisting you operate on the Manoeuvring area:

- Know where you are have a current aerodrome chart or diagram readily available for use.
- Review current aerodrome information for any taxiway or runway closures, or restrictions due construction activity.
- Listen carefully, in particular when another vehicle has a similar sounding call sign.
- All instructions given by RAAF ATC must be responded to immediately.
- Drivers operating a vehicle on the Manoeuvring Area and using VHF radio to communicate with ATC are required to hold a CASA issued Aeronautical Radio Operator Certificate (AROC), previously known as Aeronautical Radio Operator Certificate of Proficiency (AROCP).
- Category 3 and 4 ADA drivers need to be aware of the correct transmission and phraseology requirements.

Communication and Transmission Techniques

The efficient use of two-way radio depends largely on microphone technique, the method of speaking and the choice of words by the operator. Effective driver/ATC communications are vital to safe aerodrome operations.

The following principles will assist with clear and accurate communications:

- Prepare before you talk ensuring you know what to say, and are on the right frequency;
- Listen before transmitting to avoid over transmitting another vehicle or aircraft;
- Establish contact first before a lengthy request or statement;
- Be concise and speak plainly in clear English using standard phraseology, avoid any tendency to shout; your initial transmission should contain these elements:
 - who you are calling (Ground)
 - your call-sign
 - where you are located
 - a concise description of what you want to do
- Focus on what ATC is instructing you to do. Do not perform any non-essential tasks;
- Read back any holding position or instruction to hold short of, enter, and/or cross a runway;
- Confirm any instructions if you are unsure, ask for any relevant information required;
- Read back all instructions and clearances form ATC including your vehicle call-sig, always use the correct runway designator.

Phonetic Alphabet

The International Phonetic Alphabet is used to assist in voice transmission of call signs, runway/taxiway designators and the spelling of proper names and unusual words.

The phonetic alphabet is made up of particular words to denote the letters. When used, the pronunciations as shown are to apply:

Α	ALFA	Al-fa	N	NOVEMBER	no-VEM- <u>ber</u>
В	BRAVO	BRAH- <u>voh</u>	0	OSCAR	OSS-cah
С	CHARLIE	CHAR-lee	Р	PAPA	pah-PAH
D	DELTA	DEL-tah	Q	QUEBEC	key-BECK
E	ECHO	ECK-oh	R	ROMEO	ROH-me-OH
F	FOXTROT	FOKS-trot	S	SIERRA	see-AIR-rah
G	GOLF	golf	T	TANGO	TANG-go
Н	HOTEL	hoh-TELL	U	UNIFORM	YOU-nee-form
Ι	INDIA	IN-dee-ah	٧	VICTOR	VIC-tah
J	JULIETT	JEW-lee-ETT	W	WHISKY	WISS-key
К	KILO	KEE-low	X	X-RAY	ECKS-RAY
L	LIMA	LEE-mah	Υ	YANKEE	YANG-key
М	MIKE	mike	Z	ZULU	ZOO-loo

Phonetic Numerals

Numbers are to be transmitted using the following pronunciations:

0	ZE-RO
1	WUN
2	TOO
3	TREE or THREE
4	FOW-er
5	FIFE
6	SIX
7	SEV-en
8	AIT
9	NIN-er
DECIMAL	DAY-SEE-MAL
THOUSAND	TOUSAND or THOUSAND

In general, numbers except whole thousands are to be transmitted by pronouncing each digit separately, (used mainly by Air Traffic Control), e.g.

10	ONE ZERO
75	SEVEN FIVE
100	ONE ZERO ZERO
583	FIVE EIGHT THREE
5000	FIVE THOUSAND
11000	ONE ONE THOUSAND
24000	TWO FOUR THOUSAND
38143	THREE EIGHT ONE FOUR THREE

Numbers contain decimals are transmitted with the decimal point, in appropriate sequence, indicated by the word "decimal", e.g.

121.8	One Two One Decimal Eight

In contrast, ground vehicle signs are to be transmitted using the group form and can be preceded by a vehicle identifier, e.g.

Safety 1	Safety One
Car 55	CAR FIVE FIVE

Note: ATC may approve the use of discrete call signals for specific duties e.g. "Grass cutter One" or "Tender Two".

Signal Strength

1	Unreadable
2	Readable now and again
3	Readable but with difficulty
4	Readable
5	Perfectly readable

The minimum acceptable standard for a transmitter's readability is 'Four'.

Commonly Used Phrases

The following phrases are commonly used:

A CIVALOVA!! ED CE	LET ME MAIOUR THAT MORE HAVE DECEMED AND UNDERCTOOD THE
ACKNOWLEDGE	LET ME KNOW THAT YOU HAVE RECEIVED AND UNDERSTOOD THIS MESSAGE
AFFIRMATIVE	YES
APPROVED	PERMISSION FOR PROPOSED ACTION GRANTED
CANCEL	ANNUL THE PREVIOUSLY TRANSMITTED CLEARANCE
CONFIRM	HAVE I CORRECTLY RECEIVED THE FOLLOWING (see also "SAY AGAIN")
CORRECT	THAT IS CORRECT
CORRECTION	AN ERROR HAS BEEN MADE IN THIS (OR OTHER) MESSAGE - THE CORRECT INFORMATION IS
DISREGARD	CONSIDER THAT MESSAGE/INSTRUCTION AS NOT SENT
EXPEDITE	HURRY
HOLD POSITION	STOP - DO NOT PROCEED UNTIL ADVISED
HOLD SHORT OF	STOP BEFORE A SPECIFIED LOCATION (For a runway or taxiway, this is the Taxi Holding Position line)
HOW DO YOU READ	WHAT IS THE READABILITY OF MY TRANSMISSION (Normally preceded by "RADIO CHECK")
NEGATIVE	NO, or PERMISSION NOT GRANTED, or THAT IS NOT CORRECT
RADIO CHECK	I WISH TO KNOW HOW WELL YOU CAN HEAR ME - PLEASE ADVISE YOUR READABILITY OF MY TRANSMISSION
READ BACK	REPEAT ALL OR THE SPECIFIED PART, OF THIS MESSAGE BACK TO ME EXACTLY AS RECEIVED
REQUEST	REQUEST CROSS RUNWAY 29
ROGER	I HAVE RECEIVED ALL OF YOUR LAST MESSAGE (see also "WILCO")
SAY AGAIN	REPEAT ALL, OR THE FOLLOWING PART OF YOUR LAST MESSAGE
STAND BY	WAIT AND I WILL CALL YOU BACK
VACATE	MOVE OFF THE RUNWAY/TAXIWAY/AREA IMMEDIATELY (may be amplified by "VIA TAXIWAY or NEXT LEFT")
VACATED	I HAVE VACATED RUNWAY / TAXIWAY / AREA (not required after crossing a runway or taxiway unless asked by the Tower e.g. in poor visibility)
VERIFY	CHECK AND CONFIRM WITH ORIGINATOR
WILCO	I (FULLY) UNDERSTAND YOUR MESSAGE/ INSTRUCTION AND WILL COMPLY WITH IT
WORDS TWICE	COMMUNICATION IS DIFFICULT - PLEASE SEND EVERY WORD OR GROUP OF WORDS TWICE <u>or</u> SINCE COMMUNICATION IS DIFFICULT - WORDS WILL BE SENT TWICE

Transmitting

Before transmitting, be sure the channel is clear (i.e., no other communications in progress) by listening out then:

Identify the unit you are calling	"DARWIN GROUND"		
Tell the Tower WHO you are	"CAR (Number)"		
Tell the Tower WHERE you are	"ON Taxiway ECHO TWO"		
Tell the Tower WHAT you wish to do	"Cross Runway 11" or "Enter Runway 11"		
Note ATC SMC (Ground) will instruct you to contact Tower for any requests to operate on Runways			
Tell the Tower of any other significant details	"CONDUCTING PAVEMENT INSPECTION AVAILABLE ON IMMEDIATE RECALL"		

Vehicles Operating on the Manoeuvring Area of the Aerodrome

In accordance with the agreement between the Department of Defence (RAAF ATC), Darwin International Airport and Airservices Australia (ARFF) the following procedures apply to all traffic, vehicles and pedestrians operating on the aerodrome.

- a) Aircraft, vehicles, and pedestrians operating on the movement area, outside of the runway, will maintain radio communications with ATC on the designated ground frequencies 119.55 and 121.8.
- b) Aircraft, vehicles and pedestrians requiring to cross a runway will remain on ground frequency.
- c) Aircraft, vehicles, and pedestrians requiring operations on any runway or within the runway strip of any runway, that is, operations requiring them to "enter" the runway, will:
 - 1) Remain outside of the runway strip and request to enter the runway on ground frequency. ATC Ground Controller will instruct to contact Tower.
 - 2) Switch from Ground to Tower frequency 133.1 and report on frequency to Tower, and request to enter the runway.
 - 3) Remain on tower frequency until the runway operations are complete and report the runway vacated.
 - 4) Once tower has acknowledged that the element has vacated, switch back to ground frequency.

When you require to 'enter' or 'cross' a runway you should always refer to that runway by the operational direction, e.g. Runway 11/29 is currently being used for departures to the west, therefore, this runway is referred to as Runway 29.

Only the words CROSS or ENTER authorise a vehicle onto the runway.

When you are working or operating within the runway strips or on the runways the following procedures apply:

- a) you must maintain communication with ATC at all times;
- b) once you have gained runway (or taxiway) entry you must maintain a constant listening watch;
- c) always remain within hearing distance of your radio;
- d) all other radios should be switched off;
- e) you should not use a mobile phone inside the vehicle while you are responsible for maintaining radio communications with ATC;
- f) you must read back all instructions from ATC before implementing them;
- g) you must carry out instructions from ATC promptly and advise when complete e.g.

When directed to vacate the manoeuvring area, the Tower call is brief:

ATC	"Car 55 – Vacate Runway 29"
Vehicle Immediate Response	"Car 55"
Once you have vacated and are outside the runway strip, call Tower	"Car 55 VACATED Runway 29"
The Tower will acknowledge	"Car 55"

Failure of Your Radio

If you find that you are unable to receive or make transmissions once you have commenced operating on the manoeuvring area you should first carry out some quick and simple checks of your radio:

- checking that the radio is turned on;
- checking that the volume has not been turned down;
- checking that the correct frequency is selected;
- o checking that the microphone is plugged in correctly;
- o checking that you are not out of range or in a dead spot;
- checking the squelch function and level;

If there is no apparent fault you should vacate the manoeuvring area immediately. Should you experience a radio failure, or observe flashing runway/taxiway lights or white flashing lights from the Tower, adopt the following procedures:

- a) if on the runway, vacate the runway and runway strip immediately;
- b) vacate the manoeuvring area via the most safe and direct route available;
- c) exercise extreme caution at all times and keep a vigilant watch for aircraft;
- d) on vacating the manoeuvring area establish contact with the Tower using another radio or by telephone and advise that you are clear of the area;
- e) do not re-enter the manoeuvring area until your radio has been replaced or repaired.

Light Signals and Radio Frequencies

If ATC experiences a radio failure the controllers will communicate using light signals. If you receive light signals from the Tower, you should respond immediately. The meaning of these signals must be displayed in your vehicle within easy sight of the driver. These signals are as follows: Request stickers of the below for your car at TCC Reception.

	STOP		Radio Freque	encies		
STEADY RED	3107					
	MOVE OFF THE RUNWAY, HELICOPTER LANDING AREA		Ground	119.55	121.80	(alt)
FLASHING RED	OR TAXIWAY AND WATCH OUT FOR AIRCRAFT			(SMC -V)	SMC	
	APPROVAL TO CROSS RUNWAY OR TO MOVE ONTO THE HELICOPTER LANDING AREA OR TAXIWAY		Tower/ CTAF	133.10		
FLASHING GREEN			ATIS	128.25		
	VACATE THE RUNWAY,		Phone Numb	oers		
FLASHING WHITE OR TAXIWAY						
Note: In emergency conditions, or if the Tower Controller suspects that the ground vehicle has not observed the Control Tower Light Signals, the following method of			ATC:	8924 2358		
			ADM:	0401 005 977		
attracting attention will be	attracting attention will be used:		A00:	0402 088 145		
VACATE THE RUNWAY, FLASHING THE HELICOPTER LANDING AREA			ARFF:	8920 4810	(general)	
RUNWAY OR	OR TAXIWAY IMMEDIATELY AND OBSERVE THE TOWER AND OBSERVE THE TOWER		(Fire or Fire	st Aid)		
TAXIWAY LIGHTING	FOR A LIGHT SIGNAL. TELEPHONE THE TOWER CONTROLLER IMMEDIATELY.		ATIS:	8920 2950		

Common Traffic Advisory Frequency (CTAF) Procedures

- RAAF ATC 452SQN DAR FLT provide Air Traffic Services (ATS) 24/7 for Darwin Airport.
- In the event that Air Traffic Services (ATS) are temporarily not available i.e. RAAF ATC are unable or do not provide ATS, procedures will be implemented to manage Darwin Airspace, such as, FLIGHTWATCH or Aerodrome Flight Information Service (AFIS). When ATS is temporarily not available ATC will issue a NOTAM advising operators of the procedures and respective frequencies.
- When Air Traffic Services are not available all vehicles and aircraft will broadcast on CTAF frequency 133.1 MHZ.
- During CTAF conditions it is essential that vehicle operators listen to other broadcast to maintain situational awareness.
- It is essential that effective radio are communications are used and that broadcasts are clear and concise.
- The following format should be used when making broadcast during CTAF conditions.

Location	"Darwin Traffic"	
Who you are	"Vehicle or Aircraft Call Sign"	
At	"Your location"	
Your Intentions	"Entering runway 11/29, for runway inspection".	
	"E190 under tow from Bay 24 to Bay 5"	
Location	"Darwin"	

Note broadcasts may also commence with "All Stations" instead of "Darwin Traffic".

Manoeuvring Area Operating Tips

Before going onto the Manoeuvring Area:

- Brief yourself on the current situation on the manoeuvring area. Check NOTAMS, listen to ATIS (frequency 128.25 or 8920 2950).
- KNOW the communication procedures
- KNOW the LIGHT SIGNALS and SIGNAGE
- KNOW your environment, using an aerodrome chart or diagram will assist you becoming familiar

Driving on the Manoeuvring Area:

- COMPLY with all ATC INSTRUCTIONS
- Maintain a continuous LISTENING WATCH
- Use correct phraseology and communicate in a clear and concise manner
- Maintain a 'sterile' environment in your vehicle you must be able to focus on your duties without being distracted by non-operational matters like engaging in conversation with a passenger or on a mobile phone
- NEVER go beyond range of your radio
- PLAN work carefully and avoid any tendance to rush whilst airside
- NEVER LEAVE ANYTHING (equipment or tools) ON THE MOVEMENT AREA
- If you become confused about what is happening, leave the movement area immediately

Incidents, Accidents and Emergencies

Incident Reporting

All accidents and incidents must be reported to DIA Operations. This includes drivers who are involved in an incident involving staff, passengers, aircraft, vehicle, and other equipment.

Details of incident should include:

- Date and time;
- The type of incident;
- The location of the incident;
- Type of equipment failure (if applicable);
- If any emergency agencies are required.

To comply with CASR 99 and DIA DAMP Policy, a Drug and Alcohol test is required postaccident or serious incident. Your company will make arrangement for the testing to be done, otherwise DIA can arrange the testing on behalf of the company. Those involved must be stood down from airside activities until the DAMP test and investigation has been reviewed.

In the event of a fire, contact ARFF on 08 8920 4899



Appendix A: Airside Driving Penalty Points System

Introduction

A demerit penalty point system is in effect at Darwin International Airport which allocates point penalties for prescribed driving and other offences conducted whilst operating at on the airside at DIA.

Airside Driver Penalty Points

The DIA Demerit Penalty Points System allocates a maximum penalty for a range of prescribed airside driving offences.

Each time a driver is reported for a breach of the rules for driving airside the driver will be notified, issued with an Infringement Notice by an authorised DIA Officer and be notified of any Demerit Points imposed and a record kept on the Tracker Airside database. The points penalty applying to each type of offence are set out in DIA Demerit Penalty Points Table.

For any specific incident, after full review and recommendation from the Airside Operations Management team, the Head of Operations, at their sole discretion, may elect to impose a serious, but lessor penalty, for the infringement or incident.

DIA may at any time withdraw or suspend an ADA (or an AUA) for any person who breaches the conditions of the AVCH or who drives in a negligent manner.

Airside drivers who accumulate twelve (12) or more demerit penalty points within the twenty-four (24) month period of their ADA, will be provided with details of their airside driving offences and invited to *show cause* why their Authority to Drive Airside should not be suspended or withdrawn.

DIA will notify a driver's employer suspension or withdrawal of an ADA, or the issue of Infringement Notices. DIA will advise the driver in writing of the reasons for the determination and the duration of the suspension or withdrawal of the ADA.

Appeal Process

Airside drivers may challenge individual Infringement Notices, or suspension or withdrawal of an ADA, by writing to the DIA Head of Operations within 14 days of the Infringement Notice or invitation to show cause being issued and stating why the notice should be withdrawn.

The driver's response the Infringement or *show cause* notice will be considered by the DIA Airside Operations Management team, an ADA may be suspended pending this show cause process.

Upon making the determination to suspend or withdraw and ADA, DIA will advise the driver in writing of the reasons for the determination and the duration of the suspension/withdrawal.

If a determination is made to suspend an ADA for a specified time, the ADA may not be automatically reinstated and the driver may be required to re-apply for an ADA after the expiration time. Prior to the reinstatement of the ADA the driver will be required to:

- Have further driver training;
- Re-sit online induction and theory test; and/or
- Undertake a practical driving test (as required)

DIA Demerit Penalty Points Table

	OFFENCE	Demerit Points
1.	SPEEDING Supposed the supposed bissets but 5 = 10 bisset/le	\
1.1	Exceeding the speed limit by 5 – 10 km/h	Warning
1.2	Exceeding the speed limit by 10 km/h but less than 20 km/h	2 3
1.4	Exceeding the speed limit by 20 km/h but less than 30 km/h Exceeding the speed limit by 30 km/h or more	6 and 1 month
1.4	exceeding the speed limit by 30 km/m or more	ADA suspension
2.	SAFETY IN THE VICINITY OF AIRCRAFT	
2.1	Failure to give way, and maintain minimum separation distance to a taxiing aircraft	6
2.2	Failure to give way to an aircraft under tow	6
2.3	Failure to stop when an aircraft has beacon(s) activated	3
2.4	Failure to give way to an aircraft that has commenced pushback	6
2.5	Driving within 3 metres of a parked aircraft	3
2.6	Driving in a manner dangerous to aircraft	12
2.7	Using the apron/aircraft parking Bays as a short cut (without an operational requirement or prior approval)	3
3.	IMPROPER OVERTAKING	
3.1	Failure to overtake in a safe manner	3
3.2	Driving in a manner dangerous to other vehicles	6
A	DRIVING UNDER THE INFLUENCE	
4. 4.1	Having returned a positive Drug or Alcohol test as per DAMP	Suspension of
7.1	Traving returned a positive brug of Alcohol test as per DAMP	ADA
5.	FOD / COVER LOOSE MATERIAL	
5.1	Dropping rubbish/FOD from a vehicle	3
5.2	Failure to secure load	3
5.3	Failure to stop and pick up FOD	1
6.	IMPROPER PARKING	
6.1	Parking in a no parking zone	3
6.2	Parking in a safety area or Keep Clear e.g. obstructing Emergency Fuel Shut Off button or Eye Wash station	3
6.3	Parking in an area that obstructs an emergency exit	6
6.4	Parking in an area that obstructs pedestrians	3
6.5	Parking in an area that obstructs traffic, equipment or refuelling	3
6.6	Parking in an area that obstructs aircraft	6
6.7	Failure to park equipment in an equipment staging or storage area	3
7.	SAFETY IN VICINITY OF AEROBRIDGES	
7.1	Parking vehicles or equipment in an Aerobridge Keep Clear Zone (Bays 1, 2 and 5 Apron Drive Aerobridges)	6

7.2	Driving beneath an aerobridge	6
8.	IMPROPER LIGHTING	
8.1	Driving without headlights	1
8.2	Failure to use flashing beacon	3
	<u> </u>	
9.	PEDESTRIAN SAFETY	
9.1	Failure to give way to a pedestrian	3 3
9.2	Driving across a pedestrian crossing during unloading/loading of passengers.	3
10.	PUSHBACK TUGS	
10.1	Failure to return to apron other than by same bay aircraft pushed-back from	1
10.2	Towing / pushing aircraft in contravention to markers / markings	3
11.	TOWING OF EQUIPMENT/FREIGHT DOLLIES/BARROWS	2
11.1	Towing more than the allowable number of dollies/barrows	<u> </u>
11.2	Towing equipment/dollies/barrows that may constitute a hazard to other airside users	
11.3	Failure to secure load or equipment	3
11.4	Driving/towing oversized equipment under Aerobridge / Fixed Link	6
12.	RIDING ON EQUIPMENT	
12.1	Carrying a passenger when there is no seat provided	6
	carrying a passenger when there is no seat provided	
13.	BICYCLES	
13.1	Riding a bicycle (or any other personal mobility device – including scooter and skateboards) airside (unless written permission from DIA refer Airside Use of Bicycles Policy – Exemptions)	3
14.	MOBILE DEVICES AND PHONES	
14.1	Driving whilst using a hand held mobile device or phone	3
1 1.1	briving whilst using a hand held mobile device of phone	<u> </u>
15.	FAILURE TO FOLLOW DIRECTIONS	
15.1	Failure to follow directions of an Authorised Person	3
15.2	Failure to show Authority to Drive Airside when requested by a DIA Airside Operations Officer or other Authorised Person	3
15.3	Taking children (or an animal) airside	3
15.4	Failure to stop after an accident	6
15.5	Failure to follow direction/instruction given by Air Traffic Control	6 + ADA Suspension to be examined on case by case basis

16.	FAILURE TO ABIDE BY AIRSIDE MARKINGS	
16.1	Failure to stop at a Stop sign	6
16.2	Failure to give way at a Give Way sign	3
16.3	Disobeying a traffic direction	3
16.4	Failure to stop at a 'live taxiway' crossing	6
16.5	Crossing a taxiway other than at a 'live taxiway' crossing (CAT 1 or 2 ADA)	6
16.6	Failure to stop at a vehicle Access Control Point	6
17.	EXCEEDING AUTHORITY / ATC CLEARANCE	
17.1	Driving on the airside without the appropriate authority	3
17.2	Driving on the Apron (or Apron taxilane) without the appropriate authority	6
17.3	Driving on the taxiway without the appropriate authority	8
17.4	Driving on the runway without the appropriate authority / ATC clearance (Runway Incursion)	10 + ADA Suspension to be examined on a case by case basis
17.5	Escorting a vehicle without the appropriate authority	3
18.	RUNWAY CROSSING REQUIREMENTS	
18.1	Unauthorised vehicle crossing Runway	6 + ADA Suspension to be examined on a case by case basis
19.	OTHER	
19.1	Operating a personal entertainment audio device whilst	3
	operating a vehicle (or equipment)	-
19.2	Operating an un-roadworthy vehicle (or equipment) airside	3
19.3	Any other offence that may constitute a hazard to aircraft operations or airside safety	Case by case basis

Appendix B: DIA Contacts and Resources

Postal Address:

PO Box 40996 Casuarina NT 0811

DIA Website:

Information about Airside Driving, resources, other Inductions, Airside Policies, Safety information and Forms can be found on DIA website under the Working on Airport – Airside Operations: https://www.darwinairport.com.au/business/working-airport

DIA Airport Operations				
For assistance with Airport Operations the following contacts are available 24/7				
Airport Duty Manager M: 0401 005 977		E: diaadms@adgnt.com.au		
Terminal and Airside Operations Officer	M: 0402 088 145	E: dia.taoo@adgnt.com.au		
Other DIA Contacts and Email				
Terminal Control Centre	T: 8920 1805	E: tcc.reception@adgnt.com.au		
Registering for Inductions		E: diatraining@adgnt.com.au		
Airside Manager	M: 0423 797 355	E: Mike.clancy@adgnt.com.au		
Aerodrome Safety & Standards	M: 0403 088 153	E: Bob.calaby@adgnt.com.au		
Head of Airside		E: glen.dodds@adgnt.com.au		
Head of Terminal Operations	M: 0421 601 461	E: melanie.cobbin@adgnt.com.au		
Health & Safety Manager	M: 0402 782 375	E: steve.caldwell@adgnt.com.au		
Agencies				
Aviation Rescue and Fire Fighting Service (ARFF)		T: 8920 4899		
Australian Customs & Border Pro	tection	T: 8920 2551		
Australian Federal Police (AFP)		T: 131 237		

Appendix C: Aircraft Codes and Safety Distances

Aircraft Codes and Types

Drivers of vehicles and equipment must ensure safe distances for the respective aircraft types are always maintained to operating aircraft. The following tables provide information on aircraft types and respective aircraft codes and the required <u>minimum</u> separation distances.

Typical aircraft and wingspans include following:

Code	Maximum Wingspan	Common Aircraft Types
Α	15m	Cessna 310, Navajo-PA31
В	24m	Cessna Caravan, EMB-120 (Brasilia), King Air
С	36m	Boeing B737, Airbus A320, Embraer E170, Fokker F100
D	52m	Boeing B757, B767
Е	65m	Boeing B747, B787, B777, Airbus A330, A340
F	80m	Airbus A380, Antonov-124

Separation Distances to Aircraft on Aprons

Aircraft manoeuvring must not be constrained and wingtip clearances to other aircraft, vehicles and equipment must be maintained. For aircraft manoeuvring in the vicinity of an apron parking bay, the aircraft to object required minimum separation is:

Code	Separation
Α	3m
В	3m
С	4.5m - Note 7.5M separation is used on Air Transport Apron to allow sufficient space for aircraft servicing
D	7.5m
Е	10m
F	10m

Reduced Separation Distances may be permitted in some circumstances, though must be approved by DIA in accordance with the requirements detailed in the Air Transport Apron Procedures which include:

- Only permitted when aircraft are using NIGS
- 'Wing Walkers' required to monitor aircraft arrival and departure

Separation Distances to Aircraft on an Apron Taxilane

For aircraft on apron taxilane (e.g. the taxilanes around the General Aviation aprons), the aircraft to object (vehicle) required minimum separation is:

Code	Separation
Α	4.5m
В	4.5m
С	4.5m
D	7.5m
E	7.5m
F	7.5m

Note the taxilanes around the General Aviation Aprons can be busy areas and it is the responsibility of the driver to ensure that the vehicle maintains the <u>minimum</u> separation distance to moving aircraft.

Separation Distances to Aircraft on a Taxiway

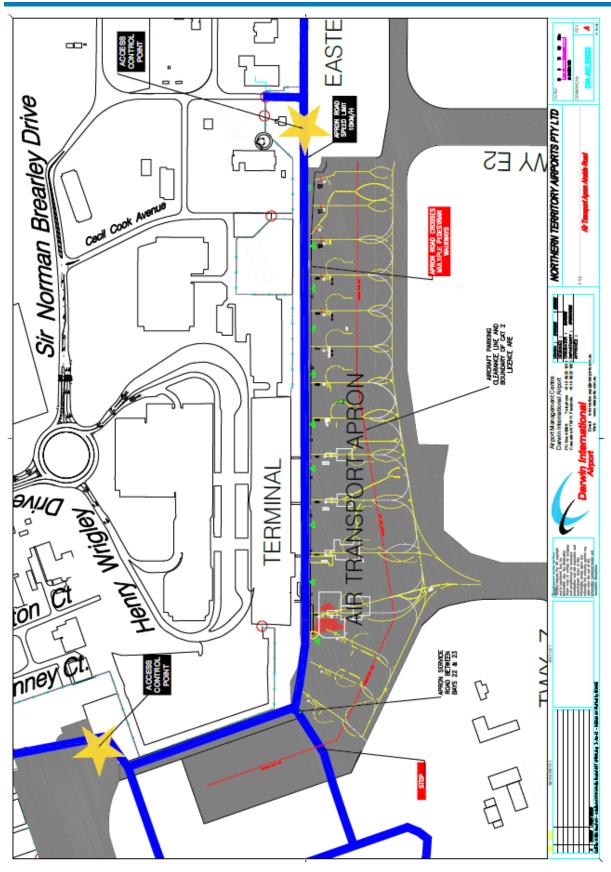
For aircraft on a taxiway, the aircraft to object (vehicle) required minimum separation is:

Code	Separation
Α	8m
В	8m
С	8m
D	11m
E	11m
F	11m

The **double yellow lines** marking the edge of the taxilane or taxilway **do not** mean you are clear of the taxiway strip and clear of the taxiing aircraft, and the minimum distances shown in the above tables must be maintained from aircraft.

It is the responsibility of the driver to ensure that the vehicle maintains the minimum separation distance to aircraft on a taxiway. Aircraft Crew will always assume that the aircraft has right of way and the expectation vehicle and/or equipment will move.

Appendix D: DIA Air Transport Apron Layout



Appendix E: DIA Airside Map

