Cairns Airport
Aerodrome Operations Manual

Reference No: 3034 AO
Version 4.1– 19 August 2020

Document Control

Reference No	Version	Status	Sponsor	Author
3034 AO	4.1	Approved	Head of Aviation	Aerodrome Safety and Compliance Manager

Amendments	Date	By whom
Version 4.1- minor updates and changes inline with organisational changes	19/08/2020	Operations
Version 4- Update following ATI, MAG Sign Variation	09/07/2019	Operations
Version 3.4- Annual review and updating new titles and responsibilities	24/05/2019	Operations
Version 3.3.1- Update to include new RO on letter to ASA as authorised NOTAM issuer for CA	29/05/2018	Operations
Version 3.3 – Update new titles and responsibilities to reflect orgainisational restructure.	05/02/2018	Operations
Version 3.2 – Update Part 2, Section 1, Annexes 3 and 4 s1 - CASA's Direction ref: Non Compliance (due to runway strip width)	15/04/2016	Operations
Version 3.1 - Updated Annex 1, Annex 2 and Annex 5 Part 2.	29/02/2016	Operations
Version 3 – Complete rewrite of manual	09/09/2015	Operations
Version 2 Amendment 2.1 – Updated Annex 1 Part 2, Section 9. ITB Pavement Markings 1-3-3013. Updated Title page, Document Control table, Distribution List and Manual Control Sheet.	29/05/2014	Operations
Version 2 – Additional Annexe 6 Part 2, Section 3 Drawings updated Annexe 1 Part 2, Section 3 Annexe 1 updated Part 2, Section 8	24/04/2014	Operations
Version 1 - Complete manual rewrite inclusive of Document Control including new document identifier and number in footer	31/03/2014	Operations

Summary

The Cairns Airport Pty Ltd Operations Manual contains details of the airside operating procedures that ensure the safety and viability of our airport. The Aerodrome Operations Manual also satisfies our legal obligations under Civil Aviation Safety Regulations (CASR) Part 139, in particular CASR 139.09.

PART 0	FOREWORD, CONTENTS AND DOCUMENT CONTROL
SECTION 01	FOREWORD

FOREWORD

Cairns Airport is owned and managed by Cairns Airport Pty Ltd, which includes all airside and landside operations, terminals, car parking and associated land holdings.

Cairns Airport Pty Ltd is part of the North Queensland Airports (NQA) group. The consortium comprises of Cairns Mackay Investment Ltd (an entity advised by JP Morgan Asset Management), The Private Capital Group's The Infrastructure Fund (TIF) managed by Hastings, Perron Investments and Auckland International Airport Limited (AIAL). Mackay Airport Pty Ltd (MAPL) which owns and manages Mackay Airport is also part of the North Queensland Airports group.

Cairns Airport is one of Australia's leading regional airports, providing air links to a range of domestic and international locations. Cairns Airport Pty Ltd's vision is to create amazing memories for travellers, growth for our communitities and retirns for our shareholders.

NQA's Managing Responsibly Policy reflects that Cairns Airport Pty Ltd strives to conduct safe, incident free operations by ensuring:

- Our management systems are best practice and properly implemented
- Our people fully understand and meet their responsibilities to enable safe operations
- System performance in enabling safe operations is recognised and there is zero tolerance of poor practice
- Sufficient equipment and skilled people are in place to enable safe operations

The Aerodrome Operations Manual contains details of the airside operating procedures that must be adopted to ensure the safety and viability of Cairns Airport. The Aerodrome Operations Manual also satisfies Cairns Airport's legal obligations under Civil Aviation Safety Regulations (CASR) Part 139, in particular CASR 139.09.

The Aerodrome Safety and Compliance Manager should be consulted if there is difficulty in complying with any of these procedures so that the necessary document amendments can be made. We should always question why we do the things the way we do and we should always challenge ourselves to see if the intended result can be achieved in a more efficient or reliable way.

To avoid unnecessary duplication, some procedures may make reference to other technical manuals and publications. All the referenced documents are readily available on the Cairns Airport's intranet and each staff member is responsible for ensuring that they can access referenced documents.

The procedures contained in this Manual are directions issued by the Head of Aviation, to those persons listed herein to undertake the functions as defined to ensure the safety of aircraft movements and persons using Cairns Airport.

Issued under the Authority of:

Garry Porter
Head of Aviation
Cairns Airport Pty Ltd

ABN: 18 132 228 221

PART 0	FOREWORD, CONTENTS AND DOCUMENT CONTROL
SECTION 02	CONTENTS

NOTES ON PLANS INCLUDED IN THIS MANUAL

Where necessary in order to describe and/or to facilitate the management of specific operating procedures, various plans are included in the relevant sections of this manual.

All such plans carry a title, plan number and revision date. For ease of production and printing, this manual generally contains reduced size copies of these plans. Originals of all plans are kept in the Cairns Airport Pty Ltd Drawing Office. Copies may be obtained upon request.

PART 0	FOREWORD, CONTENTS AND DOCUMENT CONTROL
SECTION 03	CONTROLLED COPY DISTRIBUTION LIST

Copy	All Users
Electronic	Access provided via Cairns Airport website password protected.
Master	Electronic copy on Cairns Airport Intranet and website – Maintained as a Controlled Copy

Note: All Airlines and those requiring a copy of the AOM are provided access to a controlled copy of the AOM located on the Cairns Airport website, which may be printed as an uncontrolled version. The most current version of the AOM will be uploaded on the Cairns Airport website as amendements are incorparated. It's the user's responsibility to remain up to date with the most current version.

MANUAL CONTROL SHEET

Part	Section	Issue Date	No. of Page/s	Title of Section	Approved By
All	**All**	31/03/2014		Cairns Airport Pty Ltd AOM Version 1	
All	**All**	24/04/2014		Cairns Airport Pty Ltd AOM Version 2	
NA	**NA**	29/05/2014	1	Title page & Document Control Table	
0	**03**	29/05/2014	1 & 2	Distribution List & Manual Control Sheet	
2	**9, Annex 1**	29/05/2014	25	ITB Pavement Markings 1-3-3013	
All	**All**	09/09/2015	All	Cairns Airport Pty Ltd AOM Version 3	MOE
NA	**Annex 1, 2 & 5**	29/02/2015		Updated Annex 1, Annex 2 and Annex 5 Part 2	MOE
All	**All**	28/01/2018	All	Annual Review and update in line with organisational restructure	ASCM
All	**All**	29/05/2018		Update to include new RO on letter to ASA as authorised NOTAM issuer for CA	ASCM
All	**All**		All	Remove the term exemption/s	
2	1		Annex 4	Update Lighting variations spreadsheet	
2	1		1.4	Update Doc contro prcedure	
2	4		Annex 3	AsA LOA 3173 Exchange of safety information removed	
All	**All**	24/05/2019	All	Annual review and updating new titles and responsibilities	ASCM
2	1	09/05/2019	28	Inclusion of MAG Sign variation.	ASCM
All	**All**	19/08/2020	All	Annual review and updating new titles and responsibilities	ASCM

PART 1	AERODROME INFORMATION
SECTION 01	SITE DETAILS, TITLES AND PLANS

Contents

1.1 SITE DETAILS

Cairns Airport is situated approximately six (6) kilometres north of the Cairns Central Business District (as shown on the locality plan). The Airport has been developed largely on filled areas of the Barron River flood plain.

The Aerodrome Reference Point is located at (WGS84) Latitude South 16 53.2 and Longitude East 145 45.3. The Aerodrome Elevation is 10 feet AHD.

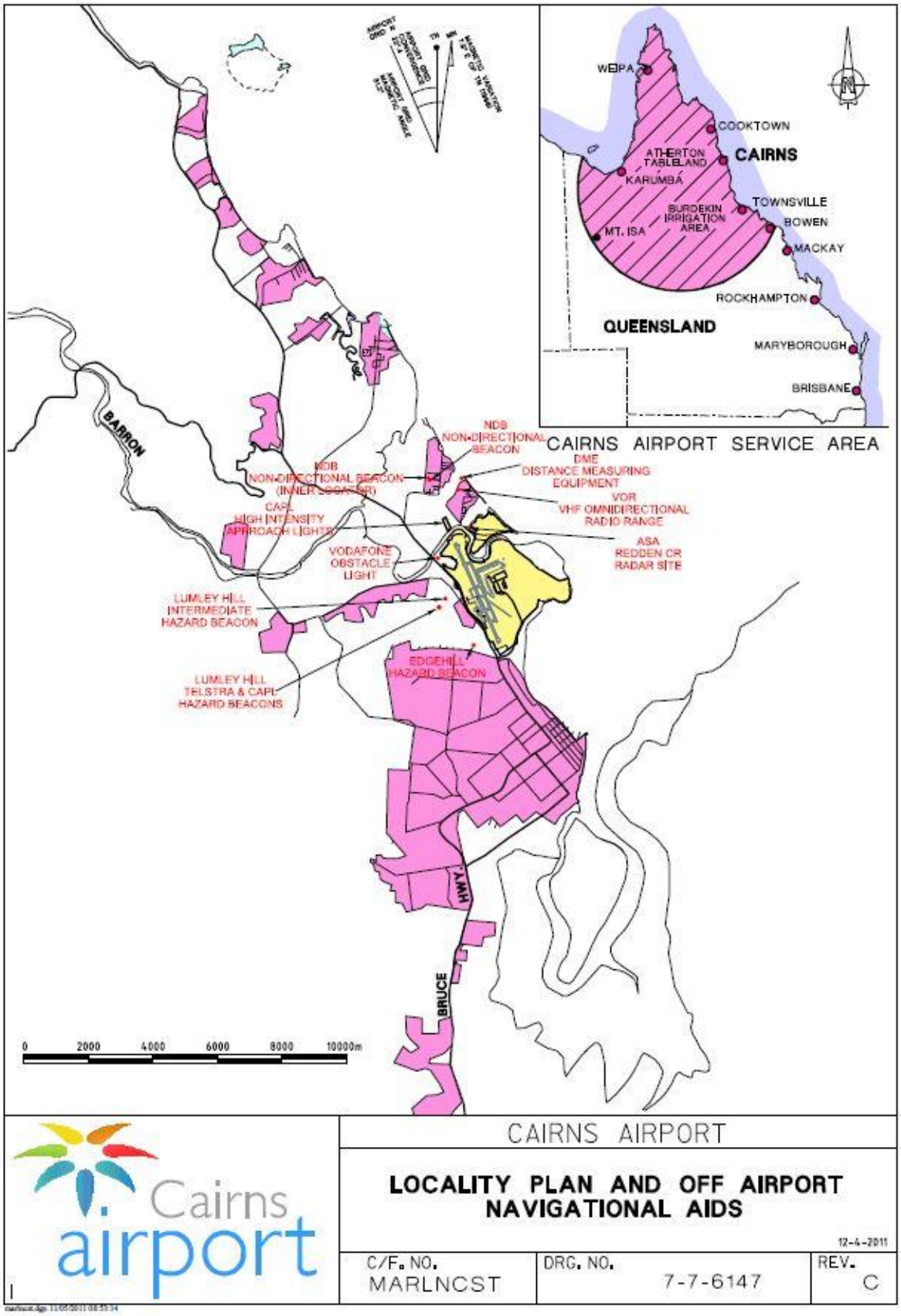
1.2 TITLE DETAILS

The real property description of the land on which the Airport is located is:

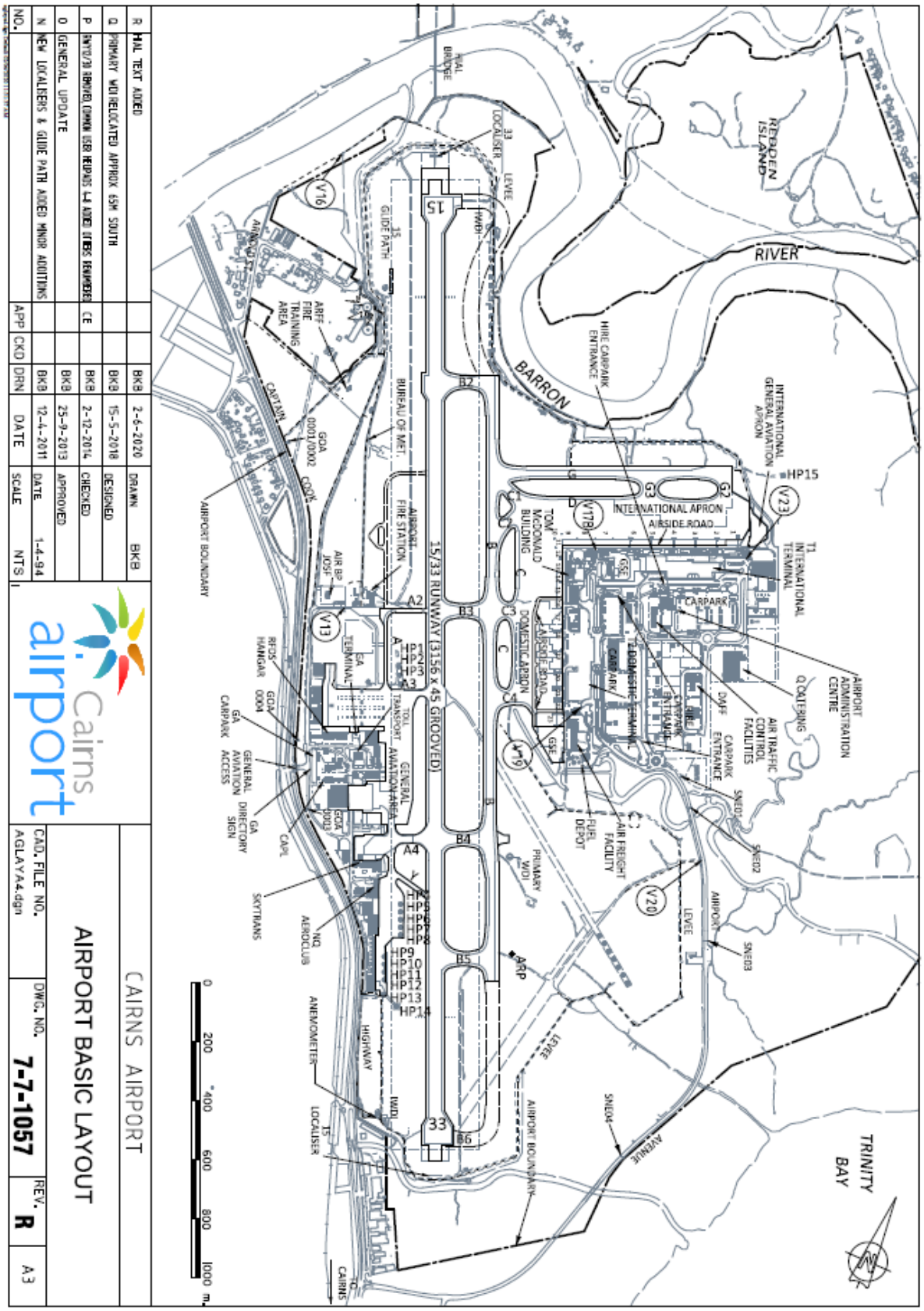
No	Plan		Area
	Reference	No	(hectares)
1	Lot 1	RP738764	0.4708
2	Lot 2	RP738764	1.825
3	Lot 3	RP738764	12.7542
4	Lot 398	RP715442	6.054
6	Lot 1	RP731801	3.521
7	Lot 1	RP736303	19.6177
8	Lot 4	SP146888	123.4
10	Lot 1	RP747652	4.674
11	Lot 1	RP748893	0.2409
12	Lot 1	RP748896	6.484
13	Lot 2	RP748896	60.7518
14	Sub 3 of Por. 101	10432	0.8094
15	Lot 1	RP736304	517.2473
Sub-total 99 Year Leased Land			**757.8501**
16	Lot 2	RP731798	1.259
Sub-total Freehold Land			**1.259**
5	Lot 748	Nr 6651	5.241
9	Lot 5	SP 146888	5.231
Sub-total – Trustee / Perpetual Leased Land			**10.472**
	TOTAL		**769.5811**

ANNEX 1

Locality Plan and Off-Airport Navigational Aids - Drawing No. 7-7-6147



ANNEX 2 Airport Basic Layout - Drawing No. 7-7-1057



NO.		APP	CKD	DRN	DATE
R	HAL TEXT ADDED			BKB	2-6-2020
Q	PRIMARY WDI RELOCATED APPROX 65M SOUTH			BKB	15-5-2018
P	[illegible]	CE		BKB	2-12-2014
O	GENERAL UPDATE			BKB	25-9-2013
N	NEW LOCALISERS & GLIDE PATH ADDED MINOR ADDITIONS			BKB	12-4-2011

DRAWN	BKB	DESIGNED	BKB	CHECKED	APPROVED	DATE	SCALE
	2-6-2020		15-5-2018		2-12-2014		25-9-2013		12-4-2011		1-4-94	NTS

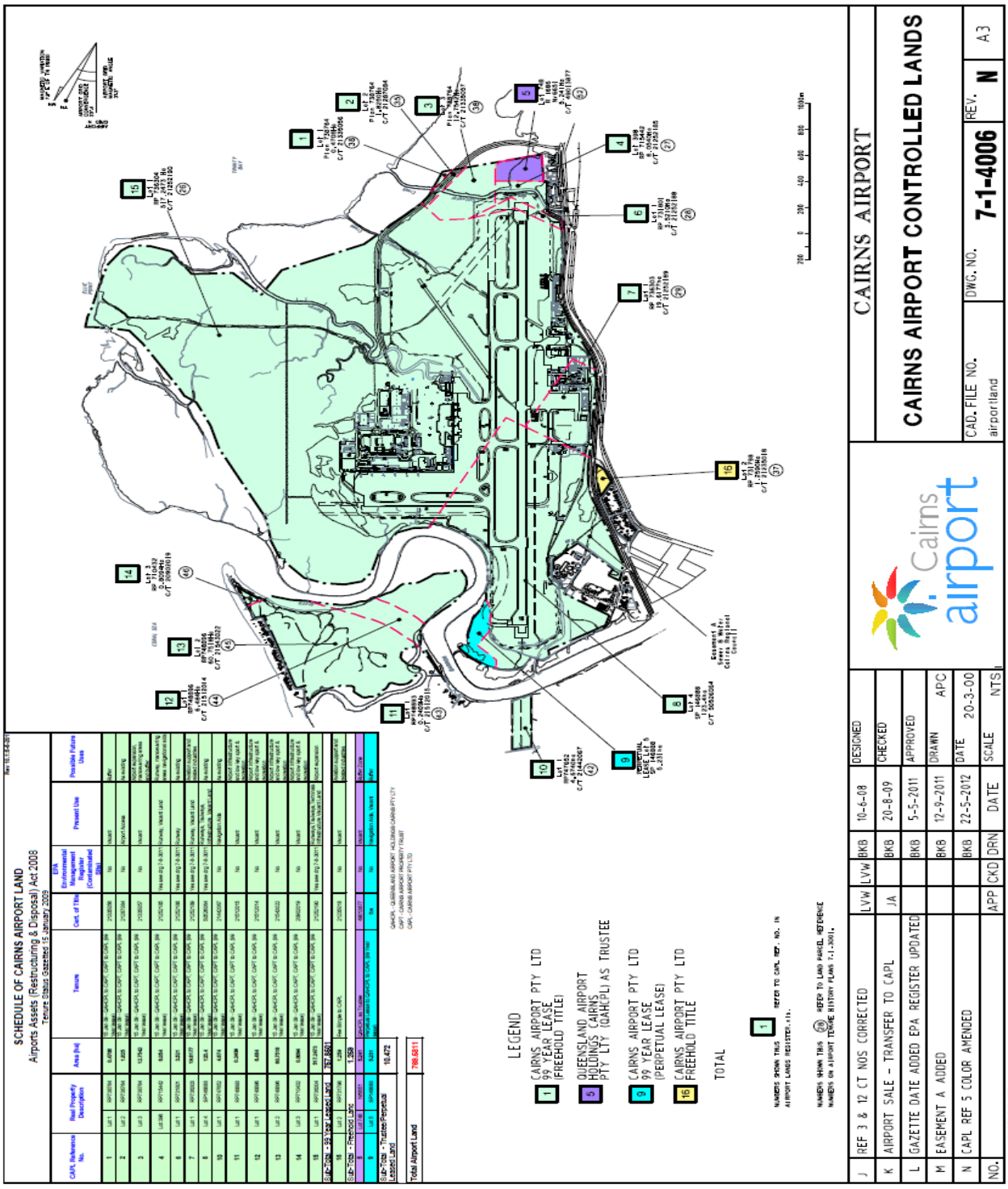
CAIRNS AIRPORT

AIRPORT BASIC LAYOUT

CAD. FILE NO. AGLAYA4.dgn | DWG. NO. 7-7-1057 | REV. R | A3

ANNEX 3

Cairns Airport Controlled Lands - Drawing No. 7-1- 4006



PART 1	AERODROME INFORMATION
SECTION 02	AERODROME CERTIFICATE

A copy of Aerodrome Certificate CASA.ADCERT.0013 issued by the Civil Aviation Safety Authority (CASA) on 6 June 2018.

ANNEX 4

Cairns Airport Pty Ltd Aerodrome Certificate CASA.ADCERT.0013 issued 6 June 2018.

Australian Government
Civil Aviation Safety Authority

AERODROME CERTIFICATE

Certificate Number: CASA.ADCERT.0013

This aerodrome certificate is granted pursuant to regulation 139.050 of the *Civil Aviation Safety Regulations 1998 (CASR)* to:

CAIRNS AIRPORT PTY LTD

ARN: 780152 ACN: 132 228 221

to operate the following aerodrome

CAIRNS/Cairns INTL (YBCS)

The certificate is subject to any conditions set out on page 2 of this certificate or notified under regulation 11.056 of CASR 1998.

This certificate is effective from 06 June 2018, and remains in force until cancelled, except during any period in which it is suspended.

Iain Lobegeier
Team Leader Aerodromes
Air Navigation, Airspace & Aerodromes
National Operations & Standards

Delegate of the Civil Aviation Safety Authority

6 June 2018

safe skies for all

Conditions:

Conditions applicable to Aerodrome Certificate CASA.ADCERT.0013

1. This Certificate replaces Certificate No. 1-9QC95.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 01	AERODROME ADMINISTRATION

Contents

1.1 RESPONSIBILITIES

Chief Executive Officer

- Provide advice to the North Queensland Airports' (NQA) Board of Directors on the strategic direction of the airport through the development of business plans that contribute to corporate objectives.
- Ensure appropriate and qualified staff are appointed as Authorised Officers in accordance with the Queensland Airport Assets (Restructuring and Disposal) Act 2008.
- Ensure the operational integrity of the airport through compliance with all relevant legislative obligations, including compliance with the Aerodrome Operations Manual.
- Provision of funding and resources for operation of airport.
- Chair the Airport Security Committee.

Head of Aviation

- Approve the Cairns Airport, Aerodrome OperationsManual.
- Provide advice to the North Queensland Airports' Chief Executive Officer on all airport operational activities.
- Ensure the airport's facilities and equipment are operated in accordance with the requirements of the Civil Aviation Safety Regulation Part 139 and the standards published in the Manual of Standards Part 139 – Aerodromes.
- Provide advice to Chief Executive Officer and Cairns Airport internal departments on airport projects and planning issues.
- Ensure the airport's facilities and equipment are maintained in accordance with the requirements of the Civil Aviation Safety Regulation Part 139 and the standards published in the Manual of Standards Part 139 – Aerodromes. Ensure that new facilities are developed and constructed, and existing facilities when upgraded are carried out in accordance with current CASA standards, and with the standards contained in the Manual of Standards Part 139 - Aerodromes.
- Analyse, evaluate and interpret statutory regulations to ensure all planning and engineering activities comply with the existing Land Use Plan, relevant legislation, regulations and ordinances on all new developments and existing building upgrades.

Manager Aerodrome Is responsible for:

- Provide technical, strategic and operational advice to internal and external stakeholders regarding legislative requirements, airside operational matters and emergency preparedness
- Assist with developing the overall operational and emergency strategies across NQA
- Ensure the development and implementation of the Bird and Wildlife Management Plan, managing and mitigating risk.
- Ensure all airside operators comply with NQA policies and procedures.
- Identify and mitigate aerodrome operational issues and risks
- Ensure the development and implementation a system of incident management and preparedness that includes joint response from Cairns Airport, Police and Emergency Services.
- Support the airport by assisting in the management of airport incidents, ensuring appropriate response and contingency plans are in place to minimise disruptions or serious impacts to people, property, environment and operations.
- Ensure the development, testing and maintenance of up to date emergency and business continuity plans
- Ensure all incidents and emergencies affecting Aerodrome Operations are managed within legislative requirements and meet best practice regulatory standards.

Aerodrome Safety and Compliance Manager (AOM Controller) Is responsible for:

- Provide advice to Head of Aviation on airport operational matters.
- Maintain, and review the Cairns Aerodrome Operations Manual
- Monitor and ensure the operational integrity and safety of the airside areas of the airport through compliance with all relevant legislative and corporate obligations including the Aviation Safety Management System.
- Coordinate the necessary annual technical inspections of all airside airport facilities as detailed in Part 2 Section 7 of this manual are carried out and their results appropriately consolidated in the Annual Aerodrome Technical Inspection Report.
- Coordinate and approve the design and implementation of the aircraft parking charts (and amendments) including utilisation chart, and the Management System (MS) compliancy rules;
- Coordinate Type A and Approach/Takeoff surveys and the preparation of new charts.
- Review and approve all works being conducted on Airside and OLS Building Height Assessments.
- Assess whether there is a requirement to engage a third party contractor to assist with planning of critical works.
- Advise CASA in writing, of any amendment made to the Manual within 30 days after the amendment is made.
- Coordination of all amendments to Aeronautical Publications through AIS.
- Coordinate the review and approval of all OLS Building Height Assessments.
- Assess Type A chart and Approach/Takeoff Survey impacts and arrange the issue of NOTAM as required.
- To ensure compliance with statutory requirements.
- Develop, implement and review of the Cairns Airport – Aviation Safety Management System (ASMS), to ensure compliance with statutory requirements.

Aerodrome Operations and Emergency Manager Is responsible for:

- Ensuring airside safety and operations are conducted in accordance with the requirements specified by prescribed standards and procedures.
- Assisting with the annual Airport Technical Inspections as defined in Part 2, Section 7 "Technical Inspections", paragraphs 7.4 (e) to (h).
- Providing input into the Technical Inspections of airport facilities as defined in Part 2 Section 7 of this Manual.
- Provide input into the amendment of the Cairns Aerodrome Operations Manual to ensure compliance with statutory requirements.
- Assist with the coordination and preparation of Method of Working Plans (MOWP).
- Implementing all training, competency assessment, and refresher training of Airport Safety Officers, and ensure that appropriate training records are maintained.
- Developing and implement a system of incident management and preparedness that includes joint response from Cairns Airport, Police and Emergency Serivces.
- Fulfilling the roles required by the Cairns Airport, Airport Emergency Plan (AEP)
- Coordinating the acitivites of the Airport Emergency Committee (AEC)
- Providing input to the amendment of the Cairns Airport, Airport Emergency Plan, specifically this function will include the following responsibilities:
  - Distribute manual and amendments to the holders of uncontrolled copies of the Manual; and
  - Monitor the currency of the master copy.
  - Facilitate the development, implementation, review and maintenance of the Cairns Airport Cyclone Plan.
  - Prepare, execute and evaluate tabletop and field exercises as required by the Aerodrome Emergency Plan.

Aerodrome Operations Supervisor

- Provide input to the Airside Safety and Bird & Wildlife Committees addressing issues that are relevant to the aerodrome, or impact on the Aerodrome Operations Manual (AOM) compliance.
- Assist in the coordination of on the job training, rostered training days and ADA Training Courses.
- Undertake routine safety inspections to all sections, identify any breaches or areas of concern, and take remedial action to rectify deficiencies in aerodrome safety standards.
- Fulfil the roles required by the Cairns Airport, Aerodrome Emergency Plan (AEP), the AOM and maintain emergency equipment.
- Conduct familiarisation tours and inductions for outside agencies and contractors.
- Assist the Aerodrome in preparing Method of Work Plans (MOWP).
- Monitor obstacles and NOTAMS for cranes and beacons
- Conduct review of all safety related SOPs as dictated by our document control procedures.
- Issue Notice to Airmen (NOTAMS) as requested and monitor the currency of NOTAMS.
- Take corrective action where breaches of security and safety occur, and investigate any reports of breaches of airside driving.

Senior Technical Officer (Drafting)

- Manage the Cairns Airport Drawing Office and ensure that hardware, software and resources are adequate to meet the needs of the Airport Business Unit.
- Administer development applications lodged with Cairns Airport and ensure that the development of new or upgraded infrastructure (including private developers) complies with Land Use Plan, relevant legislation, regulations and ordinances.

- Undertake the assessment of all aircraft pavement concessions on projects requested by Cairns Airport internal departments.
- Ensure that all airport plans and drawings are kept up to date and that any new updates to Aerodrome Operations Manual plans are provided to the Aerodrome Manual Controller for distribution and notification to all holders.
- Maintain the Airport OLS and PANSOPS charts.
- Provide advice relating to ANEF Contours, airport movement areas and airport operational surfaces (OLS, PANSOPS) in response to enquiries from Cairns Airport internal departments, developers or private citizens.
- Maintain the airport Apron Parking Layout plans including Usability Charts and ensure that their design complies with the requirements of Manual of Standards Part 139 - Aerodromes including the assessment of all new aircraft parking designs on projects requested by Cairns Airport internal departments.

Environmental Manager

- Carry out compliance checks of airport operational activities against relevant regulations, policies and agreements, with regards to environmental matters.
- Assist with the development and maintenance of the Cairns Airport Bird & Wildlife Management Plan in accordance with relevant regulations, policies and agreements.
- Provide technical and regulatory advice relating to bird and wildlife management and environmental matters.

Manager Terminals and Security (MT&S)

The Manager Terminals and Security is responsible for the Cairns Airport Security Management System in compliance with Federal and State legislation and to undertake the duties of the SCO as required;

- Review the content and implementation of the TSP for Cairns Airport, to undertake liaison with other AIPs and responding agencies on aviation security matters; To ensure Cairns Airport complies with all relevant security legislation;
- To represent Cairns Airport at appropriate aviation security forums
- Ensure security management systems are in place to maintain the operational integrity of the airport through compliance with all relevant legislative obligations;
- To provide timely and adequate advice to the SCO and CEO as to all aspects of aviation security;
- Management and implementation of Risk Register and Risk Treatment Plans for Cairns Airport Security portfolio
- Represent Cairns Airport at Security seminars, conferences, forums and any training deemed appropriate by the SCO.
- Undertake the duties of the SCO when required.

Security Operations Manager (SOM)

The SOM is responsible for facilitating the development, implementation, review and maintenance ofthe TSP. The principal role and responsibilities of this position are to:

- Assist in the management and implementation of Federal and State legislative security requirements at Cairns Airport and Document Manager for the Cairns Transport Security Program and any associated Security SOP's.
- Liaise with the APC or his or her delegate in relation to day to day operations of the Australian Federal Police on airport.
- Management of contracted security services at Cairns Airport.
- Operational security incidents are managed in accordance with legislative requirements;
- Ensure audit findings are implemented and closed out in a timely and efficient manner;

- Coordinate and oversee the contracted arrangements for international and domestic passenger and checked bag screening obligations and implementation of Additional Security Measures required either by government (by SSD issued by the Secretary) or by Cairns Airport.
- Research, develop, produce, implement and review proposed amendments to the Transport Security Program to ensure timely advice and compliance with industry standards.
- Ensures the TSP is reviewed as required and is implemented in line with all pertinent changes to security regulations and legislation impacting Cairns Airport.
- When required, plan, prepare, execute and evaluate tabletop and field exercises to test Cairns Airport Security vulnerabilities and preparedness.
- Implement any technological or process changes to airport security activities, as a result of changes to respective legislative instruments. Undertake the duties of the SCO when required.
- Management responsibility for the provision of Cairns Airport ASIC program.
- Document Controller for all Operational Manuals including the TSP and AE

Operations Services Officer (OSO)

The principle role and responsibilities of this position are to:

- Responsible for the accounting, administration and issue of Aviation Security Identification Cards (ASICs), security keys and associated registers.
- Responsible for the issue and administrations of Visitor Identification Cards (VIC) and authorised agents.
- Maintains the database relating to ASICs and access control.
- Responsibility for issuing and administration of Airside Drivers Authority (ADA).

Airport Duty Manager (ADM)

- Responsible for managing sustainable daily operations and the continuity of Cairns Airport 24/7. This role provides a single point of contact for any airport emergencies, which may require activation of Cairns Airport emergency or Business Continuity Plans, until relieved by the responsible manager.
- Undertake internal system testing and observations in the agreed framework.

Airport Coordinators

- Coordinate the operations of the International and Domestic Terminals through the efficient and effective use of Cairns Airport resources.
- Allocate aircraft parking bays in accordance with the Apron Parking Layout Plans and Aircraft Parking Protocols
- Activate and coordinate the Cairns Airport response to incidents and emergencies in accordance with the Airport Emergency Plan, Transport Security Program, Incident Management Framework, and other Cairns Airport plans, policy and procedures.
- Alarm response and escalation. Recording and reporting of equipment failure/faults and notification to the appropriate department to ensure corrective action is undertaken so as to minimise interruption to operations.

Head of Commercial

- Ensures formal lease documents for tenants include compliance requirements for safe hazardous material handling, storage and disposal, including the provision of waste receptacles as well as compliance with all other relevant Federal, State and Local government legislation.
- Ensure that any proposals to lease airport property take into account possible interference with the performance of radio navigational aids and MOS 139 standard
- Ensure that all tenants comply with all applicable Civil Aviation Safety Regulations (CASR) and specifically CASR Part 99, CAR 20.9 and CASR Part 139.

Head of Infrastructure

- Provide advice to Head of Aviation and Cairns Airport internal departments on airport maintenance activities.
- Upon request by Cairns Airport internal departments ensure that the necessary technical inspections of aircraft pavements, drainage, and aerodrome ground light systems are carried out and their results and corrective measures are appropriately recorded.
- Ensure all maintenance of Runway, Taxiway and Apron pavements including friction testing, line marking, aerodrome ground lighting and on other unscheduled maintenance identified and in conjunction with Aerodrome Operations
- Ensure appropriate funding is available to undertake all required maintenance

Airside Infrastructure Manager

- Coordinate mowing strategies in consultation with operational requirements.
- Suitably maintain fences, drains, grassed and mangrove areas, and bird prevention structures.
- Coordinate all maintenance of Runway, Taxiway and Apron pavements including friction testing, line marking, aerodrome ground lighting and on other unscheduled maintenance identified and in conjunction with Aerodrome Operations.

Technical Services Coordinator

- Ensure that the necessary technical inspections of all Aerodrome Ground Lighting systems as defined in Section 7 of this Manual are carried out and that the results and corrective measures are appropriately recorded.
- Provide and maintain all Aerodrome Ground Lighting systems including Apron Lighting, and NIGS facilities in accordance with prescribed standards and the Cairns Airport – Electrical Maintenance Manual.

- Coordinate all training, competency assessment, and refresher training of Technical Services staff, and ensure that Maintenance Contractors and other users of Cairns Airport electrical systems facilities are competent in their operation and maintenance
- Ensure that terminal light and power including standby generating equipment and other building facilities and services are operated and maintained in accordance with prescribed standards.
- Ensure that the necessary technical inspections of aerobridges and other terminal facilities including airport standby power generating equipment are carried out and that the results and corrective measures are appropriately recorded.

Airport Safety Officer

- Ensure that the movement area is safe for aircraft operations by continual inspection of airside facilities, including lighting.
- Identify, report and mark any unserviceability affecting aircraft operations.
- Maintain daily logs on all operational matters.
- Identify dangerous practices or situations before an incident or accident occurs.

- Perform surveillance of operating practices to ensure they are conducted in accordance with relevant standards and regulations.
- Monitor airport OLS for infringements.
- Implement Bird and Wildlife Management procedures.
- Undertake the functions and responsibilities as detailed in Part 2 Section 2 - 18 of this Manual.

NOTE
Names and contact telephone numbers of persons with responsibilities for Aerodrome Administration and Operating Procedures are detailed in the Master Contact List located within the "Aerodrome Administration" Section of this Manual.

1.2 OPERATION OF CAIRNS AIRPORT

Cairns Airport must be operated in accordance with the procedures contained within the Cairns Aerodrome Operations Manual and in accordance with the requirements of the Civil Aviation Safety Regulations 1998, Part 139 – Aerodromes and MOS 139

If a procedure contained within the AOM must be deviated from in order to ensure the safety of aircraft, the officer initiating the deviation should first seek approval from the Aerodrome Safety and Compliance Manager or delegate.

When a deviation from these procedures is initiated, to ensure the safety of aircraft, Cairns Airport Aerodrome Safety and Compliance Manager must review the relevant procedure to determine if an amendment to the procedure is required, or if some other action is required (e.g. training). The deviation may also have been a result of a one-off event and no further action may be required.

The Chief Executive Officer shall ensure that all persons with responsibility for safety, technical and operational functions have the appropriate training and experience to undertake those functions.

Each Section Manager shall ensure that:

- All persons reporting to them are provided with the required training.
- Each person shall also be personally responsible for ensuring that the currency of their own qualifications is maintained.
- All training records are maintained.

1.3 CAIRNS AERODROME OPERATIONS MANUAL DISTRIBUTION LIST

The AOM is aviable on the Cairns Airport web site and is password protected.

All copies downloaded are “uncontrolled copies” that shall be current at the time of downloading.

Users of uncontrolled copies should compare their copy with a controlled copy to ensure that the uncontrolled copy is current before use.

1.4 MANUAL AMENDMENTS

Frequency

- No procedure shall be amended more than once on any calendar day.
- The AOM Controller shall review the Manual at least annually and amend, if required.

Any recipient or user of the Manual, or staff member required to implement a procedure with origins in this Manual, shall notify the AOM Controller of any changes to procedures, errors or omissions, so that an amendment to the Manual can be initiated.

CASA may direct that an amendment to the Manual is required.

An issue of a Section (either as an amendment or as a reissue) shall be approved by the Aerodrome Safety and Compliance Manager by initialling the appropriate line of the Manual Control Sheet (Part 0 of this Manual) contained within the Master Copy and copied to controlled copies.

1.5 NON COMPLIANCES, CONDITIONS, DIRECTIONS AND VARIATIONS –

Any person becoming aware that a facility, or proposed facility, does not comply with the Civil Aviation Safety Regulations or the Manual of Standards Part 139 - Aerodromes shall advise the Aerodrome Safety and Compliance Manager or delegate.

Non Compliances

The Aerodrome Safety and Compliance Manager, in consultation with Cairns Airport’s Manager Aerodrome, shall prepare a Request for Assessment, which shall include a supporting safety case, for submission to CASA if an assessment is required from CASA for a new facility, or for an existing facility that is to be modified.

A variation approval must be considered as a last resort option after all practicable methods of complying with the Regulations and Standards have been fully explored.

Any request for an assesement must include explanation(s) as to why the proposal cannot meet the requirements of the Regulations and/or the Standards.

The Aerodrome Safety and Compliance Manager or delegate shall review any proposal for a new facility that does not comply with the appropriate standard and, if satisfied there is no practical alternative, shall submit a formal application and/or notification to CASA.

If CASA refuses to grant an approval, agreement or permission, the Aerodrome Safety and Compliance Manager will advise the relevant business group, who must then comply with the CASA determination and initiate an appropriate action plan.

The Aerodrome Safety and Compliance Manager or delegate maintains a record of all applications for an operational assessments, and CASA's determinations in response thereto.

The following Non Compliance CASA rulings Against Standards, issued in respect of Cairns Airport, are:

CASA Ref No.	Old CASA Ref No.	Subject	Period of Validity
D16/11578	EF 12/10677	RWY 15/33 - reduced RWS width South of chainage 2805.	Ongoing
D17/23394	FO16/5-2	Obstacle assessment ILS localiser Infrastructure RWY 15/33	Ongoing
D17/296286	FO17/2227-3	Obstacle assessment Fence line RWY 33 approach	Ongoing
D17/292926	F17/2227-4	Obstacle assessment NDB TWRS 15 approach	Ongoing

Copies of the CASA rulings Documents are included at Annex 2 to this Section.

Conditions
Cairns Airport Pty Ltd Certificate has been issued unconditionally.

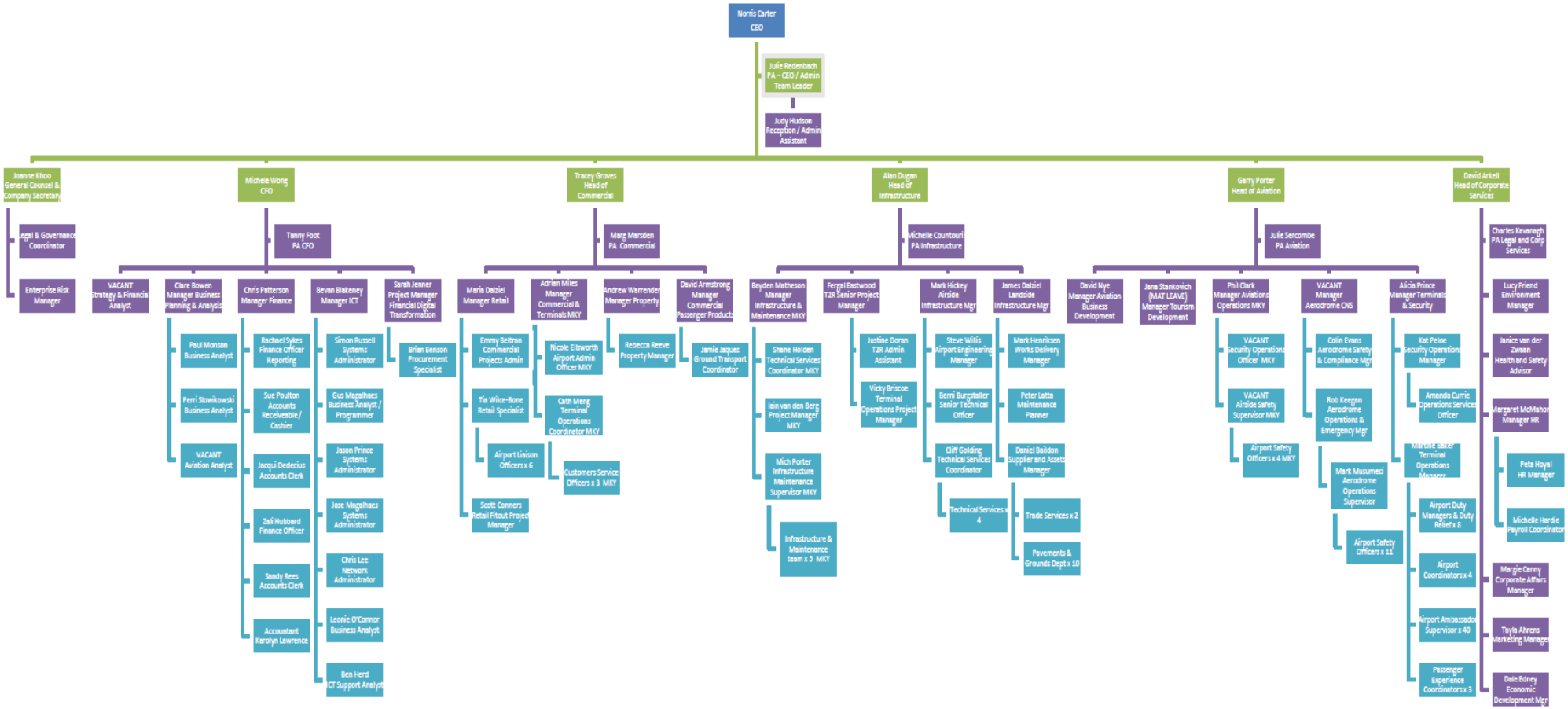
Directions

CASA has not issued any directions under CASR 139.105 to amend the Aerodrome Operations Manual.

Variations

The facilities that do not comply with the standards published in the Manual of Standards Part 139 – Aerodromes are listed at Annex 4 to this Section.

ANNEX 1 - NQA Organisational Structure



ANNEX 2

Cairns Airport Master Contact List

Position	Name	Telephone B/Hours	Telephone A/Hours
Management			
Chief Executive Officer	Norris Carter	4080 6701	
Chief Financial Officer	Michele Wong	4080 6813	0466 025 801
Head of Aviation	Garry Porter		0417 413 853
Head of Commercial	Tracey Groves	4080 6760	0435 697 533
Head of Corporate Services	David Arkell	4080 6842	0417 449 063
Head of Infrastructure	Alan Dugan	0481 917 236	0481 917 236
Switchboard	-	4080 6703	Diverts
Operations			
Manager Aerodrome	Vacant		
Aerodrome Safety and Compliance Manager (AOM Controller)	Colin Evans	0400 508 097	0400 508 097
Aerodrome Operations and Emergency Manager	Rob Keegan	0428 783 367	0428 783 367
Aerodrome Operations Supervisor	Mark Musumeci	0435 697 047	
Airport Safety Officer	Car 16 Car 17 Car 18 (B & W) WSO	0412 773 065 0402 027 732 0400 752 293 0427 880 154	0412 773 065 0402 027 732 0400 752 293 0427 880 154
Security Operations Manager	Katherine Peloe	0427 444 938	0427 444 938
Environment Manager	Lucy Friend	0400 899 342	0400 899 342
Health and Safety Advisor	Janice van der Zwaan	0448 954 419	0448 954 419
Manager Terminals and Security	Alicia Prince	0417 634 353	0417 634 353
Airport Duty Manager		0437 529 769	
Airport Coordinators	-	4080 6744	
Senior Technical Officer Drafting	Berni Burgstaller	0418 769 519	0418 769 519
Airside Infrastructure Manager	Mark Hickey	0417 088 757	0417 088 757
Technical Services Coordinator	Cliff Golding	0427 302 769	0427 302 769
Landside Infrastructure Manager	James Dalziel	0466 851 358	0466 851 358
On Call Electrician	Various	-	4080 6744
Airservices Australia			
ANS Line Manager Cairns Tower		4050 5382/ 4050 5328	
Manager FMS	Kevin Bowthorpe	4050 5315	0407 163 362
Service Desk –Faults re NAVAIDS	24 / 7	02 6268 4777	02 6268 4777
Australian Federal Police			
National Call Centre (AOCC)	131 237		

ANNEX 3

CASA Direction

Non Compliance: CASR 139.165 – Physical characteristics of movement areas, reduced runway strip width for 15/33.

Australian Government
Civil Aviation Safety Authority

Airspace and Aerodrome Regulation Division
File Ref: EF12/10677

29 March 2016

Rick Huriwai
MANAGER OPERATIONS & EMERGENCY
PO Box 57
Airport Administration Centre
Cairns Airport QLD 4870

Dear Mr Huriwai,

Re: Request for extension to AD-19/2011
Cairns Airport Runway Strip Width Exemption

In relation to previous exemption AD-19/2011, I provide the following advice and directions.

CASA recognises that the reduced runway strip width has been in existence for many years, being first recognised in an exemption by Civil Aviation Authority dated 01 March 1995, prior to the publication of the current Manual of Standards Part 139 (MOS139).

I assess that under para 2.1.2.3 of MOS139, an exemption is not required, however the non-compliance is to be listed in the Aerodrome Manual as per the details required by that paragraph. This must include details of the plans and timescale for compliance, which must be consistent with the Cairns Airport master plan. The Cairns Aerodrome Manual is to retain in Part 3, and hence also in ERSA, the current comment under 'Physical Characteristics' related to the non-standard runway strip width.

This is a direction under regulation 139.105(2) of the Civil Aviation Safety Regulations 1998, which provides for CASA to direct the operator of a certified aerodrome to amend their manual.

The Aerodrome Manual is also to detail procedures to ensure that the approach surfaces are monitored and surveyed to the requirements of Approach Runway - Instrument Non-precision Code 4 inner edge of 300 m, and the reporting to CASA of any infringements of the Obstacle Limitation Surfaces (OLS).

This is a direction under regulation 139.145(2) of the Civil Aviation Safety Regulations 1998, which provides for CASA to direct the operator of a certified aerodrome to change the procedures in their manual.

A copy of this letter must be retained in the Cairns Aerodrome Manual. For further clarification, please contact Danny Eatock on 131 757.

Yours sincerely,

Glen Heyward
Team Leader Aerodromes (QLD and WA)

GPO Box 2005 Canberra ACT 2601 Telephone 131 757
Canberra, Brisbane, Darwin, Cairns, Townsville, Tamworth, Sydney, Melbourne, Adelaide, Perth

ANNEX 4

Variations to Standards

VARIATION TO THE STANDARDS

1. Applicable MOS standard

Section 6.2.18 - Runway Strip Width

Reason for Non Compliance:
The width of the 15/33 Runway Strip south of chainage 2805 is 180 metres not the required 300 metres due to buildings and infrastructure that was established in the western GA Precinct prior to privatisation of Cairns Airport.

Date of construction/last upgrade:

Approximately 1984

Proposed interim safety measures:

- Airport minima increased to compensate for infringements.
- Current airport minima is based on Mt Lumley obstacle not transition surface infringements on airport.
- The Cairns Airport Land Use Plan and Master Plan addresses obstacles (buildings and apron) progressively being removed as redevelopment occurs.

Expected compliance with current Standard:

Progressive over the next 15 years (2034) (in line with Cairns Airport current GA Master Plan).

2. Applicable MOS standard

Section 7.1.3.4 and 7.1.3.5 – Slope of the Approach and Take-off climb surfaces are to be 2%.
7.1.1.2
Reason for Non Compliance:

The slope for the Rwy 15/33 Approach and take off surface are impacted by critical air navigational infrastructure, airport boundary fence, terrain these structures have been assessed by CASA and cannot be relocated or lowered and include LOC building and Aerials RWY 33, LOC building and Aerials RWY 15, NDB TWRS 15 approach, aerodrome boundary fence and Earl Hill.

Date of construction/last upgrade:

Pre 1970

Proposed interim safety measures:
These OLS infringements are notified in ERSA with specific reference to the height, location, and gradient.
Compliance with directions within CASA letter File Ref D17/23394, D17/296286 and D17/292926 at Annex 6.
A clear 3.3% approach is maintained to both 15/33 thresholds.
Expected compliance with current Standard:

Ongoing.

3. Applicable MOS standard

Chapter 9 – Standards for visual aids provided by aerodrome lighting.

Reason for Non Compliance:

Certain Aerodrome, Runway, taxiway, and apron lighting visual aids are non-compliant with the current MOS Part 139 – Aerodromes standards due to the age of installation.

Date of construction/last upgrade:

Pre 1970

Proposed interim safety measures:

Existing non-compliant facilities met pre-existing standards and are permitted to remain. Inspection, maintenance and operation of non-compliant facilities are the same as compliant facilities.

Expected compliance with current Standard:

Planned dates for upgrading of the individual lighting facilities are as per the Aerodrome Lighting Compliance table which follows.

4. Applicable MOS standard

Chapter 6 – 6.2.8 Transverse Slopes on Runways, Chapter 6 -6.2.12 Characteristics of Runway Shoulders.

Reason for Non Compliance:

Over the full length of RWY 15/33 the cross fall of RWY exceeds 2% (with greater than 25mm step down) over 17% of the RWY length and 2.5% over 1% with a max fall of 2.82%.

Date of construction/last upgrade:

Original construction 1936 RWY extensions 1948, 1984, 1990 / overlays 2004 ,2006 and 2020.

Proposed interim safety measures:

Continued monitoring of drainage grooving and friction testing.

Expected compliance with current Standard:

Planned RWY overlay in 2020 will address the the fall and design method will not be able to achivie total compliance but will inprove the percentage of fall greater than 2% to 10% from 17% and a step down greater than 25mm to 1%.
Each future RWY maintenance overlay will progressily improve the RWY cross gradients and step downs.

5. Applicable MOS standard

Section 8.6.18 – Take – off Run Available Sign

Reason for Non Compliance:

Intersection MAG signs do not have arrows and the intersection MAG signs at TWY A3 are both located on the left side of the TWY. These MAG signs were installed prior to privatisation of Cairns Airport.

Date of construction/last upgrade:

Approximately 1995

Proposed interim safety measures:

Existing non-compliant facilities met pre-existing standards.

ERSA list intersection departure lengths
MAG signs have RWY direction indicated as apposed to arrow

Expected compliance with current Standard:

Progressive over the next 5 years (2024).

ANNEX 4
Cairns Airport – Airport Lighting Compliance

Legend - ✓ - Compliant, x – Non Compliant, N/A – Not Applicable, NC – Not Confirmed.

Cairns Airport – Airport Lighting Compliance													
Visual Aid		Historic					Current (MOS Part 139)						Remarks
	Description	Standard or Code	Date of installation	Layout	Light photometric characteristics	Comply with Code	Layout	Light photometric characteristics	Comply with MOS 139	Permitted to remain Cl 9.13.8 Note 3	MOS requirement for upgrade	Planned Date for Upgrade	
Taxiways													
A	General Aircraft area parallel to Rwy 15/33	RPA		✓	✓	✓	✓	✓	No	Yes	When centreline defined and lights added		Section unlit and alignment of taxiway centre line varies. Spacing on short straight section greater than 30 m. Mixture of helogen and LED No action required until taxiway re-alignment is carried out.

ANNEX 5

Supporting Operational Documents

The following documents support the Aerodrome Operations Manual for Cairns Airport. Cairns Airport has aplied to CASA and received approval under CASR 139.100 (3) for these documents to be separate for the Aerodrome Operations Manual:

Aerodrome Emergency Plan	August 2020
Aerodrome Cyclone Plan	August 2020
Electrical Maintenance Manual	June 2015
Airside Vehicle Control Manual	July 2019
Bird and Wildlife Management Plan	July 2019
Firearms Use	June 2019
Safety Management System	September 2019
Terminal Operations Manual	May 2017
Transport Security Program	March 2017
Drug & Alcohol Management Plan	July 2019

Australian Government
Civil Aviation Safety Authority

AIR NAVIGATION, AIRSPACE AND AERODROMES BRANCH

06 June 2018

CAIRNS AIRPORT PTY LTD
Airport Avenue
CAIRNS AIRPORT QLD 4870

Email: enquiries@cairnsairport.com.au

Dear Sir / Madam,

RE: Approval CASA.ADMAN.0013 CAIRNS/Cairns INTL Aerodrome Manual

I refer to your application for approval dated 30 May 2018 requesting approval for the Aerodrome Manual to consist of more than one (1) document.

CASA has considered the request and in accordance with regulation 139.100(3) of the Civil Aviation Safety Regulations (CASR) I hereby approve the CAIRNS/Cairns INTL Aerodrome Manual to consist of more than one document by comprising the Manual and the following documents:

- Aerodrome Emergency Plan;
- Aerodrome Cyclone Plan;
- Electrical Maintenance Manual;
- Airside Vehicle Control Handbook and Airside Drivers Pocketbooks;
- Transport Security Program;
- Terminal Operations Manual;
- Thunderstorm Alert Procedure;
- Firearms Management Protocols & Procedures
- Bird and Wildlife Management Plan;
- Drug and Alcohol Management Plan; and
- Safety Management System.

The Aerodrome Manual and the annexed documents need to be provided to CASA in accordance with regulation 139.090(2) of the CASR 1998.

Updates to those documents need to be provided to CASA within 30 days of their update in accordance with regulation 139.110(1) of the CASR 1998.

The annexed documents are to be itemised and referenced in the Aerodrome Manual.

A copy of this approval letter must be included in the Aerodrome Manual.

GPO Box 2005 Canberra ACT 2601 Telephone 131 757

If you should require additional information or guidance on any of the above matters, please contact the Aerodromes Branch on 131 757.

Yours faithfully,

Daniel Eatock
Aerodrome Inspector
Air Navigation, Airspace & Aerodromes
National Operations & Standards

ANNEX 6

CASA Obstacle assessments
Sothern Airport Fenceline

Australian Government
Civil Aviation Safety Authority

Air Navigation, Airspace and Aerodromes
File Ref: FO17/2227-3 Your Ref: Email 17/07/17 "Obstacles for CASA assessment"
15/08/2017

Mr. Colin Evans
Airside Operations Manager
Cairns Airport
PO Box 57
Cairns Airport 4870

Dear Colin,

RE: Obstacle assessments Fence line RWY 33 approaches, Cairns:

CASA has assessed the fence line, for runway 33 approaches. The assessment included the consideration of comments from a CASA Flying Operations Inspector (FOI).

The existing infrastructure for the security fencing within the approaches for runway 33 has a maximum height of 4.34 m above Australian Height Datum (AHD), and therefore, penetrates the approach surface by 0.1 m.

Accordingly, this infrastructure is classified as an obstacle as a result this infrastructure has been determined that it could be hazardous objects under regulation 139.370(1) of the *Civil Aviation Safety Regulations 1998* and paragraph 7.1.1.2 of the Manual of Standards (MOS) Part 139 due to its height and location.

para 7.1.1.2 An obstacle is defined as:
(a) any object that stands on, or stands above, the specified surface of an obstacle restriction area which comprises the runway strips, runway end safety areas, clearways and taxiway strips; and
(b) any object that penetrates the obstacle limitation surfaces (OLS), a series of surfaces that set the height limits of objects, around an aerodrome.

CASA recommends:

I. That the area of fence-line that has been assessed as an infringement to the OLS is painted in a single conspicuous colour, preferably white, in accordance with paragraph 8.10.2.7 of the Manual of Standards (MOS) Part 139 for Aerodromes;
II. That a note is provided in AIP-ERSA that the fence has not been taken into account for the calculations of TODA & STODA gradients, as per paragraph 5.1.3.14 of the MOS; and
III. The note within AIP-ERSA must also advise the location and height of the fence.

In accordance with regulation 139.220(2)(b) of the *CASR 1998* and subsection 7.1.4 and 10.2.4.1(a) and 10.2.10.1 of the Manual of Standards – Part 139 Aerodromes, Cairns Airport is to monitor the ongoing availability of the obstacle markings and this information must be included in the Aerodrome Manual.

Yours sincerely,

Danny Eatock
Aerodrome Inspector
Air Navigation, Airspace & Aerodromes
CASA – Brisbane Office

Adelaide • Brisbane • Cairns • Canberra • Darwin • Melbourne • Perth • Sydney • Tamworth • Townsville
GPO Box 2005 Canberra ACT 2601 Telephone 131 757 www.casa.gov.au

NDB TWR 15 Approach

Australian Government
Civil Aviation Safety Authority

Air Navigation, Airspace and Aerodromes
File Ref: F17/2227-4 Your Ref: Email 12/07/17 "Obstacles for assessment"
14/08/2017

Mr. Colin Evans
Airside Operations Manager
Cairns Airport
PO Box 57
Cairns Airport 4870

Dear Colin,

RE: Obstacle assessments NDB TWRS 15 approaches, Cairns:

CASA has assessed the NDB Tower infrastructure, for runway 15 approach. The assessment included the consideration of comments from a CASA Flying Operations Inspector (FOI).

The existing infrastructure for the NDB Towers has a maximum height of 46.3 m above Australian Height Datum (AHD), and therefore, would penetrate the inner horizontal surface by 0.3 m.

Accordingly, this infrastructure is classified as an obstacle as a result this infrastructure has been determined to be hazardous objects under regulation 139.370(1) of the *Civil Aviation Safety Regulations 1998* and paragraph 7.1.1.2 of the Manual of Standards (MOS) Part 139 due to its height and location.

para 7.1.1.2 An obstacle is defined as:

(a) any object that stands on, or stands above, the specified surface of an obstacle restriction area which comprises the runway strips, runway end safety areas, clearways and taxiway strips; and
(b) any object that penetrates the obstacle limitation surfaces (OLS), a series of surfaces that set the height limits of objects, around an aerodrome.

CASA recommends:

I. Obstacle markings are maintained in alternating red or orange and white bands of colour in accordance with subsection 8.10.2 of the Manual of Standards (MOS) – Part 139 Aerodromes, and
II. That a permanent note within AIP-ERSA must also advise the location and height of the NDB TWRS, and that they are unlit.

In accordance with regulation 139.350(1) of the *CASR 1998* and subsection 7.1.4 of the Manual of Standards – Part 139 Aerodromes, Cairns Airport is to monitor the ongoing maintenance of the obstacle markings and this information must be included in the Aerodrome Manual.

Yours sincerely,

Danny Eatock
Aerodrome Inspector
CASA – Brisbane Office

Adelaide • Brisbane • Cairns • Canberra • Darwin • Melbourne • Perth • Sydney • Tamworth • Townsville
GPO Box 2005 Canberra ACT 2601 Telephone 131 757 www.casa.gov.au

LOC 15/30 Approches and asscociated Bld

Australian Government
Civil Aviation Safety Authority

Air Navigation, Airspace and Aerodromes

File Ref: FO16/5-2
Your Ref: Email 26/06/17 "Obstacles for CASA assessment"

14/07/2017

Mr Colin Evans
Airside Operations Manager
Cairns Airport
PO Box 57
Cairns Airport 4870

Dear Colin,

RE: Obstacle assessments localisers 15/33 approaches, Cairns:

CASA has assessed the ILS localiser infrastructure, for runways 15/33. The assessment included the consideration of comments from a CASA Flying Operations Inspector (FOI)).

Localiser building and Aerials runway 15:

The existing infrastructure for the localiser building and aerial has a maximum height of 5.24 m above Australian Height Datum (AHD), and therefore, would penetrate the approach surface by up to 1.5 m.

Accordingly, this infrastructure is classified as an obstacle as a result this infrastructure has been determined to be hazardous objects under regulation 139.370(1) of the *Civil Aviation Safety Regulations 1998* and paragraph 7.1.1.2 of the Manual of Standards (MOS) Part 139 due to its height and location.

para 7.1.1.2 An obstacle is defined as:
(a) any object that stands on, or stands above, the specified surface of an obstacle restriction area which comprises the runway strips, runway end safety areas, clearways and taxiway strips; and
(b) any object that penetrates the obstacle limitation surfaces (OLS), a series of surfaces that set the height limits of objects, around an aerodrome.

CASA recommends:

I. The current low intensity steady red lights are maintained for night operations as per Section 9.4 of the MOS. Characteristics for low intensity lights are stated in subsection 9.4.6.1;
II. Obstacle lighting is to be maintained in serviceable condition and any outage immediately reported to the aerodrome operator; and
III. Obstacle markings are maintained in alternating red or orange and white bands of colour in accordance with subsection 8.10.2 of the Manual of Standards (MOS) – Part 139 Aerodromes.

Localiser building and Aerials runway 33:

The existing infrastructure for the localiser building and aerial has a maximum height of 7.67 m above Australian Height Datum (AHD), and therefore, would penetrate the approach surface by up to 2.8 m.

Adelaide • Brisbane • Cairns • Canberra • Darwin • Melbourne • Perth • Sydney • Tamworth • Townsville
GPO Box 2005 Canberra ACT 2601 Telephone 131 757 www.casa.gov.au

Accordingly, this infrastructure is classified as an obstacle as a result this infrastructure has been determined to be hazardous objects under regulation 139.370(1) of the Civil Aviation Safety Regulations 1998 and paragraph 7.1.1.2 of the Manual of Standards (MOS) Part 139 due to its height and location.

para 7.1.1.2 An obstacle is defined as:

(a) any object that stands on, or stands above, the specified surface of an obstacle restriction area which comprises the runway strips, runway end safety areas, clearways and taxiway strips; and
(b) any object that penetrates the obstacle limitation surfaces (OLS), a series of surfaces that set the height limits of objects, around an aerodrome.

CASA recommends:

IV. The current low intensity steady red lights are maintained for night operations as per Section 9.4 of the MOS. Characteristics for low intensity lights are stated in subsection 9.4.6.1;
V. Obstacle lighting is to be maintained in serviceable condition and any outage immediately reported to the aerodrome operator; and
VI. Obstacle markings are maintained in alternating red or orange and white bands of colour in accordance with subsection 8.10.2 of the Manual of Standards (MOS) – Part 139 Aerodromes.

In accordance with regulation 139.350(1) of the *CASR 1998* and subsection 7.1.4 and 9.4.10 of the Manual of Standards – Part 139 Aerodromes, Cairns Airport is to monitor the ongoing availability of the obstacle lighting and this information must be included in the Aerodrome Manual.

Yours sincerely,

Danny Eatock
Aerodrome Inspector
Air Navigation, Airspace & Aerodromes
CASA – Brisbane Office

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 02	AERODROME EMERGENCY PLAN

NOTES ON EMERGENCY PLANNING AT CAIRNS AIRPORT

Plans for dealing with emergencies on or near Cairns Airport are contained in the Aerodrome Emergency Plan (AEP) which is issued by Cairns Airport as a separate document.

The AEP provides a formal record of the agreements reached among those agencies expected to respond to an emergency at the airport and is given legal effect under relevant Queensland Legislation as well as serving to confirm Cairns Airport compliance with CASA requirements under CASR PART 139.

The controlled copy of the AEP is stored on the Cairns Airport intranet site The AEP is structured to conform to MOS 139 Aerodromes sections 10.7 and 10.8 and constitutes a supporting document to this section of the Aerodrome Operations Manual.

Electronic copies of the AEP are available to all relevant agencies.

The Master Contact List in the Cairns Airport Aerodrome Emergency Plan provides names and telephone numbers of personnel identified as having responsibility for implementing the procedures detailed in this section.

Contents:

2.1 PURPOSE

This section provides information regarding the establishment, testing and review of plans to coordinate responses to emergencies involving aircraft and/or airport facilities at Cairns Airport.

This section also provides details regarding the testing of airport facilities and equipment used in an aerodrome emergency.

2.2 REFERENCES

CASR Part 139.205 requires a certified aerodrome to establish an aerodrome emergency committee. CASR Part 139.210 and 215 requires that an aerodrome emergency plan is prepared and is tested every two (2) years.

MOS Part 139 Section 10.8 provides guidelines for aerodrome emergency plans.

RESPONSIBILITIES

Chief Executive Officer: The CEO has overall responsibility for the establishment of the Aerodrome Emergency Plan (AEP).

Manager Aerodrome

- Ensure that the AEP is reviewed annualy and is current
- Ensure that the mandatory AEP exercises are carried out
- Ensure that debriefs and ammendments to the AEP are captured after the activation of the AEP

Aerodrome Operations and Emergency Manager:

- Establishment and chairing of the Aerodrome Emergency Committee (AEC) which is responsible for the preparation, adoption and all subsequent amendments to the AEP.
- Ensure that the Aerodrome Emergency Plan complies with CASA MOS Part 139 - Aerodromes regulations and that it is:
  - monitor the currency of all controlled copies;
  - amend the Manual whenever necessary to maintain its accuracy; and
- Responsible for all amendments of the AEP (including a copy to the AOM Controller).
- Conduct formal debriefs with responding agencies following a major airport emergency.
- Arranges for the AEC to:
- review the effectiveness of the responses to exercises or emergencies;
- assess the adequacy of the AEP to deal with emergencies at the Airport;
- review the AEP at least once per year; and
- take such corrective action as is necessary to ensure the plan operates properly.
- Controls and oversights distribution of the AEP document.
- Coordinates field and table top exercises.

Responding Agencies:

An Agency that has undertaken to respond to an emergency is required to:

- Respond to a declared emergency.
- Participate in post emergency debriefings.
- Make every effort to participate in emergency exercises.
- Ensure that its own documented operating procedures (Standard Operating Procedures) are in support of the AEP and are kept current.

The contact telephone numbers for the above positions are in the Master Contact List in the "Aerodrome Administration" section of this Manual. The complete list of roles and responsibilities is provided in the AEP document.

2.3 CAIRNS AIRPORT - AIRPORT EMERGENCY PLAN

The Airport Emergency Plan (AEP) for Cairns Airport has been prepared in compliance with the AAA Airport Emergency Working Group framework recommended in "Airport Emergency Planning in Australia" and has been adopted by the Airport Emergency Committee.

The AEP has been issued under the authority of the CEO, Cairns Airport and may be accessed by members of the Aerodrome Emergency Committee and others on request or through the Cairns Airport website.

The AEP is sponsored by the Head of Aviation, who ensures that the document is maintained. Whenever an amendment to the AEP is issued, the Aerodrome Operations and Emergency Manager shall notify the AOM Controller. It contains:

(i) The composition and terms of reference of the Aerodrome Emergency Committee and the contact details for the emergency service organisations represented on the committee.

(ii) A description of the role of each organisation, including the emergency service organisations, involved in the plan.

(iii) Details of the activation, control and coordination of the emergency service organisations during an emergency.

(iv) The details of the emergency facilities provided by Cairns Airport.

(v) The operational response to an emergency, including arrangements for airport access and assembly areas.

(vi) The response to a local stand-by call out.

(vii) The response to a full emergency call out.

(viii) The arrangements for returning Cairns Airport to operational status after an emergency.

(ix) The arrangements for periodic testing and review of the plan.

2.4 TESTS OF EMERGENCY FACILITIES AND EQUIPMENT

The contact details for the emergency service organisations represented on the Committee are at Annex 1.

Common Crash Call: The "Common Call" facility was deleted from the Cairns ANS system during 2001. In the event of an emergency at the Airport, ANS contacts the ARFFS and the local Queensland Police directly via telephone. Police then use direct communication facilities to advise Hospitals, Ambulance and Fire Services of the emergency at Cairns Airport.

ICC Telephones: The Incident Coordination Centre (ICC), located in the Fitzroy Room of the Cairns Airport Administration Center has an established telephone system. The Aerodrome Operations and Emergency Manager shall ensure that the telephone system is tested at least once every six (6) months. Records of the tests shall be kept by the Aerodrome Operations and Emergency Manager.

Fire Booster Pumps (Eastern): The fire booster pumps on the eastern side of the Airport are tested monthly by contractors. Records of tests are kept by the Cairns Airport Technical Services Coordinator.

Emergency Gen-sets: Emergency electrical generators are tested monthly by a contractor. Records of tests are kept by the Cairns Airport Technical Services Coordinator.

The test records are inspected as a part of the Airport Annual Technical Inspection.

Flood Pumps: There are a total of ten flood pumps which are deployed and activated as required. These comprise of the following:

- Two (2) diesel powered mobile pumps. One is usually located at the North Eastern corner, near the wind indicator, the other is usually located at the South Western corner of the airport, or wherever required.
- Eight (8) fixed flood pumps. Four (4) of these are located near the ARFFS training ground, three (3) are located at the North Western corner of the airport, and one (1) is located near Taxiway G.
- Tractors are coupled to the fixed pumps prior to flooding rain or cyclonic events. Pump testing is conducted yearly, usually prior to the wet season.

Other Equipment: Other emergency equipment used is used on a daily basis and maintained in working order (e.g. operational vehicles, telephones and VHF / UHF radios).

2.5 RECORDS

The Aerodrome Operations and Emergency Manager retains on file, copies of meeting proceedings (minutes) and of all AEP related correspondence for at least three (3) years. The master copy of the AEP is maintained by the Aerodrome Operations and Emergency Manager.

2.6 TELEPHONE CONTACTS

Telephone contact details for all Cairns Airport staff is in the Master Contact List and AEC members involved in airport emergency procedures are listed in the Cairns Airport Emergency Plan.

2.7 AERODROME CYCLONE PLAN

The Cairns Airport Cyclone Plan is a sub-plan of the AEP and has been produced by Cairns Airport in recognition of the fact that Cairns is located in a cyclone prone part of the country.

The Airport Cyclone Plan provides guidance to all Airport Tenants in respect of their preparation of individual company cyclone plans.

The Aerodrome Operations and Emergency Manager maintains the Airport Cyclone Plan. Whenever an amendment to the Plan notification is forwarded to the AOM Controller.

The Cairns Cyclone Committee members and contact details are outline in the Cairns Cyclone Plan.

The Cairns Airport Cyclone Plan may be accessed by members of the Airport Cyclone Committee and others through the Cairns Airport website.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 03	AERODROME LIGHTING

Contents:

3.1 PURPOSE

This Section details the arrangements for the provision, inspection and maintenance of the aerodrome lighting facilities, obstruction lighting and the standby power supply at Cairns Airport .

All new and existing lighting facilities will be installed and maintained in accordance with the requirements of the Manual of Standards Part 139 - Aerodromes.

3.2 REFERENCES

Civil Aviation Safety Regulation (CASR) 139.190 requires an operator of a certified aerodrome to provide a visual approach slope indicator system, as specified in the Manual of Standards Part 139, for a runway that is regularly used by jet propelled RPT aircraft.

CASR 139.195 requires the operator of a certified aerodrome used at night, or in conditions less than VMC, to provide and maintain a lighting system defined in the regulation and specified in the Manual of Standards Part 139.

CASR 139.200 requires the operator of a certified aerodrome to conduct certain checks of the aerodrome lighting system before it is put into service. The CASA Manual of Standards Part 139 - Aerodromes (MOS) requires airport management, as the operator of an aerodrome available for aircraft to land and take-off at night, to provide and maintain an appropriate lighting system. MOS Part 139 Section 9.6 specifically deals with provision of illuminated wind direction indicators.

MOS Part 139 Chapter 9 sets out the CASA requirements for aerodrome lighting including the illumination of visual aids. Chapter 9 Section 9.1.9 further specifies requirements for standby power supply for lighting systems associated with precision approach runways.

MOS Part 139 Chapter 9 details the requirements for aerodrome serviceability inspections, including visual checks of aerodrome lighting and illuminated visual aids.
Civil Aviation Regulations (1988) Reg. 94 and MOS Part 139 Chapter 9 Section 9.21 Lighting in the Vicinity of Aerodromes details the powers of CASA to control lighting that might cause confusion, distraction or glare to pilots.

ANR 63 prescribes security related lighting requirements in respect of RPT aircraft parked overnight.

ICAO Annex 14 Chapters 5, 6, 7 and 8 and the ICAO Aerodrome Design Manual Part 5 detail comparable international standards and recommended practices in respect of aerodrome lighting.

Cairns Airport has produced its own "Cairns Airport - Electrical Maintenance Manual" as a reference document for the operation and maintenance of the airport lighting system.

3.3 RESPONSIBILITIES

Manager Aerodrome is responsible for:

- Ensuring that Cairns Airports Aerodrome Ground Lighting facilities comply with CASA regulations.
- Ensure that any lighting in the vicinity of Cairns Airport with potential to breach regulations is referred to CASA for assessment.

Technical Services Coordinator is responsible for:

- Ensuring that Aerodrome Ground Lighting is provided and maintained in accordance with CASA regulations.
- The provision and maintenance of the CAIRNS AIRPORT standby power generating equipment in accordance with CASA regulations.
- Preparation and amendment of the Cairns Airport Electrical Maintenance Manual.
- Ensuring that the necessary technical inspections of airport lighting, as defined in Section 7 of this Manual, facilities are carried out and their results appropriately recorded.
- Ensuring that the Aerodrome Ground Lighting facilities are operated and maintained in accordance with the Electrical Maintenance Manual.
- Planning and implementation of system upgrades.
- Ensuring that the necessary technical inspections of airport standby power generating equipment are carried out and their results appropriately recorded.
- Maintaining the airport standby power generating equipment.

Technical Services Department is responsible for:

- Carrying out, and recording the results of inspections of the aerodrome ground lighting facilities in accordance with the Electrical Maintenance Manual.
- Maintaining the aerodrome ground lighting facilities.

Aerodrome Operations and Emergency Manager is responsible for:

- Ensuring that Cairns Airport, Airport Safety Officers carry out, and record the results of, daily serviceability inspections of the airport lighting in accordance with the requirements of Sections 4 and 6 of this Manual.
- Raise NOTAMs and notify the Aerodrome Safety and Compliance Manager of any alteration to the operational status of lighting and viz aids required by AIS.

Airport Safety Officers are responsible for:

- Carrying out, recording and reporting the results of, daily visual inspections of the airport lighting system including obstacle lighting in order to monitor serviceability.

NOTE
The Airport Safety Officers record details of defects noted and report same to the Electrical Services Department. Outside normal hours, details of "outages" are entered directly into the intranet AirLink Fault and Services reporting system. Any outages in excess of MOS 139 Aerodrome standards are reported to the on-call duty electrician for immediate rectification.

Air Traffic Service: Normally, Airservices Air Traffic Controler on duty, controls the airport lighting system. In an emergency or with ANS approval, local switching may be carried out by Cairns Airport Electrical Staff.

NOTE
The names and contact telephone numbers of persons with responsibilities for Aerodrome Lighting are detailed in a Master Contacts List located within the "Aerodrome Administration" Section of this Manual.

3.4 AERODROME LIGHTING FACILITIES

Cairns Airport provides aerodrome lighting appropriate to the aircraft operations that take place at the Airport. The Airport Lighting Layout Plan (Drawing 1-4-3042,) included in Annex 1 to this Section shows the layout of the runway and taxiway lighting and of the PAPI facilities. Details and description of aerodrome ground lighting facilities at the Airport are as follows:

Runway 15/33

Medium intensity runway edge lighting (Stages 1-3)

- White omni-directional elevated edge lights at approximately 60 metre longitudinal intervals.

High intensity runway edge lighting (Stages 4-6)

- White Bi-directional elevated edge lights at approximately 60 metre longitudinal intervals with Yellow lights in the final 600 metres of both runway sectors.

High intensity approach lighting (Stages 1-6)

- RWY 15: White uni-directional (above-ground) approach path lights in a Precision Approach Category 1 pattern (MOS CASR PART 139 Sect 9.7.2).
- RWY 33: Nil.

High intensity threshold and runway end lighting Rwy 15 and 33 (Stages 1-6)

- Fifteen (17) Green uni-directional inset (flush) lights and one (1) cluster of three (3) Green omni-directional inset lights on each side of the runway.
- Six (6) Red uni-directional inset (flush) lights.

Taxi guidance on runway end turning nodes (Stages 1-6)

- Blue elevated edge lights on turning nodes at both ends of the runway.

Taxiway lead-in lighting (Stages 1-3)

- Alternative Green/Yellow bi-directional lights along lead-in lines.

PAPI

A double sided PAPI system provided at both ends of RWY 15/33

- RWY 15: 3º slope, 53 feet above the threshold
- RWY 33: 3º slope, 61.5 feet above the threshold

Illuminated Wind Direction Indicators

Illuminated wind direction indicators (Stages 1-6)

- RWY 15: Left of threshold
- RWY 33: Left of threshold

Non-Illuminated Wind Direction Indicator

- Primary WDI, immediately east of TWY "B4".

MAGS

- MAGS ref to Annex 6 Movement Area Guidance Signs 1-3-3015

Taxiways

Taxiway centreline lighting (Stages 1-3)

- TWY B, B2, B3, B4 and B5; TWY C, C1,C2, C3 and C4; TWY D; and TWY G, G2 and G3, inset (flush) bi-directional Green lights (except that Twy C between C4 and C3 has flush omni-directional centreline lighting to assist with taxiway definition during push backs)
- TWY A3, A4, and sections of TWY A, inset (flush) bi-directional Green lights.

Taxiway holding position lighting (Stages 1-3)

- At TWY A3, A4, B2, B3, B4 and B5, intersections with RWY 15/33, three (3) inset (flush) uni-directional Yellow lights symmetrically about the taxiway centreline.

Runway Guard Lighting (24hr operation)

- At all TWY intersections with RWY 15/33 (both sides), elevated uni-directional Yellow lights symmetrically about the TWY centre-line.

Taxiway intersection lighting (Stages 1-3)

- At TWY C/D and TWY D/C, TWY C4/B, G/B, G3/G and northern G/G3 intersections, three (3) inset (flush) uni-directional Yellow lights symmetrically about the taxiway centreline.

Aprons

Floodlighting is provided on the Domestic and International Aprons.

- Additional floodlighting is provided on the Domestic Apron GSE area fully compliant to MOS 139 standards.
- Link Apron (Bays 8-12) has full apron floodlighting to MOS 139 standards.
- International Apron (Bays 1-7) and the International General Aviation Apron (Bays 1C-1E) have full apron floodlighting to MOS 139 standards.

NOTE

In the event of a greater than 30 second interruption to the power supply, a re-strike of 50% luminance is able to be achieved within 60 seconds.

Nose-In Guidance Systems (NIGS)

- Domestic Aerobridge NIGS Bay's 18, 19, 20 are Safegate systems suitable for most aircraft types and Bay 21 and 22 for Code C aircraft only.
- International Aerobridge NIGS Bays 1 to 6 are also Safegate system suitable for most aircraft types.

NOTE
All NIGS are controlled individually by local switching. They are activated by airline company engineering staff and automatically switch off at a pre-set time (varied between 20 and 30 minutes after activation).

3.5 PRECAUTIONS AGAINST SYSTEMS FAILURE

The lighting system for Runway 15/33 receives its electrical power by way of (and is controlled by) an Airport Lighting Equipment Room (ALER).

This equipment room, designated ALER 15, is located near the northern end of Runway 15/33. ALER 15 is supplied by one of two external high voltage power supplies and in the case of the loss of one supply feeder, the second feeder can be accessed by manual switching to restore a mains power supply.

In the event of the loss of primary mains power, the entire runway lighting system can also be powered by an independent and automatically initiated standby generator (standby gen-set). The standby gen-set is capable of starting and assuming load in less than 15 seconds, thus adequately meeting the CASA and ICAO requirements of 15 seconds in relation to Category 1 instrument precision approach runways.
Field circuits for both the high and medium intensity runway lighting (Runway 15/33) are interleaved and the loss of one (1) circuit will therefore only affect every second light in the system.

The High Intensity Approach Lighting (HIAL) system for Runway 15 comprises three (3) field circuits supplied from independent regulators. The loss of one (1) or two (2) regulators will decrease the visual pattern displayed but the remaining pattern will still be intact.

The PAPI associated with Runway 15/33 has its power supplied via independent regulator at each runway end. The loss of a regulator will disable the PAPI at that particular end.

Cairns Airport have a PAPI system for use in an emergency or when a displaced threshold is required to be implemented. Positioning of the PAPI is surveyed in, in accordance with instructions provided by the Aerodrome Operations Section. Once installed by trained electrical staff the angles of the boxes are checked by an appropriate qualified person using survey equipment and a final check is carried out utilising a flight test to confirm correct operation.

3.6 STANDBY POWER ARRANGEMENTS

Standby gen-sets are provided in order that continued power supply is available to essential airport lighting facilities in the event of an external mains power supply failure. These facilities include:

- Runway 15/33 medium intensity runway edge lighting
- Runway 15/33 high intensity runway edge lighting
- Runway 15 high intensity approach lighting (HIAL)
- Taxiway lighting on Domestic, International, and General Aviation taxiways
- 100% of apron flood-lighting on the International and 100% on the Domestic aprons
- Runway 15/33 PAPI

- Runway 15 Illuminated wind direction indicator
- Nose-in guidance systems
- International Terminal(T1)
- Domestic Terminal(T2)
- Cairns Airport Administration Building

The standby gen-sets are housed in the northern ALER 15, Cairns Airport Tom McDonald Building, Domestic Terminal Building (T2) and International Terminal Building (T1). All gen sets start performance are checked monthly.

NOTE
Whilst primarily intended to provide for terminal building emergency power requirements, the gen-sets in the Domestic and International Terminals provide standby power also to the respective apron floodlights.

3.7 MANUAL SWITCHING OF AIRPORT LIGHTING

In the event of partial loss of selection of airport lighting, the runway lights will default to Stage 3. In the event of a total loss of control by ANS during normal working hours, an Airport Technical Services Officer can manually switch the airport lighting systems through the ALER 15 manual controls. In the event of a total loss of control after hours requiring an immediate response, the Airport Safety Officer Car 16 has keys to the ALER and can be directed through the manual switching process by the on call duty Airport Technical Services Officer.

3.8 SERVICEABILITY

Inspection and Fault Reporting

Airport Safety Officers shall conduct daily serviceability inspections of the airport lighting facilities and submit fault reports to the Cairns Airport Technical Services Department for follow-up action. The results of the inspection are recorded on the Airport Safety Officer Car 16/17 Shift Checklist, as described in Part 2 Section 6 of this Manual.

After-hours unserviceability's requiring immediate attention are reported by the Airport Safety Officer via the duty Apron Coordinator to the "on-call" Duty Technical Services Officer. Where unserviceability is of a minor nature and is permitted to remain until it can be attended to during business hours, the Duty Airport Safety Officer will enter details directly into the intranet AirLink Fault & Services reporting system. Technical Services staff will act on such advice and complete the rectification details in the reporting system.

The Technical Services Coordinator coordinates fortnightly and monthly Serviceability Inspections during which any unserviceable lights are replaced. Details of these serviceability inspections are provided in the Airport Electrical Maintenance Manual – fortnightly/monthly Serviceability Inspections. Ref MOS 139 Section 9.20.

3.9 TECHNICAL INSPECTIONS AND MAINTENANCE

Airport lighting maintenance schedules contained in the Cairns Airport Electrical Maintenance Manual detail routine technical inspection and maintenance requirements in respect of the airport lighting system.

Inspection and maintenance activities are recorded in the Airport Lighting Logbooks. Schedules and logbooks are held by the Technical Services Manager in the Cairns Airport Asset Services Building.
Cairns Airportstandby generators are tested and maintained by contractors under a Period Maintenance contract. The Technical Services Coordinator maintains the Generator Maintenance Schedules for the standby

generating sets. The schedules and testing and maintenance records are kept in the Cairns Airport files located in the Asset Services Building.

Only appropriately qualified staff are permitted to undertake technical inspections and maintenance of electrical facilities including power generating equipment.

OBSTACLE LIGHTING

Three (3) medium intensity obstacle lights (also known as hazard beacons) are maintained by Cairns Airport and are controlled by the runway light switching system a list of these hazard beacons can be found at Annex 2. Two (2) of these hazard beacons are located on Lumley Hill and one (1) on Edge Hill west of the Airport. One (1) low intensity obstacle light owned and maintained by Cairns Airport is located on the Runway 15 IWDI.

Other "on airport" obstacle lighting owned and maintained by Airservices Australia includes the anemometer adjacent to the 33 IWDI, 15 and 33 localiser antenna and the 15 Glide-path. Details of these obstructions can be found at Annex 3: Obstacle Lighting - Location and Contacts Register.

Various other "off airport" obstruction lights as detailed in Annex 3: Obstacle Lighting - Location and Contacts Register, are owned and maintained by individual Owners/Operators.

Airport Safety Officers monitor the serviceability of obstacle lighting as part of their daily serviceability inspections. In the event of unserviceability, the Airport Safety Officers will initiate appropriate NOTAM action and report details to the Aerodrome Operations and Emergency Manager for follow up action with the respective lighting owners. The various building owners and operators also have a responsibility to check, report and repair any unserviceable lights.

An obstacle light "location and contact register" is included at the end of this Section and a copy is held by the Airport Safety Officers.

3.10 COMMISSIONING OF LIGHTING SYSTEMS

All lighting systems will be commissioned as defined in the Manual of Standards Chapter 9, Section 9.1.15 "Commissioning of Lighting Systems". Copies of commissioning test reports are held by the the Technical Services Coordinator.

3.11 ELECTRICAL MAINTENANCE MANUAL

The Technical Services Coordinator is responsible for preparing and maintaining the "Cairns Airport Electrical Maintenance Manual". Whenever an amendment is made to the Electrical Maintenance Manual, the Technical Services Coordinator shall provide details to the Aerodrome Safety and Compliance Manager so that this manual may also be amended.

The manual details the electrical maintenance regime in place at Cairns Airport and includes (at Appendices "A" to "X") inspection and maintenance schedules and checklists related to all airport lighting facilities.

NOTE
The Cairns Airport Electrical Maintenance Manual is issued as a separate document and is not included in this section of the AOM.

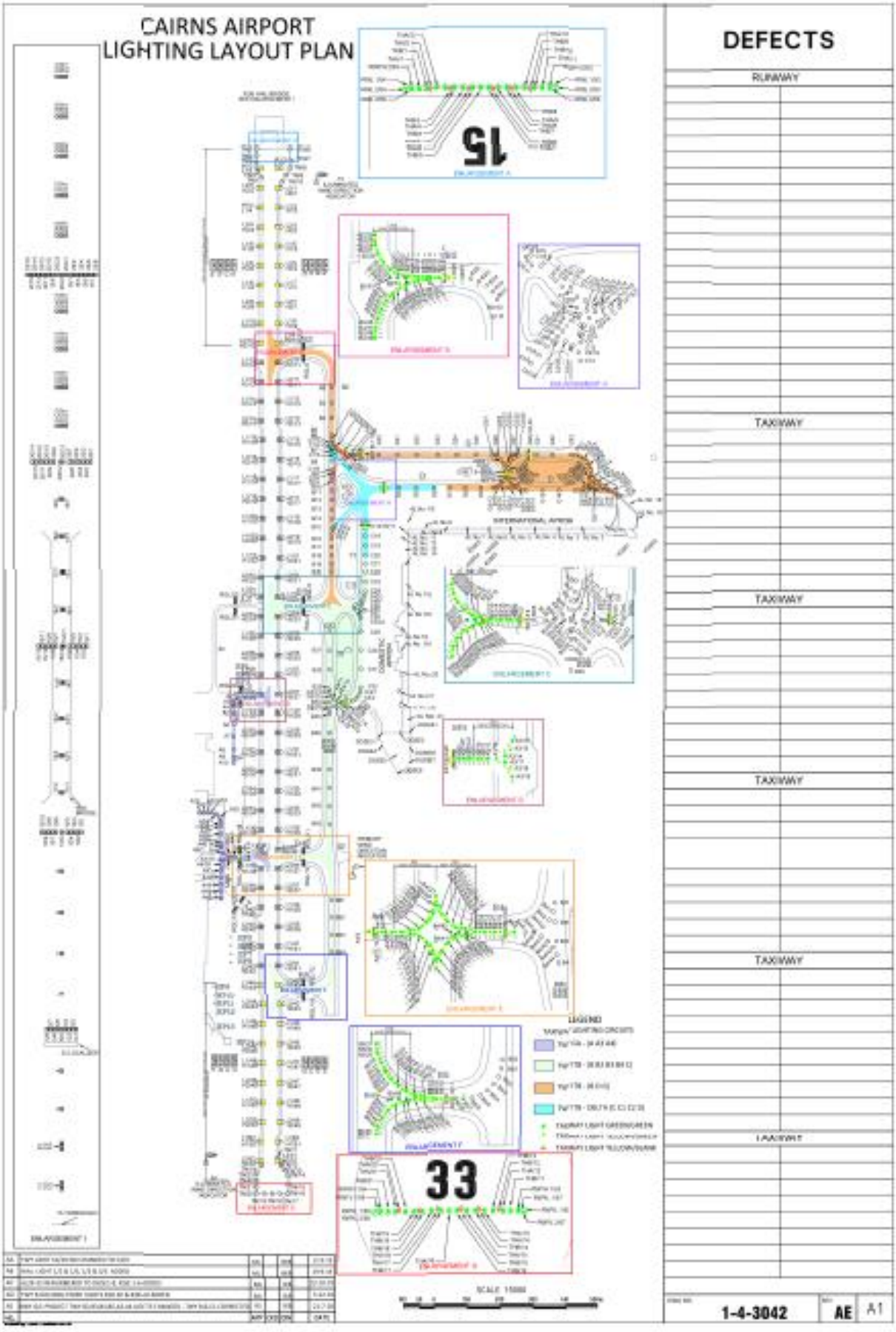
3.12 LIGHTING IN THE VICINITY OF CAIRNS AIRPORT

CASA has the power through regulation 94 of the Civil Aviation Regulations 1988 to require lights that may cause confusion, distraction or glare to pilots, to be extinguished or modified.

MOS 139 Section 9.21 Lighting in the Vicinity of Aerodromes provides advice to designers and installation contractors where lights are to be installed within 6 km of an aerodrome. A generic plan detailing the four (4) zones around a runway with lighting and the respective intensity of light emissions is provided in the MOS. CASA is responsible for the assessment and determination of all applications for lighting in the vicinity of Cairns Airport.

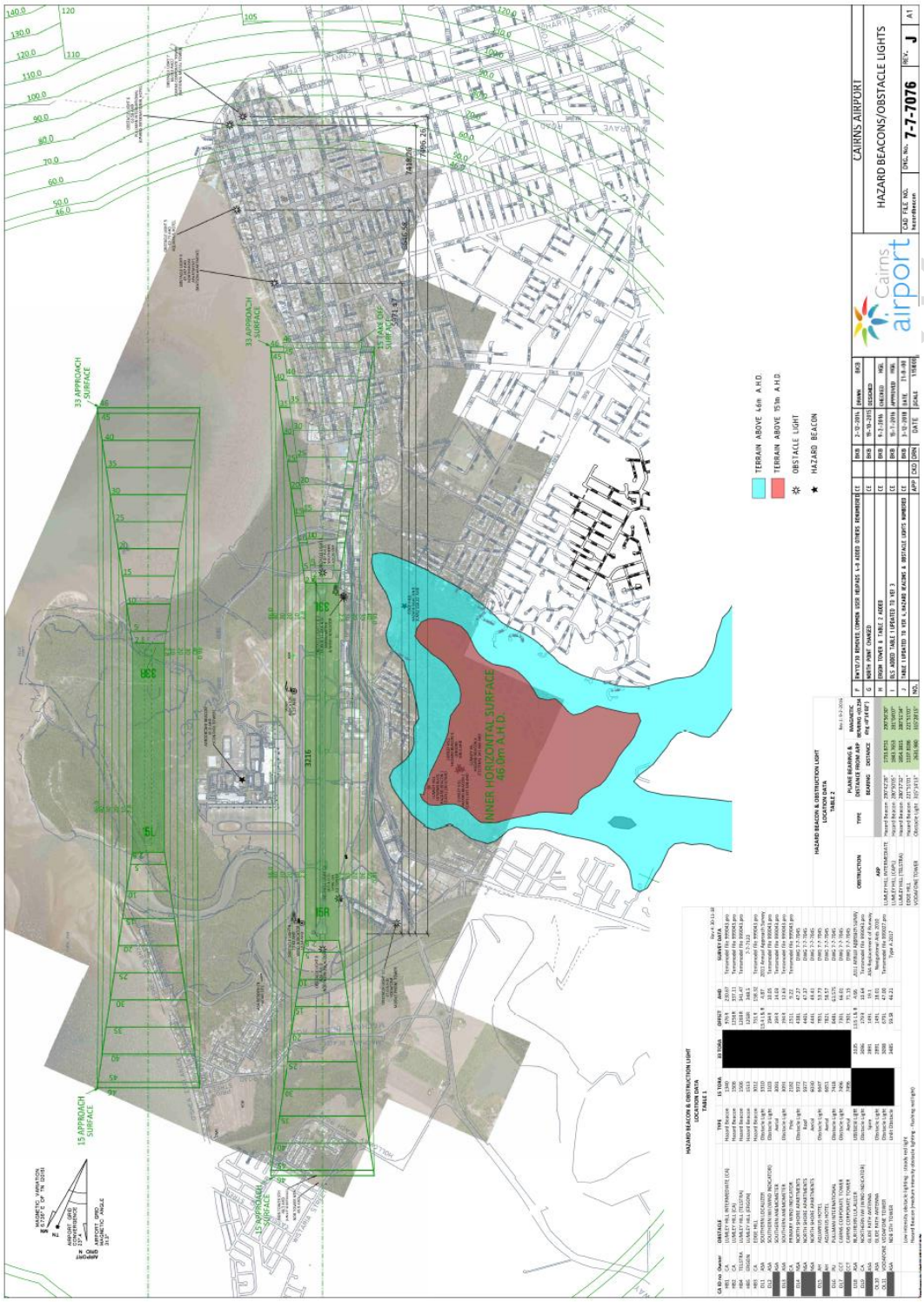
Cairns Regional Council's "Cairns Plan" also provides protection against lighting in the vicinity of Cairns Airport and requires all development applications to assess whether they meet the light emission requirements. Cairns Airport has prepared a plan reflecting the four (4) Lighting zones and have made it available to Cairns Regional Council for inclusion in their "Cairns Plan". Cairns Airport will monitor any building or developments within the vicinity of the Airport and where appropriate refer any proposals that may impact the safe operations of Cairns Airport to CASA for assessment. Cairns Airport 's Lighting in the Vicinity of Cairns Airport plan - Drawing 7-7-7078 is shown at Annex 5.

ANNEX 1
Airport Lighting Layout



ANNEX 2

Hazard Beacons/Obstacle Lights Drawing No. 7-7-7076



ANNEX 3

Obstacle Lighting Location and Contacts Register

OBSTACLE LIGHTING – LOCATION AND CONTACTS REGISTER

Location	Type	Owner	Address	Telephone	Remarks
Lumley Hill Intermediate	Hazard Beacon	Cairns Airport	Cairns Airport	(07) 4080 6744	Apron Coord
Lumley Hill	Hazard Beacon	Cairns Airport	As Above	As Above	As Above
Edge Hill	Hazard Beacon	Cairns Airport	As Above	As Above	As Above
Northern IWDI	Obstacle Light	Cairns Airport	As Above	As Above	As Above
Southern IWDI	Obstacle Light	Cairns Airport	As Above	As Above	As Above
Skytrans Hangar	Obstacle Light	Cairns Airport	As Above	As Above	As Above
Lumley Hill Ergon	Obstacle Light	Ergon	Lumley Hill	13 22 96	24hr Fault Reporting
Lumley Hill Telstra	Hazard Beacon	Telstra	Lumley Hill	(03) 8542 3481	Ben Williams benjamin.williams@team.telstra.com goc.radio.tog@team.telstra.com
Rydges Esplanade Resort	Obstacle Light	Rydges Esplanade Resort	Cnr Esplanade Kerwin St Cairns QLD	0412 700 123	Kirk Tinning
Cairns Aquarius	Obstacle Light	Cairns Aquarius CTS 1439	107 Esplanade Cairns QLD	0414 086 028	Michael Kuliesa-Jewell
The Pullman Cairns Hotel	Obstacle Light	The Pullman	17 Abbott Street Cairns QLD	(07) 4050 2122	Peter Brown
Cairns Corporate Tower	Obstacle Light	Cairns Corp.	15 Lake Street Cairns QLD	0417 943 687	Marilyn Chestnut
Hotel Riley	Obstacle Light	Cyrstalbrook	131-141 Esplanade Cairns QLD	0484 001 698	Mark Ansell
Vodaphone Aerial	Obstacle Light	Vodaphone	Arnold Street Depot Aeroglen QLD	1800 683 683	Option (2 -1) OR Option (5) flm.vha@nokia.com
Southern Localizer	Obstacle Light	Airservices Australia	PO Box 314N North Cairns	(07) 4050 5315	Kevin Bowthorpe
Southern Localiser Building	Obstacle Light	Airservices Australia	As Above	As Above	As Above
Southern Anemometer	Obstacle Light	Airservices Australia	As Above	As Above	As Above
Northern Localizer	Obstacle Light	Airservices Australia	As Above	As Above	As Above
Northern Localiser Building	Obstacle Light	Airservices Australia	As Above	As Above	As Above

Glide Path Antenna	Obstacle Light	Airservices Australia	As Above	As Above	As Above
DME	Obstacle Light	Airservices Australia	As Above	As Above	As Above

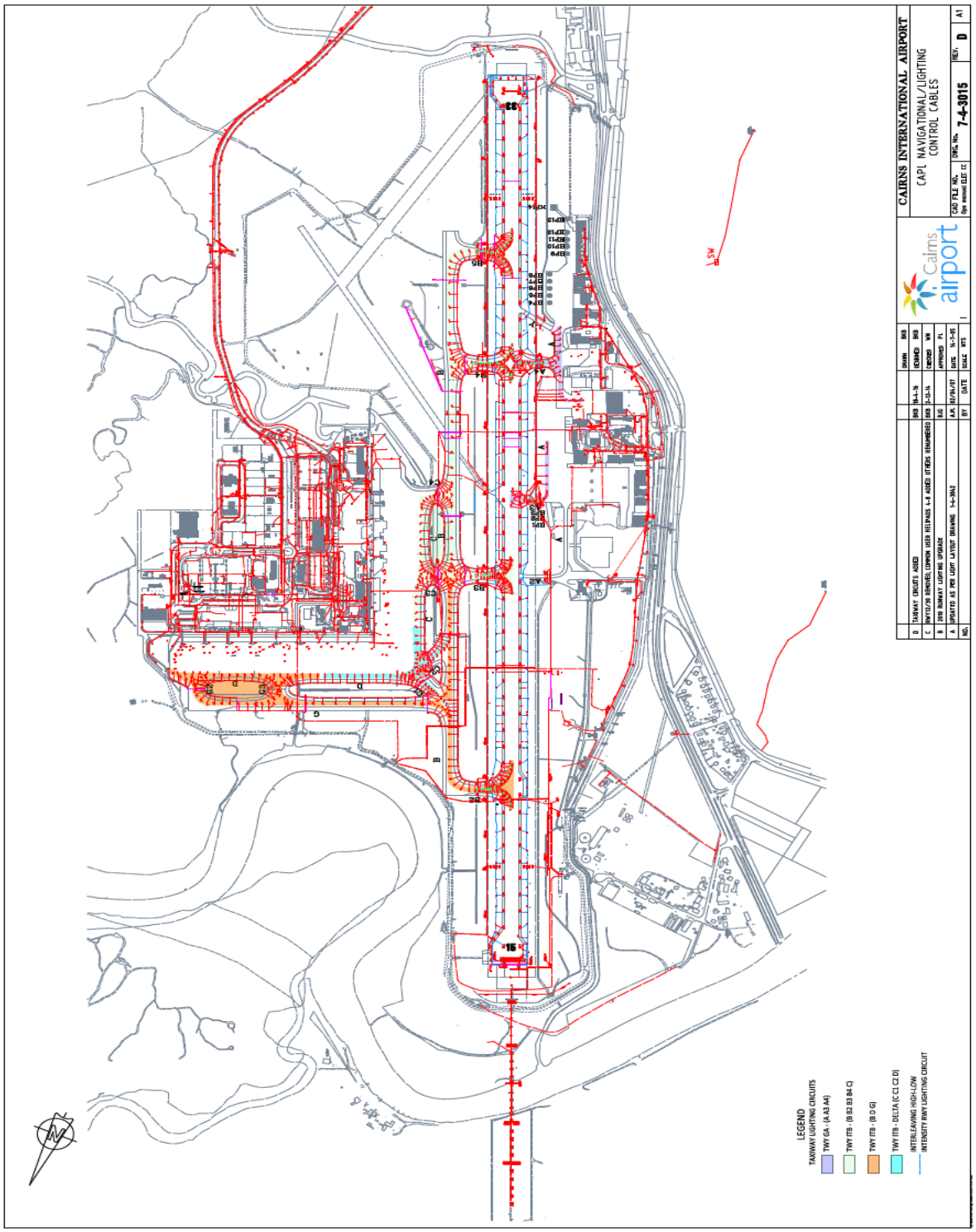
OTE

Obstacle lights comprise

- Low intensity obstacle light (steady red light):
  - referred to above as Obstacle Light.
- Medium intensity obstacle light (steady red, flashing red or flashing white lights):
  - flashing red lights are also known as Hazard Beacons.
- High intensity obstacle light (flashing white light):
  - used on obstacles higher than 150 metres above ground level.

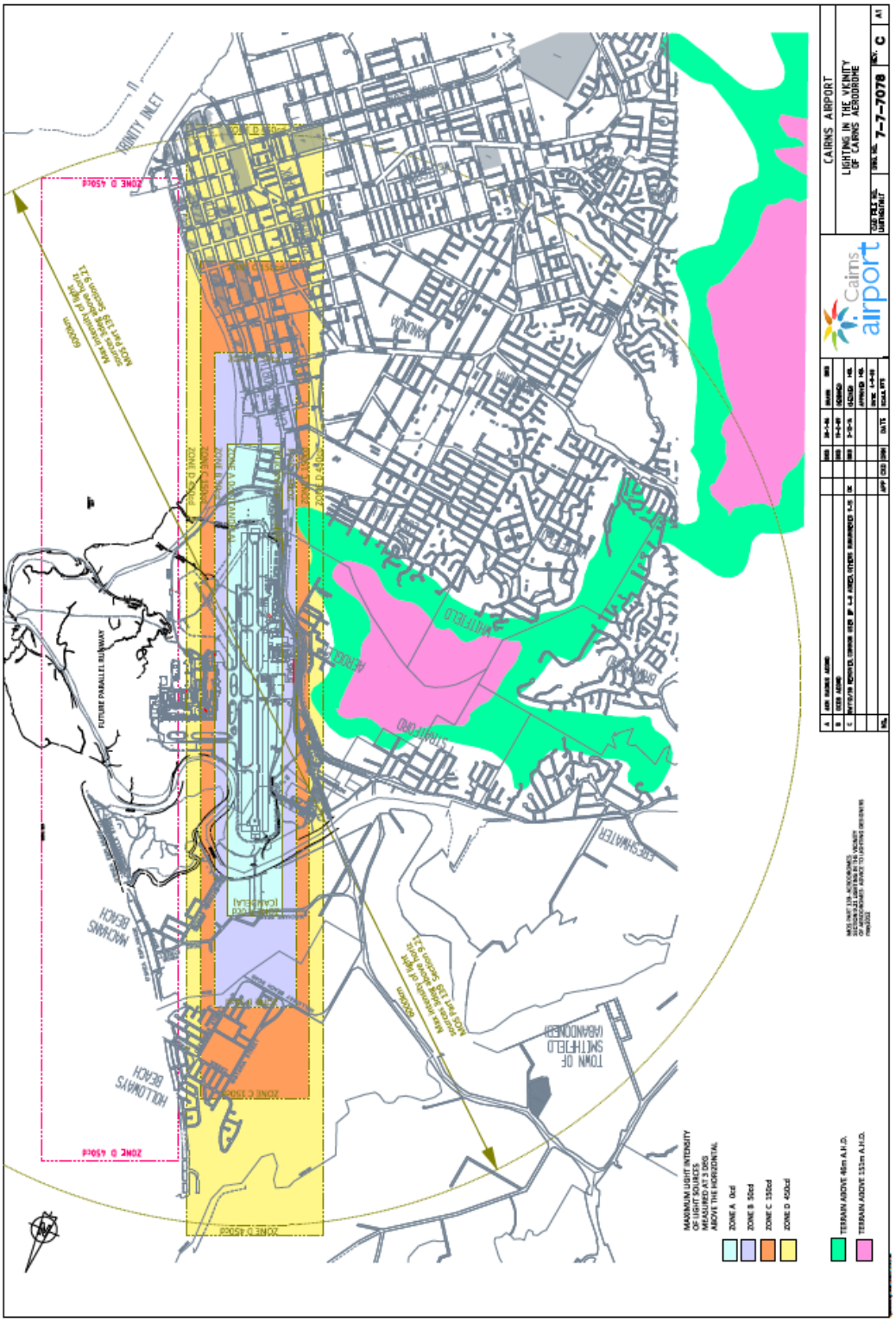
ANNEX 4

Navigational/Lighting Control Cables
Drawing No. 7-4-3015

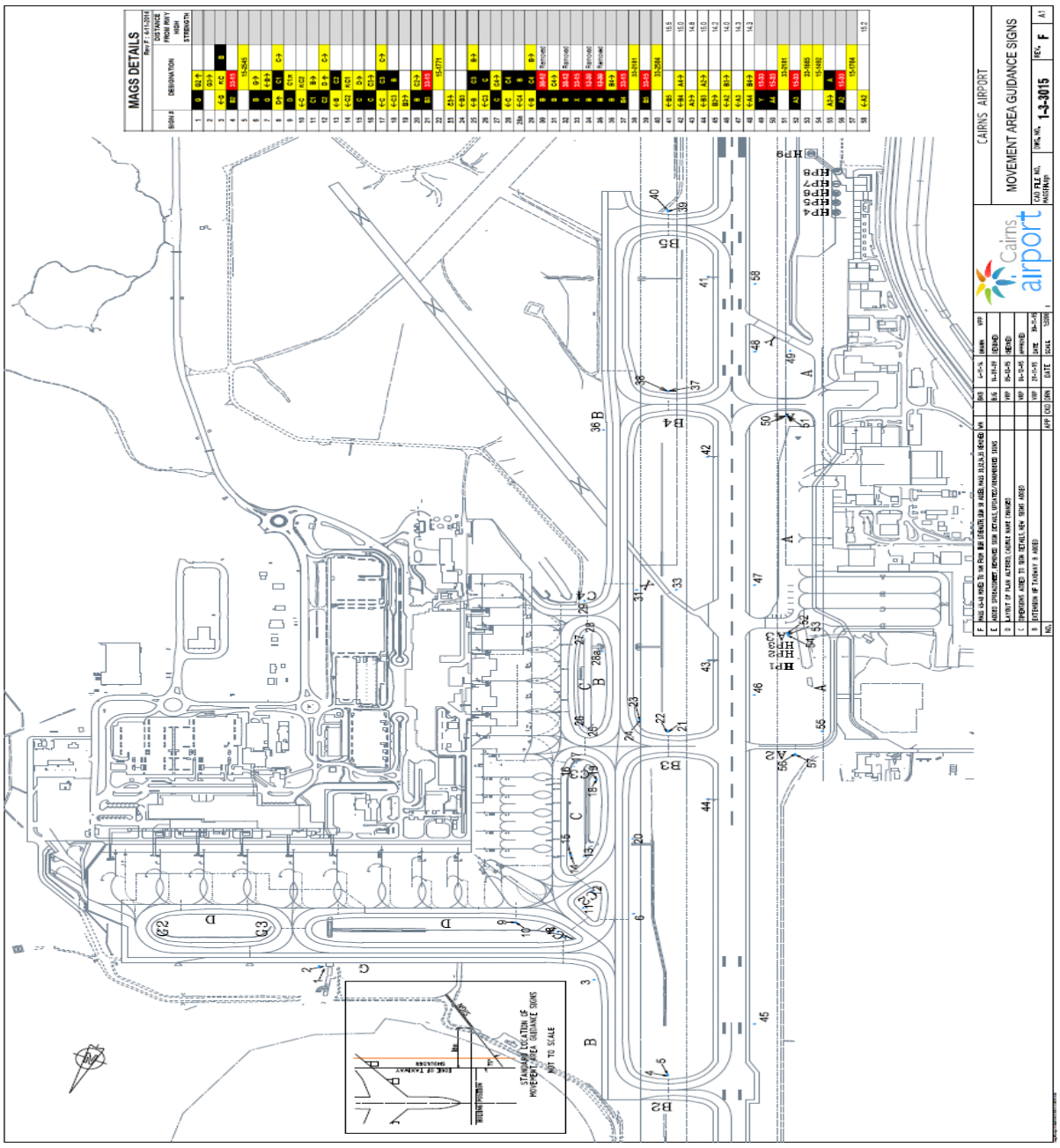


ANNEX 5

Lighting in the Vicinity of Cairns Airport
Drawing No. 7-7-7078



ANNEX 6
Movement Area Guidance Signs



Contents:

4.1 PURPOSE

This Section details the arrangements and procedures in place at Cairns Airport, for reporting:

- Changes to published aerodrome information; and
- Any other matters that have the potential to affect the safe operation of aircraft.

4.2 REFERENCES

Civil Aviation Safety Regulation 139.155 requires the operator of a certified aerodrome to notify changes in the physical condition of the aerodrome, or other occurrence, that may affect the safety of aircraft to the NOTAM Office.

Civil Aviation Safety Regulation 139.160 requires the operator of a certified aerodrome to notify to maintain the accuracy of information published in the AIP-ERSA in relation to the aerodrome, and to advise the AIS, in writing, of any change to the information that has not been advised by NOTAM.

The Manual of Standards (MOS) Part 139 - Aerodromes provides advice on publishing aerodrome operational information and on reporting changes to such information.

Civil Aviation Safety Regulation Part 175 – Aeronautical information management.

4.3 RESPONSIBILITIES

Manager Aerodrome

- Ensuring that appropriate procedures are in place to report both permanent and temporary changes to published aerodrome information.
- Ensure that contact details of authorised Reporting Officers and any changes are reported to NOF

Aerodrome Safety and Compliance Manager is responsible for:

- Amend and report both permanent and temporary changes are published in aerodrome information.
- Provide contact details of authorised Reporting Officers to NOF.
- Advising AIS of any errors or omissions found in the AIP, and arranging appropriate NOTAM (if required); and
- Advising AIS of amendments to airport information as a result of new facilities, decommissioning of facilities, or changed survey information or data and initiating appropriate NOTAM (if required).

Aerodrome Operations and Emergency Manager

- Ensuring that Airport Safety Officers are competent in initiating NOTAM action in respect of any temporary aerodrome related unserviceability.
- Maintain reporting officer training records.

Aerodrome Operations Supervisor

- Undertake routine safety inspections to all sections, identify any breaches or areas of concern, and take remedial action to rectify deficiencies in aerodrome safety standards.
- Monitor obstacles and NOTAMS for cranes and beacons.
- Conduct review of all safety related SOPs as dictated by our document control procedures.
- Issue Notice to Airmen (NOTAMS) as requested and monitor the currency of NOTAMS.
- Actively promote of the need to maintain a safe working environment through compliance with the Safety Management Framework and workplace related health and safety legislation including the CASA compliant DAMP.

Airport Safety Officers are responsible for:

- Reporting unserviceability's, logging the details and initiating appropriate NOTAMs through the Australian NOTAM Office (NOF).
- Airport Safety Officers may also initiate aerodrome work related NOTAM where the text has been included in a formal Method of Working Plan, and issue and review NOTAMs on obstacles although these functions are normally carried out by the Aerodrome Safety and Compliance Manager.

NOTE
The Airport Safety Officers record details of routine serviceability inspections in the Airport Safety Officer logs within Tracker Airside associated with their particular shift they are on. These logs are reviewed and, where necessary, actioned by the Airside Operations Supervisor. Such actions may include the initiation of a NOTAM.

4.4 REPORTING OFFICER ACCREDITATION

Only those staff with training and demonstrated competencies, to CASA requirements under MOS Part 139 (Chapter 10.3 & 10.6) and to Cairns Airport's satisfaction, will be approved as Airport Safety Officers for the purposes of fulfilling the Reporting Officer functions. Cairns Airport will ensure adequate assessments are carried out.

Other staff with appropriate technical qualifications and / or demonstrated experience and knowledge in airport operations may also be assessed and approved for the purposes of performing the duties of a Reporting Officer.

The Aerodrome Safety and Compliance Manager and Aerodrome Operations and Emergency Manager are required to have the appropriate qualifications and/or experience to fulfil the functions of their positions.

Details of the training records of all approved Reporting Officers are maintained in a training register held within the NQA Training Database.

The names and contact telephone numbers of persons with responsibilities for Aerodrome Reporting are detailed in the Master Control List located within the "Aerodrome Administration" Section of this Manual.

The Aerodrome Safety and Compliance Manager or delegate is responsible for ensuring that records of the names and contact details of all authorised Reporting Officers are maintained and notified to the NOTAM Office.

4.5 PUBLISHED AERODROME INFORMATION

Published aerodrome information comprises data on aerodromes and the associated environs regarding the physical characteristics of movement areas and the relevant surrounding airspace.

Varying portions of aerodrome information are included by Airservices AIS in:

- The AIP EnRoute Supplement (AIP-ERSA); and
- The aerodrome specific portions of the AIP-Departures and Approach Procedures (AIP-DAP).

Temporary changes to aerodrome information that may affect the safe operation of aircraft, are notified to the aviation industry by Airservices AIS and / or NOF by way of:

- AIP Supplement (when sufficient prior notice is available to enable the information to be printed or when a diagram is needed); and
- NOTAM (when rapid promulgation of information is necessary).

NOTE
The NOTAM system may also be used to amend publications or charts in respect of changed permanent data.

4.6 AIS AMENDMENTS

Changes to aerodrome information requiring amendment to AIP-ERSA and/or AIP-DAP will be notified to Airservices AIS by NOTAM, or, if the amendment does not require a NOTAM, in writing by mail, facsimile, email or upload to:

Business Reply Post
Permit No 1986 – CIVIC SQUARE
Airservices Australia
Att: Aeronautical Information Services
GPO Box 367
CANBERRA ACT 2601

OR www:http://www.airservicesaustralia.com/aip/ccard
OR email via docs.amend@airservicesaustralia.com

The Aerodrome Safety and Compliance Manager is authorised to initiate amendments to Cairns Airport AIS Publications.

A NOTAM will be initiated for occurrences as listed in MOS Part 139 S10.3.2.2.
Changes to AOC Type “A” will be conveyed directly to chart holders.
A copy of all amendment advices will be forwarded to the CASA Area Office.

Aerodromes Inspector
Civil Aviation Safety Authority
GPO Box 2005
CANBERA ACT 2601

Telephone: 131 757
Facsimile: (07) 3144 7333

4.7 NOTAM ISSUING AND MONITORING

The Aerodrome Safety and Compliance Manager shall ensure that all persons appointed by Cairns Airport to request that a NOTAM be issued have been suitably trained and meet the competencies as specified in the Manual of Standards Part 139, Section 10.6.2.

The following officers as listed at Annex 1 (Copy of letter to NOF nominating authorised officers) are authorised by the Cairns Airport to initiate the issue of a NOTAM:

- Duty Airport Safety Officer (Car 16, Car 17, Car 18 and Car 20) - Temporary NOTAM only
  Mobile: 0412 773 065 Car 16
  Mobile: 0402 027 732 Car 17
  Mobile: 0400 752 293 Car 18
  Mobile : 0427 880 154 Car 20

- Aerodrome Safety and Compliance Manager:
  Telephone: (07) 4080 6714
  Mobile: 0400 508 097

- Aerodrome Operations and Emergency Manager
  Mobile: 0428 783 367

- Aerodrome Operations Supervisor:
  Mobile: 0435 697 047

- Requests for NOTAM's are made to the NOTAM Office (NOF) by:
  Telephone: (02) 6268 5063
  Facsimile: (02) 6268 5033
  Email: nof@airservicesaustralia.com

Issue of NOTAM for AIS amendments

Business hours: Any changes to published aerodrome information requiring the issue of a NOTAM will be actioned by the Aerodrome Safety and Compliance Manager.

Out of hours: In respect of urgent notification requirements, the Airport Safety Officer will initiate appropriate NOTAM action.

Issue of NOTAM for routine temporary unserviceability

Any changes to the manoeuvring area conditions or any new obstacles that may affect the serviceability of the manoeuvring area or significant bird hazards will be reported immediately to Cairns ANS and to the NOF.

All hours: The Airport Safety Officer will record details of day to day serviceability situations requiring the issue of a NOTAM and will initiate such NOTAM action directly through the NOTAM Office. Typical events include (but are not limited to):

- Time limited works
- Increased bird activity
- Aerodrome lighting and obstacle lighting outages
- OLS surface – temporary infringements

Requests for the issue of a NOTAM are provided to the NOTAM Office by way of the standard Airservices Australia NOTAM Form via facsimile or email (copy included in Annex 2 to this Section).

Following checking by the Duty Airport Safety Officer, both NOTAM requests and confirmation of the issued NOTAM are to be maintained together on file by either the Airport Safety Officer or the Aerodrome Operations Supervisor.

Copies of NOTAM, or written requests related to permanent changes to published aerodrome information are:

- Maintained on a specific AIS Amendment file by the Aerodrome Safety and Compliance Manager; and
- Copies of NOTAMs are uploaded to the Cairns Airport intranet.

Monitoring of NOTAM

The Aerodrome Operations Supervisor and Airport Safety Officer checks the content and currency of CNS published NOTAMs on a daily basis.

4.8 COMPLEX NOTAM

Texts for complex NOTAM (e.g. those containing revised declared distances and end of clearway gradient information) will be prepared by either the Aerodrome Safety and Compliance Manager or by the Aerodrome Operations and Emergency Manager and details will be cross checked by the other officer.

In the absence of one of these staff the Aerodrome Operations Supervisor and/or the Airport Safety Officer will perform the checking function. Upon verifying the integrity of the text, the checking officer will sign off the form containing the NOTAM text, indicating that the calculations have been checked. Copies of the NOTAMs are filed on Cairns Airport Intranet (SharePoint).

NOTAM texts for inclusion in a MOWP are similarly checked and undergo additional checks by operations staff. A standard Airservices Australia NOTAM Form containing the MOWP NOTAM text/s is signed by authorised officers to certify that details have been calculated and checked. If required, a Reduced Operational Length Calculations Sheet will be countersigned, then maintained on the relevant NOTAM / MOWP file.

4.9 REPORTING CENTRES

Australian NOTAM Office
Airservices Australia
GPO Box 367
Canberra ACT 2600
Telephone: (02) 6268 5063
Email nof@airservicesaustralia.com

Air Navigation Services, Cairns Airport
Contact details: SMC Cairns Ground 121.7
TWR Cairns Tower 124.9
Telephone: (07) 4050 5328

ANNEX 1

Letter to NOF advising Report Officers appointed by Cairns Airport

15 Oct 2018

Airservices Australia
Australian NOTAM Office (NOF)
Publications Unit
By Email: DPSadmin@airservicesaustralia.com

Dear Sir/Madam

CHANGES TO APPROVED AIP RESPONSIBLE PERSON AND NOTAM AUTHORISED PERSONS

As required under Manual of Standards Part 139 – Aerodrome and CASR Part 175.445 the Cairns Airport Pty Limited, as Aerodrome Operator of Cairns Airport, is required to provide the NOTAM Office (NOF) with a list of NOTAM authorised persons and approved AIP responsible person.

I would like to confirm that Colin Evans remains the responsible person and the following staff have been approved to issue and effect NOTAM changes to NOF for Cairns Airport Pty Ltd:

Position	Name	Telephone Contact
Aerodrome Standards and Compliance Manager	Colin Evans	Mobile: 0400 508 097
Aerodrome Safety and Emergency Manager	Robert Kegan	Mobile: 0428 783 367
Airport Safety Officer	Bruno Fogale	Car 16: 0412 773 065
Airport Safety Officer	Chris Corser	Car 17: 0402 027 732
Airport Safety Officer	Garry Clarke	
Airport Safety Officer	Craig Tatlow	
Airport Safety Officer	Tom Herd	
Airport Safety Officer	Shane Porter	
Airport Safety Officer	Matt Baker	
Airport Safety Officer	Jamie Hughes	
Airport Safety Officer	Liam West	
Airport Safety Officer	Leonard Talbot	
Airport Safety Officer	Mark Musumeci	
Airport Safety Officer	Steve Harris	

Yours sincerely

Colin Evans
AERODROME SAFETY AND COMPLIANCE MANAGER
Enquiries: Colin Evans, 0400 508 097
Email: colin.evans@cairnsairport.com.au

Cairns Airport Pty Ltd > A North Queensland Airports Enterprise
A Airport Avenue | Cairns Airport | Cairns | Q | 4870 > PO Box 57 | Airport Administration Centre | Cairns Airport | Q | 4870
P + 61 7 4080 6703 F + 61 7 4080 6704 E enquiries@cairnsairport.com.au W cairnsairport.com.au > ABN 16 132 228 221

ANNEX 2

Standard Airservices Australia NOTAM Form

RESET FORM SAVE FORM SUBMIT FORM

Airservices Australia NOTAM Request Form

airservices

To: Australian NOTAM Office Ph: 02 6268 5063 Fax: 02 6268 5044 Email: nof@airservicesaustralia.com

(Office use only) ☐ Group ☐ Originator ☐ NOTAM directory ☐ ERSA ☐ Qcode ☐ T/P/S ☐ INTL abbrev ☐ Summary line

Item A) Location ◯ AD ☐☐☐☐ ◯ FIR _____ ◯ Airspace _____

NOTAM N ☐ New
NOTAM R ☐ Review (extend/amend) NOTAM No. _____
NOTAM C ☐ Cancel (Item B must be WIE) NOTAM No. _____
Template Number (if applicable): _____

Date/Time Convention ☐ Eastern Standard ☐ Central Standard ☐ Western Standard ☒ UTC/Zulu (preferred) ☐ Eastern Daylight ☐ Central Daylight

Item B) Start time Date (YYMMDD) _____ Time (HHMM) _____ ☐ Immediately (WIE)

Item C) Finish time Date (YYMMDD) _____ Time (HHMM) _____ ☐ Confirmed ☐ Estimated (requires review or cancellation)
(leave blank for all CNL NOTAM) or ☐ Permanent (to be incorporated into AIP)

Item D) (optional) Periods of Activity
Individual timings YYMMDDHHMM
Daily timings HHMM or
☐ HJ
☐ HN
Reset field

FROM _____ TO _____
FROM _____ TO _____
FROM _____ TO _____
FROM _____ TO _____
FROM _____ TO _____
FROM _____ TO _____
FROM _____ TO _____

Item E) New/Review – Full text of NOTAM to be included or For cancellations – First line of NOTAM only

Reset field Obstacle NOTAM Has the obstacle been assessed by Airservices IFP? ☐ Yes ☐ No Assessment code: _____ ☐ No impact ☐ Not required

Item F) (optional) Reset field Lower Limit: ☐ SFC or _____ (Leave blank for cancellations) ☐ Flight Level ☐ Feet AGL ☐ Feet AMSL

Item G) (optional) Reset field Upper Limit: ☐ *UNL or _____ (Leave blank for cancellations) ☐ Flight Level ☐ Feet AGL ☐ Feet AMSL

NAIPS User Name: _____ NOTAM Group Name: _____
Contact Name: _____ Phone Number: _____
Email: _____
Organisation: _____

ORIGINATOR MUST CHECK NOTAM FOR ACCURACY AFTER ISSUE
Automatic email transmission of NOTAM can be arranged with the NOTAM Office.

ATS-FORM-0018 Version 12: Effective 26 May 2020

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 05	UNAUTHORISED ENTRY TO AERODROME

This Section of the Aerodrome Operations Manual addresses CASA requirements in respect of preventing unauthorised entry to aerodrome movement areas. The CASA requirements are intended specifically and solely to ensure the safety of aircraft operations.

Cairns Airport is a security categorised airport under the Aviation Transport Security Act 2004. Access controls over and above CASA requirements are in place specifically for the purpose of safeguarding civil aviation against unlawful interference.

The relevant access control measures for security purposes are detailed in the Cairns Airport Transport Security Program.

Airside access control procedures for aviation security purposes are far more stringent than those that might satisfy CASA in respect of movement area safety. For this reason, the security measures in place at Cairns Airport exceed the CASA requirements for prevention of unauthorised access to movement areas.

Contents

5.1 PURPOSE

This Section details the procedures in place at Cairns Airport, for preventing the unauthorised entry of persons, vehicles, plant and equipment, animals or other things onto the airport movement area. These procedures are a CASA requirement for the purpose of maintaining the safety of aircraft operations.

NOTE
CASA specifically addresses prevention of unauthorised entry to the movement area, rather than to the airside.

5.2 REFERENCES

The Aviation Transport Security Act 2004 (ATSA) contains the requirements implemented by the Australian Government to protect Civil Aviation against Acts of Unlawful Interference.

Civil Aviation Safety Regulation (CASR) 139.120 requires the operator of a certified aerodrome to ensure that the aerodrome is operated with a reasonable degree of care and diligence.

Civil Aviation Safety Regulation 139.145 requires the operator of a certified aerodrome to operate and maintain the aerodrome in accordance with the procedures contained in the Aerodrome Manual and CASR 139.095 requires procedures for the control of airside access be included in the Aerodrome Manual.

The CASA Manual of Standards Part 139 – Aerodromes Section 10.9 defines the access control measures to be implemented at a certified aerodrome.

The Queensland "Airport Assets (Restructuring and Disposal) Act 2008" gives Cairns Airport Pty Ltd powers to control access to, or the use of Cairns Airport.

Cairns Airport approved Transport Security Program details the prescribed security requirements for Cairn Airport.

5.3 RESPONSIBILITIES

Manager Terminals and Security is responsible for:

- Establishing and maintaining the Cairns Airport Transport Security Program; and
- Ensuring that the provisions of that program are met at all times.

Security Operations Manager is responsible for:

- Ensuring that appropriate measures and procedures are in place to prevent the unauthorised entry to movement areas by persons, vehicles, plant/equipment or animals; and
- Assisting the Manager Terminals and Security to establish and maintain the Cairns Airport Transport Security Program.

Note: Comprehensive details of security related access controls are contained in the Cairns Airport Transport Security Program. Amendments are made by the Manager Terminals and Security.

Australian Federal Police (AFP): AFP is the Commonwealth Government designated law enforcement officers under Division 3 of the Aviation Transport Security Act. AFP provides Cairns Airport with Counter Terrorist First Response (CTFR) functions. They have powers of arrest, and certain additional powers under the federal Acts. Their main duties include:

- Respond to high risk incidents including, acts of terrorism that can include hostage situations, hi jacking, shootings, bombings barricaded suspects and extortions. AFP will typically cordon and contain the incident and provide information to responding Queensland State Police or Australian Defence Force personnel, as required.
- Providing a rapid armed response to mandated duress alarms at security screening points and emergency situations.
- Conduct continuous patrols of the international and domestic terminals and security restricted areas in order to provide a uniformed presence to deter acts of terrorism, sabotage or interference with aircraft and to ensure the continued integrity of the airside / landside barriers and 'sterile areas'.
- Assist public, airlines and airport operators as necessary.
- Provide an Airport uniformed Police force to respond to criminal activity.
- AFP and Cairns Airport maintain records of all security incidents at Cairns Airport.

Airport Safety Officers are responsible for:

- Maintaining constant and continuing surveillance activities and, as necessary:
- Detect, detain or remove unauthorised persons, and any associated vehicles, plant or equipment, on any airport movement area.
- Respond as appropriate to any bird or animal found on the movement area where the immediate safety of aircraft operations is in jeopardy.
- Undertake routine inspections of the airport perimeter fence including access gates.
- Report on incidents or observations that include any of the above.

NOTE

The Airport Safety Officers record details of encounters with any unauthorised persons, and with animal or bird hazards into their shift log. These logs are reviewed and actioned by the Aerodrome Operations Supervisor as required and escalated to the Aerodrome Operations and Emergency Manager.

Contracted Security Provider

- Cairns Airport provides contracted security arrangements to undertake security screening of all passengers and other personnel entering the sterile area and inspections of persons, vehicles and goods intending to enter airside security restricted areas.

Airport Coordinators are responsible for:

- Monitoring the access control system and the CCTV network.
- Report incidents relating to unauthorised access to AFP.

Head of Commercial ensures leasing agreements include tenant obligations to implement and maintain AMS and CA TSP requirements including an access control system where these premises occupy any airside landside boundary.

NOTE
The names and contact telephone numbers of persons with responsibilities for authorising access to the movement area are detailed in the Master Contact List at the "Aerodrome Administration" section of this manual.

5.4 AIRSIDE / LANDSIDE

Cairns Airport is made up of "airside" and "landside" areas.

As implied, airside is defined by CASA in the Manual of Standards Part 139 Aerodromes as "the movement area of an aerodrome, adjacent terrain and buildings or portions thereof, access to which is controlled".

Landside on the other hand is defined as that portion of the airport not designated airside and to which the general public normally has free access (i.e. public access roads and car parks, entrances to terminal buildings and any other facilities in the public areas).

In order to prevent unauthorised entry to aerodrome movement areas, Cairns Airport controls access at the airside/landside boundary and along the airport perimeter where adjacent land is not airport property. The total length of the airside perimeter is approximately 14 km. This boundary generally consists of 2.44 metre high chain mesh security fencing (Australian Standard AS 1725-2010). There is approximately 850m of fence line that consists of a marsupial proof fence 1.5m high adjacent to the natural mangrove barrier areas in the south east sector of the airport. Buildings such as terminals and hangars form an integral part of the airside/landside boundary.

5.5 AIRSIDE ACCESS – PROHIBITED AREA

Persons
Only persons who have a lawful and operational reason to access the airside are permitted to gain such access, as follows:

- When they hold and display a current RED or GREY Aviation Security Identification Card (ASIC), or hold and display a current Visitor Identification Card (VIC) and are escorted by a person who holds and displays a current RED or GREY ASIC; and
- When they are an airport tenant, or are employed by or are supervised by an airport tenant, they may enter via the relevant building, hangar or gate under the supervision of the tenant; and

- By demonstrating a legitimate requirement for access and obtaining from Cairns Airport an appropriate key for a gate lock or proximity card to activate an electronically activated gate, or are granted entry by a Cairns Airport officer or agent.

Cairns Airport's appointed security contractor maintains a continuous presence at Gate V23, T1 and T2 Terminals, and in the vicinity of JUHI facility, to ensure the airside inspection requirements as detailed in the Cairns Airport TSP are maintained.

In addition other organisations may arrange to establish airside inspection points under the terms of their own TSP to manage airside access, but only under approval by Cairns Airport.

As well as the above, passengers under the supervision of an airline employee or contractor holding a valid ASIC are allowed to enter the airside without an ASIC.

In accordance with the requirements of the Aviation Transport Security Act 2004, AFP provide a 24-hour presence at Cairns Airport. The AFP conducts regular patrols of the aprons and the perimeter fence.

Animals

The perimeter fencing, including the landside/airside boundary fencing and associated gates, form an adequate barrier to intrusion airside by most animals. Where, in rare instances, an animal may breach a fence or the mangroves and gain access to the airside, Airport Safety Officers will act quickly to keep the animal away from movement areas and capture or destroy the animal.

Animals are permitted airside only if being loaded, unloaded or transferred as air cargo. Carriages of small domestic animals such as pets are routinely undertaken by air carriers. Carriers must develop and implement approved ramp safety procedures to ensure safe and secure control of the animals at all times. The transport by air of livestock and other large animals is a specialised operation and not a common event at Cairns Airport.

The Aerodrome Operations and Emergency Manager and Airport Safety Officers will ensure that any operation involving loading or unloading of large animals is undertaken in accordance with the approved CA SOP 3011 AO Livestock Transfer. An important part of the procedures for handling large animals at the Airport will be the provision to (if necessary) destroy any animal that may escape during loading or unloading operations and threaten the safety of aircraft, occupants, or other airport users.

The access control measures imposed in relation to the Security Restricted Area are significantly more stringent than those required for the airside areas of the airport (see paragraph 5.6 below).

5.6 AIRSIDE ACCESS – SECURITY RESTRICTED AREA

The Security Restricted Area (SRA) is the Regular Passenger Transport (RPT) apron areas and some adjacent operational areas as detailed in the Cairns TSP.

Access to the airside within the Security Restricted Area is permitted only to persons who hold and display a red ASIC or VIC under escort by a valid Red ASIC holder, in accordance with the provisions of the Cairns Airport Transport Security Program and relevant regulations.

All persons entering the SRA are subject to enhanced screening measures as required. If entering through a terminal building sterile area, persons entering the SRA are subject to passenger screening requirements.

5.7 AIRSIDE ACCESS – VEHICLES

Cairns Airport has in place a comprehensive set of procedures for the control of vehicular traffic on airside. These procedures, which detail conditions under which vehicles may enter and be operated on the airside, are

set out in a separate document entitled the "Airside Vehicle Control Manual". The subject of airside vehicle control is dealt with in Part 2 Section 10 of this manual.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 06	AERODROME SERVICEABILITY INSPECTIONS

Contents:

6.1 PURPOSE

This Section details the types of aerodrome safety related inspections that Cairns Airport is obliged to undertake and provide particulars of the manner in which these inspections are conducted at Cairns Airport.

The objective of the various types of airport inspections is to ensure that the airport movement area and the relevant surrounding airspace are checked on a regular basis in order that any departure from standards or recommended practices is promptly detected.

NOTE
The process of reporting on the findings of inspections is addressed in Part 2 Section 4 "Aerodrome Reporting".

6.2 REFERENCES

CASR Part 139.155 requires the operator of a certified aerodrome to notify the NOTAM Office and ANS of any change in the physical condition of the aerodrome that affect aircraft safety.

CASR Part 139.160 requires the operator of an aerodrome whose aerodrome information is published in AIP to take all reasonable measures to inform AIS of any changes to published information as quickly as possible.

CASR Part 139.165 requires the aerodrome operator of a certified aerodrome to ensure that the physical characteristics of the movement area comply with the standards specified in the MOS Part 139 – Aerodromes.

CASR Part 139.170 requires the operator of a certified aerodrome to mark certain area on the aerodrome in accordance with the MOS Part 139 – Aerodromes.

ASR Part 139.220 requires the operator of a certified aerodrome to conduct serviceability inspections to ensure safety of aircraft.

CASR Part 139.225 specifies the times at which the serviceability inspections must be conducted.

MOS Part 139 - Aerodromes Section 9.20 provides guidance on inspecting and serviceability of aerodrome lighting.

MOS Part 139 - Aerodromes Section 10.2 provides guidance on inspecting and reporting aerodrome serviceability.

Airservices Australia Letter of Agreement 561 at Annex 4 outlines the interface agreement between Cairns Airport Pty Ltd and AsA in relation to serviceability inspections.

6.3 RESPONSIBILITIES

Manager Aerodrome is responsible for:

- Ensuring that the inspections required by CASA are undertaken and that they are conducted in accordance with CASA standards, at the required frequencies, and by suitably qualified staff.
- Ensuring that there is a system in place for recording, reporting, and follow up on corrective actions.

Aerodrome Operations and Emergency Manager is responsible for:

- Monitoring the inspections that are carried out as required by CASA and that they are conducted in accordance with CASA standards.
- Monitoring Aerodrome compliance in consultation with the Aerodrome Safety and Compliance Manager.
- Ensuring that the procedures are in place for recording, reporting, and follow up on corrective actions.

Aerodrome Operations Supervisor is responsible for:

- Coordinating the inspections as required by CASA and that they are conducted in accordance with CASA standards.
- Monitoring, reviewing and storing of ASO daily serviceability inspection reports.
- Ensuring appropriate follow up action is undertaken.

Airport Safety Officers: The Duty Airport Safety Officers are responsible for:

- Conducting Airport Serviceability Inspections at the frequency and times detailed in this Section of the Aerodrome Operations Manual.
- Complying with the procedures defined witin this section of the Aerodrome Operations Manual.

Airside Infrastructure Manager is responsible for:

- conducting serviceability inspections of the Airport lighting and visual aid facilities at the frequency and times detailed in the Cairns Airport - Electrical Maintenance Manual and reproduced in this Section of the Aerodrome OperationsManual.

NOTE
The names and contact telephone numbers of persons with responsibilities for Airport Serviceability Inspections are detailed and held in the master contacts list at the “Aerodrome Administration” Section of this manual.

6.4 AERODROME SERVICEABILITY INSPECTIONS

Purpose and Scope

Serviceability Inspections are by and large visual checks for the purpose of monitoring, detecting and reporting on any condition that may:

- Make the movement area (or portion of it) unavailable for use by aircraft;
- Alter the published aerodrome information (particularly the declared distances and end of clearway gradients); and/or
- Present any other hazard to aircraft operations.

These inspections are to be conducted by personnel trained in accordance with the criteria that CASA has published in MOS Part 139 Section 10.1.3.

Cairns Airport guidelines detailing the scope of Aerodrome Serviceability Inspections at Cairns Airport are contained in Annex 1 to this Section.

Conduct and Frequency

Aerodrome Serviceability Inspections are carried out by Cairns Airport, Airport Safety Officers (ASO's). ASO's must have minimum training and experience and hold competency levels as set out by CASA, to undertake serviceability inspection to the satisfaction of Cairns Airport.

As the airport has 24 hour ANS coverage, ASO's are equipped with two-way radios that enables communications with ANS and all inspections on the manoeuvring area are conducted under an appropriate ANS clearance.

NOTE

Procedures for obtaining ANS clearances to enter manoeuvring areas are detailed in the AsA Letter of Agreement 561 at Annex 4 and the booklet "Rules for Airside Drivers" which constitutes an appendix to the Airside Vehicle Control Handbook issued under Part 2 Section 10 of this manual "Airside Vehicle Control".

Cairns Airport provides 24 hour ASO coverage and maintains a continuous airside safety surveillance which includes a number of formal inspections to ensure that the inspection requirements specified in the MOS are completed during each 24 hour period. The actual timing of the inspections are detailed with the Tracker Airside Application and within the Serviceability Inspection Checklists at Annex 2.

The **Airside Infrastructure Manager** shall ensure that the Airport lighting and visual aid facilities are inspected at least once every two (2) weeks. In the period between inspections, the AGL facilities are monitored by the duty ASO. Any faults found during a serviceability inspection are reported/logged (ASO log and fault and services reporting system) and remedied as soon as possible and, if required, a NOTAM is raised.

The location of Obstacle Lights are detailed in Annex 3 to Part 2, Section 3 Aerodrome Lighting. All Obstacle Lights shall be monitored.

Any other significant events that occur during the ASO's shift are also recorded in Tracker Airside shift log and may include details of:

- Inspections carried out other than those detailed in the checklists.
- Significant tasks performed during the shift.
- Events or observations requiring further investigation or follow-up action (such as deficiencies observed during inspections).
- Works, such as time-limited-works or works conducted under a MOWP and PERCOW.
- Times that portions of the movement area are withdrawn from, or returned to, service.
- Messages or instructions relevant to the ASO function.
- Unusual occurrences (e.g. bird strikes, unauthorised persons, aircraft incidents/accidents).
- Prevailing weather, changes in weather and/or significant weather conditions.
- FOD related items/materials on movement areas and times detected and picked up.
- Bird and Wildlife activity.
- Fuel (or other) spills and actions taken.

Airport Safety Officer shift coverage at the airport has been established in the following manner:

"**A**" shift (AM)	Car 16	0045 hours to 1100 hours (local time)
"**P**" shift (PM)	Car 16	1045 hours to 2100 hours (local time)
"**E**" shift (Early)	Car 17	0300 hours to 1400 hours (local time)
"**L**" shift (Late)	Car 17	1345 hours to 0100 hours (local time)
"**BE**/**BL**" shift (B&W)	Car 18	BE- 0400 hrs to 1330 hrs or BL – 1130 hrs to 2100 hrs (local time)

Annex 2 to this Section details the inspection checklists associated with each shift.

A vehicle and equipment checklist is completed at the commencement of each shift.

Corrective Action

The ASO's will initiate all corrective actions for any item identified during the serviceability inspection. Request for corrective action must be via direct email to the responsible supervisor and registering using the fault and services reporting system. The Aerodrome Operations Supervisor will review and identify matters for follow up within the inspection reports. Matters involving a technical/compliance assessment will be referred to the Aerodrome Safety and Compliance Manager for the appropriate action.

For unserviceable obstacle beacons identified by the ASO's, appropriate NOTAM action wil be initiated and details recorded for follow up action as required.

Records

All shift logs and the shift checklists are maintained within the Tracker Airside application.

All completed logs and checklist forms submitted during or post inspection and are reviewed by Aerodrome Operations Supervisor for follow up action (as required).

Cairns Airport ICT maintain records of inspections for a minimum of three (3) years.

Airport Lighting and Visual Aid Light serviceability inspection reports shall be maintained by the Technical Services Coordinator for at least three (3) years.

ANNEX 1

Aerodrome Serviceability Inspection - Guidelines

SERVICEABILITY INSPECTION GUIDELINES

SERVICEABILITY INSPECTION GUIDELINES

1. COMMENCE SHIFT

- **NOTAM currency**
  Obtain current NOTAMs from the Airservices Australia website.
  Cross check NOTAM requests from preceding day to ensure they have been issued correctly.
  Check all YBCS NOTAMS raised by Cairns Airport for accuracy and expiry date.
  If a NOTAM is up for review on current date then confirm with originator if the NOTAM requires amendment or cancelling.
  Sign and date the NOTAM requests and file.
  Copy NOTAMs for 16, 17.

- **Firearms Check**
  Ensure firearms are unloaded and properly stowed.
  Ensure ammunition is properly stored.
  Fill in the Firearms Register when drawing and returning Firearms.
  Fill in firearms/ammunition section of logbook.
  Label defective firearms and store for immediate repair and advise supervisor.
  Clean firearms prior to being returned to store

- **MOWP**
  Check vehicle folder to ensure receipt of current MOWP.
  Ensure familiarity with contents and that applicable NOTAMs have been issued.

- **Vehicle Check**
  Complete Vehicle and Equipment checklist.
  Oil, water and fuel levels.
  Tyres (inflation and wear).
  Lights and beacons.
  Radios.

- **Logbook**
  Hand over from previous shift (if applicable).
  Read previous log entries since last on shift.
  Check contents of vehicle folder for other instructions.

2. RUNWAY 15/33 (Vehicle inspection speed **must** be no greater than **60 KMPH**)

Note: If an abnormal inspection is required, the inspection must be completed the full length of aircraft travel.

- **Pavement**
  Ensure pavement is clear of debris.
  Check for obvious pavement damage or faults.
  Check RWY edges for any drop offs greater than 25mm
  Rubber build up
  Water ponding

- **Lighting LOW**
  Request ATC to select stages 1, 2 or 3. Check all lights are operating.

- **Lighting High**
  Request ATC to select stages 4, 5 or 6. Check all lights are operating.

- **PAPI**
  Check grass height around each box.
  Check each box for serviceability and if any damage exists.
  Check all lamps are operating on both low intensity (stages 1 to 3) and high intensity (stages 4 to 6).

- **Approach Lights**
  Request ATC to select the HIAL lights. Visually check all approach lights are operating for all six stages.

- **IWDI**
  For each WDI, check wind sock is free and all lights (4) are operational. Check that the sock and assembly is in a serviceable condition, free from damage.

- **Approach & Take off Climb Surface**
  Check if approach and take-off splays are clear of unusual obstacles (cranes, kites, balloons etc).
  Any known obstacles are covered by ERSA or NOTAM. NOTAMs should be printed and checked at the commencement of each shift.

- **Transitional Surfaces**
  Check if transitional surfaces both sides of the runway are clear of obstacles (excluding permanent obstacles such as buildings in the GA).
  Assessment should be based on a 300m wide strip from the RWY 15 Threshold to TWY A3, and a 180m wide strip south from TWY A3.
  Any infringements (such as cranes or other plant) are covered by ERSA or NOTAM. NOTAMs are printed and checked at the commencement of each shift.

- **Inner Horizontal Surface**
  Visual scan of inner horizontal surface (up to 4000m from runway ends) to ensure no obstacle (other than existing terrain) protrudes through 45m AGL (150ft).
  Any infringements covered by NOTAM should be referenced in the log book with the NOTAM number.

- **Markings**
  Examine all runway markings for serviceability.
  Runway markings include:
  Threshold Markings – Piano Keys, runway designator (number), runway end markings, turning node guidance, runway chevrons and displaced threshold indicator (arrow).
  Touch down markings
  Runway centreline markings
  Runway edge markings
  Runway exit lines
  Low Visibility Operations (LVO) markings
  Runway chainage markings

- **Runway Shoulder**
  Pavement condition should be examined for defects
  Any drop-offs between the runway shoulder and the runway strip in excess of 25mm should be noted.
  Shoulders must be clear off all FOD

- **Runway Strip**
  Both sides of runway strip should be examined for surface roughness, wash outs, jet blast erosion etc.
  Any drop-offs between the runway shoulder and the runway strip in excess of 25mm should be noted.
  General surface condition such as loose material, rocks, grass height etc in accordance with standards.

- **MAGS**
  Examine MAGS for security of panels/base.
  Check edge of concrete slab for drop off/washaways.
  Confirm internal lighting is functioning.
  Check for jet blast damage.
  Check that signs are not obscured by grass growth.

3. RUNWAY 12/30

- **Pavement**
  Clear of debris.
  Obvious pavement damage or faults.

- **Markings**
  Examine unserviceability markings for serviceability.
  Examine U/S cones and temp lights serviceability.
  Examine Helicopter Landing Pad markings.

4. RWY FOD INSPECTION (Vehicle inspection speed **must** be no greater than **80 KMPH**)

- **Pavement**
  Inspect full length of runway to confirm no Foreign Object Debris on runway.

5. AIRCRAFT PARKING

Record all aircraft registrations that are parked outside leased areas.
Ensure ground equipment is correctly parked within storage lines.

6. TAXIWAY B B2 B3 B4 B5

- **Pavements**
  Check taxiways for debris.
  Check taxiways for pavement deterioration/failures.
  Check taxiway edges for drop offs above 25mm.
  After rain, check taxiways for ponding.

- **Markings**
  Examine centre-line, edge and hold point markings for serviceability.

- **Taxiway Lighting**
  Confirm all centre-line lights are functioning.
  Check cable slots for distortion/damage.
  Check holding point & Runway Guard lights.

- **MAGS**
  Examine MAGS for security of panels/base.
  Check edge of concrete slab for drop off/washaways.
  Confirm internal lighting is functioning.
  Check for jet blast damage.
  Check that signs are not obscured by grass growth.

- **Taxiway Strip**
  Examine taxiway strip for obstructions, potholes, washaways and trenches.
  Check grass height.

7. TAXIWAY G G2 G3

- **Pavements**
  Check taxiways for debris.
  Check taxiways for pavement deterioration/failures.
  Check taxiway edges for drop offs above 25mm.
  After rain, check taxiways for ponding.

- **Markings**
  Examine centre-line, edge and holding point markings for serviceability.

- **Taxiway Lighting**
  Confirm all centre-line lights are functioning.
  Check cable slots for distortion/damage.
  Check hold point lights.

- **Taxiway Strip**
  Examine taxiway strip for obstructions, potholes, washaways and trenches.
  Check grass height.

8. INTERNATIONAL APRON & TAXIWAY D

- **Pavements**
  Check for untreated fuel/oil spills.
  Check for pavement failure/deterioration.

- **Markings**
  Examine centre-line, edge, holding point markings lead in and lead out lines for serviceability.

- **Taxiway Lights**
  Confirm taxiway lights are functioning.
  Check cable slots for distortion/damage.

- **Taxiway Strip**
  Examine taxiway strip for obstructions, potholes, washaways and trenches.
  Check grass height.

- **Floodlights**
  Check floodlights to confirm all are functioning.
  Check light poles for bird nests/damage.

- **Ground Service Equipment**
  Check Ground Service Equipment is correctly stored.
  Check Spill Kit stations for operator use

9. DOMESTIC APRON & TAXIWAY C C1 C2 C3 C4

- **Pavements**
  Check for untreated fuel/oil spills.
  Check for pavement failure/deterioration.

- **Markings**
  Examine centre-line, edge, holding point markings lead in and lead out lines for serviceability.

- **Taxiway Lights**
  Confirm taxiway lights are functioning.
  Check cable slots for distortion/damage.

- **Floodlights**
  Check floodlights to confirm all are functioning.
  Check light poles for bird nests/damage.

- **Interceptors & Drains**
  Check for fuel residue/requirements for pump out.

- **Taxiway Strip**
  Examine taxiway strip for obstructions, potholes, washaways and trenches.
  Check grass height.

- **Ground Service Equipment**
  Check Ground Service Equipment is correctly stored.
  Check Spill Kit stations for operator use & contaminated waste to be removed.

10. GA TAXIWAYS AND APRONS

- **Pavements**
  Check apron for debris/rubbish.
  Check for untreated fuel/oil spills.
  Check for pavement failure/deterioration.

- **Taxiway Lights**
  Confirm taxiway lights & Runway Guard Lights are functioning.

- **Lit MAGS**
  Confirm MAGS on lit taxiways are functioning.
  Check that signs are not obscured by grass growth.

- **Floodlights**
  Check floodlights to confirm all are functioning.
  Check light poles for bird nests/damage.

- **MAGS**
  Examine MAGS for security of panel/base.
  Check edge of concrete slab for drop off/washaway.
  Check for jet blast damage.
  Check that signs are not obscured by grass growth.

- **Taxiway Strip**
  Examine taxiway strip for obstructions, potholes, washaways and trenches.
  Check grass height.

- **Markings**
  Examine centre-line, edge, hold point markings for serviceability.

11. PERIMETER FENCE

- **Fence**
  Look for obvious signs of forced entry (cut chainmesh wire, barb wire).

- **Gates**
  Perimeter gates closed, locked, and access routes clear.

- **Airside/Landside**
  Check airside/landside barriers for security.

12. EQUIPMENT CHECKS DAILY

- **Car 16, 17 & 18 Equipment**
  Check functioning of rotating beacons, siren, PA external speaker.
  Check spot lights.
  Check internal lights.
  Check equipment in vehicle as per checklist.

- **Car 16, 17 & 18 Cleaning (Weekly)**
  Wash vehicle paintwork.
  Hose off underbody of vehicle.
  Clean cabin.

- **Car 16, 17 Portable Lights**
  Check lights for serviceability/connections.
  Minimum number 8 red, 8 blue must be serviceable per vehicle.

- **Stock Take**
  Carry out stock take of consumable goods and advise AOS of items requiring replenishment.

13. EQUIPMENT CHECKS WEEKLY

- **Threshold Trailer**
  Check tyre pressure and general serviceability
  Check security of attach bolts
  Confirm security of gable markers
  Confirm correct quantities of airfield equipment: V-sheets, weights, cone markers, E-flares, bollards and other items.

- **Spill Kit Trailer**
  Check tyre pressure and general serviceability
  Check security of attach bolts
  Confirm adequate supply of spill clean-up materials.

14. BIRDS (WEEKLY)

- **Bird Count**
  Carry out bird count in designated count areas.

15. DRAINS and TIDE GATES (DAILY and TRIGGER EVENTS)

These checks are to be completed daily by Car 17 during the "E" shift and in addition if the following events occur by Car 17 "E" or "L" shift:

- High tide event or
- Rain

- **Drains Clear**
  Check that there is no obstructions and that booms are in place and serviceable.

- **Drains no hydrocarbons**
  This inspection is to insure that there is no trace of fuel or other hydrocarbon based products in the drains and water ways.

- **Tide gates no obstructions**
  Check that there is nothing that will obstruct the operation and that gate can be fully deployed into it sealed position.

ANNEX 2

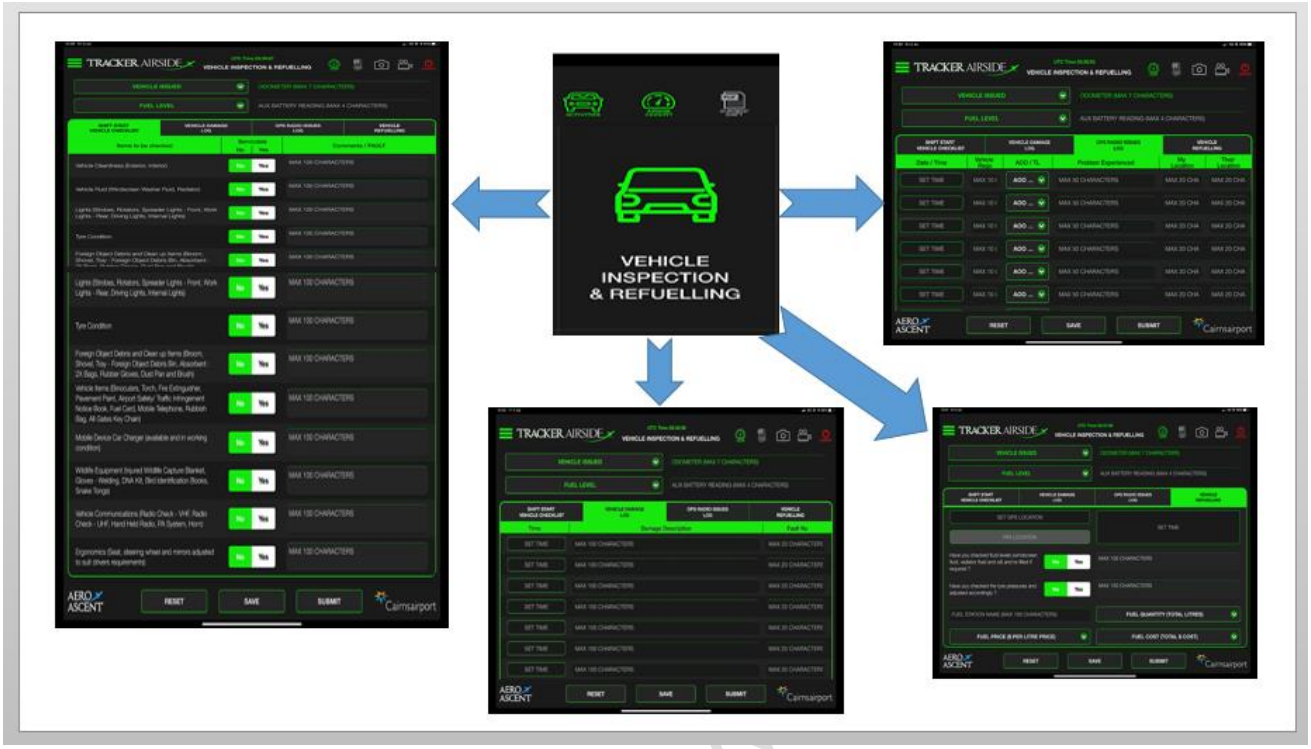
Aerodrome Serviceability Inspection Schedule (Tracker Airside)

Aerodrome serviceability inspections are recorded in the Tracker Airside application. The Airport Safety Officers enters details of deficiencies found and/or provides comments or a detailed report as appropriate. The Airport Safety Officers conduct routine serviceability inspections of the movement area, airfield lighting and the OLS. They work a 24-hour roster to ensure continuous monitoring and support the maintenance of airport serviceability

Tracker Airside Function	TIME	CAR 16		CAR 17	
		A SHIFT	P SHIFT	E SHIFT	L SHIFT
AIRSIDE SAFETY					
Shift Handover & Transistion (Sign on and read any handover notes)	Start of shift	1	1	1	1
Notice to Airmen (Read NOTAMS) Update if required	Start of shift	1	1	1	1
Vehicle Inspection & Refuelling	Start of shift	1	1	1	1
Spill Kit & Emergency Showers					
INTL - Spill Kits	Daily	1			
DOM - Spill Kits	Daily		1		
INTL - Emergency Showers	Sun			1	
DOM - Emergency Showers	Sun				1
Safety Initiative Inspections (sub section					
Use of Seatbelts	Daily	1	1	1	1
Use of Mobile Phones	Daily	1	1	1	1
Pedestrian Safety	Daily	1	1	1	1
Vehicle / Equipment Parking	Daily	1	1	1	1
GSE Unit Load Device Storage	Daily	1	1	1	1
AIRSIDE ACTIVITIES					
Runway Inspection					
Runway 15/33 HN - Before 1st RPT movement	Daily	1			
Runway 15/33 HJ - First Light	Daily	1			
Runway 15/33 HN - Before Dusk	Daily		1		
Runway FOD Inspection (mid morning / mid afternoon)	Daily	1	1		
Old Runway 12/30 (logbook entry only)	Daily			1	
Serviceability Inspection					
Taxiway B, B2, B3, B4, B5	Daily	1+	1+	1+	1+
Taxiway G, G2, G3	Daily	1+	1+	1+	1+
International Apron & Taxiway D	Daily	1+	1+	1+	1+
Domestic Apron & Taxiway C, C1, C2, C3, C4	Daily	1+	1+	1+	1+
GA Taxiways & Aprons	Daily	1+	1+	1+	1+
GA Terminal	Daily			1	1
Perimeter Fence	Daily	1	1	1	1
Drains and Tide Gates	Daily			1	
Bay Inspections					
Bay Routine Inspection	Daily	1+	1+	1+	1+
Bay Standards Inspection	Daily	1+	1+	1+	1+
Aircraft Turnaround Inspection	Daily	1	1	1	1
Driver Behaivour & Equipment Inspections					
Airside Driver Behaviour Observations	Daily	1	1	1	1
Motorised equipment Inspection	Daily	1	1	1	1
Wildlife Management					
Wildlife Patrol	Daily	1	1	1	1
Wildlife Harassment & Cull	Daily	1+	1+	1+	1+
Widlife Routine Count (If no bird shift)	Sun			1	
Widlife Strike	Daily	1	1	1	1
Wildlife Observation: ZONE 8 - Adventure Park (if no bird shift)	Daily			1	1
Foreign Object Debris & Spill Treatment					
FOD Inspections (Bays/Aprons etc.)	Daily	1+	1+	1+	1+
Escorts, Engine Ground Running & Parking					
Parking - General Aviation Parking Charges	Daily			1	1
Escorts & engine Runs	Daily	1+	1+	1+	1+
Lighting & Visibility Inspection					
Sunset Movement Area Lighting Inspection	Sat		1		
Permanent Obstacle Area Lighting Inspection	Thurs/Sun				1
Lighting Inspection	Wed/Sat	1			
Maintenance & Capital Works					
Maintenance Requests	Daily	1	1	1	1
TRANSITION ACTIVITIES					
Administration - Shift Set Up & Sign Off	Daily		1		
Vehicle Cleaning	Sunday		1		1
Breaks	Daily	1	1	1	1

ANNEX 3

ASO Vehicle Pre-shift Checklist



ANNEX 4

ASA Letter of Agreement 561

ATS Interface Agreement between the Airport and Airservices Australia in respect of Cairns Airport

Letter of Agreement

LoA_561

Version 14

Effective 10 October 2019

Between: Airservices Australia (Airservices)/Northern Operations (Cairns Tower)
Cairns Airport

Authorised	Signature	Date
Robert Irwin Service Manager - Brisbane Airservices Australia		24/9/2019
Kate McCreery-Carr Chief Operations Officer Cairns Airport		20.09.19

This document remains valid until varied or terminated in accordance with the terms of this Letter of Agreement.

Ensure document is current before use

Change summary

LoA_561 Version 14: Effective 10 October 2019		
Clause number and/or title	**Change description**	**NRFC**
6.9	Reference to Airside Vehicle Control Manual	40583
7.1.1	Reference to ASO Vehicle identification, and Lighting works notification amendment to include 'Runway' Lights	
7.1.2	Editorial Changes	
8	Low Visibility Procedures amended as per Cairns Airport SOP's	
13.3	Sub Para 2 removed as per new template	
Appendix A1	Editorial Changes	

Table of contents

1 Purpose

This Letter of Agreement (LoA) is intended by Airservices Australia (Airservices) to meet the obligations under regulations 171.086 and 172.130 of the Civil Aviation Safety Regulations 1998 (Cth) (CASR) (MOS 3.1.1.1 g.) with effect from 16 August 2006.

This LoA reflects the agreement between the parties on operational issues (for which no consideration is provided).

2 Scope

This LoA sets out certain obligations each party may have to the other, and coordination arrangements between the parties, in relation to the provision of Air Traffic Control (ATC) services at Cairns Airport.

3 Contact details

Airservices and Cairns Airport (the Airport) will:

a. maintain and provide a current contact list to the other party that includes the names of and methods of contact for key personnel
b. notify the other party when any change in this list occurs.

4 General responsibilities

4.1 Airservices' obligations

a. Airservices will advise the Airport of the estimated time of arrival, aircraft type and departure point for all arrivals of:
    1. military aircraft
    2. aircraft diversions requiring the use of either the domestic or international Apron, as soon as details are known
    3. aircraft requiring the use of the international Apron not displayed on the Flight Information Display Screen
    4. any other aircraft information as requested by the Airport.
b. Airservices must pass on to the Airport any reports of hazardous chemical spills
c. If an evacuation of the Airport's AOC coordination control centre is required, Airservices will assist with the provision of suitable facilities for the reestablishment of basic Airport coordination functions
d. Airservices will provide Air Traffic Services in accordance with CASR Part 172.

4.2 The Airport's obligations

a. The Airport is responsible for airport inspections and will assist with any runway and associated lighting inspections
b. Where required by ATC, the Airport is responsible for conducting runway visibility assessments
c. The Airport is responsible for monitoring all non-Airport owned beacons and obstruction lights, and must report any unserviceability's to Airservices and their owners
d. The Airport must operate Cairns airport in accordance with CASR part 139.

5 Provision of information

Airservices and the Airport will:

a. share information that is considered to be safety critical to the airport's operation
b. notify the other party and work cooperatively to resolve issues that may attract adverse media attention or political interest.

The Airport will provide Airservices with a controlled copy of the Airport Operations Manual (AOM).

6 Airport operations

6.1 Airport works

The Airport must consult with Airservices:

a. on any activity or work that is proposed by or with the consent of the Airport that is on the airport and will affect the movement of aircraft, both on the ground and in the air
b. where the provision of ATC or the integrity of the facilities used to provide ATC may be affected:
    1. prior to public comment being sought where a development plan is proposed
    2. prior to approval being granted for works.

The Airport will immediately inform Airservices if they become aware of any activity or work that will or is likely to affect the provision of ATC services by Airservices and has not previously consulted with Airservices in relation to that activity or work.

The Airport must allow Airservices reasonable time to respond. Airservices will provide a response in a timely manner.

6.2 Time limited works

The parties must consult with each other to allow maintenance operations on the manoeuvring area. The Airport:

a. will endeavour to give Airservices a minimum of 24 hours notice for works which require entry into the runway or RWS
b. must ensure that a NOTAM providing advice of works is published at least six hours prior to the planned commencement time.

Time limited works including the operation of men and hand tools, grass mowing and other routine maintenance, which will not impact on aircraft operations, must be negotiated between Airservices and the Airport for a mutually agreeable time.

6.3 Changes to ATC service

Except where the proposed change to ATC services is unavoidable, Airservices will:

a. advise the Airport when there is any proposed change to procedures or level of service that may affect the day-to-day operation of the airport
b. provide the Airport with reasonable time to respond before making the changes
c. consult on any proposal to alter its facilities or procedures where that alteration may affect the installation or operation of the Airport's facilities
d. allow the Airport a reasonable time to respond.

6.4 Airport lighting systems

The Airport must consult with Airservices before carrying out repairs and maintenance work on its airport lighting network as found throughout the airport.

6.5 Airport access

Airservices will provide the Airport with access to runways and taxiways to carry out the following activities:

a. serviceability inspections
b. bird hazard inspections
c. lighting inspections
d. obstacle limitation surface checks
e. foreign object debris inspections
f. maintenance works.

6.6 Unserviceability

a. The Airport may close any of its facilities, including runways and taxiways, due to unserviceability or other factors affecting day to day operations

b. The Airport must advise Airservices of the closure as soon as practicable prior to the closure

c. Airservices may close any runway or taxiway, or part thereof, that is affected by a hazard that affects aircraft operations, without prior consultation with the Airport. These hazards include:

   1. an airport lighting failure
   2. a runway or taxiway pavement failure or
   3. an obstruction on a runway or taxiway.

d. Airservices will inform the Airport of any closure as soon as practicable

e. The parties will:

   1. advise each other of any fault it detects in the other party's property or facilities as soon as practicable
   2. publish a NOTAM for outages of its own facilities.

f. Airservices may publish a NOTAM on the Airport's behalf, but must advise the Airport that this has been done as soon as practicable.

6.7 Airport lighting

During ATC hours of operation, the Airport agrees that:

a. ATC staff may, by electronic means from the control tower:

   1. switch airport lighting on and off or
   2. adjust the airport lighting intensity.

b. it will only switch airport lighting on and off or adjust the intensity of airport lighting after agreement from ATC.

Where ATC hours are non-continuous, Airservices will:

c. set lights prior to closure in accordance with procedures published by the Airport in En Route Supplement Australia – ERSA (ATS-MAN-0038) or

d. refer any requests for a variation to the Airport.

6.8 Beacon and obstacle lights

a. Airservices will take reasonable care to ensure that the beacons and obstacle lights owned by Airservices and published in AIP DAP-East are kept in working order

b. The Airport must take reasonable care to ensure that the beacons and obstacle lights owned by the Airport and listed in the Cairns Airport Operations Manual which is available on the Cairns Airport website, are kept in working order.

6.9 Vehicle control procedures

Any airside vehicle control procedures must be documented:

a. in the Cairns Airport's Airside Vehicle Control Manual (AVCM)
b. in the vehicle control handbook or
c. by separate agreement between Airservices and the Airport.

Except in emergency situations, the Airport must consult with Airservices whenever changes to airside vehicle control procedures are proposed if they affect vehicle operations on the manoeuvring area of the airport.

6.10 Movement area control

a. Airservices acknowledges that the Airport may allocate aircraft parking positions on the airport or may authorise third parties to do so by lease, licence or other agreement in respect of dedicated terminal aprons
b. Airservices will consult with the Airport prior to ATC directing an aircraft to a parking position other than that allocated to it by the Airport or an authorised third party
c. Airservices will ensure that ATC clearances and approvals are in accordance with procedures or requirements notified by the Airport.

6.11 Animal control operations

Airservices will advise the Airport when they are aware of the presence of wildlife on and around the airport which may represent a threat to safe aircraft operations.

6.12 Airspace management

Airservices will:

a. consult with the Airport regarding any proposal to vary the airspace management arrangements in respect of the airport
b. consider any proposal, suggestion or comment put forward by the Airport in response to the proposal.

6.13 Mutual obligations

a. The Airport and Airservices will consult on possible methods to increase the capacity of the airport
b. Neither party may introduce measures that would reduce the capacity of the airport without consulting the other.

7 Blanket approval for operations on portions of the manoeuvring area

7.1 ATC notification not required

Airport Safety Officers (ASO's) approved by the Airport may operate on the manoeuvring area without notifying ATC, unless specified otherwise in this LoA. (see Appendix A).

7.1.1 Conditions

The vehicle and/or driver must:

a. be a twin cab utility, station wagon or van marked with the 'Cairns Airport' logo and identified as a dedicated ASO Vehicle
b. be equipped with a serviceable amber rotating or flashing beacon
c. be equipped with a serviceable radio capable of two way communication on ATC ground frequency 121.7 MHz
d. remain outside of the gable marked areas of the runway strip
e. remain outside all localiser and glide path Vehicle Critical Areas (see Appendix B)

Note: A clearance to enter RWY 15/33 does not include a clearance to enter localiser and glide path Vehicle Critical Areas.

f. ensure that the radio receiver is functioning prior to entering the manoeuvring area
g. maintain a continuous listening watch on the ATC Ground frequency 121.7 MHz
h. have the flashing or rotating beacon switched on while operating on the manoeuvring area
i. visually observe all aircraft movements, including helicopter air taxi operations
j. give way to, or move clear of, all moving aircraft including those under tow
k. respond to any call from ATC and follow any subsequent ATC instructions
l. notify ATC before any maintenance of runway or taxiway lighting is undertaken.

7.1.2 Suspension of blanket approval

ATC may suspend this blanket approval by notifying the ASO and making a general broadcast:

'ALL VEHICLES, BLANKET APPROVAL ON THE MANOEUVRING AREA SUSPENDED ACKNOWLEDGE'.

On receipt of this advice, drivers must:

a. advise ATC of their position on the manoeuvring area
b. obtain a specific approval from the tower/ground to enter the manoeuvring area
c. comply with ATC instructions.

If unable to contact ATC, the driver must vacate the manoeuvring area without delay.

8 Low Visibility Procedures (LVP)

8.1 Implementing LVP

To facilitate unrestricted operations for as long as possible whilst weather conditions deteriorate, and to minimise delay, a staged implementation process will be utilised.

LVP Stage 1

a. runway visibility reduces to 2000m or less, or
b. cloud ceiling is 500ft or less, or
c. As required by ATC.

LVP Stage 2

a. runway visibility reduces to 1000m or less, or
b. cloud ceiling is 300ft or less, or
c. As required by ATC.

LVP Stage 3

a. runway visibility reduces to 800m or less, or
b. As required by ATC.

8.1.1 ATC and Cairns Airport requirements

The ASO must be contactable by either VHF radio or mobile phone. Do not declare LVP in force until Cairns Airport has advised that preparations as detailed below are completed.

LVP Stage 1

a. Closure of Northern Perimeter Road, and
b. All works airside to cease and all personnel, plant and equipment to be moved off the manoeuvring areas.

LVP Stage 2

a. Cancellation of all Blanket Clearances, and
b. Provide ASO for assessment of Runway Visual Range

LVP Stage 3

a. Only one Aircraft permitted on Manoeuvring area at a time, and
b. ASO's are to conduct patrols of the International, Domestic and General Aviation Apron's in order to mitigate unauthorised vehicles or persons inadvertently enter the manoeuvring area.

8.2 Runway visibility assessment procedures

8.2.1 Arrivals

If visibility is equal to or less than 1000 m, ATC may request ASOs to:

a. conduct runway visibility assessments from the 1000 FT touchdown marker of the duty runway
b. advise ATC the runway visibility distance in terms of metres visible from the 1000 FT touchdown marker of the duty runway
c. vacate the runway when instructed
d. report vacated.

8.2.2 Departures

If the visibility is equal to or less than 1000 m, ATC may request ASOs to:

a. conduct runway visibility assessments from the threshold of the duty runway
b. advise ATC the runway visibility distance in terms of metres visible from the threshold of the duty runway
c. vacate the runway when instructed
d. report vacated.

9 Provision of essential services

a. Airservices and the Airport agree that they may provide standby power facilities to the other party. Unless covered by another agreement, one party must give the other party 12 months written notice, where practicable, that a standby power facility will be withdrawn
b. The Airport may facilitate access for Airservices to essential services, such as electrical power, water supply and sewerage. Where this is the case, the Airport must provide Airservices with:
    1. advance notice of any maintenance activity or other potential disruption of these essential services which will be undertaken or caused by it
    2. immediate notification and regular and appropriate updates about the actions being taken, and the expected time, for restoration of services, where known.

10 Air Traffic Control – business continuity facilities

10.1 Business continuity facilities

In the event that ATC services cannot be delivered from the Cairns control tower as a result of an abnormal event, the Chief Executive Officer of Cairns Airport, agrees to assist by providing access to, or establishment of, suitable facilities for the provision of temporary control tower services.

10.2 Review

Where the situation is expected to be long term, the Northern Operations Manager of Airservices and the Chief Executive Officer of Cairns Airport will review the situation taking into account the circumstances at the time.

11 Airport committee memberships

11.1 Airport responsibility

The Airport must invite a representative of Airservices to sit on:

a. any committee the deliberations of which will affect ATC operations at the airport
b. the Airport Emergency Committee
c. the Airport Security Committee where established, subject to approval by the Department of Infrastructure and Transport
d. the airport environment consultative committee, where established.

11.2 Airservices responsibility

Airservices and their representative will:

a. protect the confidentiality of any information of the Airport of which they become aware during or in relation to the deliberations of a committee
b. upon receiving reasonable notice, assist the Airport in facilitating any Airport emergency exercise.

11.3 Airservices committees

Airservices must invite a representative of the Airport to sit on:

a. any committee the deliberations of which will affect airport operations
b. a local runway safety committee, where established.

12 Access and security

a. Airservices must comply with access and security provisions of any airport security program as determined by the Airport
b. The Airport must allow reasonable access to Airservices facilities.

13 Miscellaneous

13.1 Costs

Each party must bear its own costs in performing this LoA.

13.2 Variation

No variation or amendment to this LoA will apply unless:

1. it is in writing, authorised by each party to this LoA and
2. results in a new version of this document.

13.3 Termination

Either party may terminate this LoA by providing the other party with advance written notice of the termination date.

13.4 No legal effect

This LoA is not intended to create any legal rights or obligations as between Airservices and Cairns Airport.

14 Definitions

In this LoA, the following definitions apply:

Term	Definition
Airport Emergency Committee	A committee established to deal with emergencies and organise training and other preparation for emergencies at the airport.
Airport Lighting	Means: • Runway lighting • Precision Approach Path Indicator (PAPI) • Approach lighting (HIAL) • Taxiway lighting • Runway End Identification Lights • Illuminated wind indicator • Aerodrome beacon • Movement Area Guidance signs • Runway Guard lights • Cables • Control unit • Switches.
Airport Security Committee	The Airport Security Committee established under section 22ZB of the Air Navigation Act 1920 (Cth).
Apron	A defined area on a land aerodrome, intended to accommodate parked aircraft for purposes of loading or unloading passengers, mail, cargo, fuelling, parking or maintenance.
Manoeuvring Area	That part of the aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding the Apron.
MOS	Manual of Standards
Movement Area	That part of an aerodrome to be used for the take-off, landing, taxiing and parking of aircraft, consisting of the manoeuvring area and the apron(s).
NOTAM or Notice to Airmen	A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.
Vehicle Critical Area	The areas identified by the diagrams contained in Appendix B
Will	Future state, a mandatory requirement not for immediate application.

Appendix A Phraseology and clearances

A.1 Phraseology

The standard phraseologies contained within this schedule must be used between vehicles and pedestrians operating on the aerodrome and the control tower.

Note: Standard phrases reduce the risk of misunderstanding between parties and maintain brevity.

The key executive words that must be used and read back are: 'CROSS', 'ENTER', 'HOLD SHORT', 'VACATE' and 'VACATED'.

Circumstance	Phraseologies
Example 1: Vehicle requesting to cross a runway	
Vehicle requesting to cross a runway	CAIRNS GROUND, CAR SIXTEEN AT ALPHA 2 REQUEST CROSS RUNWAY ONE FIVE.
ATC response	CAR SIXTEEN, CAIRNS TOWER AT ALPHA 2, CROSS RUNWAY ONE FIVE or CAR SIXTEEN HOLD SHORT RUNWAY ONE FIVE.
Vehicle read back	AT ALPHA 2 CROSS RUNWAY ONE FIVE CAR SIXTEEN or HOLD SHORT RUNWAY ONE FIVE CAR SIXTEEN.
Example 2: Vehicle requesting to enter a runway	
Vehicle requesting to enter a runway	CAIRNS TOWER, CAR SIXTEEN AT THE ONE FIVE THRESHOLD REQUEST ENTER RUNWAY ONE FIVE FOR RUNWAY INSPECTION.
ATC response	CAR SIXTEEN ENTER RUNWAY ONE FIVE or CAR SIXTEEN HOLD SHORT RUNWAY ONE FIVE.
Vehicle read back	ENTER RUNWAY ONE FIVE CAR SIXTEEN or HOLD SHORT RUNWAY ONE FIVE CAR SIXTEEN.
Example 3: Vehicle requesting to enter a runway	
Vehicle requesting to enter a runway	CAIRNS TOWER, CAR SIXTEEN AT BRAVO 4 REQUEST ENTER RUNWAY ONE FIVE WITH SURVEYORS BETWEEN BRAVO 4 AND BRAVO 5 FOR APPROXIMATELY FIFTEEN MINUTES, TWO MINUTE RECALL.
ATC response	CAR SIXTEEN ENTER RUNWAY ONE FIVE or CAR SIXTEEN HOLD SHORT RUNWAY ONE FIVE.
Vehicle read back	ENTER RUNWAY ONE FIVE CAR SIXTEEN

Circumstance	Phraseologies
	or HOLD SHORT RUNWAY ONE FIVE CAR SIXTEEN.
Example 4: Vehicle requesting to enter the runway strip with men and hand tools	
Vehicle requesting to enter the runway strip with men and hand tools	CAIRNS TOWER, CAR SIXTEEN AT BRAVO 2 REQUEST MEN AND HAND TOOLS ENTER RUNWAY ONE FIVE STRIP UP TO THE RUNWAY EDGE EASTERN SIDE FOR ONE HOUR, IMMEDIATE RECALL.
ATC response	CAR SIXTEEN, CAIRNS TOWER MEN AND HAND TOOLS APPROVED TO ENTER RUNWAY ONE FIVE STRIP REMAINING CLEAR OF THE RUNWAY.
Vehicle read back	"MEN AND HAND TOOLS APPROVED TO ENTER RUNWAY ONE FIVE STRIP REMAIN CLEAR OF THE RUNWAY CAR SIXTEEN."
Example 5: Vehicle requesting to enter the Vehicle Critical Area	
Vehicle requesting to enter the Vehicle Critical Area	CAIRNS TOWER, CAR SIXTEEN AT THE NORTHERN PERIMITER ROAD REQUEST ENTER RUNWAY THREE THREE LOCALISER VEHICLE CRITICAL AREA.
ATC response	CAR SIXTEEN, CAIRNS TOWER, ENTER RUNWAY THREE THREE LOCALISER VEHICLE CRITICAL AREA.
Vehicle read back	ENTER RUNWAY THREE THREE LOCALISER VEHICLE CRITICAL AREA CAR SIXTEEN.
Example 6: ATC instructing a vehicle to vacate a runway	
ATC instructing a vehicle to vacate a runway	CAR SIXTEEN, CAIRNS TOWER VACATE RUNWAY (runway No.).
Vehicle response	VACATE RUNWAY (runway No.) CAR SIXTEEN.
When the vehicle has vacated	CAIRNS TOWER, CAR SIXTEEN VACATED RUNWAY (runway No.).

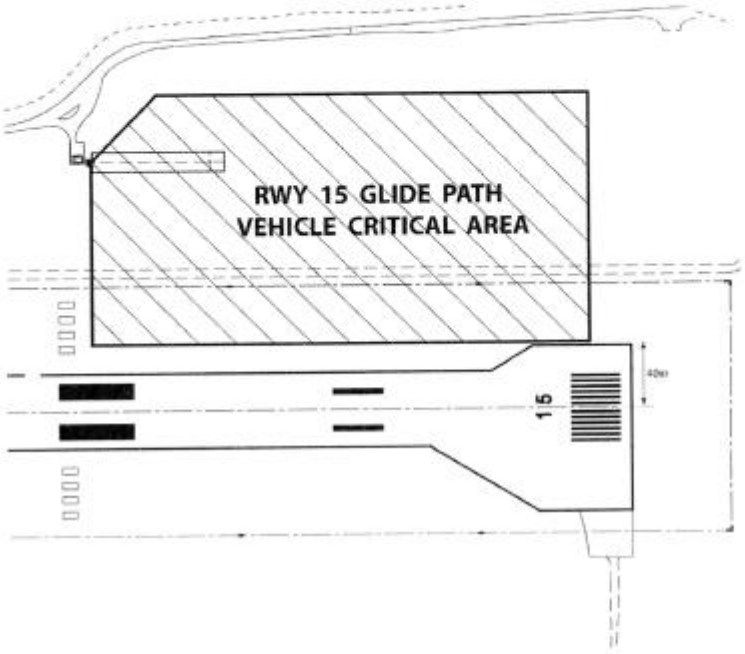
A.2 Clearances

a. A clearance to enter a Vehicle Critical Area from outside the Runway Strip (RWS) does not include a clearance to enter the RWS

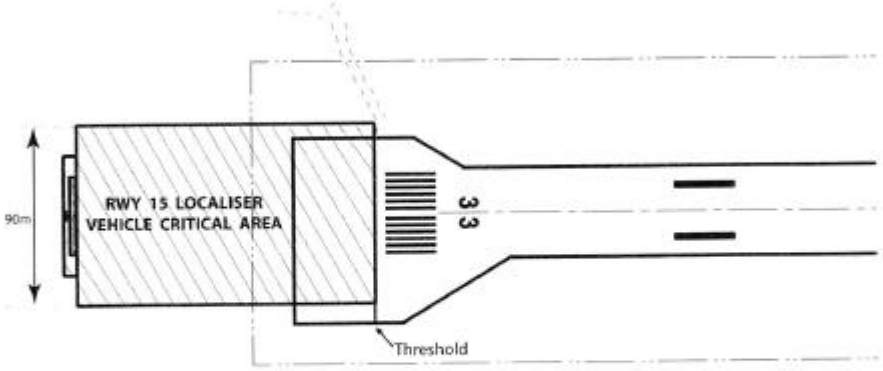
b. A vehicle that has reported vacated a runway or portion of the movement area for which a clearance to enter has been issued by ATC, must obtain a new clearance from ATC prior to re-entering that runway or area. If doubt exists with any aspect of a clearance issued by ATC, the vehicle must not proceed until clarification is received.

Appendix B Critical areas

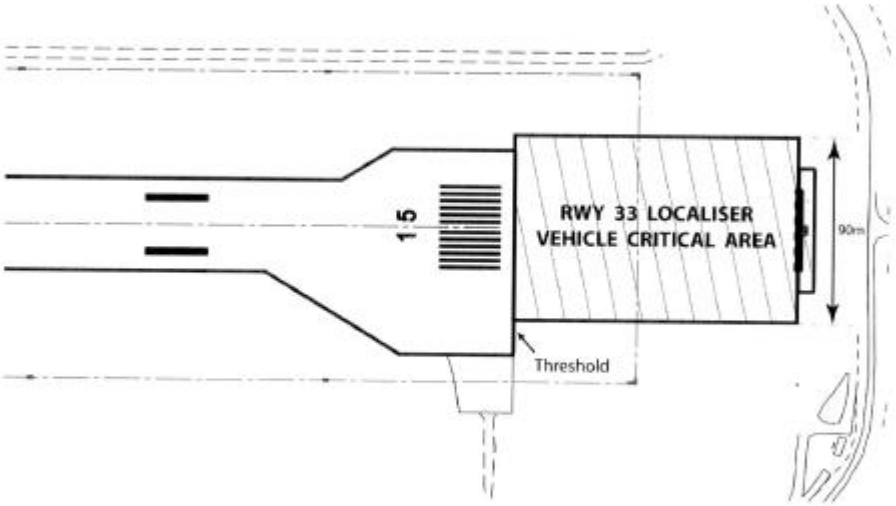
B.1 RWY 15 Glidepath Vehicle Critical Area



B.2 RWY 15 Localiser Vehicle Critical Area



B.3 RWY 33 Localiser Vehicle Critical Area



PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 07	AERODROME TECHNICAL INSPECTIONS

Contents

7.1 PURPOSE

This Section details the Technical Inspections that Cairns Airport is obliged to undertake and provides particulars of the manner in which these inspections are conducted.

Airport Technical Inspections are conducted to ensure the timely detection of any deterioration to facilities, assets, systems and/or networks that could lead to conditions that are unsafe for aircraft operations. They are intended to detect any problems that are not likely to be noticed during routine serviceability inspections, but may nevertheless have longer-term safety implications.

NOTE
The process of reporting on the findings of inspections and surveys to AIS and to the aviation industry via the NOTAM system is addressed in Part 2 Section 4 “Aerodrome Reporting”.

7.2 REFERENCES

Civil Aviation Safety Regulation 139.165 requires the operator of a certified aerodrome to ensure that the physical characteristics of the movement area comply with the standards specified by CASA in the Manual of Standards Part 139 – Aerodromes.

Civil Aviation Safety Regulation 139.160 requires the operator of an aerodrome whose aerodrome information is published in AIP to take all reasonable measures to detect and report on new obstacles as quickly as possible

Civil Aviation Safety Regulations 139.230, 139.235 and 139.240 describe the types of Technical Inspections that must be completed, that the inspections must be completed at intervals not exceeding twelve (12) months and the qualifications required by the inspectors of pavements and drainage systems, the electrical facilities, and the obstacle limitation surfaces.

7.3 RESPONSIBILITIES

Head of Aviation is responsible for:

- Ensuring that the Aerodrome Technical Inspection of Cairns Airport is appropriately funded and resourced.

Manager Aerodrome is responsible for:

- Ensuring that the Technical Inspections required by CASA are undertaken in accordance with CASA standards.
- Ensuring that they are conducted in an appropriate manner at the required frequencies.
- Ensuring that they are undertaken by suitably qualified staff as detailed in CASR Part 139.

- Ensuring that the results and corrective actions from the technical inspections are appropriately recorded as Annual Technical Inspections Reports.

Aerodrome Safety and Compliance Manager is responsible for:

- Coordinating an instrument survey of the approach and takeoff surfaces by a qualified surveyor every year.
- Coordinating a Type A instrument survey by a suitably qualified surveyor (approximately every two years).
- Coordinating Technical inspections.

Aerodrome Operations and Emergency Manager is responsible for:

- Coordinating the Airport Safety Officer participation in technical survey inspections.
- Participate in the technical inspection of airside movement areas.
- Facilitate the bi-annual runway walks.
- Participate in the technical inspection of airside movement areas.

Head of Infrastructre is responsible for:

- Providing advice to Cairns Airport on pavements and drainage systems.
- Providing pavements and drainage annuall reports as required during technical inspections.
- Ensure the coordination of the bi-annual runway walks.

Airside Infrastructure Manager is responsible for ensuring that at least once every twelve (12) months:

- A Technical Inspection of the Aerodrome Ground Lighting and electrical reticulation systems is undertaken by an appropriately qualified electrical engineer or electrician.
- Electrical testing of any earthing points is completed.
- That the results and any associated corrective actions are recorded in an Aerodrome Technical Inspection Report.

Landside Infrastructure Manager is responsible for:

- Ensuring that pavements and drainage systems are regularly monitored and repaired in accordance with CASA requirements.
- Records of repairs carried out to pavements and drainage systems are maintained.

NOTE
The names and contact telephone numbers of persons with responsibilities for Airport Technical Inspections are detailed in the Master Contacts List in the "Aerodrome Administration" section of this Manual.

7.4 TECHNICAL INSPECTIONS

The Technical Inspection shall include the following:

(a) An instrument survey of the approach, take-off and transitional surfaces.

(b) An inspection and testing of the airfield lighting and electrical reticulation systems, including the PAPI system.

(c) A civil engineering inspection and assessment of:
- The movement area pavements; and
- The movement area drainage systems.

(e) An inspection of signs on the movement area.

(f) An inspection of facilities used for:

- aerodrome emergencies;
- the handling of hazardous materials;
- bird and animal hazard management; and
- stand-by and emergency aerodrome lighting.

(g) An inspection of the airside vehicle control arrangements; and

(h) A check of the currency and accuracy of:
- aerodrome information published in AIP; and
- aerodrome operating procedures specified in the Cairns Aerodrome Operations Manual.

The inspections do not have to be conducted concurrently, however each facility to be inspected must be inspected at intervals not exceeding twelve (12) months.

The Technical Inspection of the runway surfaces must confirm that the texture standard published in the Manual of Standards Part 139-Aerodromes Section 6.2.9.1A is being met.

7.5 TECHNICAL INSPECTORS

The qualifications of the persons conducting the technical inspections must comply with the following:

- The movement area, other pavements and drainage must be inspected by a person who has a recognised degree, diploma or certificate in civil engineering or appropriate technical experience;
- The lighting and electrical facilities must be inspected by an electrical engineer or a licensed airport electrician; and
- The obstacle limitation surfaces must be inspected by a person who is technically qualified or experienced in surveying, and has a sound knowledge and understanding of the standards and survey procedures for obstacle limitation surfaces.

The Manager Aerodrome will ensure that persons with appropriate qualifications and experience complete items (a) to (h) of the Technical Inspection, as defined in Section 7.4 above.

7.6 TECHNICAL INSPECTION REPORTS

Each Technical Inspection report shall include recommended Corrective Actions to address any non-compliance with the appropriate standards or any identified procedural issues. Any Corrective Actions that are not accepted by Cairns Airport must be supported by documentation to demonstrate that the recommendation has been addressed.
The Manager Aerodrome shall ensure that each Corrective Actions is completed, either by implementation or rejection, and that appropriate documentation is maintained.

The Aerodrome Safety and Compliance Manager shall maintain a copy of each report on file for at least three (3) years.

NOTE
The approved Surveyor will provide the Aerodrome Safety and Compliance Manager with a copy of the survey information in order that any necessary amendments to the data published in the AIP and in Part 3 of this manual may be completed.

7.7 PAVEMENT FRICTION MEASURING

The Runway 15/33 pavement friction measurement is conducted every two (2) years or as required, using an ICAO accepted continuous friction measuring device. The regular testing is to identify areas of the runway pavement that may require maintenance or special surface treatment, before the surface conditions deteriorate significantly.

Runway 15/33 will be evaluated after resurfacing to determine the wet runway surface friction characteristics. A NOTAM will be issued when measurements fall below the standard as per Manual of Standards Part 139 - Aerodromes.

The CASA friction criteria for a variety of testing equipment are defined in the Manual of Standards Part 139 – Aerodromes Chapter 10.15.

7.8 SPECIAL INSPECTIONS

Special technical inspections may be conducted by Cairns Airport Technical Officers when:

- Airport serviceability inspections indicate that a more detailed technical inspection is needed;
- OLS obstacles are detected;
- Notification of a possible unsafe situation is received; or
- Severe weather has caused damage and dictates further inspection.

Inspections related to the above may involve Cairns Airport staff who will record the findings and arrange for appropriate remedial actions.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 08	AERODROME WORKS SAFETY

Contents

8.1 PURPOSE

This Section details the procedures in place at the airport for the planning and safe conduct of works that affect the aerodrome movement areas or the adjacent airspace.

8.2 REFERENCES

CASR Part 139.130 requires the operator of a certified aerodrome to appoint Works Safety Officer for Aerodrome Works.

CASR Part 139.135 requires that whenever time-limited works are being carried out the operator of a certified aerodrome must ensure that a person who has been trained to perform the function of a works safety officer performs that function for those Works.

CASR Part 139.245 requires the operator of a certified aerodrome to ensure that any Aerodrome Works at the Aerodrome are carried out in a way that does not create a hazard to aircraft, or confusion to pilots.

MOS Part 139 Chapters 10.10, 10.11 and 10.12 provide guidance in aerodrome works safety.

Airservices Letter of Agreement 561 outlines the interface agreement between Cairns Airport and Airservices in relation to the conduct of movement area works including communications with ANS.

8.3 RESPONSIBILITIES

Manager Aerodrome is responsible for:

- Ensure the preparation and issue of NOTAM's associated with Aerodrome Works;
- Ensure the preparation of all MOWP's and amendments to MOWP's prior to issue;
- Ensuring that all "Aerodrome Works" are planned, approved and executed to prevent any hazard or confusion to operators;
- Ensure that the works are planned and implemented so as to not create a hazard to aircraft operations, and that any impact on aircraft operations is minimised

- Facilitate discussion (as necessary) regarding the proposed work with relevant Cairns Airport staff, aircraft operators and aviation industry representatives that may be affected by the work;

- Ensure all resouces and staff that are required are sourced and aviliable;
- Ensure WSOs coverage is available for the duration of works;

Aerodrome Safety and Compliance Manager is responsible for:

- Determining whether a proposed work activity on the airport is an "aerodrome work" within the meaning with MOS Part 139 - Aerodromes;
- Determining whether or not a Method of Working Plan (MOWP) is required in respect of the work;
- Review and/or approvie all MOWP's and amendments to MOWP's prior to issue;
- Provide technical advice and input regarding standards and aviation safety matters.

Aerodrome Operations and Emergency Manager is responsible for:

- Oversight of works and ensure that works are being conducted in accordance with the MOWP;
- Ensure WSOs coverage is available for the duration of works;
- Ensure that any necessary MOWP is prepared and distributed according to the current distribution list;
- Ensure that the MOWP distribution list is current and relevant;Audit "Aerodrome Works" to ensure they are being conducted in accordance with the relevant MOWP;
- As required, assist with the preparation and issue of NOTAM's associated with Aerodrome Works.

Aerodrome Operations Supervisor is responsible for:

- Ensure that appropriate Works Safety Officers (or persons able to carry out WSO functions in the case of Time Limited Works) are allocated to the works;
- The implementation and oversight of Aerodrome Works in accordance with these procedures
- Ensure that the agreed works plans are adhered to and any requested changes to the works are approved by the Aerodrome Safety and Compliance Manager or Delegate; and
- As required, assist with the preparation and issue of NOTAM's associated with Aerodrome Works.

Works Project Manager shall:

- Ensure that any changes to the agreed works plan are approved by the Manager Aerodrome or delegate;
- Ensure that the Aerodrome Operations and Emergency Manager is advised of daily works plans to ensure that appropriate Works Safety Officer resources are available; and
- In consultation with the ASO/WSO, ensure that any contractors are fully briefed on their responsibilities and restrictions when working on the movement area of Cairns Airport .

Works Safety Officer / Airport Safety Officers (when nominated as Works Safety Officers) shall:

- Ensure the safe conduct of aerodrome works;
- Ensure the safety of aircraft operations during Aerodrome Works;
- Ensure that the contractor has been provided with a safety briefing prior to the works commencing;
- Ensure that work is carried out in accordance with agreed works plan;
- Inform the Aerodrome Operations and Emergency Manager or Aerodrome Safety and Compliance Manager of any changes to the works plan; and
- Ensure that all relevant duties as detailed in MOS Part 139 - Aerodromes Chapter 10 Section 10.12 are performed in accordance with CASA standards.

NOTE
Individual MOWP may stipulate additional specific tasks for which the Works Safety Officer will be made responsible.

The names and contact details of persons with responsibilities for Aerodrome Works Safety are detailed in Part 2 Section 4 Annex 1 Reporting officers. The project specific names and contact details will also be provided in each MOWP document.

8.4 AERODROME WORKS

All aerodrome works will be conducted under the supervision and control of a nominated Cairns Airport Works Safety Officer, whose functions are detailed in MOS Part 139 Section 10.12.

Aerodrome works may be conducted in a number of ways, depending on the characteristics and magnitude of the works and/or the circumstances that demand the work to be carried out. For these reasons, aerodrome works may be categorised as:

Planned Works, comprising**:**

- Time limited works (during which there are no disruptions to normal aircraft operations);
- Works on runway strips (during which the runway remains operational);
- Works subject to a MOWP (during which a portion or portions of the movement area are closed to aircraft operations or during which runway declared distances may be reduced); and
- Unrestricted works (during which the whole airport is closed to aircraft operations).

Emergency Works (i.e. Unplanned Works), made necessary at short notice in order to:

- Re-instate an unserviceable or deteriorated portion of the movement area; or
- Remove (or compensate for the presence of) an unplanned temporary obstacle.

The conduct of these various types of aerodrome works is governed by specific conditions stipulated by MOS Part 139 - Aerodromes Section 10.10. Airservices Letter of Agreement 561 also stipulates certain conditions under which movement area works will be permitted. A copy of LOA 561 can be found at Part 2 Sect 6 Annex 4.

Cairns Airport shall carry out all aerodrome works in accordance with the CASA requirements.

8.5 TIME LIMITED WORKS

Time limited works, comprise works that can be carried out such that normal operational standards may be restored in not more than 30 minutes. (Refer to MOS 139 – Aerodromes Section 10.10.3) Typical Works include:

- Maintenance of markers, markings and lighting.
- Grass cutting within movement areas and the OLS.
- Sweeping.
- Minor repairs to movement area pavements.
- Surveys, inspections, etc. on (or adjacent to) movement areas.

As required by CASA, and unless otherwise agreed by ANS, Cairns Airport will conduct Time Limited Works subject to the following Conditions:

- Works that need more than 10 minutes in which to restore normal safety standards (recall time) will be notified (by NOTAM) at least 24 hours beforehand.

- Works will cease (and normal safety standards restored) when necessary to allow an aircraft to operate at least five (5) minutes before the scheduled or notified time of an aircraft operation.
- Works that have ceased to permit aircraft operations to take place will be resumed:
  - immediately after the aircraft arrival (inbound aircraft).
  - 15 minutes after the aircraft departure (departing aircraft).

All Time Limited Works shall be coordinated through the Aerodrome Operations Supervisor or (after hours) the duty Airport Safety Officer, who will consult with ANS and issue NOTAMS as required.

8.6 WORKS WITHIN RUNWAY STRIP

Under specified conditions, works may be undertaken within a runway strip while the runway remains available for normal operations.

These works are normally confined to runway lighting maintenance and associated trenching for electrical conduits, cables, the maintenance of PAPIs and mowing of runway strip areas.

Cairns Airport will conduct Works within the runway strip in accordance with CASA and Airservices requirements (refer MOS Part 139 – Aerodromes Section 10.10.12 and Airservices LOA 561) :

- Works will take place only on one side of the runway at any one time.
- Plant and/or vehicles will vacate the runway strip when aircraft are operating on the runway.
- Loose equipment and/or material likely to be affected by propeller or jet blast will be removed.
- Other materials that have to be left within the runway strip (e.g. soil, gravel, signs, lights, etc.) will not exceed a height of:
  - one (1) metre if within 23 metres of the runway or runway shoulder edge
  - two (2) metres if further than 23 metres from the runway or runway shoulder edge
- Machine cut trenches will not be wider than 100mm or longer than 280 metres.
- In the case of other than machine cut trenches, the works area at any one time will not exceed:
  - Nine (9) square metres if within 23 metres of the runway edge.
  - Eighteen (18) square metres if further than 23 metres from the runway edge.
- Where works take place close to navigational/landing aids within the runway strip, due care will be taken to ensure that such aids are not interfered with or damaged and that the performance of the aids will not be affected.
- Works close to Airservices ILS Localisers (and ILS Glide Slope) in designated vehicle critical areas can only be undertaken with ANS approval.
- A Works Safety Officer has control of the works and maintains continuous radio contact with the ANS on the nominated frequency.
- The runway surface is dry.

All work within runway strips including men and hand tools shall be coordinated through the Aerodrome Operations Supervisor or (after hours) the duty Airport Safety Officer, who will consult with ANS and issue NOTAMs as required.

8.7 METHOD OF WORKING PLAN (MOWP)

A MOWP is a document which provides formal advice to the aviation industry (and other involved parties) regarding the planned arrangements for conducting Aerodrome Works, other than time limited works, that will affect normal aircraft operations. In particular, a MOWP advises of restrictions placed on aircraft operations and on the organisation/s carrying out the works.

When Cairns Airport is contemplating works requiring a MOWP, the Manager Aerodrome or delegate and the Project Manager will discuss the nature of the Works and determine desirable options (if any) for the conduct of the works. The Manager Aerodrome or delegate (in company with the Project Manager if necessary) will then consult with all relevant organisations, including:

- RPT Operators using the Airport;
- Airservices Australia (ANS / ARFF); and
- Any other organisations that may be affected by the proposed work.

Once in-principle agreement has been reached between Cairns Airport and airport users, the Aerodrome Operations and Emergency Manager will prepare a draft MOWP which will be provided to the Project Manager, the RPT Operators, ANS, other specific parties as required, and the Cairns Airport Safety Officers for initial comment. The draft MOWP will incorporate all requirements of MOS Part 139 – Aerodromes, Section 10.11.

Having incorporated relevant comments, the Aerodrome Operations and Emergency Manager will produce a final MOWP and email to the distribution list. For straight forward MOWP's that have little impact on aircraft operations the draft MOWP stage can be bypassed and a final MOWP issued as per the distribution list. Any subsequent amendments to the initial issue MOWP will be undertaken by fully reissuing the Revised MOWP as a complete document.

Cairns Airport recognises that Aerodrome Works, especially those that involve reduced declared distances on runways, will require Airline companies to make temporary amendments to operational documents for affected flights. For this reason, even though those Airlines will have been consulted in the MOWP preparation process, Cairns Airport will issue a MOWP at least 14 days before the work is to commence. If this target cannot be met, other formal notification of the MOWP contents will be provided to the relevant parties.

An MOWP distribution list and telephone contact details is stored on the Cairns Airport Contacts System and updated, as required.

8.8 UNRESTRICTED WORKS

An MOWP is not required if the whole Airport is closed to aircraft operations while the work (or a particular part of it) is being carried out.

Such an option will not normally be considered at Cairns Airport unless the impact of such a closure could be justified on the basis of overall benefit to the Airlines and/or other operators. For this reason, a total Airport closure due to Aerodrome Works would be a highly unlikely event at Cairns Airport.

8.9 UNPLANNED EMERGENCY WORKS

An MOWP is not required (nor would it be possible to prepare a MOWP in time) for the conduct of unplanned or emergency aerodrome works.

Such Unplanned Works could include:

- Repairs to unforeseen damage or deterioration to movement area surfaces; or
- The removal of an obstacle that was erected without Cairns Airport prior knowledge or approval.

Cairns Airport will arrange NOTAM action as early as possible in respect of such emergency works.

8.10 WORKS RELATED NOTAM TEXTS

As detailed in Part 2 Section 4, (sub-section 4.7) texts for complex NOTAM and NOTAM texts included in any MOWP, are prepared by either the Aerodrome Safety and Compliance Manager or the Aerodrome Operations and Emergency Manager. The wording, the relevant revised declared distances and any other data is then checked and signed off by both officers before details are promulgated.

In the absence of either of these officers the Aerodrome Operations Supervisor or an Airport Safety Officer may be engaged to check the NOTAM details.

For planned works requiring an MOWP, the NOTAM text will be included in the MOWP.

8.11 WORKS SAFETY OFFICER

The Aerodrome Operations Supervisor will arrange for a Works Safety Officer to be appointed to oversee, and ensure the safe conduct of all defined aerodrome works. The Works Safety Officer will normally be a Cairns Airport duty Airport Safety Officer.

Electrical Services staff have also received Works Safety Officer training (applicable for their role) and are approved to undertake Time Limited Works under their own supervision.

The functions of the Works Safety Officer are broadly described in MOS Part 139 - Aerodromes Section 10.12. Each MOWP will detail the duties of the Works Safety Officer relevant to the specific project.

8.12 MARKING AND LIGHTING

Those parts of the movement area that become unserviceable and any obstacles created by any Aerodrome Works will be lit and marked in accordance with the requirements set out in MOS Part 139 - Aerodromes Section 10.10.8.

Vehicles and plant used in carrying out aerodrome works will be of a conspicuous colour and be equipped with flashing lights (or will be escorted by vehicles so equipped) as required by MOS Part 139 - Aerodromes Section 10.10.8.

8.13 COMMUNICATIONS WITH ANS

During the conduct of Aerodrome Works, the Cairns Airport Works Safety Officer will be in continuous communication with Cairns ANS by two-way radio on either Ground (Surface Movement Control) frequency (121.7 MHz) or Tower frequency (124.9 MHz) as appropriate. Details of the required Airservices communications protocols can be found within Airservices LOA 561.

The Works Safety Officer will:

- At the commencement of works each day/night, notify ANS of the start time and duration of works and confirm that the conditions of the relevant NOTAM are being invoked

- Obtain from ANS the necessary clearances to enter those portions of the movement area to be closed for the works in order to:
  - lay out the appropriate markers/lighting; and
  - permit entry of works organisation personnel.
- Notify ANS of recall times (if applicable) and of any change in the status of the works.
- Obtain from ANS details of any anticipated early aircraft arrival times in order to ensure timely and appropriate restoration and evacuation of affected movement areas.
- Obtain from ANS details of all movements that may require a particular work restriction to be implemented.

In relation to works whose timing is critical, particularly at night when working to a recall time, the Works Safety Officer will consider monitoring the Approach frequency (118.4 MHz) in addition to the Ground and Tower frequencies.

NOTE

Cairns Airport recognises the importance of working closely with ANS staff in order to achieve safe and effective progress of aerodrome works.

8.14 PERMIT TO COMMENCE WORKS (PERCOW)

Cairns Airport has in place a management system in relation to all works that take place at the airport generally, in order to:

- Ensure an appropriate approval process;
- Notify required stakeholders; and
- Determine conditions under which the works can proceed safely.

With the exception of works undertaken by Cairns Airport staff and contractors undertaking period maintenance contract works for Cairns Airport, all Works (whether they be defined Aerodrome Works or not) are to be approved by the relevant Cairns Airport Manager by way of a Permit to Commence Works (PERCOW). The PERCOW system is a Cairns Airport management tool to ensure that no work may commence on Cairns Airport without a PERCOW being issued. For Aerodrome Works, a PERCOW may not be issued until a MOWP has been issued.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 09	AIRCRAFT PARKING CONTROL

Contents

9.1 PURPOSE

This Section details the arrangements in place at the Airport for the safe and efficient parking of aircraft.

9.2 REFERENCES

The Manual of Standards Part 139- Aerodromes, Section 6.5 provides information in regard to the design of aircraft parking positions and the associated clearance requirements.

The Manual of Standards Part 139 - Aerodromes, Section 8.5 provides details of apron markings and Section 9.16 provides details of apron floodlighting requirements.

The Manual of Standards Part 139 - Aerodromes, Section 9.17 provides the requirements for Visual Docking Guidance Systems.

Civil Aviation Order 20.9 specifies the precautions and clearances required in respect of aircraft fuelling activities, and operation of aircraft engines and ground radar.

AC 139-12 (0) Handling of Hazardous Materials on an Aerodrome provides guidance on the safe distances between explosive laden aircraft and a variety of aerodrome facilities.

Cairns Airport Terminal Operations Manual, incorporating apron bay allocation protocols for the international and domestic aprons.

9.3 RESPONSIBILITIES

Head of Aviation is responsible for:

- Overall responsibility for implementing aircraft parking control procedures at the Airport.

Manager Aerodrome is responsible for:

- The approval of airline ramp safety standard operating procedures to ensure compliance with CASA regulations,
- Ensuring parking areas and aircraft parking layout markings comply with associated charts and CASA standards including audits of apron areas;
- Ensure that the drafting, terminal operations and SITA staff maintain consistency of the the RMS compliance rules in relation to the domestic and international apron parking layout plans.

Aerodrome Safety and Compliance Manager is responsible for:

- The coordination and approval of the design and implementation of aircraft parking charts (and amendments) and the Resource Management System (RMS) compliancy rules;
- Developing specific Aircraft Parking Protocols;
- Ensuring that aircraft parking charts and associated pavements markings comply with CASA MOS 139 – Aerodrome standards;
- The approval of remote parking on the taxiway system;
- The approval of explosive transfer aircraft parking;
- Ensuring Pavement Concession and/or geometric assessment are undertaken so that any conditional approval can be issued to aircraft operators.
- Ensuring drafting office prepare and maintain the Pavement Marking Plans including assessment of aircraft suitability to use particular parking areas in accordance with MOS 139 – Aerodromes standards.
- Developing new or amended aircraft parking layouts in conjunction with the Drafting Office staff, and ensuring all amendments are updated in the RMS compliance rules; and

- **Aerodrome Operations and Emergency Manager** is responsible for:
- The active promotion and management of airside safety awareness; and
- Chairing the Cairns Airport Airside Safety Committee.

Manager Terminals and Security is responsible for:

- The development, implementation, maintenance, and review of the RMS.
- The overall planning and coordination of parking position allocation in accordance with ITB and DTB parking protocols through the RMS;
- Monitoring scheduling arrangements;

The development of the Cairns Airport Terminal Operations Manual incorporating the Apron Parking Protocols.

Aerodrome Operations Supervisor is reponsible for:

- Liaising with and monitoring airlines, ground handling companies, and other apron users to ensure the safe operation of aircraft and passengers on Cairns Airport apron areas, including the storing and parking of ground handling equipment and vehicles.

Airport Coordinators are responsible for:

- planning and coordination of parking position allocation in accordance with ITB and DTB parking protocols through the RMS;
- The day to day allocation and coordination of parking bays on the International and Domestic Aprons utilising the RMS and the Terminal Operations Manual, and itinerant high strength parking areas on the GA Apron;
- The coordination of parking requests for all adhoc and itinerant aircraft;
- The allocation of parking positions on the common user areas on GA aprons (usually on a "first come – first served" basis);
- The entering of bay allocations into the RMS and Flight Information Display System;
- The coordination (when necessary) of remote parking on the taxiway system;
- The coordination and approval of the ground running of aircraft engines; and
- Notifying ANS of any last minute changes to bay allocations.

Airport Safety Officers are responsible for:

- Monitoring aircraft aprons and Ground Service Equipment (GSE) parking areas for safety of aircraft, passengers and ramp staff;
- The provision of a "follow me" service for pilots unfamiliar with the airport layout;
- Monitor, report and take action, where applicable, on situations where safety may be compromised as a result of inappropriate aircraft and GSE parking;
- Ensure safety procedures associated with Ground Running of Aircraft Engines are followed; and
- Monitoring all works on or in the vicinity of aprons to ensure that all safety and security requirements are met.

NOTE:

- The names and contact telephone numbers of persons with responsibilities for Apron Parking Control are detailed in the Master Contact List in the "Aerodrome Administration" section of this Manual.
- All aircraft operators parking on the International and Domestic Aprons are required to appoint Ground Handling Agents who will be responsible for providing full services to respective aircraft.
- Although ANS have access to the FIDS, the Airport Coordinator is repsonsible for notifing ANS directly (phone) of any last minute changes to bay allocations.

9.4 AIRCRAFT MARSHALLING

Cairns Airport does not provide a marshalling service. Airlines and ground handling agents are required for to marshall all scheduled RPT and itinerant aircraft using International and Domestic Aprons and sections of the high strength General Aviation (GA) Aprons, except where NIGS are provided at parking positions.

The Duty Airport Safety Officer will, if requested, provide a "Follow Me" service for pilots requiring guidance to a particular parking position on the Airport.

9.5 AIRCRAFT PARKING AREAS

There are three (3) main Apron areas at the Airport, namely:

- International Apron (including the International General Aviation Apron IGAA);
- Domestic Apron;
- General Aviation Apron.

Plans of the apron areas are included in the annexes to this section of the manual.

All apron marking plan amendments shall be prepared by the appropriately trained Drafting Office staff in consultation with the sponsoring section, generally Aerodrome Operations. All apron marking plans shall be approved by the Aerodrome Safety and Compliance Manager or the Manager Aerodrome (or delegate) before issue and implementation.

Each Airline conducting passenger/aircraft operations from Cairns Airport Apron areas is responsible for the development, implementation and review of company specific Ramp Safety standard operating procedures. All Airline Ramp Safety SOP's must be submitted to Cairns Airport for prior approval. Airlines must ensure that sufficient resources are provided to ensure the safe movement of passenger to, from, across apron areas at all times.

Airlines, Ground Handling Companies and Fuel Companies are responsible for the correct parking and operation of GSE on apron areas. They shall ensure that:

- All GSE is operated and maintained in accordance with CASA CAO 20.9 requirements.
- GSE parking on aprons is restricted to essential equipment only so as to reduce apron congestion.
- All GSE when not in use is parked within designed apron Equipment Storage Areas or remote GSE storage areas.
- Only that GSE required for pre-positioning for an immediate aircraft arrival is permitted within the apron Equipment Clearance Areas.
- All GSE in use on a Bay must be kept within the equipment parking limit lines to prevent infringement of adjacent aircraft parking areas.

9.6 INTERNATIONAL APRON (Bays 1-7 and IGAA Bays 1C-1E)

General

The International Apron specifically facilitates international passenger arrivals and departures at the International Terminal and for the loading and unloading of International freight aircraft. For this reason, the apron is generally available only for international aircraft operations.

Cairns Airport will permit domestic aircraft operations on this apron only in exceptional circumstances, and subject to:

- Being able to achieve specific aviation security measures compliant with Department of Infrastructure and Regional Development Regulations; and
- Prior notification of the relevant Border Control Agencies.

The strength of the international apron pavement will permit unrestricted access by all Code E international airline aircraft (i.e. up to and including Boeing 747-400 type aircraft). Bay 1 has been designed to Code F clearance standard, Bays 2-7 to Code E clearance standard.

Bay Allocation

The International Terminal T1 is a common user facility and aircraft parking bays are allocated by the Cairns Airport Apron Coordinator in accordance with the Cairns Airport Terminal Operations Manual - Apron Bay Allocation Protocols.

The International Apron has seven (7) primary aircraft parking positions (bays), six (6) of which (Bays 1 - 6) are serviced by Aerobridges. Bay 7 is a "stand-off" position with no Aerobridges. A number of other aircraft types can be accommodated on secondary parking positions on this Apron (refer parking layout plans for further details).

The International General Aviation Apron located at the eastern end of the International Apron, has three (3) positions 1C, 1D and 1E and can accommodate following maxium size aircraftvides parking for:

- 1 x Dash 8 - 400
- 1 x Dash 8 – 300 / ATR72.
- 1 x GA aircraft (maximum wing span 12.7 metres).

Airport Coordination Australia coordinates "slot allocation" for Cairns Airport and provides Cairns Airport with advice of proposed international aircraft schedules six (6) months in advance.

The Cairns Airport, Airport Coordinator will:

- Determine bay allocation using advice from the Airline companies (and other relevant operators) in respect of their actual day's activities and applying Cairns Airport Apron Parking Protocols;
- Issue bay allocations daily using the RMS;
- Enter details of the bay allocations into the RMS and Flight Information Display System (FIDS) at least 12 hours prior to bay usage; and
- Alter bay allocations (as necessary) if notified of late changes to aircraft type or arrival/departure times.

Bay allocation details are displayed through the FIDS or passed directly to the pilot upon arrival using Airline company radio although late changes may be notified by ANS staff.

Itinerants and operators of "small" aircraft using the International Apron are required to liaise directly with the Cairns Airport, Airport Coordinator on VHF radio.

Engine Start and Push-back

Start-up and push-back approvals are provided by ANS. Power out operations are permitted from certain secondary parking positions.

The Aircraft Operators and/or Ground Handling Agents are responsible for ensuring appropriate wing tip and jet blast clearances are maintained during power out, push-backs and any subsequent pull forwards.

9.7 LINK APRON (Bays 8-12)

General

The Link Apron joins the International and Domestic Aprons and performs as a multi-use function supporting both domestic and international passenger and freight operations.

Cairns Airport will permit dual domestic and international aircraft operations on this apron provided that:

- All relevant aviation security measures compliant with Transport Security Program are met.
- Prior notification of the relevant border control agencies for any international operations proposed.

The strength of the Link Apron pavement will permit aircraft up to Code E aircraft (i.e. up to and including Boeing 747-400 type aircraft).

Bay Allocation

The International and Domestic Terminals are common user facilities and aircraft parking bays are allocated by the Cairns Airport Duty Airport Coordinator in accordance with the Cairns Airport Terminal Operations Manual - Apron Bay Allocation Protocols.

The Link Apron has five (5) primary aircraft parking positions (Bays). All positions are "stand-off" position with no Aerobridges. Bays 8 and 9 are Code D capable, Bay 10 is Code E, and Bays 11 and 12 are Code C. A number of other aircraft types can be accommodated on secondary parking positions on this Apron (refer parking layout plans for further details).

Airport Coordination Australia coordinates "slot allocation" for Cairns and provides Cairns Airport with advice of proposed international aircraft schedules six (6) months in advance.

The Cairns Airport, Airport Coordinator will:

- Determine bay allocation using advice from the airline companies (and other relevant operators) in respect of their actual day's activities and applying Cairns Airport Apron Parking Protocols;
- Issue bay allocations daily using the RMS;
- Enter details of the bay allocations into the RMS and Flight Information Display System (FIDS) at least 12 hours prior to bay usage; and
- Alter bay allocations (as necessary) if notified of late changes to aircraft type or arrival/departure times.

Bay allocation details are displayed through the FIDS or passed directly to the pilot upon arrival using Airline company radio although late changes may be notified by ANS staff.

Itinerants and operators of "small" aircraft using the International Apron are required to liaise directly with the Cairns Airport Airport Coordinator on VHF radio.

Engine Start and Push-back

Start-up and push-back approvals are provided by ANS, inconsultation with Cairns Airport. Power out operations are permitted from certain secondary parking positions.

The aircraft operators and/or ground-handling agents are responsible for ensuring appropriate wing tip and jet blast clearances are maintained during power out, push-backs and any subsequent pull forwards.

9.8 DOMESTIC APRON (Bays 13-23)

General

The Domestic Apron provides for the bulk of arrivals and departures in respect of passengers using the main domestic RPT services to and from Cairns. A number of smaller Charter Companies operate from the GA Apron areas on the western side of the Airport.

Particular bays on the Domestic Apron are also used by air freight operators employing large aircraft not suited to being accommodated in the GA Area.

Any use of the Domestic Apron for international operations will be considered by Cairns Airport, but will be approved only with the concurrence of the relevant border control agencies.

NOTE
Cairns Airport may seek to have particular international aircraft use the Domestic Apron on occasions (such as facilitating Aerodrome Works on the International Taxiways or Apron). In such cases, disembarking/embarking passengers would usually need to be transported airside to and from the International Terminal for normal passenger processing and baggage reconciliation.

The domestic apron pavement has been constructed such that Bays 18, 19 and 20 are of sufficient strength and geometry to accommodate all domestic Airline aircraft currently in service (i.e. up to and including Boeing 747-400 type aircraft). The remaining primary bays have been allocated to aircraft up to Code C aircraft types based on the pavement strength and clearances.

Bay Allocation

The Domestic Apron has eleven (11) primary aircraft parking positions. Five (5) positions, Bays 18, 19, 20, 21, and 22 are serviced by aerobridges. The remainder are standoff positions. Most Domestic Apron Bays also have secondary positions.

The Domestic Terminal is a common user facility and aircraft parking bays are allocated by the Cairns Airport, Airport Coordinator in accordance with the Cairns Airport Terminal Operations Manual - Apron Bay Allocation Protocols. The allocation of all bays is controlled by the duty Airport Coordinator.

Aircraft operators wishing to operate on the Domestic Apron are required to contact the Airport Coordinator for approval and bay allocation. Cairns Airport will consider requests for parking only from bona fide operations involving passenger or freight operations.

As with International operations, the Cairns Airport, Airport Coordinator will:

- Use information provided by the major airlines (e.g. daily “port operating plans” and advance details for schedules) and enter details of the bay allocations into the RMS and Flight Information Display System (FIDS) at least 12 hours prior to bay usage;
- Issue bay allocations daily using the RMS; and
- Alter bay allocations (as necessary) if notified of late changes to aircraft type or arrival/departure times.

Bay allocation details are displayed through the FIDS or passed directly to the pilot upon arrival using airline company radio although late changes may be notified by ANS staff.

Itinerant and non-RPT operators of aircraft using the Domestic Apron are required to liaise directly with the Cairns Airport, Airport Coordinator on VHF radio.

Engine Start and Push-back

Start-up and push-back approvals are provided by ANS. Power out operations are permitted from certain secondary parking positions.

Aircraft operators are required to delay engine starts on Domestic Bays 16-22 until push back clearance is available to prevent unnecessary delays to GSE travelling on the Rear of Aircraft Road.

The Aircraft Operators and/or Ground Handling Agents are responsible for ensuring appropriate wing tip and jet blast clearances are maintained during power out, push-backs and any subsequent pull forward.

9.9 GA APRON/S

The GA Aprons comprise a number of paved apron areas known as:

- Northern HLS
- GA Apron
- GA High Strength Aprons
- Old Tower Apron
- Cairns Airport Hangars Apron
- Southern HLS

The types of aircraft that may be accommodated on these individual areas vary according to the pavement strength and the physical dimensions of the aprons. The following weight restrictions apply on these various apron areas:

- The northern GA Apron is restricted to aircraft below 7,000 kg MTOW
- The Cairns Airport Hangar Apron is restricted to aircraft below 5,700 kg MTOW
- The Old Tower Apron can accommodate aircraft up to 23,000 kg MTOW
- The GA High Strength Aprons are capable of accommodating aircraft up to 90,000 kg MTOW

The GA Apron is a "Common User Apron" (with some leased parking) and is provided with light aircraft tie-down cables, available on a "first come – first served" basis.

Parking on the Old Tower Apron is controlled and allocated by the Cairns Airport, Airport Coordinator.

The GA High Strength Aprons are either leased to individual operators or reserved for larger aircraft and are not available for Common User parking.

Helicopter parking is limited to both the northern and southern HLS (Common Use) and the southern HLS (hangar lessee's only).

Itinerant helicopter parking is to be coordinated through the Cairns Airport, Airport Coordinator.

9.10 EXPLOSIVE-LADEN AIRCRAFT

Operators of aircraft carrying explosives are required to adhere to the specific requirements for such operations as laid down by CASA.

All requests for transiting or loading/unloading of explosives must be approved in advance by the Aerodrome Safety and Compliance Manager. Only those operations that have approval from CASA and can comply with specific clearance requirements at the nominated remote parking area will be considered for approval by Cairns Airport.

In accordance with the recommendations contained in the AC 139-12 (0) Handling of Hazardous Materials on an Aerodrome, Cairns Airport has designated a number of remote areas on the Aerodrome for the purpose of parking aircraft being loaded or unloaded or otherwise involved in the carriage of explosives (subject to explosive category and quantity):

- Aircraft may be parked on the southern extremity of Taxiway "B" immediately south of Taxiway "B5". This area is also used as the Eastern run-up area.
- Twy G can also be considered for lower category explosives meeting the required volume and distance requirements of CASA.

NOTE
Limitations imposed by the type and quantity of explosives may determine that neither remote parking area is suitable for the proposed shipment.

All approved transiting aircraft or those needing to load or unload explosives will be directed to the appropriate parking positions by the Cairns Airport, Airport Coordinator.

9.11 EMERGENCY PARKING ARRANGEMENTS

During an emergency, the Manager Aerodrome or the Aerodrome Operations and Emergency Manager may consult with affected Operators and authorise alternative aircraft parking arrangements.

The Isolated Aircraft Parking position located in Twy B between Twy B4 and Twy B5, is the designated area for parking aircraft subject to a threat or other aviation security related threat.

Cairns Airport will endeavour to park an aircraft in such circumstances in the Isolated Aircraft Parking position in order to provide best possible safeguard in respect of safety, security and Airport facilities.

9.12 ARRANGEMENTS FOR PARKING OVER-SIZED AIRCRAFT

The approval of Aerodrome Safety and Compliance Manager or delegate must be obtained prior to any proposed operations by aircraft larger than those that normally operate at the Airport, or by aircraft that require parking at other than designated parking positions. The approval will be based on Cairns Airport assessments of Runway, Taxiway and Apron clearance requirements and weight limitations, and may include appropriate directions in respect of parking arrangements.

Engineering staff are responsible for undertaking the Pavement Concession assessment and geometric assessment so that any conditional approval can be issued to the aircraft operator.

The Aerodrome Safety and Compliance Manager or delegate may grant approval, issue directions to Cairns Airport Airport Coordinators, Airport Safety Officers, Airline Staff and Ground Handling Agents in respect of taxiing, towing and/or parking of such aircraft to ensure the safety of all operations. Once approved, aircraft details and bay allocations are to be entered into the RMS and Apron Parking Plans amended.

9.13 AIRCRAFT GROUND MAINTENANCE ENGINE RUNS

Cairns Airport is responsible for the management of aircraft noise from aircraft engine run-ups. The Noise Abatement Procedures detailed in Airservices Australia AIP DAP-EAST and Cairns Airport's Aircraft Ground Maintenance Engine Run Procedures must be complied with.

Cairns Airport Airport Coordinators record the name of the company conducting an aircraft ground maintenance engine run, the aircraft type and registration details, the start and finish times and the next flight operation (if known).

General

The following procedures apply to all types of aircraft engine test runs, whether conducted within designated Engine Run-up Bays, Leased Premises or elsewhere on the Airport:

- Prior permission is required from the Cairns Airport, Airport Coordinator for any type of engine run-up (other than those associated with normal pre-flight departure checks) between 2300 hours and 0600 hours EST.
- Prior permission from Cairns Airport, Airport Coordinator is required for all engine runs.

- Preferred engine runs location, other than short duration idle power runs are either the Western or Eastern designated run-up bays. Use of Twy G and Bay 10 for above idle runs is also available depending on aircraft type, time of day and wind direction. Subject to the requirements of CAO 20.9 Section 5, non-turbine propeller-driven aircraft below 5,700 kg MTOW may undergo short duration idle power engine run-ups within leased areas on the aerodrome.
- The pilot/engineer in charge of the engine run operation is to notify the Apron Coordinators and ANS of his/her intentions.
- Aircraft undergoing engine run-ups must display anti-collision lights by day and both anti-collision lights and navigational lights at night.
- The clearances required under CAO 20.9 in relation to public areas and buildings are to be maintained.

Engine Run-up Area - Western (GA)

The "Western Run-up Bay" is located on the southern GA Apron immediately north of Taxiway "A4". Use of this bay is limited to piston-engined aircraft not above 5,700 kg MTOW.

NOTE

As already detailed, engine runs may be conducted in leased areas in respect of:

- Short duration (up to 5 minutes duration) ground idle power engine runs by any aircraft.
- Short duration (up to 5 minutes duration) low power engine runs by piston-engined propeller-driven aircraft not above 5,700 kg MTOW.

Engine Run-up Area - Eastern

The section of Taxiway B south of Taxiway B5 is able to accommodate engine runs by aircraft up to Boeing 747 in size. This area is known as the "Eastern Run-up Bay". It has a Bituminous Concrete surface and aircraft operators are to satisfy themselves that the surface is suitable for the aircraft type and power settings proposed.

Short duration low power "idle" engine runs by jet and turbo-prop aircraft may also be undertaken on a normal parking bay subject to Airline safety operating procedures being implemented.

On Bays 16-22 idle power engine runs are limited to 5 minutes duration during daytime and other peak apron periods, to minimise impact to GSE traffic on the ROAR. Longer run periods maybe authorised by Cairns Airport during night time quieter traffic periods. In such cases the Airport Coordinator will liaise with the ASO over the timing and request ASO attendance at the aircraft to assist with ROAR escorts as required.

All other power engine runs by jet aircraft are confined to the Eastern Run-up Bay and Bays 1 and 5 on the International Apron. Twy G will also be considered for above idle engine runs under certain conditions. The International Bays have an interlocking concrete block surface and aircraft operators are to satisfy themselves that the surface is suitable for the aircraft type and power settings proposed. For each high power, the Cairns Airport, Airport Coordinator will:

- Notify Airport Safety Officers and ANS regarding the restrictions on the use of Taxiways to the rear of the aircraft; and
- Arrange for the Airport Safety Officers to close the boom gates on the levy wall perimeter road when international Bays 1 or 5 are being used for medium or high power engine runs.

9.14 VISUAL DOCKING GUIDANCE SYSTEMS

Cairns Airport provides Safegate, heads up display, Nose-In Guidance Systems (NIGS) at the following Aerobridges:

- Bays 1 to 6 on the International Apron.
- Bays 18, 19, 20, 21 and 22 on the Domestic Apron.

Technical details regarding NIGS are provided in Part 2 Section 3 sub-section 3.4 of this Manual (Aerodrome Lighting).

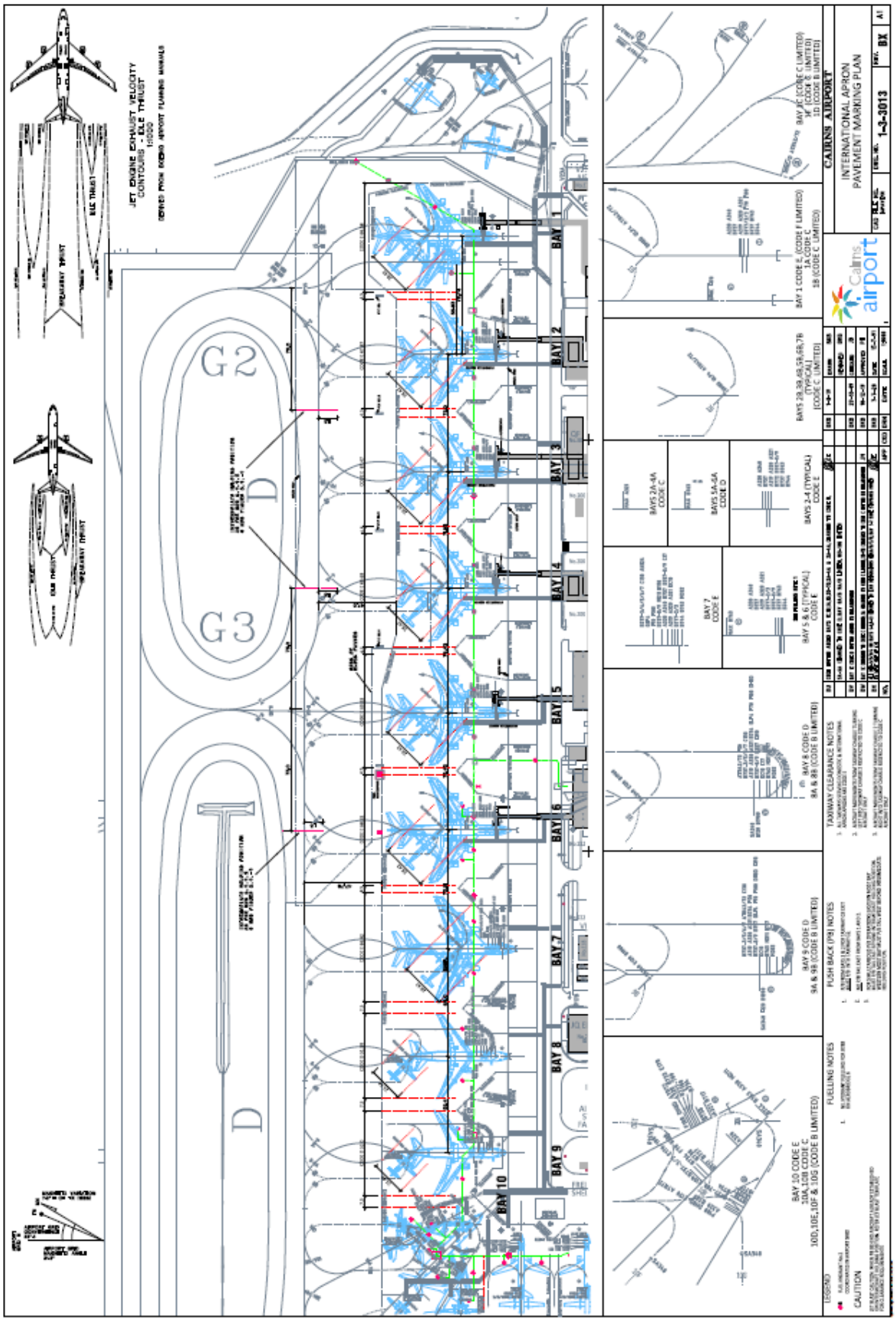
RADIO FREQUENCIES

The following table details the VHF radio frequencies available for communications with a number of the major Airline companies on the Airport:

AIRLINE	FREQUENCY (MHz)
Air Niugini	129.7
Jet Aviation Australia	135.95
Jetstar	130.475
Police Air Wing	131.60
Qantas Airways	131.9
Skytrans	128.90
Virgin	131.15

NOTE
The Cairns Airport, Apron Coordinator is available on 129.9 MHz.

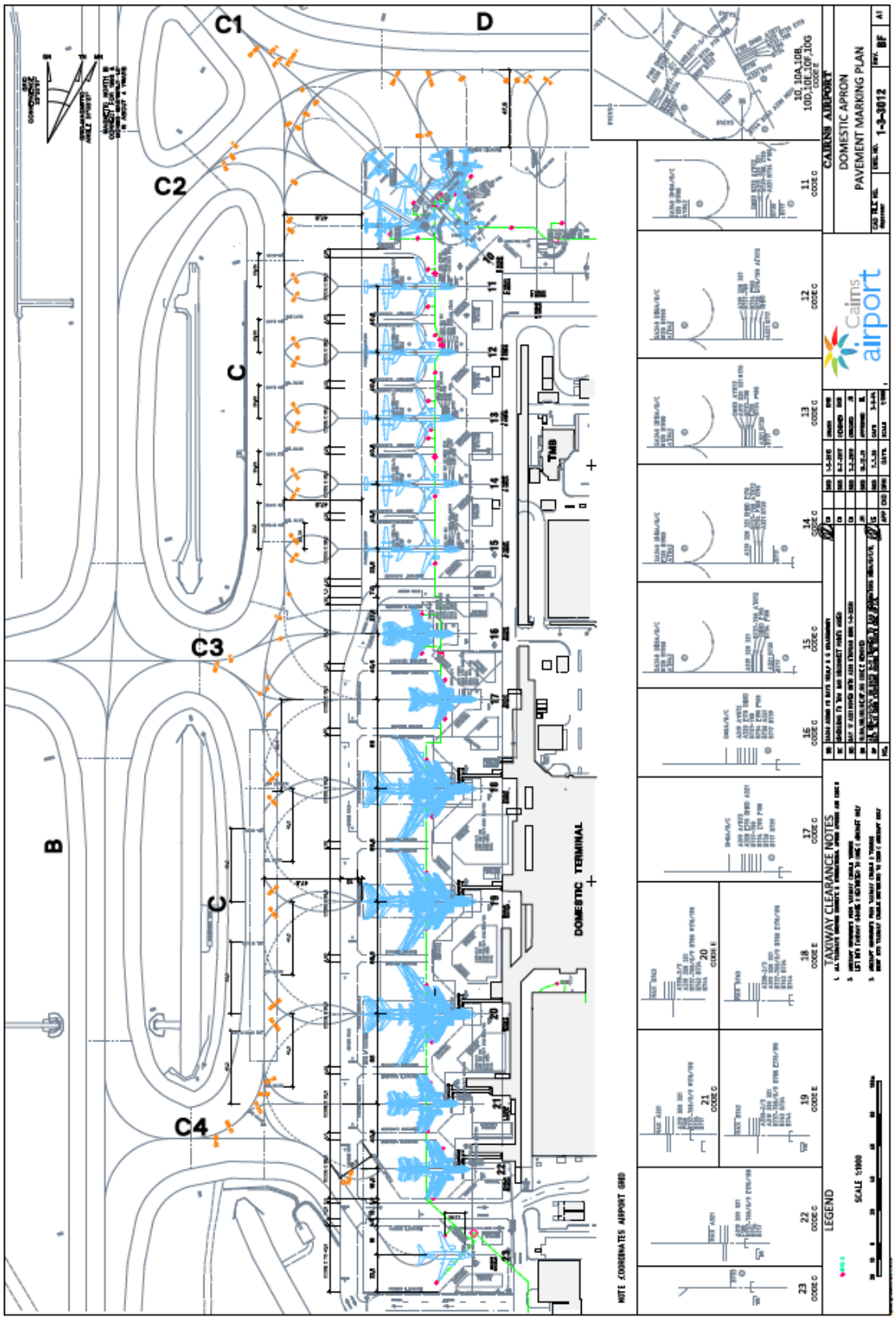
ANNEX 1 International Apron – Pavement Marking Plan
Drawing No. 1-3-3013



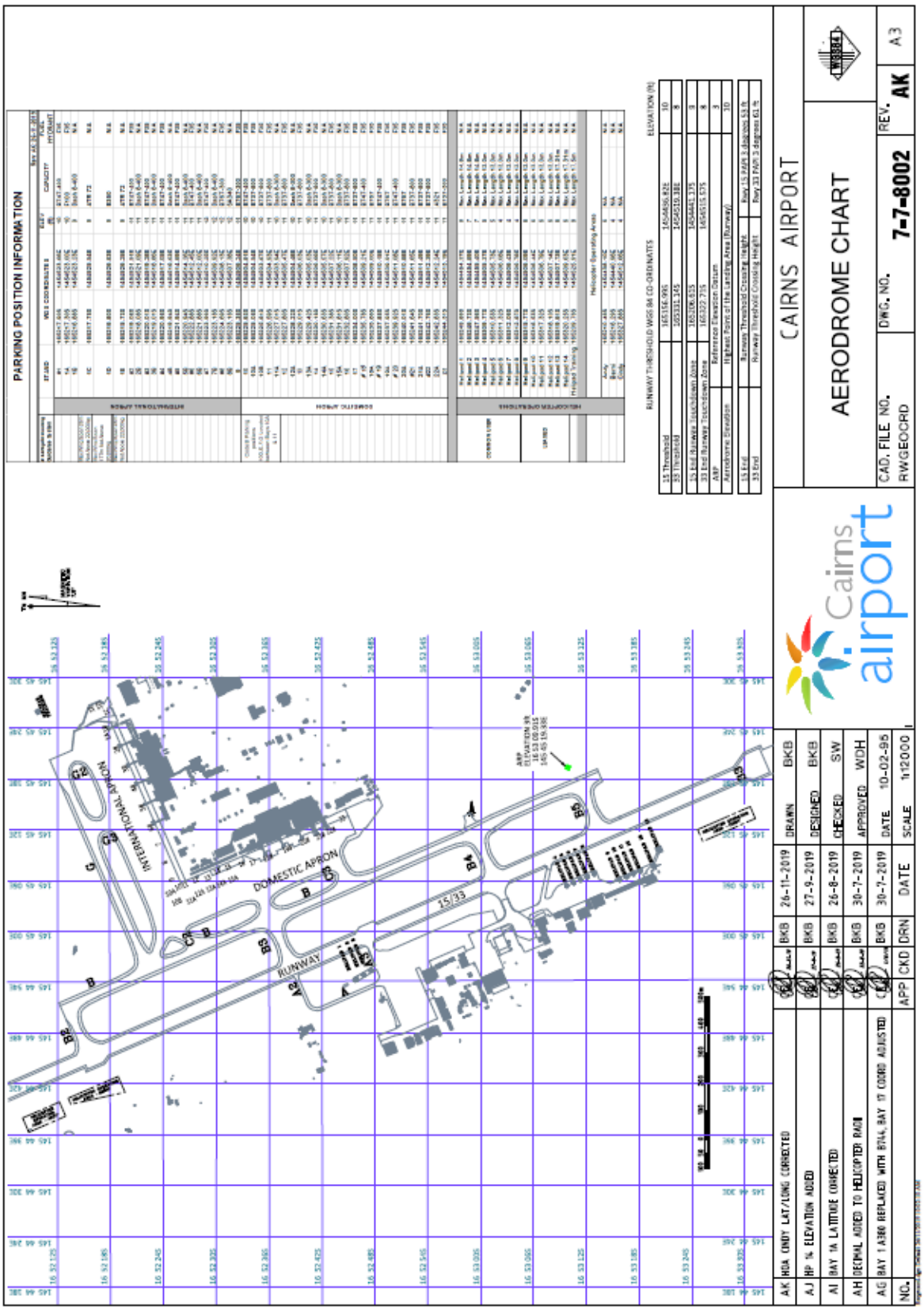
ANNEX 2

Domestic Apron – Pavement Marking Plan

Drawing No. 1-3-3012

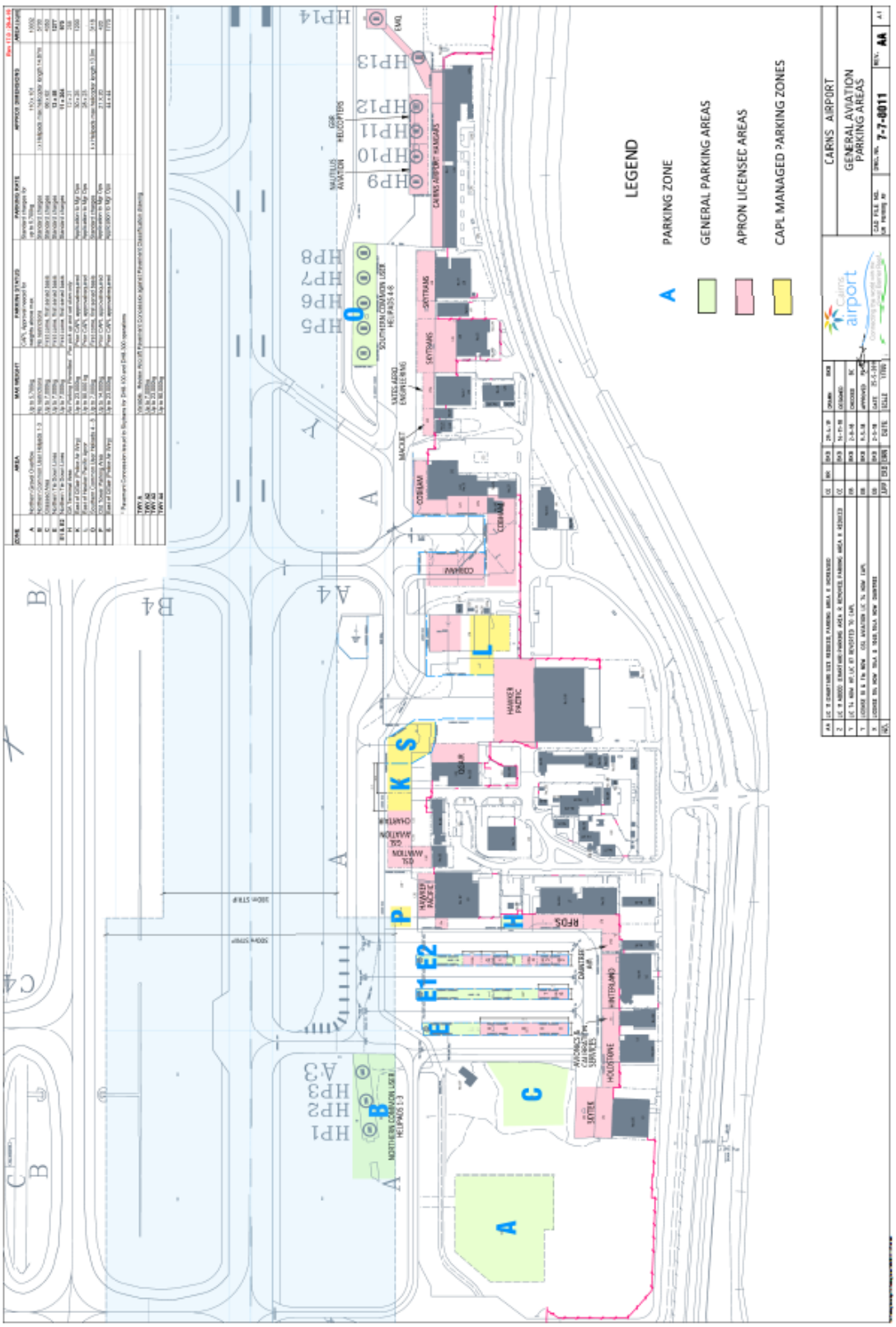


ANNEX 3
Apron Chart
Drawing No. 7-7-8002



ANNEX 4

General Aviation Parking Areas
Drawing No. 7-7-8011



PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 10	AIRSIDE VEHICLE CONTROL

NOTES ON AIRSIDE VEHICLE CONTROL AT CAIRNS AIRPORT

Procedures for the control of vehicles operating on the airside at Cairns Airport are contained in the Airside Vehicle Control Manual (AVCM). This Manual is issued by the Cairns Airport Pty Ltd as a separate document to those organisations and persons who have a need to operate vehicles airside on a frequent and unescorted basis.

The AVCM and its attachments detail Cairns Airport Pty Ltd requirements and obligations in respect of vehicular activities on airside. Furthermore, the Procedures stipulated in the Manual accommodate the requirements of CASR Part 139 - (MOS) Aerodrome and the Manual may thus be regarded as an Annex to this Section of the Aerodrome Operations Manual.

Copies of the AVCM are available from Cairns Airport.

Contents

10.1 PURPOSE

This Section details the arrangements in place at the Airport for the control of vehicles operating airside.

Cairns Airport has further airside related responsibilities in respect of aviation security, duty of care under common law and obligations under workplace health and safety legislation.

10.2 REFERENCES

Civil Aviation Safety Regulation 139.095 requires the operator of a certified aerodrome to include procedures for airside vehicle control in this manual.

Civil Aviation Safety Regulation 139.120 requires the operator of a certified aerodrome to ensure that the aerodrome is operated with a reasonable degree of care and diligence.

The Manual of Standards Part 139 – Aerodrome, Section 10.9 contains the CASA requirements for administering control of vehicles on the airside of an aerodrome.

CAO 20.9 specifies practices, precautions, and clearances required in respect of aircraft fuelling activities, and operation of aircraft engines and ground radar.

The Airport Assets (Restructuring and Disposal) Act 2008 gives powers to Cairns Airport to regulate and control persons and vehicles on the airport.

The Cairns Airport Airside Vehicle Control Manual details Cairns Airport's procedures for the control of vehicles operating on the airside at Cairns Airport.

10.3 RESPONSIBILITIES

Head of Aviation is responsible for:

- Overall responsibility for implementing airside vehicle control procedures at the airport.
- The approval of Cairns Airport documentation designed to control vehicular activities on airside, (AVCM).
- The approval of applications from organisations to conduct their own airside vehicle control measures in accordance with Cairns Airport requirements.

Manager Aerodrome is responsible for:

- Developing Cairns Airport policies for the control of vehicles operating on airside and ensuring that they are published in the Airside Vehicle Control Manual (AVCM).
- Oversight of Cairns Airport assessment of vehicles to be authorised for use on airside.
- Oversight of Cairns Airport driver training and examination activities.

Aerodrome Safety and Compliance Manager is responsible for:

- Coordinating regular audits of ADA Training Authourities approved by Cairns Airport;
- Keeping details of audits conducted on such organisations.

Aerodrome Operations and Emergency Manager is responsible for:

- Maintaining and distributing the Airside Vehicle Control Manual and Rules for Airside Drivers.
- Implementing and maintaining a system for recording:
  - details of all authorities issued by Cairns Airport for vehicles to use airside; and
  - all authorities issued by Cairns Airport for drivers to operate on airside.
- Ensuring that all drivers needing to operate on airside are approved prior to training and testing.
- Chairing the Cairns Airport Airside Safety Committee.

Aerodrome Operations Supervisor is responsible for:

- Ensuring that resources are provided to enable appropriate training and testing to meet the ADA requirements.
- Ensuring consistency in taining and testing requirements for all ADA's

Head of Infrastructure, projects is responsible for:

- Providing advice on the suitability of heavier vehicles for airside operations where compatibility with airside pavements may be in question.

Airport Safety Officers are responsible for:

- Escorting drivers who have a lawful reason to enter the airside, when:
  - the vehicle being driven has no formal authority to be used on airside; and
  - the driver of a vehicle (whether or not the vehicle has an appropriate authority to be used on airside) is not authorised to drive on airside.
- Ensure that the requirements of the AVCM in relation to the driving and use of vehicles airside are complied with.
- Delivering airside hazard awareness training and testing of airside drivers.

Note

- Designated Airport Safety Officers are authorised by Cairns Airport to conduct airside driver training and testing.
- The names and contact telephone numbers of persons with responsibilities for Airside Vehicle Control are detailed in the Master contact list in the "Aerodrome Administration" Section of this manual.

10.4 GENERAL PRINCIPLES

Cairns Airport as the Airport Operator controls the entry to, and the activities of all vehicles airside. Vehicles are only permitted on the manoeuvring area of the Airport (i.e. on Taxiways and Runways) when specifically provided with a clearance by ANS.

In exercising control of vehicles and drivers, Cairns Airport has instituted procedures that involve the following:

- Providing Airport Safety Officer escort for vehicles needing to access the airside.
- Assessing the need for individual vehicles and drivers to operate on airside without escort.
- Checking, and approving the use of particular vehicles on airside.
- Hazard awareness training, testing and authorising individual drivers to drive on airside.
- Issuing Penalty Points for drivers observed breaching airside driving rules.
- Authorising certain organisation as "Approved Issuing Authorities". (Cairns Airport has currently approved Qantas as an Approved ADA Training Authority).

The Procedure for the approval for a vehicle to be used on airside and the issuing of a Cairns Airport "Authority for Use Airside" (AUA) is contained in the Airside Vehicle Control Manual.

The procedure for the approval for a driver to operate a vehicle on airside and the issuing of a Cairns Airport "Authority to Drive Airside" (ADA) is contained in the Airside Vehicle Control Manual.

An ADA may be issued following satisfactory training and testing in one of the following Categories, namely:

ADA Category (Pink)	Contractor Site Specific Area
ADA Category 1 (Grey)	GA Apron Areas only
ADA Category 1 (Green)	GA Apron Areas & Northern Perimeter Road
ADA Category 2 (Blue)	Category 1 plus International & Domestic Aprons
ADA Category 3A (Yellow / Red)	Category 2 plus Taxiways & Runway Crossings
ADA Category 3B (Yellow)	Category 2 plus Taxiways only
ADA Category 4 (Red)	Categories 3A plus entering Runways

Cairns Airport administers a Penalty Point System to enforce the Rules for Airside Drivers. Under this system, points are issued to a driver who fails to abide by the set rules. When 12 penalty points are reached within a two-year period, the ADA may be suspended or cancelled.

10.5 AIRSIDE VEHICLE CONTROL MANUAL

The Cairns Airport "Airside Vehicle Control Manual" (AVCM) has been produced as the Cairns Airport management document for the administration of measures in place to control airside vehicle operations. It is maintained and distributed by the Manager Aerodrome as a supporting document to this Aerodrome Operations Manual.

An approved copy of the AVCM and Rules for Airside Drivers is available on the Cairns Airport Website.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 11	BIRD AND WILDLIFE HAZARD MANAGEMENT

NOTES ON BIRD AND WILDLIFE HAZARD CONTROL AT CAIRNS AIRPORT

The control of bird and wildlife hazards to aircraft constitutes an important part of Cairns Airport Pty Ltd actions in its endeavours to provide a safe environment for all aircraft using the Airport. In this context, the term "birds" is meant to include other flying wildlife, such as Fruit Bats.

It is further recognised that other wildlife, and even domestic animals, also pose a threat to Aviation Safety. Although not specifically detailed in this document, Cairns Aerodrome Operations staff continually monitor and take necessary action to ensure that animals such as Wallabies, Crocodiles and Dogs do not jeopardise the safety of aircraft operations.

Contents

11.1 PURPOSE

This Section details the arrangements in place at the airport for management and control of bird and wildlife hazards to aircraft.

11.2 REFERENCES

Civil Aviation Safety Regulation 139.095 requires the operator of a certified aerodrome to include in this manual the procedures to deal with danger to aircraft operations caused by the presence of birds or animals on or near the aerodrome.

Civil Aviation Safety Regulation 139.120 requires the operator of a certified aerodrome to ensure that the aerodrome is operated with a reasonable degree of care and diligence.

The CASA Manual of Standards Part 139 – Aerodromes Section 5.13.24 advises that an operator of a certified aerodrome that has an identified bird or animal hazard may include a notification as additional information published in the AIP-ERSA.

The CASA Manual of Standards Part 139 – Aerodromes Section 10.14 requires an operator of a certified aerodrome that has an identified bird or animal hazard to produce a bird and animal hazard management plan.

CASA AC 139-26(0) Wildlife Hazards Management at Aerodromes provides general information and advice for the management of wildlife hazards at aerodromes.

Transport Safety Investigation Regulations 2003 (TSIR) requires an airport to report any wildlife strike to ATSB within 72 hrs.

Cairns Airport's Bird and Wildlife Management Plan (the "Plan") details the airports response to bird and wildlife hazards at or in the vicinity of Cairns Airport.

The Nature Conservation Act 1992 administered by the Department of Environment and Science (DES) controls the taking of wildlife in the State of Queensland.

11.3 RESPONSIBILITIES

Cairns Airport has established the Cairns Airport Bird and Wildlife Management Committee (BWMC) to develop and implement the Plan. The Committee consists of members from the aviation community, the Cairns Regional Council and State Government Departments and agencies or groups involved in the management of wildlife in the Cairns area.

The following roles and responsibilities for each member organisation of the BWMC have been agreed to:

Cairns Airport

Head of Aviation shall:

- Ensure that the Plan is implemented and agreed mitigation measures are appropriately funded.
- Ensure Cairns Airport Pty Ltd meets its statutory obligation.

Manager Aerodrome responsible for:

- Ensuring that the procedures contained in the Bird and Wildlife Management Plan are implemented,
- Ensuring that the firearms Policy is reviewed annually and associated SOPs,
- Ensuring that all staff required to use firearms are trained and tested annualy in the use of firearms,
- Ensuring that all staff required to use firearms have vaild weapsons licences,
- Ensure that all staff understand their role and responsibilities in relation to the Bird and Wildlife Management Plan.

Aerodrome Safety and Compliance Manager shall:

- Review proposals for land use changes ensuring due consideration of the potential for bird and other wildlife hazards.
- Review and approve modifications to the Bird and Wildlife Management Plan as a result of any review.
- Chair meetings, review recommendations and arrange administrative support for the BWMC.
- Monitor bird and other wildlife activity and strike statistics.
- Engage consultants to undertake professional bird surveys.
- When appropriate, invite specialists to BWMC meetings to present relevant information.
- Coordinate interactions with BWMC stakeholders for the management of land use surrounding the Airport.
- Engage consultant to conduct a review of the Bird and Wildlife Management Plan at least once per year, with particular input into Operations Procedures contained in the Bird and Wildlife Management Plan.
- Investigate and complete the Significant Bird Strike Report.

Aerodrome Operations and Emergency Manager shall:

- Implement the "Bird Watch" Procedure contained in the Plan
- Review the Firearms Policy and SWP.
- Ensure that the ASOs are trained and tested annually in the use of firearms
- Ensure that the ASO's understand their role and responsibilities in relation to the Bird and Wildlife Management Plan.
- Ensure that the necessary DES Bird and Wildlife Damage Mitigation Permits are maintained and submit quarterly returns to DES.
- Ensure that conditions of the Damage Mitigation Permit conditions are fully complied with.

Aerodrome Operations Supervisor shall:

- Ensure that all bird and wildlife strikes are reported to ATSB.
- Coordinate ASO training associated with Bird and Wildlife Management.
- Ensure that all Operations Procedures contained in the Plan involving ASO's are implemented.
- Maintain the weapons/ammunitions register.
- Initiate Significant Strike Investigation activities.
- Undertake firearms audits.
- Assist with the implementation of the "Bird Watch" Procedure contained in the Plan
- Review Bird Strike Report and email to the Bird Strike recipients.

Airport Safety Officer shall:

- Inspect the perimeter fence daily so that access for animals such as Wallabies and Dogs is restricted.
- Undertake runway inspections for bird and other wildlife hazards and collect any carcasses found following a Bird strike.
- Undertake bird dispersal and culling as required.
- Comply with the Firearms Policy and Firearms Management Protocols & Procedures.
- Coordinate with aircrew and maintenance personnel for collection of remains or DNA samples after strikes and store for identification.
- During Bird Watch conditions undertake counts and report wildlife hazards details to ANS for aircraft advice.
- Initiate Bird Strike Report in Tracker Airside.
- Accurately enter data collected from bird strikes, bird count, culling and dispersal into Tracker Airside.

Environment Manager shall:

- Assist with the development and maintenance of the Cairns Airport Bird & Wildlife Management Plan in accordance with relevant regulations, policies and agreements.
- Provide technical expertise and advice in support of the preparation and maintenance of DES Bird and Wildlife Damage Mitigation Permits and monthly returns.
- Provide advice to the BWMC meetings regarding environmental matters.
- Where necessary, assist with the management, control and reporting of birds and other wildlife in occupied buildings and hangars, including threatened species management and nest/ chick removal.
- Review, as required, Cairns Airport's Flora Management Strategies.
- Carry out compliance checks of waste management practices at the airport to reduce food and waste attractants for birds and other wildlife.

Landside Infrastructure Manager shall:

- Ensure that all mowing practices are in line with the Bird and Wildlife Management Plan.
- Suitably maintain all vegetated areas, drainage systems and any bird deterrent measures.

Airservices Australia, Air Navigation Services shall:

- Represent Airservices Australia at BWMC meetings.
- Include appropriate Bird Watch Condition Reports in ATIS broadcasts.
- Ensure procedures are in place to eliminate the use of runway and taxiway lights including HIAL between aircraft movements during non-daylight hours.
- Inform ASO's of any reported strikes, near misses or indications of heightened risk conditions.

Airline Operators shall:

- Provide a representative to the BWMC.
- When "Low", "Moderate", "Severe" or "Alert" Bird Watch Conditions prevail, inform aircrews of necessary procedures to follow.
- Review the possibility of changing operations to avoid times and locations of where serious bird or other wildlife concentrations indicate heightened risk conditions.
- Encourage aircrews to promptly inform ANS of all bird and other wildlife strikes, near misses or indications of heightened risk conditions.
- Inform ground engineering staff of the need to relay evidence of strikes and damage to ASO's.

Other Aircraft Operators and General Aviation shall:

- Participate in adoption of procedure relevant to the issue of Bird Watch Conditions.
- Change operations to avoid times and locations of where serious bird or other wildlife concentrations indicate heightened risk conditions.
- Encourage aircrews to promptly inform ANS of all bird and other wildlife strikes, near misses or indications of heightened risk conditions.
- Inform ground engineering staff of the need to relay evidence of strikes and damage to ASO's.

Civil Aviation Safety Authority shall:

- Provide a representative to the BWMC.
- Ensure that all aspects of the Plan comply with CASA legislation.
- Consider the progress and effectiveness of the Plan during audits of the Aerodrome Operations Manual.

Queensland Parks and Wildlife Service shall:

- Provide a representative to the BWMC.
- Liaise with other relevant DES representatives on matters relating to the Plan.
- Consider the safety imperative when assessing the application by Cairns Airport Pty Ltd for Damage Mitigation Permits to cull, remove eggs and nests, and relocate birds and other wildlife.
- Assist Cairns Airport to determine the appropriate actions where rare or threatened species become an aviation hazard, given that damage mitigation permits can not be issued to manage such species and alternative arrangements must be made.
- Provide advice on environmental issues, with particular regard to regional populations of bird and other wildlife species.

Cairns Regional Council shall:

- Provide a representative to the BWMC.
- Participate with regular bird surveys of the Sewerage Treatment Plant.
- Manage the Sewage Treatment Plant, parks, gardens and other council lands adjacent to Cairns Airport to minimise their attractiveness to birds.
- Consider the potential for bird and other wildlife attraction when developing and reviewing land use strategies as per Annex 2, Section A2.1 of State Planning Policy.

Wildlife Preservation Society Queensland shall:

- Provide a representative to the BWMC.
- Provide advice on bird and other wildlife within a local and regional context.
- Assist with the formulation of any Action Plans to mitigate bird and wildlife hazards.

Far North Queensland Wildlife Rescue shall:

- Provide a representative to the BWMC.
- Provide advice on bird and other wildlife within a local and regional context.
- As required, provide carcass analysis of birds and bats struck or culled at Cairns Airport.
- Provide expertise and advice on the care of wildlife, including those injured at Cairns Airport.
- Assist with the formulation of any Action Plans to mitigate bird and wildlife hazards.

NOTE
The names and contact telephone numbers of Cairns Airport persons with responsibilities for Bird and Wildlife Hazard Management are detailed in the Master Contact List in the "Aerodrome Administration" section of this Manual.

11.4 CONTROLLING BIRD AND WILDLIFE HAZARDS

Cairns Airport is located in an area which provides a natural and desirable habitat for a number of bird and wildlife species.

Cairns Airport is acutely aware of the need to reduce or eliminate bird and wildlife hazards to aircraft and has taken a risk management approach to bird and wildlife hazards at Cairns Airport. The Bird and Wildlife Management Plan details Cairns Airport's comprehensive response to ensure hazards are identified, reported, and managed.

The Airport contains significant areas of low-lying land and open drains but in past years, substantial work has been carried out to improve drainage and to reduce wet areas within the airport boundary. As well as having reduced many attractions to bird-life through these environmental initiatives, Cairns Airport shall continue to carry out constant bird and wildlife monitoring, harassment and dispersal activities in order to reduce the risk to aircraft of bird and wildlife strikes. Further habitat modification is always considered as part of the Cairns Airport Bird and Wildlife Management Plan.

Cairns Airport has also developed specific ground maintenance practices that take into account the need to reduce bird and wildlife hazards. In this regard, Cairns Airport shall:

- Consider the height of grass cutting in order to reduce the incidence of bird assembly, resting and nesting areas.
- Limit daytime mowing to prevent attraction of raptors.
- Prevent any accumulation of rubbish that may attract birds to the Airport.
- Endeavour to prevent ponding of surface water during periods of high rainfall.
- Maintain a rodent baiting program.

Cairns Airport Airport Safety Officers carry out bird & wildlife harassment on a daily basis primarily by way of mobile patrols using vehicle sirens and bird-scaring cartridges* fired from shotguns. As a last option, to prevent threats to aircraft safety, it is necessary from time to time to shoot birds with live shot.

**Cairns Airport uses specially designed shotgun cartridges known as "cracker shot" (trade name "Bird Frite") for the purpose of scaring rather than killing birds. Cracker shot consists of a 12 gauge cartridge which, when fired from a shotgun (without a choked barrel) produces two loud reports – the first when fired and the second when the "cracker" detonates (with a brilliant flash and a puff of smoke) some 2 or 3 seconds after leaving the barrel (at a distance of about 70 metres).*

NOTE
Cairns Airport Airport Safety Officers are trained in the safe use of firearms and each officer holds a Queensland Firearms Licence.

11.5 HAZARD ASSESSMENT

On a daily basis, the Airport Safety Officers shall take particular note of bird and wildlife activity during their routine aerodrome serviceability inspections. Any bird or wildlife observed on or near the runway shall be dispersed by the Airport Safety Officer prior to arriving or departing aircraft. When necessary, any continuing hazard will be reported to aircraft operators through ANS, Notice to Airmen (NOTAM), and Aeronautical Information Publications.

In order that operations staff may gauge the long term trends in bird populations at the Airport, the Airport Safety Officers shall conduct "bird counts" on one (1) specific day per week. Bird counts involve observing the numbers and types of birds in specific areas on the airport and recording these details on the Bird Count record sheets.

The Aerodrome Safety and Compliance Manager shall ensure that professional (ornithologist) bird and wildlife surveys are undertaken as follows: Day surveys - on three (3) occasions during the day, two (2) times per month and Night surveys - on one (1) occasion early evening, two (2) times per month and that the data is entered into the Wildlife Database System. An "off airport" survey of the northern approach area is undertaken two (2) times per month. Designated "bird count areas" on the Airport are as detailed on Drawing 3-8-3015 (Annex 2).

The data collected shall be used by operations and environmental staff in identifying trends and implementing appropriate mitigation measures.

11.6 HAZARD REMOVAL

The Airport Safety Officers are responsible for bird and wildlife monitoring and harassment / dispersal activities. Airport Safety Officers will report to ANS any presence of bird and wildlife that is suspected of being an immediate hazard to aircraft operations.

The Airport Safety Officer will also act on ANS or pilot advice or when hazardous bird or wildlife activity is observed on the airport.

In deciding on the action to be taken, the Airport Safety Officer will be careful in his timing of harassment measures in order to reduce chances of having the birds fly in front of an aircraft taking off or landing. The Airport Safety Officer shall decide on the type of harassment to be adopted or indeed, decide whether there is a need (in the circumstances) to use live shot. The Plan provides details of species specific Action Plans for guidance in this area.

The Plan also details actions to take when species specific Bird Watch Condition Reports are issued in relation to heighten risk of a damaging aircraft bird strike.

The Airport Safety Officers will record ammunition used during each shift into their logs and , culling details, and details of bird and wildlife harassment into the Wildlife Database.

11.7 DAMAGE MITIGATION PERMIT

DES regulates the culling of wildlife. Cairns Airport is required to apply for and hold a "Damage Mitigation Permit" to take any wildlife in the State of Queensland.

The permit is valid for a maximum period of twelve (12) months and normally imposes on Cairns Airport the following conditions "to ensure that the taking of wildlife is ecologically sustainable":

- A limit to the number of birds and wildlife taken to maintain safety.
- The taking must be humane and can occur only within the boundaries of the permit holder's property.
- The permit holder is to keep a daily written register listing the numbers, species, sex (if known) and the date of all wildlife taken under the permit. The register is to be made available to a DES Conservation Officer for inspection, on request.
- The permit holder is to allow a DES Conservation Officer access to the premises at any hour, to monitor the numbers killed.

The Damage Mitigation Permit is issued by DES under the Queensland Nature Conservation Act 1992 and Nature Conservation (Wildlife Management) Regulation 2006.

A bird and wildlife cull report is presented at the quarterly meetings of the Bird and Wildlife Management Committee.

11.8 BIRD STRIKE REPORTS

The Airport Safety Officers must complete a Bird Strike Report (as depicted at Annex 1) for each known case where an aircraft has struck a bird or where a suspected strike is reported by a Pilot or Airline Operator. The report is distributed both internally and externally to designated airline operators as well as AsA, CASA, and ATSB.

Where no carcass is available for species identification the Airport Safety Officers will take a DNA sample from any blood smear located on the aircraft and forward it to the Australian Museum for DNA testing.

The Aerodrome Safety and Compliance Manager (or Aerodrome Operations and Emergency Manager or Environment Manager in his / her absence) will review each incident and, if necessary discuss with the Airport Safety Officers any special actions that might be prudent to remove or minimise further similar occurrences.

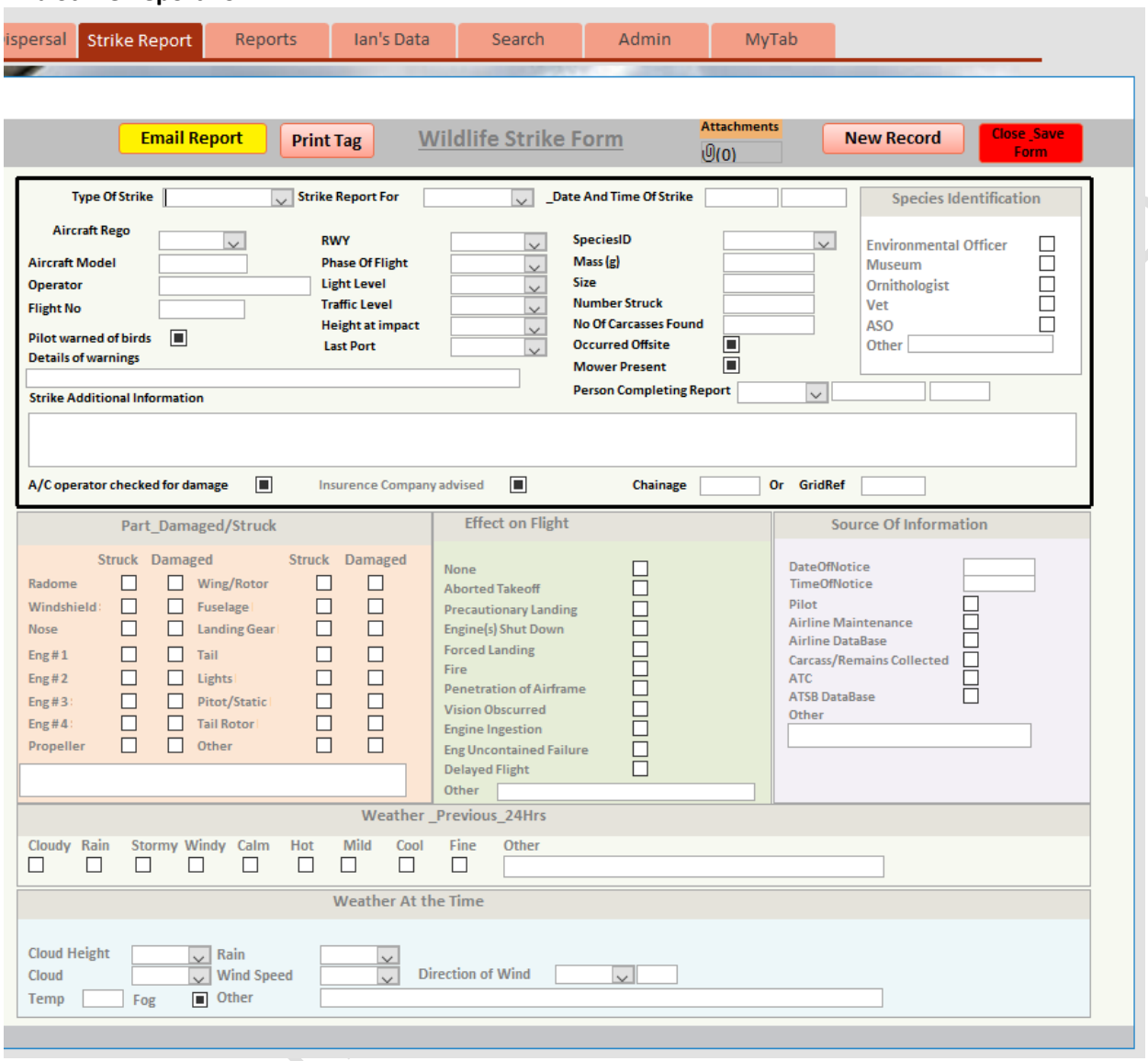
The Aerodrome Operations Supervisor will ensure that the Bird Strike data is entered into the Wildlife Database system for statistical purposes.

11.9 STATISTICS

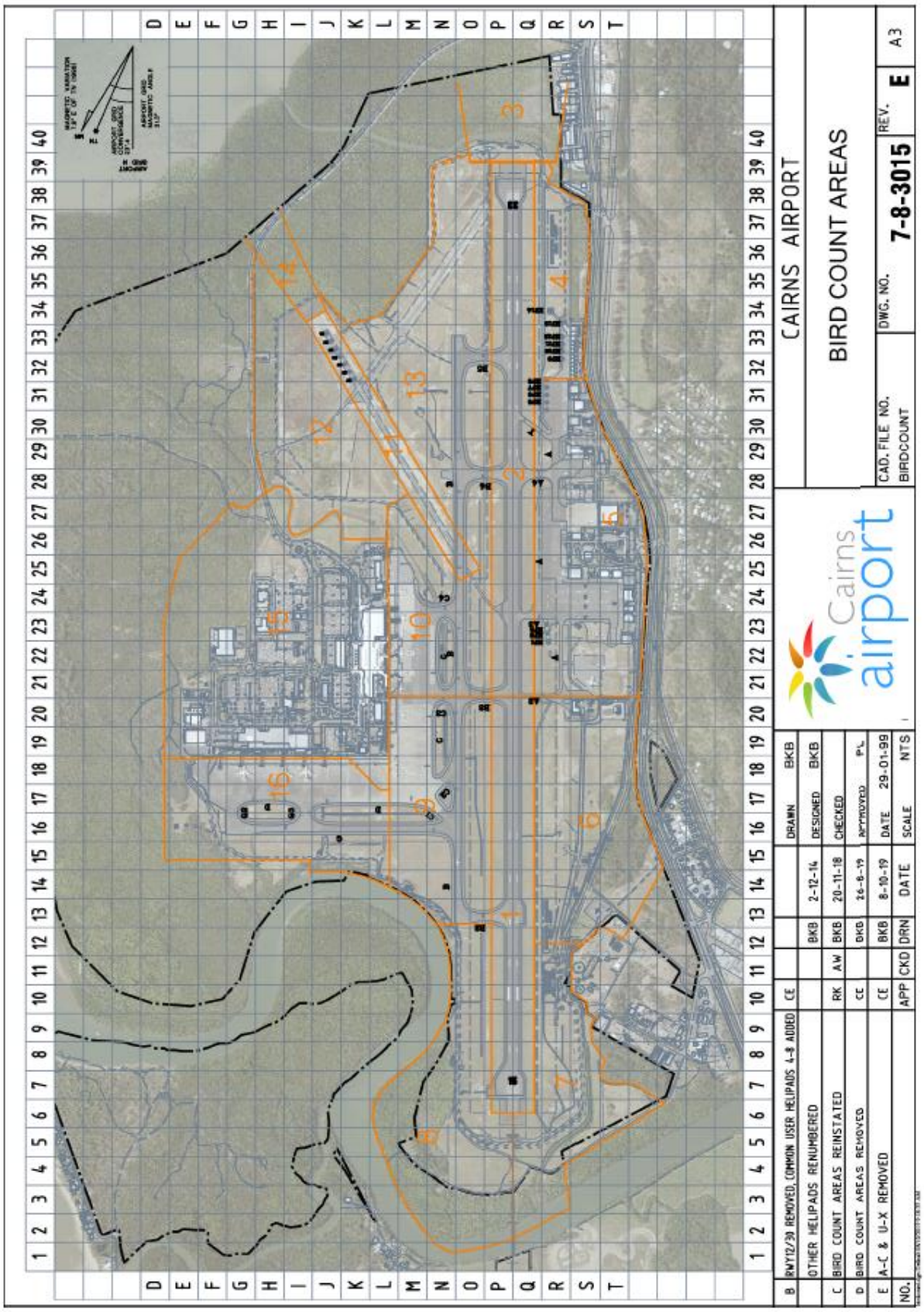
Cairns Airport tracks data relating to bird and wildlife counts and bird strikes associated with the aerodrome. This data is used to inform risk assessments and management strategies incorporated in the Bird and Wildlife Management Plan.
The Aerodrome Safety and Compliance Manager shall ensure that data records are maintained for at least five (5) years.
Cull records are provided to the Department of Environment and Science as required under the Cairns Airport Damage Mitigation Permit.

ANNEX 1

Bird Strike Report Form



ANNEX 2
Bird Count Areas
Drawing No. 7-8-3015



PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 12	OBSTACLE CONTROL

Contents:

12.1 PURPOSE

This Section details the arrangements in place for establishing and maintaining the Obstacle Limitation Surfaces (OLS) for Cairns Airport. It provides details for controlling the erection of obstacles and for notifying the industry of the presence of obstacles that may constitute a hazard to air navigation in the vicinity of the Airport.

12.2 REFERENCES

Civil Aviation Safety Regulation 139.095 (a) (ii) requires airport management to include in this manual, particulars of the procedures to:

- Monitor the Obstacle Limitation Surfaces (OLS) and Type A chart take-off surfaces for obstacles.
- Monitor building developments within the OLS.
- Monitor for new objects or building developments within any other area nominated by the designer of the instrument approach procedures for Cairns Airport.
- The arrangements between Cairns Airport Pty Ltd AsA, and CASA, Cairns Regional Council and the Queensland Government in relation to the approval of building developments that may infringe the OLS.

Civil Aviation Safety Regulation 139.160 requires Cairns Airport Pty Ltd to ensure the accuracy of the information published in AIP-ERSA in relation to Cairns Airport.

Civil Aviation Safety Regulation 139.350 requires Cairns Airport Pty Ltd to monitor the airspace around Cairns Airport to detect any infringement of the OLS by any object, building, structure or gaseous efflux having a velocity exceeding 4.3 metres per second.

Civil Aviation Safety Regulation 139.355 requires Cairns Airport Pty Ltd to establish an OLS in relation to Cairns Airport in accordance with the standards published in the Manual of Standards Part 139, Chapter 7.

Civil Aviation Safety Regulation 139.360 requires Cairns Airport Pty Ltd to notify by NOTAM immediately any obstacles within the vicinity of Cairns Airport are detected, and Cairns Airport Pty Ltd must advise CASA as soon as Cairns Airport Pty Ltd becomes aware of any development or proposed development that is likely to create a hazard.

Civil Aviation Safety Regulation 139.365 empowers CASA to determine whether an obstacle, or a structure taller than 110 metres above ground level, is a hazardous object in respect of aviation safety. In such cases, CASA is required to have details of the hazardous object published in AIP or by way of a NOTAM.

Civil Aviation Safety Regulation Part 173 details the requirements for instrument procedural designers including PANS OPS plans.

The Manual of Standards Part 139 – Aerodromes (MOS), Chapter 7, entitled "Obstacle Restrictions and Limitations" defines obstacles and specifies the physical characteristics of the Obstacle Limitation Surfaces (OLS). The MOS also provides information on requirements for ICAO type obstacle charts.

The MOS Part 139 - Aerodromes Section 7.2 requires the operator of an aerodrome used by aircraft engaged in international aviation, to prepare an AOC Type "A" (Type A) chart for each runway used for such operations. The (MOS) Section 7.2 also requires the Aerodrome Operator to:

- Notify any changes to the Type A chart information to the chart users.
- Provide a copy of the Type A chart to CASA and maintain a distribution list of current Type A chart holders.

ICAO Doc 8168-OPS/611 Vol. 2 "Procedures for Air Navigation Services – Aircraft Operations" (PANS-OPS) details the standards and guidelines for the design of instrument flight procedures. (The airspace surfaces associated with instrument flight procedures are known as PANS-OPS Surfaces).

ICAO Airport Services Manual Part 6 "Control of Obstacles" explains the separate functions of the OLS and the PANS-OPS Surfaces.

State Planning Policy (SPP) and Cairns Regional Councils "Cairns Plan" details the planning initiatives required to be implemented by local authorities to provide protection for Cairns Airport OLS / PANSOPS.

12.3 RESPONSIBILITIES

Head of Aviation is responsible for:

- Providing advice regarding inclusions, in relevant Development Control Plans, of measures to control the heights of proposed buildings or other structures within the OLS of the Airport.
- Ensuring that the Senior Technical Officer (Drafting) maintains the Airport OLS, Type A, and PANS - OPS plans and assists with the assessment of Building Height Applications or crane operation that might impact the airports operations.

Manager Aerodrome is responsible for:

- Ensuring that details of all obstacles (as defined in MOS Part 139 Chapter 7) are reflected in the AIP published information for the Airport.
- Ensuring that a current AOC Type "A" chart is available in respect of Runway 15/33.
- Ensuring that a current OLS Plan for the Airport is available.
- Ensuring that instrument surveys of the approach (including Non-Precisions Approach (NPA) Procedures and PANSOPS where applicable), take-off climb, transitional Surfaces and Visual Segment Surface (VSS) are carried out annually.
- Ensuring that the PANS OPS Procedure Design Critical Surfaces are monitor annually.
- Ensuring that a system is in place to assess and approve/disapprove applications for the erection of buildings or other structures in the vicinity of the Airport and for the approval of building heights and temporary crane heights associated with such construction works.

Aerodrome Safety and Compliance Manager is responsible for:

- Ensuring that details of all obstacles (as defined in MOS Part 139 Chapter 7) are reflected in the AIP published information for the Airport.
- Maintaining the AOC Type "A" chart (in conjunction with the Senior Technical Officer (Drafting)) by arranging appropriately licensed and experienced surveyors to undertake Type A and annual approach surveys.
- Ensuring that a system is in place for the provision of advice to Airservices Australia - AIS Section for the purpose of amending published aerodrome information related to the presence of obstacles.
- Advising the AOC Type "A" chart holders of any changes that require to be made to the charts (as a result of revised obstacle information);
- Distributing the AOC Type "A" chart to chart holders in accordance with the distribution list (see Annex 2 to this Section);
- Maintaining records (i.e. a register) of all building height applications and Cairns Airport Pty Ltd responses; and
- Arranging for appropriate NOTAM action in respect of temporary obstacles.

Aerodrome Operations and Emergency Manager is responsible for:

- Ensuring that aerodrome serviceability inspections by Cairns Airport Airport Safety Officers include visual inspections of the OLS for the purpose of detection of any new obstacles and
- Monitoring NOTAMS issued in respect of obstacles.

Airport Safety Officers are responsible for:

- The day to day surveillance of the airspace around the Airport and the reporting of any newly detected obstacles (see also Part 2 Section 6 Annex 1).
- Monitoring obstacle lighting (see Part 2 Section 3 sub-section 3.3).
- Monitoring NOTAMS issued in respect of obstacles.

NOTE
The names and contact telephone numbers of persons with responsibilities for Obstacle Control are detailed in the Master Contact List in the "Aerodrome Administration" section of this Manual.

12.4 AIRSPACE AND OBSTACLES

Obstacle Limitation Surfaces (OLS)

Obstacle limitation requirements in the vicinity of Cairns Airport are prescribed by CASA in MOS Part 139 – Aerodromes Chapter 7, which is based on the ICAO specifications detailed in ICAO Annex 14. The MOS contains the Australian standards. The applicable standards for Cairns Airport are based on the following criteria to be applied to Table 7.1-1 in the MOS:

- Runway 15 – Instrument, Precision, Cat I, Code 4 (with variation of the inner edge and gradients); and
- Runway 33 – Instrument, Non-precision, Code 4 (with variation of the gradient, strip width and transitional surface).

The OLS comprise a number of reference surfaces in airspace, which determine whether or not an object may be an obstacle in respect of aircraft manoeuvring in the vicinity of the Airport or during take-off or landing. An "obstacle" is thus defined as any object that infringes the OLS.

The OLS are complex surfaces related to the runways. The OLS for Cairns Airport are specifically detailed in Drawing 7-7-7040 "Obstacle Limitation Surfaces: Ultimate Surfaces" (Ref Annex 4).

The OLS comprise:

- Outer Horizontal Surface
- Conical Surface
- Inner Horizontal Surface
- Approach Surface
- Inner Approach Surface
- Transitional Surface
- Inner Transitional Surface
- Baulked Landing Surface
- Take-off Climb Surface

Whilst ideally there should be no infringements of the OLS, Cairns (like many other airports in the country and overseas) suffers from several obstacles that infringe various parts of the OLS. These infringements by both natural and man-made obstacles have made it necessary for adjustments to be made in order to compensate for such shortcomings. The operational details for the airport are provided in the AIP-Enroute Supplement and the AIP-Departures and Approach Procedures and reflect the presence of existing obstacles in the vicinity of the Airport.

GA hangars and parking areas on the western side of the Airport (as well as Lumley Hill) create several Runway 15/33 transitional surface infringements that were constructed before the present OLS standards were adopted in Australia. These infringements, in relation to which CASA has assesed and granted an approval under certain conditions detailed in their letter Ref D16/11578, and shown on Plan 7-7-7040 Cairns Airport - Obstacle Limitations Surfaces.

PANS-OPS Surfaces

PANS-OPS Obstacle Assessment Surfaces are discrete complex surfaces in airspace specifically related to requirements for instrument flight procedures (i.e. flight where the pilot relies totally on cockpit instruments and without visual reference to the ground).

In contrast to the OLS, which determine at which point an object becomes an “obstacle” (to be assessed for its impact on aircraft operations), PANS-OPS Surfaces cannot be infringed. In fact, the height of the tallest structure or feature beneath any one of the PANS-OPS Surface determines the altitude/elevation of that surface, and all connected surfaces. If a new and higher obstacle is created, the PANS-OPS Surfaces also have to move correspondingly higher, which results in a corresponding adjustment to the minimum safe altitude to which an aircraft may descend without establishing a visual reference to the ground.

ANS maintains up to date PANS-OPS plans in conjunction with the Instrument Approach / Departure Procedures for Cains Airport and uses these in the assessment of all obstacles referred by Cairns Airport.

12.5 MONITORING OBSTACLES

The Cairns Airport, Airport Safety Officers shall carry out visual inspections of the airspace around the airport, and particularly the approach and take-off climb surfaces, as a part of their daily serviceability inspections.

NOTE

The Airport Safety Officer will seek assistance from the Aerodrome Operations Supervisor, Aerodrome Safety and Compliance Manager or the Aerodrome Operations and Emergency Manager (both during and after normal working hours) if there is any difficulty in determining whether or not an object protrudes the OLS.

Additionally, it is a CASA requirement that an instrument survey of the approach, take-off and transitional surfaces be carried out each year. In this regard, the Aerodrome Safety and Compliance Manager will liaise with, and brief, the contracted survey staff in the conduct of such surveys.

The Manager Aerodrome will ensure that the Type A chart survey is conducted approximately every two (2) years and a detailed transitional surface analysis conducted every other year.

The Aerodrome Safety and Compliance Manager will use relevant information provided by the Airport Safety Officers (as a result of serviceability inspections) and/or the results of annual surveys to determine the need or otherwise to notify changes to published aerodrome information, including Type A Chart details. The Aerodrome Safety and Compliance Manager will arrange for any required NOTAM be issued, as specified in Part 2, Section 4 of this Manual.

Cairns Airport has prepared and maintains a number of drawings related to obstacles on and around the airport. A list of these drawings is provided at Annex 3 to this Section.

12.6 BUILDING HEIGHT APPROVALS

The State Planning Policy and Cairns Regional Council "Cairns Plan" requires Council to refer to Cairns Airport any building application that may impact on the Airport OLS or gaseous emissions exceeding 4.3m/sec that may affect aircraft safety.

Cairns Airport has developed standard forms in order to accommodate applications for height approvals and certifying such approvals. Examples of forms are included at Annex 1 to this Section.

Upon receipt of any applications for height approval (either permanent or temporary in nature), the Aerodrome Safety and Compliance Manager or delegate will assess the proposal as described in Section 12.7 (below) and:

- If no protrusion of the OLS or PANS-OPS is involved, will approve the application; or
- If the OLS or PANS-OPS is penetrated by the proposal, will
  - Forward to Airservices Australia, Airport Development Section and CASA, Aerodrome Inspector for assessment.
  - Await responses from CASA and Airservices Australia and will either disapprove the application, or recommend that the application be subject to such conditions as determined by CASA, Airservices Australia or Cairns Airport.
- Notify the aviation industry of any amended published aerodrome information (i.e. end of clearway gradients to critical obstacles and amended declared distances) – see Part 2, Section 4 of this Manual.

The Aerodrome Safety and Compliance Manager or delegate will prepare a letter to the applicant either disapproving the proposed activity, or approving the application by the issue of a "Certificate of Height Approval" (as shown at Annex 1).

12.7 ASSESSMENT OF TEMPORARY OBSTACLES

In assessing the possible impact of obstacles (whether they be tree growth detected during an annual survey or obstacles constructed or proposed for construction) the Senior Technical Officer (Drafting) will provide the Aerodrome Safety and Compliance Manager with technical advice on obstacle location, height and Reduced Level, and the degree of OLS infringement.

The Aerodrome Safety and Compliance Manager or delegate will determine the effect of the obstacle on the approach and take-off climb surface gradients and on the supplementary declared distances for the particular runway. An assessment against the PANS-OPS surfaces plan will also be made and, where an infringement occurs, the application will be forwarded to Airservices Australia for an assessment against published (Flight Procedures Section) "Departure and Approach" procedures.

In cases where a proposed obstacle will impact significantly on operational viability, detailed discussions with CASA and with the major Airlines and/or other Aircraft Operators at the Airport will be undertaken by the Aerodrome Safety and Compliance Manager before making decisions regarding approval or otherwise of the proposal.

Details of obstacles (or proposals for obstacles) that infringe the OLS or PANS OPS will be referred to the CASA Aerodrome Inspector and Airservices Australia by the Aerodrome Safety and Compliance Manager or delegate for an aeronautical assessment.

The following details are to be provided to the CASA area office and Airservices Australia for a determination:

- Existing obstacles
- Proposed obstacle
- Type of structure
- Location
- Latitude/Longitude
- Nearest aerodrome
- Bearing and distances from ARP
- Distances from start to take-off runway
- Instrument or Non-instrument runway
- Offset from runway centre line
- Height of structure
- Ground level of site
- Height of OLS
- Penetration of surface, copy of the OLS plan showing the location of the object
- Date of effect for proposed object

NOTE
Every effort must be made to implement and protect the OLS standards and limit the introduction of new obstacles.

New or proposed obstacles do not necessarily pose a safety problem provided that appropriate compensatory measures are taken, i.e. operational data may be adjusted to take into account the effect that the obstacle has on aircraft operations, probably with a corresponding detrimental impact on aircraft operations.

12.8.1 NOTIFICATION OF OBSTACLES

Where operational data (published aerodrome information) needs to be altered to reflect the presence of a new obstacle, notification to the aviation industry will be actioned by the Aerodrome Safety and Compliance Manager in accordance with the Part 2 Section 4 of this manual.

A NOTAM will be issued for the duration of all temporary obstructions or in the case of a permanent obstruction, until such times as details of the obstruction are reported in appropriate AIP amendments.

12.8.2 OBSTACLE MARKING/LIGHTING

Where required by CASA, obstacles (temporary and permanent) shall be marked and/or lit using standard red/white markings and/or red obstacle or white strobe lighting.

Details of lit obstacles are provided on Drawing 7-7-7076 Cairns Airport - Hazard Beacons, included in Part 2 Section 3 Annex 2.

A register of obstacle lights detailing their location, owner and contacts for fault reporting is included in Part 2 Section 3 Annex 3.

12.8.3 AOC TYPE "A"

Aerodrome Obstacle Charts (AOC) are prepared in accordance with CASA specifications contained in the Manual of Standards Part 139 – Aerodromes. The AOC Type "A" chart provides comprehensive obstacle data in the take-off climb areas and, Cairns Airport as the operator of an International Airport is required to provide such charts for use by Airline Operators. The Aerodrome Safety and Compliance Manager will arrange for the Type A charts to be reviewed approximately every two (2) years.

Type A charts are available for Runway 15/33. Details of the latest Type A are published in ERSA. Copies of Type A Charts are provided to Airlines and Aviation Industry groups upon request.

The Aerodrome Safety and Compliance Manager will notify chart holders of any changes to information (such as significant obstacle changes). Where any obstacle changes are notified by NOTAM, the Aerodrome Safety and Compliance Manager will not normally provide any separate advice to chart holders.

The Aerodrome Safety and Compliance Manager will update the Type A chart when the number of changes to the chart, notified through the NOTAM system or by way of separate advices, reaches an excessive level.

ANNEX 1

Cairns Airport Building Height Approval Forms:

- **Application for Height Approval of a Permanent Structure**
- **Application for Height Approval of a Temporary Structure**
- **Certificate of Height Approval – Permanent Structure**
- **Certificate of Height Approval – Temporary Structure**

APPLICATION FOR HEIGHT APPROVAL OF A PERMANENT STRUCTURE (in the vicinity of Cairns Airport)

Enquiries: Aerodrome Safety and Compliance Manager
Phone: 0400 508 097 Fax: (07) 4035 9657

For all proposals the following information must be supplied:

NAME	ADDRESS	PHONE NO	
Owner			
Architect			
Builder			

2. Maximum height of proposal (Australian Height Datum - AHD) including vent pipes, aerials, lighting protection devices etc, as well as objects that are to be erected periodically, such as building maintenance units etc.

   RL: .....metres AHD.

3. Real property description of site: .....

4. Street address: .....

5. Description of structure or building (eg. Mast, multi-storey hotel etc) .....

6. Elevation drawings:

7. Plan drawn to scale showing the following:
   a. Property boundary and distance to nearest street corner.
   b. Location shown in (Australian Map Grid - AMG Co-ordinates to the nearest metre) and RL (AHD) of highest point reached by structure.
      AMG: .....
   c. North point.
   d. Street name and block/lot number.

   (For a construction crane, a site plan of the project showing the maximum height to be reached by the crane (AHD) and its accurate location on the site will suffice. If more than one crane is to be used, each crane must be identified by a number.

   Please note: A separate height approval is required for each crane.

8. Any additional information: .....

   .....

9. **DECLARATION**

   I, ...(name of applicant)

   of.....(address/name of company)

   do solemnly and sincerely declare that the above information is correct and that all the drawings submitted with this application are accurate representations of the project.

Applicant's Signature: ..... Date: ...../...../.....

Witness Name:..... Witness Signature: .....

The information contained in this form is to be used for the purpose of airport operations and management. Information may be disclosed to government agencies or other parties if required by law or necessary for the purpose of continued port operations or administration. CAPL ensures that your personal information is collected, stored, accessed, altered, used and disclosed in accordance with the Privacy Act 1988 (Cth).

ATFM 0402r0 This form is a controlled document – refer to electronic file for latest version

APPLICATION FOR HEIGHT APPROVAL OF A TEMPORARY STRUCTURE (in the vicinity of Cairns Airport)

Enquiries: Aerodrome Safety and Compliance Manager
Phone: 0400 508 097 Fax: (07) 4035 9657

For all proposals the following information must be supplied:

NAME ADDRESS PHONE No.....

Builder			
Crane Operator			

2. Location / Real property description of site: .....

.....

3. Description of structure (eg. crane, mast, etc. In respect of cranes please advise if it is obstruction painted and lit):

.....

4. Maximum height of proposal (Australian Height Datum - AHD) to be reached by structure (e.g. when crane boom is at its highest elevation) including all attachments such as aerials, lighting protection devices lights etc.

Top RL: .....metres AHD **Ground Level:** .....metres AHD

Staged crane heights: Stage 1- .....m AHD (from ..... Until .....)
Stage 2 - .....m AHD (from ..... Until .....)

5. Starting date: .....

6. Duration of site occupancy: .....

7. Plan drawn to scale showing the following:

   a. Property boundary and distance to nearest street corner.
   b. Location shown in (Australian Map Grid - AMG Co-ordinates to the nearest metre) and RL (AHD) of highest point reached by structure.
      AMG: .....
   c. North point.
   d. Street name and block/lot number.

   (For a construction crane, a site plan of the project showing the maximum height to be reached by the crane (AHD) and its accurate location on the site will suffice. If more than one crane is to be used, each crane must be identified by a number.)

   Please note: A separate height approval is required for each crane.

8. Any additional information (eg. lighting) .....

.....

9. **DECLARATION**

I, ...(name of applicant)

of .....(address/name of company)

do solemnly and sincerely declare that the above information is correct and that all the drawings submitted with this application are accurate representations of the project.

Applicant's Signature: ..... Date: ...../...../.....

Witness Name:..... Witness Signature: .....

The information contained in this form is to be used for the purpose of airport operations and management. Information may be disclosed to government agencies or other parties if required by law or necessary for the purpose of continued port operations or administration. CAPL ensures that your personal information is collected, stored, accessed, altered, used and disclosed in accordance with the Privacy Act 1988 (Cth).

ATFM 0401r0 This form is a controlled document – refer to electronic file for latest version

Date)

(Address)

Via Email / facsimile:

Dear Sir/Madam

CAIRNS AIRPORT
CERTIFICATE OF HEIGHT APPROVAL – PERMANENT STRUCTURE

Attached is Certificate of Height Approval **CAPL-…./….** for the construction of a (Type of Structure) at:

The operation of cranes on the site requires a separate approval. This Authority would require details of crane position, number and duration of site occupancy as part of a separate application process.

Please note the conditions of approval described on the certificate.

Yours sincerely

[INSERT]
APPOINTMENT

Enclosure

Enquiries : First Name / Surname, Mobile Number
Email : Insert Email Address

Enquiries: **Aerodrome Safety and Compliance** Manager
Phone: 0400 508 097

CERTIFICATE OF HEIGHT APPROVAL

PERMANENT STRUCTURE

(in the vicinity of Cairns Airport)

Date:…… **No: CAPL** ……/……

Approval is granted subject to the conditions specified below for the erection of (type of structure) to a maximum RL of **(…) metres** on Australian Height Datum (AHD) including all appurtenances, aerials, masts, vents, lift structures, etc. located at:

(location)

For:

(owner)

CONDITIONS OF APPROVAL

CAPL is to be notified of the completed height and date of completion within fourteen (14) days of such completion.

This Certificate of Height Approval shall remain valid for a period of one (1) year from date of issue. If construction has not commenced within this period a further application for height approval should be made to CAPL.

The stated height above is that determined by the CAPL for airspace protection requirements only and is not necessarily the same as would be acceptable to the local authority, therefore building approval to the height mentioned above is not inferred by the issue of this Certificate.

The operation of cranes on the site requires a separate approval. CAPL would require details of crane position, number and duration of site occupancy.

Yours faithfully

(insert)
APPOINTMENT
Enquiries : First Name / Surname, Mobile Number
Email : Insert Email Address

(Date)

(Name)
(Title)
(Company)
(Address)

Via email:

Dear (Insert name)

CAIRNS AIRPORT
CERTIFICATE OF HEIGHT APPROVAL – TEMPORARY STRUCTURE

Attached is Certificate of Height Approval for the construction of a (crane type) at:

(Building/address)
Cairns

Please note the conditions of approval described on the certificate.

Yours sincerely

(Insert name)
INSERT TITLE

Enclosure

Enquiries : (Insert Name & Mobile No.)
Email : (Insert email address)

CERTIFICATE OF HEIGHT APPROVAL
TEMPORARY STRUCTURE
(in the vicinity of Cairns Airport)

Approval is granted subject to the conditions specified below for the erection of a mobile Crane:

Date:	**REF:**
From:	**To:**

to a **maximum RL XX metres** on Australian Height Datum (AHD) located at:

(Building/address)

For

(crane hire company on behalf of developer)

CONDITIONS OF APPROVAL

Conditions:

- Crane boom is not to exceed the maximum approved height.
- The crane must be fitted with a white strobe at the highest point.
- No crane operations are to take place during hours of darkness.
- Notify Cairns Airport at the start and completion of crane operation.
- Notify any changes to operation for approval.

(Insert name)
INSERT TITLE

Enquiries : (Insert Name & Mobile No.)
Email : (Insert email address)

ANNEX 2

Aerodrome Obstacle Chart Type "A"
Register of Chart Holders

AERODROME OBSTACLE CHART MAIL REGISTER						
Name	**Title**	**Company**	**Address / Email / Tel No**	**Date Sent**	**Type A Version**	**OFFICE USE ONLY New Version to be sent when avail.**
Mr Dave Copley		Jeppesen Australia Pty Ltd	GPO Box 1864 Canberra ACT 2601 document.control.denver@jeppesen.com.au 02 6120 2903	10/05/19	May 19	
Mr Andy Newman	Manager Operations Support	Cobham	National Drive Adelaide Airport SA 5950 opssupport@cobham.com.au 08 8154 7420	10/05/19	May 19	
Mr Cecil Teets	President & CEO	Automated Systems in Aircraft Performance Inc	POB 2457Cranberry Twp PA 16066-6909 USA team@asapinc.net	10/05/19	May 19	
Mr Robert Potter	-	Aviation Performance Systems	PO Box 138 Hampton Vic 3188 acm.aps@bigpond.com 0408 218 742	10/05/19	May 19	
Ms Melissa Wilson	Aust East Coast Manager	Air New Zealand	PO Box 5016 (Level 2 International Terminal) Melbourne Airport Vic 3045 melissa.williams@airnz.co.nz 0414 747 517	10/05/19	May 19	
Ms Maree Keygan	Airport Manager	Air Niugini	PO Box 65 AAC Cairns International Airport Cairns QLD 4870 airngcnsairport@bigpond.com 4035 9209	10/05/19	May 19	
Ms Toni Gilliver	Manager Domestic Customer Experience	Qantas Airways Ltd	PO Box 100 AAC Cairns International Airport Cairns Qld 4870 tonigilliver@qantas.com.au 4050 4581	10/05/19	May 19	

AERODROME OBSTACLE CHART MAIL REGISTER

Name	Title	Company	Address / Email / Tel No	Date Sent	Type A Version	OFFICE USE ONLY New Version to be sent when avail.
Mr Jarrod Seen	Dash 8 Fleet Manager Flight Operations	Qantaslink	PO Box 538 Mascot NSW 2020 02 9691 2345 qlinkflighttechnical@qantas.com.au	10/05/19	May 19	
Mr Michael Chapman		Virgin Australia	PO Box 1034 Spring Hill Qld 4004 3136 6134 michael.chapman@virginaustralia.com	10/05/19	May 19	
Mr Gurpreet Grewal	Flight Technical Officer	British Airways	PO Box 365 Harmondsworth UB7 0GB UK gurpreet.k.grewal@britishairways.com +44 208 513 0311 or aislibrary@ba.com	10/05/19	May 19	
Mr Peter Gard	Operations Manager	Police Air Wing	Sir Robert Norman Street General Aviation Aeroglen Qld 4870 Gard.peterc@police.qld.gov.au 4046 2222	10/05/19	May 19	
Mr Gerald McConnell	Manager	Airline Operations & Performance Engineering Services P/L	41B Aberdeen St Aberfeldie Vic 3043 0414 338 583	10/05/19	May 19	
Mr Geoff Neate	Head of Flying Operations	Cobham Aviation Services Aust	PO Box 1107 Tullamarine Vic 3043 03 9330 5222	10/05/19	May 19	
Ms Robyn Lavis	Flight Ops Aircraft Performance Mgr	Virgin Australia	Flight Operations Brisbane Airport C/- PO Box 1034 S Spring Hill Qld 4004 APG@virginaustralia.com 07 3087 0654	10/05/19	May 19	
Mr Roger Hemphill		Aircraft Performance Group	Aircraft Performance Group Inc 823 S. Perry Street Suite 210 Castle Rock CO 80104 USA rvh@apgdata.com 303 539 0410	10/05/19	May 19	
Mr Stuart Paynter		SITA Airport Info	1 London Gate, 252-254 Blyth Road Hayes Middlesex	10/05/19	May 19	

AERODROME OBSTACLE CHART MAIL REGISTER

Name	Title	Company	Address / Email / Tel No	Date Sent	Type A Version	OFFICE USE ONLY New Version to be sent when avail.
			UB3 1BW ENGLAND Stuart.paynter@sita.aero 0044 020 875 684 79			
Mr Chris Brown	Flight Operations Technical Manager	Monarch Airlines	London Luton Airport Prospect House Prospect Way Luton Bedfordshire LU2 9NU UK Chris.Brown@flymonarch.com	10/05/19	May 19	
Mr Andy Bokanev	Aerodata Support Specialist	Naverus	20415 72nd Ave S Suite 300 Kent WA 98032 USA abokanev@naverus.com 0011 1 253 867 3922	10/05/19	May 19	
Mr Paul Morris	Aeronautical Information Services	European Aeronautical Group UK Ltd	Navtech House Lyon Road Walton-on-Thames Surrey KT12 3PU UK +44 (0) 1932 70 4238 Paul.morris@euronautical.com	10/05/19	May 19	
SYD Flight Operations		Japan Airlines	Box 34 Brisbane International Terminal Building Airport Drive Eagle Farm Qld 4007 3860 5602 org.sydkkw.jali@jal.com	10/05/19	May 19	
Mr Stephen Weatherstone	Chief Pilot	Aircruising Australia Ltd	Stephen@aircruising.com.au 0414 905 307	10/05/19	May 19	
Mr Garry Studd		Skytraders	PO Box 1566 Tullamarine Vic 3043 garry.studd@skytraders.com.au	10/05/19	May 19	
Mr Reg Farrar	Performance Engineer	Skytraders	PO Box 1566 Tullamarine Vic 3043 reg.farrar@gmail.com 0413 782 767	10/05/19	May 19	
Mr Jason Howard		Aircraft Performance Group	Aircraft Performance Group Inc 823 S. Perry Street Suite 210 Castle Rock CO 80104 USA jhoward@apgdata.com 303 539 0410	10/05/19	May 19	

AERODROME OBSTACLE CHART MAIL REGISTER

Name	Title	Company	Address / Email / Tel No	Date Sent	Type A Version	OFFICE USE ONLY New Version to be sent when avail.
Flight Operations		Regional Express	81-83 Baxter Road MASCOT NSW 2020 foed@rex.com.au 02 9023 3576	10/05/19	May 19	
Mr Greg Brennan	Head of Ground Services	Tiger Airways	Building 186, 1-5 Grants Road, Melbourne Airport Vic 3045 gregbrennan@tigerair.com 0429 314 990	10/05/19	May 19	
Mr Steven Mould	Airport Analyst Operations Support	Flygprestanda AB	Adelgatan 8 Box 4210 S-211 22 Malmo SWEDEN 46 40 6420000 steven@flygp.se	10/05/19	May 19	
Mr Ian Liu	Senior Engineer Flight Operations Engineering	United Airlines	Lan.liu@coair.com 713 324 5183	10/05/19	May 19	
Mr Kieren Jin	Aircraft Performance Engineer	Qantas Engineering Qantas Airways	AB2/7 Qantas Jet Base MASCOT NSW 2020 kierenjin@qantas.com.au	10/05/19	May 19	
Mr Daniel Polak	Performance Coordinator First Officer – Dash 8	Skytrans Regional	PO Box 7110 CAIRNS QLD 4870 Daniel.polak@skytrans.com.au	10/05/19	May 19	
Ms Petra Struthmann	Performance & Operations Engineering	Lufthansa Systems Aeronautics GmbH	FRA OD/N-P Am Prime Parc 2 65479 Raunheim GERMANY Petra.struthmann@lhsystems.com	10/05/19	May 19	

AERODROME OBSTACLE CHART MAIL REGISTER

Name	Title	Company	Address / Email / Tel No	Date Sent	Type A Version	OFFICE USE ONLY New Version to be sent when avail.
Mr Luke Wilmen		Airnorth	Luke.wilmen@airnorth.com.au 0429 067 147	10/05/19	May 19	
Mr Selven Ramsamy	Flight Operations Performance Analyst	Skywest Airlines (Aust) Pty Ltd	Domestic Terminal PERTH AIRPORT WA 6105 Selven.ramsamy@skywest.com.au	10/05/19	May 19	
Mr Marcus Mok		Pearl Aviation	Level 3 Paspaley Pearls Building Smith Street Small DARWIN NT 0800 Marcusmok16@hotmail.com	10/05/19	May 19	
Flight Operations		Flight Focus Pte Ltd	17 Changi Business Park Central 1 #06-09 Honeywell Bldg Singapore 486073 dispatch.sin@flightfocus.net dispatch.my@flightfocus.net Tel: +65 6783 0839 Ext 318 Fax: +65 6783 3718	10/05/19	May 19	
Ms Claudio Ortenzi	Performance & Navigation	Alitalia C.A.I. S.p.A.	Tel: +39 06 6563 8402 Fax: +39 06 6563 3549 Ortenzi.claudio@alitalia.it	10/05/19	May 19	
Mr Samuel Catts	Flight Operations Engineer	Alliance Airlines	81 Pandanus Avenue PO Box 1126 BRISBANE AIRPORT QLD 4009 07 3212 1587 0423 524 333 scatts@allianceairlines.com.au	10/05/19	May 19	
Mr Steve Whittemore	Airport Data Engineer	AeroData Inc.	aptdata@aerodata.aero	10/05/19	May 19	
Toshiyuki Suzuyama	Operations Planner	Nippon Cargo Airlines	toshiyuki.suzuyama@nca.aero	10/05/19	May 19	

Intentionally Blank

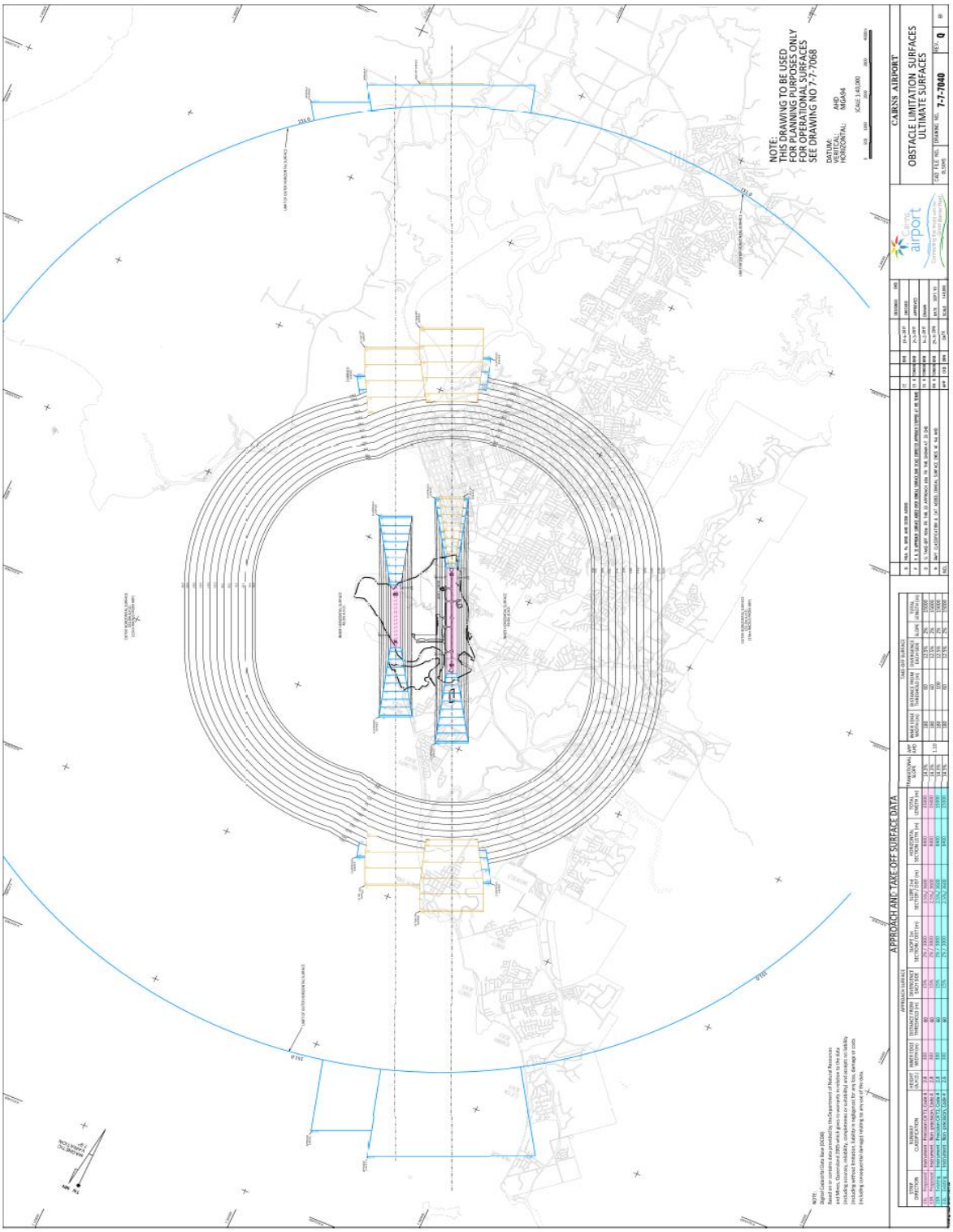
ANNEX 3

List of Obstacle Related Drawings held by Cairns Airport

DRAWING NO.	TITLE
7-7-7040	Obstacle Limitation Surface, Ultimate Surfaces
7-7-7043	OLS and Fly-over area Protrusions
7-7-7045	Building Heights within RWY 33 OLS area
7-7-7048	Aerodrome Obstacle Chart – ICAO, Cairns Airport, Australia, Type A Chart – North (Sheet 1 of 2)
7-7-7048	Aerodrome Obstacle Chart – ICAO, Cairns Airport, Australia, Type A Chart – South (Sheet 2 of 2)
7-7-7050	Cairns Airport Obstacle Limitation Surfaces (Colour Copy – A4 size only)
7-7-7052	OLS – Cairns City Planning Purposes Chart, 300m Runway Strip
7-7-7060	Comparison Between OLS and PANSOPS Surfaces
7-7-7064	PANSOPS and OLS Surfaces, 15 Take-Off (300m – 180m Rwy Strip at Chg 2805m)
7-7-7068	Existing Operational Obstacle Limitation Surfaces (300 to 180m Rwy Strip at chg 2805)
7-7-7069	OLS Operational Surfaces, Temporary Obstacle Checking Chart - 15 Take-Off
7-7-7077	OLS Operational Surfaces, Temporary Obstacle Checking Chart - 33 and 30 Take -off
7-7-7078	Hazard Beacon Obstacle Lights
7-7-7083	Existing Surfaces PANS-OPS Critical Surfaces at 2001 and Obstacle Limitation Surfaces

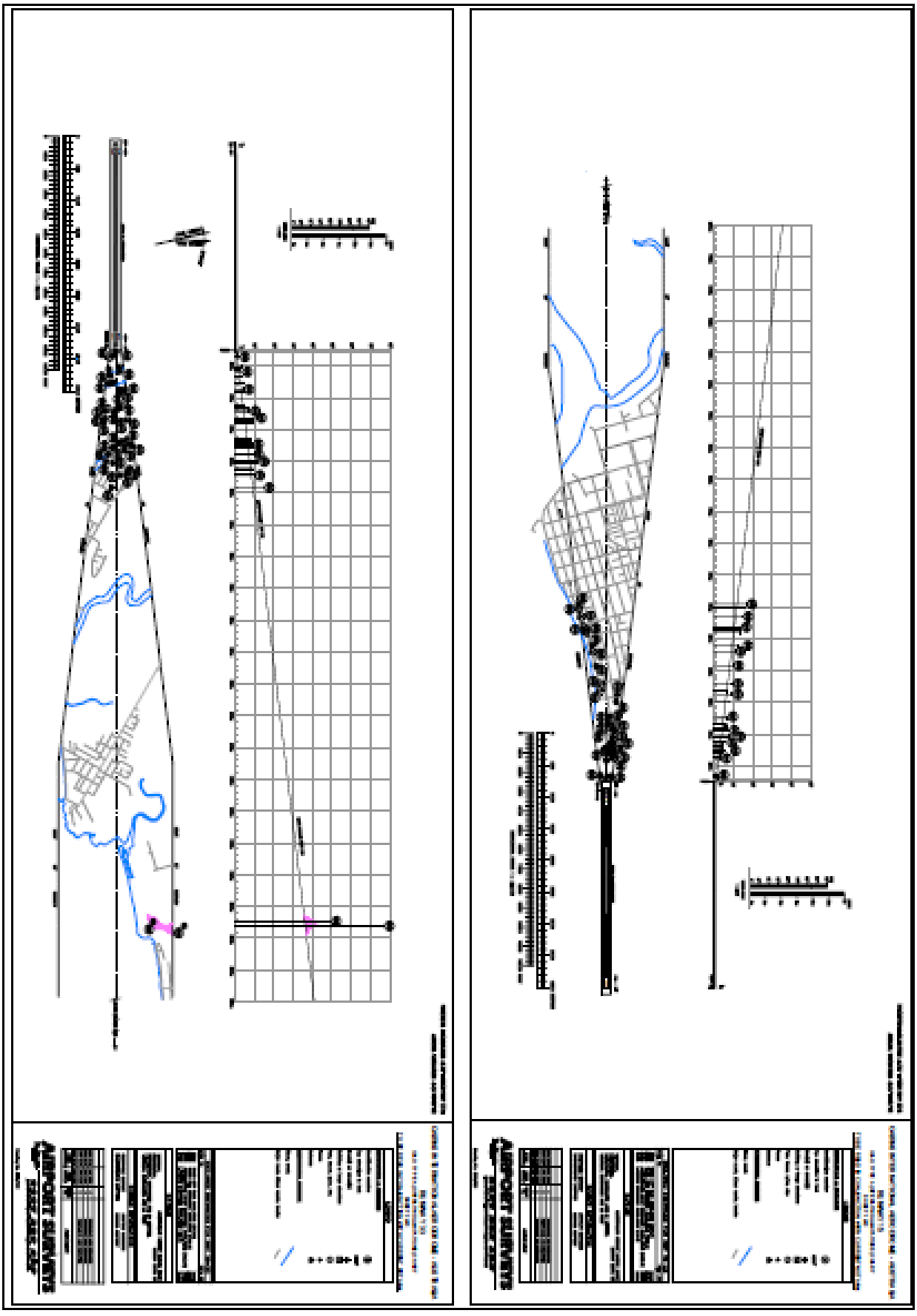
ANNEX 4

Obstacle Limitation Surface
Drawing No. 7-7-7040



ANNEX 5.1

Type “A” Charts – 2019



CAIRNS INTERNATIONAL AERODROME - AUSTRALIA
TYPE A OPERATING CHART - OBSTACLE DATA RWYS 15 & 33
SURVEYED: P.FITZGERALD
DATE :MAY 2019
SHEET 3 OF 3 SHEETS

AIRPORT SURVEYS

Take Off Runway	Point ID	Dist from TODA End	Dist from SOT	Offset	MGRAM Zone 55 Easting	MGRAM Zone 55 Northing	AHD Elevation	AHD Elevation (ft)	Description	Take-Off Gradient (%)
15	1503	456.4	3712.4	-48.9 L	367706.6	8131487.0	11.48	38	Street Light	1.95
15	1504	456.0	3712.0	-23.8 L	367681.1	8131477.1	11.48	38	Street Light	1.95
15	1506	434.6	3690.6	134.6 R	367527.9	8131402.6	11.20	37	Street Light	1.98
15	1507	513.1	3769.1	-16.1 L	367697.5	8131421.8	11.99	39	Street Light	1.83
15	1510	485.1	3741.1	50.3 R	367625.5	8131420.6	12.40	41	Mangrove	2.02
15	1512	448.0	3704.0	102.8 R	367562.4	8131403.3	12.88	42	Tree	2.0
15	1514	521.4	3777.4	5.1 R	367681.5	8131405.6	13.41	44	Tree	2.07
15	1515	544.1	3800.1	104.6 R	367599.8	8131344.6	12.23	40	Power Pole	1.77
15	1516	552.9	3808.9	57.9 R	367645.9	8131355.5	12.24	40	Power Pole	1.74
15	1517	614.9	3870.9	71.4 R	367658.7	8131293.4	15.96	52	Tree	2.17
15	1518	594.1	3850.1	94.0 R	367629.6	8131303.3	13.76	45	Chimney	1.88
15	1519	491.3	3747.3	125.3 R	367559.4	8131384.5	15.23	50	Tree	2.57
15	1520	702.6	3958.6	107.4 R	367661.3	8131198.6	23.18	76	Palm Tree	2.83
15	1522	803.1	4059.1	109.7 R	367699.9	8131105.8	21.15	69	Tree	2.31
15	1523	805.7	4061.7	139.7 R	367673.5	8131091.3	24.11	79	Tree	2.67
15	1524	848.7	4104.7	95.8 R	367731.1	8131069.7	19.79	65	Palm Tree	2.00
15	1525	896.2	4152.2	79.9 R	367805.3	8130941.3	19.79	65	Floodlight	1.73
15	1526	906.4	4162.4	34.6 R	367810.5	8131041.7	20.04	66	Tree	1.92
15	1529	1258.6	4514.6	158.0 R	367840.1	8130669.7	23.84	78	Paperbark	1.69
15	1530	1272.0	4528.0	178.2 R	367867.7	8130557.8	26.35	86	Tree	1.88
15	1532	1001.1	4277.1	49.4 R	367843.3	8130930.9	21.87	72	Paperbark	1.89
15	1537	1426.8	4682.8	-68.1 L	368133.3	8130615.6	20.00	66	TV Aerial	1.22
15	1538	1537.3	4793.3	-80.0 L	368170.6	8130511.3	28.31	93	Phone Cell - Nautilus	1.67
15	1539	2122.9	5378.9	-226.3 L	368581.5	8130035.0	37.21	122	Aerial on Mercure	1.63
15	1540	2423.7	5679.7	-347.2 L	368773.8	8129808.9	42.92	141	Chimney on Hospital	1.66
15	1542	901.7	4157.7	159.6 R	367984.2	8130995.4	17.84	59	Floodlight	1.69
15	1560	2583.9	5839.9	-385.9 L	368874.1	8129678.1	45.68	150	Aerial on Hospital	1.67
15	1571	368.7	3624.7	135.1 R	367500.9	8131482.7	10.11	33	AFP Building	2.04
15	1572	383.4	3639.4	91.2 R	367545.9	8131497.0	10.20	33	Mangrove	1.98
15	1573	2371.1	5627.1	-310.5 L	368719.0	8129842.2	42.40	139	Stairs on Hospital	1.68
15	1575	2334.3	5590.3	-310.1 L	368703.7	8129875.7	40.07	131	Aerial on Building	1.61
15	1579	332.3	3588.3	3.7 R	367606.2	8131539.2	7.77	25	Mangrove	1.56
15	1601	51.2	3307.2	19.3 R	367478.1	8131829.9	4.87	16	LIZ Hazard Light	4.43
15	1609	60.7	3316.7	97.5 R	367410.5	8131789.5	6.84	22	Mangrove	6.89
15	1621	104.8	3360.8	-97.6 L	367606.7	8131828.2	7.66	25	Mangrove	4.83
15	1622	85.1	3341.1	75.2 R	367440.8	8131776.3	7.21	24	Mangrove	5.42
15	1625	71.9	3327.9	-95.6 L	367591.6	8131857.5	7.12	23	Mangrove	6.29
15	1701	1824.1	5080.1	-159.6 L	368359.5	8130281.2	30.82	101	Aerial - Coral Waters	1.55
15	1702	2014.7	5290.7	-205.9 L	368487.1	8130107.4	31.56	110	Acacia Court Bldg	1.52
15	1708	2713.4	5969.4	-429.2 L	368966.1	8129577.2	48.95	161	Vent - Nth Shore Tower	1.71
15	1710	2774.2	6030.2	-435.8 L	368996.8	8129524.3	51.22	168	Phone Cell - Rydges	1.75

33	3001	613.4	3869.4	-146.7 L	365750.1	8135417.8	14.90	49	Tree	1.98
33	3002	644.3	3900.3	-115.1 L	365766.5	8135458.8	14.11	46	Wattle	1.76
33	3003	653.2	3909.2	-82.9 L	365792.4	8135480.0	13.14	43	Tree	1.59
33	3006	871.6	4127.6	-104.0 L	365684.6	8135671.2	15.14	50	Power Pole	1.42
33	3008	914.9	4170.9	117.3 R	365869.4	8135800.4	15.47	51	Power Pole	1.39
33	3009	899.0	4155.0	-68.5 L	365706.0	8135710.6	20.81	68	Eucalypt	2.01
33	3010	1096.9	4352.9	-106.2 L	365536.6	8135852.0	21.17	69	Eucalypt	1.68
33	3011	1111.5	4367.5	-74.0 L	365605.0	8135902.7	23.05	76	Eucalypt	1.82
33	3012	1070.3	4326.3	167.0 R	365852.0	8135962.5	30.30	99	Eucalypt	2.57
33	3013	1124.8	4380.8	192.9 R	365853.6	8136002.9	28.93	95	Eucalypt	2.32
33	3014	1142.2	4398.2	187.3 R	365841.4	8136036.6	29.21	96	Eucalypt	2.31
33	3017	1506.3	4762.3	-260.8 L	365283.0	8136190.8	28.32	93	Eucalypt	1.69
33	3018	1473.5	4729.5	-231.9 L	365324.0	8136169.8	28.19	92	Eucalypt	1.72
33	3019	1403.3	4659.3	-171.3 L	365407.8	8136130.1	24.01	79	Eucalypt	1.51
33	3020	1401.8	4657.8	-90.8 L	365469.9	8136188.8	24.01	79	Paperbark	1.48
33	3021	1459.4	4715.4	-56.1 L	365490.4	8136228.1	22.93	75	Eucalypt	1.38
33	3022	1512.5	4768.5	19.7 R	365536.2	8136267.3	25.79	85	Paperbark	1.52
33	3023	1515.6	4791.6	48.8 R	365555.5	8136340.2	25.77	85	Paperbark	1.5
33	3027	1967.1	5243.1	-70.2 L	365272.0	8136686.6	31.70	104	Tree	1.47
33	3029	1772.2	5038.2	42.4 R	365453.9	8136553.9	30.47	100	Paperbark	1.56
33	3030	1752.2	5008.2	147.3 R	365557.8	8136578.1	34.35	113	Paperbark	1.8
33	3031	1626.8	4885.8	114.7 R	365577.6	8136453.0	30.56	100	Paperbark	1.7

33	3334	2160.5	5416.5	59.5 R	365312.2	8136915.9	46.21	152	NDB Aerial	2.01
33	3336	9050.5	12306.5	-1079.1 L	361481.6	8142755.0	234.94	771	Earl Hill	2.57
33	3337	8985.0	12241.0	-992.5 L	361953.1	8142692.1	151.92	498	Tree on Hill	1.66
33	3338	1855.9	5111.9	-224.9 L	365175.6	8136522.3	26.94	88	Paperbark	1.3
33	3339	1877.6	5133.6	-197.8 L	365191.6	8136553.1	26.87	88	Paperbark	1.28
33	3340	1947.4	5203.4	-170.2 L	365188.6	8136628.1	28.73	94	Paperbark	1.33
33	3341	843.1	4199.1	-5.7 L	365745.5	8135776.4	20.21	66	Tree	1.85
33	3342	862.0	4218.0	31.0 R	365771.4	8135808.5	20.28	67	Tree	1.82
33	3343	855.4	4211.4	165.1 R	365896.7	8135856.8	25.16	83	Tree	2.34
33	3344	510.4	3766.4	65.8 R	365986.1	8135409.7	12.89	42	Tree	1.98
33	3345	504.6	3760.6	27.7 R	365953.6	8135388.9	12.81	42	Tree	1.99
33	3346	621.5	3877.5	-67.8 L	365819.0	8135457.2	13.20	43	Eucalypt	1.68
33	3347	520.1	3776.1	111.8 R	366004.3	8135437.2	13.64	45	Tree	2.09
33	3402	80.2	3336.2	19.2 R	366117.7	8134997.5	4.66	15	LIZ Hazard Light	2.35
33	3403	103.1	3359.1	100.8 R	366183.0	8135051.4	7.67	25	Aerial on LIZ Bldg	4.74
33	3405	19.0	3275.0	0.0 R	366124.9	8134933.7	4.03	13	NF Monitor Aerial	6.54
33	3406	133.5	3589.5	-60.6 L	365942.2	8135196.7	11.99	39	Mangrove	2.76
33	3411	259.9	3515.9	-55.8 L	365976.4	8135131.4	9.81	32	Mangrove	2.7
33	3417	396.9	3652.9	83.1 R	366047.9	8135312.9	12.69	42	Mangrove	2.5
33	3419	299.6	3555.6	105.2 R	366107.5	8135232.9	9.20	30	Mangrove	2.34
	Coordinates of Take Splay Origins:			15 T/O	367475.06	8131884.51	2.60			
				33 T/O	366112.61	813-4916.34	2.78			

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 13	DISABLED AIRCRAFT REMOVAL

NOTES ON DISABLED AIRCRAFT REMOVAL

An aircraft which suffers an accident passes into the custody of Australian Transport Safety Bureau (ATSB) pending a decision to undertake an accident investigation and, if so, until the accident investigation is complete. Furthermore, an aircraft involved in an accident may not be removed from the accident site until the ATSB officially releases the aircraft to the owner.

An accident is any event that causes damage to an aircraft. Such an event may range from simple events such as a flat tyre on taxying or running off a taxiway to major accidents such as the total destruction of an International B747 aircraft.

Arrangements for dealing with disabled aircraft are set out in the Aerodrome Emergency Plan (AEP), which is issued by the Cairns Airport Pty Ltd as a separate document.

Contents

13.1 PURPOSE

This Section details the arrangements in place at the airport for removing an aircraft that has become disabled on (or near) the movement area for reasons other than an accident, e.g. an aircraft that is immobilised as a result of a mechanical problem.

When an aircraft is disabled as a result of an accident, the applicable response is as detailed in the Disabled Aircraft Recovery Plan of the AEP.

13.2 REFERENCES

Civil Aviation Safety Regulation 139.095 (a) (ii) requires airport management to include in this manual, particulars of the procedures for removing an aircraft that is disabled on or near the movement area.

Regulation 293 of Civil Aviation Safety Regulations (1988) empowers CASA to authorise persons to move or remove aircraft from any part of the movement area of an aerodrome in the interests of safety or orderly flow of air traffic.

Cairns Airport's Aerodrome Emergency Plan – Disabled Aircraft Recovery Supporting Plan provides the coordinated response for agencies to safely remove, in the shortest possible time, any aircraft which causes the temporary closure of a runway or taxiway.

Transport Safety Investigation Regulations 2003 (TSIR) requires an airport to report any aircraft accident and not move an aircraft until ATSB have cleared it.

Queensland "Airport Assets (Restructuring and Disposal) Act 2008" details powers of Cairns Airport "authorised officers" in moving any aircraft (contravening property) that affects the efficient operation, safety, or security of Cairns Airport.

13.3 RESPONSIBILITIES

Australian Transport Safety Bureau (ATSB): The ATSB has a legislated responsibility to investigate all accidents and incidents involving aircraft in Australia. Other parties/countries may also be involved if the aircraft is registered in another country or if foreign nationals are on board. The investigation may not involve an on-site investigation, in which case the aircraft may be released by the ATSB investigator immediately.

Air Traffic Control (ANS) - The Cairns ANS will:

- Notify the ATSB of any accident involving an aircraft at Cairns Airport.

Aircraft Owner - The owner of an aircraft, the pilot and any other person in charge of the aircraft is responsible for:

- The removal of the aircraft if it becomes disabled on the Airport once it has been authorised to do so by ATSB.

Chief Executive Officer has overall responsibility for:

- Facilitating the removal of a disabled aircraft in order that the airport can be returned to normal service as quickly as possible.
- Determining the degree of assistance to be offered by Cairns Airport in a removal operation.
- Determining whether in certain cases Cairns Airport should itself remove a disabled aircraft.
- Ensuring that only Cairns Airport staff members who have been trained in the removal process are involved in such activity.

Manager Aerodrome is responsible for:

- Preparing and maintaining an effective set of procedures detailing the extent of Cairns Airport assistance would be available in removing a disabled aircraft.
- Ensuring that the ATSB has been notified of the accident.
- Liaising with ATSB, CASA, and Air Traffic Control over clearance to remove the aircraft.
- Coordinating the aircraft removal with the aircraft owner, pilot or other person in charge of the aircraft.
- Ensuring that any Cairns Airport coordinated aircraft removal is conducted in accordance with Cairns Airport Pty Ltd's statutory powers.
- Providing assistance in the removal operation.
- Convening, if necessary, a meeting with the aircraft owner (or representative), oil companies, CASA, ANS, recovery equipment supplier, etc.
- Recording events and details of any meetings.

Aerodrome Operations and Emergency Manager is responsible for:

- Providing assistance as necessary to the Manager Aerodrome
- Compiling and maintaining records of the occurrence, including photographs of the aircraft and of the recovery operation (for record purposes, especially in respect of possible future litigation).
- Liaising with Cairns Airport, Airport Safety Officers and the aircraft owner.
- Ensuring the provision of appropriate unserviceability markers, markings and/or lighting and initiating any necessary NOTAM.

- Arranging, if necessary, the calculation and notification of temporary declared distances and provision of any temporarily displaced threshold.
- Determining when the affected area is serviceable and returning it to normal service.

Airport Safety Officers are responsible for:

- The provision of any unserviceability markers, markings or lighting.
- Coordinating field activities with ANS via the appropriate radio frequency.
- Logging details of the events.
- Providing escorts and supervision for aircraft engineering companies and/or recovery equipment.

Environment Manager is responsible for:

- Complete a risk assessment regarding environmental harm associated with the aircraft and response activities.
- Provide advice regarding appropriate control measures to prevent or minimise environmental harm or pollution.
- Co-ordinate sampling and remediation measures if environmental harm has been caused.
- Report environmental harm as required by law
- Liaise with all relevant Local, State and Federal environmental authorities on environmental matters, as required.

NOTE
The names and contact telephone numbers of Cairns Airport persons with responsibilities for Disabled Aircraft Removal are detailed in the Master Contact List in the "Aerodrome Administration" section of this Manual.

13.4 ROLE AND OBLIGATIONS OF CAIRNS AIRPORT

No removal of the aircraft can take place until ATSB complete their investigations and release custody of the aircraft to the owner, pilot or other person in charge. Cairns Airport will liaise with ANS and ATSB to confirm the release of the aircraft.

The aircraft owner, pilot or other person in charge of an aircraft is responsible for moving a disabled aircraft. Where the aircraft owner, pilot or other person in charge of an aircraft agrees to undertake the removal, then Cairns Airport will assist wherever possible to ensure this occurs as soon as possible.

Where the owner, pilot or other person in charge of the aircraft agrees for Cairns Airport to remove, or assist in the removal of the aircraft, the Cairns Airport delegated representative will first obtain from the owner a written indemnity, in the form provided at Annex 2 to this Section.
In instances where the aircraft removal is not undertaken by or agreed by the owner, pilot or other person in charge, or by CASA, the Chief Executive Officer or delegated representative will determine the degree of Cairns Airport involvement in the removal action.

Cairns Airport's authorised officers may give a direction to move a disabled aircraft in accordance with Cairns Airport Pty Ltd's statutory powers under Queensland "Airport Assets (Restructuring and Disposal) Act 2008". Before exercising the statutory power, Cairns Airport's authorised officers:

- Must reasonably believe it is necessary to move the disabled aircraft having regard to efficient airport operations, safety or security;
- Must give a verbal direction to the owner, pilot or other person in charge of the aircraft if they can be found;
- Must have issued a Notice as per Annex 1;

- Must have tried again to immediately find the owner, pilot or other person in charge of the disabled aircraft and give them the Annex 1 Notice; and
- Where the owner, pilot or other person in charge is located, Cairns Airport authorised officers must believe that they cannot, or will not, immediately remove the disabled aircraft in response to the Annex 1 Notice. Cairns Airport's authorised officers can then take steps considered necessary and reasonable to have the disabled aircraft moved.

13.5 MATTERS TO BE CONSIDERED BY CAIRNS AIRPORT

When Cairns Airport is co-ordinating a removal/recovery of a disabled aircraft, or itself removing a disabled aircraft, Cairns Airport Aerodrome Operations and Emergency Manager will consider matters such as:

- Provision of amended aerodrome information by NOTAM.
- Provision of a chronological record of events and meetings related to the recovery operation.
- Allocation of storage areas for mail or other cargo taken from the aircraft.
- Recovery equipment and man-power needs.
- Suitable access routes to and from the recovery area.
- Necessity (or otherwise) to de-fuel the aircraft.
- Necessity for other specialist attendance (e.g. if there are toxic or other hazardous material on board the aircraft).
- Allocation of storage area for the recovered aircraft.
- Weather conditions (particularly if crane or air-bag operations are planned).
- Lighting of the site for night works.
- Infringement of movement areas and/or OLS by recovery equipment.
- Clearance from Cairns Airport engineering/technical staff in respect of underground services before permitting any excavation work that might be necessary.
- The requirements of ANS to manage other aircraft traffic, if any.
- Movement area restoration work.
- Post-recovery operation critique.
- Environmental issues.

NOTE
Cairns Airport lists, in the Disabled Aircraft Recovery Plan of the AEP, the equipment on or near the airport that can be made available for aircraft removal purposes and the Disabled Aircraft Recovery procedures applicable.

ANNEX 1

Notice directing an aircraft owner, pilot or other person in charge to remove a disabled aircraft.

Date

Aircraft Owner, Pilot or Other Person in Charge
C/- VH-____
Cairns Airport
CAIRNS QLD 4870

Dear Sir/Madam

CAIRNS AIRPORT
DIRECTION TO MOVE AIRCRAFT VH - .....

Aircraft registered VH-____ (the contravening aircraft) has been parked on the movement area at Cairns Airport in such a manner that it is impeding Cairns Airport Pty Limited's safety, security and operational requirements.

Under the powers conferred in me by the Airport Assets (Restructuring and Disposal) Act 2008 (the Act) I, *[name]*, Chief Executive Officer, Cairns Airport, hereby direct you, the owner, pilot or person in charge of the contravening aircraft, to remove the contravening aircraft from the movement area of Cairns Airport by (time) on (date).

Failure to comply with this direction will result in the contravening aircraft being removed by the Cairns Airport Pty Limited in accordance with Chapter 4 Part 4 Sect 77 of the Act. Furthermore, any costs incurred by Cairns Airport Pty Limited will become a debt owed by you to the Cairns Airport Pty Limited.

If you have not contacted the undersigned by (time) on (date), I will have no choice but to commence the removal of the contravening aircraft and direct any costs involved to you.

Whilst all care will be taken by the Authority's authorised officers during the removal action, the Cairns Airport Pty Limited will not be responsible for any damage to the contravening aircraft that might be incurred during the removal.

This direction is given at Cairns Airport at (time) on the ..... day of ....., 20....

Yours faithfully

[Name]
CHIEF EXECUTIVE OFFICER

Cairns Airport Pty Ltd > A North Queensland Airports Enterprise
A Airport Avenue | Cairns Airport | Cairns | Q | 4870 > PO Box 57 | Airport Administration Centre | Cairns Airport | Q | 4870
P + 61 7 4080 6703 F + 61 7 4080 6704 E enquiries@cairnsairport.com.au W cairnsairport.com.au > ABN 18 132 228 221

ANNEX 2

Indemnity and Release Document

INDEMNITY AND RELEASE
MOVEMENT OF STATIONARY AIRCRAFT

TO: CAIRNS AIRPORT PTY LTD

I, the undersigned, being the owner, pilot or other person in charge of the contravening aircraft described below hereby agree to provide this indemnity and release on the conditions set out below.

1. I agree and consent to the Cairns Airport Pty Ltd, its servants, agents, contractors and employees ("the CAPL") to move at any time required by CAPL the contravening aircraft at my sole cost and expense.

2. In consideration of CAPL moving the contravening aircraft, I agree to indemnify and keep indemnified CAPL against all and any loss damage cost charge expense or other liability however suffered paid or incurred by or threatened against CAPL in relation to or arising out of or in consequence of any action, proceeding, claim or demand which is or may be brought made or prosecuted or threatened against CAPL in respect of any loss of or damage to property, loss of life or personal injury or other loss that may arise in any way from the moving of the contravening aircraft by CAPL.

3. I further agree to release CAPL from all claims, actions, causes of actions, proceedings and demands which I or the owner now has or but for this indemnity and release would or might at any time in the future have against CAPL and from all present and future liability of CAPL to me and or the owner however caused in relation to or arising out of or in consequence of the moving of the contravening aircraft.

4. I confirm that it is the intention of this indemnity and release that each servant, agent, contractor and employee of CAPL obtain the benefits expressed in their favour under this indemnity and release and be entitled to enforce such benefits.

5. I confirm that I and the owner have abided by all applicable laws including without limitation acts, regulations, by-laws, directions and determinations relating to or made by the Civil Aviation Safety Authority, the Australian Transport Safety Bureau, the Department of Infrastructure, the Commonwealth of Australia, Cairns Airport Pty Ltd and any other relevant authority or body which has authority in relation to interference with or movement of an aircraft.

Description of Aircraft .....

Type of Aircraft .....

Registration .....

Signed by .....Date.....

Full Name (Print) .....

In the presence of .....Date.....

Full Name (Print) .....

Cairns Airport Pty Ltd > A North Queensland Airports Enterprise

A Airport Avenue | Cairns Airport | Cairns | Q | 4870 > PO Box 57 | Airport Administration Centre | Cairns Airport | Q | 4870
P + 61 7 4080 6703 F + 61 7 4080 6704 E enquiries@cairnsairport.com.au W cairnsairport.com.au > ABN 18 132 228 221

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 14	HANDLING OF HAZARDOUS MATERIALS

NOTES ON HAZARDOUS MATERIALS

CASA deems hazardous materials to include flammable liquids and solids, corrosive liquids, compressed gases and magnetised or radio-active materials.

Arrangements for dealing with accidental spillage of hazardous materials are set out in the Aerodrome Emergency Plan (AEP) which is issued by the Cairns Airport Pty Ltd as a separate document.

Contents

14.1 PURPOSE

This Section details the arrangements in place at the airport for the safe handling of hazardous materials.

These arrangements are limited to hazardous materials handled at the Airport, namely:

- Hazardous waste
- Petro-chemicals
- Explosives

NOTE
As noted above, responsibilities for responding to the spillage of hazardous materials on the Airport are detailed in the AEP.

Cairns Airport has established specific procedures to deal with hazardous material in order to:

- Ensure the safety of aviation activities on or near the Airport.
- Protect persons on the airport from possible adverse effects of hazardous substances.
- Protect the environment.
- Avoid or minimise possible disruptions to the operation of the airport as a result of improper handling of such materials.

14.2 REFERENCES

Section 23 of the Civil Aviation Act requires CASA to regulate the carriage of dangerous goods by air and prescribes penalties for breach of the Civil Aviation Regulations (CAR). The CAR details the rules applicable to the transport of dangerous goods and hazardous materials on Australian aircraft, or on foreign aircraft within Australian territory.

Civil Aviation Safety Regulation – Part 92 Consignment and Carriage of Dangerous Goods by Air prescribe the safety requirement for carriage of dangerous goods.

Civil Aviation Order 20.9 contains the CASA directions in relation to safety during the refuelling of aircraft.

Queensland Dangerous Goods Safety Management Act 2001 and the Australian Standard AS 1940-2004 "The Storage and Handling of Flammable and Combustible Liquids" stipulate requirements in respect of storage and handling of flammable and combustible liquids. (Note: Mobile tankers are required to meet the construction requirements of Australian Standard AS 2809 - 2008 – "Road Tank Vehicles for Dangerous Goods.")

CASA issued AC 139-12 (0) provides guidance on handling of hazardous substances on an Aerodrome.

The Queensland Environment Protection Act 1994 and the Environmental Protection (Water) Policy 2009 impose legal obligations in respect of environmental damage and pollution.

Cairns Airport's Aerodrome Emergency Plan details the emergency services response to any hazardous materials incident that can not be adequately managed by the Spill Response Procedures.

14.3 RESPONSIBILITIES

NOTE
In all cases, the aircraft operator, the re-fuelling company or the ground-handling agent (as the case may be) is responsible for the development of procedures for the safe handling of hazardous materials and spill response. They are also required to contain and clean-up any hazardous material spill on the airport caused by their organisations and for the remediation of any contamination or damage caused.

Aerodrome Safety and Compliance Manager has overall responsibility for:

- Ensuring that appropriate procedures are in place to accommodate the aviation safety related requirements in respect of hazardous materials on the Airport.
- Approval of the shipment of explosives through the Airport, including determining any conditions under which the operation may occur.

Manager Engineering is responsible for:

- Ensuring that the waste disposal facility is operated and maintained in accordance with prescribed standards.
- Ensuring contingency arrangements for waste disposal contractors is in place.
- Providing advice on infrastructure developments on the airport to ensure effective and safe disposal of hazardous material (including fuels and oils).

Environment Manager has overall responsibility for:

- Carry out compliance checks of airport operational activities against relevant regulations, policies and agreements, with regards to environmental matters including the handling and storage of hazardous substances.
- Provide scientific/ technical advice to Cairns Airport staff and relevant stakeholders.
- Conduct and coordinate investigations and regulatory/ external incident reporting requirements associated with hazardous material spills.
- Liaise with Environment Services regarding investigations of fuel or hazardous waste spills.
- Prepare reports for senior management regarding any major fuel, or other hazardous material spill, as required.
- Assist with scientific/ technical components of Hazardous Material training for Cairns Airport staff and other users of our common use spill equipment as required

Chief Commercial Officer – Retail, Transport and Property is responsible for including in formal lease documents such conditions that will require tenants to:

- Comply with the Standards Association of Australia codes in respect of hazardous materials.
- Ensure that no hazardous materials will be disposed of or permitted to leak or drain onto airport surfacers or into drains, sewers or soils.
- Develop procedures for the safe handling of hazardous materials.
- Remediate any contamination or damage caused by a hazardous material incident.
- Provide (where necessary) suitable spill response materials receptacles for waste substances and for those substances to be disposed of under applicable Government regulations.
- In the case of aviation fixed base operators and mobile refuellers, to provide fuel sample receptacles at convenient locations with instructions for relevant persons to use them when discarding such fuel samples.
- Develop and adopt appropriate standard operating procedures to deal with hazardous material incidents and which should include:
  - details of contacts with police, fire brigades, Department of Enviroment & Science (DES) and relevant public health authorities; and
  - a requirement to advise Cairns Airport of any incident.

Manager Aerodrome is responsible for:

- Ensuring that procedures for hazardous materials spill response on the Airport are developed and reviewed regularly,
- Overseeing the responses and activities surrounding spill reponse is cunduted in a safe manner,
- Ensuring that airside operators have in place procedures to safely handling, store, clean up and disposal of hazardous materials,
- Ensure spill and hazardous material response training is conducted and spill resouces material is available.

Aerodrome Operations and Emergency Manager is responsible for:

- Preparing procedures for hazardous materials spill response on the Airport,
- Overseeing Airport Safety Officer activities to ensure safe spill response,
- Liaise with airside operators to ensure safe practices for handling, storage, clean up and disposal of hazardous materials,
- Ensure adequate training and spill response supplies are provided.

Airport Safety Officers are responsible for:

- Reporting to the Aerodrome Operations and Emergency Manager, any practices or procedures observed, regarding storage and handling of hazardous material that in their opinion are unsafe,
- Reporting (in the Airport Safety Officer logs) details of any hazardous material spills,
- In respect of hazardous materials spills, overseeing the clean-up by the responsible party,
- Providing assistance in respect of clean-up activities, such as supplying absorption materials and/or emulsifying agents,
- For fuel spills over 10 litres, seeking ARFFS assistance to stand-by with fire fighting appliance/s during the clean-up,
- Manage the replenishment of the Cairns Airport common use spill kits,
- Providing unserviceability markers, markings or lighting as may be required,
- Assist with disposal of contaminated waste and arranging for additional surface remediation, as required.

Airport Tenants are responsible for:

- Complying with the Standards Association of Australia codes in respect of hazardous materials.
- Ensure that no hazardous materials will be disposed of or permitted to leak or drain onto airport surfaces or into drains, sewers or soils.
- Developing organisational procedures for the safe storage and handling of hazardous materials.
- Remediate any contamination or damage caused by a hazardous material incident.

- Provide (where necessary) suitable spill response materials receptacles for waste substances and for those substances to be disposed of under applicable Government regulations.
- In the case of aviation fixed base operators and mobile refuellers, to provide fuel sample receptacles at convenient locations with instructions for relevant persons to use them when discarding such fuel samples.
- Develop and adopt appropriate standard operating procedures to deal with hazardous material incidents and which should include:
  - details of contacts with police, fire brigades, DES and relevant public health authorities; and
  - a requirement to advise Cairns Airport of any incident via the Cairns Airport Environmental Incident Report Form located on the Cairns Airport website.

NOTE

The names and contact telephone numbers of Cairns Airport persons with responsibilities for the Handling of Hazardous Materials are detailed in the Master Contact List in the "Aerodrome Administration" section of this Manual.

14.4 HAZARDOUS WASTE

Hazardous waste, including sewage, industrial solvents, acids, caustic agents, oxidising agents and other corrosive agents are required to be handled and disposed of appropriately.

Cairns Airport has provided a facility for airline companies to dispose of aircraft sewage. This facility, known as the Waste Disposal Building, is located immediately west of the International Terminal Building. Cairns Airport shall ensure that it is operated and maintained effectively.

On the International and Domestic aprons Cairns Airport has provided common use spill kits on all bays for all operators to use. The spill kits contain a copy of Cairns Airport's spill response procedures. Charges for materials used and waste disposal are recovered from the company responsible for any spill.

All airside operators must ensure they comply with environmental requirements in respect of waste disposal (i.e. detergents, cleaning fluids, thinners and residues etc).

Tenants and/or Cairns Airport's hazardous materials spill response procedures will be activated in the event of all hazardous material incidents. Cairns Airport's AEP Hazardous Materials response may also be activated depending on the size, severity, location, and risk that may be involved.

14.5 PETRO-CHEMICALS

Fuelling companies on the airport include Cairns Airport Refuelling Services (CARS) who operate the Joint User Hydrant Installation (JUHI), Air BP (GA), and Viva Energy Australia (GA). The main types of fuels stored and dispensed by these companies are:

- Avgas (100/130 octane and 100 octane LL aviation gasoline) for piston-engined aircraft.
- Avtur (Jet A1) aviation turbine fuel for jet and turbine engines.

The eastern RPT aprons (both Domestic and International) are served by an underground fuel hydrant system from the JUHI storage depot south of the Domestic Apron. On the western GA Aprons, aircraft are refuelled from mobile tankers.

These companies must operate in strict accordance with all State and Federal safety and environmental legislative requirements.

Cairns Airport also maintains stores of flammable materials for use in day to day maintenance and operation of the Airport. The respective Cairns Airport Manager will ensure that the relevant SAA codes and Cairns

Airport Workplace Health and Safety and environmental requirements are complied with in installations for which they are responsible.

Tenant and/or Cairns Airport's hazardous materials spill response procedures will be activated in the event of all hazardous material incidents. Cairns Airport's AEP Hazardous Materials response may also be activated depending on the size, security, location, and risk that may be involved.

14.6 EXPLOSIVES

Explosives used in mining operations or by the military are transported by air from Cairns Airport from time to time.

The Aerodrome Safety and Compliance Manager or delegate will normally only approve the transhipment of relatively small quantities of explosives (such as may be accommodated in aircraft below 5,700 kg MTOW and meet CASA clearance standards at the designated remote parking areas) and only if the application is accompanied with a written approval from CASA.

If the Aerodrome Safety and Compliance Manager or delegate approves the uplift of explosives, the operator is required to load the aircraft at such time and at a location nominated by the Aerodrome Safety and Compliance Manager or delegate. Part 2 Section 9 Sub-section 9.10 of this Manual provides details of areas designated for parking, loading/unloading of explosive laden aircraft.

The Cairns Airport Duty Airport Safety Officer must be present during the loading of explosives in order to ensure that the conditions of the approval are adhered to. He will advise both ANS and ARFFS of the activity.

Any international aircraft involved in loading or unloading explosives will be directed to move from the International Apron to an appropriate designated location with prior consent from ANS (subject to specific clearance requirements).

Details of safety distances for explosive laden aircraft are provided by CASA in AC 139-12(0) Handling of Hazardous Materials on Aerodromes accessible on the CASA web site.

14.7 OTHER HAZARDOUS MATERIALS

Hazardous material other than those already mentioned may include herbicides, pesticides and (on occasions) radioactive and biological substances.

Pesticides and herbicides are used within Cairns Airport and are handled in accordance with Cairns Airport Standard Work Procedures.

All Cairns Airport workplaces at which hazardous materials are used have Material Safety Data Sheets (MSDS) readily available for use by all staff and emergency response personnel. Each respective MSDS details the safe storage, handling, use and disposal of the relevant material.

Although radioactive isotopes may occasionally be transported to Cairns by air (for use in hospitals) Cairns Airport does not consider the incidence of such activities significant enough to warrant detailing specific handling procedures in this Manual. The Freight Company handling the storage and transhipment of dangerous goods is responsible for the assessment and safe handling of the materials.

Tenant and/or Cairns Airport's hazardous materials spill response procedures will be activated in the event of all hazardous material incidents. Cairns Airport's AEP Hazardous Materials response may also be activated depending on the size, security, location, and risk that may be involved.

NOTE 1

In cases where the Cairns Airport Pty Ltd Aerodrome Safety and Compliance Manager or delegate becomes aware of any shipment of radioactive substance at the airport, any specific requirements deemed necessary at the time will be discussed with the airline company or its agents. Actions in the event of an incident involving radioactive materials are detailed in the AEP.

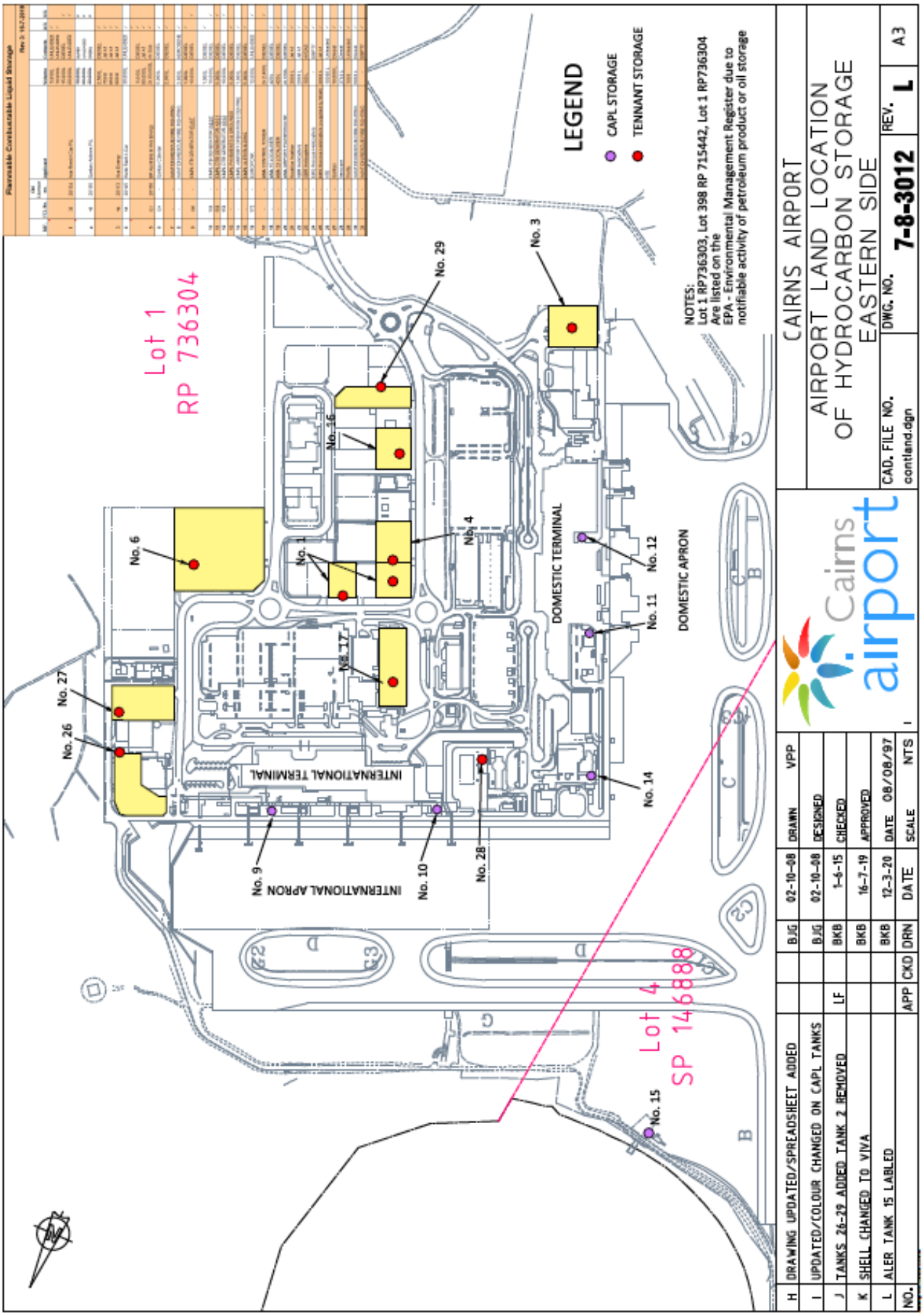
NOTE 2

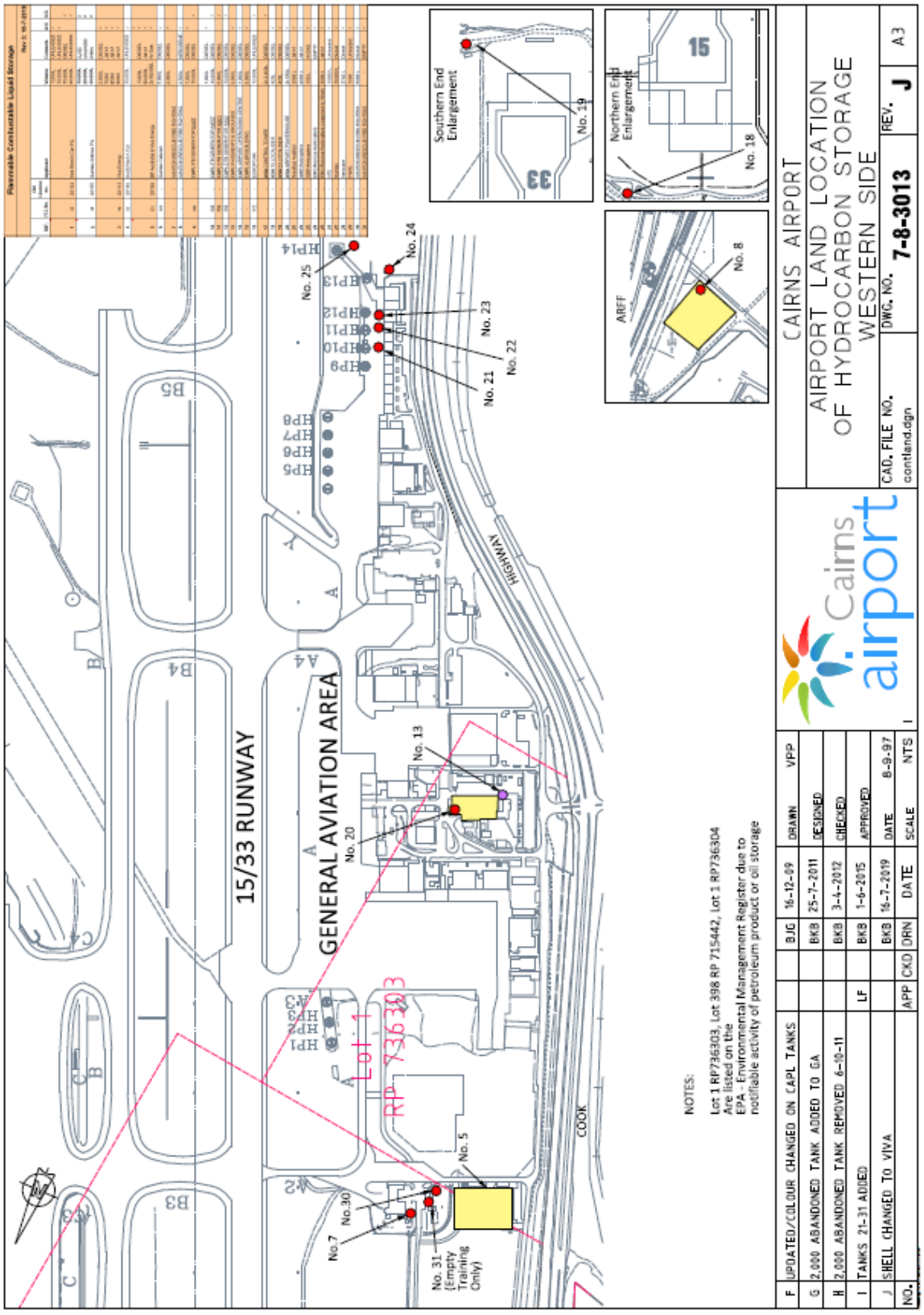
There are airfreight facilities on Cairns Airport that receive and dispatch freight by road transport. Accordingly there may be freight on Airport that is too hazardous for carriage by air. The freight handlers are trained to handle hazardous goods, and are responsible for the safe handling of any such product.

The carriage of hazardous materials / dangerous goods as cargo/freight on aircraft is regulated by Civil Aviation Safety Regulation Part 92 "Consignment and Carriage of Dangerous Goods by Air." Responsibility for implementation of these requirements rests with the air freight company and/or airline involved. Aircraft manifests provide details of all hazardous materials carried on board an aircraft. This information is available to pilots and crew, and ground handling companies prior to flights and to emergency services in the event of an aircraft accident or incident. Cairns Airport's Aircraft Parking Approval application process for ad hoc itinerant aircraft requires aircraft operators to provide advance notification of any hazardous materials that will be carried on the aircraft.

ANNEX 1

Hydrocarbon Hazard storage Aeras




15/33 RUNWAY
GENERAL AVIATION AREA
HIGHWAY
COOK
Lot 1 RP736303
Southern End Enlargement
Northern End Enlargement
ARFF
No. 8
No. 18
No. 19
No. 20
No. 21
No. 22
No. 23
No. 24
No. 25
No. 13
No. 5
No. 7
No. 30
No. 31 (Empty Training Only)
NOTES:
Lot 1 RP736303, Lot 398 RP 715442, Lot 1 RP736304 Are listed on the EPA - Environmental Management Register due to notifiable activity of petroleum product or oil storage
CAIRNS AIRPORT
AIRPORT LAND LOCATION OF HYDROCARBON STORAGE WESTERN SIDE
CAD. FILE NO. contland.dgn
DWG. NO. 7-8-3013
REV. J
A3
F UPDATED/COLOUR CHANGED ON CAPL TANKS BJG 16-12-09 DRAWN VPP
G 2.000 ABANDONED TANK ADDED TO GA BKB 25-7-2011 DESIGNED
H 2.000 ABANDONED TANK REMOVED 6-10-11 BKB 3-4-2012 CHECKED
I TANKS 21-31 ADDED LF BKB 1-6-2015 APPROVED
J SHELL CHANGED TO VIVA BKB 16-7-2019 DATE 8-9-97
NO. APP CKD DRN DATE SCALE NTS

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 15	PROTECTION OF RADAR AND NAVIGATIONAL AIDS

Contents

15.1 PURPOSE

This Section details the arrangements in place at the airport for the protection of ground-based radar installations and/or other aviation radio navigational aid facilities.

Radio navigational aids situated on or near the airport are owned and operated by Airservices Australia. Airservices Australia is responsible for ensuring that all navigational aid sites, including those "off airport" remote locations, are adequately protected from interference. Those installations located within the airport boundary may be subject to interference and/or damage during normal airport maintenance activities or as a result of any inadvertent encroachment by personnel and/or equipment.

Cairns Airport has developed these procedures in order to ensure that the radio navigational aids located on the airport are adequately protected from interference and that personnel are protected from any adverse effects of electro-magnetic radiation associated with the operation of the installations.

15.2 REFERENCES

CASR 139.095 (a) (ii) requires an Airport operator to include in this manual, particulars of the procedures for the protection of radars and navigational aids located on the aerodrome, to ensure that their performance will not be degraded. The procedures are required to include arrangements for:

- Controlling activities in the vicinity of the installations;
- For the conduct of ground maintenance works; and
- The provision of warning signs (in respect of microwave radiation).

The Manual of Standards Part 139 – Aerodromes (MOS), Chapter 11 details the requirements for the protection of critical and sensitive areas required to maintain the integrity of the signal produced from a navigation aid.

Airservices Australia Letter of Agreement 561 outlines the extent of the Vehicle Critical Areas associated with the Rwy 15/33 ILS and the procedure for accessing these areas (see Part 2 Sect 6 Annex 4).

15.3 RESPONSIBILITIES

NOTE

The radio navigational aids on the Airport are owned, operated, and maintained by Airservices Australia Technical Services Operations Support Group. Airport contact is Kevin Bowthorpe on:

Telephone	4050 5315 (business hours)
Mobile	0407 163 362
Facsimile	4050 5390
E-mail	kevin.bowthorpe@airservicesaustralia.com

Head of Aviation has overall responsibility for:

- Ensuring that procedures are in place to afford appropriate protection for the radio navigational aid sites located on the Airport.
- Ensuring that routine airport maintenance activities do not interfere with the operation and performance of these navigational aids.

Manager Engineering will:

- Provide advice on any planning and development of airport facilities and infrastructure takes into account the protection of existing and future Airservices Australia radar and navigational aid sites and the associated critical and sensitive zones.
- Ensure that any major works contracts with the potential to operationally impact navigational aids are managed appropriately.

Chief Commercial Officer – Retail, Transport and Property will:

- Ensure that any proposals to lease airport property take into account possible interference with the performance of radio navigational aids on the Airport.

Manager Aerodrome is responsible for:

- Ensuring that Cairns Airport Airport Safety Officers, other Cairns Airport Staff and Contractors entering the vicinity of radio navigational aid installations are made aware of clearance requirements in respect of critical and sensitive areas of the navigation aids (refer Part 139 (Aerodromes) Manual of Standards 2019 Chapter 11.16 and Airservices LofA 561)

Aerodrome Operations and Emergency Manager is responsible for:

- Provide advice during planning activities to ensure that works do not impact clearance requirements in respect of critical and sensitive areas of the navigation aids.
- Ensuring that Airport Safety Officers instructed to contact ANS for approval to enter those areas if such clearances are to be infringed.

Aerodrome Operations Supervisor is responsible for:

- Coordinating ASO resources to support entry to critical and sensitive areas of the navigation aids by Cairns Airport ground maintenance personnel and contractors

Airport Safety Officers are responsible for:

- Facilitating entry to critical and sensitive areas of the navigation aids by Cairns Airport ground maintenance personnel and contractors; and
- Monitoring and reporting directly to ANS any presence of persons and/or vehicles within the critical and sensitive areas of any navigational aids.

Airservices Australia are responsible for:

- Ensuring that the boundaries of the critical and sensitive areas are appropriately marked and signed.
- Assist in the development of procedures that will allow Cairns Airport to enter upon the areas for required inspections and maintenance (Airservices LoA 561).

NOTE

Ground maintenance work within the critical and sensitive areas of the navigation aids requires the prior approval of Airservices Australia / ANS, who may need to temporarily turn off the navigational aid or reset the device (depending on the nature of interference caused by the maintenance activity).

The names and contact telephone numbers of Cairns Airport and AsA personnel with responsibilities for the Protection of Radar and Navigation Aids are detailed in the Master Contact List in the "Aerodrome Administration" section of this Manual.

15.4 NAVIGATIONAL AIDS ON THE AIRPORT

Radio navigational aids on the Airport comprise:

- Rwy 15 Glide Path installation adjacent to the northern runway strip (western side).
- Rwy 15 Localizer at the southern end of the runway.
- Rwy 33 Localizer at the northern end of the runway.
- Rwy 15 DME (co-located with the Rwy 15 GP)

There are no Radar sites located on Cairns Airport.

Ground maintenance (such as mowing) is routinely carried out in and around these installations by Cairns Airport Groundstaff in accordance with established procedures involving prior approval through ANS and oversight by a Cairns Airport Airport Safety Officer.

Appropriate signage prohibits vehicular traffic on the perimeter road crossing the critical area in the Rwy 15 and Rwy 33 approach when aircraft are on approach or from entering the Rwy 15 Glide Path critical Area without ANS approval.

15.5 NAVIGATIONAL AIDS OFF THE AIRPORT

The operation, maintenance, and protection of radio navigational aids outside the airport boundary is entirely the responsibility of Airservices Australia.

Radio navigational aids outside the airport comprise:

- Terminal Area Radar at Redden Island north of the Barron River.
- Secondary Surveillance Radar at Biboohra.
- NDB at Holloway's Beach.
- DVOR and DME at Machans Beach.
- Middle Marker (MM) at Machans Beach (northern end of Cairns Airport HIAL area).
- Outer Marker (OM) at Yorkey's Knob.

These installations are entirely the responsibility of Airservices Australia in respect of site maintenance and protection against unlawful interference and possible building development in the vicinity that might be detrimental to their function. Cairns Airport and Airservices Australia have jointly made input into the Development Control Plan incorporated in the Cairns Plan in order to ensure that this protection is achieved.

It is the responsibility of Airservices Australia to ensure that the controls in place through the Development Control Plan are exercised.

15.6 GROUND MAINTENANCE

Ground maintenance in the immediate vicinity of radar and navigational aid sites is the responsibility of Airservices Australia. Cairns Airport may undertake general grass cutting activities at and in the vicinity of the on-airport installations.

15.7 WARNING SIGNS

Airservices Australia is responsible for the provision and erection of warning signs and barriers on and around radio navigational aids installations both on the Airport and off the Airport.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 16	LOW VISIBILITY OPERATIONS

Contents

16.1 PURPOSE

This Section details the arrangements in place at Cairns Airport to assist ANS in providing information to pilots in respect of visibility (at ground level) when the visibility along the runway is less than 2,000 metres. This Section also discusses the Cairns Airport procedures for securing the airside when Runway Visibility is reduced to or below 800 metres or the cloud ceiling drops below 200ft and a situation of "low visibility operations" has been declared by ANS.

NOTE
In this document, the term Runway Visual Range (RVR), as defined by ICAO and MOS Part 139 - Aerodromes, means "the range over which the pilot of an aircraft on the centreline of a runway can see the runway surface markings or the lights delineating the runway or identifying the centreline. Within Australia the term Runway Visual Range (RVR) is used exclusively in relation to RVR measured by an instrument system."

Cairns Airport does not have an instrument system / transmissometer for assessing RVR.

The term Runway Visibility (RV) means " The distance along a runway over which a person can see and recognise a visibility marker or runway lights. Cairns Airport has trained staff and Low Visibility Procedures for undertaking Runway Visibility assessments.

Background

CASA prescribes general minimum visibility and cloud ceiling requirements to be met by pilots landing and taking-off at an aerodrome. CASA places the responsibility for assessing actual conditions on the pilot.

The pilots of major airlines and certain other commercial aircraft operators are trained and permitted to take-off in conditions with a visibility less than 800 metres, provided that their operating procedures have been approved by CASA. Visibility between 800 and 2,000 metres permits instrument approaches and landings (visibility not less than 800 metres, or a RVR not less than 550 metres is required for a Category 1 ILS approach).

CASA also permits reduced visibility take-offs. Most pilots in Australia are permitted to depart with a visibility down to 550 metres. Major airlines must have CASA approval for departures with a visibility below 800 metres.

Pilots of arriving aircraft, particularly those making an ILS approach, are able to benefit from Runway Visibility Assessments that provide them with an indication of the visibility they might expect during the final approach and landing. Pilots of departing aircraft on the other hand, rely on ANS advice on Runway Visibility Assessments in order that they can delay engine start and taxiing until an appropriate runway visibility is likely to be available.

It should be understood that in some conditions the pilot might have a greater RV than the runway visibility observed at ground level. This is especially so from the cockpit of a lofty aeroplane such as a Boeing 747 lined up for take-off, or from an aircraft approaching over a shallow fog.

Cairns Airport Policy

Cairns Airport does not have an instrument system / transmissometer for assessing RVR. Cairns Airport has therefore instituted a Runway Visibility Assessment service in order to assist ANS in providing pilots with information needed to enhance the conduct of Cat 1 low visibility operations at the Airport.

Cairns Airport Facilities – Limitations on Aircraft Operations

For Landings

CASA Part 139 (Aerodromes) Manual of Standards 2019 Chapter 3 – 3.01 Difnes the Runway Visibility requirements for Precision Approach Cat 1, 2 and 3 Runways and details the requirements for Precision Approach Cat 1, 2 and 3 visual aids. The aerodrome facilities provided by Cairns Airport (runway strip width, runway lighting, taxiway lighting, holding point lights) are Cat 1 compliant and therefore only permit landing operations in Runway Visibility conditions not less than 800 metres, (i.e. Cat 1 conditions only).

For Take Offs

CASA Part 139 (Aerodromes) Manual of Standards 2019 Chapter 9 Division 1 – 9.05 requires that for runways meant for take-off in conditions where the Runway Visibility is less than 800 metres that a secondary power supply with 1 second switch over time is required. Cairns Airport's secondary power switch over time meets the 15 second Cat 1 requirement only. Take-offs are therefore only permitted in conditions where the Runway Visibility is not less than 800 metres.

16.2 REFERENCES

Civil Aviation Safety Regulation 139.095 (a) (ii) requires the operator of a certified aerodrome to include in this manual the procedures during low visibility operations.

CASA MOS Part 139- Aerodromes Sect 1.2 defines the runway visibility requirements for Precision Approach Cat 1, 2, and 3 runways.

CASA MOS Part 139- Aerodromes Sect 9.1.7, 9.1.8, and 9.13.8 details the requirements for Precision Approach Cat 1, 2, and 3 visual aids.

CASA MOS Part 139- Aerodromes Sect 10.17 details the safety procedures during conditions of reduced visibility.

CASA MOS Part 139- Aerodromes Sect 10.19 details Runway visibility Assessments by Ground Personnel.

AIP-ENR 1.5 requires ANS to provide pilots with an assessment of ceiling and/or visibility if weather conditions approximate the minima specified for take-off or landing.

Cairns Airport Pty Ltd / AsA Letter of Agreement 561 - ANS Interface Agreement (see Part 2 Sect 6 Annex 4).

16.3 RESPONSIBILITIES

NOTE
ANS determines if and when low visibility operations are to be activated and deactivated at the Airport (i.e. visibility less than 800 metres or cloud ceiling below 200ft. ANS may also determine that these will commence when visibility reduces below 2,000 metres or cloud ceiling below 500ft).

Manager Aerodrome is responsible for:

- Ensuring there is a procedure for measuring visibility along a runway and for passing that information to ANS.

- Ensuring that the AsA / Cairns Airport Pty Ltd Letter of Agreement 561 which includes Low Visibility Operations accurately reflects the MOS compliant conditions under which aircraft operations are permitted.
- Ensuring that the Cat 1 status of Cairns Airport at times of low visibility operations is disseminated to CASA and all relevant Airlines.
- Ensuring that there are arrangements in place to minimise vehicular traffic within the movement area during periods of low visibility.
- That appropriate Cairns Airport personnel are trained and available to conduct runway visibility assessments.

Aerodrome Operations and Emergency Manager is responsible for:

- Prepare and implement Low Visibility Procedures for Runway Visibility Assessments during low visibility conditions.
- Ensuring that Airport Safety Officers are trained to carry out runway visibility assessments; and
- Ensuring procedures are maintained for Airport Safety Officers to restrict vehicle access, where required.
- Facilitate the notification procedures to all relevant stakeholders with regard to the status of Cairns Airport at times of low visibility operations.

Airport Safety Officers are responsible for:

- Carrying out runway visibility assessments on request from ANS;
- Carrying out all requirements for low visibility operations in accordance with the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

NOTE
The names and contact telephone numbers of Cairns Airport personnel with responsibilities for Low Visibility Operations are detailed in the Master Contact List in the "Aerodrome Administration" section of this manual.

16.4 ASSESSMENT PROCEDURES

- Airservices Australia and Cairns Airport Pty Ltd have agreed to the procedures as detailed within the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO) which can be found on the Cairns Airport website.

16.5 RUNWAY MARKINGS

Low visibility operations at the airport require all runway markings to be displayed in optimum condition in order to assist pilots in their low visibility operations. The Airport Safety Officers will ensure that runway markings are inspected and faults or deterioration is reported to ensure they are maintained in good order.

16.6 AIRSIDE SECURITY

When ANS has declared visibility to be 800 metres or less and activate Low Visibility Operations, Cairns Airport Airport Safety Officers will take steps to restrict persons or vehicles inadvertently entering the manoeuvring area.

In order to restrict access, the Airport Safety Officer/s will:

- Cause all works on the airside to cease and direct personnel, plant and equipment to be moved either from the airside or to a specific area on airside to be confined until further notice. This may require a notification to works parties before the visibility descends to 800 metres in order to facilitate an expeditious clearing of non-essential vehicles and personnel. Vehicles and persons associated with the servicing of aircraft on the apron areas are permitted during these conditions, however, approved vehicles may need to be restricted within the GA Apron areas.

- Restrict all vehicle movements on the northern perimeter road by closing the barrier gates.
- Carry out a perimeter fence inspection and, if instructed by the Aerodrome Operations and Emergency Manager or delegate, ensure that security perimeter gates are locked or disabled.
- Escort aircraft and vehicles as required.

23 January 2019

APPOINTMENT OF RWY VISIBILITY ASSESSOR

As required under Manual of Standards Part 139 – Aerodrome Cairns Airport Pty Limited, as Aerodrome Operator of Cairns Airport, is required to appoint RWY Visibility Assessors (RVA) the following are appointed as RVA having met the requirements and are able to perform the duties contained in MOS 139 Sect 10.19:

Mr Robert Keegan
Mr Matthew Baker
Mr Chris Corser
Mr Bruno Fogale
Mr Tom Herd
Mr Jamie Hughes
Mr Shane Porter
Mr Craig Tatlow
Mr Liam West
Mr Leonard Talbot
Mr Mark Musumeci
Mr Steven Harris

Each RVA has received a letter informing them of their appointment as an RVA. This appointment will remain until cancelled in writing by the Aerodrome Operations and Emergency Manager, delegate, or if an approved RVA fails to meet the standards contained within MOS 139 Sect 10.19.3.

Yours faithfully

Robert Keegan

AERODROME OPERATIONS AND EMERGENCY MANAGER

Enquiries: Robert Keegan, 0428 783 367
Email: robert.keegan@cairnsairport.com.au

Cairns Airport Pty Ltd > A North Queensland Airports Enterprise
A Airport Avenue | Cairns Airport | Cairns | Q | 4870 > PO Box 57 | Airport Administration Centre | Cairns Airport | Q | 4870
P + 61 7 4080 6703 F + 61 7 4080 6704 E enquiries@cairnsairport.com.au W cairnsairport.com.au > ABN 18 132 238 221

PART 2	AERODROMES ADMINISTRATION AND OPERATING PROCEDURES
SECTION 17	AIRPORT WARNINGS

Contents

17.1 PURPOSE

This Section deals with the arrangements in place to warn staff on the Airport of expected severe meteorological events.

The Bureau of Meteorology issues, by email, formal Airport Warnings to the Cairns Airport and to Airline companies when certain weather conditions affect, or are expected to affect Cairns Airport. Cairns Airport has developed procedures to convey details of such warnings to relevant Cairns Airport and other airport personnel.

17.2 REFERENCES

CASR Part 139.205 requires a certified aerodrome to establish an aerodrome emergency committee. CASR Part 139.210 and 215 requires that an aerodrome emergency plan is prepared and is tested every two (2) years.

MOS Part 139 Section 10.18 provides guidelines for aerodrome emergency plans.

Cairns Airport's Aerodrome Emergency Plan provides details of operational response to natural disasters. Cyclones are identified as one of the natural disasters and Cairns Airport has therefore developed the Cairns Airport Cyclone Plan. This document is a supporting document to this Aerodrome Operations Manual.

Cairns Airport's Thunderstorm Alert Procedure details the airport response to Bureau of Meteorology's generated warnings via the Automated Thunderstorm Alert Service (ATSAS). This document is a supporting document to this Aerodrome Operations Manual and is not included in this manual.

17.3 RESPONSIBILITIES

Manager Aerodrome is responsible for:

- Ensuring that the Cairns Airport Thunderstorm Alert Procedure is implemented and reviewed.
- Ensuring that the notification arrangements in accordance with the Thunderstorm Alert Procedure are implemented and reviewed.
- Ensuring that the factors affecting the Airport Warning Notifications/Procedures through the Airside Safety Committee.
- Ensuring that the Aerodrome Emergency Plan and the Cyclone Plan are implemented and reviewed.
- Ensuring that the Cairns Airport standard operating procedures for response to cyclones are implemented and reviewed.
- Ensuring that the notification and call out arrangements for the Airport Cyclone Committee are in place and tested regularly.

Aerodrome Operations and Emergency Manager is responsible for:

- Coordinating the notification arrangements in accordance with the Thunderstorm Alert Procedure ensuring that they are implemented and reviewed.
- Coordinating the notification arrangements in accordance with the Low Visibility Operations Procedure ensuring that they are implemented and reviewed.
- Addressing the factors affecting the Airport Warning Notifications/Procedures through the Airside Safety Committee.
- Reviewing procedures through the Airside Safety Committee
- Implement, maintain and review the Aerodrome Emergency Plan and the Cyclone Plan.
- Implement, maintain and review Cairns Airport standard operating procedures for response to cyclones.
- Coordinating and maintaining the notification and call out arrangements for the Airport Cyclone Committee and ensure the process is in place and tested regularly.
- Implement and maintain the SMS notification system for Alerts.

Aerodrome Operations Supervisor is responsible for:

- Ensuring that the Cairns Airport Airport Safety Officers are instructed in their duties in respect of Airport Warnings.
- Ensuring that amendments to the Airport Warning Notifications/Procedures are communicated and actioned as appropriate.

Airport Coordinators are responsible for:

- Providing the initial point of contact for the Bureau of Meteorology, and Qantas (in respect of Thunderstorm Alerts).
- Passing on details of Airport Warnings to relevant Cairns Airport staff and other airport operators in accordance with the standard operating procedures, including initiation of SMS notifications.

Airport Safety Officers are responsible for:

- Ensuring that Cairns Airport personnel and other airport operators known to be working on the airside of the airport are aware of the Airport Warning.
- Undertaking other duties in accordance with standard operating procedures.
- Ensuring that preparations are carried out, if required to secure loose items outdoors.
- Carrying out relevant inspections and report on serviceability, following adverse weather events.

17.4 AIRPORT WARNINGS

The Bureau of Meteorology issues Airport Warnings when:

- Wind speeds are forecast to exceed 41 knots; and/or
- Thunderstorms are expected to approach within 30 nm of the airport.

(Bureau of Meteorology also provides warnings of wind shear and severe turbulence through their meteorological Terminal Area Forecasts)

Airport Warnings are broadcast to various subscribing organisations on the airport (including Cairns Airport and the major airline companies) by SMS mobile phone communications, as well as through normal meteorological Terminal Area Forecasts, and the ATSAS system.

The nominated point of contact for Cairns Airport is the Airport Co-ordinator.

17.5 CAIRNS AIRPORT NOTIFICATION PROCEDURES

On receipt of an Airport warning from the Bureau of Meteorology or Qantas in respect of adverse operational weather warnings the duty Airport Co-ordinator will initiate the following notification actions:

- Contact relevant Point of Contact as per the Cairns Airport list.
- Advise all relevant parties as directed and/or
- Initiate SMS alert advice to stakeholders and Cairns Airport staff using a specific communications group.
- Record notification activities.
- In respect of Thunderstorms, initiate the Thunderstorm Warning System comprising lights and sirens in accordance with standard operating procedures.

The duty Airport Safety Officer will ensure that all Cairns Airport staff, GA operators, and contractors known to be working on the airside are aware of the nature of the warning.

All staff are advised to vacate exposed outside work areas and movement areas when lightning is detected within 5 nm of the Airport (Phase 3 of the Thunderstorm Alert Procedures).

The Airport Duty Manager will inform any Cairns Airport Staff and Contractors known to be working in the terminal buildings or in the landside car parks of the nature of the warning.

NOTE
Although ANS does not have the authority to close the Airport due to weather, ANS does advise pilots of the prevailing or expected conditions. It is the prerogative of the pilot of an aircraft to determine whether he/she will take-off or land in such conditions.

In extreme weather events or natural disasters that threaten the safety of airport personnel, Cairns Airport will withdraw essential operational services which effectively render the Airport closed. Any decision to initiate this action will be undertaken in close consultation with the Airport Stakeholders.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 18	HELICOPTER OPERATIONS

Contents

18.1 PURPOSE

This Section deals with the arrangements in place to accommodate helicopter operations at the Airport.

18.2 REFERENCES

ICAO Annex 14 Vol 2 Helicopters describes the International Standards and Recommended Practices.

Civil Aviation Advisory Publication CAAP 92-2(2) provides guidelines for the establishment and operation of on-shore helicopter landing sites (HLS).

MOS Part 139- Aerodromes Sect 8.11 details the markers and markings required in respect of helicopter operations.

Cairns Airport - Helicopter Fly Neighbourly Procedures as agreed by Helicopter Operators, Community Groups, AsA and Cairns Airport as a voluntary noise abatement procedures for all helicopter operations.

Airservices Australia Manual of Air Traffic Services - Helicopter Operations Cairns.

18.3 RESPONSIBILITIES

Manager Aerodrome is responsible for:

- Ensuring that the appropriate assessment of applications from persons and organisations wishing to operate helicopters at the Airport is undertaken.
- Ensuring that the relevant planning and procedural approvals are managed in accordance with requirements.
- Ensure that appropriate markers and markings are displayed on helicopter operating areas;

Aerodrome Safety and Compliance Manager is responsible for:

- Assessing applications from persons and organisations wishing to operate helicopters at the Airport;
- Approve appropriate operating areas and (subject to Air Traffic Services concurrence) such operations.
- Coordinate the preparation, implementation and review of Fly Neighbourly Procedures.
- Details of helicopter operating areas are shown on relevant Cairns Airport plans.
- Relevant notes are provided to AIS for inclusion in the AIP.
- Liaising with Cairns Airport drafting section on HLS design and clearance issues.

Airport Coordinators are responsible for:

- Directing the parking of itinerant helicopters.

- Approving itinerant helicopter operations. Approvals must be within any guidelines issued by the Aerodrome Safety and Compliance Manager or Delegate.

Airport Safety Officers are responsible for:

- Monitoring helicopter activities, especially those that occur in proximity to fixed-wing aircraft in the GA area;
- Reporting instances where safety may be jeopardised by way of any helicopter operation;
- Assist, whenever required, the Airport Coordinator to approve itinerant helicopter operations; and
- Liaise with ANS regarding closure of helicopter operating areas, or controlling vehicular access adjacent to helicopter operating areas.

18.4 HELICOPTER OPERATIONS - GENERAL

Cairns Airport will endeavour to segregate helicopter operations from fixed wing operations and thereby eliminate or at least reduce the incidence of rotor wash causing damage or dust/debris nuisance to other aircraft operators and fixed base operators.

All helicopter movements at the Airport are subject to ANS directions and clearances. Helicopter operators in conjunction with ANS and Cairns Airport have developed Fly Neighbourly Procedures to minimise the noise impact upon adjacent residents. These Procedures detail flight paths and minimum operating heights over residential areas that will be voluntarily adopted by helicopter operators. ANS and Cairns Airport will monitor and review compliance with the Fly Neighbourly Procedures, and liaise with community groups through the Airport Environmental Consultative Committee. AsA also have ANS procedures (MATS) for common air routes between the airport and the Pier.

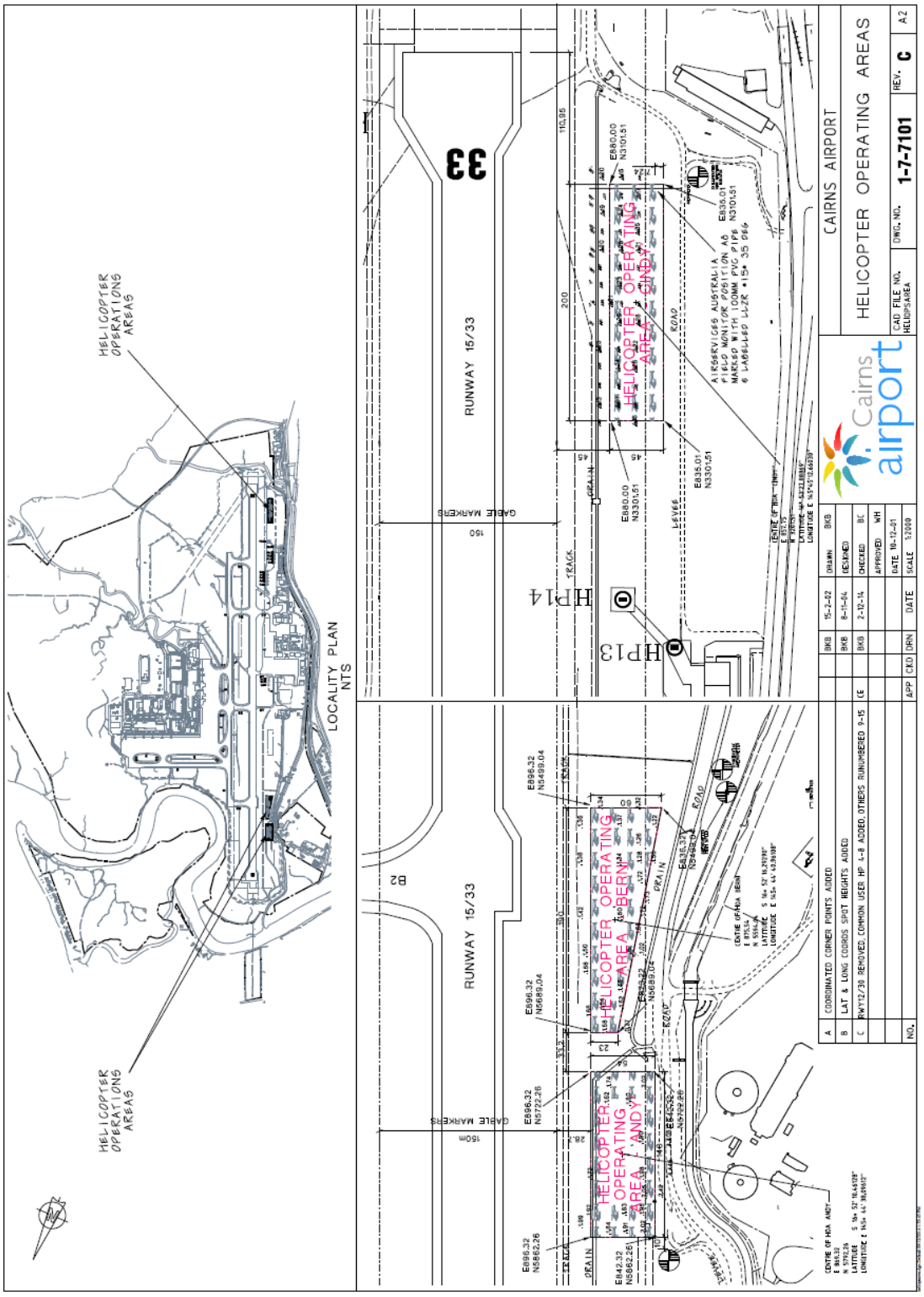
A “Common User” helicopter area (comprising of five (5)TLOF pads) has been established on the western side of the Airport at the southern end of the GA (vicinity Skytrans Hanger). There is an additional five (5) leased TLOF pads HLS used by Queensland Emergency Services and two (2) other helicopter operators holding leases at Cairns Airport Hangars. These five (5) Southern Helicopter Landing Sites are not available for itinerant helicopters.

A further three (3) common user bitumen sealed TLOF pads HLS are located on the western side of the Airport between Taxiways “A2” and “A3”.

As well as charter operations, helicopter training operations take place at the Airport. Cairns Airport and Airservices Australia have agreed on the location of three (3) declared Helicopter Operating Areas for training purposes. These are shown on the plan at Annex 1 to this Section.

ANNEX 1

Helicopter Operating Areas
Drawing No. 1-7-7101



ANNEX 2

Cairns Airport Pty Ltd – Helicopter Fly Neighbourly Procedures

Cairns Airport Pty Ltd
ABN 18 132 228 221
Airport Avenue, Cairns Airport, QLD 4870
PO Box 57 Airport Administration Centre
Cairns Airport QLD 4870
p: +61 7 4080 6703 f: +61 7 4080 6704
e: enquiries@cairnsairport.com.au
www.cairnsairport.com.au
A North Queensland Airports Enterprise

CAIRNS INTERNATIONAL AIRPORT

HELICOPTER "FLY NEIGHBOURLY" PROCEDURES – May 2010

After consultation between helicopter operators, Airservices Australia and Cairns Airport Pty Ltd, the following "Fly Neighbourly" procedures were established with helicopter operators are to operate under.

Compliance with these procedures are monitored by both Airservices Australia and Cairns Airport Pty Ltd. The procedures can amended, by agreement, as required.

1. **Transit Flights to / from Pier and Cairns Base Hospital**
   - Where practical, helicopters transiting between either the Pier or Cairns Base Hospital to Cairns Airport should be processed to avoid built-up areas as follows;
   - YRAP/YCBH to YBCS – Direct to the Control Tower then once established north of the RWY 33 threshold direct to a right/left base for the nominated helipad.
   - YBCS to YRAP/YCBH – From the departure helipad to establish east of RWY 15/33 then east of The Esplanade to YRAP/YCBH clear of built-up areas.
2. **Arrivals - Flights from South West of Airport**
   - Request western VFR corridor route west and north of Mt Lumley, if available, remaining clear of residential areas enroute to airport, or
   - Maintain 1000 feet east of highway / west of Runway 15/33. Remaining clear of residential areas, turn right onto approach to designated landing area.
3. **Departures – Flights to North East/West**
   - Maintain upwind east of highway / west of Runway 15/33 until 1000 feet before commencing turn. Request left turn if traffic permits to the north east, or commence right turn, avoiding residential areas wherever possible.
4. **Circuit Training / Aerial Work Mt Lumley**
   - Avoid use of Bell 47's in the western training areas.
   - Use eastern training areas during quieter traffic periods.
   - For western circuits parallel Runway 15, maintain upwind east of highway / west of Runway 15/33 until 1000 feet before commencing right turn. Preferred downwind leg east of highway / west of runway.
   - Avoid residential areas wherever possible.
   - Routes associated with aerial work at Mt Lumley, to and from the airport or staging area at Aeroglen sporting fields, are to avoid Aeroglen residential areas

ANNEX 4

Airservices Australia Manual of Air Traffic Services, Helicopter Operations Cairns

Chapter 12-5
Helicopters

12-5-1
Helicopters taxi restrictions

Helicopters are not permitted to taxi within the GA lines on the western side of the aerodrome. This is a CAPL restriction.

12-5-2
Helicopters engine runs in Regional Pacific leased area

Helicopter engine runs are permitted within the Regional Pacific leased area.

12-5-3
Pier and Cairns Base Hospital transits

As part of the 'Fly Neighbourly' policy, where practical, helicopters transiting between either the Pier or Cairns Base Hospital to Cairns should be processed to avoid built-up areas as follows:

a. YRAP/YCBH to YBCS: Direct to the Control Tower then once established north of the RWY 33 threshold direct to a right/left base for the nominated helipad.
b. YBCS to YRAP/YCBH: From the departure pad to establish east of RWY 15/33 then east of the Esplanade to YRAP/YCBH clear of built-up areas.

12-5-4
EMQ ground engine runs with rotor pitch applied

EMQ ground runs - rotor pitch advice	EMQ will advise SMC when a ground engine run at the Southern Pads will include application of rotor pitch (resulting in rotor wash).
SMC responsibilities	• SMC shall advise ADC when an EMQ ground engine run includes application of rotor pitch. • SMC shall caution helicopters taxiing/departing from the Southern Pads of the possibility of rotor wash from the EMQ helicopter.
ADC responsibilities	ADC shall caution helicopters arriving to the Southern Pads of the possibility of rotor wash from the EMQ helicopter.

PART 3	PARTICULARS OF AERODROME TO BE PUBLISHED IN THE AIP
SECTION 01	AERODROME GENERAL INFORMATION

AERODROME GENERAL INFORMATION

Name	CAIRNS/Cairns INTL
State	Queensland (WAC 3219)
Coordinates	S16 53.09 and E145 45.19
Elevation	10 feet AHD
Beacon	ALTN WG 8 SEC
Operator	Cairns Airport Pty Limited PO Box 57 Airport Administration Centre CAIRNS QLD 4870 Telephone: 4080 6744 (H24) Facsimile: (07) 4080 6704

Note: The information contained within Part 3 Sections 1, 2, 3, 4 and 5 is correct at the time this document was published and will be updated whenever this document is amended.

Cairns Airport Pty Ltd, adheres to it's responsibilities detailed in CASR Part 175, to update any changes to this information through Airservices Australia via the NOTAM and AIP amendment process. Cairns Airport Pty Ltd advises that the AIP and NOTAM should be consulted for the most up to date aerodrome information.

PART 3 PARTICULARS OF AERODROME TO BE PUBLISHED IN THE AIP
SECTION 02 RUNWAYS

RUNWAY INFORMATION

The magnetic bearing of the runway and the runway number:

Rwy Designation	Rwy Bearing
15/33	150° / 330°

The runway reference code number for the approach and take-off areas that have been surveyed:

Rwy 15	Reference code 4 Instrument - Precision Cat 1
Rwy 33	Reference code 4 Instrument – Non-Precision

The length, width and slopes of the runway:

Rwy	Rwy Length	Rwy Width	Rwy Slope
15/33	3156m	45m	Level

The length and width of the graded and overall runway strip:

Rwy	Rwy Strip Length Overall	Rwy Strip Width
15/33	3316m	150m (graded) OPR Restrictions: RWS – Variations due obstacles in Western GA building area: RWY 33 (South end) is 180m, increased to 300m at 1352M from THR. RWY 15 (North end) is 300m, reduced to 180m at 1804 from THR.

The pavement surface type and its strength rating:

Rwy	Pavement Surface	Pavement Strength
15/33	Asphalt	PCN 90/F/D/1518(220 PSI)/ Grooved

The runway declared distances and take-off gradient:

Rwy	TORA	TODA	ASDA	LDA
15	3156(10354)	3256(10682)(6.99%)	3156(10354)	3156(10354)
33	3196(10485)	3256(10682)(6.54%)	3196(10485)	3156(10354)

The taxiway intersection declared distances:

Rwy	Tkof From	Rwy Remaining	Reduce All Dist By
15	Twy B3	1771 (5810)	1385 (4544)
15	Twy B2	2545 (8350)	611 (2005)
15	Twy A3	1492 (4895)	1664 (5459)
15	Twy A2	1764 (5787)	1392 (4567)
33	Twy B5	2584 (8478)	612 (2008)
33	Twy B4	2181 (7155)	1015 (3330)
33	Twy A4	2181 (7155)	1015 (3330)
33	Twy A3	1685 (5528)	1511 (4957)

The supplementary take-off distances:

Rwy	1.6%	1.9%	2.2%	2.5%	3.3%	5.0%
15	2639(8658)	2845(9334)	2997(9832)	3111(10207)	3184(10446)	3231(10600)
33	2609(8560)	2881(9452)	3079(10102)	3163(10377)	3212(10538)	3250(10663)

The Aerodrome Obstacle Chart Type A:

Aerodrome Obstacle Chart Type A – May 2019

PART 3	PARTICULARS OF AERODROME TO BE PUBLISHED IN THE AIP
SECTION 03	VISUAL AID SYSTEM INFORMATION

VISUAL AID SYSTEM INFORMATION

The type of runway lighting and the stand-by power for that lighting

Rwy 15	3 Stage High Intensity Runway Edge Lighting. 3 Stage Medium Intensity Runway Edge Lighting.
Rwy 33	3 Stage High Intensity Runway Edge Lighting. 3 Stage Medium Intensity Runway Edge Lighting.
Standby Power	Auto-start (within 15 seconds) generating set standby power available for all lighting and visual aids.

The type of approach lighting

Rwy 15 only	HIAL for Category 1 ILS

The Precision Approach Path Indicator system

Rwy 15	PAPI 3° 53 ft
Rwy 33	PAPI 3° 61 ft

A description of the visual docking guidance systems

International Apron	
Bay	**Nose in Guidance**
1	Safegate
1A	Marshalled
1C	Marshalled
1D	Marshalled
1E	Marshalled
2/2A & 2B	Safegate/Marshalled
3/3A & 3B	Safegate/Marshalled
4/4A & 4B	Safegate/Marshalled
5/5A & 5B	Safegate/Marshalled
6/6A & 6B	Safegate/Marshalled
7/7B	Marshalled

Link Apron	
Bay	**Nose in Guidance**
8/8A/8B	Marshalled
9/9A/9B	Marshalled
10	Marshalled
10A-10G	Marshalled
11/11A	Marshalled
12/12A	Marshalled

Domestic Apron	
Bay	**Nose in Guidance**
13/13A	Marshalled
14/14A	Marshalled
15/15A	Marshalled
16	Marshalled
17	Marshalled
18/18A	Safegate/Marshalled
19/19A	Safegate/Marshalled
20/20A	Safegate/Marshalled
21/21A	Safegate/Marshalled
22/22A	Safegate/Marshalled
23	Marshalled

PART 3	PARTICULARS OF AERODROME TO BE PUBLISHED IN AIP
SECTION 04	AERODROME INFORMATION REQUIRED FOR NOTIFICATION IN AIP- ERSA

LOCAL INFORMATION

Hours of Operation: Cairns Airport is operational 24 hours per day.

Available Ground Services:

Air BP (Danshe Pty Ltd)	GA Apron D 2000-0800 (UTC) Phone 07 4035 9872. Fax 07 4034 9238. Mob 0418 778 956 AH 1 HR PN. AH callout fee. VHF 126.40 AVGAS, JET A1, JET FSII (no bowser)
JUHI Services	D 1800-1500 (UTC) Phone 07 4046 2300 AH (callout). Mob 0408 153 336 JET A1 (hydrants/mobile tankers).
Viva Energy Australia (Oz North Services Pty Ltd)	MON-FRI 1900-0900 (UTC) SAT-SUN 2000-0800 (UTC) Phone 07 4035 9686 H24. Mobile 0417 788 330 Email: cairns@oznorthservices.com.au. VHF 123.00, AVGAS, JET A1, JETPLUS (FSII). AH 1HR PN. (call-outfee applies)

PHYSICAL CHARACTERISTICS

OPR Restrictions: RWS – Variations due obstacles in Western GA building area:
RWY 33(South end) is 180m increased to 300m at 1,352M from THR.
RWY 15 (North end) is 300M, reduced to 180m at 1804M FM THR.

AERODROME OBSTACLES

Unlit NDB CS BRG 327 MAG 2.6NM FM ARP 152FT AMSL infringes inner HZS by 0.9FT.

Unlit Fence APRX BRG 150 MAG 3219.9M FM RWY 15 THR offset 123.9M R 16.75Ft AMSL infringes APCH surface by 6.5FT and not part of TODA & STODA gradients.

Unlit NF aerial APRX BRG 148 MAG 3246M FM RWY 15 THR offset 0.3M L 12.8FT AMSL inside CWY infringes APCH surface by 2.9FT.

Lit LLZ BLDG by red beacon APRX BRG 330 MAG 3359.1M FM RWY 33 THR offset 100.8M R 25.1FT AMSL infringes APCH and TKOF surfaces by 9.1FT.

Lit LLZ BLDG by red beacon APRX BRG 147 MAG 3282M FM RWY 15 THR offset 103.6M L 21.9FT AMSL infringes APCH surface by 9.5FT.

Lit LLZ aerial by red beacon APRX BRG 148 MAG 3307.2M FM RWY 15 THR 15.9FT AMSL infringes APCH surface by 1.9FT TKOF surface by 3.9FT.

Lit LLZ aerial by red beacon APRX BRG 328 MAG 3336.2M FM RWY 33 THR 15.25FT AMSL infringes APCH and TKOF surfaces by 0.9FT.

Special Procedures

1. RWY 15 THR Turning Node – Clockwise turns only.
2. OPR restrictions:RWS- variations due obstacles in Western GA building area: RWY 33 (South end) is 180M, increased to 300M at 1,400M from THR RWY 15 (North end) is 300M, reduced to 180M at 1,756 FM THR.
3. B777-300 pilots should be aware that normal clearance to TWY edge may not be AVBL during turns.
4. ACFT with wingspan ABV 36m must use turning nodes at RWY ends. ACFT to execute MAX RAD turns.
5. All ACFT using RWY 15/33 turning nodes to use MAX radius turns. All wide bodied ACFT using RWY 15/33 turning nodes are also requested to use minimum thrust.
6. Taxiways – outboard ENG on 4 – engine jet ACFT to be OPR at low PWR to prevent erosion and ENG damage.
7. TWY A3 NOT AVBL for ACFT ABV 23,000kg.
8. TWY A3 holding point marking ONLY clearly visible when taxiing on centreline of TWY. Holding points are NOT aligned with gable markers.
9. Western run up bay not AVBL to turbine engine ACFT except for normal pre-flight checks associated with departure. Noise Abatement Procedures apply.
10. Aircraft marshalling is required for all charter and visiting aircraft using the Domestic and International aprons. All aircraft using these aprons must be facilitated through a Fixed Base Operator or ground handler. Crew and passengers must be escorted to and from the aircraft. The AD OPR does not provide a marshalling service.
11. Pavement restrictions – TWY A2 and A BTN A2 and A3 not AVBL to ACFT ABV 7,000KG. TWY A4 not AVBL to ACFT ABV 90,000KG. TWY Y not AVBL TO ACFT ABV 10,000KG.
12. Parking restrictions – Due to a critical shortage of apron space, all non-RPT ACFT ABV 5700KG and rotary wing, Government and MIL requiring access to GA, Domestic or International Aprons must obtain prior parking approval from Cairns Airport Pty Limited. 48HR PN, Phone: (07) 4080 6744 (H24). Fax: (07) 4035 9115. VHF 129.9. EMAIL: coords@cairnsairport.com.au.
13. Thunderstorm warning system installed on DOM and INTL aprons. Apron shut down (blue strobe lights) commences when lightning detected WI 5NM. Expect ACFT docking and DEP delays during apron shut down.
14. Low Visibility Operations
    a) RWY 15 – CAT 1 percision APCH.
    b) Low VIS TKOF are NOT supported. RWY 15/33 is capable of supporting TKOF with a RWY VIS of not less than 800M.
    c) Manual RV readings are provided to the control TWR. Transmissometers are not installed.
    d) RWY Guard Lights – a pair of unidirectional flashing yellow lights are installed at each TWY INT to caution pilots or vehicle drivers that they are about to enter an active RWY.

Local Precautions

1. Bird hazard exists. Increased numbers of the following species are expected during the specified times:
    a. Jan-Apr Magpie Geese, Pied Imperial Pigeons.
    b. May-Sep Black Kites, White Faced Heron, Straw Necked Ibis, Intermediate and Cattle Egret.
    c. Oct-Dec Pied Imperial Pigeons, White Faced Heron, Straw Necked Ibis, Intermediate and Cattle Egret.
    d. Pelican numbers can be very high in AUG with flocks transiting across the northern approaches.
    e. Spectacled Flying fox and Little Red Flying fox can be a hazard at any time of the year depending on the activity at camps and location of attractants.
2. Bird Watch Condition Reports and species specific NOTAMs will be issued during periods of increased activity.

3. Increased bird hazard severe bird watch condition activated various species of high risk birds WI 2000m of THR RWY 15
4. Noise Abatement Procedures apply. Refer AIP DAP
5. Runway incursion hot spot: RWY 15/33 and TWY A3

PART 3	PARTICULARS OF AERODROME TO BE PUBLISHED IN THE AIP
SECTION 05	AERODROME RADIO COMMUNICATION SERVICES

CASA have not given any directions about collecting aircraft statistics for ANS / air ground radio service purposes, as Cairns Airport has 24 hour Air Traffic Control.

As a Controlled Airport with 24 hour ANS coverage, Cairns Airport does not require an Aerodrome Frequency Response Unit (AFRU).

The relevant frequencies for airport communications are as follows:

ANS COMMUNICATIONS FACILITIES

SMC	CAIRNS GROUND	121.7
TWR	CAIRNS TOWER	124.9
APP/DEP	CAIRNS APPROACH	118.4
VOL/MET	AUSTRALIA	11387 6676
APP/FIA	CAIRNS APPROACH	126.1
ATIS	CAIRNS ATIS	113.0 131.1
ACD	CAIRNS DELIVERY	128.75
FIA	CAIRNS APPROACH	126.1

CAIRNS AIRPORT PTY LTD

AIRPORT COORDINATORS	129.9

MAJOR AIRLINES

QANTAS Movement Control	131.9
AIR NIUGINI	129.7
VIRGIN (Handled by Swissport)	131.15
JETSTAR	130.475
SKYTRANS	128.9