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Cairns Airport

Aerodrome Operations Manual

Version	1.6
Approver	Chief Operating Officer

Review Date 11 August 2024

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Glossary

Acronyms and abbreviations

Acronym / abbreviation	Description
ACN	aircraft classification number
ADP	aeronautical data package
AEP	aerodrome emergency plan
ARC	aircraft reference code
ARFFS	aviation rescue and firefighting services
AGL	aeronautical ground lighting
AHD	Australian height datum
AIP	aeronautical information publication
AIS	aeronautical information service
ALARP	as low as reasonably practicable
AMSL	above mean sea level
ARO	aerodrome safety officer
ARP	aerodrome reference point
ASDA	accelerate-stop distance available
ATC	air traffic control
AT-VASIS	an abbreviated T pattern visual approach slope indicator system
AVDGS	advanced visual docking guidance system
CASA	Civil Aviation Safety Authority
ERSA	En-Route Supplement Australia
ft	feet
FOD	foreign object debris
H24	continuous
IFR	instrument flight rules
ILS	instrument landing system
IWDI	illuminated wind direction indicator
LDA	landing distance available
LVP	low visibility procedures
m	metre(s)
MAGS	movement area guidance sign
MOS	Manual of Standards
MOWP	method of working plan

NAIPS	national aeronautical information processing system
NOF	NOTAM Office
NOTAM	notice to airmen
OFZ	obstacle free zone
OLS	obstacle limitation surface
OMGWS	outer main gear wheel span
PAL	pilot activated lighting system
PANS-OPS	Procedures for Air Navigation Services – Aircraft Operations
PAPI	precision approach path indicator
PCN	pavement classification number
RESA	runway end safety area
RTIL	runway threshold identification lights
RV	runway visibility
RVR	runway visual range
RWY	runway
SMS	safety management system
STODA	supplementary take-off distance
RMP	risk management plan
TDZ	touchdown zone
TODA	take-off distance available
TORA	take-off run available
T-VASIS	T pattern visual approach slope indictor system
TWY	taxiway
VASIS	visual approach slope indicator system
VDGS	visual docking guidance system
VFR	visual flight rules
WDI	wind direction indicator

Definitions

Term	Definition
accelerate-stop distance available	the length of the take-off run available plus the length of the stopway if provided.
accident	an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which: a person is fatally or seriously injured as a result of: being in the aircraft, or direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew, or the aircraft sustains damage or structural failure which: adversely affects the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component, except for engine failure or damage when the damage is limited to the engine, its cowlings or accessories, or for damage limited to propellers, wing tips, antennas, tyres, brakes, fairings, small dents or puncture holes in the aircraft skin, or the aircraft is missing or is completely inaccessible.
aerodrome	an area of land or water (including any buildings, installations, and equipment) intended to be used either wholly or in part for the arrival, departure or movement of aircraft.
aerodrome elevation	the elevation of the highest point of the landing area.
aerodrome reference code	refers to the three (3) elements that are nominated by the aerodrome operator, specifically: a code number which is determined by the aeroplane reference field length, and which is applicable to runways a code letter which is determined by the aeroplane wingspan, and which is applicable to runways, taxiways, aircraft holding bays and parking positions the OMGWS which is applicable to runways and taxiways.
aerodrome reference point	the designated geographical location of an aerodrome.
AIP responsible person	for an aeronautical data originator, a person appointed by the originator under regulation 175.445 as responsible for the provision of aeronautical data or aeronautical information published in the AIP.

Term	Definition
air transport operation	a passenger transport operation, or a cargo transport operation, that is conducted for hire or reward, or is prescribed by an instrument issued under regulation 201.025. However, an operation conducted for a purpose mentioned in paragraph 206(1)(a) of CAR is not an air transport operation. 206(1)(a) aerial work purposes, being purposes of the following kinds (except when carried out by means of an RPA): aerial surveying aerial spotting agricultural operations aerial photography advertising balloon flying training ambulance functions carriage, for the purposes of trade, of goods being the property of the pilot, the owner of the hirer of the aircraft (not being a carriage of goods in accordance with fixed schedules to and from fixed terminals) any other purpose that is substantially similar to any of those specified in subparagraphs (i) to (vii) (inclusive).
AIS provider	a person who holds a certificate under regulation 175.055 of CASR.
apron	a defined area on a land aerodrome to accommodate aircraft for the purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.
apron taxiway	a portion of a taxiway system located on an apron to provide a through taxi route for aircraft across the apron to another part of the taxiway system.
Australian height datum	the datum that sets mean sea level as zero elevation.
clearway	a defined area at the end of the TORA, on the ground or water under the control of the aerodrome operator, which is selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.
displaced threshold	a threshold not located at the extremity of a runway.
holding bay	a defined area where aircraft can be held or bypassed to facilitate efficient surface movement of aircraft.
incident	an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.
international aerodrome	an aerodrome: designated by the Department as an international airport in Australia; and identified as a designated international airport in Australia on the Department's website.

Term	Definition
instrument runway	one of the following types of runway nominated for the operation of aircraft using instrument approach procedures: non precision approach runway precision approach runway (CAT I) precision approach runway (SA CAT I) precision approach runway (SA CAT II) precision approach runway (CAT II) precision approach runway (CAT III A / B / C)
landing distance available	the length of the runway which is declared available and suitable for the ground run of an aeroplane landing.
manoeuvring area	part of the aerodrome used for the take-off, landing and taxiing of aircraft, excluding aprons.
method of working plan	a plan to ensure that aerodrome works do not present a hazard to aircraft operations.
movement area	a part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the aprons.
non-homogenous runway surface	a runway surface that has different surface finishes across its full width.
non-instrument runway	a runway for the operation of aircraft using visual approach procedures.
NOTAM	Notice to Airmen and is a notice issued by the NOTAM Office containing information or instructions concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to persons concerned with flight operations.
NOTAM authorised persons	for an aeronautical data originator, a person(s) appointed under regulation 175.445 by the originator authorised to request the issue, review or cancellation of a NOTAM.
obstacle	fixed (whether temporarily or permanently) and mobile objects, structures and parts of such objects and structures that: are located on an area provided for the surface movement of aircraft, or extend above a defined surface designated to protect aircraft in flight, or stand outside the defined surfaces mentioned in items (a) and (b) above and that have been assessed as being a hazard to air navigation.
obstacle free zone	the airspace above the inner approach surface, inner transitional surface, baulked landing surface, and that portion of the runway strip bounded by these surfaces, which is not infringed by any fixed obstacle other than a low mass and frangibly mounted one required for air navigation purposes.
obstacle limitation surfaces	a series of planes, associated with each runway at an aerodrome, that defines the desirable limits to which objects or structures may project into the airspace around the aerodrome so that aircraft operations at the aerodrome may be conducted safely.

Term	Definition
PANS-OPS	Doc.8168-OPS/611 Volume II (Procedures for Air Navigation Services – Construction of Visual and Instrument Flight Procedures) approved and published by decision of the Council of the International Civil Aviation Organization, as in force from time to time.
pavement classification number	a number expressing the bearing strength of a pavement for unrestricted operations by aircraft with aircraft classification number (ACN) less than or equal to the PCN.
runway	a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.
runway end safety area	an area symmetrical about the extended runway centreline and adjacent to the end of the runway strip, primarily to reduce the risk of damage to an aeroplane which undershoots or overruns the runway.
runway strip	a defined area, including the runway and stopway, provided to: reduce the risk of damage to aircraft running off a runway, and protect aircraft flying over the runway during take-off or landing operations.
scheduled air transport operation	an air transport operation conducted in accordance with a published schedule.
secondary power supply	an electrical power supply that: is automatically connected to the relevant load when the primary power source fails, and is derived from: the normal public electrical power supply, but in a way that: supplies power for the aerodrome's functionality from a special substation that is not the normal substation, and supplies the power through a special transmission line that follows a route different from the normal power supply route, and makes extremely remote the possibility of a simultaneous failure of the normal public electrical power supply and the power supply for the aerodrome, or one or more generators, batteries, or similar devices which deliver a constant, reliable and sufficient supply of electrical power for the relevant aerodrome service.
shoulder	an area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.
stopway	a defined rectangular area on the ground at the end of the take-off run available and prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.
take-off distance available	the length of the take-off run available, plus the length of the clearway if provided.
take-off runway available	the length of the runway declared available and suitable for the ground run of an aeroplane taking off.
taxilane	a portion of an apron designated as a taxiway and for use only to provide access to and egress from aircraft parking positions.

Term	Definition
taxiway	a defined path on an aerodrome on land, established for the taxiing of aircraft from one part of an aerodrome to another. A taxiway includes a taxilane, an apron taxiway, and a rapid exit taxiway.
threshold	the beginning of that portion of the runway usable for landing.
Type A chart	a chart which contains information on all significant obstacles within the take-off area of an aerodrome up to 10 km from the end of the runway.
Type B chart	an obstacle chart which provides obstacle data from around the aerodrome.
Y location code	the international code prefix used to identify Australian aerodromes.

Reference material

Document type	Title
Regulation	Part 139 of the *Civil Aviation Safety Regulations 1998*
Act	*Civil Aviation Act 1988*
Manual of Standards	Manual of Standards Part 139
Advisory Circulars	CASA Advisory Circulars
Civil Aviation Advisory Publications	Civil Aviation Advisory Publications

Forms

Form no.	Title

Preface

Amendment record

(Part 139 MOS – 10.03)

Revisions to this manual are dated and a new version number assigned accordingly. In addition to recording the date of change for each section or page of this manual, a summary of the changes made is also recorded.

Version no.	Date of change	Parts and page	Summary of change(s)
1.0	13 May 2021	All	Initial issue for new Aerodrome Certificate in accordance with new MOS139 ruleset
1.1	01 August 2021	1.3. Key personal, page 18-22 Appendix A – organisational chart Appendix D, I and G	Review by new Aerodrome Operations Manager New Type A
1.2	01 March 2022	1.3. Key personal, page 18-22 Appendix A – organisational chart	Review by Aerodrome Safety and Compliance Manager Some formatting
1.3	09 Sep 2022	1.3. Key personal, page 18-22 1.5 Instruments, page 26 Appendix A – organisational chart Appendix C	Organisational chart Added CASA Instrument 36/22 Reviewed Data Product Specification
1.4	06 Oct 2022	1.3. Key personal, page 18-22 3.6.9.1 – Reduced Separation Distances – VDGS, page 70 Appendix A – organisational chart Appendix C – page 10	Specified the aircraft stands with VDGS and reduced separation distances. Amended roles and responsibilities for designated safety roles Organisational chart. Added candela to the Runway Edge Lights section.
1.5	11 Oct 2022	1.5.1 Aerodrome Certificate - conditions	Inserted new Aerodrome Certificate CASA.ADCERT.0013
1.6	11/AUG/2024	General review	General review carried out due to delays with new AOMI on CASA MAAT

Distribution list

(Part 139 MOS – 10.02(2)(7))

A copy of this manual is maintained as an electronic copy on the Cairns Airport Sharepoint (internal) and Website (external). This manual is made available to CASA for inspection if requested.

Electronic or printed copies of this manual are further distributed as follows:

Copy No. (if assigned)	Manual holder	Electronic Format	Hard copy
Electronic	Access provided via Cairns Airport website - password protected. Access provided to Aerodrome Safety Officers via Tracker AIRSIDE knowledge centre Access provided to CAPL aerodrome staff via Sharepoint (internal)	✓	
Master	Electronic copy on Cairns Airport Sharepoint (internal) and website - Maintained as a Controlled Copy	✓	

Cairns Airport makes this manual available to all relevant persons on our website. Access is also available to staff on our Sharepoint (internal).

Persons printing this manual should be aware that any hard copies are uncontrolled and may not be the most up-to-date version.

1 Aerodrome Administration

1.1 Operator's Statement

(CASR 139.110(5)(c))

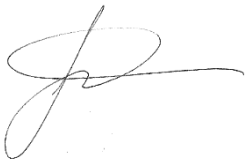
The Cairns Airport Aerodrome Manual has been prepared in accordance with the requirements set out in the Civil Aviation Safety Regulations 1998 (CASRs), and associated Part 139 (Aerodromes) Manual of Standards 2019 (Part 139 MOS).

The contents of this manual describe the systematic approach to the operation and maintenance of Cairns Airport and demonstrates Cairns Airport Pty Ltd group's commitment to managing the aerodrome safely and promoting a positive safety culture.

The aerodrome will be operated and maintained in accordance with the procedures set out in this manual, and in any subsidiary materials that are referenced in this manual, unless a temporary non-compliance or deviation from the procedures is necessary to ensure the safety of aircraft, aircraft operations, or individuals using the aerodrome. If the temporary non-compliance or deviation in the procedures is to take effect on a permanent basis, the manual will be updated. CASA will be advised of a temporary deviation or a change to this manual within 30 days.

At all times when the aerodrome is operating, the aerodrome manual and any subsidiary materials will be accessible by those personnel who have a role of responsibility.

This manual identifies persons from all levels of the organisation that are responsible and accountable for the safe operation of the aerodrome. As the authorisation holder, Cairns Airport Pty Ltd is committed to ensuring that all individuals understand their responsibilities and accountabilities as defined within this aerodrome manual.

Signed: 

Name: Garry Porter

Position: Chief Operating Officer

1.2 Organisational structure

(Part 139 MOS – 11.02(a)(i))

An organisational chart which clearly identifies all personnel responsible for the management and administration of Cairns Airport is available in Appendix A of this manual.

1.3 Key personal

1.3.1 Accountable Manager

(CASR 139.110(1)(5); Part 139 MOS – 11.02(a)(ii); 13.02; 16.08(3); 25.04(2)(4))

Name: Garry Porter

Position: Chief Operating Officer (COO)

Responsibilities:

To ensure Cairns Airport (CA):

- complies with civil aviation legislation
- operates and maintains the aerodrome safely and with a reasonable degree of care and diligence
- operates and maintains the aerodrome in accordance with the aerodrome manual for the aerodrome.

The accountable manager has a general knowledge of the relevant civil aviation safety legislation and standards that are applicable to the inspection, reporting, operation, and maintenance of the aerodrome.

The Aerodrome Operations Manager (AOM) is a delegate to the COO with regards to the functions of the Accountable Manager.

1.3.2 Management positions (aerodrome operation and maintenance)

(Part 139 MOS – 11.02(a)(ii))

The management position(s) responsible for the **operation** and **maintenance** of the aerodrome are:

Name: Alicia Prince

Management position: Head of Operations

Responsibilities:

- Approve the Cairns Airport Aerodrome Operations Manual
- Provide advice to the Chief Operating Officer and Cairns Airport internal departments on aerodrome and planning issues
- Provision of funding and resources for operation of the aerodrome
- 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.
- 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.
- Team development
- Direct continuous improvement management

Name: Alan Dugan

Management position:
General Manager Infrastructure and Property Projects

Responsibilities:

- Provide advice to the Chief Operating Officer and Cairns Airport internal departments on airport infrastructure and maintenance activities.

- 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 budget is available to undertake all maintenance of movement area pavements including friction testing, line marking, aerodrome ground lighting and other unscheduled maintenance identified; and to maintain the functions of the Cairns Airport Drawing Office

Name: Joseph Godolley

Management position: Aerodrome Operations Manager

Responsibilities:

- Ensure aerodrome operational integrity through compliance with all relevant legislative obligations, including compliance with the Aerodrome Operations Manual.
- Act as the Delegate to the Chief Operating Officer with regards to the functions of the Accountable Manager
- Manage and develop aerodrome safety standards
- Direct Aerodrome compliance including coordination of Annual Technical Inspections program
- Ensure implementation of the Aerodrome Risk Register
- Relationship management: CASA, Air Traffic Control, ARFFS
- Perform the following safety related roles/activities:
  - Aerodrome Manual Controller
  - AIP Responsible person

Name: Robert Keegan

Management position: Emergency and Operational Resilience Manager

Responsibilities:

- Development and implementation of the Aerodrome Emergency Plan (AEP) and associated documentation.
- Relationship management: AEP stakeholders
- Ensure all aerodrome incidents and emergencies are managed within legislative requirements

Name: Sheree Gall

Management position: Airside Infrastructure Manager

Responsibilities:

- 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, in conjunction with Aerodrome Operations

Name: Damien Beech

Management position: Security Operations Manager

Responsibilities:

- Manage screening operations
- Law enforcement liaison
- Commonwealth agencies contact and regulatory body point of contact for Cyber and Infrastructure Security Centre

Name: Vicky Briscoe

Management position: Terminal Operations Manager

Responsibilities:

- Manage terminal operations including risk and contingency management
- Law enforcement liaison
- Commonwealth agencies contact and regulatory body point of contact for Australian Border Force

Name: Darryl Greig

Management position: Health and Safety Manager

Responsibilities:

- Lead and manage the DAMP program

Name: Lucy Friend

Management position: Environment Manager

Responsibilities:

- Carry out compliance checks of aerodrome 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

1.3.3 Aerodrome Operations and Safety functions

(Part 139 MOS – 11.02(c))

The following individuals or positions are responsible for the aerodrome's operations and safety functions:

Individual / position: Aerodrome Operations Supervisor

Responsibilities:

- Day-to-day supervision of the Aerodrome Safety Officer team
- Coordination of aerodrome functions and activities
- Review of aerodrome SOPs
- Assist the Aerodrome Manager with preparing Method of Work Plans (MOWP).
- Issue Notice to Airmen (NOTAMS) and monitor the currency of NOTAMS.

Individual / position: Aerodrome Safety Officer

Responsibilities:

- Key point of contact for aerodrome operations
- 24/7 inspecting, reporting and monitoring of the aerodrome operational condition e.g. OLS, WHM
- Implement and enforce all relevant aerodrome policies and procedures e.g. ADVH, engine ground running
- First response to aerodrome emergencies
- Maintain daily logs on all operational matters

Individual / position: Airport Coordinators

Responsibilities:

- Coordination of airport facilities including the allocation of 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,
- Alarm response and escalation.
- Recording and reporting of equipment failure/faults and notification to the appropriate department to ensure corrective action is undertaken to minimise interruption to operations.

Individual / position: Airport Duty Manager (ADM)

Responsibilities:

- Key point of contact for terminal operations
- 24/7 inspecting, reporting, and monitoring of the terminal operational condition
- First response to terminal emergencies and disruptions

1.4 Aerodrome manual administration

(Part 139 MOS – 10.01(1)(2)(3); 10.02(1)(3)(4); 10.04(1)(2)(b)(c); 11.02(b))

This aerodrome manual identifies all elements required by the Part 139 MOS. Information that is not relevant to the aerodrome's operational context or regulatory compliance is marked NOT APPLICABLE or N/A.

All subsidiary materials that are adopted are clearly referenced in the relevant sections of this manual.

This manual and the adopted subsidiary materials will always be accessible by those persons who have a role in the operation and maintenance of the aerodrome.

1.4.1 Manual control

(Part 139 MOS – 10.01(4); 11.02(b))

The following individuals / positions are responsible for reviewing, maintaining, amending, and controlling this aerodrome manual:

Individual / position	Role / Function

Aerodrome Operations Manager	• Reviewing, maintaining, amending, and controlling the aerodrome manual • Ensuring compliance with the format, content, retention and amendment provisions
Emergency and Operational Resilience Manager	Delegate to the Aerodrome Operations Manager for: • Reviewing, maintaining, amending, and controlling the aerodrome manual • Ensuring compliance with the format, content, retention and amendment provisions

1.4.2 Manual amendment

(Part 139 MOS – 10.03(1)(2)(3))

To maintain the accuracy of this manual, the aerodrome manual controller(s) will be advised of any changes to the aerodrome's facilities, operating procedures, or of any errors or omissions, so that an amendment can be made.

When an amendment is made, the aerodrome manual controller will update the amendment record in the respective section of this manual.

So that readers can identify information in the manual that has changed, the following procedure has been adopted:

- The amendment record will be updated in the manual to include a written summary of each change and the date on which the change was made.

Within 30 days of any amendment to this manual, written notice of the change and a copy of the changed part of the aerodrome manual is provided to CASA.

1.4.3 Manual review

(Part 139 MOS – 12.09(6)(a)(ii))

This manual will be reviewed annually as part of the aerodrome technical inspection process.

1.5 Authorisations

1.5.1 Aerodrome certificate – conditions

(Part 139 MOS – 11.01(3)(c))

The Cairns Airport Pty Ltd Aerodrome Certificate CASA.ADCERT.0013 Revision: 1 is issued 10 October 2022.

The Conditions applicable to this Aerodrome Certificate are: NIL

Australian Government
Civil Aviation Safety Authority

AERODROME CERTIFICATE

Number: CASA.ADCERT.0013 Revision: 1

This aerodrome certificate is granted pursuant to regulation 139.030 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 10 October 2022, and remains in force until cancelled, except during any period in which it is suspended.

Iain Lobegeier
Manager Aerodromes
Regulatory Oversight Division

Delegate of the Civil Aviation Safety Authority

10 October 2022

Conditions:

Conditions applicable to Aerodrome Certificate CASA.ADCERT.0013

NIL

1.5.2 Aerodrome instruments

(Part 139 MOS – Chapter 11.01(3)(a))

CASA has issued the following approvals, determinations, directions, exemptions or other instruments:

Type and particulars of authorisation			
RWY 15/33 - reduced RWS width South of chainage 2805.			
No.	**Effective date**	**Expiry date (if applicable)**	**Document location**
D16/11578	29 March 2016		Appendix B

Type and particulars of authorisation			
Obstacle assessment ILS localiser Infrastructure RWY 15/33			
No.	**Effective date**	**Expiry date (if applicable)**	**Document location**
D17/23394	14 August 2017		Appendix B

Type and particulars of authorisation			
Obstacle assessment Fence line RWY 33 approach			
No.	**Effective date**	**Expiry date (if applicable)**	**Document location**
D17/296286	15 August 2017		Appendix B

Type and particulars of authorisation			
Obstacle assessment NDB TWRS 15 approach			
No.	**Effective date**	**Expiry date (if applicable)**	**Document location**
D17/292926	14 August 2017		Appendix B

Type and particulars of authorisation			
Objects in Obstacle Restriction Area			
No.	**Effective date**	**Expiry date (if applicable)**	**Document location**
CASA 36/22	16 August 2022	31 July 2025	Appendix B

2 Aerodrome Information

2.1 Aeronautical information

(Part 139 MOS – 11.01(1); Chapter 5)

2.1.1 Aerodrome diagram

(Part 139 MOS – 11.01(1); 5.03(1)(a)-(j))

A single aerodrome diagram that clearly illustrates all applicable aerodrome facilities prescribed in subparagraph 5.03(1) of the Part 139 MOS has been reported to Airservices. The aerodrome diagram is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.2 Aerodrome administration statement

(Part 139 MOS – 11.01(1); 5.03(2)(a)-(c))

The aerodrome's administration information prescribed in subparagraph 5.03(2) of the Part 139 MOS has been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.3 Aerodrome location statement

(Part 139 MOS – 11.01(1); 5.03(4)(a)-(f))

The aerodrome's location information prescribed in subparagraph 5.03(4) of the Part 139 MOS has been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4 Movement area information – runways

2.1.4.1 Runway code number

(Part 139 MOS – 11.01(1); 5.04(1)(a))

The code number of the runway(s) has been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.2 Runway bearing, length, width, and surface type

(Part 139 MOS – 11.01(1); 5.04(1)(b)(c))

The bearings, length, width and surface type(s) of the runway(s) have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C this manual.

2.1.4.3 Threshold geographical location & elevation - instrument runways

(Part 139 MOS – 11.01(1); 5.04(1)(d)(i)(ii))

The geographical location coordinates, and the elevation of the midpoint of the runway threshold for each instrument runway have been provided to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.4 Runway pavement strength rating

(Part 139 MOS – 11.01(1); 5.04(1)(e))

The strength rating of the runway(s) pavement has been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.5 Runway strip length and width

(Part 139 MOS – 11.01(1); 5.04(1)(f))

The length and width of the runway strip(s) have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.6 Runway slope

(Part 139 MOS – 11.01(1); 5.04(1)(g))

The runway slope(s) has / have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.7 Runway declared distances

(Part 139 MOS – 11.01(1); 5.04(1)(h))

The runway(s) declared distances have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.8 Intersection departure take-off distances available

(Part 139 MOS – 11.01(1); 5.04(1)(h); 5.12(3)(4))

The runways(s) intersection departure take-off distances have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.9 Supplementary take-off distances available (STODA)

(Part 139 MOS – 11.01(1); 5.04(1)(h))

The runway(s) supplementary take-off distances have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.10 Established OLS for the runway

(Part 139 MOS – 11.01(1); 5.04(1)(i))

The code number of the runway(s) OLS have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.11 Type A charts

(Part 139 MOS – 11.01(1); 5.04(1)(j)(i))

The Type A chart obstacle data has been prepared in digital format and provided to the AIS provider in accordance with Subpart 175.E of the CASRs. The Type A chart obstacle data is available in Appendix D of this manual.

2.1.4.12 Type B charts

(Part 139 MOS – 11.01(1); 5.04(1)(j)(ii))

A type B chart has not been prepared.

2.1.4.13 Obstacle-free zone (OFZ)

(Part 139 MOS – 11.01(1); 5.04(1)(k))

Obstacle free zone(s) have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.4.14 Arrestor system

(Part 139 MOS – 11.01(1); 5.04(1)(l))

An arrestor system is not provided.

2.1.5 Movement area information – runway strip availability

(Part 139 MOS – 11.01(1); 5.04(2)(a)(b))

The runway strip is not available for take-offs and landings.

2.1.6 Movement area information – taxiways

(Part 139 MOS – 11.01(1); 5.04(3)(a)-(d))

Each taxiway designation, code letter, width, and surface type have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.7 Movement area information – aprons

(Part 139 MOS – 11.01(1); 5.04(4)(a)-(c); 5.04(5)(a)(b))

The aerodrome has international operations and / or the parking position designations have been provided to Airservices for publication in the AIP. Each apron, their surface type, the designation and location of primary and secondary parking positions, and the type of parking guidance provided has been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.8 Visual aids – approach and runway lighting systems

(Part 139 MOS – 11.01(1); 5.05)

2.1.8.1 Approach lighting system(s) (ALS)

(Part 139 MOS – 11.01(1); 5.05(1)(a))

The type, length and intensity of the runway approach lighting system(s) have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.8.2 Runway threshold lights and wing bars

(Part 139 MOS – 11.01(1); 5.05(1)(b))

The particulars for each runway threshold lights / wing bars (if provided) have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.8.3 Visual approach slope indicator system (VASIS)

(Part 139 MOS – 11.01(1); 5.05(1)(c))

The particulars of each visual slope indicator system have been reported to the Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.8.4 Touchdown zone (TDZ) lighting

(Part 139 MOS – 11.01(1); 5.05(1)(d))

Touchdown zone lighting is not provided.

2.1.8.5 Runway centreline lights

(Part 139 MOS – 11.01(1); 5.05(1)(e))

Runway centreline lights are not provided.

2.1.8.6 Runway edge lights

(Part 139 MOS – 11.01(1); 5.05(1)(f))

The length, longitudinal spacing, colour and intensity of the runway edge lights have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.8.7 Runway end lights

(Part 139 MOS – 11.01(1); 5.05(1)(g); Chapter 9, Division 10)

The colours of runway end lights, and wing bars (if provided), have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.8.8 Stopway lights

(Part 139 MOS – 11.01(1); 5.05(1)(h))

The aerodrome does not have stopway lights.

2.1.8.9 Starter extension lighting

(Part 139 MOS – 11.01(1); 5.05(1)(i))

The aerodrome does not have starter extension lighting.

2.1.8.10 Runway threshold identification lights (RTIL)

(Part 139 MOS – 11.01(1); 5.05(1)(j))

The aerodrome does not have RTIL.

2.1.8.11 Pilot activated lighting (PAL) system

(Part 139 MOS – 11.01(1); 5.05(1)(k))

The aerodrome does not have a pilot activated lighting (PAL) system.

2.1.9 Visual aids – other lighting and secondary power supply

2.1.9.1 Aerodrome beacon

(Part 139 MOS – 11.01(1); 5.05(2)(a))

The location, characteristics and hours of operation of the aerodrome beacon(s) have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.9.2 Taxiway lighting systems (including holding positions and stop bars)

(Part 139 MOS – 11.01(1); 5.05(2)(b))

The lighting systems for taxiways, including taxiway holding positions and stop bars (where provided), have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.9.3 Apron lighting systems (including VDGS)

(Part 139 MOS – 11.01(1); 5.05(2)(c))

The lighting systems for aprons, including the location and type of VDGS, have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.9.4 Other movement areas – lighting systems

(Part 139 MOS – 11.01(1); 5.05(2)(d))

No other movement area lighting systems are provided at the aerodrome.

2.1.9.5 Obstacle lighting for OLS infringements

(Part 139 MOS – 11.01(1); 5.05(2)(e))

All lit obstacles within the aerodromes OLS have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.9.6 Secondary power supply (including switch-over time)

(Part 139 MOS – 11.01(1); 5.05(2)(f))

The particulars of the secondary power supply and its switchover time have been provided to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.10 Navigation aids

(Part 139 MOS – 11.01(1); 5.06)

No navigation aids are provided by the aerodrome operator.

2.1.11 Aviation rescue and fire-fighting services (ARFFS)

(Part 139 MOS – 11.01(1); 5.07)

An ARFFS is not provided by the aerodrome operator.

2.1.12 Ground services

2.1.12.1 Fuel suppliers

(Part 139 MOS – 11.01(1); 5.08(a))

Fuel suppliers and their contact details have been provided to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.12.2 Weather information broadcasts

(Part 139 MOS – 11.01(1); 5.08(b))

Aerodrome weather information broadcasts are not provided by the aerodrome operator.

2.1.12.3 Ground-to-air communication systems

(Part 139 MOS – 11.01(1); 5.08(c))

Ground-to-air communication systems are not provided by the aerodrome operator.

2.1.12.4 Other aviation-related services made available to pilots

(Part 139 MOS – 11.01(1); 5.08(d))

No other aviation-related services are made available to pilots by the aerodrome operator.

2.1.13 Aerodrome operational procedures – standard taxi routes

2.1.13.1 Standard taxi routes determined by aerodrome operator

(Part 139 MOS – 11.01(1); 5.09(1)(a))

Standard taxi routes have not been determined by the aerodrome operator.

2.1.13.2 Standard taxi routes determined by the ATS provider

Standard taxi routes have not been determined by the ATS provider.

2.1.14 Aerodrome operational procedures – special procedures

(Part 139 MOS – 11.01(1); 5.09(2))

Special procedures unique to the aerodrome which pilots would reasonably be expected to know in the interests of aviation safety have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.15 Aerodrome operational procedures – notices

(Part 139 MOS – 11.01(1); 5.09(3))

Cautionary or administrative notices relating to the safe use of the aerodrome have been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.1.16 Aerodrome operational procedures – low-visibility procedures

(Part 139 MOS – 11.01(1); 5.09(4)(a)(b)(c))

Low-visibility procedures have been established at the aerodrome and the required information has been reported to Airservices. This information is contained in Cairns Airport's ADP. The ADP is available in Appendix C of this manual.

2.2 Aerodrome site plan

(Part 139 MOS – 11.01(2)(a)(i)-(v))

A scaled plan of the aerodrome site that clearly shows all applicable aerodrome facilities prescribed in subparagraph 11.01(2)(a) of the Part 139 MOS is available in Appendix E of this manual.

2.3 Site plan – facilities outside the aerodrome boundary

(Part 139 MOS – 11.01(2)(b))

Cairns Airport owns three hazard beacons that are locate outside the aerodrome boundary:

Location	Type	Owner	Address	Telephone
Lumley Hill Intermediate	Hazard Beacon	Cairns Airport	Cairns Airport	(07) 4080 6744
Lumley Hill	Hazard Beacon	Cairns Airport	Cairns Airport	(07) 4080 6744
Edge Hill	Hazard Beacon	Cairns Airport	Cairns Airport	(07) 4080 6744

Cairns Airport does not own any other aerodrome facilities or equipment that is located outside the boundaries of the aerodrome.

A plan of the aerodrome site that clearly shows the hazard beacons is available in Appendix G of this manual.

2.4 Aerodrome reference code (ARC) nominations

(Part 139 MOS – 4.01; 11.01)

2.4.1 Runways

(Part 139 MOS – 11.01(2)(c))

The aerodrome reference code (ARC) number, letter and OMGWS for each runway are recorded in the table below:

Runway	ARC number	ARC letter	OMGWS
RWY 15/33	Code 4	Code F	9 m up to but not including 15 m

2.4.2 Taxiways and taxilanes

(Part 139 MOS – 11.01(2)(c))

The aerodrome reference code (ARC) letter and OMGWS for each taxiway and taxilane is recorded in the table below:

	ARC letter	OMGWS
TWY A (BTN TWY A2 and A3)	Code B	4.5 m up to but not including 6 m

TWY A (BTN TWY A3 and Hawker Pacific)	Code C	4.5 m up to but not including 6 m
TWY A (BTN Hawker Pacific and A4)	Code C	6 m up to but not including 9m
TWY A (BTN A4 and Y)	Code B	4.5 m up to but not including 6 m
TWY A2	Code B	4.5 m up to but not including 6 m
TWY A3	Code C	6 m up to but not including 9 m
TWY A4	Code C	6 m up to but not including 9 m
TWY B	Code F	9 m up to but not including 15 m
TWY B2	Code F	9 m up to but not including 15 m
TWY B3	Code F	9 m up to but not including 15 m
TWY B4	Code F	9 m up to but not including 15 m
TWY B5	Code F	9 m up to but not including 15 m
TWY C	Code E	9 m up to but not including 15 m
TWY C1	Code F	9 m up to but not including 15 m
TWY C2	Code E	9 m up to but not including 15 m
TWY C3	Code F	9 m up to but not including 15 m
TWY C4	Code F	9 m up to but not including 15 m
TWY D	Code E	9 m up to but not including 15 m
TWY G	Code F	9 m up to but not including 15 m
TWY G2	Code F	9 m up to but not including 15 m
TWY G3	Code F	9 m up to but not including 15 m
TWY Y	Code B	4.5 m up to but not including 6 m

2.4.3 Aircraft parking positions

(Part 139 MOS – 1.08(2))

The aerodrome reference code (ARC) letter for each marked primary and secondary aircraft parking position is recorded in the table below:

NOTE: * Limited or with restrictions					
Parking position designation	**ARC letter**	**Parking position designation**	**ARC letter**	**Parking position designation**	**ARC letter**
Bay 1	E	Bay 7	E	Bay 13	C
Bay 1A	C	Bay 7A	No Position	Bay 13A	C*

Bay 1B	D*	Bay 7B	D*	Bay 14	C
Bay 1C	D*	Bay 8	D	Bay 14A	C*
Bay 1D	B*	Bay 8A	C*	Bay 15	C
Bay 1E	C*	Bay 8B	C*	Bay 15A	C*
Bay 2	E	Bay 9	D	Bay 16	C
Bay 2A	C	Bay 9A	C*	Bay 17	C
Bay 2B	D*	Bay 9B	C*	Bay 18	E
Bay 3	E	Bay 10	*E	Bay 18A	D
Bay 3A	C	Bay 10A	C	Bay 19	E
Bay 3B	D*	Bay 10B	C	Bay 19A	D
Bay 4	E	Bay 10D	C*	Bay 20	E
Bay 4A	C	Bay 10E	C*	Bay 20A	D
Bay 4B	D*	Bay 10F	C*	Bay 21	C
Bay 5	E	Bay 10G	C*	Bay 21A	C
Bay 5A	D	Bay 11	C	Bay 22	C
Bay 5B	D*	Bay 11A	C*	Bay 22A	C*
Bay 6	E	Bay 12	C	Bay 23	C
Bay 6A	D	Bay 12A	C*	Bay K	
Bay 6B	D*	Bay 13	C	Bay L	
				Bay S	

2.4.4 Holding bays (aircraft)

(Part 139 MOS – 1.08(2); 6.55(2))

Aircraft holding bays are not provided; therefore, this is NOT APPLICABLE.

2.5 Instrument classification of each runway

(Part 139 MOS – 3.01(2); 11.01(2)(d))

The instrument classification for each runway end is recorded in the table below:

Runway designation	Instrument classification
RWY 15	Instrument, precision approach, CAT 1 runway
RWY 33	Instrument, non-precision approach runway

2.6 Deviations from preferred standards

(Part 139 MOS – 1.08(3)(4); 11.01(3)(d))

2.6.1 Location of runway threshold

(Part 139 MOS – 6.01(3)(4)(6); 8.26)

The following runway thresholds are permanently displaced from the extremity of the runway:

Runway end	Distance of permanent threshold displacement	Reasons for permanent threshold displacement
33	40m	Displacement to achieve 90m RESA

2.6.2 Runway turn pad / bypass pad

(Part 139 MOS – 6.03(2)(3))

Runway 15 turn pad is located on both sides of the runway and the direction of turn is clockwise.

Runway 33 bypass turn pad is located on both sides of the runway and the direction of turn is clock-wise.

2.6.3 Runway longitudinal slope values

(Part 139 MOS – 6.06(1)-(7))

The maximum runway longitudinal slope values expressed in subparagraphs 6.06(1) to (6) of the Part 139 MOS have not been exceeded.

2.6.4 Runway transverse slope values

(Part 139 MOS – 6.08(2)(3))

The runway transverse slope values expressed in Table 6.08(2) of the Part 139 MOS have been exceeded.

The alternate runway transverse slope values are as close as practicable to the required slope values, and demonstrably safe for aircraft operations.

Runway designation	Alternate transverse slope value
RWY 15/33	The cross fall ranges from 1.1%-2.73% with an average crossfall of 1.8%.

2.6.5 Runway surfaces

2.6.5.1 Average surface texture depth

(Part 139 MOS – 1.08(4); Table 6.09(1)-1)

The preferred average surface texture depth of 1 mm has been met on all runways.

2.6.5.2 Friction values

(Part 139 MOS – 108(4); Table 6.09(1)-2)

The preferred values for continuous friction as stated in Table 6.09 (1)-2 of the Part 139 MOS are continuously met on all runways.

2.6.6 Longitudinal slope design values on graded runway strip

(Part 139 MOS – 6.18(1)(2))

The design longitudinal slope values expressed in subparagraph 6.18(1) of the Part 139 MOS have not been exceeded.

2.6.7 Runway end safety area (RESA)

(Part 139 MOS – 1.08(4); 6.26(4))

The preferred RESA length as stated in Table 6.26(4) of the Part 139 MOS has not been met on the following runways:

Runway designation	Actual RESA length	Reasons why the preferred RESA length not met
RWY 15	90m	Due to the proximity of the levee wall it is not practical to comply with the preferred RESA length.
RWY 33	90m	Due to the proximity of the boundary fence it is not practical to comply with the preferred RESA length.

2.6.8 Taxiway longitudinal slope values

(Part 139 MOS – 1.08(4); 6.40(1)(2)(3))

The maximum taxiway longitudinal slope values expressed in subparagraphs 6.40(1) and (2) of the Part 139 MOS have not been exceeded.

2.6.9 Taxiway transverse slope values

(Part 139 MOS – 6.41(2)(3))

The taxiway transverse slope values expressed in Table 6.41 (2) of the Part 139 MOS have not been exceeded.

2.6.10 Colour of aerodrome markings, markers, signals and signs

(Part 139 MOS – Table 8.03(1))

AS 2700-2011 has been used for all aerodrome markings, markers, signals and signs (as applicable).

2.6.11 Runway edge lights on a reduced runway width

(Part 139 MOS – 9.51(10)(11))

Runway edge lights are not located more than 3 m from the runway edge.

2.6.12 Spacing of taxiway edge lights

(Part 139 MOS – 9.92(1))

Taxiway edge lights are not provided.

2.7 Facilities with retained compliance

2.7.1 Non-compliant grandfathered facilities

(Part 139 MOS – 11.01(3)(b))

At the time of commencement of the Part 139 MOS, the following aerodrome facilities / OLS do not comply with the new standards.

These aerodrome facilities / OLS did meet a previous standard that was in place at the time the facility was introduced, last upgraded or replaced.

These facilities will be maintained in accordance with the requirements set out in the Part 139 MOS for the same facility.

Facility (grandfathered)	Description of non-compliance	Previous standard/year
Runway Strip Width	The width of the RWY 15/33 Strip south of chainage 2805 is 180m. This promulgated in ERSA FAC and RDS. The 300m RWS is not achievable due to buildings and facilities in the GA. A CASA exemption is in place - AD-19/2011	AEI 8.3.6
RESA	A RESA of minimum 240m for international air transport operations can not be achieved at both ends due to physical and environmental constraints e.g. terrain and perimeter fence. A minimum RESA of 90m is provided and commences at the start of the end of TORA at both ends of RWY 15/33.	2008
Slope of the Approach and Take-off climb surfaces	The slope for the RWY 15/33 approach and take-off surface are impacted by critical air navigational infrastructure and the airport boundary fence.	2010
Taxiway Shoulders	Taxiway A3 has no shoulders provided. Taxiway A4 has 2.5 not 3.5m shoulders	Constructed prior to RPA standards
TWY D	Centre line lighting spacing and leading on to apron	MOS 139 9.13.8.1 and 9.13.8.2 (2018)
Runway, taxiway, and apron lighting visual aids	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.	Pre-RPA's
Turning Pad edge lighting	The TSH 33 elevated turn pad lighting on the southern side is less than 0.6m from the outside edge	
Runway End Lights	The RWY end lights for TSH 33 are installed 2m prior to the day marking, which is not in accordance with MOS 139, Section 9.67 (2).	
Runway Guard Lights	Road access points to RWY 15/33 are not installed with Runway Guard Lights in accordance with MOS139, 9.98 (2).	
Transverse Slopes on Runways, and Characteristics of Runway Shoulders	The Runway 15/33 cross fall exceeds 2% over the full length.	
Take-off Run Available Information signs	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.	
Aerodrome Beacon	Flash rate 8 cycles per minute with approximately 15 times per minute.	Tower constructed 89-90 beacon meets the then RPA standard Chapter 12

		Section 3. Beacon is also maintained and operated by Airservices.
Aeronautical ground light chromaticity and commissioning	Existing AGL installations commissioning and certification not available.	
Slope of GA Apron	Some locations exceed slopes of 1%.	RPA standards allow for slope of up to 2% Chapter 7
Runway 15/33, Taxiway and Apron markings	Designed to previous standards.	
Taxiway Centreline lighting	Longitudinal spacing of the taxiway lighting on Taxiway A, A3 and A4.	
Taxiway Centreline lighting	A mixture of LED and halogen taxiway centreline light fittings are currently installed on a single taxiway lighting primary circuit.	

2.7.2 Grandfathered facilities – opted-in

(Part 139 MOS – 2.01 opted-in)

All grandfathered facilities remain grandfathered to a previous standard.

3 Aerodrome Operating Procedures and Systems

3.1 Reporting aeronautical data and information

This section documents the procedures for:

- providing information to the AIS provider (Airservices) for publication in the Aeronautical Information Package (AIP)
- notifying Airservices of any changes that are required to be made to the information that is published in the AIP
- reporting to the NOTAM Office (NOF) any changes to the condition of the aerodrome facility, or any hazards, that may adversely affect aviation safety
- reporting hazards that may adversely affect aviation safety to ATC
- making the aerodrome reports readily accessible to relevant personnel
- retaining reports for at least 3 years
- maintaining the integrity of information that is published.

3.1.1 Personnel with responsibilities – data originator

(CASR 175.445; Part 139 MOS – 11.05(3))

3.1.1.1 AIP responsible person

(CASR 175.445(1)(2); Part 139 MOS – 11.05(3))

The nominated AIP responsible person for Cairns Airport is the Aerodrome Operations Manager.

Their nomination has been provided to Airservices on the Aeronautical Data Originator (ADO) form that is available on the Airservices Australia website.

To meet the requirements of CASR 175.445, Cairns Airport Pty Ltd ensures that the AIP responsible person has been suitably trained so that they have the knowledge and competence to carry out their responsibilities**.**

Where a change to the AIP responsible person is required, a new ADO form will be submitted to Airservices informing them of the new appointment. This subsection of the manual will also be updated to reflect the change in nomination.

3.1.1.2 NOTAM authorised person(s)

(CASR 175.445(4)(5); Part 139 MOS – 11.05(3))

Persons who are authorised to request the issue, review, and cancellation of NOTAMs at Cairns Airport are listed below:

NOTAM authorised person(s)	
Position	**Name**
Aerodrome Operations Manager	~~Davy Semal~~**Joseph Godolley**
Emergency and Operational Resilience Manager	Robert Kegan
Aerodrome Operations Supervisor	Mark Musumeci
Aerodrome Safety Officer	Bruno Fogale

Aerodrome Safety Officer	Craig Tatlow
Aerodrome Safety Officer	Shane Porter
Aerodrome Safety Officer	Jamie Hughes
Aerodrome Safety Officer	Liam West
Aerodrome Safety Officer	Leonard Talbot
Aerodrome Safety Officer	Steve Harris

To meet the requirements of CASR 175.445, Cairns Airport ensures that these persons have been suitably trained so that they have the knowledge and competence to request the issue, review and cancellation of NOTAMs.

The list of NOTAM authorised person(s) is also recorded in the NAIPS system that Airservices administers.

A NOTAM group manager who is responsible for maintaining and updating the NOTAM group is also recorded in the NAIPS system.

The NOTAM group manager for Cairns Airport is the Aerodrome Operations Manager.

Where a change to the NOTAM group is required, the NOTAM group manager will update the NAIPS system. This subsection of the manual will also be updated to reflect the change in NOTAM authorised person(s).

3.1.2 Changes to published aeronautical information

(CASR 175.455, 175.460; Part 139 MOS – 11.05(1)(a))

The AIP responsible person is authorised to request a change to information that is published in the AIP.

Cairns Airport Pty Ltd ensures that all requests for a change adhere to Airservices data quality requirements and are in a format that allows Airservices to readily identify the required change(s) to the existing published data or information, including any consequential changes.

As soon as practicable after becoming aware of the change, a request for a change will be made in writing to Airservices at**:** docs.amend@airservicesaustralia.com.

Cairns Airport Pty Ltd ensures that a statement of any consultation undertaken is provided with the request for change if the data is expected to cause an aviation organisation to make plans for changes to the organisations' operating procedures.

Once the request for a change has been submitted, the Aeronautical Data Package / Section 2 of this manual will be amended to reflect the change in aeronautical information.

Cairns Airport Pty Ltd endeavours to ensure that long-term changes are planned and incorporated into the AIP. Aeronautical information is updated quarterly. The Airservices document amendment calendar is published on the Airservices website. To best ensure the timely communication of a change to published information, the deadlines for submissions are monitored by the AIP responsible person.

3.1.3 Advising NOTAM Office (NOF) of changes – aerodrome conditions / hazards

(CASR 175.470; Part 139 MOS – 11.05(1)(b)(c))

In the event there is a change to the condition of the aerodrome facility, or there is a hazard to aircraft operations, a NOTAM authorised person will, as soon as possible after the condition or hazard is detected, request the issue of a NOTAM.

To request the issue of a NOTAM, the NOTAM authorised person will complete a NOTAM request form which is available on the Tracker AIRSIDE iPad application and the Airservices website.

The completed NOTAM request form will be submitted electronically to the NOTAM Office (NOF) at: nof@aiservicesaustralia.com.

In an emergency or if the matter is urgent, the NOTAM authorised person may phone the NOF to request the immediate issue of a NOTAM. In these circumstances, the NOF can be contacted on:

02 6268 5063.

Urgent reports made by phone will be confirmed as soon as possible by the submission of a NOTAM request form forwarded by email.

On submission of the request to issue a NOTAM, the NOTAM authorised person will obtain a copy of the published NOTAM through NAIPS to check the accuracy of that information which has been published. If an error is discovered, the discrepancy will be reported immediately to the NOF.

A NOTAM will normally only be used in the case of operationally significant changes (reportable occurrences) that are required at short notice. The list of reportable occurrences is contained in subsection 3.2.6.1 of this manual.

3.1.4 Reporting hazards that may adversely affect aviation safety to ATC

(Part 139 MOS – 11.05(1)(d))

Hazards that may adversely affect aviation safety and are of an urgent nature will be reported immediately to the onsite Air Traffic Control (ATC). The aerodrome safety officer will advise ATC either by radio or phone (as appropriate):

(1) Phone: 07 4050 5328
(2) Radio: 121.7

Hazards that may adversely affect aviation safety and are not of an urgent nature will be e-mailed to the onsite Air Traffic Control.

ATC e-mail: cairns.tower@airservicesaustralia.com

3.1.5 Record keeping – reports

(Part 139 MOS – 11.05(2)(a)(b))

A copy of all NOTAMs requested by Cairns Airport are:

Retained by: The Aerodrome Operations Manager

Stored securely: On the Cairns Airport's electronic filing system – Sharepoint

A copy of all requests for change(s) to published information that are sent to Airservices docs amend are:

Retained by: The Aerodrome Operations Manager

Stored securely: On the Cairns Airport's electronic filing system – Sharepoint

Copies of all requests are held on file for a minimum period of three (3) years from the date each request was made.

The AIP responsible person and NOTAM authorised person(s) have access to all reports held on file.

The accuracy and currency of all active NOTAMs requested by Cairns Airport is checked by the aerodrome safety officer during the serviceability inspection process. Refer to subsection 3.2.4.1 of this manual.

3.1.6 Review of published information

(CASR Part 175.465; Part 139 MOS – 12.09(6)(a)(i); 12.11(11)(d)(i))

The Aerodrome Operations Manager will review, at least once annually, the published aeronautical data and aeronautical information for which the aerodrome is responsible. Documented evidence of each review is:

Retained by: The AIP responsible person.

Stored securely at: On the Cairns Airport's electronic filing system – Sharepoint

Cairns Airport Pty Ltd ensures the records of each review are kept for a minimum period of three (3) years from the date the review was completed.

In the event inaccurate information is identified during the review, the AIP responsible person will notify Airservices immediately.

3.2 Aerodrome serviceability inspections

(Part 139 MOS – 11.03(1)(2))

This section documents the procedures for:

- scheduling, conducting, and reporting on the results of routine aerodrome serviceability inspections and additional aerodrome serviceability inspections should the circumstances require them to be conducted
- communicating with ATC during the inspection (if applicable)
- taking prompt follow-up action(s) to ensure the correction of any unsafe conditions
- arranging a technical inspection if an unsafe condition is identified
- maintaining records of inspections.

3.2.1 Positions with responsibilities

(CASR 139.080(2); 139.085(2); Part 139 MOS – 11.03(2)(a)-(d); 13.03(a)-(f))

The Aerodrome Operations Manager is responsible for managing the aerodrome's serviceability inspections, ensuring that they occur in accordance with the requirements of the Part 139 MOS, and this manual.

The following is a list of personnel authorised to perform the functions of a reporting officer. The authorisation allows them to carry out serviceability inspections at Cairns Airport.

Name	Position	Function
Robert Keegan	Emergency and Operational Resilience Manager	ARO/WSO
Mark Musumeci	Aerodrome Operations Supervisor	ARO/WSO
Bruno Fogale	Aerodrome Safety Officer	ARO/WSO
Craig Tatlow	Aerodrome Safety Officer	ARO/WSO
Shane Porter	Aerodrome Safety Officer	ARO/WSO
Jamie Hughes	Aerodrome Safety Officer	ARO/WSO
Liam West	Aerodrome Safety Officer	ARO/WSO
Leonard Talbot	Aerodrome Safety Officer	ARO/WSO
Steve Harris	Aerodrome Safety Officer	ARO/WSO

All personnel appointed as reporting officers have been trained so that they can competently carry out their duties at this aerodrome, without the need for supervision.

Cairns Airport Pty Ltd ensures all training activities for reporting officers are recorded to verify achieved competencies.

All reporting officers undergo recurrent training every two to five years as is recommended in guidance material published by CASA.

A training schedule has been established and is maintained by the Emergency and Operational Resilience Manager. The training schedule is reviewed regularly to ensure training is completed in a timely manner.

The training records of all reporting officers are:

Maintained by: The Emergency and Operational Resilience Manager

Stored securely: On the Cairns Airport's electronic filing system – Sharepoint

The Emergency and Operational Resilience Manager is responsible for reporting the results of the inspections.

The Emergency and Operational Resilience Manager is responsible for taking follow-up action if an unsafe condition is identified during the inspection.

3.2.2 Routine serviceability inspections

(Part 139 MOS – 11.03(1)(a)(i); 12.01(2)(3))

The aerodrome has daily scheduled passenger air transport operations. An aerodrome serviceability inspection is carried out on each day that an air transport movement is scheduled.

Cairns Airport Pty Ltd ensures that an aerodrome serviceability inspection is completed before the first passenger air transport operation of the day occurs.

Should the first air transport passenger movement occur before first light, an inspection of the safety critical elements is completed before the first movement occurs.

The safety critical elements are:

- FOD
- Visual Aids
- Significant hazards

Inspections of the remaining items will re-commence and be completed as soon there is sufficient daylight.

The serviceability inspections occur in accordance with the pre-determined schedule below:

Day of Inspection	Inspection times
Daily	At least 30 minutes before the first daily scheduled RPT movement
Daily	At first light if initial inspection was carried out during hours of darkness
Daily	At last light

3.2.3 Additional serviceability inspections

(Part 139 MOS – 11.03(1)(a)(ii); 12.01(1)(a)-(d))

Cairns Airport ensures that the reporting officer conducts additional serviceability inspections immediately when any of the following occur:

- following an incident or accident
- a severe wind event, a severe storm or a period of heavy rainfall
- if a hazard to aircraft may be present on the manoeuvring area
- when requested in writing by CASA
- when requested by ATC
- when a pilot or ARFFS provider reports a hazard.

3.2.4 Inspection procedures

(Part 139 MOS – 11.03(1)(b))

When conducting a serviceability inspection, the reporting officer will ensure that the vehicle they use to complete the inspection is:

- in a sound mechanical state to prevent a breakdown, unsafe operation, and any spillage of fuel lubricant or hydraulic fluid
- lit in accordance with the requirements set out in subsection 3.5.3 of this manual
- equipped with a VHF radio capable of monitoring the CTAF and / or ATC frequency.

Reporting officers are instructed to maintain a continuous listening watch of the VHF radio at all times when operating on the manoeuvring area.

Procedures for conducting runway inspections, including the direction of travel, communication procedures, actions in the event of a communication failure or vehicle breakdown etc. are documented in the Operating on Runway SOP.

This is a subsidiary document to this manual and is available on: The Cairns Airport's electronic filing system – Sharepoint

3.2.4.1 Inspection items

(Part 139 MOS – 12.03(3)-(11))

When performing each serviceability inspection, aerodrome safety officers will check:

1. The surface condition of the movement area (which also includes runway and taxiway strips) looking for the following:
    a. surface irregularities, including cracking or spalling
    b. pavement deflections, including rutting or slipping
    c. water pooling or ponding
    d. build-up of rubber or other contaminants which may reduce runway surface friction
    e. surface damage caused by the spillage of corrosive fluids or oil
    f. subsurface leaks or pressure, including broken water mains or inadequate or defective drainage
    g. scour or erosion ditches within unsealed areas, including step-downs from sealed runway surfaces
    h. termite mounds, sink holes or other ground obstacles obscured, or not obscured, by grass
    i. soft ground, particularly in combination with surface roughness and slipperiness
    j. any other signs of pavement distress which have the potential to develop into a hazard for aircraft.
2. Aerodrome markings, lighting, wind direction indicators and ground signals for the following:
    a. loss of visibility markers and markings
    b. incorrect markers or markings
    c. any disturbance to the correct intensity level and alignment of lights
    d. discoloured or dirty lenses
    e. unserviceable lights, incorrectly fitted lights, or lights that are misaligned

f. stand-by power equipment, to ensure that it is serviceable including the availability of fuel (if applicable)
g. the condition of light bases, MAGS and navigation equipment within the movement area, including strips
h. exposed edges around concrete footings and other aerodrome installations within the runway and taxiway strips
i. damage to the wind indicator assembly or mounting
j. for wind indicators – damage to sleeve fabric or loss of conspicuous colour
k. the correct operation of the pilot activated lighting (if installed)
l. the correct operation of the broadcast aerodrome weather station (if installed).

3. The cleanliness of the movement area looking for the following:

a. foreign objects, for example, aircraft fastening devices and other aircraft parts
b. work tools, small items of equipment and personal items
c. debris, for example, sand, loose rocks, concrete, wood, plastic, pieces of tyre, mud and any other foreign bodies
d. hazards created during and after construction activity, including hazards arising from vehicles and plant travelling over unpaved, wet or contaminated areas.

4. For any obstacles infringing the take-off, approach, transitional and PANS-OPS surfaces that are visible from the aerodrome, specifically:

a. the take-off, approach and transitional elements of the OLS
b. PANS-OPS airspace, including any critical obstacles that would otherwise affect the safety or integrity of PANS-OPS airspace.

5. For wildlife on, or in the vicinity of, the movement area:

a. the condition of aerodrome fencing and the security of access points to the movement area
b. monitoring the presence and behaviour of any wildlife on, or likely to be on, the aerodrome, and identifying seasonal and environmental conditions which may act as an attractant
c. monitoring evidence of wildlife shelter provided by aerodrome infrastructure, for example, buildings, equipment and gable markers
d. checking for off-aerodrome wildlife attraction sources, observable from the aerodrome site, for example, mowing activities, seeding, standing water bodies, uncovered waste disposal, deceased wildlife or offal
e. the presence and operating condition of any wildlife hazard mitigating equipment incorporated into the wildlife hazard management procedures for the aerodrome.

6. Where the runway and runway strip surfaces are unrated, an empirical assessment of the runway, and the runway strip if it is available for aircraft operations, will be conducted to confirm their suitability.
7. Aerodrome fencing and signage to:

f. identify any damage
g. confirm gates are secured
h. ensure there has been no attempted entry onto the manoeuvring area by either land-based wildlife or unauthorised persons.

8. Active NOTAMs requested by the aerodrome to ensure they are accurate and current.
9. The aerodrome frequency response unit to verify that it is functioning correctly.

All items and the areas that are to be checked as part of each aerodrome serviceability inspection are identified in Tracker AIRSIDE mobile application.

3.2.5 Communicating with ATC during inspection

(Part 139 MOS – 11.03(1)(g))

When conducting a serviceability inspection, the reporting officer obtains ATC approval to enter and operate within the manoeuvring area.

All instructions issued by ATC will be acknowledged and responded to appropriately. Radio procedures, including terminology, and procedural requirements when operating on the manoeuvring area are documented in the: Airservices Australia Letter of Agreement LoA 561.

This is a subsidiary document to this manual and is available on the: Cairns Airport's electronic filing system – Sharepoint.

3.2.6 Reporting inspection results

(Part 139 MOS – 11.03(1)(c); 12.03(12))

Cairns Airport Pty Ltd ensures that any significant object found during the serviceability inspection that could reasonably be expected to have an immediate adverse effect on the safety of an aircraft is reported to ATC in accordance with subsection 3.1.4 of this manual.

At the completion of each aerodrome serviceability inspection, the reporting officer records the following information in the Tracker Airside Application:

- the date and time the serviceability inspection was completed
- the results of the inspection
- a description of any remedial action taken or scheduled to be taken.

All identified faults that require further corrective action are detailed with the Tracker Airside Application and within the Computerised Maintenance Management System - MEX.

Any works activities that are required to correct these faults are conducted in accordance with the works protocols set out in section 3.10 of this manual.

When the fault has been rectified, an entry to confirm the corrective action is complete is detailed within MEX.

Faults that remain open are subject to regular monitoring.

In the event the aerodrome serviceability inspection identifies a reportable occurrence as prescribed in subsection 3.2.6.1 below, a NOTAM authorised person is to contact the NOF to request the issue of a NOTAM. This request is to be made as soon as possible after it is observed and in accordance with subsection 3.1.3 of this manual.

The NOTAM authorised person has been instructed to provide as much detail as available. Should additional information become known, a revised NOTAM is to be submitted as soon as possible.

At a controlled aerodrome, the aerodrome safety officer is to advise ATC of any finding identified during the serviceability inspection that requires the issue of a NOTAM.

3.2.6.1 Reportable occurrences to the NOTAM Office

(Part 139 MOS – 11.03(1)(c); 12.04(1)(a)-(i))

A report to the NOF will be made on identification of the following:

- published runway information – any change (whether temporary or permanent), including changes to current information contained in permanent NOTAMs or in the AIP
- aerodrome works affecting the manoeuvring area or the obstacle limitation surfaces – includes time-limited works that require more than 10 minutes to restore normal safety standards
- aerodrome lighting / obstacle lighting – outage or unserviceability, unless the outage or unserviceability is fixed immediately, or does not meet the required outage limits
- temporary obstacles to aircraft operations, unless the temporary obstacle is removed immediately
- any significant increase in, or concentration of, wildlife hazards on or near the aerodrome which constitute a danger to aircraft, unless the wildlife causing the hazard is dispersed immediately
- any change to gradients within the take-off climb area that is due to a new or changed obstacle which results in a change to the gradient of more than 0.05% from the published gradient data for the runway, unless that new or changed obstacle can be removed without delay
- the emergence of new obstacles, unless the new obstacle is removed immediately
- a radio navigation aid or landing aid owned by Cairns Airport Pty Ltd is unserviceable or has returned to service
- any other event which affects the safety of aircraft using the aerodrome unless the event is ceased immediately.

3.2.7 Prompt follow-up action to correct unsafe conditions

(Part 139 MOS – 11.03(1)(d); 12.04(2)(3(4))

In the event the aerodrome serviceability inspection identifies an unsafe condition, the aerodrome safety officer will**:**

- immediately report the unserviceability to ATC (if applicable)
- if urgent, advise the NOF via the phone to request the immediate issue of a NOTAM
- mark the unserviceable portion of the movement area so that it is not available by deploying the appropriate markers, markings, and lighting in accordance with the Part 139 MOS
- submit a request to issue a NOTAM (if applicable)
- if issued, verify the accuracy of the NOTAM information published by Airservices
- arrange for a technical inspection as soon as practicable
- arrange for repairs to the affected area ensuring that works requirements are adhered
- confirm the suitability of the repairs and the serviceability of the affected areas before returning to normal operations
- cancel the NOTAM (if applicable)
- advise ATC (if applicable).

3.2.8 Technical inspection of identified unsafe condition

(Part 139 MOS – 11.03(1)(e); 12.08; 12.09; 12.10(2)(d))

If any unsafe condition is identified during the serviceability inspection, a technical inspection of the area impacted by the defect or deficiency will be immediately carried out in accordance with section 12.09 of the Part 139 MOS.

When arranging the technical inspection, the Aerodrome Operations Manager will ensure that the person engaged to conduct the inspection has the required technical qualifications and experience, or demonstrable relevant experience, as required by section 12.10 of the Part 139 MOS.

A copy of the person's qualifications and relevant experience will be included in the resulting technical inspection report or maintained as part of the aerodrome manual.

On receipt of the technical inspection report, the recommendations will be reviewed by Aerodrome Operations Manager and agreed corrective actions will be entered into a corrective actions plan. Where a recommendation is not supported, the reasons the recommendation was not supported will also be documented in the corrective actions plan. A timeframe for implementation will be recorded.

The corrective actions plan will be retained on file on the Cairns Airport's electronic filing system – Sharepoint.

The corrective actions plan will be reviewed regularly and updated by the Aerodrome Operations Manager.

The technical inspection report will be retained for a minimum period of three (3) years on file on the Cairns Airport's electronic filing system – Sharepoint.

Within 30 days of receiving the technical inspection report, the Aerodrome Operations Manager or delegate will send a copy of the report to CASA via e-mail at: aerodromes@casa.gov.au

3.2.9 Maintaining inspection records

(Part 139 MOS – 11.03(1)(f); 11.04(1)(d); 12.03(12))

Completed inspection records are:

Filed: Electronically

Stored securely in the: Aerodrome Safety Officer logs within Tracker Airside

The results of each aerodrome serviceability inspection are retained for a minimum period of two (2) years from the date the inspection was completed.

3.3 Aerodrome lighting

This section documents the procedures for:

- inspecting and maintaining aerodrome lighting, and obstacle lighting that is maintained by Cairns Airport Pty Ltd
- carrying out routine maintenance and emergency maintenance
- monitoring the supply of secondary and stand-by power (if provided)
- responding to a partial or total power system failure
- taking follow-up action(s) to correct deficiencies

- maintaining records of inspections
- monitoring hazardous lights, lasers, and reflection or glare within the aerodrome boundary.

3.3.1 Personnel with responsibilities

(Part 139 MOS – 11.04(2)(a)-(f))

The following individuals or positions have responsibilities for each lighting-related activity:

(a) Carrying out lighting inspections

Individual / position: Technical Services Department / Aerodrome Safety Officers

(b) Maintaining the records of inspections

Individual / position: Technical Services Coordinator

(c) Taking follow-up action if unsafe condition identified during inspection

Individual / position: Technical Services Coordinator

(d) Operating aerodrome lighting, including switching systems, back-up supply systems, and portable lighting equipment

Individual / position: Technical Services Department / Aerodrome Safety Officers

(e) Performing maintenance on aerodrome lighting

Individual / position: Technical Services Department

(f) Monitoring hazardous lights, lasers, reflection or glare within the aerodrome boundary

Individual / position: Aerodrome Safety Officers

3.3.2 Aerodrome lighting – inspection and maintenance

(Part 139 MOS – 9.136(2); 9.138(4); 11.04(1)(a))

The Aerodrome Safety Officers carry out a visual inspection of aerodrome lighting as part of the routine serviceability inspection process. The lights will be switched on so that their serviceability can be assessed.

At least one inspection each week will occur after sunset or before sunrise.

The inspection, reporting the results of the inspection, and any follow-up actions that are required, will occur in accordance with the serviceability inspection process outlined in section 3.2 of this manual.

In addition to the serviceability inspection, inspection and maintenance activities for each lighting system will occur in accordance with the AGL Maintenance Manual.

The manual is a subsidiary document to this checklist and is available on the: Cairns Airport's electronic filing system – Sharepoint.

3.3.3 Obstacle lighting maintained by aerodrome operator – inspection and maintenance

(Part 139 MOS – 11.04(1)(a))

Inspection and maintenance of the obstacle lights maintained by Cairns Airport occur in accordance with the table below:

Obstacle type / location	Obstacle light type	Inspection schedule	Items to be inspected or checked	Maintenance activities
Lumley Hill Intermediate	Two medium intensity obstacle light	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Lumley Hill	Two medium intensity obstacle light	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Edge Hill	One medium intensity obstacle light	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual

Procedures for recoding inspection and maintenance activities are included in subsection 3.3.8 of this manual.

In addition, the aerodrome safety officer carries out a visual inspection of all obstacle lighting in accordance with subsection 3.7.10 of this manual. The inspection, reporting the results of the inspection, and any follow up action(s) that are required are conducted in accordance with procedures included in subsection 3.7.11 of this manual.

3.3.4 Portable runway lights – inspection and maintenance

(Part 139 MOS – 9.07(3)(a))

Portable runway lights are available at the aerodrome. Their availability is notified in the AIP-ERSA. Portable runway lights will always be in a serviceable condition and ready to operate in the event they need to be deployed.

The following is an inventory of portable runway lighting. Inspection and maintenance of these lights occurs in accordance with the table below:

Portable Runway Lights	Storage Location	Inspection schedule	Items to be inspected or checked	Maintenance activities
52 X Blue Solar Edge Lights/ Turning Node Lights	Eastern end of T1 Terminal airside; next to the interline baggage conveyer	Daily/ 6 Monthly/ Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
2 X Red Omni Solar Runway End Lights	Eastern end of T1 Terminal airside; next to the	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL	Maintenance is undertaken in accordance with the AGL

			Maintenance Manual	Maintenance Manual
10 X Green Omni Solar Threshold Lights	Eastern end of T1 Terminal airside; next to the	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
26 X Red/Green split bidirectional Runway End/ Threshold Lights	Eastern end of T1 Terminal airside; next to the	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual

Procedures for recording inspection and maintenance activities are included in subsection 3.3.8 of this manual.

3.3.5 Monitoring secondary power supply

(Part 139 MOS – 9.04; 9.05; 11.04(1)(b))

A secondary power supply is available at the aerodrome. The type, location, lighting systems and the switchover times are recorded below:

Secondary power supply type	Location of secondary power source	Lighting systems	Switchover times
Standby gen-sets	Northern ALER 15, Cairns Airport Tom McDonald Building, Domestic Terminal Building (T2) and International Terminal Building (T1)	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	15 seconds

		International Terminal(T1) Domestic Terminal(T2) Cairns Airport Administration Building	

The secondary power supply will be monitored by the Technical Services Coordinator in accordance with the AGL Maintenance Manual.

3.3.6 Monitoring standby power supply

(Part 139 MOS – 11.04(1)(b))

Standby power is available at Cairns Airport.

The standby power supply is automatically activated.

The availability of standby power is notified in AIP ERSA.

The supply of standby power will be monitored by Technical Services Coordinator in accordance with the following procedure: AGL Maintenance Manual.

3.3.7 Lighting inspections and checks

(Part 139 MOS – 11.04(1)(c))

In addition to the inspections outlined in subsection 3.3.2, inspection and maintenance activities for each lighting system will occur in accordance with the table below:

Aerodrome lighting systems	Inspection schedule	Items to be inspected or checked	Maintenance activities
Hazard Beacons	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Approach Lights	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Medium Intensity			
Edge lights	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Threshold – Medium Intensity	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
End lights – Medium Intensity	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual

Transformers, Cabling	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
High Intensity			
Edge lights	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Threshold	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
End lights	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Transformers, Cabling	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
PAPI'S			
RWY 15	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
RWY 33	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Transformers, Cabling	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Taxiway Lights			
Centre-line lights	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Transformers, Cabling	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Holding Points	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual

Transformers, Cabling	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Turning Nodes	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Transformers, Cabling	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Runway Guard Lighting	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
ALER	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Illuminated Wind Indicators			
RWY 15	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
RWY 33	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Movement Area Guidance Signs (MAGS)	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Docking Guidance Systems (DGS)	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Ground Earthing Points	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual
Apron Flood Lighting	Daily / 6 Monthly / Annually	Items are inspected in accordance with the AGL Maintenance Manual	Maintenance is undertaken in accordance with the AGL Maintenance Manual

Procedures for recording inspection and maintenance activities are included in subsection 3.3.8 of this manual.

Aerodrome lighting inspections carried out as part of the Aerodrome Technical Inspection will be conducted in accordance with section 3.9 of this manual.

Each lighting system and the list of specific elements to be inspected and checked is contained in the AGL Maintenance Manual, which is available on the Cairns Airport's electronic filing system – Sharepoint.

3.3.8 Maintaining lighting inspections records and follow-up actions

(Part 139 MOS – 11.04(1)(d))

At the completion of each lighting inspection, the Technical Services Coordinator records the following information on the Airport Lighting Logbooks:

- the date and time the inspection was completed
- the person responsible for completing the inspection
- the results of the inspection
- a description of any action taken.

All identified faults that require further corrective action are to be entered into Computerised Maintenance Management System - MEX. Any works activities that are required to correct these faults are to be conducted in accordance with the works protocols set out in section 3.10 of this manual.

When the fault has been rectified, an entry will be made in MEX confirming the corrective action is complete.

Faults that remain open are to be subject to regular monitoring.

3.3.9 Switching lights on and off & intensity selection

(Part 139 MOS – 11.04(1)(e))

The lighting system is operated by: ATC

The data on the operating current and the corresponding intensity selection is recorded in the Aeronautical Ground Lighting Maintenance Manual.

This is a subsidiary document to this is manual and is available on the: Cairns Airport Airport's electronic filing system – Sharepoint.

The procedures for switching lights on and off, including the intensity selection, are in accordance with the Airservices Letter of Agreement 561.

3.3.10 Back-up arrangements for PAL system

(Part 139 MOS – 9.23(1)(b); 11.04(1)(e))

There is no pilot-activated lighting (PAL) system at Cairns Airport; therefore, this subsection is NOT APPLICABLE.

3.3.11 Routine and emergency lighting maintenance

(Part 139 MOS – 11.04(1)(f))

Routine maintenance is carried out in accordance with the Aeronautical Ground Lighting Maintenance Manual.

Emergency maintenance is carried out in accordance with the Aeronautical Ground Lighting Maintenance Manual.

This is a subsidiary document to this is manual and is available on the: Cairns Airport Airport's electronic filing system – Sharepoint.

3.3.12 Partial or total power system failure

(Part 139 MOS – 11.04(1)(g))

In the event of a partial or total power system failure, the following procedures are to be followed:

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 for 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.

3.3.13 Monitoring hazardous lights, lasers, reflection or glare

(Part 139 MOS – 9.143(2)(a)(3)(4)(5)(8); 9.144(2); 11.04(1)(h))

The Aerodrome Operations Manager or delegate is to notify CASA in writing immediately when they become aware of any installation, or a proposal to install, or use any installation,

equipment or laser, outside the aerodrome boundary that may have lighting or lighting intensity greater than that specified in Figure 9.144(2) of the Part 139 MOS.

Before proceeding to install or use any installation, equipment, or lasers within the boundary of the aerodrome, the Aerodrome Operations Manager or delegate will report the following proposals to CASA so that a hazard assessment can be undertaken:

- installation of any equipment or lighting which would reflect sunlight (including solar panels, lasers, mirrors, or reflective building cladding)
- lighting that will emit multiple colours from a single source
- lighting that will result in rapid change in light colour
- flashing lights
- lighting that may have a lighting intensity that is greater than that specified in Figure 9.144(2) of the Part 139 MOS.

Cairns Airport will not proceed with any proposal until CASA has assessed, and approved in writing, confirming the installations will not cause a hazard to aircraft operations.

3.3.14 Commissioned lighting systems

(Part 139 MOS – 9.18(8))

Cairns Airport has commissioned the following lighting systems:

		Commissioning documentation		
Lighting system	**Date commissioned**	**Independent compliance statement / laboratory test report**	**Ground check report**	**Flight check report**
RWY 15 Approach Lights	Documentation not available	Documentation not available	Documentation not available	Documentation not available
RWY 15/33 Edge lights	09/10/2021	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint
RWY 15/33 Threshold lights	09/10/2021	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint
RWY 15/33 End lights	09/10/2021	Runway Threshold and End LED Upgrade documentation is	Runway Threshold and End LED Upgrade documentation is	Runway Threshold and End LED Upgrade documentation is

		stored securely on the Cairns Airport's electronic filing system – Sharepoint	stored securely on the Cairns Airport's electronic filing system – Sharepoint	stored securely on the Cairns Airport's electronic filing system – Sharepoint
PAPI'S	15/01/2008	PAPI documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	PAPI documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	PAPI documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint
Transformers, Cabling	09/10/2021	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint
Taxiway Lights TWY B2, B3, B4, B5, A3 and A4	09/10/2021	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint	Runway Threshold and End LED Upgrade documentation is stored securely on the Cairns Airport's electronic filing system – Sharepoint
Taxiway Lights	Documentation not available	Documentation not available	Documentation not available	Documentation not available
Runway Guard Lighting	Documentation not available	Documentation not available	Documentation not available	Documentation not available
ALER	Documentation not available	Documentation not available	Documentation not available	Documentation not available
Illuminated Wind Indicators	Documentation not available	Documentation not available	Documentation not available	Documentation not available
Movement Area Guidance Signs (MAGS)	Documentation not available	Documentation not available	Documentation not available	Documentation not available
Docking Guidance Systems (DGS)	Documentation not available	Documentation not available	Documentation not available	Documentation not available
Apron Flood Lighting	Documentation not available	Documentation not available	Documentation not available	Documentation not available

3.3.15 Commissioning a new or upgrading / replacing an existing lighting system

(Part 139 MOS – 9.17(1)-(10); 9.18(1)-(8))

Cairns Airport will not commission a new aerodrome lighting system, or permit the use of a lighting system that has been replaced or upgraded, until:

- compliance statements from the manufacturer and the supplier, or, a test report from an accredited laboratory (as per subparagraph 9.17(1) of the Part 139 MOS), confirm that light fitting types, models and versions comply with the standard for photometric and other relevant characteristic specified in the Part 139 MOS
- a ground check has been completed by an appropriately qualified person and written evidence has been provided that confirms the lighting system meets the requirements of the Part 139 MOS
- if applicable, a flight check has been completed by a CASA approved person and written evidence has been provided that confirms the lighting system meets the requirements of the Part 139 MOS.

Once full compliance with the Part 139 MOS has been confirmed, a NOTAM authorised person is to request the issue of a NOTAM advising that the lighting system is available. The AIP responsible person is to advise Airservices of the particulars of the lighting system for publication in the AIP.

The Aerodrome Operations Managers or delegate will provide a copy of the ground check determination, and the flight check report (if applicable), to CASA via e-mail to: aerodromes@casa.gov.au.

All compliance statements / laboratory test reports, ground check, and flight check reports will be retained by the Aerodrome Operations Managers or delegate and stored securely on the Cairns Airport's electronic filing system – Sharepoint.

Subsection 3.3.14 of this manual is to be amended to include the particulars of the newly commissioned lighting system(s).

All reports and commissioning records are retained for as long as the lighting system remains in service.

3.4 Unauthorised entry to aerodrome

(Part 139 MOS – 11.11)

This section details how unauthorised persons, vehicles, equipment, mobile plant, animals, or other things that may endanger the safety of aircraft, are prevented from entering onto the movement area, including procedures for:

- controlling airside access
- monitoring airside access control points and barriers.

3.4.1 Controlling airside access

(Part 139 MOS – 11.11(a))

As Cairns Airport is a security-controlled aerodrome, persons in security restricted areas are required to display a valid Aviation Security Identification Card (ASIC) or, a Visitor

Identification Card (VIC) and be escorted by an ASIC holder. All persons not displaying a valid ASIC / VIC are to be challenged and escorted from the secure area.

To prevent unauthorised access by persons, vehicles, equipment, mobile plant, animals and other things that may endanger aircraft safety, a fence has been installed around the perimeter of the airside boundary:

- This boundary generally consists of 2.44 metre high chain mesh security fencing (Australian Standard AS 1725-2010). There is approximately 850m of fenceline 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.

Cairns Airport Pty Ltd ensures that access is only permitted in accordance with the access control procedures:

- Name of procedures: Cairns Airport Transport Security Program (TSP).
- The Cairns Airport TSP is published and distributed independently of the Aerodrome Manual.

Only authorised persons are allowed unescorted access to the movement area and other operational areas of the aerodrome. For those persons not authorised, escorted access is provided as required.

Manned airside access gates:

- 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.

Unmanned airside access gates are:

- Shown on the: Airside Vehicle Access Plan
- Always locked by: Mechanical key and padlock system or proximity card to activate an electronically activated gate
- Keys and / or electronic access cards are issued by the: Security Services Officer.
- A register of issued keys and / or access cards is maintained by the: Security Services Officer.
- An audit of issued and unissued keys and / or access control cards is conducted annually by the: Security Services Officer.

Restricted access signs are located at regular intervals along the boundary fence, at each airside access gate, and at each building that provides direct access airside. The signs are located such that at least one sign is visible to a person approaching the secure perimeter.

Airport tenants are responsible for controlling airside access through their leased areas. Any unauthorised entry observed by the tenant is to be reported immediately to the Head of Operations.

Only authorised vehicles driven by 'an airside driver' are permitted airside. Refer to section 3.5 of this manual.

Animals are only permitted airside if caged or restrained.

3.4.2 Monitoring airside access points and barriers

(Part 139 MOS – 11.11(b))

The reporting officer carries out a visual inspection of the perimeter fence and airside access gates as a part of the aerodrome serviceability inspection process. The inspection, reporting the results of the inspection, and any follow-up action(s) that is required, is to occur in accordance with the process outlined in section 3.2 of this manual.

Additional fence and access gate inspections are conducted:

By: The Australian Federal Police (AFP), Aerodrome Safety Officer/ Cairns Airport's appointed security contractor

When: As required.

These additional inspections are recorded: in the relevant in the Aerodrome Safety Officer logs within Tracker Airside/checklist/logbook.

In the event there is evidence of unauthorised entry by persons or wildlife (breaches and diggings), or the fence or access gates are compromised the fence or access gates are to be re-secured where possible, and an airside inspection undertaken immediately to ensure there are no unauthorised persons, or wildlife, on the aerodrome.

Damaged fences or gates will be entered in the Aerodrome Safety Officer logs within Tracker Airside/checklist/logbook., in accordance with the process outlined subsection 3.2.6 of this manual and are repaired as soon as possible.

3.5 Airside vehicle control

(Part 139 MOS – 11.14)

3.5.1 Permit system for airside vehicles

(Part 139 MOS – 11.14(a); 14.02(a))

A permit system for the operation of vehicles airside has been established.

The permit issuing authority is:

Cairns Airport authorises their own staff to Drive Airside in accordance with the Airside Vehicle Control Manual.

This is a subsidiary document to this is manual and is available on the: Cairns Airport's electronic filing system – Sharepoint.

Details of the airside vehicle permit system are contained in the: Airside Vehicle Control Manual.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

3.5.2 Vehicles and ground equipment operated airside

(Part 139 MOS – 14.03(1)(a)(b))

Cairns Airport requires:

- evidence that vehicles comply with lighting and radio requirements (as applicable)
- a certificate of insurance with valid cover for the use of the vehicle within the airside area of the aerodrome.

A list of authorised vehicles is:

- Maintained by the: Security Services Officer
- Available on the: Cairns Airport's electronic filing system – Sharepoint.

To ensure the requirements of this manual are achieved, Cairns Airport can inspect or can require an inspection to be carried out on any vehicle or ground equipment that is operating airside.

In the event that an inspection is not carried out, or the inspection identifies an unsafe condition that may create a hazard to aviation safety, the vehicle is to be denied access. If the vehicle is already airside, the operator of the vehicle is to be instructed to remove the vehicle from the airside.

A list of vehicles that have been removed from the airside or denied access is:

- Maintained by the: Security Services Officer
- Available on the: Cairns Airport's electronic filing system – Sharepoint.

A vehicle that is denied access or has been removed from the airside at the direction of Cairns Airport is not to be authorised to re-enter the airside until an inspection has been completed and a satisfactory vehicle condition statement has been received.

3.5.3 Airside vehicle lighting requirements

(Part 139 MOS – 14.05(1)-(11))

As the aerodrome has scheduled air transport operations or is an international aerodrome, all vehicles, during daylight hours and at night, are to display a flashing or rotating light on the top of the vehicle that complies with the specifications listed in subparagraph 14.05(8) of the Part 139 MOS when moving or operating on:

- a runway / runway strip
- a taxiway / taxiway strip.

All other vehicles operating airside during periods of low visibility, or when on the aprons at night, are to display a light on the top of the vehicle. If a light cannot be suitably placed on the top of the vehicle, additional lights are to be displayed so that the vehicle is visible in all directions.

During daylight hours only, a vehicle directly connected to an aircraft is permitted to display the standard manufacturer-fitted vehicle hazard warning lights, rather than a light on the top of the vehicle.

3.5.4 Vehicles on manoeuvring area

(Part 139 MOS – 14.03(4)(8); 14.04)

Except for a vehicle that is under escort, all vehicles operating on the runway, runway strip, taxiways and taxiway strips have a VHF receiver capable of monitoring the CTAF and / or ATC frequency. All drivers are to maintain a listening watch through the VHF receiver. Only those persons that hold an Aeronautical Radio Operator Certificate (AROC) are permitted to transmit.

3.5.5 Airside drivers – training

(Part 139 MOS – 14.01(1)-(4), 14.02(b); 11.14(b))

As Cairns Airport has more than 350,000 air transport passenger movements / 100,000 or more aircraft movements, drivers not under escort and who are operating a vehicle airside, are trained to know and understand the following:

- the terminology used to describe the movement area
- the purpose and location of all airside areas
- hazardous or prohibited areas on the airside
- the significance of aerodrome visual aids and signs.

Training details:

- Training method: undertaken in accordance with the Airside Vehicle Control Manual
- Responsible for records: Aerodrome Operations Manager and Emergency and Operational Resilience Manager

This is a subsidiary document to this is manual and is available on the: Cairns Airport's electronic filing system – Sharepoint.

A competency assessment is also conducted.

Competency assessment details:

- Competency assessment method undertaken in accordance with the Airside Vehicle Control Manual
- Responsible for records: Aerodrome Operations Manager and Emergency and Operational Resilience Manager

This is a subsidiary document to this is manual and is available on the: Cairns Airport's electronic filing system – Sharepoint.

3.5.6 Vehicles in proximity to aircraft

(Part 139 MOS – 14.03(3))

Airside drivers must give way to aircraft.

Airside vehicles are to remain clear of the runway, runway strip, taxiway(s), or taxiway strip(s) when they are in use or available to be used by aircraft unless there is a safety-related or operational requirement for vehicles to operate in these areas.

Airside vehicles are not to be driven:

- in a manner likely to endanger the safety of any person or create a hazard to aircraft operations
- under an aircraft, or within three (3) m of lateral clearance, or within 1 m of overhead clearance, of any part of the aircraft, except when required for servicing the aircraft
- within 15 m of refuelling aircraft
- when drivers are affected by alcohol or drugs as per CASR Part 99.

All vehicles operated within 15 m of an aircraft's fuel tank filling points and vent outlets during fuelling operations comply with Appendix 1 of Civil Aviation Order 20.9.

3.5.7 Movement area speed limits

(Part 139 MOS – 14.03(2)(a))

Speed limits are explained and provided to all drivers during their driver training and / or induction.

Drivers must adhere to the following speed limits:

Location	Speed limit (km / h)
Perimeter roads	60Km/h or as sign posted
Aprons	25Km/h
Taxiways	60Km/h
At entrance/exit roads to the ROAR	10Km/h
Baggage make up and drop off areas	10Km/h
Runways	60Km/h

3.5.8 Escort service procedures

(Part 139 MOS – 14.01(5))

Third-party vehicle escort providers

Only authorised third party drivers are permitted to provide vehicle escorts airside. This authorisation will be considered on a case by case basis.

At any one time, an escort driver is not authorised to escort more than one vehicle.

The escort driver is fully responsible for the driver(s) under escort.

All airside drivers providing an escort service are monitored for adherence with these requirements periodically by the reporting officer.

In the event an airside driver or driver under escort is observed to not be following the rules for operating a vehicle airside, or otherwise creating an unsafe condition, all respective vehicles and their drivers are to be escorted from the airside, and any authorisations maybe withdrawn.

Records of drivers authorised to conduct escorts are:

Maintained by the: Security Services Officer

Stored securely on the: Cairns Airport's electronic filing system – Sharepoint.

3.5.9 Monitoring and enforcing traffic rules

(Part 139 MOS – 14.03(2)(b))

The aerodrome safety officer is responsible for periodically monitoring the operation of vehicles airside in accordance with the following: The Aerodrome Serviceability Schedule.

Appropriate action is to be taken against drivers who are clearly in breach of displayed signage, markings, or speed limits. This may include withdrawing their authority to operate a vehicle airside.

3.6 Aircraft parking control

(Part 139 MOS – 11.15(1))

3.6.1 Aircraft parking control personnel

(Part 139 MOS – 11.15(2)(g)(i)(ii))

As the aerodrome has scheduled international air transport operations or apron congestion, aircraft parking control procedures have been established.

The individuals and roles responsible for planning and implementing aircraft parking control, and the phone numbers for contacting the relevant individuals (during and after working hours) are listed below:

Name	Role	Contact No.	After-hours contact No.
Aerodrome Operations Manager	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 ensuring all amendments are updated in the RMS compliance rules	0421 944 579	0421 944 579
Aerodrome Operations Supervisor	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.	0428 783 367	0428 783 367
Airport Coordinators	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 Notifying ANS of any last-minute changes to bay allocations		
Aerodrome Safety Officers	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 Monitoring all works on or in the vicinity of aprons to ensure that all safety and security requirements are met.	Car 16 - 0412 773 065 Car 17 - 0402 027 732 Car 18 (B & W) - 0400 752 293 WSO - 0427 880 154	

3.6.2 Liaison with ATC – apron management

(Part 139 MOS – 11.15(2)(a))

The arrangements for liaising with ATC are documented in the Airservices Australia Letter of Agreement LoA 561.

3.6.3 Allocating aircraft parking positions

(Part 139 MOS – 11.15(2)(b))

Aircraft parking positions are allocated in accordance with the procedures that are published on the apron parking plans.

Apron parking plans are:

Maintained by the: Aerodrome Operations Manager

Available at: on the: Cairns Airport's electronic filing system – Sharepoint.

Parking position restrictions are adhered to in the bay planning process managed by: Aerodrome Operations Manager

Allocated bays are communicated to:

- the airline operator
- the ground handler
- ATC.

As schedule changes may require a reallocation of parking positions, airlines are to advise Duty Airport Coordinator so that where necessary, parking positions can be re-allocated and changes communicated**.**

3.6.4 Engine start and aircraft push-back clearances

(Part 139 MOS – 11.15(2)(c))

A FOD check is completed by the airline operator or ground handler prior to an aircraft starting its engines.

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

Anti-collision beacons are to be switched on before an aircraft is permitted to move.

It is the responsibility of the ground handlers to ensure that the area immediately behind the aircraft is clear and that there is no risk of collision or potential jet blast. In the event a hazard is detected, the ground handler is to inform the pilot and the push-back will be stopped.

The tug operator is to adhere to the directions published on the apron parking plans, and all line marking guidance provided.

The tug operator is to ensure the aircraft follows the marked path as a means to ensuring clearance distances are maintained.

3.6.5 Aerodrome visual docking guidance systems

(Part 139 MOS –11.15(2)(d)))

The Visual Docking Guidance Systems available for use at the aerodrome and the manner in which they are to be used are as follows:

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.

3.6.6 Marshalling service

(Part 139 MOS – 11.15(2)(e))

A marshalling service is not provided by Cairns Airport. This is the responsibility of the aircraft operator.

3.6.7 Leader (van) service or follow-me service

(Part 139 MOS – 11.15(2)(f))

The reporting officer is to provide a leader (van) service or follow-me service when requested by the aircraft operator or the ATC. Contact with the reporting officer can be made by:

Radio: 121.7 MHz

Phone: Car 16 - 0412 773 065

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

3.6.8 Apron safety management procedures

(Part 139 MOS – 11.15(3))

The reporting officer(s) is responsible for periodically monitoring activities occurring on the apron to check that:

- no person, vehicle, or equipment is within the potential jet blast area behind the aircraft
- aprons are free from loose stones and other material that may cause FOD
- all equipment is appropriately stored in marked equipment storage areas
- vehicles do not pass behind aircraft that are displaying anti-collision beacons
- tug operators are adhering to the line marking guidance provided
- wheel chocks are appropriately positioned on parked aircraft.

As trends may identify changes to apron safety management procedures, reported incidents and hazards are also reviewed by:

Position / committee: Aerodrome Operations Manager.

3.6.9 Alternative separation distances and apron markings

3.6.9.1 Reduced separation distances – VDGS

(Part 139 MOS – 6.58(1)(4)(a)(b))

Minimum separation has been reduced on the following Code D, E, and F aircraft parking positions that are served by VDGS:

International Apron: 1, 2, 3, 4, 5 and 6

Domestic Apron: 18, 19 and 20

(Part 139 MOS – 8.49(3)(d))

All aircraft type designations have been marked in accordance with the list of aircraft type designators published in ICAO Doc 8643, Aircraft Type Designators.

3.6.9.2 Alignment lines

(Part 139 MOS – 8.65(5))

An alignment line beyond the stop line has been marked at all aircraft parking positions where a VDGS is not provided.

A marshaller will be present for all arriving aircraft at each of these aircraft parking positions.

3.6.9.3 Push-back operator guidance markings

(Part 139 MOS – 8.70(4))

Push-back vehicle operator guidance markings at the aerodrome are based on:

Bay 1 – 16: nosewheel tracking

Bay 17 – 23: main wheel tracking

Local aircraft operators have been consulted with and agreed in writing with the main wheel tracking methodology and the associated safety procedures:

General requirements for aircraft pushbacks:

- Only trained and authorised personnel or trainees under instruction may perform a pushback operation and they must be familiar with the required procedures before pushback commences.
- Only pushback's approved by Cairns Airport using the current apron marking plans are permitted unless special instruction is given by Cairns Airport or Air Traffic Control (details on Tow Bar Disconnect Points can be sourced on the apron plans available on the Cairns Airport website).
- Where an aircraft is required to pushback onto a taxiway, the pushback driver must hold an approved Category 2 Authority to Drive Airside. If the aircraft Is to be towed, then the driver requires a Category 3 license.
- Any vehicle engaged in a pushback must be fitted with a radio capable of communicating with ATC/airline company frequency.
- Situational awareness must be maintained with the location of other persons and obstructions must be known at all times. The pushback should be stopped if safety is compromised at any stage.
- The dispatcher must closely monitor vehicle movements behind the aircraft just prior to pushback and not proceed if vehicles are obstructing the push.
- The pushback team must ensure the safety of all those involved directly in and around pushback operations.
- To ensure good communication prior to a pushback or towing operation, the pushback driver and head set dispatcher, should be aware of the requirements of each parking bay layout and line markings.
- The flight crew and/or the aircraft tug operator must be in radio contact with the Air Traffic Control, via the radio tuned to frequency Cairns ATC ground frequency 121.70 during pushback procedure and be in some form of contact with each other.
- The maximum turning angle of the aircraft should be closely monitored to avoid over steering.
- All hand signals given by a dispatcher must be followed.
- Tugs are never to be left unattended when the vehicle engine is switched on.

- Rotating Beacons must be activated just prior to an aircraft pushback in order to provide airside drivers with adequate warning of an impending aircraft movement.

Commencement of the Pushback

- The correct tug, towbar and bypass pin should be used for the specific aircraft type and series to be pushed back.
- Prior to the commencement of pushback, a pre-departure walk around should be undertaken to ascertain the safety of the proposed pushback and ensure the area is clear of any FOD.
- All radio communication should be in accordance with radio telephony standards.
- Chocks should only be removed at the request of the flight crew or dispatcher.
- All chocks should be removed, aerobridge retracted and all equipment and personnel clear of the aircraft prior to commencing pushback.
- Ensure safe operation of the tug when moving clear of the aircraft.
- For aircraft being positioned onto another aircraft parking bay, the bay is to be clear of any obstructions.

At completion of the pushback ensure that all vehicles and equipment are returned to appropriate staging or storage areas.

Dangers Associated with Pushback Operations:

All airside personnel must act responsibly towards their own personal safety and the safety of those around them. Pushback operators are susceptible to injuries and must be particularly cautious of the following:

- Connecting or disconnecting the tow bar.
- Walking near the draw bar.
- Moving around on wet or slippery surfaces.
- Jet blast or ingestion from their aircraft, or other aircraft in the vicinity
- Movement of other vehicles in the vicinity.
- Personnel must always maintain a high level of situational awareness and where possible avoid turning away from an aircraft during pushback.

If an accident or incident occurs during the pushback sequence the following procedures should be followed:

- The tug should be stopped immediately, brakes applied and the gear changed to neutral.
- Cairns Ground should be contacted on 121.70. Cairns Ground may then request assistance from the Aviation Rescue Fire Fighting (ARFF) service and the ASO or airport coordinator.
- All accidents or incidents must be reported to the CAPL ASO.

Bay Inspection:

- The bay is clear of FOD.
- Any spills on the bay are cleaned up and all spills are reported to CAPL.
- Equipment has been cleared from the bay to dedicated equipment parking areas.
- Any faults / hazards are reported to the CAPL.

3.6.9.4 Passenger path markings

(Part 139 MOS – 8.76(2)(b))

Passenger path markings do not comply with the dimensions stated in subparagraph 8.76(2)(a) of the Part 139 MOS. Cairns Airport has adopted the standards for pedestrian crossings as stated in the QLD Main Roads Manual of Uniform Traffic Control Devices.

3.6.9.5 Miscellaneous area line markings

(Part 139 MOS – 8.77(2))

Miscellaneous area line markings are used on the apron(s). The location and the purpose of each miscellaneous area line marking is described below:

Location of miscellaneous area line markings	Purpose of the miscellaneous area line marking
International and Domestic Apron	Give way to Aircraft

3.7 Aerodrome obstacle control

3.7.1 Obstacle control personnel

(Part 139 MOS – 11.06(2)(a)-(d))

The following person(s) have responsibilities for obstacle control:

Individual or position	Responsibilities
Aerodrome Safety Officers	monitoring surfaces related to the OLS and terminal instrument flight procedures (PANS-OPS)
Aerodrome Operations Manager	notifying CASA or the procedure designer when a proposed or actual infringement of the prescribed airspace is identified
Emergency and Operational Resilience Manager	implementing obstacle control within the aerodrome boundary
Emergency and Operational Resilience Manager	liaison and facilitation of obstacle control outside the aerodrome boundary

3.7.2 Monitoring take-off, approach and transitional surfaces

(Part 139 MOS – 11.06(1)(a)(i))

Cairns Airport has established the obstacle limitation surfaces (OLS) for each runway that meet the physical dimensions for approach and take-off runways as set out in Chapter 7 of the Part 139 MOS.

The particulars of each surface are shown on an OLS plan for the aerodrome which is available at Appendix F.

The aerodrome safety officer will visually scan the OLS as part of the aerodrome serviceability inspection in section 3.2 of this manual to identify the emergence of any new or potential obstacles.

A survey that assesses the take-off, approach, and transitional surfaces, is completed as part of the aerodrome technical inspection programme conducted in accordance with section 3.9 in this manual.

This survey is used to verify the accuracy of published information. On receipt of the survey, the results are compared against the aerodrome's information published in the AIP to ensure that there are no new obstacles, or that the height of existing obstacles has not changed.

3.7.3 Proposed or actual infringements – OLS

(Part 139 MOS – 11.06(1)(d)(i))

3.7.3.1 Proposed OLS infringements

(Part 139 MOS – 7.01(1); 7.18(1)(b); 17.19(1); 11.06(1)(d)(i))

If a proposed object or structure is identified as likely to be an obstacle, details of the proposal are to be sent to CASA in writing by the Aerodrome Operations Manager or delegate.

On receipt of CASA's written assessment, the relevant planning authority is to be advised of the result of the assessment.

Cairns Airport will follow up with the planning authority to ensure that those obstacles considered an unacceptable risk to aviation safety are not approved, or that those obstacles that are considered acceptable but subject to additional mitigations are appropriately marked and / or lit.

3.7.3.2 Actual OLS infringements

(Part 139 MOS – 7.18(1)(b); 7.19(2); 11.06(1)(d)(i))

Cairns Airport will not make a runway available for night use until CASA has determined that any obstacle(s) will not adversely affect the safety of night operations.

For any identified obstacles that have been erected without prior notification and which have not been assessed, the aerodrome safety officer is to:

- advise ATC immediately (if applicable)
- consider limiting aircraft approach and take-off to the runway
- ensure an immediate request is made to issue a NOTAM
- take immediate steps to have the obstacle removed
- ascertain the height of the obstacle and consider displacing the runway approach threshold. If the threshold is displaced, the published declared distances will be amended, and the new threshold location appropriately marked / lit
- report the infringement to CASA in writing.

The NOTAM authorised person is to include the following information in the NOTAM request:

- the nature of the obstacle
- the distance and magnetic bearing of the obstacle from:

  - if the obstacle is within the take-off area – the start of the take-off end of the runway, or
  - the ARP
- the height of the obstacle in relation to the aerodrome elevation
- if it is a temporary obstacle – the time during which it is a temporary obstacle.

The request to issue the NOTAM is to be made in accordance with the procedures set out in section 3.1 of this manual.

Once the obstacle has been removed, the aerodrome safety officer is to:

- advise ATC (if applicable)
- re-open, or re-instate the full runway length (if required)
- ensure a request to cancel the NOTAM is made (if issued).

3.7.4 Height of infringements – OLS

(Part 139 MOS – 11.06(1)(c)(i))

The heights of buildings, structures, plumes and other developments that infringe the aerodromes OLS are listed below:

Obstacle Type	Location	Height of the obstacle	Penetrated surface
Unlit NDB	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 21.	BLDG by red beacon APRX BRG 147 MAG 3282M FM RWY 15 THR offset 103.6M L	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.

3.7.4.1 Hazardous obstacles

(Part 139 MOS – 8.109(4); 8.110(1)-(8); 8.111(2)(a)(b))

CASA has not assessed any obstacles as being hazardous; therefore, this subsection is NOT APPLICABLE.

3.7.5 Monitoring visual segment surfaces and critical obstacles

(Part 139 MOS – 11.06(1)(a)(ii))

Terminal instrument flight procedures have been established by Airservices Australia.

The data and drawings of the area around the aerodrome that show the designed approach paths, visual segment surface, circling areas, and the location of critical obstacles, have been provided by the procedure designer, and are available at Appendix G.

The aerodrome safety officer will use this data and drawings to monitor the visual segment surface and the nominated critical obstacles that are visible from the aerodrome as part of the aerodrome serviceability inspection in accordance with section 3.2 of this manual.

3.7.6 Proposed or actual infringements – PANS-OPS

(Part 139 MOS – 7.20(3); 11.06(1)(d)(ii)(2)(b))

The Aerodrome Operations Manager or delegate is to immediately inform the terminal instrument flight procedure designer as soon as:

- a proposed or actual infringement of the PANS-OPS is identified
- a change to the status of an existing critical obstacle is identified
- there is a proposed development that is higher than the critical obstacle
- a new object or structure has been detected that is higher than the critical obstacle**.**

The procedure designer's' contact details are as follows:

- Name: Airservices Australia
- E-mail: IFP@airservicesaustralia.com
- Phone: (02) 6268 4111

3.7.7 Height of infringements – PANS-OPS

(Part 139 MOS – 11.06(1)(c)(ii))

The aerodrome has published terminal instrument flight procedures. There are no buildings, structures, plumes and other developments that infringe the surfaces or areas associated with the published terminal instrument flight procedures (as defined in PANS-OPS); therefore, this subsection is NOT APPLICABLE.

3.7.8 Obstacle control within aerodrome boundary

(Part 139 MOS – 11.06(1)(e))

Cairns Airport does not permit objects or structures, other than approved visual and navigational aids, to be erected within the obstacle restriction area of the aerodrome without the written approval of CASA.

All proposed fixed objects or structures at the aerodrome, whether temporary or permanent, that sit on or above the movement area, or those that extend above the defined height limits, including the OLS, have been and / or will be reported to CASA in writing.

On receipt of CASA's assessment, Cairns Airport adopts controls appropriate to the recommendations provided by CASA.

3.7.9 Obstacle control outside aerodrome boundary

(Part 139 MOS – 11.06(1)(f))

Cairns Airport has liaised with local government authorities located within the OLS footprint of the aerodrome and requested they forward development proposals for assessment where the proposal may penetrate the OLS or PANS-OPS of the aerodrome.

Assistance has been provided to ensure the local government authority has suitable processes and information to determine which development proposals should be forwarded for assessment.

3.7.10 Obstacle lights serviceability monitoring programme

(Part 139 MOS – 9.36(1)(3)(a))

The following lit obstacles are located within the OLS area of the aerodrome:

Location	Type	Owner	Address	Telephone
Lumley Hill Intermediate	Hazard Beacon	Cairns Airport	Cairns Airport	(07) 4080 6744
Lumley Hill	Hazard Beacon	Cairns Airport	Cairns Airport	(07) 4080 6744
Edge Hill	Hazard Beacon	Cairns Airport	Cairns Airport	(07) 4080 6744
Northern IWDI	Obstacle Light	Cairns Airport	Cairns Airport	(07) 4080 6744
Southern IWDI	Obstacle Light	Cairns Airport	Cairns Airport	(07) 4080 6744
Skytrans Hangar	Obstacle Light	Cairns Airport	Cairns Airport	(07) 4080 6744
Lumley Hill Ergon	Obstacle Light	Ergon	Lumley Hill	13 22 96 24hr Fault Reporting
Lumley Hill Telstra	Hazard Beacon	Telstra	Lumley Hill	Ben Williams (03) 8542 3481
Rydges Esplanade Resort	Obstacle Light	Rydges Esplanade Resort	Cnr Esplanade Kerwin St Cairns QLD	Kirk Tinning 0412 700 123
Cairns Aquarius	Obstacle Light	Cairns Aquarius CTS 1439	107 Esplanade Cairns QLD	Michael Kuliesa-Jewell 0414 086 028

The Pullman Cairns Hotel	Obstacle Light	The Pullman	17 Abbott Street Cairns QLD	Peter Brown (07) 4050 2122
Cairns Corporate Tower	Obstacle Light	Cairns Corp.	15 Lake Street Cairns QLD	Marilyn Chestnut 0417 943 687
Hotel Riley	Obstacle Light	Cyrstalbrook	131-141 Esplanade Cairns QLD	Mark Ansell 0484 001 698
Vodaphone Aerial	Obstacle Light	Vodaphone	Arnold Street Depot Aeroglen QLD	Option (2 -1) OR Option (5) flm.vha@nokia.com 1800 683 683
Southern Localizer	Obstacle Light	Airservices Australia	PO Box 314N North Cairns	Kevin Bowthorpe (07) 4050 5315
Southern Localiser Building	Obstacle Light	Airservices Australia	PO Box 314N North Cairns	Kevin Bowthorpe (07) 4050 5315
Southern Anemometer	Obstacle Light	Airservices Australia	PO Box 314N North Cairns	Kevin Bowthorpe (07) 4050 5315
Northern Localizer	Obstacle Light	Airservices Australia	PO Box 314N North Cairns	Kevin Bowthorpe (07) 4050 5315
Northern Localiser Building	Obstacle Light	Airservices Australia	PO Box 314N North Cairns	Kevin Bowthorpe (07) 4050 5315
Glide Path Antenna	Obstacle Light	Airservices Australia	PO Box 314N North Cairns	Kevin Bowthorpe (07) 4050 5315
DME	Obstacle Light	Airservices Australia	PO Box 314N North Cairns	Kevin Bowthorpe (07) 4050 5315

Obstacles will be visually inspected at least once in every 24-hour period.

A plan that shows the location of each of these obstacle lights is available at: Appendix G.

At the completion of each obstacle light inspection, the following information are detailed with the Tracker Airside Application and within the Serviceability Inspection Checklists:

- the date and time the obstacle light inspection was completed
- who performed the inspection

- the results of the inspection
- a description of any action taken.

The results of each obstacle light inspection and any action taken will be maintained by the Technical Services Coordinator.

Inspection records stored on the: Cairns Airport's electronic filing system – Sharepoint.

3.7.11 Obstacle light outage

(Part 139 MOS – 9.36(2)(3)(b))

In the event an obstacle light outage is detected during an inspection, the reporting officer is to:

- ensure that a NOTAM authorised person requests the immediate issue of a NOTAM
- liaise with the owner of the obstacle light so that the outage is repaired as quickly as possible.

If the obstacle light has been determined by CASA, in writing, as essential for aviation safety, the reporting officer is to:

- immediately report the outage to any aircraft that are manoeuvring, or about to manoeuvre on the affected runway
- immediately close the relevant runway or close the aerodrome until the outage is repaired
- notify CASA of the outage as soon as possible.

3.7.12 Charts published by the aerodrome operator

(Part 139 MOS – 11.06(1)(b))

3.7.12.1 Type A charts

(Part 139 MOS – 7.21)

Type A charts that meet the standards and procedures set out in ICAO Annex 4 have been prepared.

The obstacle data has been provided to the AIS provider in digital format in accordance with CASR Part 175.E. A copy of the Type A charts have also been provided to CASA.

The up-to-date distribution list of current Type A chart holders is maintained by: the Aerodrome Operations Manager.

The Type A chart holders distribution list is available in Appendix I.

The Type A charts are Appendix J.

The Type A charts are reviewed as part of the aerodrome technical inspection to ensure they remain accurate. Any changes to the Type A chart information are communicated to all organisations on the distribution list and CASA as soon as possible by the Aerodrome Operations Manager.

3.7.12.2 Type B charts

(Part 139 MOS – 7.22)

Type B charts have not been prepared; therefore, this subsection is NOT APPLICABLE.

3.7.12.3 Precision Approach Terrain Charts – ICAO

(Part 139 MOS – 7.23)

Precision Approach Terrain Charts have not been prepared; therefore, this subsection is NOT APPLICABLE.

3.7.12.4 Aerodrome Terrain and Obstacle Charts – ICAO (Electronic)

(Part 139 MOS – 7.24)

Aerodrome Terrain and Obstacle Charts have not been prepared; therefore, this subsection is NOT APPLICABLE.

3.8 Protection of communication, navigation, surveillance and meteorological facilities

3.8.1 Controlling activities near CNS and MET facilities

(Part 139 MOS – 11.16(a); 19.02)

The following is a list of all CNS and MET facilities, their location on the aerodrome, and the particulars of the respective service provider:

CNS / MET facility	Location on the aerodrome	Service provider
RWY 15 Glide	Path Adjacent to the northern runway strip (western side).	Airservices Australia
RWY 15 Localizer	Southern end of the runway.	Airservices Australia
RWY 33 Localizer	Northern end of the runway	Airservices Australia
RWY 15 DME	Co-located with the RWY 15 GP	Airservices Australia

Cairns Airport ensures that there will not be any interference to the CNS or MET facilities at the aerodrome caused by developments, the erection of structures or from work activities within the vicinity of each facility.

Cairns Airport refers all developments within the aerodrome boundary, near to or likely to affect an existing CNS or MET facility, to the respective CNS or MET facility providers for a hazard and impact assessment.

In consultation with each facility provider, the restricted area boundaries have been determined for each CNS and MET facility. The restricted area boundaries are shown on a plan which is available at Appendix K.

Only the facility service provider is permitted to work within each boundary. When ground maintenance is required, the service provider is advised.

Vehicles and plant are not permitted to enter or remain in an ILS critical or sensitive area whilst the ILS is in use. Should vehicle access be required, Cairns Airport:

- liaises with the service provider to temporarily withdraw the ILS from service unless otherwise authorised by the service provider

- arranges for notification via ATC or NOTAM to inform pilots of the temporary withdrawal.

3.8.2 Supply and installation of warning signs

(Part 139 MOS – 11.16(b); 19.06(5))

Signs have been placed around each communications, navigation and surveillance (CNS) or meteorological (MET) facility to:

- deter unauthorised access from vehicles and persons
- warn of hazardous emissions, including electromagnetic and microwave radiation.

Signs have also been placed at each road access point to each of the ILS critical and sensitive areas to prohibit drivers and pedestrians against entering the area without authority.

The responsibilities for supplying, installing and maintaining the signs have been agreed upon with the service provider and are documented in the Airservices Australia Letter of Agreement LoA 561.

3.9 Aerodrome technical inspections / manual validations

3.9.1 Inspection personnel

(Part 139 MOS – 11.10(2)(a)-(e))

The following is a list of individuals or positions, and their responsibilities in the aerodrome technical inspection and reporting process:

Individual or position	Responsibilities
Aerodrome Operations Manager	managing the inspection programme
Aerodrome Operations Manager	planning the aerodrome technical inspections
Aerodrome Operations Manager	reporting inspection results and follow-up action
Aerodrome Operations Manager	receiving and considering inspection reports
Aerodrome Operations Manager	taking follow-up action if defects or deficiencies have been identified

3.9.2 Inspection items and timeframes

(Part 139 MOS – 11.10(1)(a)(b); 12.09; 12.11(11))

Cairns Airport, in a financial year, has 50,000 or more air transport passenger movements / 100,000 or more aircraft movements.

A technical inspection programme is carried out in accordance with the following:

Inspection requirement	Frequency	Required qualifications and / or experience
An instrument survey of the approach, take-off and transitional surfaces	The inspection is completed annually	The person engaged to conduct the inspection is technically qualified or experienced in surveying and has a sound knowledge and understanding of the standards for OLS

Inspection requirement	Frequency	Required qualifications and / or experience
A check of other applicable surfaces associated with the OLS	The inspection is completed annually	The person engaged to conduct the inspection: • is a qualified or experienced in surveying and has a sound knowledge and understanding of the standards for OLS, or • has a sound knowledge and understanding of the standards for OLS
For an aerodrome with a Type A chart, the currency and accuracy of the: (a) Type A chart (b) distribution list of current Type A chart holders	The inspection is completed biennially	The review of the Type A chart is completed by a person with tertiary qualifications in civil engineering or surveying, or a person that has the knowledge to interpret the chart and the associated data.
For an aerodrome with a TIFP - a check of the Cairns Airport monitoring of the instrument approach procedure-critical obstacles nominated by the procedure designer	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
An inspection and assessment of the movement are pavements, drainage and associated strips, including a visual inspection and assessment of: (a) pavement condition; and (b) contamination, including from rubber build-up **Note:** Periodic friction assessment and surface evaluation (as applicable) is undertaken to identify the need for maintenance or special surface treatment before surface conditions deteriorate below the specified limits.	The inspection is completed annually	The person engaged to conduct the inspection has: • a recognised degree, diploma, or certificate of civil engineering, or • demonstrable relevant technical experience in civil engineering
An inspection and testing of the aerodrome lighting and electrical reticulation systems, including the following: *(a)* visual aids on the movement area *(b)* apron floodlighting, including illumination of the apron and paring positions *(c)* illuminated wind direction indicators *(d)* pilot-activated lighting systems *(e)* stand-by and emergency aerodrome lighting *(f)* the visual approach slope indicator system *(g)* approach lighting systems *(h)* obstacle lights and beacons maintained by the Cairns Airport Pty Ltd *(i)* any earthing points on the apron	The inspection is completed annually	The person engaged to conduct the inspection is: • a qualified electrical engineer, or • a qualified licensed electrician with relevant aerodrome lighting knowledge and experience

Inspection requirement	Frequency	Required qualifications and / or experience
An inspection and assessment of visual aids on the aerodrome, including the following: (a) movement area markings (b) movement area guidance signs, including aircraft parking position signs (c) airside vehicle control signs (d) protection of CNS and MET signs (if applicable)	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
An inspection of equipment or facilities at the aerodrome used for wildlife hazard management, including aerodrome fencing and gates	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
An inspection of equipment or facilities at the aerodrome used for aerodrome emergencies	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
A check of the currency and accuracy of aerodrome information published in the AIP}	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
A check of the currency and accuracy of aerodrome operating procedures specified in the aerodrome manual and supporting documents	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
A check that the safety management system is up-to-date and is functioning as documented}	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
An inspection of airside vehicle control arrangements	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
A check that personnel appointed as a reporting officer (a) have been trained and assessed in accordance with Chapter 13, and (b) appear to be generally competent to carry out the required duties in accordance with MOS	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation
A check that personnel appointed as a works safety officer (a) have been trained and assessed in accordance with Chapter 13, and	The inspection is completed annually	The person engaged to conduct the inspection has sound knowledge and experience of the applicable civil aviation safety legislation

Inspection requirement	Frequency	Required qualifications and / or experience
(b) appear to be generally competent to carry out the required duties in accordance with MOS		

3.9.3 Qualified personnel for technical inspections / manual validations

(Part 139 MOS – 11.10(1)(b); 12.10(3)(4); 12.11(13))

The Aerodrome Operations Manager, at the time of engaging a person to conduct each element of the technical inspection, is to sight the qualifications and relevant experience of each person(s) to verify that they meet the required qualifications and / or experience as documented in subsection 3.9.2 of this manual.

A person who cannot demonstrate that they have the required technical qualifications and experience, or demonstrable relevant technical experience, will not be permitted to perform the inspection.

A record of qualifications and relevant experience is included in the technical inspection report.

3.9.4 Scheduling inspections / manual validations and recording their results

(Part 139 MOS – 11.10(1)(c))

A calendar is maintained to schedule inspections.

- Person(s) responsible for calendar: Aerodrome Operations Manager
- Location of calendar: on the Cairns Airport's electronic filing system – Sharepoint.

To allow adequate planning time, a reminder is also set in the calendar three (3) months in advance of the due date.

The calendar is updated when an element of the technical inspection is completed, and a new date for the next inspection and a three-month advance reminder is set.

The calendar is reviewed monthly.

Irrespective of the schedule, an immediate inspection is conducted in the event any of the following is detected during an aerodrome serviceability inspection:

- an unsafe condition is identified
- a defect or deficiency in a part of the aerodrome is identified.

The results of each technical inspection are presented in a report.

3.9.5 Briefing technical inspectors

(Part 139 MOS – 11.10(1)(d)(i)(ii); 12.08(4); 12.11(8))

At the time of engagement, the person(s) conducting the technical inspection will be briefed on the scope of the inspection, including the technical matters and the locations which must be inspected.

The Aerodrome Operations Manager is to advise the person(s) conducting each element of the technical inspection that they are to include in their report:

- any non-compliance with the Part 139 MOS with respect of the aerodrome's facility, equipment, operation, or aerodrome personnel.
- any defect or deterioration in any facility, equipment or visual aid which could make the aerodrome unsafe for aircraft operations
- any incorrect aerodrome information:
  - published in the AIP or NOTAMs
  - reported to ATC (if applicable).
- any information in the aerodrome manual which is incorrect or not current
- any procedure, or practice in use at the aerodrome, which is not in accordance with, or conflicts with, procedures in the aerodrome manual.

3.9.6 Post-inspection / validation corrective actions

(Part 139 MOS – 11.10(1)(e); 12.08(4))

On receipt of the technical inspection report, each recommendation is to entered into a corrective action plan and is to be considered. Each recommendation is to be documented and considered by the following person(s):

- Documented by the: Aerodrome Operations Manager
- Considered by the: Aerodrome Operations Manager and relevant department Manager.

Where a recommendation has been supported, the agreed corrective actions are to be documented and assigned to an individual who will be responsible for implementing the listed corrective actions. An agreed target date for completion for each corrective action will also be assigned.

In the event a recommendation is not supported, the reasons for not supporting the recommendation are also to be documented in the corrective action plan.

Cairns Airport ensures that corrective action plans are reviewed and updated regularly. Specific responsibilities for corrective plans have been attributed to the following person(s):

- Retained by the: Aerodrome Operations Manager
- Stored securely on: the Cairns Airport's electronic filing system – Sharepoint

In the event CASA requests a written copy of the corrective action plan, Cairns Airport ensures that this copy will be provided to CASA within 30 days and will include a report showing the progress of corrections to any defects or deterioration.

3.9.7 Providing CASA with inspection / validation reports

(Part 139 MOS – 11.10(1)(f); 12.08(7); 12.11(8))

Within 30 days of receiving the technical inspection report, a copy of the report is to be provided to CASA:

- By: the Aerodrome Operations Manager
- Via e-mail at: aerodromes@casa.gov.au

Upon receipt of a written request, a copy of the corrective actions plan, including progress made to address the actions, is to be provided within 30 days to the aerodrome inspector making the request:

- By: Aerodrome Operations Manager

3.9.8 Maintaining records of technical inspections / manual validations

(Part 139 MOS – 12.08(9); 12.11(10))

Technical inspection reports are retained for a period of at least three (3) years from the date the report was completed.

- Retained by the: Aerodrome Operations Manager
- Stored securely on: the Cairns Airport's electronic filing system – Sharepoint

3.10 Aerodrome works safety

(Part 139 MOS – 11.07)

Cairns Airport always makes all necessary arrangements to ensure that aerodrome works do not create a hazard to aircraft or cause confusion to pilots.

A works safety officer is to be present to directly oversee works safety at all times when the aerodrome is open and available for aircraft operations.

Aerodrome markers, markings and lights required for, or affected by aerodrome works are installed, altered or removed in accordance with the required standards.

Any part of the movement area that is unserviceable as a result of aerodrome works being carried out are marked and lit. Obstacles created as a result of the aerodrome works are assessed and marked or lit in accordance with the assessment.

Where works are to be undertaken in the vicinity of CNS or MET facilities, the service provider is to be consulted to ensure neither the works, nor the vehicles or plant associated with the works affect performance of the facilities.

Where significant displacement of a runway threshold is planned, works planning may require consultations with the terminal instrument flight procedure (TIFP) designer and the surveyor that conducts the annual obstacle surveys.

3.10.1 Works safety personnel

(Part 139 MOS – 11.07(1)(2); 13.01)

The following persons have specified responsibilities for works:

Individual / position	Responsibility
Aerodrome Operations Manager/Aerodrome Operations Manager/Operations and Emergency Manager	works planning
Works Safety Officer / Aerodrome Safety Officers	conducting works
Emergency and Operational Resilience Manager	arrangement and notifications

The following is a list of personnel appointed to perform the functions of a works safety officer (WSO):

Name	Position	Function
Robert Keegan	Emergency and Operational Resilience Manager	ARO/WSO
Bruno Fogale	Aerodrome Safety Officer	ARO/WSO
Garry Clarke	Aerodrome Safety Officer	ARO/WSO
Craig Tatlow	Aerodrome Safety Officer	ARO/WSO
Shane Porter	Aerodrome Safety Officer	ARO/WSO
Jamie Hughes	Aerodrome Safety Officer	ARO/WSO
Liam West	Aerodrome Safety Officer	ARO/WSO
Leonard Talbot	Aerodrome Safety Officer	ARO/WSO
Mark Musumeci	Aerodrome Operations Supervisor	ARO/WSO
Steve Harris	Aerodrome Safety Officer	ARO/WSO

All personnel appointed as a WSO have been trained so that they can competently carry out their duties at this aerodrome, without the need for supervision.

Cairns ensures all training activities for works safety officers are recorded to verify achieved competencies.

All WSOs undergo recurrent training every two (2) to five (5) years as is recommended in guidance material published by CASA, or earlier if deficiencies are identified.

A training schedule has been established and is maintained by Aerodrome Operations Manager.

The training schedule is reviewed regularly to ensure training is completed in a timely manner.

The training records of all WSOs are:

Maintained by the: Emergency and Operational Resilience Manager
Stored securely on: the Cairns Airport's electronic filing system – Sharepoint

3.10.2 Preparation of a method of working plan (MOWP)

(Part 139 MOS – 11.07(1)(a); Chapter 15; Chapter 16)

Cairns Airport develops a Method of Working Plan (MOWP) for scheduled works unless the:

- works are time-limited works
- aerodrome is closed to aircraft operations during the works and a 14-day written notice period of the impending closure was made
- works are of an emergency nature (to repair unforeseen failure or damage to part of the manoeuvring area, or to remove an obstacle)
- works do not require any restrictions to aircraft operations.

MOWPs are prepared in accordance with the content and sequencing requirements stated in Chapter 16 of the Part 139 MOS.

When preparing a MOWP, and so that the impact of the works is clearly understood, consultations are conducted by: the Aerodrome Operations Manager.

The following operators / organisations are consulted:

- air transport operators using the aerodrome
- operators of emergency services aircraft that are likely to operate at the aerodrome
- ATC (if applicable)
- ARFFS (if applicable)
- providers of any communications, navigation, surveillance or meteorological infrastructure or equipment that might be affected by the works (if applicable).

A list of representatives from each operator / organisation listed above, and their contact details, is maintained by: the Emergency and Operational Resilience Manager.

Although a MOWP does not require CASA approval, CASA is to be consulted on any safety issues identified in the preparation of the MOWP.

The name, position, and function of each WSO will be recorded in the MOWP.

MOWPs will be authorised and signed by either the:

- Accountable Manager
- Project Manager that has written authorisation from the aerodrome operator to sign the MOWP.

Written authorisations will be retained on file.

3.10.3 MOWP Notifications

(Part 139 MOS – 11.07(1)(b); 15.02(3)(5); 16.10)

Unless the works are unforeseen urgent works, the authorised MOWP will be issued not less than 14 days before the works are scheduled to commence by: Aerodrome Operations Manager, Emergency and Operational Resilience Manager or Aerodrome Operations Manager.

The MOWP is to be issued to:

- air transport operators using the aerodrome
- operators of emergency services aircraft that are likely to operate at the aerodrome
- ATC (if applicable)
- ARFFS (if applicable)
- providers of any communications, navigation, surveillance or meteorological infrastructure or equipment that might be affected by the works (if applicable)
- the WSO
- the project manager
- the works organiser
- the aerodrome security manager
- CASA via e-mail at aerodromes@casa.gov.au

A distribution list of all MOWP recipients and their contact details is:

- Maintained by the: Aerodrome Operations Manager
- Stored securely on: the Cairns Airport's Outlook Distribution List Folder system

The following person(s) is responsible for ensuring that all recipients receive the MOWP: Aerodrome Operations Manager.

The MOWP distribution list will be regularly reviewed to ensure it remains current.

In the event a MOWP requires amendment, the amended MOWP will:

- clearly show the information that has changed
- be disseminated to all persons who received the original MOWP
- be issued no later than 48 hours before the change in works commences.

Amendments to the MOWP are the responsibility of the: Aerodrome Operations Manager.

A NOTAM providing the time and date of the commencement of the works is to be issued as early as possible, but not less than 48 hours before commencement.

In the event the change in works is due to an unforeseen event and a notification period of at least 48 hours is not possible, a NOTAM is to be requested as soon as possible after the change becomes known, and notification of the change is declared on the AFRU / or requested on the ATIS.

3.10.4 Communications with ATC during aerodrome works

(Part 139 MOS – 11.07(1)(c))

WSOs that hold an Aeronautical Radio Operator Certificate (AROC) are authorised to transmit on an aeronautical radio frequency. WSOs without an AROC are only authorised to listen to the aeronautical radio frequency, but not transmit.

WSOs will at all times maintain a continuous radio listening watch.

WSO are to obtain ATC approval to enter and operate within the manoeuvring area. All instructions issued by ATC are to be acknowledged and responded to appropriately.

Radio procedures, including terminology, and procedural requirements when operating on the manoeuvring area are:

- Are documented in: the Airservices Australia Letter of Agreement LoA 561
- Available on: the Cairns Airport's electronic filing system – Sharepoint.

3.10.5 Time-limited works (TLW) or emergency works

(Part 139 MOS – 11.07(1)(d))

A MOWP is not required for time-limited works (TLW) or emergency works.

TLW are only to be carried out if:

- a works safety officer(s) is present in the vicinity of the works
- normal operations are not disrupted
- the movement area can be restored to normal safety standards, and
- any obstacles created by those works removed in not more than 30 minutes.

At all times during TLW, the WSO is to maintain a continuous radio listening watch.

In the event TLW have been stopped to facilitate an aircraft movement, normal safety standards are to be restored not less than five (5) minutes before the aircraft movement is to occur.

Where TLW have been stopped for an aircraft movement, subject to ATC instruction, TLW is only permitted to resume in accordance with the following:

- for an aircraft arrival:

  - immediately after the aircraft arrival provided the safety of the aircraft is not endangered
  - If the aircraft has not arrived, at least 30 minutes after the aircraft was due to arrive.

- for an aircraft departure:
  - a minimum period of 15 minutes must have elapsed between the aircraft's departure and the resumption of TLW.

3.10.6 Notifications of TLW or emergency works

(Part 139 MOS – 11.07(1)(e))

TLW or emergency works with recall times between 10 and 30 minutes are to be advised by NOTAM.

For TLW, the works safety officer is to ensure that a NOTAM has been issued at least 24 hours before the works commence.

The request for a NOTAM is to be made in accordance with section 3.1 of this manual.

The NOTAM authorised person is to include the following information in the NOTAM request:

- date and time of commencement of the works
- time required to restore normal safety standards.

Emergency works on a runway, or runway strip are not to commence until ATC (local tower, or the air traffic service centre) have been notified and the publication of a NOTAM advising the changes to the aerodrome has been verified. The operations centre for air transport operators with scheduled services occurring during the expected duration of emergency works is also be advised of the changes occurring due to the works.

3.10.7 Works at closed aerodrome

(Part 139 MOS – 11.07(1)(f))

To enable works to be completed when the aerodrome is closed, written notice of the intention to close the aerodrome is to be sent, at least 14 days before the aerodrome closure, to:

- air transport operators using the aerodrome
- each other known organisation using the aerodrome which is likely to be affected by the closure
- CASA.

A distribution list of those receiving the written notification will be retained by the: Aerodrome Operations Manager.

A copy of the written notice will be retained by the: Works Safety Officer

At least 14 days before the aerodrome closure, a NOTAM will also be issued in accordance with section 3.1 of this manual, advising when the aerodrome will be temporarily closed.

3.11 Wildlife hazard management

3.11.1 Wildlife hazard personnel

(Part 139 MOS – 11.08(2))

The following individuals and positions have responsibilities for wildlife hazard management:

Individual / position	Responsibilities
Aerodrome Operations Manager/ Emergency and Operational Resilience Manager/ Aerodrome Operations Supervisor/ Environment Manager/ Aerodrome Safety Officer	monitoring wildlife hazards
Aerodrome Operations Manager/ Emergency and Operational Resilience Manager/ Aerodrome Operations Supervisor/ Environment Manager/ Aerodrome Safety Officer	mitigating wildlife hazards

3.11.2 Training of personnel

3.11.2.1 Training for wildlife hazard monitoring and reporting

(Part 139 MOS – 17.07(1)(3))

At Cairns Airport, all personnel tasked with wildlife hazard monitoring and reporting are trained, so that they can competently:

- conduct wildlife observations and identify high-risk species
- assess wildlife populations and describe their behaviour
- record information
- collect any remains of a wildlife strike on the aerodrome
- attempt to facilitate the identification of
  - any wildlife involved in a strike event
  - any resulting damage to an aircraft
- report the outcomes of observations, monitoring, and strike collection activities.

Re-currency training is completed every: 36 months

The training records of all personnel are kept for a minimum period of three (3) years and are:

Maintained by the: Aerodrome Operations Manager

Stored securely on: the Cairns Airport's electronic filing system – Sharepoint

3.11.2.2 Training for wildlife hazard mitigation

(Part 139 MOS – 17.07(2)(a)(b)(3))

All personnel engaged in wildlife hazard mitigation are trained, so that they can competently:

- engage in active wildlife management without causing a hazard to aviation safety
- assess the effectiveness of any mitigation measures that are taken.

Re-currency training is completed every: 36 months

The training records of all personnel are kept for a minimum period of three (3) years and are:

Maintained by the: Emergency and Operational Resilience Manager

Stored securely on: the Cairns Airport's electronic filing system – Sharepoint

3.11.3 Wildlife hazard management plan

(Part 139 MOS – 17.03; 17.04)

As the aerodrome has 50,000 or more air transport passenger movements / 100,000 or more aircraft movements in a financial year, a wildlife hazard management plan that meets the requirements of section 17.04 of the Part 139 MOS has been established and implemented.

The Wildlife Hazard Management Plan is a subsidiary document to this manual and is:

Maintained by: Aerodrome Operations Manager
Available on: Cairns Airport's electronic filing system – Sharepoint.

3.11.4 Wildlife hazard monitoring

(Part 139 MOS – 11.08(1)(a); 17.01(3))

Wildlife hazards at Cairns Airport are monitored as part of the aerodrome serviceability inspection process as shown in section 3.2 of this manual.

In addition to an inspection of the aerodrome boundary fence, and gates, looking for holes or other potential signs of a breach by wildlife, reporting officers will identify and record the following:

- presence of wildlife on and in the vicinity of the aerodrome, which is to include:
  - a count of all birds and animals sighted
  - bird / animal activity, e.g., feeding, flying, nesting
  - species (if known)
  - numbers
  - location.
- seasonal and environmental conditions which may attract wildlife, such as grasses, standing water, uncovered waste, deceased wildlife (e.g., dead rabbits, mice etc.)
- any additional indicators such as new nests or eggs.

All wildlife observed on the aerodrome and in the vicinity of the aerodrome are recorded in the Tracker Airside Application and within the Serviceability Inspection Checklists.

A record of wildlife strikes is also included in the Tracker Airside Dashboard and the End-Of-Month reports.

All known or suspected wildlife strikes that occur at or in the vicinity of the aerodrome are reported to the Australian Transport Safety Bureau (ATSB). Each month, the wildlife strike statistical reports published by the ATSB are reviewed by the Aerodrome Operations Manager.

Any reported occurrences near the aerodrome not previously recorded are included in Tracker Airside.

To detect changes in wildlife hazards, reported wildlife observations and the wildlife strike data are reviewed monthly by a qualified ornithologist.

3.11.5 Wildlife hazard assessment

(Part 139 MOS – 11.08(1)(b); 17.02(1))

Any detected wildlife hazard is assessed for risk to aircraft operations.

The hazard assessment process is completed in accordance with the procedures set out in the aerodrome's safety management system.

The frequency that wildlife hazards are assessed:

- Monthly via wildlife info-cards
- Quarterly ornithologist surveys and reports
- Annually as part of the Wildlife Hazard Management Plan review

When assessing the risks, the following data is considered:

- wildlife observations
- reported strike events
- reported near miss events
- times of day or year / weather conditions.

Wildlife hazard risk assessments are:

- Maintained by the: Aerodrome Operations Manager
- Stored securely on: the Cairns Airport's electronic filing system – Sharepoint

3.11.6 Wildlife hazard mitigation

(Part 139 MOS – 11.08(1)(c))

The following measures have been implemented to assist in mitigating wildlife hazards:

- wildlife dispersal, culling, egg and nest removal
- all gates are kept locked, and rubbish appropriately stored
- grass heights are monitored to prevent seeding
- open unlined drains are regularly inspected and maintained to prevent water retention as best as possible
- in the event dead birds and animal carcasses are located they are quickly removed
- bird spikes or barriers have been installed on roosting sites.

In the event a reporting officer(s) detects a source of attraction for wildlife, so that further actions can be considered and implemented to minimise the attraction, a report is to be drafted and sent to: the Aerodrome Operations Manager.

A Wildlife mitigation permit is not required for Cairns Airport as it is a Strategic Airport under the QLD Nature Conservation (Animals) Act 1992. Cairns Airport adheres to the exemption conditions that apply for wildlife dispersal, culling, and egg and nest removal activity under the associated Nature Conservation (Animals) Regulations 2020. The WHMP contains more detailed information on how Cairns Airport meets the pre-conditions stipulated in the Act.

3.11.7 Wildlife hazard reporting (AIP, NOTAM, ATC)

(Part 139 MOS – 11.08(1)(d); 17.05(1))

In the event a wildlife risk is identified on or in the vicinity of the aerodrome, and the risk is a serious or imminent threat and cannot be immediately managed, the reporting officer(s) is to:

- notify ATC (if applicable) with request to include this on the ATIS
- request the immediate issue of a NOTAM.

Known or seasonal hazards are reported in writing to the AIS provider for publication in the AIP-ERSA

A NOTAM is requested if the hazard is a higher risk than usual or is of a short term or seasonal nature.

A Bird Watch Condition Status and Report is issued to relevant stakeholders if there is an increase in the hazard level posed by any high-risk species

3.11.8 Liaison with local authorities for wildlife hazard mitigation

(Part 139 MOS – 11.08(1)(e); 17.01(2))

A list of the local authorities that have land within a 13 km radius of the aerodrome are documented in the Cairns Airport Wildlife Hazard Management Plan, and is:

Maintained by the: Aerodrome Operations Manager
Available on: the Cairns Airport's electronic filing system – Sharepoint.

Cairns Airport engages with these local authorities through the Cairns Regional Council Development Application process and in addition, the Safety and Security forum to ensure that future land uses, and development proposals can be carefully considered and/ or are not missed.

Development applications are assessed against the MOS139 and if expert advise is required, an external airport wildlife risk management and ornithologist will be consulted.

Where existing land use presents a potential risk, site visits are conducted to discuss aviation safety concerns and possible mitigations to reduce those risks. Regular site visits are conducted to ensure mitigations are effective. A record of these sites and the frequency of review is recorded in the Cairns Airport Wildlife Hazard Management Plan and is:

Maintained by the: Aerodrome Operations Manager
Available on: the Cairns Airport's electronic filing system – Sharepoint.

3.11.9 Liaison with project management for wildlife hazard mitigation

To mitigate the risk of introducing wildlife attractions during aerodrome works, Cairns Airport assesses proposed works, whether they are of a time-limited nature or part of a larger project.

Cairns Airport engages internally with relevant departments and project managers, and with contracted project managers to ensure that wildlife risks can be carefully considered.

When aerodrome works present a potential risk, mitigations will be discussed and implemented to reduce the risks to a level as low as reasonably practicable. During the works, the aerodrome safety officer and/ or the works safety officer conducts observations to ensure mitigations are effective.

3.12 Low-visibility operations (LVO)

Low-visibility operations at Cairns Airport are implemented when: weather conditions deteriorate, and to minimise delay, a staged implementation process will be utilised.

LVP Stage 1

- Runway visibility reduces to 2000m or less, or
- Cloud ceiling is 500ft or less, or
- As required by ATC.

LVP Stage 2

- Runway visibility reduces to 1700m or less, or
- Cloud ceiling is 460ft or less, or
- As required by ATC.

3.12.1 Low-visibility personnel

(Part 139 MOS – 11.17(1)(e)(i)(ii))

The following person(s) have responsibilities in managing low-visibility operations:

Name	Role	Phone number	After-hours phone number
~~Davy Semal~~Joseph Godolley	Aerodrome Operations Manager	+61 477 701 857~~0421 944 579~~	+61 477 701 857~~0421 944 579~~
Robert Keegan	Emergency and Operational Resilience Manager	0428 783 367	0428 783 367
Mark Musumeci	Aerodrome Operations Supervisor	0435 697 047	0435 697 047
Bruno Fogale	Aerodrome Safety Officer	Car 16 - 0412 773 065 Car 17 - 0402 027 732 Car 18 (B & W) - 0400 752 293 WSO - 0427 880 154	
Craig Tatlow	Aerodrome Safety Officer		
Shane Porter	Aerodrome Safety Officer		
Jamie Hughes	Aerodrome Safety Officer		
Liam West	Aerodrome Safety Officer		
Leonard Talbot	Aerodrome Safety Officer		
Steve Harris	Aerodrome Safety Officer		

3.12.1.1 Runway visibility (RV) assessment personnel

(Part 139 MOS – 23.08)

The following personnel are authorised and have been appointed to conduct runway visibility assessments at Cairns Airport:

Name	Position
Robert Keegan	Emergency and Operational Resilience Manager
Bruno Fogale	Aerodrome Safety Officer
Jamie Hughes	Aerodrome Safety Officer
Shane Porter	Aerodrome Safety Officer
Craig Tatlow	Aerodrome Safety Officer
Liam West	Aerodrome Safety Officer
Leonard Talbot	Aerodrome Safety Officer

Mark Musumeci	Aerodrome Operations Supervisor
Steve Harris	Aerodrome Safety Officer

Before appointing any personnel, Cairns Airport confirms that each proposed runway visibility assessor has:

- a distant visual acuity of 6/12 or better in each eye separately, and 6/9 or better binocular (with or without correcting lenses)
- a certificate of proficiency in aeronautical radio telephony
- the competence and familiarity to operate on the manoeuvring area of the aerodrome during low-visibility conditions
- demonstrated competence in:
  - identifying the location of each point of observation
  - identifying the visibility markers for each point of observation
  - identifying the relevant runway edge lights for making a runway visibility assessment
  - using the conversion table
  - using the visibility markers chart
  - reporting a runway visibility assessment.

After initial appointment, to confirm that the appointed RV assessor(s) continue to meet these requirements, assessments are to be conducted every 12 months.

Records to confirm the attributes and qualifications of each appointed runway visibility assessor are:

- Maintained by the: Emergency and Operational Resilience Manager
- Stored securely on: the Cairns Airport's electronic filing system – Sharepoint

3.12.2 Vehicular traffic in low-visibility operations

(Part 139 MOS – 11.17(1)(b))

All airside vehicles operating airside during periods of low visibility are to be lit in accordance with subsection 3.5.3 of this manual.

ATC are responsible for notifying reporting officers that low-visibility operations are in effect.

Once notified, the reporting officer is to ensure:

- airside access is restricted to non-essential vehicles by:
  - 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 Emergency and Operational Resilience Manager or delegate, ensure that security perimeter gates are locked or disabled.
  - Escort aircraft and vehicles as required.

- advise airport tenants that low-visibility operations are in effect and request that they withdraw non-essential vehicles. The Aerodrome Safety Officer is responsible for notifying airport tenants. Notification will occur by means of: SMS alert.

3.12.3 CNS facilities in low-visibility operations

(Part 139 MOS – 11.17(1)(c))

When low-visibility operations are in effect, vehicles or plant are not permitted to enter or remain in ILS critical areas unless ATC has given specific clearance for the vehicle or plant to enter or remain.

The reporting officer(s) is to contact ATC to confirm that the surface movement guidance control system is operational.

The reporting officer(s) is to deploy additional barriers / signage withdrawing access to any airside roadways that could result in vehicles inadvertently compromising CNS facilities.

3.12.4 Measuring runway visibility

(Part 139 MOS – 11.17(1)(a); 23.09(c)(iii)(iv))

Low-visibility operations conducted in accordance with the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.5 Manoeuvring area inspections in low-visibility operations

(Part 139 MOS – 11.17(1)(d))

All vehicles used when conducting inspections of the manoeuvring area during low-visibility operations are to comply with the airside vehicle requirements stated in subsections 3.5.3 and 3.5.4 of this manual.

All manoeuvring area inspections are conducted at the direction of ATC.

The aerodrome safety officer(s) is to conduct an initial inspection of the manoeuvring area to ensure there is no FOD or other objects that are hazardous to aircraft, and that the aerodrome's lighting systems essential to low-visibility procedures are operational, specifically:

- runway edge lights
- runway approach lights*
- PAPIs*
- taxiway lights*
- runway guard lights*
- illuminated MAGS*
- RTIL*.

*Unless specific concerns have been raised for the function of these systems, they are to be checked during the initial serviceability inspection at commencement of low-visibility

operations. Ongoing checks during low-visibility operations do not include these lighting systems.

The frequency of additional inspections is conducted in accordance with the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.6 Communicating visibility measurements to ATC or pilots

(Part 139 MOS – 11.17(1)(a))

The RV assessor is to immediately report the visibility to ATC or the pilot, in the following manner:

> *"RUNWAY VISIBILITY, RUNWAY [runway number], THRESHOLD [distance assessed in meters] (or if applicable MIDPONT [distance assessed in meters]), ASSESSED AT [time] UTC."*

If runway visibility is below 350 m, the RV assessor(s) is to report the runway visibility as "less than 350 m".

In the event runway visibility varies during the assessment, the RV assessor(s) is to report the lowest value observed.

An RV assessment is only provided to a pilot if the assessment was conducted within the previous 20 minutes. If a pilot commences to taxi after the last CTAF report, a general broadcast is made advising either the details of the last observation, or "more than 20 minutes has occurred since the last RV assessment, there is no current RV information".

3.12.7 Transmissometers

(Part 139 MOS – 11.17(2))

Transmissometers are not installed at Cairns Airport; therefore, this is NOT APPLICABLE.

3.12.8 Low-visibility procedures (LVP)

(Part 139 MOS – Chapter 23)

Low-visibility procedures (LVP) that take into account the local conditions, and which meet the requirements of Chapter 23 of the Part 139 MOS, have been established and implemented.

These procedures were developed in consultation with:

- ATC
- aircraft operators operating at the aerodrome
- aerodrome service providers.

3.12.8.1 Specific circumstances for LVP

(Part 139 MOS – 23.02(c)(i))

The specific circumstances in which LVP measures are to be initiated, fully implemented and terminated are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.2 Nominated rate of aerodrome movements

(Part 139 MOS – 23.02(c)(ii))

The procedures for supporting the nominated rate of aerodrome movements when low-visibility procedures are in effect are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.3 LVP- related training and authorisation for airside drivers

(Part 139 MOS – 23.02(c)(iii))

The procedures for training and authorisation of airside drivers and other operational personnel when low-visibility procedures are in effect are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

Training records are:

- Retained by: Emergency and Operational Resilience Manager
- Stored securely on: the Cairns Airport's electronic filing system – Sharepoint

3.12.8.4 Control of airside operations

(Part 139 MOS – 23.02(c)(iv))

The procedures for controlling airside operations including vehicles, drivers and other personnel when low-visibility procedures are in effect are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.5 Withdrawal of non-essential vehicles and personnel

(Part 139 MOS – 23.02(c)(v))

The procedures for withdrawing non-essential vehicles and personnel when low-visibility procedures are in effect are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.6 Suspension of visual and non-visual aid maintenance

(Part 139 MOS – 23.02(c)(vi))

The procedures for suspending routine maintenance on visual and non-visual aids when low-visibility procedures are in effect are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.7 Securing airside access and preventing entry

(Part 139 MOS – 23.02(c)(vii))

The procedures for securing airside access and preventing inappropriate or inadvertent entry when low-visibility procedures are in effect are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.8 Alerting of LVP

(Part 139 MOS – 23.02(c)(viii))

The procedures for alerting scheduled air transport operations, emergency services aircraft, or other affected organisations to LVP are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.9 Coordinating LVP activities with ATC

(Part 139 MOS – 23.02(c)(ix))

The procedures for coordination of LVP activities with ATC are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.10 Physical checks of lighting and warning devices

(Part 139 MOS – 23.02(c)(x))

The procedures for physically checking lighting installations and warning devices during LVP are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.11 Protection of areas for ILS

(Part 139 MOS – 23.02(c)(xi))

The procedures for protecting critical and sensitive areas for ILS and other precision approach aids during LVP are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.12 Emergency responses during LVP

(Part 139 MOS – 23.02(c)(xii))

The procedures for emergencies during LVP are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.13 LVP status

(Part 139 MOS – 23.02(c)(xiii))

The procedures for establishing and promulgating a single point form which definitive information about the current status of LVP can be confirmed are documented in the Cairns Airport Low Visibility Operations Standard Operating Procedure (3080_AO).

This is a subsidiary document to this is manual and is available on: the Cairns Airport website.

3.12.8.14 Review of low-visibility procedures

(Part 139 MOS – 23.04)

Low-visibility procedures are regularly reviewed to ensure their continuing effectiveness. Local ATC and other persons or organisations involved are consulted in the review process.

The review is to be completed before the time of the year when low visibility is likely to occur.

Evidence of the review will be maintained by: Emergency and Operational Resilience Manager.

3.13 Disabled aircraft removal

3.13.1 Aircraft removal personnel

(Part 139 MOS – 11.13(e)(i)(ii))

The following person(s) have responsibilities for arranging the removal of disabled aircraft:

Name	Role	Phone number	After-hours phone number
Richard Barker	Chief Executive Officer	07 4080 6701	
Garry Porter	Chief Operating Officer	07 4957 0222	
Alicia Prince	Head of Airport Operations	0417 634 353	0417 634 353
~~Davy Semal~~Joseph Godolley	Aerodrome Operations Manager	**+61 477 701 857**~~0421 944 579~~	**+61 477 701 857**~~0421 944 579~~
Rob Keegan	Emergency and Operational Resilience Manager	0428 783 367	0428 783 367
Mark Musumeci	Aerodrome Operations Supervisor	0435 697 047	0435 697 047
Bruno Fogale	Aerodrome Safety Officer	Car 16 - 0412 773 065 Car 17 - 0402 027 732 Car 18 (B & W) - 0400 752 293 WSO - 0427 880 154	
Craig Tatlow	Aerodrome Safety Officer		
Shane Porter	Aerodrome Safety Officer		
Jamie Hughes	Aerodrome Safety Officer		
Liam West	Aerodrome Safety Officer		
Leonard Talbot	Aerodrome Safety Officer		

Steve Harris	Aerodrome Safety Officer		
Lucy Friend	Environment Manager	0400 899 342	0400 899 342

3.13.2 Aircraft removal – aerodrome operator & aircraft certificate holder

(Part 139 MOS – 11.13(a))

The registered owner or aircraft operator has complete responsibility for removing their aircraft should it become disabled. All airline operators are therefore expected to have aircraft recovery plans which identify any special equipment that may be necessary.

Cairns Airport coordinates the aircraft recovery operation to ensure that the disabled aircraft is removed in a timely and efficient manner.

Removal of damaged aircraft may be subject to clearance of Australian Transport Safety Bureau and other investigating teams.

Although the aircraft owner is responsible, Cairns Airport may, where necessary, initiate salvage action when:

- there is a serious and imminent threat or hazard to other aircraft, vehicles or personnel on the movement area
- the aircraft operator refuses to move a disabled aircraft, or neglects to do so within a reasonable time.

In these instances, Cairns Airport accepts no responsibility for any loss or damage of any kind resulting from this action, and the aircraft operator shall be held responsible for all costs incurred.

Once a runway is negatively impacted (unavailable), or a reduction in operating length is required, a NOTAM is to be issued in accordance with section 3.1 of this manual.

Appropriate visual aids are deployed, when necessary, to mark unserviceable portions of the aircraft movement area by the Aerodrome Safety Officer.

3.13.3 Notifying aircraft certificate holder

(Part 139 MOS – 11.13(b))

The pilot of a disabled aircraft is expected to notify the holder of the aircraft's certificate of registration in the first instance.

If the pilot is not available or is unable to notify the certificate of registration holder, the required notification is to be issued by the Cairns Airport delegated representative.

If the certificate of registration is not known to Cairns Airport, details are to be obtained from the pilot, if possible, or if available, from the CASA website via: *https://www.casa.gov.au/aircraft/civil-aircraft-register*

3.13.4 Liaising with the ATSB, Defence and ATC

(Part 139 MOS – 11.13(c))

As Cairns Airport is a controlled aerodrome, the pilot is expected to confirm with Air Traffic Control that they are aware of the disabled aircraft.

The ATSB will be notified immediately of an occurrence that requires their involvement.

3.13.5 Equipment and person(s) to remove aircraft

(Part 139 MOS – 11.13(d))

The holder of the aircraft's certificate of registration is expected to provide, by the fastest means possible, any specialised equipment and personnel required to remove a disabled aircraft.

Prior to engaging recovery assistance from Cairns Airport, the aircraft operator is required to indemnify Cairns Airport from any adverse consequence resulting from any activities during the recovery process.

Cairns Airport is to advise the aircraft operator of the contacts of any commercial crane operators that may assist in providing equipment for the removal of disabled aircraft.

3.14 Aerodrome safety management

3.14.1 Safety management system (SMS)

(Part 139 MOS – 11.09(1); 25.02; 25.03; 25.04)

As the aerodrome has scheduled international air transport operations, an SMS that meets the requirements of section 25.04 of the Part 139 MOS has been prepared and implemented. The SMS is:

- Maintained by: the Aerodrome Operations Manager
- Available on: the Cairns Airport’s electronic filing system – Sharepoint.

3.14.2 Risk management plan

(Part 139 MOS – 11.09(2); Chapter 26)

As the aerodrome has 50,000 or more air transport passenger movements, or 100,000 or more aircraft movements in a financial year, an SMS has been prepared and implemented. The procedures to manage risk are contained in the SMS framework.

4 Aerodrome Emergency Response

4.1 Emergency response personnel

(Part 139 MOS – 11.12(2)(a)-(e))

The following individuals or positions have responsibilities in an aerodrome emergency response:

Individuals / positions	Responsibilities
Emergency and Operational Resilience Manager	Maintaining aerodrome emergency response procedures
Emergency and Operational Resilience Manager	Notifying procedures to initiate an emergency response
ATC/Duty Airport Coordinator	Initiating emergency response actions by aerodrome personnel
CEO/Chief Operating Officer	Returning the aerodrome to operational status after an emergency
Emergency and Operational Resilience Manager	Reviewing the aerodrome emergency plan

4.2 Aerodrome emergency response

(Part 139 MOS – 11.12; Chapter 24)

4.2.1 Aerodrome emergency plan (AEP)

(Part 139 MOS – Chapter 24)

An AEP that meets the requirements of section 24.02 of the Part 139 MOS has been established and implemented. The aerodrome emergency plan is:

- Maintained by: Emergency and Operational Resilience Manager
- Cairns Airport makes this manual available to all relevant persons on our website. Access is also available to staff on our intranet.

4.2.2 Local / state emergency response plan

(Part 139 MOS – Chapter 24)

An AEP has been established and implemented at Cairns Airport; therefore, this subsection is NOT APPLICABLE.

4.3 Aerodrome emergency procedures

4.3.1 Aerodrome emergency committee

(Part 139 MOS – 11.12(1)(a)(i))

An aerodrome emergency committee has been established at Cairns Airport. The position of each member on the aerodrome emergency committee is recorded in the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

The responsibility of the aerodrome emergency committee is to ensure an appropriate and commensurate response in the event of a real emergency. The aerodrome emergency committee has assisted in:

- preparing and maintaining the aerodrome emergency plan
- planning the emergency response arrangements, including emergency preparation, testing and exercising the aerodrome's emergency plan.

The aerodrome emergency committee conducts a review of the aerodrome emergency plan following a test, an exercise, a real activation of the plan, or at least once annually.

Records of each review will be:

- Maintained by the: Emergency and Operational Resilience Manager
- Available on: the Cairns Airport's electronic filing system – Sharepoint.

4.3.2 Emergency service organisations

(Part 139 MOS – 11.12(1)(a)(ii))

Descriptions of the roles of each emergency service organisation involved in the Cairns Airport AEP are recorded in the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.3.3 Local emergency planning arrangements

(Part 139 MOS – 11.12(1)(a)(iii))

To ensure a coordinated response, the following procedures are followed when liaising with authorised person(s) responsible for local emergency planning arrangements:

Procedures for liaison with the authorised person responsible for local emergency planning arrangements are detailed the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.3.4 Notification and initiation of emergency response

(Part 139 MOS – 11.12(1)(a)(iv); 24.04)

Notification of an emergency will be made without delay.

To ensure agencies respond appropriately, it is important that all information known about the emergency is relayed as accurately as possible. The following information is to be relayed as applicable:

- exact location of the incident (including location details and map references etc.)
- nature of the incident
- type of aircraft
- estimated time of arrival of the aircraft involved and the runway to be used (if applicable)
- number of persons on board (including passengers and crew)
- presence of hazardous materials including dangerous goods
- any other relevant information.

To assist responding emergency agencies, location details and / or maps of the aerodrome and its immediate vicinity have been provided. The location details and / or maps show:

- primary and secondary access points
- emergency assembly areas
- aerodrome hazards.

The location details and / or maps are available in the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.3.5 Activation, control and coordination of emergency responders

(Part 139 MOS – 11.12(1)(a)(v))

Procedures for activation, control and coordination of aerodrome-based emergency responders during the initial stages of an emergency at Cairns Airport are detailed in the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.3.6 Aerodrome emergency facilities

(Part 139 MOS – 11.12(1)(a)(vi))

The facilities that are available at the aerodrome in the event of an emergency, and their procedures for use, are detailed in the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.3.7 Access and management of assembly areas

(Part 139 MOS – 11.12(1)(a)(vii))

The procedures for access and the management of assembly areas are detailed in the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.3.8 Response to a local stand-by event

(Part 139 MOS – 11.12(1)(a)(viii))

The procedures to respond to a local stand-by event are detailed in the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.3.9 Initial response to full emergency

(Part 139 MOS – 11.12(1)(a)(ix))

The procedures to respond to a full emergency at, or in the immediate vicinity of the aerodrome, are detailed in the Airport Emergency Plan (AEP) for Cairns Airport.

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.4 Readiness of emergency facilities, access points & assembly areas

(Part 139 MOS – 11.12(1)(b))

Aerodrome emergency facilities, access points and assembly areas are detailed within the Aerodrome Emergency Plan and are maintained in a state of readiness through Cairns Airports Maintenance Management System (MEX)

This is a subsidiary document to this is manual and is available on: the Cairns Airport's electronic filing system – Sharepoint.

4.5 Emergency responder preparedness

(Part 139 MOS – 11.12(1)(c))

4.5.1 Site inductions for emergency responders

(Part 139 MOS – 11.12(1)(c)(i))

The aerodrome has an aerodrome emergency plan; therefore, this subsection is NOT APPLICABLE.

4.5.2 Emergency response training

(Part 139 MOS – 11.12(1)(c)(ii))

To ensure airport personnel and off-aerodrome responders are adequately trained in responding to an emergency, an initial and ongoing cyclic training programme has been established.

A register of training activities is:

- Maintained by the: Emergency and Operational Resilience Manager
- Available on: the Cairns Airport's electronic filing system – Sharepoint

4.5.3 Emergency exercises

(Part 139 MOS – 11.12(1)(c)(iii))

A full-scale emergency exercise is conducted at intervals not exceeding two (2) years. Partial emergency exercises are held in each intervening year.

Following each exercise, a debrief is held to obtain feedback from volunteers and responding organisations. Records of these reviews are:

- Retained by the: Emergency and Operational Resilience Manager
- Available on: the Cairns Airport's electronic filing system – Sharepoint

4.6 Post-emergency return to operational status

(Part 139 MOS – 11.12(1)(d))

Aircraft operations will only be resumed when:

- circumstances permit aircraft to operate safely
- the airport movement area is secured
- there is no interference to emergency response activities
- all stakeholders are aware that the emergency response has been formally stood down, or a plan has been established to recommence operations while phases of the emergency response have not been finalised.

If the aerodrome has been closed due to the occurrence of an emergency, normal aircraft operations are not to resume until there are adequate aerodrome personnel available to support the resumption of operations, and trained aerodrome personnel have:

- conducted an inspection of the movement area making sure that the runway and taxiway surfaces are free of hazards that may cause damage to aircraft
- provided confirmation that the movement area is serviceable and safe to resume normal aircraft operations
- ensured that areas which remain closed are suitably marked and lit to distinguish their unserviceability
- completed an assessment that any operational equipment on or near the aerodrome as part of the emergency response does not infringe the prescribed airspace (OLS or PANS-OPS)
- if a displaced threshold is required, all components of the OLS will be assessed based on the displaced threshold location
- ensured the accuracy of information published in NOTAM.

Where the emergency is confined, operations are only able to resume under restricted conditions. Cairns Airport Pty Ltd ensures all hazards are identified and appropriately assessed prior to the commencement of restricted operations. In completing this assessment and to ensure the ongoing integrity of CNS and MET equipment, communication navigation and surveillance systems specialists are consulted by the Aerodrome Operations Manager or delegate.

The ATSB is to be consulted as they may require the preservation of evidence which may affect the return of part, or all of the movement area, to service.

4.7 Reviews of aerodrome emergency plan (AEP)

(Part 139 MOS – 11.12(1)(e); 24.05(2))

The aerodrome emergency plan is to be reviewed:

- following a test or exercise
- after the occurrence of a real emergency that requires activation of the aerodrome emergency plan
- at least once annually.

Documented evidence of each review is:

- Retained by the: Emergency and Operational Resilience Manager
- Available on: the Cairns Airport's electronic filing system – Sharepoint

4.8 Monitoring local emergency planning arrangements

(Part 139 MOS – 11.12(1)(e))

The aerodrome has an AEP; therefore, this section is NOT APPLICABLE.