MACKAY AIRPORT
AERODROME MANUAL

Reference No: 9000MKY

Version 11

26 Feb 2021

ACN 132 228 534

PART 0

SECTION 01 FOREWORD

Mackay Airport Pty Ltd owns and manages Mackay Airport which includes all airside and landside operations, terminals, car parking and associated land holdings and is part of the North Queensland Airports (NQA) group.

NQA is owned by a consortium comprising of IIF Cairns Mackay Investment Ltd (an entity advised by JP Morgan Asset Management), The Infrastructure Fund (TIF) and Perron Investments.

NQA

Health, Safety, Security & Environment Policy

NQA will operate in a safe, secure and environmentally responsible way.

We will:

- Foster and maintain a culture of safe, secure and environmentally responsible practices that demonstrate "safety leadership at work" and nurture a "work safe, home safe" ethos;
- Manage our aerodromes safely and securely;
- Eliminate or minimise hazards and risks to health and safety, aviation safety, security and the environment as far as is reasonably practicable;
- Structure financial delegations to ensure our people are provided with resources, ongoing training and support so that they have the equipment, knowledge, skills and competency to work safely, securely and environmentally responsibly, and appropriate supervision to ensure that they do;
- Consult with and involve our people on matters relating to health and safety, aviation safety, security and the environment;
- Respond to and investigate incidents and emergencies in an appropriate and timely manner, and document and use finding to reduce hazards and risks;
- Set and review measurable objectives and targets;
- Meet and, where practicable, exceed the requirements of legislative obligations and industry standards;
- Conduct internal and external audits to identify improvements in health and safety, aviation safety, security and environmental management;
- Promote a just culture relating to incident reporting and investigations where the focus is on continuous improvement not blame.

Our people will contribute to a safe, secure, sustainable and incident-free work environment by:

- Taking care of the health and safety of themselves and others, of security and of the environment;
- Participating in training and other activities to ensure they have the knowledge, skills and competency to work safely, securely and environmentally responsibly;
- Following safe work procedures, instructions and rules;
- Reporting hazards, near misses, incidents and injuries in a timely manner;
- Actively participating in risk assessments, audits, investigations and other activities to reduce hazards and risks.

Richard Barker
Chief Executive Officer

For quality control purposes, this document is only valid on the day it is printed. Official versions are stored on the intranet.
This copy was last saved: 25/02/2021, last printed: 25/02/2021
4538_PC_NQA Health Safety Security and Environment Policy Effective Date: 25/02/2021 Review Date: 24/02/2022

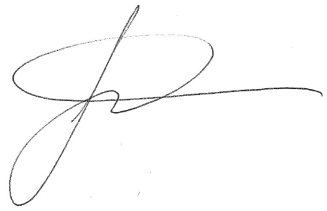
The *Aerodrome Manual* contains details of the airside operating procedures that we importantly need to adopt to ensure the safety and viability of our airport. The *Aerodrome Manual* also satisfies our legal obligations under the Civil Aviation Safety Regulations (CASR) Part 139, in particular CASR 139.090. Any items under CASR 139.0959(a) that are not applicable to Mackay Airport, are not included within this manual. Mackay Airport is transitioning to its Aerodrome Manual line with Part 139 (Aerodromes) Manual of Standards 2019.

Mackay Airport has received written approval from CASA for the *Aerodrome Manual* to consist of more than one document. All separate documents referenced throughout this manual are readily available from Mackay Airport and each staff member is responsible for ensuring that they can access these documents.

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

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

Issued under the Authority of:



Garry Porter – Head of Aviation

Mackay Airport Pty Ltd **ACN 132 228 534** **26 February 2021**

PART 0	FOREWORD, CONTENTS AND INTRODUCTION
SECTION 02	CONTENTS

NOTES ON PLANS INCLUDED IN THIS MANUAL

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

All such plans carry a title, plan number and revision date. For ease of production and printing, this manual generally contains reduced size copies of these plans. Copies may be obtained upon request.

PART 0	FOREWORD, CONTENTS AND INTRODUCTION
SECTION 03	DOCUMENT CONTROL RECORDS

Reference Number	Version	Status	Sponsor	Author
9000MKY	10	Approved	Head of Aviation	Manager Aviation Operations

Amendments

Version Number	Revision Date	Affected Pages	Inserted by	Date Inserted
3	May 2015	Complete review of manual as recommended from an ATI.	AAO	May 2015
4	October 2015	Review of Manual with minor amendments	AAO	October 2015
5	February 2016	Review of Manual with minor amendments	AAO	February 2016
6	November 2016	Review of Manual with minor amendments (namely RWY 05/23 references removed & update of Diagrams.	AAO	November 2016
7	November 2017	Changed title of document from Airport Operations Manal to Aerodrome Manual, updated NQA & Mackay Airport Organisational Charts, inserted YBMK 14/32 VNAV Surface Charts, Part 175D wording inserted and ERSA updates. Updated Health, Safety, Security and Environment Policy & amended position title names. Updated WGA Apron Parking Plan.	AAO	March 2018
8		• General amendments: - NQA ownership wording - Aerocare to Swissport - Shell to Viva - GM to Acting GM Adrian Miles - Various contact details • Part 2 S1 - Org charts updated - Dept. of IRD to Department of Home Affairs - Addition to Deviations – TXY lighting • Part 2 S3; 3.8 –Racecourse Mill Smoke Stack & Ergon Tower contacts • Part 2 S8 Attachment A – addition of Helicopters New Zealand (HNZ) • Part 2 S9 Annex D - diagrams 01 (YBMK13AV01)	AAO	22 February 19

Amendments				
Version Number	**Revision Date**	**Affected Pages**	**Inserted by**	**Date Inserted**
		& 03 (YBMK13AV02) & replaced with 01 16-921. • Part 3 S1 - Aerodrome geographic coordinates as per AIC H29/18 - Supplementary take-off distances		
9	20/02/2020	• Part 0 S1 – Health, Safety, Security & Environment Policy • Part 1 S2 – Telephone list updated • Part 2 S1.3.4 – Deviations - TXY lighting non-conformance - Aerodrome Beacon non- conformance • Part 2 S3.8 – New Telstra contact for Mt Oscar • Part 2, S11.2.3 Typo • Part 2 S14 – Updated Australian Standard to AS1940 2018 • Part 2 S14.3.3 – Updated guidelines CAAP 891-1(2) to AC139-12 (0) • Part 3 S1 - TODA & supplementary take-off distances updated - Addition of RWY 14 approach obstacles	MAO	20 February 20
10	15/06/20	• Part 0 S3 Change to structure GM role replaced by Head of Aviation (NQA) • Part 0 S4 Changing to electronic version of Aerodrome Manual on Website with password control. • Part 1 S2 Aerodrome Facilities Plan updated • Part 1 S3 New Aerodrome Certificate • Part 1 S4 Updated Mackay Airport and NQA Org Charts • Part 2 S1.3.4 Deviations. • Added RPA reference to RWY Strip Width and RESA • Added Additional Safety Measures regarding Inner Edge for OLS Approach Surface. • Annex D 02- Western GA Apron Parking Plan updated • Annex D 03- Eastern GA Pavement Marking Plan updated. • Part 3 S14.32 Added diagram showing Location of Hydrocarbon Storage. • Part 3 S01 Surface Movement Guidance moved MAG reference into that are.	MAO	15 June 2020

Amendments				
Version Number	**Revision Date**	**Affected Pages**	**Inserted by**	**Date Inserted**
		• Moved items listed as Aerodrome Approach Obstacles to Aerodrome Obstacles • Removed RWY and Vis Aid sections as information repeated. • Part 3 S1TODA & supplementary take-off distances updated		
11	26/02/21	• Part 0 Forward. Added that, Mackay Airport is transitioning to its Aerodrome Manual line with Part 139 (Aerodromes) Manual of Standards 2019. • Part 0 S1 update Heath, Safety, Security & Environment Policy. • Part 0 S4 update approval for Aerodrome Manual to consist of more than one documents. • Part 1 S2 Aerodrome Facilities Plan updated • Part 1 S4 Updated Mackay Airport and NQA Org Charts • Part 2 S1 updated titles and contact details and removed Fax numbers • Part 2 S1.3.4 Deviations. Transition to Part 139 (Aerodromes) Manual of Standards 2019 And delay to Full Aerodrome Emergency Exercise. • Part 2 S3.8 Title and contact detail changes. • Part 2 S4.3.2 Title and contact detail changes. • Part 2 S5 Changed Airport Classification from Category 3 to Tier 2. • Part 2 S8 Annex C updated Title and contact detail changes. • Part 2 S11.4.3 Damage Mitigation Permit changes. • Part 2 S14 updated Location of Hydrocarbon Storage diagram to included Airservices Facilities. • Part 2 16.2.3 updated appointed Runway Visibility Assessors • Part 3 S1 removed fax number from General information. • Part 3 S1 Aerodrome Lighting and Approach Lighting. Have requested AIP to reword to AFRU+PAL. • Part 3 S1 Additional Information section amended request to AIP for Bird and animal hazards.	MAO	26 June 2021

PART 0	FOREWORD, CONTENTS AND INTRODUCTION
SECTION 04	CONTROLLED COPY DISTRIBUTION LIST

In accordance with MOS 139.100, Mackay Airport maintain the following copies of the Aerodrome Manual in printed form as a controlled copy:

Copy No.	Holder
Electronic	Access provided via Mackay Airport website password protected.
Master	Electronic copy on Mackay Airport Intranet and website – Maintained as a Controlled Copy

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

Note: The Mackay Airport *Aerodrome Emergency Plan* (*AEP*) is a separate controlled document, published and distributed independently of the *Aerodrome Manual*. Please see email authority from CASA below.

Australian Government
Civil Aviation Safety Authority

AIR NAVIGATION, AIRSPACE AND AERODROMES BRANCH

25 June 2020

MACKAY AIRPORT PTY LTD
Boundary Road
MACKAY QLD 4741

Email: garry.porter@mackayairport.com

Dear Mr Porter,

RE: Approval CASA.ADMAN.0095 MACKAY Aerodrome Manual

I refer to your application for approval dated 25 June 2020 requesting approval for the Aerodrome Manual to consist of more than one (1) document.

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

- Airside Vehicle Control Handbook and Airside Drivers Pocketbooks;
- Aerodrome Emergency Plan;
- Safety Management System;
- Standard Operating Procedures;
- Severe Weather and Cyclone Plan;
- Terminal Evacuation Supporting Plan; and
- Wildlife Hazard Management Plan.

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

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

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

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

GPO Box 2005 Canberra ACT 2601 Telephone 131 757

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

Yours faithfully,

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

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

Particulars of Title and Locality Map

Aerodrome Name: Mackay

The Real Property Descriptions:

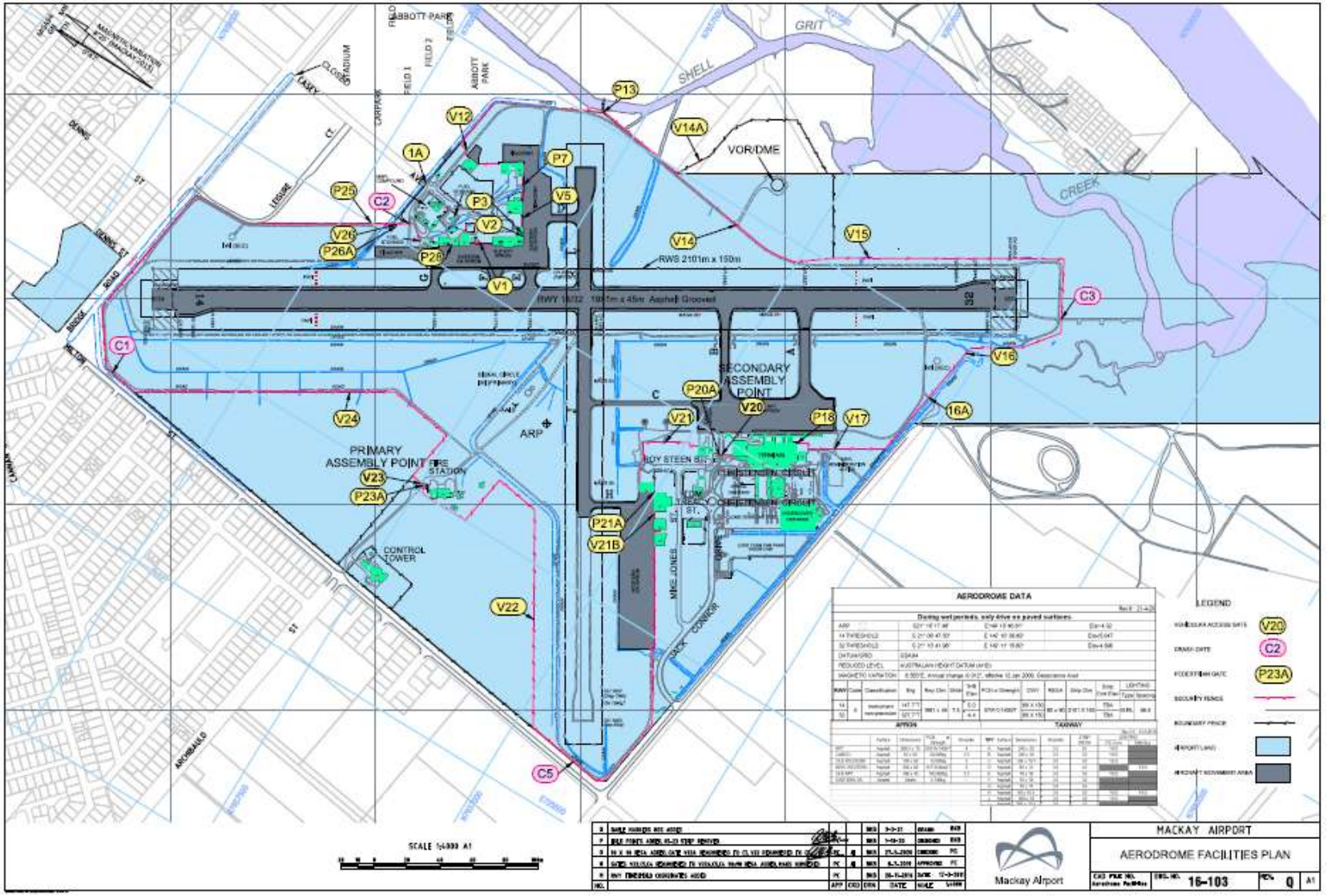
Lot 1 on RP 711078	Lot 3 on RP 723311
Lot 1 on RP 713704	Lot 3 on RP 842090
Lot 1 on RP 723311	Lot 19 on SP 145073
Lot 1 on RP 842090	Lot 381 on RP 711085
Lot 2 on RP 723311	Lot 405 on CP 842088
Lot 2 on RP 842090	Lot 443 on RP 724222

LOCALITY MAP

Mackay Airport is located approximately 3km south of the Mackay CBD.

PART 1 AERODROME INFORMATION

SECTION 02 AERODROME FACILITIES PLAN



Australian Government
Civil Aviation Safety Authority

AERODROME CERTIFICATE

Certificate Number: CASA.ADCERT.B095

This aerodrome certificate is granted pursuant to regulation 139.035 of the *Civil Aviation Safety Regulations 1998* (CASR) to:

MACKAY AIRPORT PTY LTD

ABN: 74619 ACN: 132 228 334

to operate the following aerodrome:

MACKAY (YBMK)

This 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 02 June 2020, and remains in force until cancelled, except during any period in which it is suspended.

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

Delegate of the Civil Aviation Safety Authority

2 June 2020

Conditions

Conditions applicable to Aerodrome Certificate CASA.ADCERT.B095

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

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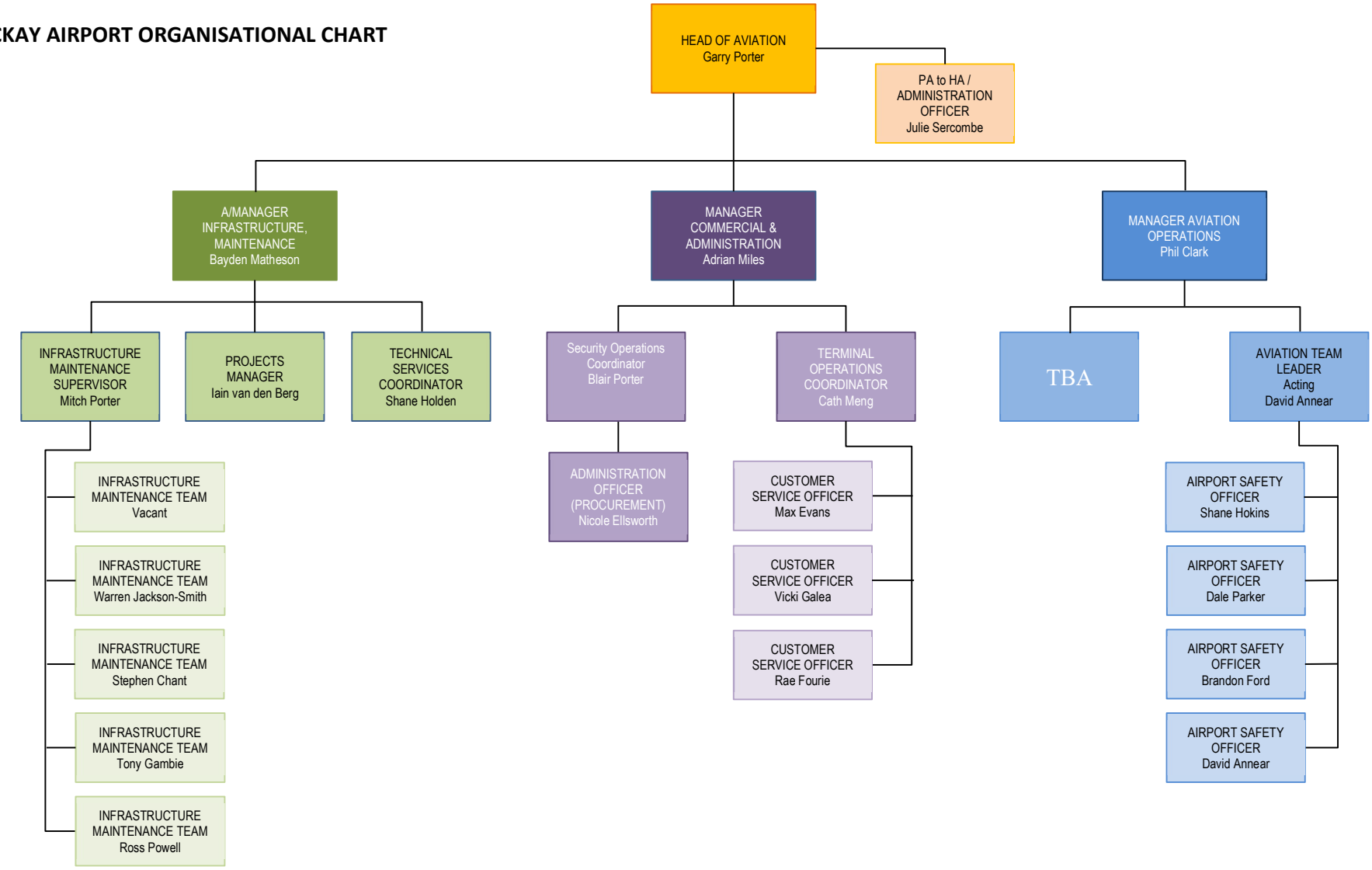
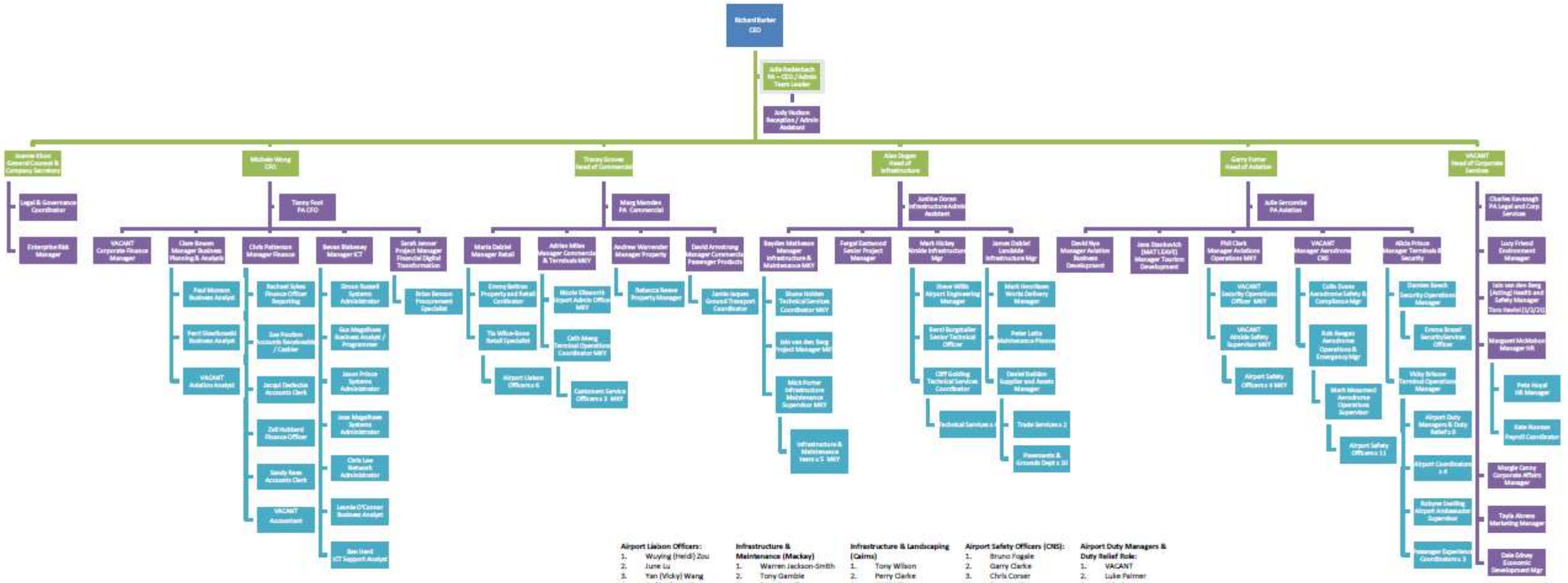
CIVIL AVIATION SAFETY AUTHORITY

MACKAY AIRPORT ORGANISATIONAL CHART



NQA ORGANISATIONAL CHART



Airport Liaison Officers:
1. Wuying (Heidi) Zou
2. June Lu
3. Yan (Vicky) Wang
4. Su (Sue) Hua Ou
5. Hiroe Glasser
6. Vishakha Sholapurkar

Customer Service Officers (MKY)
1. Vicki Galea
2. Rae Fourie
3. Max Evans

Infrastructure & Maintenance (Mackay)
1. Warren Jackson-Smith
2. Tony Gamble
3. Ross Powell
4. Stephen Chant
5. VACANT

Technical Services (Electrical)
1. Russell Hurst
2. Matthew Lamont
3. Rohan Sparkes
4. Rodney Taylor

Infrastructure & Landscaping (Cairns)
1. Tony Wilson
2. Perry Clarke
3. VACANT
4. John Paul
5. Joe Rees
6. VACANT
7. Richard Coombes
8. George Woodley (L)
9. Donna Russell (L)
10. Scott Clark (L)

Trade Services
1. VACANT
2. Brock Blah

Airport Safety Officers (CNS):
1. Bruno Fogale
2. Garry Clarke
3. Chris Corser
4. Tom Herd
5. Shane Porter
6. Matt Baker
7. Jamie Hughes
8. Liam West
9. Craig Tetlow
10. Steven Harris
11. Leonard Talbot

Airport Safety Officers (MKY)
1. Shane Hoskins
2. Brandon Ford
3. Dale Parker
4. David Annear

Airport Duty Managers & Duty Relief Role:
1. VACANT
2. Luke Palmer
3. Kyle Bowen
4. Tracey Lobert
5. Caitlin Norris
6. Martine Baker
7. Scott Robinson (DRR)
8. Ben Rodda (DRR)

Airport Coordinators (CNS):
1. David Lang
2. Andrew Belczacki
3. Brian Nash
4. Michael Ferry

Passenger Experience Coord:
1. June Lu
2. Roger Snelling
3. Robyne Snelling

PART 2 AERODROME ADMINISTRATION AND OPERATING PROCEDURES

SECTION 01 AERODROME CONTACT NUMBERS

MACKAY AIRPORT – TELEPHONE CONTACT NUMBERS

POSITION	NAME	CONTACT NUMBER
Head of Aviation	Garry Porter	0417 413 853
Manager Aviation Operations	**Philip Clark**	**0407 570 208**
Manager Infrastructure and Maintenance	Bayden Matheson	0434 738 810
Manager Commercial and Terminals	Adrian Miles	0401 565 396
Aviation Team Leader	David Annear (Acting)	0418 570 232
Duty Airport Safety Officer		**0418 570 233**
Duty Customer Service Officer		**0434 607 658**
Infrastructure Maintenance Supervisor	Mitch Porter	0413 153 750
Technical Services Coordinator	Shane Holden	0417 062 708
Project Manager	Iain van den Berg	0466 851 791
Airport Switchboard (Reception)		07 4957 0201
NQA Corporate Affairs Manager	Margie Canny	0466 721 536

Environmental Manager	Lucy Friend	0400 899 342
Emergency Electrical Contractor Revolution Electrical		0407 788 758 0400 152 976

REGULATORY AUTHORITIES		
NOTAM Office	Phone: Fax:	02 6268 5063 02 6268 5044
CASA National Switchboard	Phone:	131 757
Australian Search and Rescue Coordination Centre (Aviation)	Phone:	1800 815 257

AIRSERVICES AUSTRALIA		
Airservices Australia Control Tower	Phone: Fax:	07 4951 8431 07 4957 8491 07 4951 8439
ATC Supervisor	Mobile:	0427 113 385
ATC Brisbane	Phone:	07 3866 3224

QUEENSLAND POLICE SERVICE		
Emergency	Phone:	000
Executive Officer - District Disaster Management Group	Phone:	0428 710 795
Mackay Police Station	Phone:	07 4968 3444

AIRLINES & GROUND HANDLING AGENCIES		
Swissport – Virgin Australia	Phone:	07 4952 3355
	Mobile:	0437 884 740
Swissport – Qantas/Jetstar	Phone:	07 4969 3500
	Mobile:	0429 879 705
Alliance – Ground Operations and Compliance Manager	Phone:	07 3212 1540
	Mobile:	0418 880 626
CQ Rescue – Administration & Asset Maintenance Coordinator	Mobile:	0400 124 379
Cobham – Operations Controller	Phone:	08 8154 5666
QantasLink – Emergency Recovery Coordinator	Phone:	02 9691 0845
Qantas Mainline - Operations	Phone:	02 9691 1964
Jetstar – Senior Dispatch Coordinator	Phone:	03 8628 3561
	Mobile:	0437 400 683
Virgin Australia – Network Integrity	Phone:	1800 500 777

CALL SIGNS FOR AIRPORT STAFF		
STAFF IDENTITY	**CALLSIGN (VEHICLE ID)**	**CONTACT**
Airport Administration & Maintenance Staff	(Christian name)	UHF
Airport Office	BASE	UHF
Safety Officers' Office	OPERATIONS	UHF
Airport Safety Officer	CAR 1 or 2	124.5MHz/121.7MHz/VHF
Aviation Team Leader	CAR (Car 1 or 2)*	124.5MHz/121.7MHz/VHF
Manager Aviation Operations	CAR 8	124.5MHz/121.7MHz/VHF
Infrastructure Maintenance Supervisor	CAR 4	124.5MHz/121.7MHz/VHF
Electrical Contractor	CAR 3	124.5MHz/121.7MHz/VHF
Infrastructure Maintenance	CAR 7	124.5MHz/121.7MHz/VHF
Infrastructure Maintenance Truck	CAR 9	124.5MHz/121.7MHz/VHF

UHF: A fixed frequency radio for staff inter-communication. UHF Base Station located in the Administration and ASO offices.

* Example: if using Vehicle 2, then call sign CAR 2, if Vehicle 4, then CAR 4.

- **Tower** Frequency is 124.5MHz
- **Ground** Frequency is 121.7MHz

- **Approach** Frequency is 125.65MHz

1.1 OPERATION OF MACKAY AIRPORT

Mackay Airport shall be operated in accordance with procedures contained in the Mackay Airport *Aerodrome Manual* and in accordance with Civil Aviation Safety Regulations 1998 Part 139 Aerodromes (CASR 139). Mackay Airport is transitioning to its Aerodrome Manual line with Part 139 (Aerodromes) Manual of Standards 2019. Mackay Airport is also a Security Controlled Airport regulated under the Aviation Transport Security Act 2004.

Manual of Standards Part 139 Aerodromes (MOS 139) and Part 139 (Aerodromes) Manual of Standards 2019 contains the standards and specifications that must be applied at Mackay Airport to enable it to comply with CASR 139.

If a procedure must be deviated from in order to ensure the safety of aircraft, the officer initiating the deviation must advise the MAO at the earliest opportunity.

When advised of a deviation from these procedures, initiated to ensure the safety of aircraft, the MAO or representative must:

- Advise the CASA District Airport Inspector within 30 days of the deviation occurring;
- Review the relevant procedure to determine if an amendment to the procedure is required, or if some other action is required (e.g. training). The deviation may also be a one-off event where no further action is required.

The MAO shall ensure that:

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

1.2 POSITION RESPONSIBILITIES & ROLES

1.2.1 Head of Aviation (HA)

- Provide advice to the CEO on the strategic direction of the airport through the development of business plans that contribute to corporate objectives.
- Develop operational performance measures and guide the implementation of industry best practice.
- Ensure the operational integrity of the airport through compliance with all relevant legislative obligations, including compliance with the Aerodrome Manual.

- Provision of funding and resources for the operation of the airport.

1.2.2 Manager Aviation Operations (MAO)

- Is responsible for aerodrome operations, the safety functions and the day-to-day running of the aerodrome.
- Ensures that all personnel are trained in accordance with the standards for training aerodrome personnel set out in MOS 139 Section 10.1.3
- Ensures that the aerodrome facilities and equipment are planned, constructed, installed and maintained in accordance with the MOS 139 Standards.
- Ensure that all airport plans and drawings are kept up to date and that any new updates to Aerodrome Manual plans are provided to the Aerodrome Manual Controller for distribution and notification to all holders.
- Ensures the operational integrity and safety of the airport through compliance with all relevant legislative and corporate obligations including coordination of technical and serviceability inspections.
- Ensures that the operations team members actively contribute to the improvement of the airports operation, safety and maintenance systems.
- Ensures that procedures are in place for the formal commissioning of new or repaired lighting systems as described in MOS 139 Section 9.1.15.
- Coordinates the development, implementation and review of the Mackay Aerodrome Manual to ensure compliance with statutory requirements.
- Responsible for providing timely and accurate aeronautical data and information to AIS providers (Airservices Australia) for publication in the AIP.
- In accordance with MOS 139.110, the MAO will advise CASA in writing of any amendment to the Aerodrome Manual within 30 days after the amendment is made. If a deviation is made to ensure the safety of aircraft operations, the deviation shall be reported to CASA within 30 days of the event causing the deviation.
- Responsible for implementation and enforcement of noise abatement procedures and wildlife hazard management.
- Ensures pavement evaluations, pavement repairs and airport drainage inspections are undertaken by a suitable qualified person.
- Responsible for provision and revision of all planning documentation, including the OLS, airport facilities, apron parking, electrical and engineering services.
- Responsible for Emergency Planning and the Transport Security Plan
- Has responsibilities under the Aeronautical Information Management - Part 175D

1.2.3 Aviation Team Leader (ATL)

- Monitors the safety of the aerodrome by regular safety inspections to identify any breaches or areas of concern, taking remedial action to rectify deficiencies in aerodrome safety standards.

- Conducts regular safety inspections and compile records and reports for the MAO which will satisfy the requirements of the CASA annual audit.
- Maintains liaison with Air Traffic Control, airlines and other aerodrome users in respect of airport works and serviceability.
- Monitors and maintains the safety of the aerodrome Obstacle Limitation Surfaces clearances.
- Maintains and implements an effective wildlife control programme
- Assists the MAO in reviewing, developing and implementing new Airside Driving Licence training and procedures.
- Assists the MAO in monitoring, reviewing, updating and implementing new procedures applicable to the Aerodrome Manual.
- Issues Notices to Airmen (NOTAMS) as required and monitors the currency of NOTAMS.
- Fulfils Reporting Officer functions at Mackay Aerodrome.
- Fulfils the roles required by the Mackay Aerodrome Emergency Plan and the Disabled Aircraft Removal Plan and maintains emergency equipment. This includes but is not limited to assist with preparation and co-ordination of emergency tabletop and field exercises, debriefs and familiarisations of external emergency response agencies.
- Co-ordinates all functions of aviation ramp safety and security at Mackay Aerodrome to ensure that aviation regulations and requirements are complied with for the safety of airport users.
- Develops safe work procedures in line with industry practice for persons operating on the ramp and baggage make-up areas.
- Ensures compliance by Freight and Ground handling agents with all relevant airport conditions of use.
- Performs audits of training records, serviceability of ramp vehicles, Workplace Health & Safety, Foreign Object Damage, work procedures and competencies to operate various types of ground service equipment. Fulfils reporting officer functions at Mackay Aerodrome.
- Monitors airport security to ensure compliance with the Department of Home Affairs regulations by regular inspections to identify any breaches or areas of concern.
- Takes corrective action where breaches of security occur or acts on reports from contract security by utilising appropriate and effective communication with offenders or recommendations to security agencies or management.
- Conducts regular competency checks on Mackay Airport staff and contractors performing ASO or WSO functions.

1.2.4 Airport Safety Officer (ASO)

- Ensures the movement area is safe for aircraft operations by continual inspection of airside facilities, including lighting, and identifies reports and marks any unserviceability affecting aircraft operations.

- Maintains daily logs on all operational matters.
- Identifies dangerous practises or situations before an incident or accident occurs.
- Conducts perimeter security and SRA checks and supervision before and during RPT operations.
- Performs surveillance of operating practices to ensure they are conducted in accordance with relevant standards and regulations.
- Monitors the airports OLS for infringements.
- Implements Bird & Wildlife Management procedures, including conducting and recording daily bird counts.
- Performs the role of WSO when undertaking Time Limited Works.
- Emergency Response
    - Provides first response to an aircraft crash on or off airport within reasonable area and establishes command post as per Aerodrome Emergency Procedures – Mackay.
    - Provides first response to a security incident including possible activation of the Terminal Evacuation Plan.

1.2.5 Manager Infrastructure and Maintenance (MIM)

- Responsible for ensuring that the development of all airport works relating to pavements are carried out in accordance with adopted plans.
- Manages overall maintenance of airport infrastructure and the airfield.
- Ensure that electrical contractor performs the necessary technical inspections of all Aerodrome Ground Lighting systems as defined Mackay Airport Electrical Maintenance Manual and that the results and corrective measures are appropriately recorded.
- Provide advice to Head of Aviation and Mackay Airport internal departments on airport maintenance activities.
- Coordinate all maintenance of Runway, Taxiway and Apron pavements and aerodrome ground lighting and on other projects requested by Mackay Airport internal departments.
- Ensure that mowing strategies advised by MAO and MIM are carried out.
- Suitably maintain fences, drains, grassed and mangrove areas.
- Ensure that Mackay Airport Infrastructure and Maintenance Staff are trained and competent to perform required duties and refresher training is provided and ensure that period maintenance contractors and other users of Mackay Airport building services facilities are competent in their operation and maintenance.
- Ensure that terminal light and power including standby generating equipment and other building facilities and services are operated and maintained in accordance with prescribed standards.

1.2.6 Infrastructure Maintenance Supervisor

- Ensures upkeep, repair and safety of airport grounds, pavements, roads and landscaped and grassed areas.
- Ensure that the necessary technical inspections for compliance with standards and maintenance requirements of all aircraft pavements, line marking, grounds, and drainage are carried out and their results and corrective measures are appropriately recorded.
- Monitors all radio communication whilst on movement areas and ensures all directions from Air Traffic Control and Airport Safety Officers are complied with immediately.
- Performs the role of WSO when undertaking Time Limited Works.

1.3 CONDITIONS, EXEMPTIONS, DIRECTIONS AND DEVIATIONS.

1.3.1 Certification Conditions

There are no conditions, current at this time (Certificate attached end of section).

1.3.2 Exemptions

There are no exemptions current at this time.

1.3.3 Directions

There are no directions current at this time.

1.3.4 Deviations

The following table identifies facilities that do not comply with the MOS 139 standards. MOS 139 2.1.2 refers.

Applicable MOS Standard	Facility & Non-Compliance	Date of installation	Interim Safety Measures	Expected date of compliance with current Standards
Section 6.2.18 Runway Strip Width	Runway 14/32 strip width presently 150m in width. , MOS 139 Section 6.6.18.2 for Code 4 RWY requires 300m – Not practicable to achieve desired width.	1970	Future planning and projects based on 300m strip. Surveys completed to 300m.	Change not planned.

Applicable MOS Standard	Facility & Non-Compliance	Date of installation	Interim Safety Measures	Expected date of compliance with current Standards
	The Standards at the time of construction were Airport Engineering Instructions (APEI) 8.3.4 RPA Table 7-8 Runway Strip Width for Non-Precision Approach Runways, Code 4 "*Where it is not practicable to provide the full runway strip width, a minimum 150 m wide graded only strip may be provided, subject to landing minima adjustments*		Protection of the 300m strip is written into the Mackay Airport Land Use Plan 2014 also the Mackay Regional Planning Scheme.	
Section 7.1.3.4 Inner Edge	Runway 14/32 approach surface inner edge width for a code 4 aircraft is 300m unless used by aeroplane requiring 30mwide runway 150m strip.	1970	Future planning and projects based on 300m strip. Surveys completed for 150 and 300m. Additional safety measures currently in place include protection of the OLS from future infringement based on 300m Survey data to a 300m inner edge is provided to all RPT operators as an additional safety measure.	Change not planned.
Section 9.16.4.4	Eastern GA Apron Floodlighting, 5 lux required at parking positions.	unsure	Relocation aircraft to WGA where possible. Noted in ERSA	Change not yet planned due to review of GA operations on EGA.
Section 9.16.4.4	Western GA Apron Floodlighting, 5 lux required at parking positions.	Early 1990s	Remarked bays to maximise lighting. Noted in ERSA	2022 WGA area identified for development

Applicable MOS Standard	Facility & Non-Compliance	Date of installation	Interim Safety Measures	Expected date of compliance with current Standards
Section 9.13.2	Taxiway and EGA Apron lighting	Early 1990s	Noted in ERSA for pilots to exercise caution	2026 depending on review of GA operations on EGA.
Section 6.5.3	EGA some locations exceed slopes specified in MOS 139. This is to reduce accumulation of water.	1970's	Is noted in ERSA. Local operators use this area and are aware of level changes.	Change not yet planned due to review of GA operations on EGA.
Section 6.2.25	RESA non-conforming to MOS139 – 6.2.25 which requires a minimum RESA length of 90m commencing from the end of the Runway Strip. The width of RESA must be twice the runway width so in the case of RWY 14/32 shall be 90m wide. Previous standards allowed RESA to be measured from the Runway end. *Rules and Practices for Aerodromes 1999*: ○ *7.18.2 – In Australia, a RESA originates from the end of a runway, or stopway, if provided.* ○ *7.18.4 – The minimum length of the RESA is to be 90m where the associated runway is suitable for aircraft with a code number of 3 or 4 and is used by regular public transport jet aeroplanes.*	1990s	Future planning with Mackay Regional Council on road and drainage network in this area.	Mackay Regional Council currently in progress of possible redesigning road network in this area
Section 8.5.20	Keyhole marking. Additional stop bars provided on some bays.		Not all aircraft are marshalled on to position. The addition of stop bars are to ensure correct stopping position	

Applicable MOS Standard	Facility & Non-Compliance	Date of installation	Interim Safety Measures	Expected date of compliance with current Standards
Section 10.2	PAALC non-conforming to MOS 139 PAALC has additional non-compliant message at 5 minutes prior to end of lighting cycle	1990s	This will be removed when PAALC is replaced.	Change not planned
Section 9.13.8	Taxiway lighting – Alpha, Bravo & Echo	1990s	Whilst the longitudinal spacing of the taxiway lighting on Taxiways A, B and E does not meet the current requirements of CASA's MOS Part 139 12.1.1.2A, it is understood that the lighting complies with the standard applicable at the time of its installation, this being Guide to Airport Lighting Installations for Licensed Aerodromes and the Rules and Practices for Aerodromes.	Change not planned.
Section 9.5.1.6	Beacon generates 16 flashes per minute; MOS standard is 20 to 30 per minute.		Older beacons with a frequency of flashes in the range of 12 to 20 per minute are acceptable, until the next replacement or upgrade.	ASA have no plans to upgrade or replace
24.05 Part 139 (Aerodromes) Manual of Standards 2019	Mackay Airport was due to conduct a full aerodrome emergency exercise in October 2020. Mackay Airport is currently transitioning to the new Manual of Standards		Due to Covid 19 Mackay Airport self-reported to CASA that we would conduct a virtual Table Top exercise for social distancing reasons and plan to conduct a full exercise in May 2021. Transition requirements have been identified and planning is in place to meet the transition dates.	May 2021 if Covid 19 restrictions are lifted. By transition dates.

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

The Mackay Airport *Aerodrome Emergency Plan* (AEP) is a separate, controlled document, published and distributed independently of the Aerodrome Manual.

The Aerodrome Emergency Committee (AEC) has prepared the AEP in compliance with MOS 139 Sections 10.7 and 8.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 03	AERODROME LIGHTING

3.1 GENERAL

This chapter contains information relating to the procedures for the inspection and maintenance of the aerodrome lighting, including obstacle lighting and the supply of stand-by power. MOS 139 Chapter 9, 'Visual Aids Provided by Aerodrome Lighting', provides the basis for all new and existing lighting facilities at Mackay Airport. All lighting systems are planned, installed, commissioned and maintained in accordance with MOS 139 Standards.

Mackay Airport has produced its own *Electrical Maintenance Manual* which is a separate supporting document published independently of the *Aerodrome Manual*. The *Electrical Maintenance Manual* provides details of all lighting systems at Mackay Airport and how they are maintained. Copies are available on request from Mackay Airport.

Records relating to the commissioning of the airport lighting system are maintained in MEX.

3.2 EXISTING LIGHTING FACILITIES

3.2.1 Runway Lighting

Runway 14/32 is fitted with a medium intensity runway lighting (MIRL) system. The system has 3 stages of intensity.

3.2.2 Precision Approach Path Indicator (PAPI) System

Runway 14/32 is fitted with a PAPI system. Each system has 6 stages of brightness. PAPIs are 3.0 degrees at 53.3ft.

3.2.3 Taxiway Lighting and Holding Points

Taxiways A, B, E, J & H and are fitted with green and yellow centreline lighting and flush yellow holding point lights.

The activation of Runway 14/32 lighting also activates the lighting on taxiways A, B, E, H and J.

3.2.4 Illuminated Wind Indicator (IWI)

Three illuminated wind indicators are provided. All wind socks are coloured white.

3.2.5 RPT Apron Floodlighting

High mast floodlighting is provided on all RPT parking positions on the RPT Apron Area. The apron floodlights are activated by way of a photo-electric (PE) cell during hours of darkness or low visibility.

3.2.6 GA Apron Floodlighting

The Eastern and Western GA apron areas are partially lit by floodlights.

3.2.7 Aerodrome Frequency Response Unit (AFRU) + Pilot Activated Lighting (PAL)

An AFRU + PAL system is provided for use when the Control Tower is unmanned. The PAL system activates the following airport lighting facilities:

(a) Runway and Taxiway lighting systems.
(b) PAPI system.
(c) Primary illuminated wind indicator.
(d) Runway 14 RTILs.

3.2.8 Runway Threshold Identification Lights (RTILs)

RTILs consist of two white strobe lights located adjacent to the Runway 14 Threshold and are activated in conjunction with the 14/32 Runway lights. The RTILs have 3 stages of brightness.

3.2.9 Aerodrome Beacon

The aerodrome beacon is owned, maintained and operated by Airservices Australia. It flashes alternating white and green lights over an 8 second period.

3.2.10 Movement Area Guidance Signs (MAGS)

Lighting for the illuminated runway designation signs and taxiway locations signs on RWY 14/32 is controlled by the associated runway lighting system.

3.3 LIGHTING INSPECTIONS

3.3.1 Inspection Schedule

Inspections completed by the Mackay Airport Electrical Contractor are at various intervals for different facilities, i.e. fortnightly, monthly and annual inspections. A detailed lighting inspection schedule for the Mackay Airport Electrical Contractor is included within the Mackay Airport *Electrical Maintenance Manual*.

3.3.2 Notification of Works and Unserviceability's

Before maintenance or rectification work takes place on Aerodrome Lighting Systems, the Works Supervisor or Electrical Contractor shall advise ATC

- The time maintenance or rectification work is to take place;
- Expected duration of works;
- A Notam is to be submitted, if required;
- Recall times for facilities to be removed from service, if applicable.

During inspections if faults are found in lighting facilities that will render equipment unserviceable ATC shall be notified of:

- The nature of the fault
- Expected unserviceability times
- When the facility is returned to service.

NOTAMS shall be actioned as required by the ASO.

3.3.3 Daily Lighting Serviceability Inspections

Lighting serviceability inspections are conducted by the ASO on commencement of each AM shift and at last light on each PM shift. These inspections incorporate a visual check of all the aerodrome lighting facilities in accordance with the electronic application, Tracker Airside.

The time of each inspection shall be recorded in the ASO log, together with any unserviceability.

Unserviceability's found on the aerodrome shall additionally be handled as follows:

1. A Faults and Services Request shall be raised electronically by the ASO for each unserviceability; except that unserviceability's of the same type may be grouped on the one request (e.g. four U/S runway edge lights may be grouped on the one Faults and Services Request).
2. Advise MAO or ATL to engage Electrical Contractor.
3. When the Electrical Contractor has repaired the unserviceability, they will confirm the outcome with the ASO. Once rectified, the ASO shall close the fault.

The ASO shall advise ATC of any unserviceability that may affect their operations and shall raise NOTAMS as necessary.

3.3.4 Electrical Technical Inspections

An Electrical Technical Inspection is an inspection of aerodrome facilities to ensure that any deterioration that could make a facility unsafe for aircraft operations is detected. These inspections are carried out by the Mackay Airport Electrical Contractor at various intervals as stipulated in the Mackay Airport *Electrical Maintenance Manual*.

Should any corrective action, as a result of a routine inspection, not be able to be completed, the Electrical Contractor shall report this to the ASO. The inspection at CASR 139.230 must include:

a) An inspection and testing of the aerodrome lighting and electrical reticulation systems, including the PAPI system;

Details of corrective action taken during all inspections is recorded on the appropriate form within the *Electrical Maintenance Manual* and kept on file by the Manager Infrastructure and Maintenance. However, where corrective action on an unserviceable item cannot be taken and the unserviceability would require a NOTAM to be raised, the ATL or ASO shall be advised immediately to enable them to raise a Faults and Services Request and to issue an appropriate NOTAM.

3.4 ELECTRICAL MAINTENANCE

3.4.1 Routine Maintenance

Routine maintenance can be carried out during all inspections.

Details of repairs made during routine maintenance are recorded on the applicable form within the *Electrical Maintenance Manual* and kept on file by the Manager Infrastructure and Maintenance.

The operating manuals for the Mackay Airport terminal emergency stand by generator, AFRU and PAL systems are kept in the Mackay Airport Office.

The operating manuals for the main Airservices Australia Generator are located in the Airservices Australia office.

3.4.2 Emergency Maintenance

Emergency Maintenance is required when a lighting system is deemed unserviceable, as detailed in the Electrical Maintenance Manual. When required, the Electrical Contractor will be notified of urgent electrical failures by telephone (Electrical Contractor available 24/7). Telephone advice will be followed up with a Faults and Services Request at the earliest opportunity.

If faults are found that will render equipment unserviceable, the ASO shall raise an appropriate NOTAM and if ATC is active, advise them accordingly.

3.5 LIGHTING OPERATION

3.5.1 Lighting Activation

Airport lighting may be activated by the following means:

(a) By ATC from the Control Tower.

(b) By the PAL system using Local or Remote activation

(c) By Airport Electrical Contractor using local control from airport lighting equipment cubicle for maintenance purposes. (Agreement shall be arranged with ATC before any local controls are used).

3.5.2 PAL Activation

There are two means of activating the PAL:

REMOTE – from the air or ground, and LOCAL – a control switch on the ground.

REMOTE Select Tower/CTAF frequency 124.5 MHz, press the "Press to Talk" button 3 times (3 one second pulses within a 5 second period). The PAL will activate on receipt of this code.

LOCAL The system can be manually activated by:

1. a push button switch mounted on the wall airside on the old terminal building in the Eastern GA area;

2. A manual switch located in the airport lighting room.

Once activated by PAL, lights will operate for 30 minutes then switch off. During an operating cycle, the operation by remote or local methods will reactivate the PAL for another period of 30 minutes. When 10 minutes remain during an activation cycle, the primary IWI will start flashing and the AFRU will provide verbal advice that there is 10 minutes remaining and a nonstandard end of cycle at 5 minutes remaining.

During CTAF hours, the AFRU is activated by both voice modulation and PAL activation.

Lighting intensities during PAL activation are as follows:

Mackay Airport PAALC - Lighting Intensities										
Setting	**Circuit**	**State**		**Intensity**						
		On	**Off**	**1**	**2**	**3**	**4**	**5**	**6**
Daylight	Runway 14/32 Circuit A								
	Runway 14/32 Circuit B								
	Taxiway Lights								
	14 PAPIs								
	32 PAPIs								
	Aerodrome Beacon								
	Primary IWDI								
Twilight	Runway 14/32 Circuit A								
	Runway 14/32 Circuit B								
	Taxiway Lights								
	14 PAPIs								
	32 PAPIs								
	Aerodrome Beacon								
	Primary IWDI								
Night	Runway 14/32 Circuit A								
	Runway 14/32 Circuit B								
	Taxiway Lights								
	14 PAPIs								
	32 PAPIs								
	Aerodrome Beacon								
	Primary IWDI								

3.6 STANDBY POWER SUPPLY

3.6.1 Main Airservices Australia Generator

All airport lighting facilities except apron floodlights and the Runway 14 and 32 WDI receives its electrical power (and is controlled) by way of an Airport Lighting Equipment Room (ALER) located in the Air Services Control Tower complex. This is provided with stand-by power from the emergency stand by generator located within the control tower complex. The standby, diesel powered generator is fully automatic and will assume full load within 10-15 seconds of primary power failure. The generator is owned, operated and maintained by Airservices Australia. If the stand by generator becomes unserviceable, Airservices Australia shall advise Mackay Airport and raise the appropriate NOTAMS.

3.6.2 Mackay Airport Terminal Stand By Generator

The Mackay Airport Terminal stand by generator provides stand by power to the passenger terminal building facilities, the RPT apron flood lights and the Runway 32 WDI. The Runway 14 WDI is not provided with standby power from any source.

This generator is located adjacent to the baggage conveyor systems. It is fully automatic and will assume full load within 10-15 seconds of primary power failure. This generator is owned and operated by Mackay Airport but maintained by a Contractor as arranged by Mackay Airport.

3.6.3 PAL Failure

Whenever the PAL system fails:

1. If failure detected by Airservices Australia, ASO to be advised;
2. If failure detected by Electrical Contractor, ASO to be advised;
3. If failure detected by ASO, Electrical Contractor and Airservices to be advised;

4. The ASO shall raise a Faults and Services Request;
5. The ASO shall advise Airservices Australia;
6. The ASO shall arrange for a NOTAM if repair is not expected before nightfall.

3.7 LIGHTING COMMISSIONING

All lighting systems will be commissioned as defined in the Manual of Standards Chapter 9, Section 9.1.15 'Commissioning of Lighting Systems'. Copies of commissioning test reports are held by the Manager Aviation Operations and the Manager Infrastructure and Maintenance.

3.8 OBSTACLE LIGHTING

Permanent obstacles significant to Mackay Airport are:

1.	Floodlight adjacent Gate 12 lit by red medium intensity obstacle light (red MIOL) – located adjacent to HLS. Does not infringe the OLS.	**Aviation Team Leader** – 0418 570 232
2.	Floodlight adjacent Freight Apron lit by red medium intensity obstacle light (red MIOL) – located north of RPT Apron (does not infringe the OLS).	**Aviation Team Leader** – 0418 570 232
3.	Mt Oscar lit by red MIOL - located on left base Runway 14, infringes Conical Surface. Details: height 123.31m (405ft) AMSL, bearing BRG 342, 6,170M FM ARP. Latitude S21° 7' 5.14" Longitude E149° 10' 8.6". It is owned, operated & maintained by Telstra. The mast has twin functioning independent systems that are activated by light sensor and is also on standby emergency generator power. The operation is checked by Telstra on a weekly basis.	Geoff Jamerson – 0428 870 097
4.	Racecourse Mill Smokestack, lit by red MIOL - located on right base runway 14, infringes Conical Surface. Details: height 74.52m (262FT AMSL, BRG 272, 4,600M FM ARP Latitude 21° 9', 53.87" Longitude 149° 8' 0.35	**Joe Reitano (Engineering Superintendent) –** 0428 924 108 (07) 4953 8287
5.	Ergon Tower – lit at Ergon Compound Communication Tower. Details: Details: height 57.61m, (189ft) AMSL 1m below transitional surface. 3360m from Runway 14 Threshold. BRG: 308. Latitude: 21°08'48.49" Longitude: 149°09'40.95	**Damien Dixon (Lead Coordinator)** – 0448 850 528

The MIOLs are checked daily by the ASO as per Tracker Airside. If a MIOL is not functioning the ASO shall:

- contact the Electrical Contractor to effect repair for the on-aerodrome MIOL, or
- report the unserviceability to the persons nominated above for off-aerodrome MIOLs
- During ATC hours, inform ATC who should issue a NOTAM for off-aerodrome unserviceability's.
- During CTAF hours, raise a NOTAM for off-aerodrome unserviceability's.

3.9 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

Head of Aviation – responsible for:

- The planning, installation, operation and maintenance of all aerodrome lighting and electrical facilities on the airport in accordance with CASR.

MAO: – responsible for:

- Ensuring that aerodrome lighting systems are planned, installed and maintained in accordance with the MOS 139 as required by CASR 139.190 & 195.
- Ensuring that daily, technical inspections are carried out and their results appropriately recorded and arranging for any necessary remedial work to be undertaken without undue delay.
- Ensuring that procedures are in place for the formal commissioning of new or repaired lighting systems as described in MOS 139 Section 9.1.15.
- Ensuring that electrical contractors working on the aerodrome are appropriately qualified and suitably experienced in aerodrome operational lighting facilities and installations.

ATL – responsible for:

- Identifying the operational situations that require the issue of a NOTAM and initiating same.
- Ensuring that at the completion of works on the runway lighting system, the ASO carries out a functional check of the system prior to releasing it into service.
- Assistance and supervision of ASOs with the formulation of NOTAMS.
- Overseeing unserviceability's and repairs through the Faults and Services Request system.
- Liaise with electrical contractor to identify appropriate times for routine and emergency maintenance.

Electrical Contractor – responsible for:

- On request from Mackay Airport, maintain airport lighting facilities by undertaking appropriate checks through routine and emergency maintenance and technical inspections as per the *Electrical Maintenance Manual.*
- Advise the ASO of the results of all routine and emergency maintenance carried out.
- Recording the results of all technical inspections associated with the Mackay Airport Lighting facilities on the appropriate form and provide to Manager Infrastructure and Maintenance.
- Undertaking repairs to airport lighting facilities as a result of routine or technical inspections.
- Undertaking emergency maintenance works when necessary as requested by Mackay Airport.
- Notifying ATC prior to any maintenance works as per section 3.3.2.

ASO – responsible for:

- Carrying out and recording the results of daily visual inspections of aerodrome lighting facilities including obstacle lighting in order to monitor serviceability.
- Recording details of any lighting/electrical unserviceability's in the aerodrome log and raising a Faults and Services Request;
- Identifying the operational and/or emergency situations that require the issue of a NOTAM and initiating same. Notams are to be saved electronical to Share Point.
- Advise MAO or ATL and ATC of any identified unserviceability of the Airfield Lighting System.
- On confirmation from the electrical contractor on completion of works on the Airfield Lighting System, carrying out a functional check of the system prior to releasing it into service and cancel associated NOTAMs and close the fault in the Faults and Services Request system.

MIM –responsible for:

- Reviewing and amending the Mackay Airport *Electrical Maintenance Manual*.
- Administer the Electrical Maintenance Manual by checking and filing information recorded by the Electrical Contractor after performing technical inspections.
- Arranging for the Electrical Contractor to conduct works in accordance with the schedule outlined in the *Electrical Maintenance Manual* and ensuring works are complete.
- Ensuring that Airservices Australia carries out routine maintenance on the emergency stand by generator located in the tower complex.
- Ensuring that the nominated contractor carries out routine maintenance on the Terminal Emergency Stand by Generator.
- Undertake any follow up actions required as the result of routine inspections.

Airservices Australia – responsible for:

- Carrying out routine maintenance on the emergency stand by generator and providing inspection and maintenance records to Mackay Airport.

3.10 CONTACTS

The names and telephone numbers of the Head of Aviation, MAO, ATL, ASO, MIM, Electrical Contractor and Airservices Australia personnel are found in the Telephone Contact List at Part 2 of this Manual.

For **call out requirements on critical faults**, the following contacts are identified:

Mackay Airport Pty Ltd (In Order)

1.	ATL or	0418 570 232 (Mobile)
	MAO	0407 570 208 (Mobile)
2.	Electrical Contractor	0407 788 758 / 0400 152 976

PART 2 AERODROME ADMINISTRATION AND OPERATING PROCEDURES

SECTION 04 AERODROME REPORTING

4.1 GENERAL

Aerodrome Reporting is the notification of changes to the published aerodrome information or any other occurrence or emergency affecting the availability of the aerodrome and safety of aircraft using the aerodrome. This chapter deals with the arrangements for reporting any changes that may affect aircraft operations to the Aeronautical Information Service (AIS), the Australian NOTAM Office and local air traffic control, as detailed in MOS 139 10.3.2.1 and CASR 175D.

4.2 CHANGES/OCCURRENCES TO BE REPORTED

4.2.1 Temporary Changes

Temporary changes plus planned works that may affect the safety of aircraft operations will normally be detected during the Daily Aerodrome Serviceability Inspection or they may result from an incident.

During ATC hours, the ASO shall advise ATC immediately of such changes and must be reported to the NOTAM office.

During CTAF hours, the ASO shall either raise a NOTAM or request the Australian NOTAM Office (NOF) to issue a NOTAM. ATC shall be notified as soon as practicable.

NOTAMS raised by ATC or the NOF after verbal advice must be checked for accuracy and amended if necessary.

The occurrences that must be reported are listed in MOS 139 Section 10 paragraph 10.3.2.2.

NOTAM Office Contact:
Telephone: 02 6268 5063, Fax: 02 6268 5044
Email: nof@airservicesaustralia.com

The formulation of more complex NOTAMS such as alterations to declared distances shall be carried out by the MAO or ATL.

Action taken for temporary changes shall be fully detailed in Tracker Airside Log.

4.2.2 Permanent Changes

The MAO Philip Clark is responsible for arranging changes when any operational information published in the AIP is or will be incorrect. When the changes will not have an immediate effect on aircraft safety**,** advice will be sent to Airservices Australia AIS at the following address:

Airservices Australia
Attention: Aeronautical Information Service
GPO Box 367
Canberra ACT 2601
Telephone: 1300 301 120
Facsimile: 02 6268 5693.
Email: **docs.amend@airservicesaustralia.com**

AIS should be advised whether or not you have notified the change to the NOTAM Office.

For permanent changes that will affect aircraft safety, raise a NOTAM as per normal procedures and send a copy to AIS with advice that the NOTAM has also been sent to the NOTAM Office or an E-Correction card.

Copies of any amendments and NOTAMS issued shall be forwarded to:

Civil Aviation Safety Authority
Attention: Aerodrome Inspector
GPO Box 2005
Canberra ACT 2601

The *Aerodrome Manual* Part 3 shall be amended, if necessary, to reflect any changes.

Where CASA approval is required prior to bringing a new facility into public use, it is the responsibility of the Mackay MAO to obtain such approval and to then arrange for the issue of a permanent NOTAM to commission the relevant facility, as per MOS 139 Section 10.3.4 (Permanent NOTAM).

4.3 ORIGINATING AND DISPATCH OF A NOTAM

4.3.1 Aeronautical Information Management is described in the Civil Aviation Legislation Amendment (Part 175) Regulation 2014

The originating and dispatching of NOTAMS is described in MOS 139 Sections 10.3 to 10.5.

4.3.2 Originator

The following personnel may originate and dispatch a NOTAM for the Mackay Airport as per the information provided to the NOTAM office:

Name	Position	Contact
Philip Clark	Manager Aviation Operations (Mackay)	0407 570 208
David Annear (Acting)	Aviation Team Leader (Mackay)	0418 570 232
Shane Hokins Brandon Ford Dale Parker David Annear	Airside Safety Officers (Mackay)	0418 570 233
Robert Keegan	Aerodrome Operations and Emergency Manager (Cairns)	0428 783 367

4.3.3 Initiating a NOTAM

NOTAMS will be raised by using the Airservices Australia NOTAM Request Form located at **http://www.airservicesaustralia.com/wp-content/uploads/NOTAM-Request-Form.pdf** NOTAMS are to be raised in accordance with MOS 139 Section 10.3 *'Initiating a NOTAM'*.

4.3.4 NOTAM Follow-up

Whenever a NOTAM is raised, the ASO is to check the NOTAM currency prior to the expiration time and when necessary review or cancel the NOTAM as appropriate.

When changes to an issued NOTAM are made the ASO is to inform the ATL.

4.3.5 Complex NOTAMS

Texts for complex NOTAMS (e.g. those containing revised declared distances and gradient information) will be prepared by the MAO or ATL and details will be checked by these officers respectively. Calculations will be checked by a person other than the NOTAM originator to confirm their accuracy. Upon verifying the integrity of the text, the NOTAM will be submitted via email. Copies of the NOTAM and relevant confirmation details will be kept on file in the ASO office. The NOTAM will be checked again following issue.

NOTAM texts for inclusion in a MOWP are similarly checked and undergo additional checks by operations staff to ensure verification of the calculations of the declared distances.

4.4 Training Of Aerodrome Reporting Officers

The Airport Safety Officers are trained as Aerodrome Reporting Officers.

The ATL shall arrange for the ASOs to be trained in accordance with MOS 139 Section 10.1.3 to enable them to meet the qualifications described in MOS 139 Section 10.6.2.

The ATL shall arrange for all trained ASOs to participate in an assessment of their duties at least once per year.

4.5 Record Keeping

4.5.1 NOTAMS

4.5.1.1 NOTAMS Register

NOTAMS raised by authorised Mackay Airport staff and the NOTAM confirmation shall be electronically filed on Sharepoint.

4.5.1.2 NOF NOTAMS Register

At the start of each morning shift, the ASO shall access the Airservices Australia website of the list of NOTAMS current for Mackay Airport. These are electronically filed on Sharepoint.

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AIS Amendments File

All amendments sent to AIS shall be filed electronically on SharePoint.

4.5.2 Aerodrome Reporting Officer Register

The NQA Training Register shows details of the relevant certificates, training and general information of the trained ASOs for the aerodrome. Copies of certificates are kept in personnel files.

4.6 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

MAO – responsible for:

- Ensuring that appropriate procedures are in place to report both permanent and temporary changes to published aerodrome information;
- Checking more complex NOTAMS with the ATL;
- Providing training for Reporting Officers;
- Approving, sending and recording permanent changes of aeronautical information.

ATL - responsible for:

- On-going training of Reporting Officers;
- Ensuring all registers located in the ASO office are actioned correctly;
- Ensuring the data filed in registers by ASOs has been correctly compiled;
- Checking complex NOTAMS with MAO assistance before submission.
- Preparing changes to aeronautical information for MAO.

ASO – responsible for:

- Reporting changes to aerodrome conditions that will impact on the safety of aircraft;
- Entering details of changes to aerodrome conditions in the ASO Log and actions taken;
- Initiating NOTAM action as required through the NOF;
- Initiating work related NOTAMS where the text has been included in a formal Method of Working Plan (MOWP).

4.7 CONTACTS

The Telephone Contact Details for the MAO, ATL and ASO's are found in the Telephone Contact List at the beginning of this Manual.

PART 2 AERODROME ADMINISTRATION AND OPERATING PROCEDURES

SECTION 05 UNAUTHORISED ENTRY TO AERODROME

5.1 GENERAL

Mackay Airport is classified as a Tier 2, Security Controlled Airport. Therefore, the airport is operated in accordance with the Mackay Airport *Transport Security Program* (TSP), approved by the Department of Home Affairs. The TSP is a separate, controlled, security sensitive document, distributed independently from the *Aerodrome Manual*.

As a Security Controlled Airport, Mackay Airport is subject to audits by the Department of Home Affairs.

5.2 Responsibility of Aircraft Operators & Airport Tenants

Aircraft operators and airport tenants are responsible for controlling access of their passengers to and from aircraft.

5.3 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

MAO – responsible for:

- Ensuring that appropriate controls are in place to prevent the unauthorised entry to the airfield by persons, vehicles, plant/equipment and animals.

ASO –responsible for:

- maintaining surveillance activities and, as necessary:
- Detect and arrange the removal of unauthorised persons, associated vehicles, plant or equipment from the aerodrome;
- Harass, hunt down, corral, or capture any animal found on the movement area;
- Undertake routine inspections of the aerodrome boundary fence including access gates.

5.5 CONTACTS

The contact details of personnel responsible for unauthorized entry to the Aerodrome are detailed in the TSP.

PART 2 AERODROME ADMINISTRATION AND OPERATING PROCEDURES

SECTION 06 AERODROME SERVICEABILITY INSPECTIONS

6.1 GENERAL

This section deals with the importance of timely and disciplined aerodrome serviceability inspections and it provides guidance on how such inspections may be undertaken effectively in accordance with CASR 139.220 and MOS 139 Section 10.2.

6.2 ASO COMPETENCY

Mackay Airport ASOs are authorised to carry out aerodrome serviceability inspections. ASO's must be proficient in the competencies detailed in MOS 139 Section 10.1.3.2 and will be suitably trained to perform the duties of Aerodrome Reporting Officers.

ASOs shall have an Aeronautical Radio Operators Certificate to enable them to communicate with ATC during tower hours and with aircraft during CTAF hours and they will have achieved approximately 3 months on-the-job training before being certified as an ASO. The timing for ASO certification is at the discretion of the ATL or approved delegate.

The ATL shall conduct competency checks on ASOs at intervals not to exceed 12 months or following any periods of extended leave.

6.3 AERODROME SERVICEABILITY INSPECTION SCHEDULE

The MAO through the ATL shall arrange for aerodrome serviceability inspections to be carried out each day by the ASO in accordance with the *Aerodrome Serviceability Guidelines* (Annex A) and the *Daily Aerodrome Serviceability Checklist* (Annex B) is available in SharePoint.

Daily serviceability inspections should be carried out:

- At least 30 minutes before the first daily scheduled RPT movement;
- At first light if initial inspection was carried out during hours of darkness;
- At last light;
- After severe wind or rainstorms;
- After an aircraft incident or accident on a runway;
- After a report of foreign objects on or damage to a runway;
- After a reported bird or animal strike;
- After cessation of works on a runway;
- On request from ATC or CASA.

Additionally, the ASO should perform an inspection of the runway immediately prior to periods of RPT jet landings. These inspections shall target FOD on the runway and bird dispersal.

Preferred Inspection Procedure

The procedure that should be employed for major runway inspections is to include a slow drive down one side of the runway, between the centreline and one runway edge, followed by a slow drive in the reverse direction down the other side of the runway, to ensure that pavement coverage is maximized.

6.4 LOGS

6.4.1 Inspection Register

Mackay Airport transitioned to a digital platform called Tracker Airside from Aeroascent Daily Service Inspection shall be retained for at least 2 years.

6.4.2 ASO Log

The ASO Log is retained within Tracker Airside the ASO shall record each significant aerodrome event that takes place during the period of each shift. These events include as a minimum:

- Routine and additional inspections carried out;
- Routine and additional tasks performed throughout the shift;
- Significant FOD found including evidence of bird strike on runway;
- Reported bird and animal strikes;
- Unserviceability's;
- Any instruction, advice or information passed that is relevant to the ASO duties;
- Bird and Wildlife Management, including dispersals;
    - Any access given to pilots or work contractors;
    - Obstacle Limitation Surface Issues;

- Parking approval requests.

The log are available for inspection by the ATL, MAO or other authorised Tracker Airside persons on request.

6.5 REPORTING AND FOLLOW-UP

A Faults and Service Request (FSR) shall be raised for any unserviceability found during the period of an ASO shift. The ASO shall refer the Faults and Services Request to the appropriate department.

Refer to Section 4 for unserviceability's that require a NOTAM to be raised.

As a result of any reported unserviceability, the MAO after consultation with ATL, may require a technical inspection to determine the extent of the unserviceability and the actions required to rectify the unserviceability.

6.6 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

MAO – responsible for:

- Ensuring that the inspections required by CASRs are undertaken and that they are conducted in an appropriate manner at the required frequencies, and by suitably qualified staff;
- Arranging technical inspections as required;
- Ensuring specific engineering inspections are carried out on a scheduled basis.

ATL - responsible for:

- Initial and on-going competency assessment of ASOs;
- Overseeing the ASO serviceability inspections;
- Monitoring Faults and Services Requests to ensure unserviceability's have been actioned correctly and that follow up action is undertaken promptly.

ASO –responsible for:

- Conducting the aerodrome serviceability inspections in accordance with this manual;
- Logging the results of the inspection in the Tracker Airside Log.
- Raising Faults and Services Requests as required for unserviceability's and closing them once repaired or rectified;
- Raising NOTAMS as required for unserviceability's;
- Keeping the ATL advised of events considered unusual or significant.

6.7 CONTACT DETAILS

The MAO, ATL and ASO contact details are found in the Telephone Contact List at the beginning of this Manual.

ANNEX A – AERODROME SERVICEABILITY GUIDELINES

Serviceability Inspection Guidelines

Type of Inspection	When to look	What to look at/for
Movement Area (status)	Start of Shift	Current NOTAMS
		Current MOWP's and Works Permits issued for the movement area
		Matters highlighted in the Log Book or on the Daily Serviceability Checklist from the previous shift
		Daily Parking Requests
		Crane Notification Applications
Runway	As soon as possible after first light (at least 30 minutes before the 1st RPT movement where possible), before last light, before periods of RPT movements, following an incident and on specific requests	Debris on the Runway
		Fuel or oil spillages
		Markings are correct
		Pavement deterioration
		Lights are functioning
		No obstructions on clearways or Runway End Safety Areas
		Bearing strength and riding quality
		Obstacle Limitation Surfaces
Runway Strip	Daily	Undue roughness
		Obstructions
		Grass height
		Boundary markers
		Visual aids not obscured by grass
Taxiways and Taxiway Strips	Daily	Debris on Runways
		Pavement deterioration
		Shoulder erosion
		Grass height
		Markings are correct
		Lights are functioning
		Obstructions, pot holes, open trenches etc.
Aprons	Daily	Debris, loose stones
		Fuel or oil spillages
		Pavement deterioration
		Markings are correct
		Lights are functioning
		Aircraft and ground handling equipment parked correctly
		Refuelling operations
		Vehicle control/conduct
Perimeter Fence	As soon as possible after first light, before last light	Signs of unauthorised entry
		Kites or balloons etc. being flown
		Unauthorised drones
		Any open or unsecured gates
		Crash Gates are not obscured or blocked
Obstacle Limitation Surface	Daily	Approach/take off climb surfaces are clear Transitional surfaces are clear.
		Obstructions are marked and lit
Bird & Wildlife Hazards	Daily	Presence of any animals on airfield
		Bird movements in the vicinity of the airport
		Bird dispersal/harassment
Aircraft Tie-downs	Daily	Section of tie-down restraints to be inspected on a daily basis to encompass all tie-down in one week.

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

7.1 GENERAL

Mackay Airport Aerodrome Technical Inspections are a diagnostic inspection of aerodrome facilities to ensure that any deterioration that could make a facility unsafe for aircraft operations is detected, as required under CASR 139.230.

7.2 WHEN TO INSPECT

Aerodrome Technical Inspections must be carried out at intervals of not more than 12 months and when required as a result of the findings of the aerodrome serviceability inspections. Parts of the technical inspection may be carried out at different times from the other parts. Each part of the technical inspection must be carried out at intervals of not more than 12 months.

Further technical inspections may be necessary as a result of a serviceability inspection. This is when a particular aerodrome facility requires further or more detailed assessment.

7.3 WHO CAN INSPECT

Technical inspections shall be carried out only by persons who meet the requirements of CASR 139.240.

The MAO shall arrange and brief suitable qualified persons to carry out the Annual Technical Inspections on Mackay Airport.

7.4 DETAILS OF THE INSPECTION

The Technical Inspection shall include all areas specified in CASR 139.230 and include:

a) an instrument survey of the approach, take-off and transitional surfaces;

b) an inspection of records relating to the testing of the aerodrome lighting and electrical reticulation systems, including the visual approach slope indicator;

c) an inspection of records relating to electrical testing of any earth points at the aerodrome;

d) an inspection and assessment of the movement area pavements and drainage;

e) an inspection of signs on the movement area;

f) an inspection of aerodrome procedures used for any of the following:

i. aerodrome emergencies;

ii. the handling of hazardous materials;

iii. birds and animal hazard management;

iv. stand-by and emergency aerodrome lighting,

v. airside vehicle control arrangements (if any);

g) a check of the currency and accuracy of:

i. aerodrome information published in AIP; and

ii. Aerodrome operating procedures specified in the *Aerodrome Manual* for the aerodrome.

The inspection must comply with all applicable standards for Aerodrome Technical Inspections set out in the Manual of Standards 139.

Details of Electrical Technical Inspections are described within the Mackay Airport *Electrical Maintenance Manual*.

Mackay Airport will ensure that any persons appointed to undertake technical inspections hold the appropriate license or qualification and are competent in undertaking the inspection.

7.5 RECORD KEEPING

Annual Technical Inspection Reports are kept in SharePoint. The reports must be kept for at least 3 years after an inspection and must be made available to CASA Officers for audit purposes and to persons conducting the Annual Technical Inspections.

7.6 FOLLOW-UP ACTIONS

The MAO is responsible for drawing up a Corrective Action Plan to show CASA how Mackay Airport intends to action recommendations resulting from a technical inspection. The Corrective Action Plan will be filed and cross-referenced to the applicable Technical Report.

7.7 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

The MAO is responsible for ensuring that Annual Technical Inspections required for items detailed under CASR 139.230 are undertaken in a timely manner by persons having the qualifications detailed in CASR 139.240.

7.8 CONTACT DETAILS

The contact details of the MAO are found in the Telephone Contact List at the beginning of this Manual.

PART 2 AERODROME ADMINISTRATION AND OPERATING PROCEDURES

SECTION 08 AERODROME WORKS SAFETY

8.1 GENERAL

This chapter identifies the procedures for planning and safely carrying out aerodrome works including those works that may have to be carried out at short notice. The procedures are governed by specific conditions stipulated in MOS 139 Chapter 10.10 and regulated in CASR 139.245.

8.2 AERODROME WORKS

All works shall be conducted under the supervision and control of a Works Safety Officer whose functions are detailed in MOS 139 Section 10.12.

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

a) Planned works, comprising:
   - Time limited works (during which there are no disruptions to normal aircraft operations).
   - Works subject to a Method of Working Plan (MOWP), during which works will disrupt aircraft operations;
   - Unrestricted works (during which the aerodrome is closed to aircraft operations).

b) Unscheduled emergency works (i.e. unplanned works), made necessary at short notice in order to:
   - Re-instate an unserviceable portion of the movement area, or

- Remove (or compensate for the presence of) an unplanned temporary obstacle.
- The ASO shall be advised by the works team of all works to be performed.

The MAO shall take all reasonable measures to ensure that the works organisation carries out aerodrome works in a manner that will ensure the safety of aircraft operations, and shall ensure that persons, vehicles, plant and equipment required for carrying out aerodrome works are not permitted to enter the movement area or remain on it, except for the purposes of carrying out those works. All work areas will be identified by the appropriate markings.

8.3 TIME-LIMITED WORKS ARRANGEMENTS

Aerodrome Works may be carried out as time-limited works if normal aircraft operations are not disrupted, the movement area can be restored to normal safety standards and any obstacle created by those works removed in not more than 30 minutes.

A dedicated WSO is not required for time limited works, if one of the persons carrying out the works is trained and qualified to perform the functions of a WSO.

Time-limited works include the following:

a) Maintenance of markings and lights;

b) Grass mowing;

c) Rolling surfaces;

d) Sweeping pavements;

e) Minor repairs to pavements; and

f) Surveys and inspections

As requested by CASA, and unless otherwise agreed by ATC, the Mackay Airport will conduct time limited works subject to the following conditions:

a) Works at night (or when visibility is less than 5 km) shall take place only if normal safety standards can be restored to permit aircraft operations to take place without delay.

b) Works that need more than 10 minutes in which to restore normal safety standards will be notified by NOTAM at least 24 hours before works commence.

c) Works shall cease and normal safety standards restored when necessary to allow an aircraft to operate at least 5 minutes before the scheduled or notified time of operation.

d) Works that have ceased to permit aircraft operations to take place shall be resumed:

- Immediately after the aircraft arrival (inbound aircraft)
- 15 minutes after the aircraft departure.
- 30 minutes after the time scheduled or notified for the arrival (when a new ETA is established.

ATC may, at the request of Mackay Airport, vary these time limits subject to conditions).

All Time-limited works shall be co-coordinated through the ATL or ASO, who will consult with ATC, Works Safety Officer, work organizations and issue NOTAMS as required.

8.4 WORKS WITHIN RUNWAY STRIPS

Under specific conditions, works may be undertaken within a runway strip while the runway remains available to normal operations. Such works are normally confined to runway lighting or PAPI maintenance.

Mackay Airport shall ensure works within runway strips are in accordance with MOS 139 Section 10.10.12:

- Works shall take place at any one time only on one side of the runway;
- Plant and vehicles shall vacate the runway strip when aircraft are operating on the runway;
- Loose material likely to be affected by propeller or jet blast shall be removed;
- Other materials that have to be left within the runway strip (e.g. soil, gravel, signs, lights etc.) shall not exceed a height of:
- 1 meter if within 23 metres of the runway shoulder
- 2 metres if further than 23 metres from the runway shoulder
- Machine cut trenches shall not be wider than 100mm or longer than 280 metres;
- In the case of other than machine cut trenches, the works area at any one time shall not exceed:-
- 9 square metres if within 23 metres of the runway shoulder
- 18 square metres if further than 23 metres from the runway shoulder.

These procedures permit men with hand tools to work up to the runway shoulder and remain there during aircraft operations. The following additional conditions shall be adhered to:

Zone 1 within 23 metres of the runway shoulder:

- work will be under control of a dedicated Works Safety Officer who is in continuous radio contact with ATC
- work will not take place during operations by wide-bodied aircraft
- work will not take place if the mean cross wind component is greater than 10 or 15 knots
- work will not take place in conditions of low cloud or visibility (cloud base less than 900ft, visibility less than 4000m)
- work will not take place if the runway is wet.

Zone 2 23m from runway shoulder to outer edge of graded runway strip:

- as for Zone 1, except the Works Safety Officer may be a member of the works party

All works within the runway strips including men and hand tools shall be coordinated through the ATL, who will consult with ATC, ASO's and works organizations and arrange issue of NOTAMS as required.

8.5 METHOD OF WORKING PLAN (MOWP)

A Method of Working Plan (MOWP) is a document that provides formal advice to the aviation industry (and other interested agencies) regarding the planned arrangements for conducting aerodrome works, other than time limited works, that will affect normal aircraft operations. In particular, a MOWP advises of restrictions placed on aircraft operations and on the organizations carrying out the works.

The MAO or delegate is authorised to sign off on Mackay Airport MOWPs. Only the approved MOWP Template is to be used for compiling MOWPs, located on SharePoint.

8.5.1 MOWP Preparation

When Mackay Airport is contemplating works requiring a MOWP, the MAO, ATL and the Project Manager will discuss the nature of the works and determine desirable options (if any) for the conduct of the works. The MAO, ATL and Project Manager will consult with all organisations that may be affected by the proposed work as required.

Once the in-principle agreement has been reached between Mackay Airport and the airport users, the MAO, ATL or Project Manager shall prepare a draft MOWP for comment from relevant stakeholders. The MOWP shall incorporate all the requirements stipulated in MOS 139 Section 10.11.

8.5.2 MOWP Approval

The MOWP shall be approved by the MAO or delegate prior to any works commencing.

8.5.3 MOWP Distribution

Mackay Airport should issue the MOWP at least 14 days before the work is to commence. If this target is not met, other formal notification of the MOWP contents shall be provided to the relevant parties. MOWPs are issued on a case by case basis where required.

The MAO is responsible for the distribution of the final MOWP to relevant parties. Contact details are provided in Annex C to this section.

8.6 UNRESTRICTED WORKS

The MOWP is not required if the aerodrome is closed to aircraft operations while major works are being carried out.

Such an option will not normally be considered at Mackay Airport unless the impact of such a closure could be justified on the basis of overall benefit to the airlines and/or other operators.

8.7 UNSCHEDULED EMERGENCY WORKS

An MOWP is not required for the conduct of emergency aerodrome works.

Emergency works could include:

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

8.8 AERODROME WORKS SAFETY OFFICER (WSO)

All ASOs who meet the competency requirements of MOS 139 Section 10.1.3.2 and who are suitably trained and competent as Mackay Airport ASO's also meet the competency requirements for carrying out WSO duties. The MAO or delegate shall appoint WSOs from its pool of ASOs or arrange for other suitably trained and competent persons to undertake WSO duties.

The ATL shall conduct competency checks on WSOs at intervals of approximately 12 months or as required.

The WSO shall perform the functions detailed in MOS 139 Section 10.12 'Functions of a Works Safety Officer'. Each MOWP will detail the duties of the WSO relevant to a specific project.

8.9 WORKS RELATED NOTAM TEXT

As detailed in Paragraph 4.3.5, text for more complex NOTAMS including NOTAM text included in MOWPs, are prepared by either the MAO or the ATL. The wording is the relevant revised declared distances and any other data is then checked and signed off by the other officer before details are promulgated.

For planned works requiring a MOWP, the NOTAM text shall be included in the MOWP.

8.10 COMMUNICATION WITH ATC

During the conduct of aerodrome works, the Mackay Airport WSO shall be in continuous radio contact with Mackay ATC via 121.7MHz or 124.5MHz or outside ATC hours on the CTAF frequency 124.5MHz.

The WSO shall:

- At the commencement of works each day or night, notify ATC of the start time and duration of works and confirm that the conditions of the relevant NOTAM are being invoked.
- Obtain from ATC the necessary clearances to enter the portions of the movement area to be closed for the works in order to:
  - lay out the appropriate markers/lighting, and
  - permit entry of works organization personnel
- Notify ATC of recall times (if applicable) and of any change in the status of the works
- Obtain from ATC details of any anticipated early aircraft arrival times in order to ensure timely and appropriate restoration of and clearance from affected areas.
- If outside ATC hours, broadcast these calls on CTAF.

In respect of aerodrome works whose timing is critical (whether conducted under a MOWP or not), the WSO or ATL shall brief ATC (when active) beforehand to ensure that the duty air traffic controllers have a thorough understanding of the nature of the works.

Mackay Airport recognizes the importance of working closely with ATC staff in order to achieve safe and effective progress of aerodrome works.

8.11 PERMIT TO COMMENCE WORKS (PERCOW)

Mackay Airport has in place a management system in relation to all works that take place on the airport in order general to:

- Ensure an appropriate approval process is in place, and
- Stipulate specific conditions for the works.

This system requires all works (whether they are defined aerodrome works or not) to be approved by the relevant Mackay Airport Manager by way of a Permit to Commence Work (PERCOW). The PERCOW system is a Mackay Airport management tool to ensure that no work may commence upon Mackay Airport without a PERCOW being issued. For aerodrome works involving an MOWP, a PERCOW may not be issued until a MOWP has been issued.

8.12 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

MAO – responsible for ensuring that:

- Aerodrome works are classified correctly (i.e., time-limited. MOWP, unscheduled, emergency, runway strip);
- Correct works procedures are implemented according to the works classification;
- MOWPs are approved for issue;
- MOWPs and associated NOTAMS are compiled correctly.

ATL - responsible for the implementation and oversight of aerodrome works in accordance with these procedures and shall:

- Co-ordinate Time-limited works and consult with ATC, ASO, WSO, work organizations and issue NOTAMS as required;

- Ensure that persons, vehicles, plant and equipment required for carrying out aerodrome works, must not be permitted to enter the movement area or remain on it, except for the purposes of carrying out those works;
- Ensure that any necessary MOWP is prepared and distributed according to the current Distribution List;
- Ensure that the MOWP distribution list is current and relevant;
- Ensure that appropriately qualified WSOs (or persons able to carry out WSO functions in the case of Time-limited works) are allocated to the works; and
- Audit works safety to ensure it is meeting its obligations.

Works Project Managers –shall:

- Ensure that the works are planned so as to not create a hazard to aircraft operations or cause confusion to pilots, and that any impact on aircraft operations is minimized;
- Ensure that a MOWP is prepared, if required and that any amendments are issued in a timely manner;
- Ensure that the MAO is advised of daily works plans to ensure that appropriate WSO resources can be made available;
- Ensure that any contractors are fully briefed on their responsibilities and restrictions when working on the movement area of the aerodrome;
- Ensure that the works are carried out in a manner that does not endanger the safety of aircraft operations.

WSO – responsible for ensuring the safe conduct of aerodrome works. The WSO shall also ensure that relevant NOTAM action has been taken in relation to aerodrome works.

8.13 CONTACT DETAILS

The MAO, ATL and ASO contact details are found in the Telephone Contact List at the beginning of this Manual.

MOWP DISTRIBUTION LIST

Mackay Airport MOWPs are distributed via email on most occasions. Records are kept on SharePoint. The Mackay Airport Distribution List for MOWPs may include the following organisations:

Mackay Airport Pty Ltd

- Head of Aviation
- Manager Aviation Operations
- Manager Infrastructure and Maintenance
- Aviation Team Leader
- Airport Safety Officers
- Project Manager (if not already listed above)
- Works Safety Officer (if not already listed above)
- Works Organiser (if not already listed above)

Swissport

Airservices Australia (Mackay Airport)
Air Traffic Control
Technical Services Division
Aviation Rescue & Fire Fighting Service
NOTAM Office

Alliance Airlines

Australian NOTAM Office

CASA (Airport Inspector)

Chrisair Maintenance

Cobham Aviation

CQ Rescue

Flyon Pty Ltd

Horizon Airways

Hunt Family Trust/Roylen Holdings

Life Flight

Mackay Helicopters (Aviator Group)

Helicopters New Zealand ('HNZ') (PHI Inc.)

Jetstar

Oz North Services Pty. Ltd

Pel-Air Aviation

Qantas

QantasLink

Qantas Freight

Queensland Police Air Wing

Royal Flying Doctor Service

Toll Aviation

Virgin Australia

Virgin Australia Tech

Whitsunday Helicopters (Aviator Group)

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

9.1 GENERAL

This chapter identifies the responsibilities and procedures for the control of aircraft parking at Mackay Airport.

9.2 APRON MANAGEMENT

Apron marking design changes that will impact on aircraft parking arrangements shall not be implemented without advice to the affected aircraft operators, and the approval of the MAO.

The provision of plans for any changes to aircraft parking positions on the airport is the responsibility of the MAO who shall engage specialist design consultants if necessary. Approval of these plans and their introduction and operation on the aprons remains the responsibility of the MAO.

Apron Marking and Aircraft Layout / Parking Plans have been established to allocate parking positions on the RPT apron areas (see plans in Annex D).

9.2.1 Line Marking Design on a Movement Area – Approval

Mackay Airport has a procedure and approval process for any significance change to line marking design on a movement area. The process is as follows:

- Once design is completed forward pdf version to MAO for approval;
- MAO approves the drawing in writing and returns to the originator to finalise.
- A new pdf with the electronic signature included is created and is forwarded to the MAO who then requests the Assets department to install the markings. No work should commence by Assets without the MAO signature on the drawing.
- The 'As Constructed Signoff' is to be completed by the relevant departments as works take place and once completed and checked, a copy is sent back to the originator to add to the drawing base plan.

9.3 AIRCRAFT PARKING LOCATIONS

9.3.1 RPT Apron

The RPT Apron is a Security Restricted Area that is located directly in front of the main terminal building. Its dimensions including the taxi lane are approximately 294m x 75m.

All parking positions are free moving. The types of aircraft that may use the available parking positions and the limitations on their usage are detailed on the plan at Annex D. The RPT apron parking layout has been designed to accommodate A320, E190/E170, B738,C27J or Dash 8 on Bays 1 to 5, C17, B767 on Bay 1A, Dash 8-300 on Bay 1B, Dash 8-400 on Bay 1 and Dash 8-300 on Bay 5A.

Scheduled operators include Qantas, Qantaslink, Jetstar and Virgin Australia.

Bays 4, 5 and 5A are within the Security Restricted Area. Notwithstanding this, the ASO may use discretion in allocating these bays to itinerant aircraft if the Cargo Apron is not available or is unsuitable for such aircraft. Refer to Cargo Apron below.

9.3.2 Cargo Apron

The Cargo Apron, with a weight limitation of 20,000kg, abuts the RPT Apron.

The apron is used for non-scheduled aircraft that require access to the main terminal area whilst Qantas Freight regularly uses it for loading and unloading cargo.

9.3.3 Western GA Apron

The Western GA apron, with a weight limitation of 12,000kg on the old section and 18,000kg on the new section, is located on the western side of the primary runway, access with TWY Juliet and Hotel. The apron is used by mainly by CQ Rescue Helicopters, PHI and operators using aircraft up to 24 metre wingspan. The apron may also be used by other aircraft requiring access to the main terminal area. Bays 21-22A may be used for itinerant aircraft, if aircraft are of suitable size. Helicopters fitted with Skids, with a MTOW greater than 1100Kg are restricted from operating on the WGA without prior approval from MOA.

9.3.4 Eastern GA Apron

The Eastern GA apron is located on the eastern side of the primary runway. The area has a high strength apron capable of handling RPT jets to B738 size plus other areas that are restricted to aircraft below 5,700kg.

The area comprises the old terminal building, old RPT apron and other areas, but it is now used solely by resident fixed base operators and commercial light aircraft operators who operate aircraft generally below 5,700kg. Apron areas leased to commercial organisations are marked by green leased area lines. Viva operates an AVGAS dispensing bowser at the northern end of the apron.

The apron abuts the flight strip of Runway 14/32, and consequently the runway-holding position markings on the three adjoining taxiways, E, F and G are marked along the edge of the apron.

Tie-down facilities are provided at a number of parking areas.

9.3.5 Aircraft without Air Worthiness Certificate

Aircraft without an Air Worthiness Certificate are generally not to be parked at Mackay Airport. The MAO shall instruct the owner to remove such aircraft from the airport.

9.4 AIRCRAFT PARKING PROCEDURES

9.4.1 Allocation of RPT Parking Positions

The MAO is responsible for the allocation of aircraft parking positions but will delegate this duty to ASOs for day to day operations. These allocations are to be added to the Resource Management System, 2020.

Generally, the RPT apron parking is self-managed based on commercial agreements and preferences detailed at Annex E to this section. Should a conflict be anticipated due to RPT apron works or other aircraft, parking allocation will be determined by the MAO or delegate. Bay 5 has additional restrictions and caution must be used when allocating this bay.

Paragraph 5.7 of the ATS Interface Agreement between Mackay Airport Pty Ltd and Airservices Australia in respect of Mackay Aerodrome (Letter of Agreement 569) details the arrangements for the movement area control.

9.4.2 Parking Approval Request Form

ASOs shall use the Parking Approval Request form to control and approve parking on the Cargo Apron and the adjacent RPT bays. They may, however, issue verbal approvals when time does not permit the Parking Approval Request proforma to be actioned in the normal manner. ASOs shall fill in pertinent details on a Parking Approval Request proforma when a verbal approval has been issued.

Refer to the *Mackay Airport RPT & WGA Apron Parking Plan* for allocation of Bays on the RPT & WGA Apron.

Please see Parking Application Form on the Mackay Airport Website, link below –

https://www.mackayairport.com.au/assets/Uploads/9001-MKY-Mackay-Airport-Aircraft-Parking-Approval-V4.pdf

9.4.3 Entry to/Exit from RPT Parking Positions

RPT jet aircraft are marshalled into position by their appointed ground handlers whilst other aircraft self-park. All aircraft exit their parking position under their own power.

9.4.4 Visual Docking Guidance Systems

Mackay Airport does not have a Visual Docking Guidance System.

9.4.5 Engine Start

Engine start is at pilot discretion.

9.4.6 Marshalling

Mackay Airport does not provide a marshalling service. Marshalling for RPT jets is provided by airline appointed ground handlers.

9.4.7 Follow-Me Service

A Follow-Me Service is not normally provided, but the ASO will on request from ATC or a pilot, provide a Follow-Me for pilots requiring guidance to a area of the airport. This service will generally be provided during tower hours. As required, the ASO will escort aircraft to designated parking areas by vehicle, whilst keeping in radio contact with the pilot and/or ATC.

9.5 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

MAO – responsible for:

- Implementing and maintaining aircraft parking control procedures at the airport;
- Approving the design and amendment of aircraft parking positions & areas;
- Arranging for apron plan production and amendments;
- Monitoring the overall co-ordination of parking position allocations.

ATL – responsible for:

- Managing the Airport Safety Officers;
- Monitoring and reporting on the efficiency and safety of all apron activities.

ASO – responsible for: -

- Reporting any unsafe or potentially unsafe circumstance to the MAO;

- Providing a Follow-Me Service when requested by ATC or pilots for pilots that are unfamiliar with the airport layout.

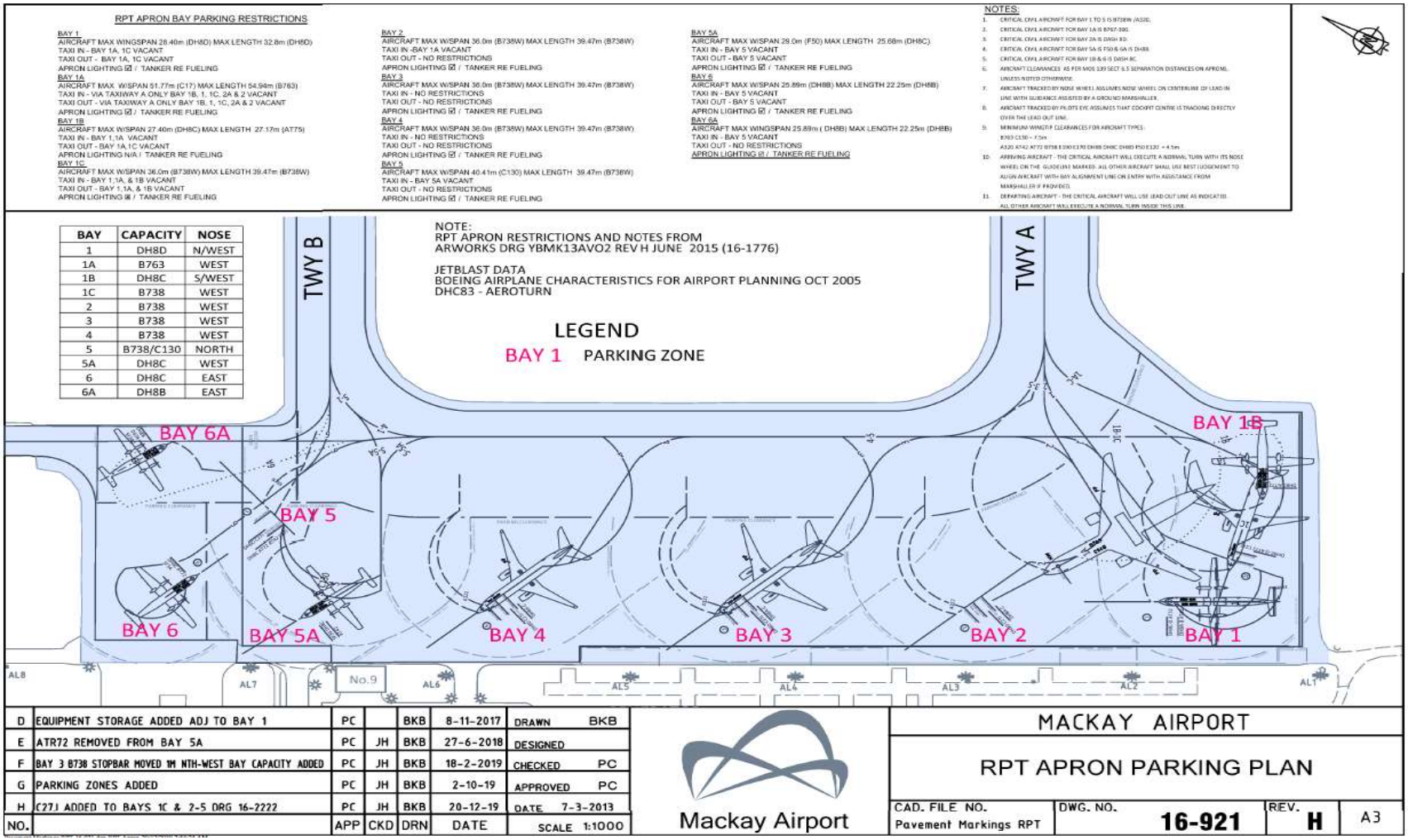
The MAO, ATL and ASO are the key persons involved in respect to Aerodrome Parking Control.

9.6 CONTACT DETAILS

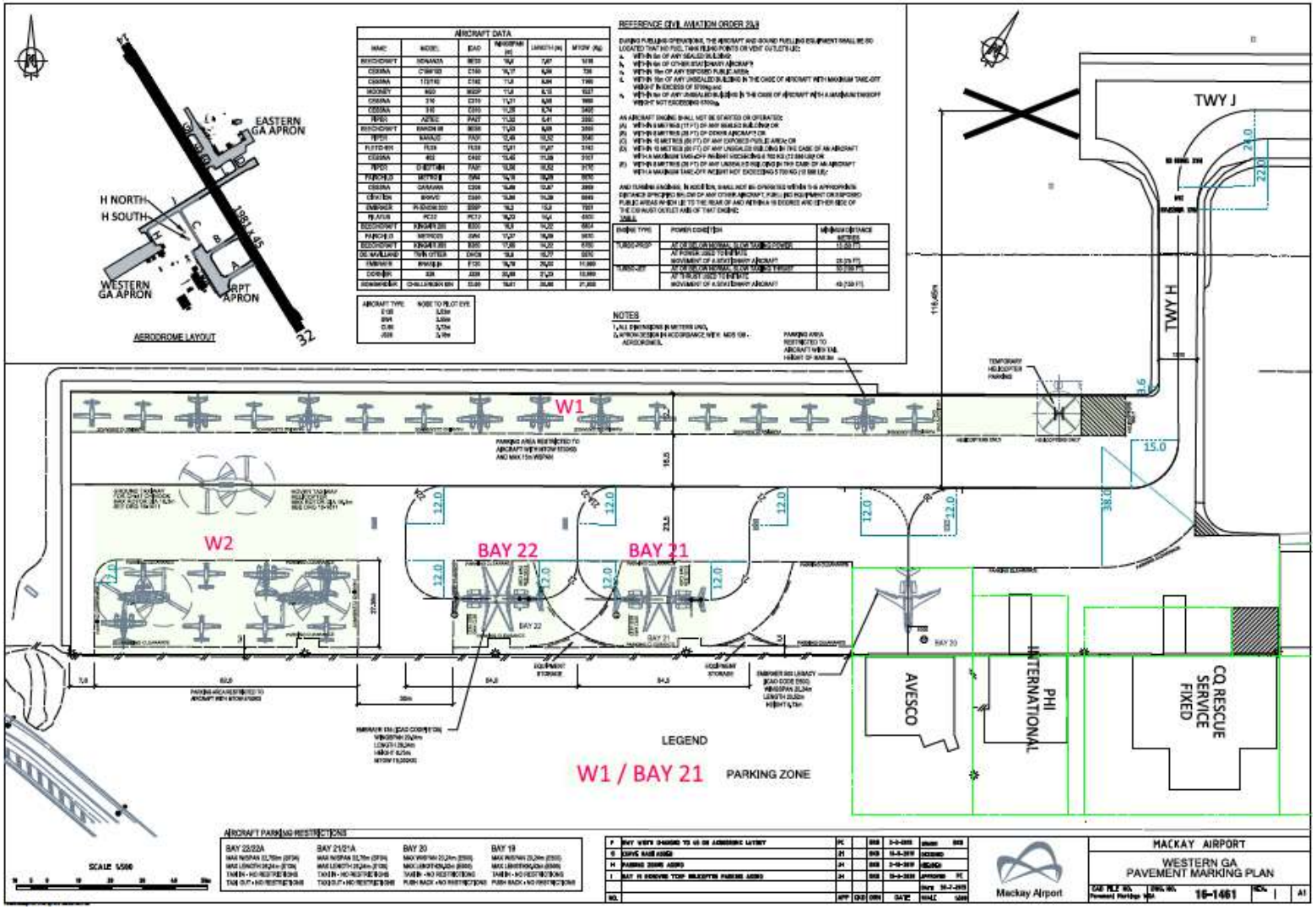
Contact details for the MAO, ATL and Duty ASO are found in the Telephone Contact List at the beginning of this manual.

ANNEX D – APRON MARKING & AIRCRAFT LAYOUT / PARKING PLANS

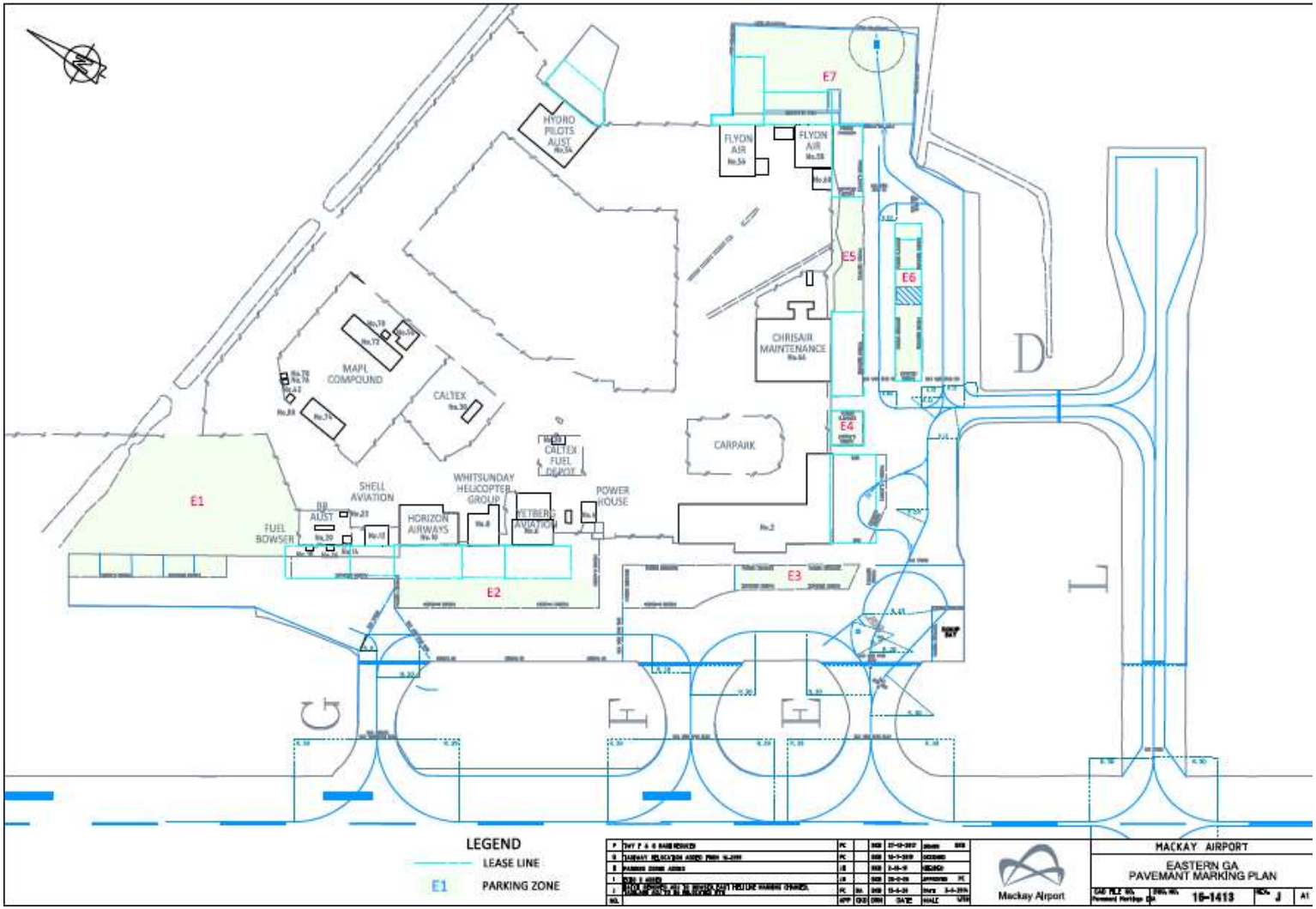
01 -RPT APRON PARKING PLAN



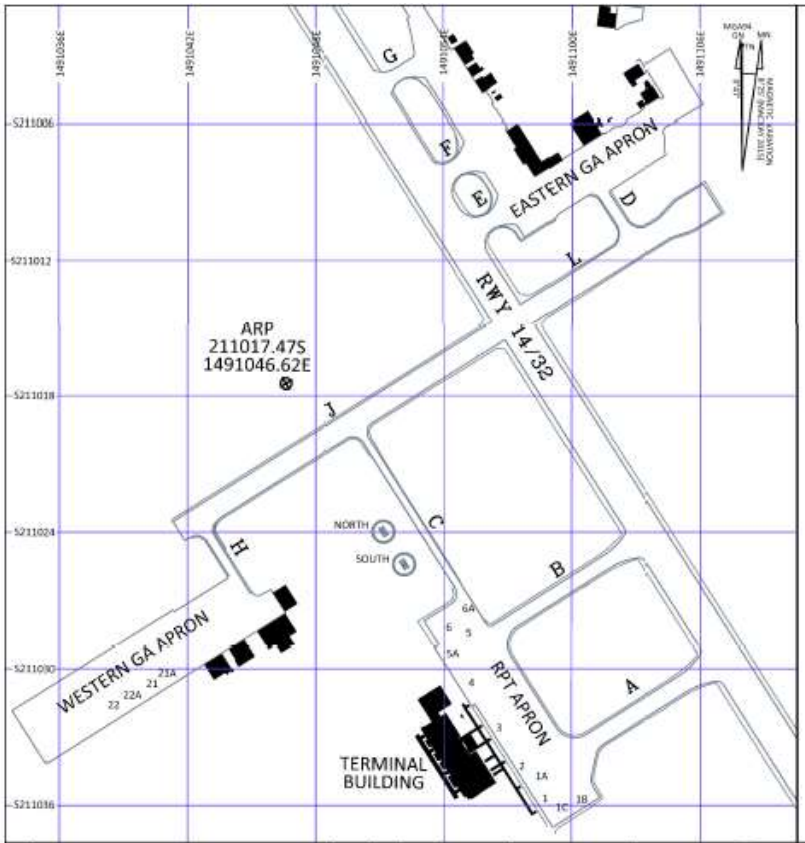
02 - WESTERN GA APRON PARKING PLAN



03- EASTERN GA PAVEMENT MARKING PLAN



PA**RKING POSITIONS – AERODROME CHART**



PARKING POSITION INFORMATION

Rev C : 12-6-19

STAND	WGS COORDINATES		ELEV (ft)	CAPACITY	FUEL HYDRANT
1	211035.70S	1491058.84E	18	DH8D	NIL
1A	211034.69S	1491058.63E	18	B763	NIL
1B	211035.81S	1491100.35E	18	DH8C	NIL
1C	211035.96S	1491059.57E	18	B738	NIL
2	211034.22S	1491057.76E	18	B738	NIL
3	211032.43S	1491056.56E	18	B738	NIL
4	211030.64S	1491055.37E	18	B738	NIL
5	211028.49S	1491055.17E	18	B738/C130	NIL
5A	211029.34S	1491054.38E	18	DH8C	NIL
6	211028.28S	1491054.14E	18	DH8C	NIL
6A	211027.32S	1491055.22E	18	DH8B	NIL
21	211030.62S	1491040.29E	18	E135/CL60/SW4	NIL
21A	211030.28S	1491040.87E	18	E135/CL60/SW4	NIL
22	211031.50S	1491038.80E	18	E135/CL60/SW4	NIL
22A	211031.22S	1491039.28E	18	E135/CL60/SW4	NIL
Helipad Nth	211023.98S	1491051.18E	18	MRH90	N/A
Helipad Sth	211025.40S	1491052.14E	18	MRH90	N/A
ARP	211017.47S	1491046.62E	14		

NO.		APP	CKD	DRN	DATE
A	1/100 OF A SECOND FORMAT AS PER AIC 29/18	PC		BKB	29-10-18
B	DEGREES MINUTES SECONDS AND SPACINGS REMOVED	PC		BKB	12-6-19

DRAWN BKB
DESIGNED
CHECKED JH
APPROVED PC
DATE 11-5-2017
SCALE 1:5000

MackayAirport
FOR WORKDAYS AND HOLIDAYS

MACKAY AIRPORT

AERODROME CHART

CAD. FILE NO. Aerodrome Chart | DWG. NO. 16-1294 | REV. C | A3

ANNEX E – MACKAY AIRPORT RESOURCE PREFERENCES AND DEFAULTS

Stand	Aircraft	Airline Stand Preference	Default Arrival Gate (to Stand)	Available Arrival Gates	Default Boarding Gate (to Stand)	Avail. Board. Gates	Airline Gate Preference	Gate Usage Separation	Notes
1	AT4,AT7,DH1-4	QF_1	6	1,2,3,4,5,6,20A	2 *	1,2,3,4,5,20A	QF_1,JQ_2	25 mins	If an allocated stand is changed, the corresponding arrival and/or departure gate may need to be changed.
1A	763,C130,C17		6	1,2,3,4,5,6,20A	2 *	1,2,3,4,5,20A		25 mins	
1B	AT4,AT7,DH3		6	1,2,3,4,5,6,20A	2 *	1,2,3,4,5,20A		25 mins	
1C	32W,738,712,DH1-4,170,190,100	QF_2	6	1,2,3,4,5,6,20A	2 *	1,2,3,4,5,20A	QF_2	25 mins	
2	32W,AT4,AT7,738,712,170,190,DH1-4,100,C27J	JQ_1,QF_4,VA_2,	6	1,2,3,4,5,6,20A	1 *	1,2,3,4,5,20A	JQ_1	25 mins	**1 *, 2 *, 4*, 5 *, Default to Match QF, JQ, VA, Preferred gate. Applies to any carrier on that stand (Direct Stand to gate relationship)**
3	32W,AT4,AT7,738,712,170,190,DH1-4,100,C27J	VA_1, JQ_4,	6	1,2,3,4,5,6,20A	3 *	1,2,3,4,5,20A	VA_1	25 mins	
4	32W,AT4,AT7,738,712,170,190,DH1-4,100,GL4,GL5,GLEX,C27J	QF_5,VA_3	6	1,2,3,4,5,6,20A	5 *	1,2,3,4,5,20A	VA_2	25 mins	
5	32W,738,712,100,170,190,130,DH1-4,CL60,GL4-5,GLEX,C27J	QF_3	6	1,2,3,4,5,6,20A	5	1,2,3,4,5,20A		25 mins	
5A	AT7,DH3,F50,F2TH,SF34		6	1,2,3,4,5,6,20A	5	1,2,3,4,5,20A		25 mins	
6	AT7,AT4,DH1-3,SF34		20	1,2,3,4,5,6,20A	5/20	1,2,3,4,5,20A		25 mins	
6A	DH2,D328,SF34		20	1,2,3,4,5,6,20A	5/20	1,2,3,4,5,20A		25 mins	

Check in Counters and Laterals		
1 - 3	QF	Lateral 1
4 - 6	JQ	Lateral 1
7 - 10	VA	Lateral 2

Baggage Arrival Carousels		
Carousels	**Airline**	**A/C**
1	JQ_1,QF_1,VA_2,***	ALL
2	VA_1,JQ_2,QF_2,***	ALL

*** = Other

Preferred Sequence

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 10	AIRSIDE VEHICLE CONTROL

10.1 INTRODUCTION

Mackay Airport has developed an *Airside Vehicle Control Manual* (AVCM) and an *Airside Drivers Handbook* (ADH). These documents identify the mandatory rules and procedures that have been adopted for the control of surface vehicles operating on or near the movement areas of the airport as well as the procedures used to authorize drivers to drive vehicles airside.

The Mackay Airport AVCM and ADH are separate controlled documents, distributed independently from the *Aerodrome Manual*.

10.2 GENERAL PRINCIPLES

Mackay Airport, as the operator of the airport, controls the entry to, and the activities of, all surface vehicles on the airside. Pursuant to this the MAO has the responsibility for authorizing the operation of vehicles airside at the Mackay Airport.

No person shall operate any vehicle airside without prior and specific approval from the Head of Aviation or his delegate. No type of vehicle or ground equipment shall be operated on airside areas without the prior and specific authorization of the Head of Aviation or his delegate.

When Air Traffic Control is active, vehicles are permitted on the manoeuvring area of the airport only when specifically approved by ATC and at other times after making mandatory CTAF calls and ensuring that there will be no conflict with aircraft operations.

10.3 AIRSIDE DRIVING AUTHORITY

The procedures for the approval for a vehicle to be used on airside and the issuing of a Mackay Airport Airside Driver's Authority are contained in the *Airside Vehicle Control Manual*.

An Airside Driver's Authority may be issued following satisfactory training and testing in one of two categories, namely:

- Restricted Airside Driver's Authority — Perimeter roads & Aprons
- Unrestricted Airside Driver's Authority — Taxiways & Runways

10.4 AIRSIDE VEHICLE PERMIT

A copy of the application and details of the requirements to be met before an Airside Vehicle Permit (AVP) will be issued can be found on the Mackay Airport website. This permit is to be held at all times by the person granted access.

The ATL shall keep a copy of all AVP applications received. When a permit has been granted, a copy of the permit (with the application) shall be filed and details included in the AVP register. It addresses vehicles, registration and insurance.

Conditions for obtaining an ADA are contained within the ACVM and ADH.

It is important that drivers on airside areas exercise due caution in the course of their duties. Failure to observe these instructions could endanger their life or the lives of others.

10.5 KEY PERSONNEL - ROLES AND RESPONSIBILITIES

MAO – responsible for:

- Implementing airside vehicle control procedures at the Mackay Airport.
- Production and distribution of the Airside Vehicle Control Manual and Airside Drivers Handbook.

- The institution and conduct of regular audits of organizations approved by Mackay Airport to control the operation of their own vehicles operating airside.
- Overseeing Mackay Airport assessment of vehicles that are authorized for use on airside.
- Overseeing training and examinations activities.

ATL – responsible for:

- Training and assessing of ADA applicants and issuing ADAs (note: these duties may be delegated to an ASO).
- Assessing applications for and issuing AVP's
- Instituting and maintaining a system of recording:
- Names and details of on-airport organizations delegated by the Mackay Airport to administer their own airside vehicle control (in accordance with Mackay Airport requirements)
- Details of audits conducted on such organizations
- Details of all authorities issued by the Mackay Airport for the use of vehicles airside
- All authorities issued by Mackay Airport to drivers to drive airside.

ASO – responsible for:

- Escorting drivers who have a lawful reason to be airside and when the vehicle being driven has no formal authority to be used on airside.
- Reporting any unsafe or potentially unsafe circumstance involving a driver of a vehicle on the movement area to the Head of Aviation, MAO or ATL.

10.6 CONTACT DETAILS

The Mackay Airport MAO and ATL are the key personnel with respect to Airside Vehicle Control.

Their respective contact details are found in the Telephone Contact List at the beginning of this Manual.

PART 2 AERODROME ADMINISTRATION AND OPERATING PROCEDURES

SECTION 11 BIRD AND WILDLIFE HAZARD MANAGEMENT

11.1 GENERAL

This section identifies the procedures to be used in dealing with hazards to aircraft operations caused by the presence of wildlife or animals on or near the aerodrome.

Mackay Airport has developed a Wildlife Hazard Management Plan (WHMP) in accordance with CASR Part 139 to provide particulars of the procedures to deal with danger to aircraft operations caused by the presence of wildlife on or near the aerodrome. The Mackay Airport WHMP is a separate, controlled document, distributed independently from the *Aerodrome Manual*.

11.2 ASSESSMENT OF ACTIVITY

11.2.1Control of Terrestrial Animal Access

Mackay Airport is responsible for the control of animals at the airport. The main animals likely to be encountered near the aerodrome are dogs, cats, wallabies and stock (e.g. horses and cattle). The integrity of the boundary fence and gates ensures these animals are denied entry onto the aerodrome.

The perimeter fence line and the associated gates are inspected at first light and again at random intervals during the day. The ASO is to ensure that all gates are closed and locked and that the boundary fence is intact at all times.

If at any time animals do find their way onto the aerodrome and they cannot be removed, aircraft operators are to be advised by NOTAM to exercise caution when operating into the aerodrome.

11.2.2 Wildlife Assessment

Collision with wildlife can result in severe damage to aircraft, even causing the aircraft to crash. The takeoff and landing phases are the most critical times of aircraft flight, and this is when aircraft are most likely to suffer damage from striking birds or bats.

Wildlife activity is monitored by the ASO during their presence at the aerodrome. Bird counts will be conducted at the beginning of each shift (generally between 0600-0700hrs). The information is to be gathered both from the airport and relevant surrounding areas, e.g. sports fields, swamps, water holes etc. and will then be correlated into graph form and used to indicate any significant change in the numbers of a particular species at any given time. This information is useful when planning eradication programs.

The ATL or delegate shall compile statistics on all bird counts, habits and bird strike data together with measures taken to mitigate the risks.

During any period when there is an unusual concentration of birds or bats, aircraft operators are to be advised by appropriate NOTAM or specific bulletin, (this information is published in ERSA), to exercise caution when operating in the vicinity of the aerodrome. When NOTAM action is required the ASO is to log this requirement in the ASO log book and then inform the MAO who is then responsible for issuing the required NOTAM. The MAO will then assess the bird or bat activity and cancel the NOTAM when required.

11.2.3 Attractions to Birds

While it is impossible to stop all birds or bats from over flying aerodromes, when considering adjacent land uses, authorities should take care not to create a wildlife problem. Existing land uses should also be managed so birds are not attracted. With proper management at aerodromes and careful planning in the environs around the aerodrome, wildlife numbers can be greatly reduced.

Maintenance procedures will take into account the requirement to reduce bird or bat activity on the Airport, which is achieved by way of habitat management i.e. converting the Airport into an environment that is unattractive to birds and bats. This is done in part through:

- Regulating the height of grass to reduce bird feeding and nesting areas;
- Preventing the accumulation of rubbish that may attract wildlife.
- Consultation with the Manager Infrastructure and Maintenance.
- Consultation with Avisure, Department of Environment and Science (Mackay) and Mackay Regional Council.

11.3 REPORTING OF AN ACTIVITY

11.3.1 Reporting of Wildlife Strikes

The reporting of a bird or animal strike, including a “near miss” or a hazardous situation or suspected bird strike, is mandatory under the *Transport Safety Investigation Act 2003* (TSI Act). These incidents are to be reported to the Australian Transport Safety Bureau (ATSB) using the Tracker Airside and if required the Mackay Airport Bird Strike form.

The ASO shall record all aircraft bird or animal strikes in the ASO Logbook and then report these bird and animal strikes to the ATL. The ATL will investigate each incident and, if necessary, discuss with the ASOs any special actions that might be warranted to remove or minimize further similar occurrences.

11.3.2 Reporting of Wildlife Activity

Excessive bird or animal activity on the aerodrome is to be logged in the ASO log and any action taken reported to the ATL. As above, ATL will discuss possible solutions, if applicable, with the ASOs to minimize bird or animal activity.

11.4 ARRANGEMENTS FOR REMOVAL OF BIRDS/ANIMALS

11.4.1 Removal of Birds

The ASO is responsible for carrying out harassment, dispersal or eradication procedures at Mackay Airport. Each ASO will be the holder of a Queensland Firearms Licence, be approved by the airport licensee, in this instance the Mackay Airport Head of Aviation or delegate and have demonstrated competency in the use of Mackay Airport supplied firearms.

The ASO must discharge their firearms only within the confines of Mackay Airport after having satisfied themselves that it is safe to do so.

Predominately, 12-gauge cartridges are used in double barrel shotgun as a means of harassment/dispersal.

Where this proves to be unsuccessful, live shot is to be used to cull problem birds. Dead birds and spent shells shall be removed from the area and disposed of in the correct manner.

11.4.2 Safety Precautions during Bird Removal

Firearms will be provided for the purpose of harassing and dispersing birds and animals. Under no circumstances are they used for any other purpose. Only those persons currently in receipt of a relevant Queensland Firearms License and approved by the Head of Aviation will be permitted the use of firearms for the purpose of bird control on the airport.

Care must be taken when harassing birds and animals. The following items are noted to facilitate the safe and efficient removal of bird and animal hazards at Mackay Airport.

1. As it can take several minutes to adequately disperse birds adjacent to runway and approach/departure area, procedures are to commence well in advance of aircraft movements.
2. All care will be taken to ensure birds are not dispersed in the direction of active runways or approach/departure paths.
3. The location of the bird hazard in relation to any aircraft in the vicinity, whether landing, taking off, taxiing etc. A gun shall not be fired in the direction of or in the vicinity of any aircraft.
4. A strict watch will be maintained for any personnel working in the vicinity, particular men on foot whose clothing may blend in with the background.
5. Never carry a loaded gun in the vehicle.
6. Particular care will be taken when using a gun in the vicinity of any buildings, aerials, runway lights, windsocks etc.
7. A strict watch will be kept for helicopter and fuel tanker traffic.
8. Never fire in the direction of any vehicle moving on the perimeter road or at any houses, vehicle etc. in the vicinity of the boundary fence.

9. When using cracker shell ammunition in dry, hot conditions, care will be taken to ensure that the spent cracker casing (which has a tendency to smoulder) does not set off a grass fire.
10. Guns must be thoroughly cleaned and oiled after use.
11. When not being carried in the ASOs vehicle, guns and ammunition must be stored separately in a firearms specific cabinet.

11.4.3 Damage Mitigation Permit

The Department of Environment and Science regulates the taking of wildlife. Mackay Airport is no longer required to apply for and hold a "*Damage Mitigation Permit*" to take any wildlife.

The Nature Conservation (Animals) Regulation 2020 and the Nature Conservation (Plants) Regulation 2020 replaced the Nature Conservation (Wildlife Management) Regulation 2006 and other related regulations. While the focus of this review was to give the regulations a more logical structure and to introduce the international standard system for categorising the conservation status of wildlife, several amendments were also made.

The Animals Regulation includes a new provision relating to Damage Mitigation Permits for the control of animals at airports. Under the new provision strategic airports are now exempt from requiring a Damage Mitigation Permit and have been given greater flexibility in how they record the animals that are taken.

1. The number of wildlife taken must be the minimum necessary to maintain safety.
2. The taking must be humane and can occur only within the boundaries of the holder's property.
3. To keep a daily written register listing the numbers, species, sex (if known) and the date of all wildlife taken. The register is to be made available to a Conservation Officer for inspection, on request.
4. To provide access to a Conservation Officer at any hour, to monitor the numbers killed.

11.4.4Removal of Animals

The integrity of the aerodrome boundary fence shall be kept in good condition and boundary gates kept closed at all times. If animals find their way onto the aerodrome they are to be removed immediately and the means of entry identified and rectified.

11.5 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

MAO – responsible for:

- Arranging and coordinating Wildlife Hazard Management Committee meetings.
- Responsible for the implementation and update of the Bird and Wildlife Management Plan.
- Liaising with airline operators when necessary regarding bird/animal removal.
- Formulating an Operations and Firearms Policy and annually reviewing the procedures within this policy.
- When necessary, engaging the consultants to undertake professional bird surveys and recommend mitigation strategies.
- Ensuring that Mackay Airport is fulfilling its obligations under The Nature Conservation (Animals) Regulation 2020 and the Nature Conservation (Plants) Regulation 2020.

ATL – responsible for:

- Ensuring that bird/animal removal and dispersal takes place by the ASO during inspections.
- When necessary, ensuring an appropriate NOTAM is raised to cover the removal or dispersal of bird/animals.
- Monitoring bird/animal activity and strike statistics.
- Ensuring that all bird/animal strikes are reported to ATSB.
- Coordinating ASO training for bird and other wildlife identification and strike reporting, inspection for bird and wildlife hazards, bird counts, bird dispersal and culling, and weapons certification.
- Maintaining the weapons/ammunitions register.
- Annually reviewing operations procedures and firearms policy and forward any recommended modifications to the MAO.

ASO – responsible for:

- Inspecting the aerodrome boundary fence daily so that access for animals such as wallabies is restricted. If animals find their way onto the aerodrome they are to be removed immediately and the means of entry identified and rectified.
- Undertaking runway inspections for bird/animal activity and if necessary, arranging for dispersal of birds/animals.
- Undertaking bird dispersal and culling.
- Logging and ensuring that all bird/animal strikes during inspections are reported to ATSB via the Mackay Airport Bird Strike Report form
- Monitoring bird/animal activity on the aerodrome and if necessary, arranging for a suitable NOTAM to be issued through the ATL.
- Safely storing and maintaining firearms and ammunition, as per the NQA Firearms Policy and relevant SWP.

11.6 CONTACT DETAILS

The MAO, ATL and ASO are the key personnel with respect to Wildlife Hazard Management. Their respective contact details are found in the Telephone Contact List at the beginning of this Manual.

PART 2 AERODROME ADMINISTRATION AND OPERATING PROCEDURES

SECTION 12 OBSTACLE CONTROL

12.1 GENERAL

This section specifies the procedures required to monitor obstacles and building development on and in the vicinity of Mackay Airport, in relation to the height of buildings and other structures. The Civil Aviation Safety Authority (CASA) bases these requirements on the standards as set out in MOS 139. The Head of Aviation is responsible for the establishment of the Obstacle Limitation Surfaces (OLS) required around the Mackay Airport.

12.1.1 Obstacle Limitation Surfaces (OLS)

At the Mackay Airport, the Obstacle Limitation Surfaces (OLS) are based on the following criteria as applied in MOS 139, Chapter 7, tables 7.1-1 'Approach Runways' & 7.1-2 'Take-Off Runways':

- Runway 14/32 – Instrument Non-Precision Code 4.

- Runway 05/23 – Instrument Non-Precision Code 2 - which has been converted to a taxiway system. Mackay Airport is surveying and protecting the airspace in case of future reinstatement.

The OLS comprises a number of reference surfaces in airspace, which determine whether or not an object may be an obstacle in respect of aircraft maneuvering in the vicinity of the airport or during take-off or landing. An obstacle is thus defined as any object that infringes the OLS.

The OLS are complex surfaces related to the runways. The OLS for Mackay Airport are specifically detailed in Annex F of this section.

12.1.2 PANS-OPS Surfaces

PANS-OPS Obstacle Assessment Surfaces are discrete complex surfaces in airspace specifically related to the requirements for instrument flight (i.e. flight where the pilot relies totally on cockpit instruments and without visual reference to the ground).

In contrast to the OLS, which determined at which point an object becomes an obstacle (to be assessed for its impact on aircraft operations), PANS-OPS surfaces cannot be infringed. In fact, the height of the tallest structures or feature beneath any one of the PANS-OPS surfaces determines the altitude/elevation of that surface, and all connected surfaces. If a new and higher obstacle is created beneath a particular PANS-OPS surface, that surface also has to move correspondingly higher and it may affect other surfaces, which results in a consequential adjustment to the minimum height to which an aircraft may descend. This higher minimum altitude may affect the ability of the pilot to establish visual reference with the ground.

12.2 MONITORING OF THE OBSTACLE LIMITATION SURFACES

12.2.1 Monitoring & Notification of Obstacles by Airport Safety Officers

CASR 139.350 requires Mackay Airport to monitor the airspace around Mackay Airport to detect any infringement of the OLS by and object, building, structure or gaseous efflux having a velocity exceeding 4.3 metres per second.

As part of the Daily Serviceability Inspection, the ASO shall carry out a visual check of the approach/take-off climb surface areas, the transitional surfaces and the inner horizontal surface close to the aerodrome. The purpose of the visual check is to determine if any new obstacles have penetrated the OLS or whether a new obstacle could affect the instrument approach procedures published for Mackay.

When a new obstacle is detected, the ASO shall advise ATC and the ATL at the earliest opportunity and raise an appropriate NOTAM advising:

a) The nature of the obstacle – for instance structure or machinery;

b) Distance and bearing of the obstacle from the nearest runway end or the ARP.

c) Height of the obstacle above mean sea level;

d) If it is a temporary obstacle – the duration of the infringement;

e) Amended runway gradient changes and declared distances if applicable.

If a proposed object or structure is determined to be an obstacle, details of the proposal must be referred to CASA to determine whether it will be a hazard to aircraft operations.

CASA may recommend that obstacles be marked and or lit and may impose operational restrictions on the aerodrome as a result of an obstacle.

12.2.2 ANNUAL OLS SURVEY

An instrument check of the Approach Take-off Climb and Transitional Surfaces will be carried out during the annual Aerodrome Technical Inspection in accordance with CASR 139.230 Para. 2(a) 'Aerodrome Technical Inspections'. The MAO will arrange and brief a suitably qualified consultant or surveyor to carry out this survey. The survey data will be used to update the AIP Runway Distances Supplement (RDS). The MAO will be guided by MOS 139 10.3 in determining the need for NOTAM action if changes to the RDS are required. Runway 14/32 OLS survey data for 150m and 300m strip is sent to airlines and CASA.

12.2.3 Monitoring Areas associated with Instrument Approaches

Airservices Australia designs instrument approach and departure procedures in accordance with ICAO PANS-OPS standards. Airservices Australia has provided drawings showing the PANS-OPS surfaces and critical obstacles in each PANS-OPS surface applicable to Mackay's instrument approach procedures. An instrument approach normally comprises five phases, the initial approach, intermediate approach, final approach, circling approach and missed approach. The circling approach is an area within which an aircraft can maneuver after becoming visual and is normally used by a pilot to land on the runway end that is not aligned with the instrument approach. The missed approach area is used when a pilot does not become visual on the final approach and must climb to a safe altitude to either hold, commence another approach or divert to another airport.

Airservices Australia drawings will show the PANS-OPS surfaces for each of these areas plus the critical obstacle within each area. The *Procedure Design Drawings (PANS-OPS) - Airservices Australia* are attached as Annex G. ASOs should identify each critical obstacle visible from the aerodrome so that they can be used as a reference for new obstacles.

ASOs are therefore required to monitor the PANS-OPS surfaces to the extent possible to ensure that any new obstacle in each area is not higher than the critical obstacle advised by Airservices Australia.

The ATL shall conduct an annual inspection of critical obstacles to ensure that any new obstacle in each area is not higher than the critical obstacle advised by Airservices. Inspections shall be documented on ***9034MKY*** *Mackay Airport Operations Inspections – Critical Obstacles*.

The ATL shall advise Airservices Australia Procedure Design Section of any obstacle that may affect their existing instrument approach designs. **Monitoring of New Building Developments & Proposed Structures**

If the ATL becomes aware of any proposed development or construction near the aerodrome that is likely to become an obstacle, details of the development or construction must be passed to CASA immediately. CASR 139.360 refers.

The Queensland Government State Planning Policy 1/02 "Development in the vicinity of certain airports and aviation facilities" requires the Mackay Regional Council to refer any building application that may impact on the airport OLS or gaseous emissions exceeding 4.3m/sec that may affect aircraft safety, to Mackay Airport.

Upon receipt of any application for height approval (either permanent or temporary in nature) the ATL in conjunction with the MAO will assess the proposal and:

- If no protrusion of the OLS or PANS-OPS is involved, recommend that the Head of Aviation recommend approval of the application, or
- If the OLS or PANS-OPS are penetrated by the proposal, recommend that an aeronautical study be undertaken so that the impact of the proposal can be properly assessed.

Consequently, the ATL shall prepare a letter for the Head of Aviation signature to the Mackay Regional Council recommending that they either deny or approve the application.

12.3 ASSESSMENT OF OBSTACLES

The MAO will determine the extent of any proposed infringement including the potential effect on approach and take-off gradients and declared distances, taking into account long term development of the runways. In assessing the compatibility of a proposed structure, Mackay Airport should weigh the cost of preventing or removing the obstacle, against the restrictions imposed by such an obstacle to the aerodrome's immediate and long-term usability. In cases where a proposed obstacle will impact significantly on operational viability, detailed discussions with CASA, Instrument design consultants, major airlines and/or other aircraft operators at the airport will be undertaken by the MAO before making decisions regarding Mackay Airport's recommendation to Council on the proposal.

The following details should be provided to the CASA office and/or instrument procedures design consultant for a determination:

- Existing obstacles
- Proposed obstacle
- Type of structure
- Location
- Latitude/Longitude
- Bearing and distance to ARP
- Distance from start of TORA
- Instrument or non-instrument runway
- Offset from runway centerline
- Height of structure (total including aerials etc.)
- Ground level of site
- Height of OLS
- PANS-OPS surface considerations
- Penetration of surface and a copy of the OLS plan showing the location of the object.
- Date of effect for of the proposed object.

12.4 NOTIFICATION OF OBSTACLES

Where published operational data in AIP needs to be altered to reflect the presence of a new obstacle, the Responsible Person will notify industry in accordance with Part 2 Section 4 of this manual and MOS 139 Chapter 10.

A NOTAM will be issued for the duration of all temporary obstructions or in the case of a permanent obstruction, until such times as details of the obstruction are published in AIP ERSA.

12.5 OBSTACLE MARKING AND/OR LIGHTING

Where required by CASA, obstacles (temporary or permanent) shall be marked and/or lit in accordance with MOS 139.

Details of existing lit obstacles are provided in Part 2 Section 3.8.

12.6 TYPE A – AERODROME OBSTRUCTION CHART

A Type A - Aerodrome Obstruction Chart is not published for the aerodrome.

12.7 KEY PERSONNEL – ROLES AND RESPONSIBILITIES

Head of Aviation – responsible for:

- Establishment of the OLS requirements for Mackay Airport.
- Approving/rejecting the erection of buildings or other structures in the vicinity of the airport and for the approval of building heights and temporary crane heights associated with such construction works.

MAO – responsible for:

- Ensuring that details of all obstacles (as defined in MOS 139 Chapter 7) are reflected in the AIP published information for the aerodrome.
- Ensuring that instrument surveys of the approach and take-off climb areas are carried out annually (through Technical Inspection), and ensure, if necessary, appropriate NOTAMS are issued as a result of these surveys.
- Ensuring there is a current Airport OLS plan available for the airport.
- Ensuring that there is a system in place to assess and make recommendations regarding applications for the erection of buildings or other structures in the vicinity of the airport and for the approval of building heights and temporary crane heights associated with such construction works.
- Implementing and maintaining a building height control approval system to receive and assess applications for height approvals.

ATL - responsible for:

- Ensuring that during aerodrome serviceability inspections, visual inspections of the OLS are carried out for the purpose of early detection of any new obstacles.
- Ensuring that arrangements are made for NOTAM action in respect of temporary obstacles infringing the OLS.
- Monitoring the location and height of any obstacle that infringes the OLS and which may be a threat to the safety of aircraft operations, and to report such infringements to CASA and the MAO as appropriate.
- Ensuring that the Airport OLS plan and associated plans are kept up to date.
- Ensuring that a system is in place for the provision of advice to Airservices Australia – AIS Section for the purpose of amending published information relating to the presence of obstacles (in accordance with Part 2 Section 3 of this manual).

ASO: - responsible for:

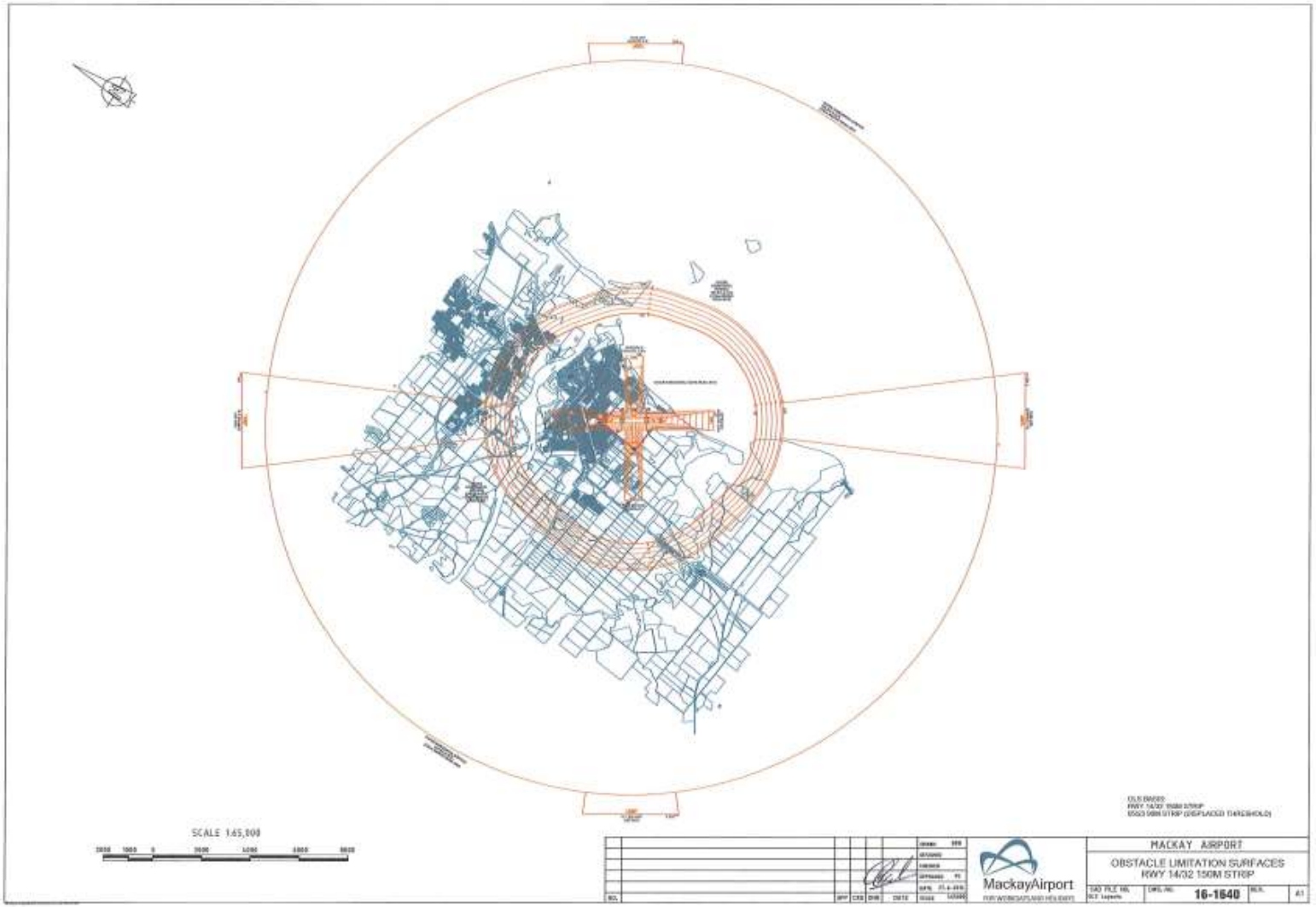
- Monitoring daily the OLS and reporting to ATL any newly detected obstacles which may be penetrating the OLS.
- Monitoring of the obstacle lighting.

12.8 CONTACT DETAILS

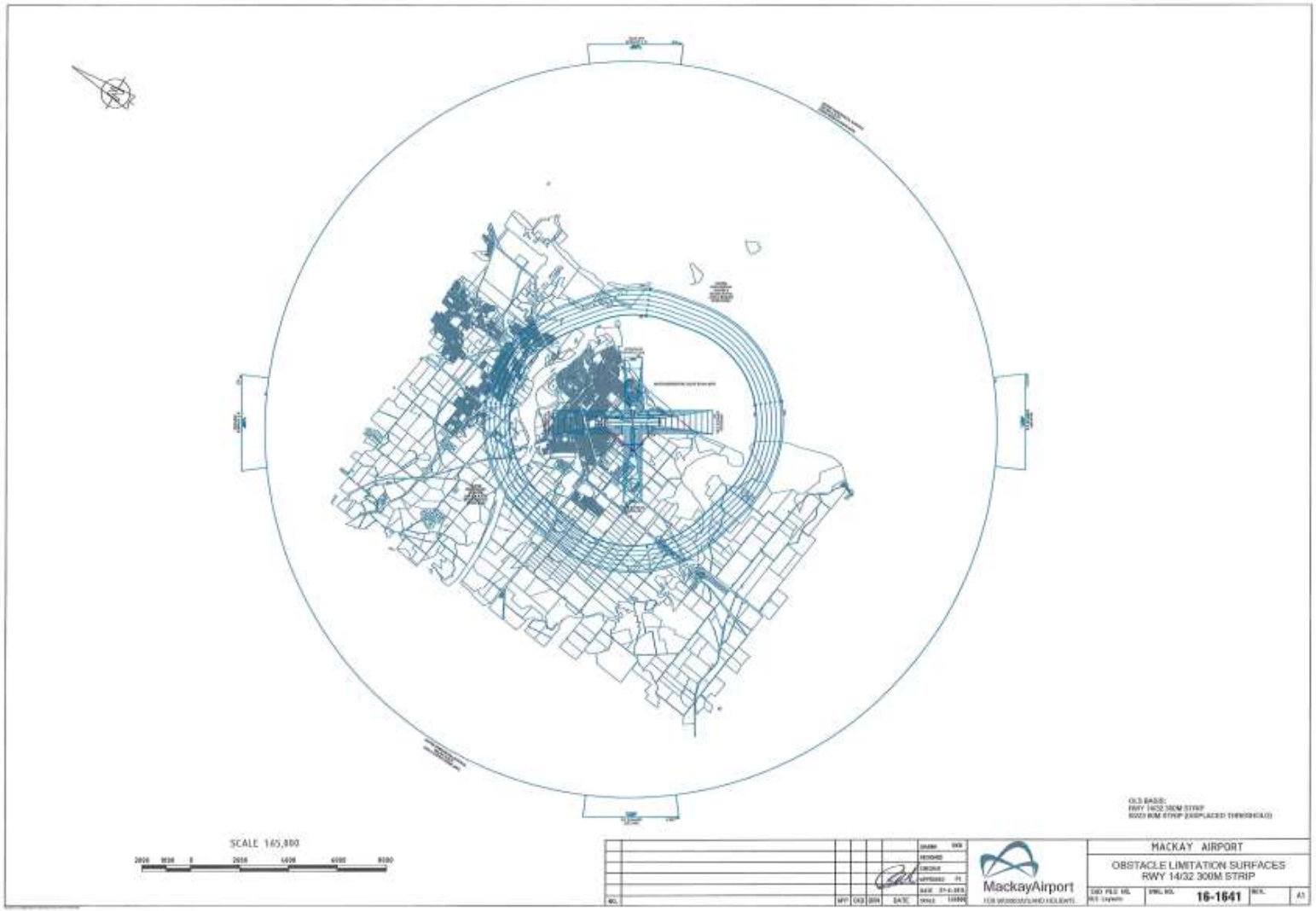
The contact details for the Head of Aviation, MAO, ATL, ASO, CASA officers, Airservices Australia procedure design section and the nominated Airport Consultants are found in the Telephone Contact List at the beginning of this Manual.

ANNEX F - MACKAY AIRPORT – OLS DRAWINGS

01 - RUNWAY 14/32 OLS – 150M STRIP



02 - RUNWAY 14/32 OLS – 300M STRIP



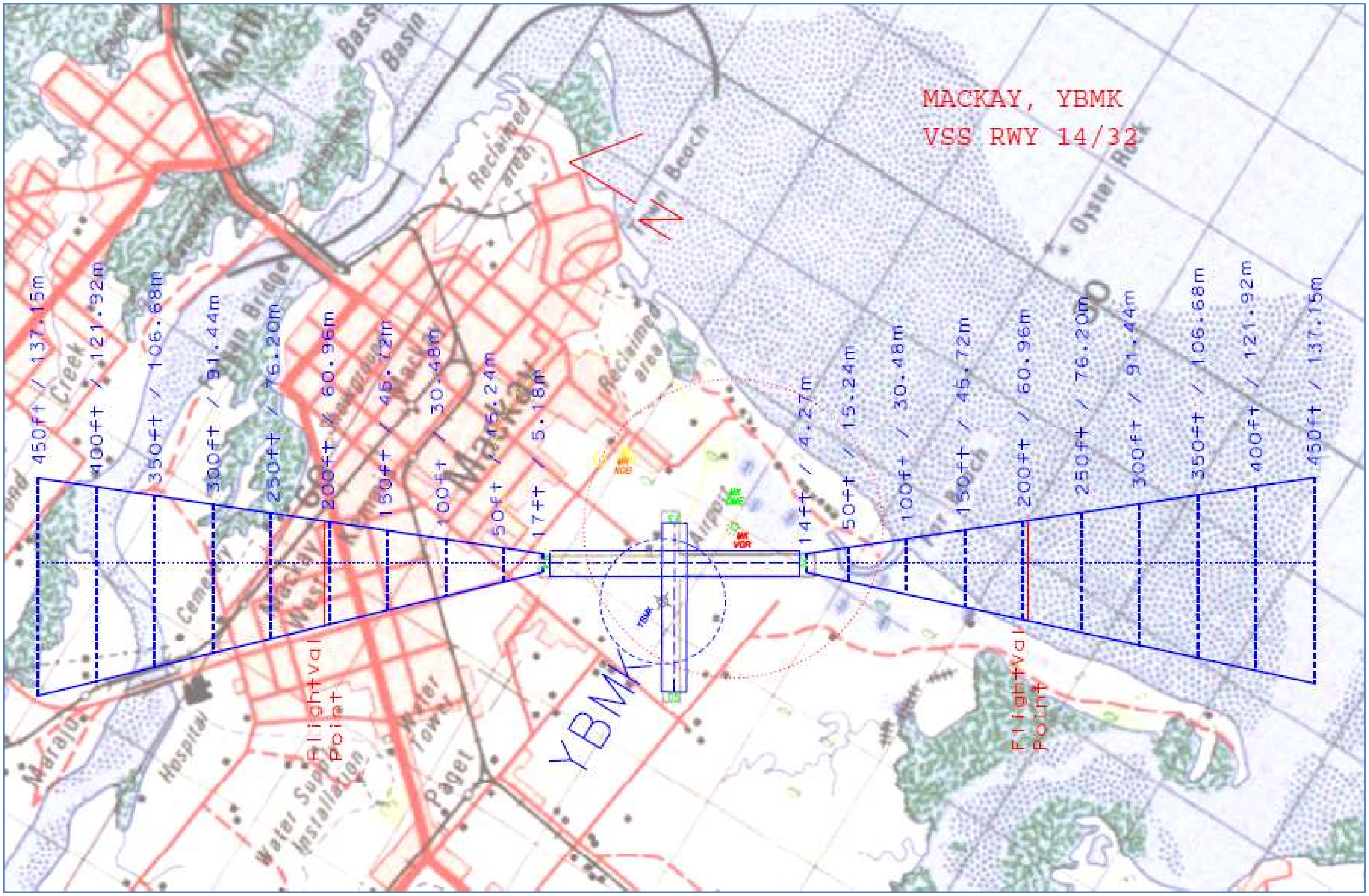
ANNEX G - PROCEDURE DESIGN DRAWINGS (PANS-OPS) - AIRSERVICES AUSTRALIA

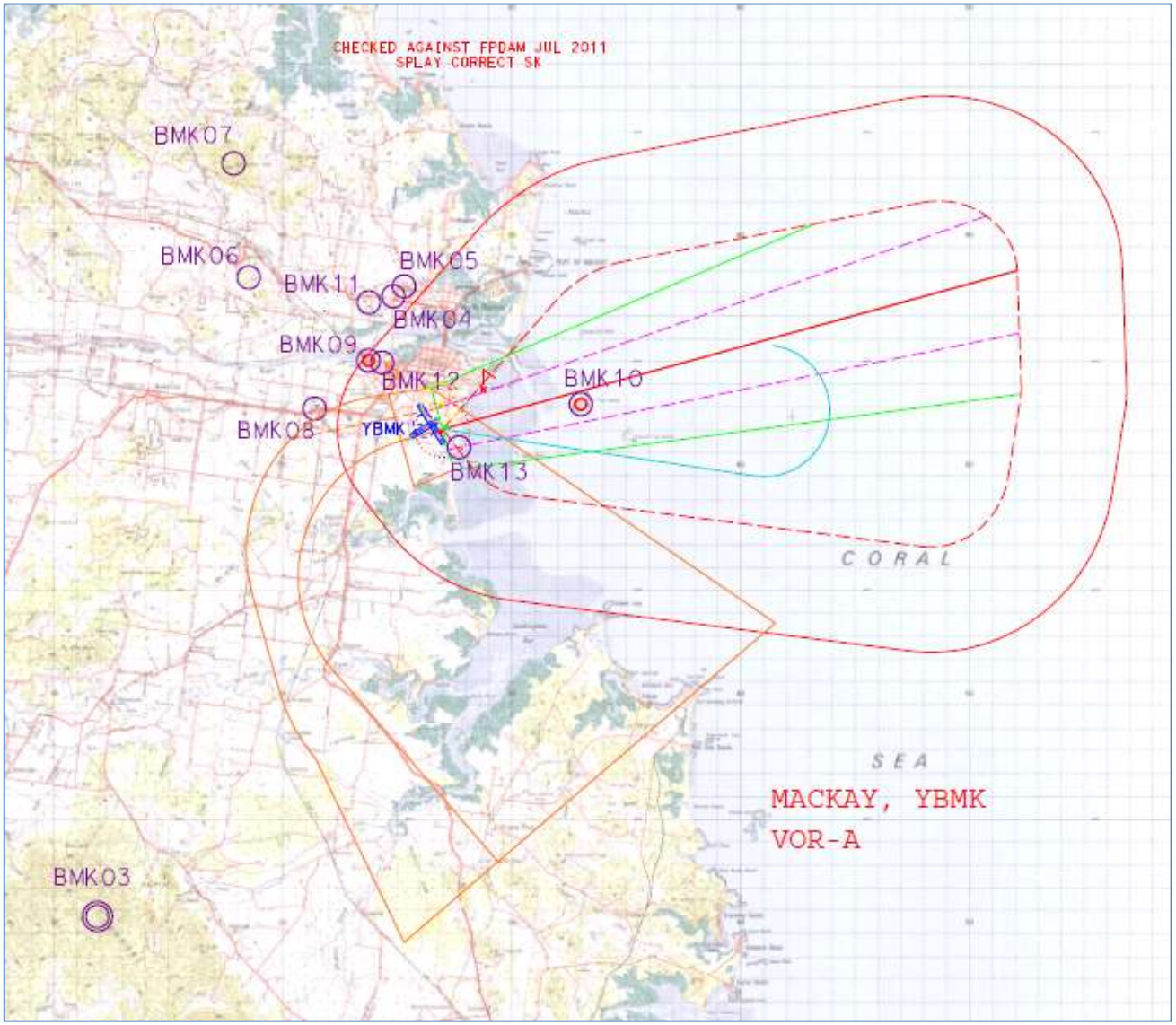
Note: All bearings/distances on following drawings are from intersection of runways

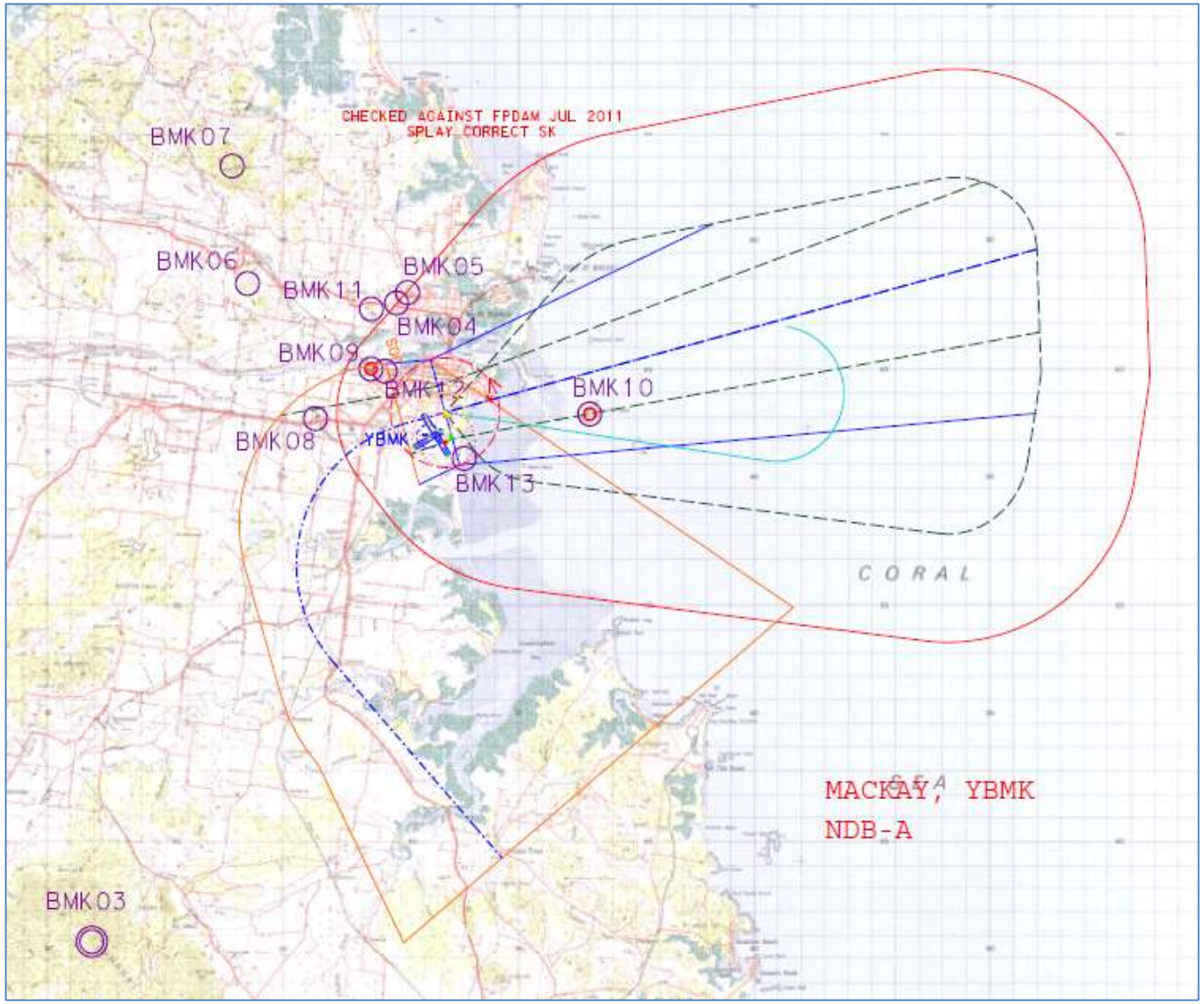
AERODROME: (YBMK) OBSTACLES

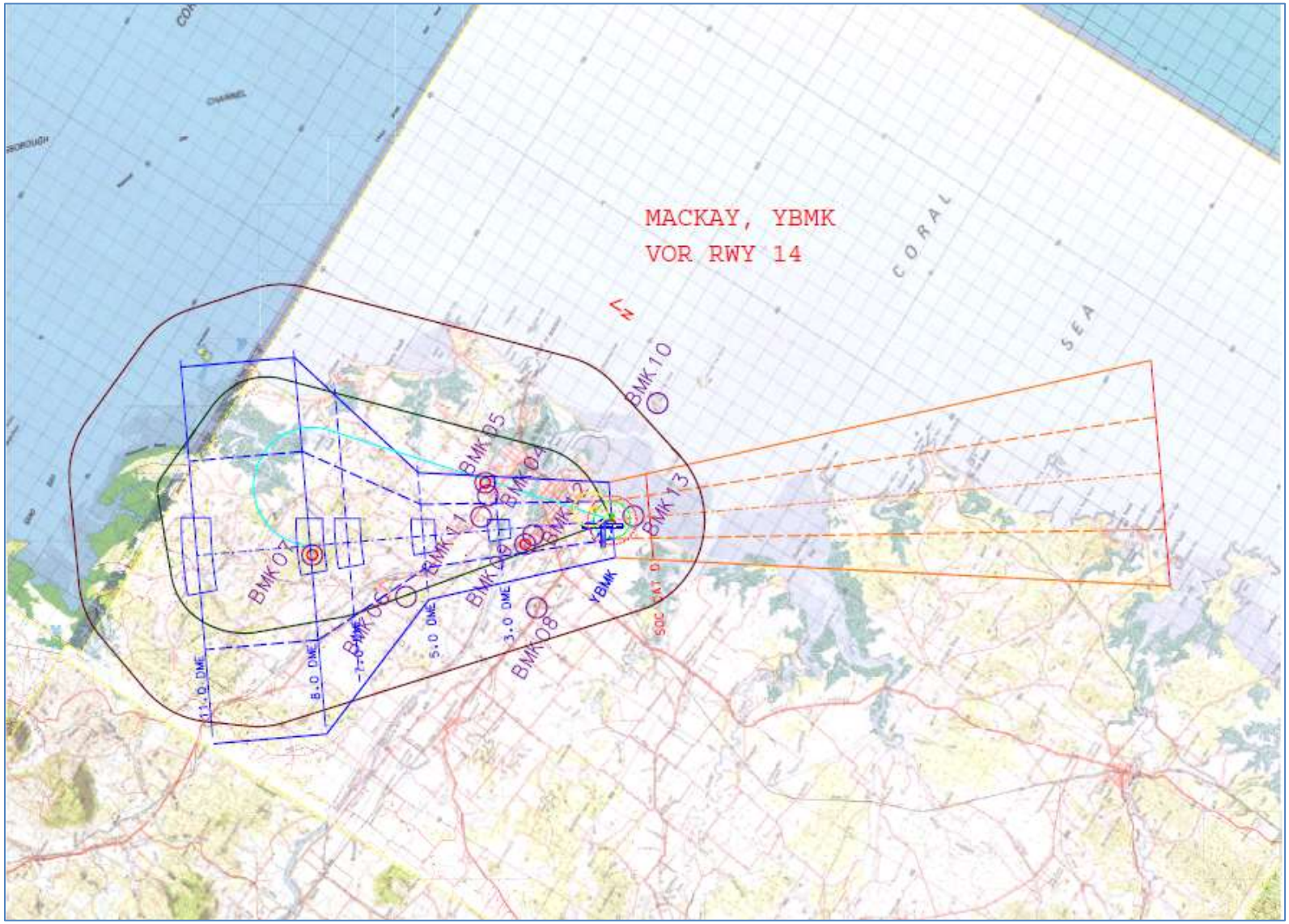
Serial	Segment	Description	BRG °T ARP	Dist (km)	Dist (nm)	Elev (ft)	MOC	Nominal Alt (ft)	OIS / Flt Alt (ft)	Approximate Position	
BMK01	25NM MSA (R320°-R152°)	SKIDDAW PEAK 393m	014°	44.9	24.22	1446	984	2500	**1516**	20 46.72	149 17.09
BMK02	25NM MSA (R152°-R320°)	1058m Spot	205°	52.3	28.24	3677	984	4700	**3716**	21 36.03	148 58.09
BMK03	10NM MSA	560m Contour	213°	25.8	13.91	2102	984	3100	**2116**	21 22.01	149 02.68
BMK04	CIRCLING CAT A/B	40m Contour	346°	5.8	3.15	314	295	610	**315**	21 07.23	149 09.95
BMK05	VOR14 FINAL	Mt Oscar Tower	351°	6.2	3.33		246	650	**404**	21 06.99	149 10.21
BMK06	CIRCLING CAT D	154m Spot	309°	10.1	5.43	658	394	1060	**666**	21 06.83	149 06.29
BMK07	RNAV14 INTERMEDIATE	The Black Mtn 304m SPOT	323°	14.2	7.66	1183	492	1700	**1208**	21 04.13	149 05.87
BMK08	SECTOR-E ARRIVAL - FINAL	Racecourse Mill Smoke Stack	278°	4.9	2.62	262	300	720	**420**	21 09.92	149 08.00
BMK09	VOR14 FINAL	Mackay Hospital Building	319°	3.8	2.03	151	246	440	**194**	21 08.76	149 09.34
BMK10	NDB-A or VOR-A FINAL	40m Contour	081°	6.9	3.73	314	295	610	**315**	21 09.72	149 14.72
BMK11	RNAV14 FINAL	40m Contour	335°	5.9	3.20	330	246	700	**454**	21 07.38	149 09.33
BMK12	LNAVVNAV RWY14	0-20m Contour	General Area			199			**200**	NA	NA
BMK13	LNAVVNAV RWY32	Shipping	General Area			200			**200**	NA	NA

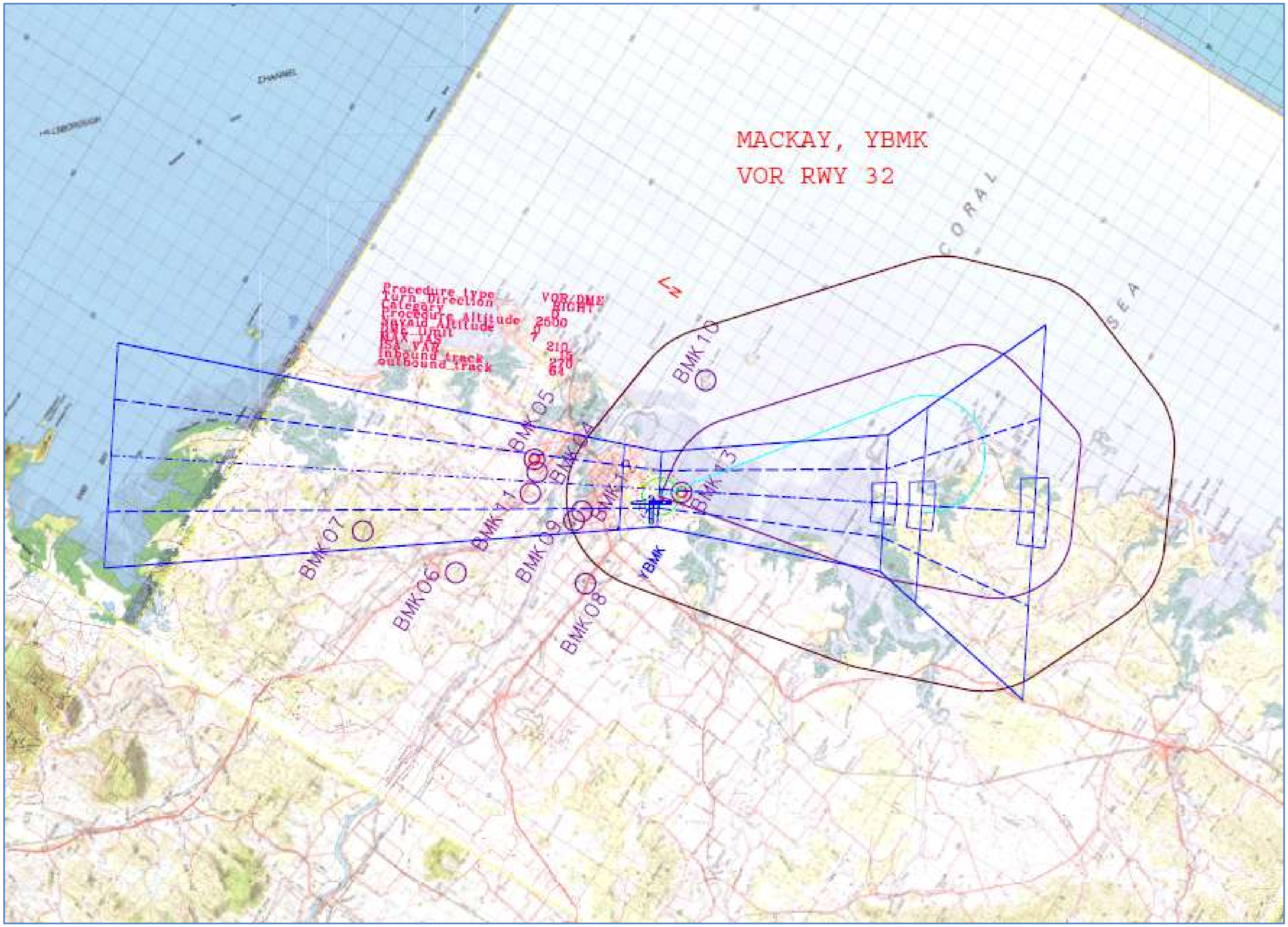

BMK07
MACKAY, YBMK
CIRCLING (A-D)
BMK06
BMK11
BMK05
BMK04
BMK09
BMK12
BMK10
BMK08
YBMK
BMK13
CAT A/B
CAT C
CAT D
CORA

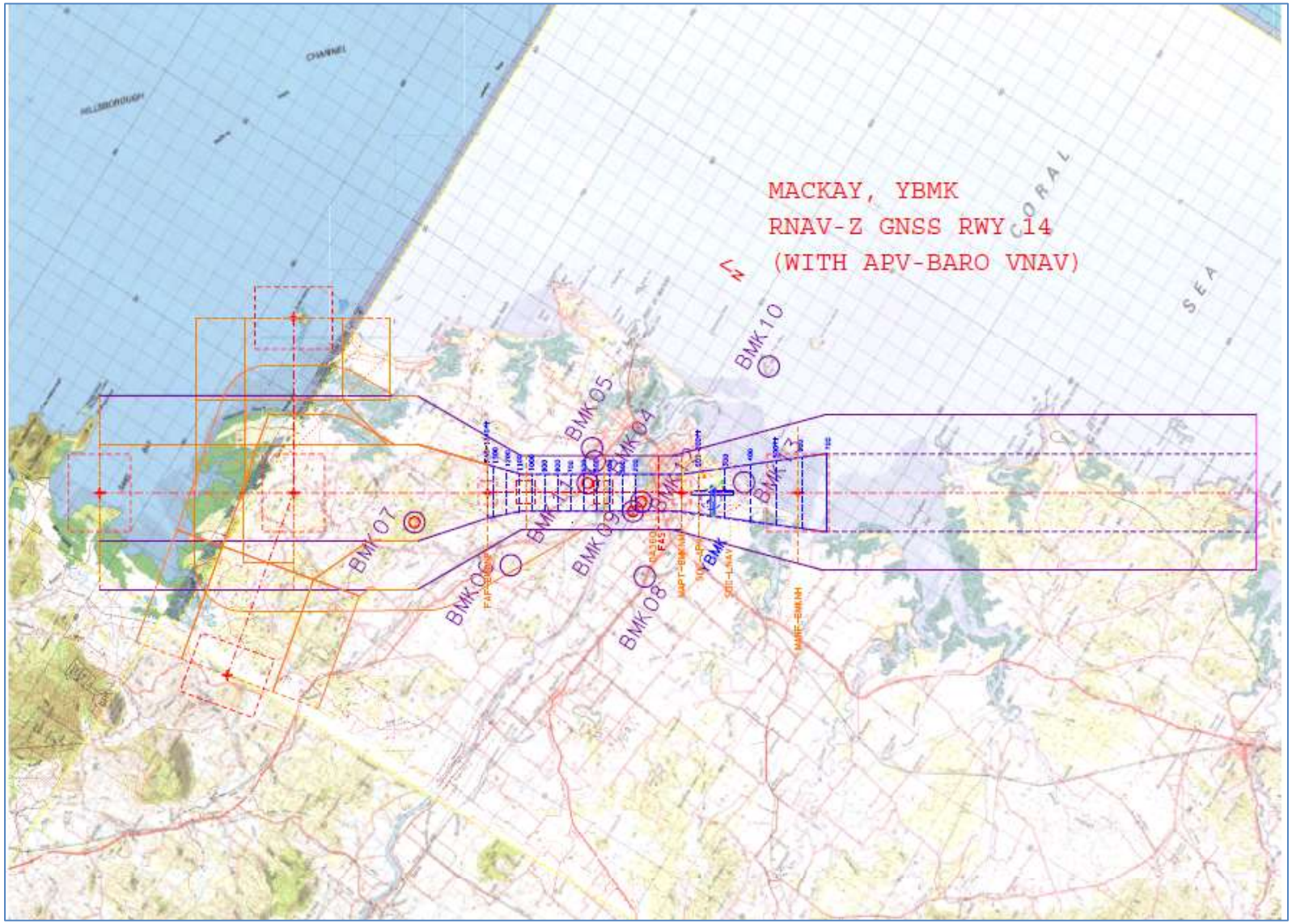

MACKAY, YBMK
VSS RWY 14/32
450ft / 137.15m
400ft / 121.92m
350ft / 106.68m
300ft / 91.44m
250ft / 76.20m
200ft / 60.96m
150ft / 45.72m
100ft / 30.48m
50ft / 15.24m
17ft / 5.18m
14ft / 4.27m
50ft / 15.24m
100ft / 30.48m
150ft / 45.72m
200ft / 60.96m
250ft / 76.20m
300ft / 91.44m
350ft / 106.68m
400ft / 121.92m
450ft / 137.15m
FlightVal Point
FlightVal Point
YBMK

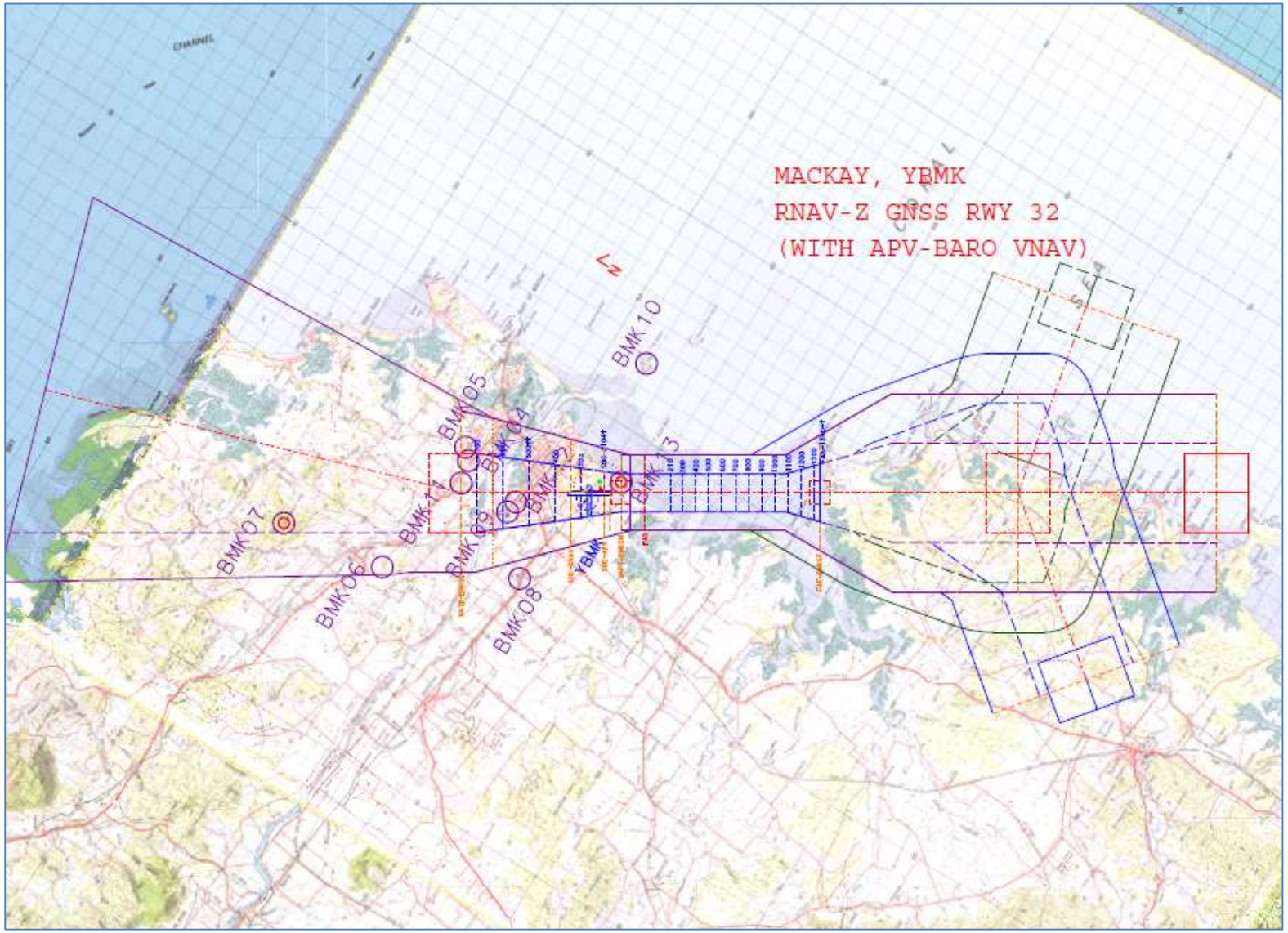

CHECKED AGAINST FPDAM JUL 2011
SPLAY CORRECT SK
BMK07
BMK06
BMK11
BMK05
BMK04
BMK09
BMK12
BMK10
BMK08
YBMK
BMK13
CORAL
SEA
MACKAY, YBMK
VOR-A
BMK03

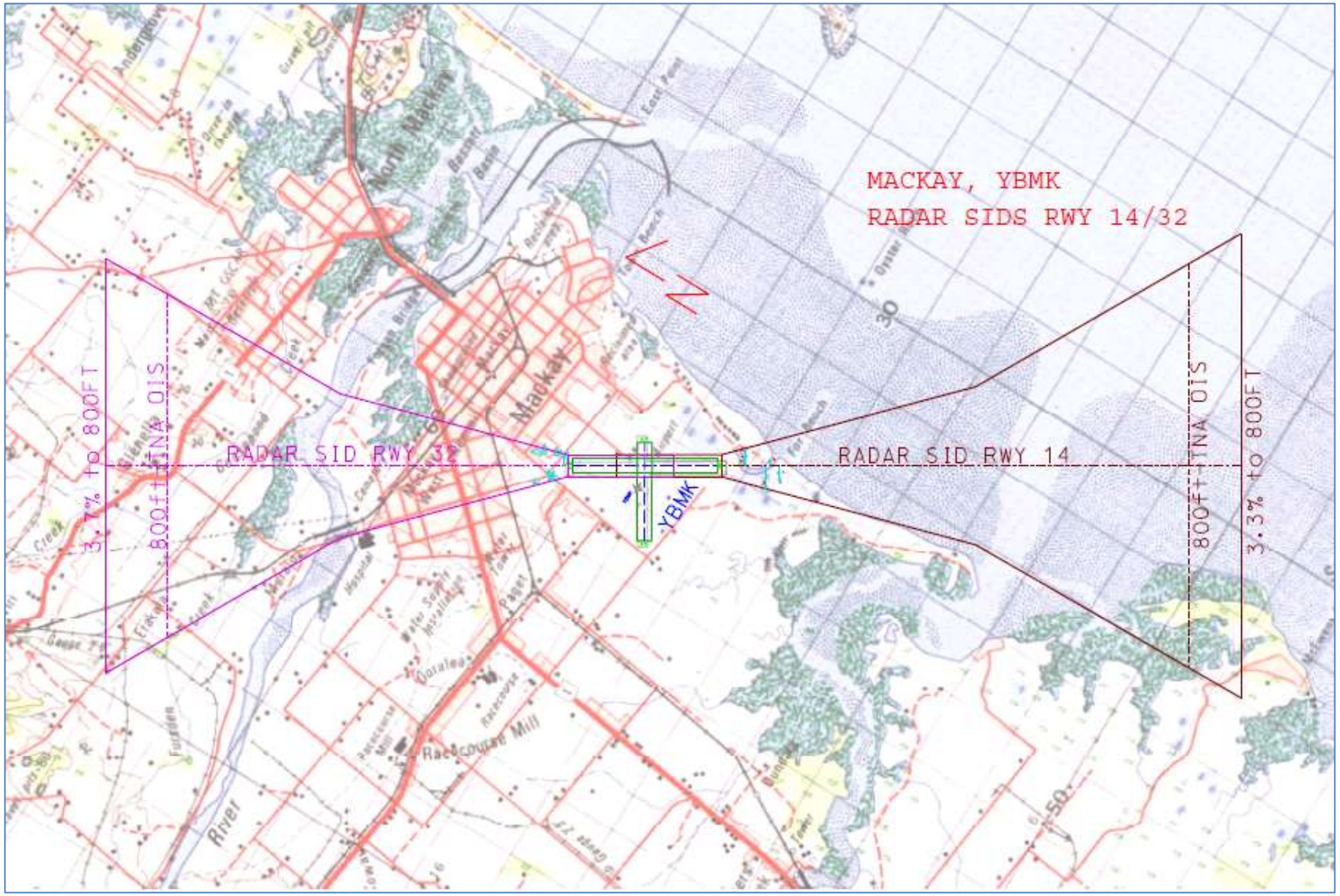

CHECKED AGAINST FPD4M JUL 2011
SPLAY CORRECT SK
BMK07
BMK06
BMK11
BMK05
BMK04
BMK09
BMK12
BMK10
BMK08
YBMK
BMK13
CORAL
MACKAY, YBMK
NDB-A
BMK03


MACKAY, YBMK
VOR RWY 14
CORAL
SEA
BMK10
BMK13
BMK12
BMK11
BMK05
BMK04
BMK07
BMK06
BMK09
BMK08
YBMK
11.0 DME
8.0 DME
7.0 DME
5.0 DME
3.0 DME


MACKAY, YBMK
VOR RWY 32
Procedure type VOR/DME
Turn Direction RIGHT
BMK05
BMK06
BMK07
BMK08
BMK09
BMK10
BMK11
BMK13
YBMK
CORAL
SEA


MACKAY, YBMK
RNAV-Z GNSS RWY 14
(WITH APV-BARO VNAV)
CHANNEL
HILLSBOROUGH
CORAL
SEA
BMK10
BMK05
BMK04
BMK07
BMK06
BMK09
BMK08
BMK13
YBMK


MACKAY, YBMK
RNAV-Z GNSS RWY 32
(WITH APV-BARO VNAV)
BMK10
BMK05
BMK04
BMK02
BMK13
BMK07
BMK11
BMK03
BMK06
BMK08
YBMK


MACKAY, YBMK
RADAR SIDS RWY 14/32
RADAR SID RWY 32
RADAR SID RWY 14
800FT+TNA OIS
3.7% to 800FT
800FT+TNA OIS
3.3% to 800FT
YBMK
Mackay
North Mackay
Racecourse Mill
River
30
50

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 13	DISABLED AIRCRAFT REMOVAL

13.1 Objective

Mackay Airport has prepared this "*Disabled Aircraft Removal Plan*" to provide an efficient and coordinated response for the removal of aircraft disabled on or near the runways at Mackay Airport. The plan provides details pertinent to air safety investigation of a disabled aircraft as well as guidelines for aircraft recovery for nominated personnel.

13.2 Authorisation

An aircraft which suffers an accident passes into the custody of the Australian Transport Safety Bureau (ATSB) pending a decision to undertake an accident investigation and if so, until the accident investigation is complete. Furthermore, an aircraft involved in an accident may not be removed from the accident site until the ATSB officially releases the aircraft to the owner.

In all but extreme emergency situations, the Australian Transport Safety Bureau (ATSB) approval shall be sought by Mackay Airport before any action to remove a disabled aircraft is taken.

There are 2 other sources of authority for the removal of disabled aircraft available to Mackay Airport.

1. **Airport Assets (Restructuring & Disposal) Act 2008:** This Act details powers of Mackay Airport 'authorised officers' in moving any aircraft (contravening property) that affects the efficient operations, safety or security of Mackay Airport.
2. **Civil Aviation Regulations (CAR) 293:** In certain circumstances the Civil Aviation Safety Authority (CASA) can authorise removal of aircraft through this regulation. The primary limitations associated with CAR 293 are that:
    - CASA can use this regulation only where safety of air navigation is involved; and
    - any assistance given in the removal of aircraft is to be necessary and reasonable.

CASA authorisation may be given only in the "interest of safety" and not for commercial expediency. Action then taken indemnifies persons so authorised from liability for damage which may occur to the aircraft by reason of removal.

13.3 Immediate Considerations

It is important that where an aircraft becomes disabled on or adjacent to an aircraft movement area, immediate action is taken to assess the availability or otherwise of runway systems (critical areas).

- NOTAM action shall be taken as appropriate.
- Where possible, if an aircraft up to approximately 3400 kg is involved and where no injuries and only minor damage has been incurred, such as deflated or punctured tyres, immediate removal action may be initiated.
- Where action is taken in accordance with the above, the ATSB Investigation Team shall be advised that such action is proceeding.

13.4. Responsibilities

13.4.1Mackay Airport

The Head of Aviation or his representative shall:

a) Ensure that ATSB has been notified and obtain their requirements with respect to the aircraft;

b) Arrange for security of the aircraft as required by ATSB;

c) If runway is not to be closed, determine runway length available and arrange for displaced threshold for landing aircraft pending calculation of revised declared distances by the MAO or ATL;

d) During tower hours, keep ATC updated and arrange for appropriate NOTAMS to be issued.

e) Arrange for notification of the holder of the "Certificate of Registration";

f) Inspect all areas prior to resumption of normal operations;

g) Return to operation unaffected portions of the aerodrome as expeditiously as possible after assuring that access to the incident area has been secured and associated taxiways and runways are in good operational condition and free of debris and damage;

h) Coordinate all aspects of the removal effort;

i) Convene a meeting with the airline/operator Recovery Coordinator, ATSB investigator and where necessary representatives from CASA and recovery equipment company.

Additionally, when coordinating a removal/recovery of a disabled aircraft, the Head of Aviation or his representative shall:

a) Keep chronological records of meetings and recovery operations;

b) Arrange storage areas for mail cargo and records etc.;

c) Determine recovery equipment and manpower needs;

d) Obtain aircraft manufacturer's data on recovery;

e) Establish suitable access routes to and from recovery area;

f) Determine storage area for recovered aircraft;

g) Determine need to defuel aircraft;

h) Monitor weather conditions, particularly when crane lifting or air bag operations planned;

i) If necessary, arrange lighting to site;

j) Consider need for presence of a fire tender at recovery site;

k) Determine whether runway clearance limits are likely to be infringed during recovery operation;

l) If excavations are necessary, obtain a clearance in respect to underground services;

m) Arrange necessary surface restorations;

n) Convene a post recovery operation critique.

13.4.2 Australian Transport Safety Bureau

The ATSB is responsible for the investigation of all aircraft accidents and incidents involving civil aircraft operations within Australia in accordance with the provision of Transport Safety Investigation Act 2003.

An aircraft which is the subject of an accident is deemed to be in the custody of the Director and shall not be removed or otherwise interfered with without permission of the ATSB Investigating Officer except for:

a) the extrication of persons, animals and mail from the wreckage of an aircraft;

b) the protection of wreckage from destruction by fire or other cause;

c) the prevention of immediate danger to the safety of persons or property;

d) the removal of the aircraft and its contents to a place of safety when the aircraft is wrecked on water;

e) if the aircraft has come from within Australian territory and the written agreement of the Director has been obtained for removal of goods or baggage, the removal of goods or baggage can be carried out under the supervision of the Police;

f) if the aircraft has come from outside Australian territory and the written agreement of the Director has been obtained for removal of goods or baggage, the removal of goods or baggage from the vicinity of the aircraft can be carried out on a clearance by or with the consent of an officer of Border Force.

13.4.3 Aircraft Owners, Operators and Tenants

The holder of the aircraft "Certificate of Registration" or his delegate is responsible for the prompt removal of disabled aircraft and parts thereof, unless required or directed to delay such action by the ATSB or Mackay Airport.

Each aircraft operator using Mackay Aerodrome should have a basic recovery plan ready to meet such an emergency. Consultation with aircraft airframe or engine manufacturers should be conducted as appropriate. The choice of technical ways and means to remove the aircraft and all costs associated with the recovery is the responsibility of the airline or owner involved.

When a disabled aircraft is blocking or delaying the use of any portion of the maneuvering area, the owner or operator of the aircraft shall make immediate arrangements to have such aircraft moved as soon as authorised by ATSB.

In the event that removal of the aircraft is not initiated as soon as possible, or is not progressing at an acceptable rate, the Mackay Airport Head of Aviation will decide whether to initiate action to have the aircraft removed at the expense and risk of the owner.

Mackay Airport may act as a contractor to the owner in the removal of a disabled aircraft. In this case, the owner or the owner's authorised representative must complete and sign an Indemnity and Release Document, a copy of which is shown at Annex H.

13.4.4 Recovery Coordinator

The aircraft owner should appoint a "Recovery Coordinator" with the authority to make all decisions, technical and financial, including clearance from the aircraft insurer, to proceed with prompt removal of the aircraft. The removal of the aircraft and all costs associated with the recovery, including contractor charges, airline rental and service company equipment charges, aerodrome property damage etc., is the responsibility of the aircraft owner/operator.

The duties of the Recovery Coordinator are to:

a) Have all required company facilities, including personnel and equipment made available;

b) Meet with the Mackay Airport Head of Aviation or his representative and the ATSB Investigator and develop a comprehensive plan for the removal of the aircraft;

c) If appropriate, arrange for a company representative to be available to answer any questions from the press, to issue press releases as may be appropriate, and to coordinate with Mackay Airport Head of Aviation or his representative for access of the press to the accident scene;

d) Participate in recovery critique.

13.5 Removal and Recovery Equipment

Equipment suitable for the removal or recovery of aircraft is available from the following companies:

Provider	Equipment	Contact
Mackay Airport	• Skid Steer Loader (forklift) • 4t Tipper • 5t Excavator • 5KVA Inverter • 2 KVA Petrol Generator • 2 Trolleys located in the old terminal building	Manager Infrastructure and Maintenance Infrastructure Maintenance Supervisor
Coates Hire, Mackay	• Floodlighting including 4 and 6 KVa generators, Welders, • Cherry Pickers to 50 ft. • Forklifts to 20,000lb capacity • Air compressors to 1000 cfm	07 4963 9000
Ground Handling Agencies /Airlines	• Airbags • Recovery Jacks • Lifting Slings	As per 1.2 – Aerodrome Manual Telephone Contact numbers
BOC Mackay	Nitrogen Cylinders to 21,000 psi	07 4968 2222

Following any event in which the Mackay Airport either does not have the resources or requires additional resources to adequately restore services a request for assistance will be made to the Mackay Local Disaster Management Group.

13.6 Contact Details

The names and contact telephone numbers of Mackay Airport officers are detailed at the beginning of this Manual.

ANNEX H - INDEMNITY AND RELEASE DOCUMENT - MOVEMENT OF STATIONARY AIRCRAFT

To: Mackay Airport Pty Ltd (MAPL)

I, the undersigned, being the owner or the duly authorised representative of the owner of the aircraft described below hereby agree to provide this indemnity and release on the conditions set out below.

1. I agree and consent to the Mackay Airport, its servants, agents, contractors and employees to move at any time required by Mackay Airport the aircraft at my sole cost and expense.
2. In consideration of Mackay Airport moving the aircraft, I agree to indemnify and keep indemnified Mackay Airport against all and any loss damage cost charge expense or other liability however suffered paid or incurred by or threatened against Mackay Airport in relation to or arising out of or in consequence of any action, proceeding, claim or demand which is or may be brought made or prosecuted or threatened against Mackay Airport in respect of any loss of or damage to property, loss of life or personal injury or other loss that may arise in any way from the moving of the aircraft by Mackay Airport.
3. I further agree to release Mackay Airport from all claims actions, causes of actions, proceedings and demands which I or the owner now has or but for this indemnity and release would or might at any time in the future have against Mackay Airport and from all present and future liability of Mackay Airport to me and or the owner however caused in relation to or arising out of or in consequence of the moving of the aircraft.
4. I confirm that it is the intention of this indemnity and release that each servant, agent, contractor and employee of Mackay Airport obtain the benefits expressed in their favor under this indemnity and release and be entitled to enforce such benefits.
5. I confirm that I and the owner have abided by all applicable laws including without limitation acts (specifically the *Airport Assets (Restructuring and Disposal) Act 2008)*, regulations, by-laws, directions and determinations relating to or made by the Civil Aviation Safety Authority, the Australian Transport Safety Bureau, the Department of Infrastructure and Transport, the Commonwealth of Australia, Mackay Airport, and any other relevant authority or body which has authority in relation to interference with or movement of an aircraft.

Description of Aircraft:

_____

_____

Type of Aircraft: _____ **Registration**: _____

Signed by: _____ **Date**: _____

Full Name: _____

In the presence of: (Mackay Airport employee) **Date**: _____

_____

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 14	HANDLING OF HAZARDOUS MATERIALS

14.1 General

This chapter identifies the procedures for the safe handling of hazardous materials on the aerodrome. The handling, storing and transporting of Hazardous Materials on the Mackay Airport is governed by provisions of the Australian Standards 1940-2018 "The Storage and Handling of Flammable and Combustible Liquids" and related Australian Standards.

14.2 Aircraft Operations

Aircraft freight companies and airlines are required under CASR 92 to comply with these regulations in relation to the carriage, or consignment for carriage of dangerous goods on Australian aircraft or foreign aircraft within Australian territory.

Manuals on Company procedures are produced by concerned companies and used in conjunction with these Consignment & Carriage of Dangerous Goods by Air Regulations.

14.3 Hazardous Materials

14.3.1 Hazardous Waste

Hazardous waste, including sewage, industrial solvents, acids caustic agents, oxidising agents and other corrosive agents are required to be disposed of appropriately as per applicable regulations.

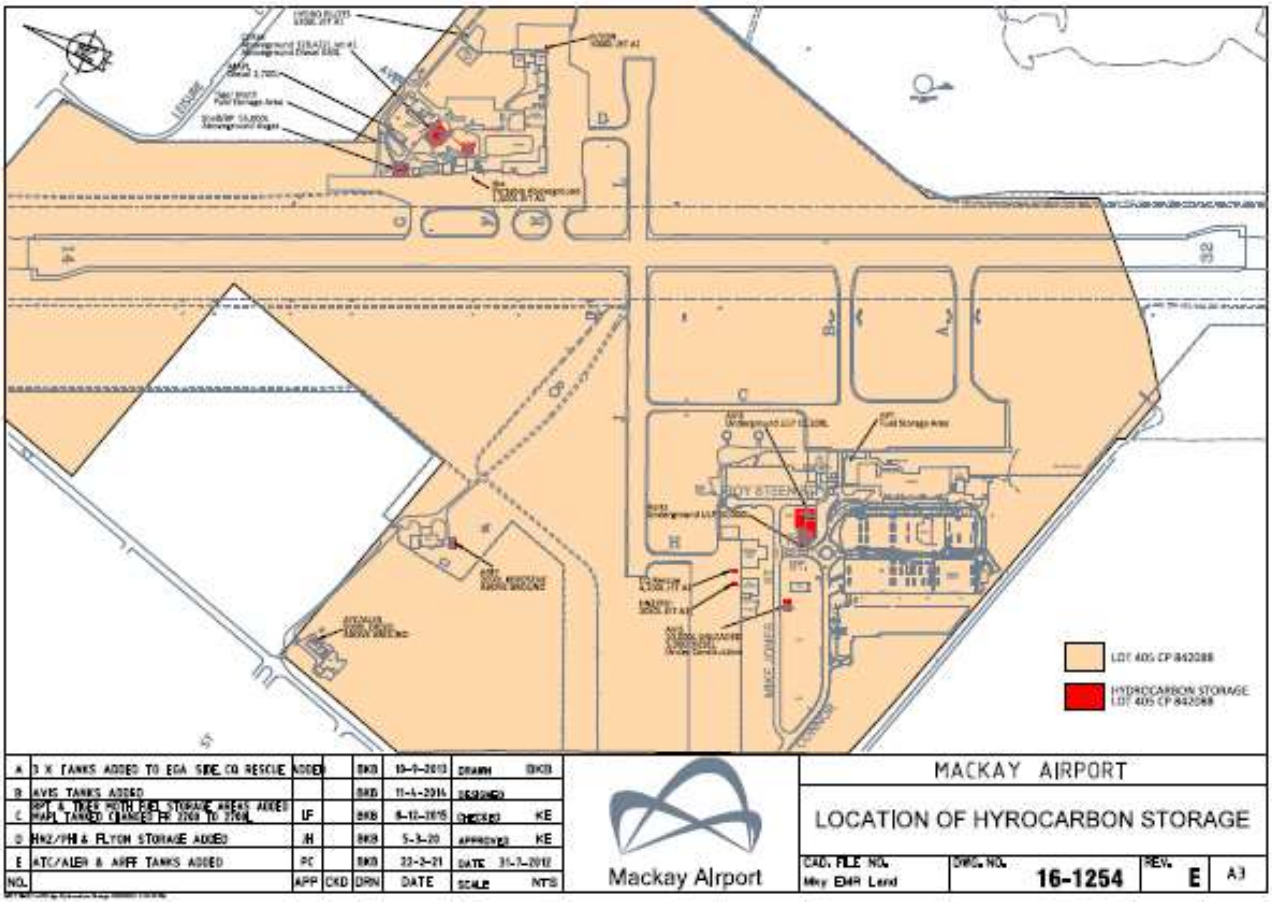
14.3.2 Petro-Chemicals

All refuelling carried out on the airport by Viva and BP is done by mobile tankers (there are no underground hydrant facilities on the airport) or by bowsers located near the Eastern GA Apron.

BP have a fuel storage depot on the eastern side of the airport. The Viva fuel storage depot is located at the Mackay seaport. The main fuels stored and dispensed by these companies are Avgas & Jet A1.

These companies operate in strict accordance with the requirements of CAO 20.9 and the relevant codes established by the SAA and in particular AS 1940-2018"The Storage and Handling of Flammable and Combustible Liquids". Quality control checks are performed daily by trained aviation refuellers on the aviation fuel in accordance with the respective Oil Company Quality Control Procedures.

Mackay Airport provides a facility in the Mackay Airport workshop area to dispose of small deposits of waste oils and contaminants. The MAO ensures that the relevant SAA codes and Mackay Airport Workplace Health & Safety and environmental requirements are complied with.



14.3.3 Explosives

Term storage of explosives on Mackay Airport is not permitted. Any explosives, as defined by ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air, will be loaded and unloaded in accordance with the guidelines provided in AC139-12 (0) entitled Safety Distances for Explosive Laden Aircraft.

The MAO will normally only approve the transshipment of relatively small quantities of explosives (such as may be accommodated in aircraft below 5,700kg MTOW) and only if the application is accompanied with a written approval from CASA.

The ASO will be present during the loading of explosives in order to ensure that the conditions of the approval are adhered to. The ASO will advise both ATC and ARFFS of the activity.

14.3.4 Other Hazardous Materials

Other hazardous material may include herbicides, pesticides and (on occasions) radioactive substances.

Pesticides and herbicides are used routinely within Mackay Airport and are handled in accordance with the HAZCHEM labelling on the respective packets or containers.

Although radioactive isotopes may be occasionally transported to Mackay by air (for use in hospitals) Mackay Airport does not consider the incidence of such activities significant enough to warrant detailing specific handling procedures in this manual.

In cases where the MAO becomes aware of any shipment of radioactive substance at the airport, any specific requirements deemed necessary at the time will be discussed with the airline company or its agents. Actions in the event of an incident involving radioactive materials are detailed in the AEP.

14.4 Key Personnel – Roles and Responsibilities

PLEASE NOTE: In all cases, the aircraft operator, the re-fueling company or the ground-handling agent (as the case may be) is responsible to contain and clean-up any hazardous material spill on the airport caused by their organizations.

MAO: - responsible for:

- Ensuring that appropriate procedures are in place to accommodate the aviation safety related requirements in respect of hazardous materials on the airport.
- Approval of the shipment of explosives through the airport, including determining any conditions under which the operation may occur.
- Ensure that all developments on the airport incorporate adequate measures to facilitate the effective and safe disposal of hazardous materials i.e. fuels & oils.

ATL: - responsible for:

- Preparing in conjunction with environmental officers hazardous materials procedures and promulgating these procedures for use by Mackay Airport operations staff.
- Investigating any reports by ASOs regarding fuel spills or hazardous waste spills.
- Recording and processing Mackay Airport Fuel/Oil Spill Records compiled by ASOs.
- Providing a report, based on ASO findings, to the MAO on any major fuel spill, or other hazardous material spill.

ASO: - responsible for:

- Reporting to the ATL any practices or procedures observed regarding storage and handling of aviation fuels and oils that in their opinion are unsafe.
- Report in the ASO log any hazardous material spills.
- In respect of waste spills, overseeing the clean-up by fueling companies or aircraft operators.
- If necessary, supplying absorption materials and/or emulsifying agents for fuel and oil spills.
- In the case of a major fuel spill (i.e. in excess of 100 litres) seeking ARFFS assistance to stand-by with firefighting appliances during the clean-up and, if appropriate, to provide foam, and as a last resort provide high pressure water to neutralize and disperse the spill if the containment fails.
- After the event formally report any spillage to the ATL including cause and corrective action taken.
- Providing unserviceability markers or lighting as may be required.
- Inspect and when necessary reopen a closed portion on the movement area if the area is considered serviceable.

MIM: - responsible for:

- Ensuring that appropriate procedures are in place to accommodate the environmental requirements in respect to hazardous materials on the airport.
- Providing scientific/technical advice to Mackay Airport personnel and airport tenants.
- With Environment Manger, undertaking environmental audits in order to ensure detection of spillage or unauthorised disposal of hazardous materials or waste.

Manager Commercial and Terminals: - responsible for:

- All airside and land side tenant agreements, these include:
    - Safety
    - Security
    - Environment

14.5 Contact Details

The names and contact telephone numbers of Mackay Airport officers are detailed in the beginning of this manual.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 15	PROTECTION OF RADAR AND NAVIGATIONAL AIDS

15.1 General

This chapter identifies the procedures to be used for the protection of radar and navigational aids located on the aerodrome to ensure that their performance will not be degraded.

The following Navigational aids are owned, maintained and operated by Airservices Australia as per the Airservices Australia Aerodrome Operator Interface Arrangement for Mackay Aerodrome.

- VOR Facility
- DME
- NDB Facility (off airport)

15.2 Control of Activities around the Installation Sites

The procedures for the protection of the navigational aids located on the airport are documented in MOS 139 Section 11 – 'Standards for other aerodrome facilities'.

15.3 Installation Warning Signs

Airservices Australia shall supply and install all appropriate signage, including signs warning of hazardous microwave radiation, around the respective sites.

15.4 Ground Maintenance Arrangements

15.4.1 Site Maintenance

Ground maintenance (such as mowing) is routinely carried out in and around these installations by Airservices Australia contractors in accordance with established procedures involving prior approvals through Airservices Australia Technical staff and ATC.

15.4.2 Maintenance Concerns

Any maintenance or operational problems will be immediately directed to Airservices Australia, Technical Section located on the Airport.

PART 2	AERODROME ADMINISTRATION AND OPERATING PROCEDURES
SECTION 16	LOW VISIBILITY OPERATIONS

16.2 General

Mackay Airport does not have the facilities to support low visibility aircraft operations when the runway visibility (RV) falls below 800m, the limiting factor being the standby power supply with a switchover time of greater than 1 second.

Although Low Visibility Operations for aircraft are not supported, procedures must be put in place to guarantee the safety of aircraft, personnel and vehicles during conditions of low visibility. In this context, Low Visibility Operations (LVO) refers only to the ground procedures that must be implemented when ATC notifies of its activation.

This section details the arrangements in place to assist ATC in determining the RV during conditions of low visibility as well as the arrangements for restricting personnel and vehicles on movement areas during LVO.

Automatic RVR instrumentation is not provided at Mackay Airport. ATC or pilots may request the ASO to conduct RV assessments in conditions of low visibility. These are visual observations carried out to enable ATC or pilots to determine the RV. RV Assessments may only be performed by suitably qualified and authorised RV assessors. All Mackay Airport ASOs who may be required to conduct RV assessments are trained and notified in writing of their appointment as an RV assessor. Before appointment, they must undergo eye testing to fulfil the requirements of MOS 10.19.3.1.

16.3 Runway Visibility Assessment

16.2.1 Responsibility

In conditions of low visibility and on request from ATC or pilots, the ASO shall conduct an RV assessment on the nominated runway in accordance with the Mackay Airport SOP.

16.2.2 Notification

Once the RV Assessment is complete, the ASO shall report the visibility distance along the specified runway to ATC or the pilot by radio.

16.2.3 Appointed Runway Visibility Assessors

The following Mackay Airport staff have been appointed as Runway Visibility Assessors for Mackay Airport:

Philip Clark	David Annear	Brandon Ford
Dale Parker	Shane Hokins	

16.3 Restrictions during LVO

When ATC notifies the ASO that LVO is implemented, the ASO shall restrict the movement of persons and vehicles on the movement area. To this end, the ASO shall: Cause all works airside to cease and direct personnel, plant and equipment to be moved either from the movement area or to a specific area and remain until further notice. The ASO may anticipate the introduction of LVO and implement restrictions before the RV reduces to 800m. Vehicles and persons associated with the servicing of aircraft on the apron areas are permitted during these conditions, however, vehicles may need to be restricted within the GA apron areas.

- Provide a “follow me” service for taxiing aircraft and an escort service for vehicles if requested by ATC or pilots.
- Carry out a perimeter fence inspection and check that all security gates are secured.
- Request permission to enter maneuvering areas when LVO is introduced during tower hours

16.4 Key Personnel – Roles and Responsibilities

ATC: - responsible for:

- Requesting RV assessments;
- Determining the RV; and
- Introducing LVO

MAO: - responsible for:

- Ensuring that there are arrangements in place to minimize vehicular and pedestrian traffic on the movement area during LVO.

ATL: - responsible for:

- Ensuring that appropriate serviceability inspections are carried out by the ASO;
- Ensuring that ASOs are trained to conduct RV assessments;
- Ensuring that ASOs conduct RV assessments on request from ATC or pilots.

ASO: - responsible for:

- Conducting RV assessments on request from ATC or pilots;
- Ensuring that only essential vehicles and personnel have access to the movement area during LVO;
- Providing a "Follow Me" service for taxiing aircraft and an escort service for vehicles on request from ATC or pilots by:
    - Liaising with pilot/driver in command directly or via ATC to confirm route and destination;
    - Following a defined route at a suitable speed to destination ensuring safety of other vehicle or aircraft; and
    - Ensuring the escort vehicle has flashing lights and 'low beam' headlights enabled. It is imperative that the position of all vehicles/aircraft using this service be positively established at all times when flying operations are in progress.
- Checking the security of the perimeter fence and security gates;
- Requesting permission to enter maneuvering areas when LVO is introduced during tower hours.

PART 2 AERODROMES ADMINISTRATION AND OPERATING PROCEDURES

SECTION 17 AERODROME RADIO COMMUNICATION SERVICES

17.1 General

In accordance with CASR 139.385, Mackay Airport has provided Mackay Airport with a frequency confirmation system for use during CTAF hours that complies with the requirements of MOS 139 14.3. The system

commissioned at Mackay Airport is an Aerodrome Frequency Response Unit (AFRU) which is coupled with Pilot Activated Lighting (PAL). Hence, AFRU+PAL.

17.2 Collection of Statistics

CASA has not given the aerodrome owner any direction about collecting statistics for deciding what radio communication services or air traffic services should be provided at the aerodrome.

17.3 AFRU+PAL

17.3.1 Operation

The AFRU+PAL is installed at Mackay Airport and operates on the CTAF frequency of 124.5MHz. Activation of AFRU+PAL is in accordance with the operating instructions identified in the introduction section of AIP-ERSA.

17.3.2 Installation

The AFRU+PAL has been installed in accordance with the Airservices Australia Series II AFRU/PAL service manual and meets the ARFU technical specification as described in MOS Section 14.3.5. The system was commissioned on 16th February 2005. The AFRU+PAL unit is located in the Airport Lighting Room located in the ATC Tower Complex.

17.3.3 Commissioning

Commissioning of new AFRU+PAL units will be carried out per the requirements of MOS 139 9.1.15 & MOS 139 14.3.8.

Commissioning reports will be sent to the CASA Airport Inspector. If CASA is satisfied with the reports, CASA will approve the issue of a permanent NOTAM. The MAO is responsible for issue of this NOTAM.

17.3.4 Maintenance

Routine maintenance of the AFRU+PAL is carried out on an annual basis by Airservices Australia. The IMS is responsible for arranging this maintenance and any necessary repairs. If necessary, the MAO will arrange NOTAM action if the AFRU+PAL becomes unserviceable as per MOS Section 10.3.2.2. Copies of the user manuals for this equipment are held by Mackay Airport and Airservices Australia.

17.3.5 Reporting

During daily inspections the ASO shall check the AFRU transmission. If it is found to be unserviceable, the ASO shall make a log entry, complete a Faults and Services Request and advise the MAO or ATL who will then initiate the NOTAM and coordinate repair of the unit.

17.4 Key Personnel – Roles and Responsibilities

MAO: - responsible for:

- Ensuring that the AFRU+PAL is checked by ASOs during aerodrome serviceability inspections and by the electrical contractor during inspections.
- Arranging a permanent NOTAM on successful commissioning of a new AFRU+PAL system.
- Initiate NOTAM and coordinate repair of the AFRU+PAL if it becomes unserviceable (or delegate to ATL).

MIM: - responsible for:

- Arranging for the annual maintenance of the AFRU+PAL.

ASO: - responsible for:

- Checking the AFRU+PAL during the Daily Serviceability Inspections.
- Logging any unserviceability of the AFRU+PAL in the ASO Log.
- Reporting the fault on AFRU+PAL to the MAO or ATL for action.
- Raising a Faults and Services Request on an unserviceable AFRU+PAL system. On confirmation of repair and serviceability check, close fault.
- Initiate NOTAM for the AFRU+PAL if it becomes unserviceable as directed by the MAO or ATL. On confirmation of repair and serviceability check, cancel NOTAM.

17.5 Contact Details

The names and contact telephone numbers of the Mackay Airport officers with responsibility for the Aerodrome Radio Communication Service are detailed in the beginning of this manual.

PART 3 PARTICULARS OF AERODROME TO BE PUBLISHED IN AERONAUTICAL INFORMATION PACKAGE

SECTION 01 AERODROME INFORMATION REQUIRED FOR NOTIFICATION IN AIP- ERSA

The information contained herein is correct at the time this document was published and will be updated whenever this document is amended. Mackay Airport, in adherence to its responsibilities to update any changes to this information to Airservices Australia through the NOTAM and AIP amendment process, resolves that AIP should be consulted for the most up to date information.

GENERAL INFORMATION

Aerodrome Name	Mackay Airport (YBMK)
State	Queensland
Aerodrome Location	S21 10.3 E149 10.8 VAR 8 DEG E (ERSA update effective May 2019 – S 21° 10′ 17.47″ E 149° 10′ 46.62″ (as per revised format))
Aerodrome Elevation	19 ft.
Aerodrome Operator	Mackay Airport Pty Ltd P.O. Box 5806 Mackay MC QLD 4741 Phone: 07 4957 0201,
	ARO: 0418 570 233, 0407 570 208

Aerodrome Beacon Provided. Flashing with alternating white/green every 8 seconds

REMARKS:

1. AD Charges: All ACFT
2. This AD is a Security Controlled Airport.
3. RPT APN is a Security Restricted Area. Access for non RPT operators to RPT and Cargo APN by permission from Airport Management non RPT operators must obtain prior parking approval 48 HR PN from Mackay

Airport Pty Ltd, Phone 0418 570 233, Fax 07 4957 0273. Parking Approval Forms are available via Airport Website and return by fax or email to **aso@mackayairport.com** Access from cargo APN to RPT terminal or landside is via pedestrian gate 20A, remaining clear of Security Restricted Area.

4. Pedestrian Gates access code for both GA APN AVBL 0418 570 233 (2000-1100 SUN-FRI, 2000-0930 SAT). AH phone 0419757 117. Call –out fee will apply.
5. ASIC must be displayed at all times whilst airside, including on GA APN. Passengers must be escorted at all times.
6. Parking charges apply as per Mackay Airport Conditions of Use which can be obtained via Mackay Airport Website.

HANDLING SERVICES AND FACILITIES:

Viva Energy Australia: Oznorth Services Pty Ltd. JET A1 0500 to 2100 Local, AH 1 HR PN required call out fee applies. Avgas bowser 24 HR. PH 07 4957 3226, MBL 0407 127 539. Viva Fuel2Sky, V and MC accepted.
BP: AVGAS. H24 Carnet card swipe bowser. PH 07 4957 3226 or MBL 0407 127 539.
AVGAS not AVBL for ACFT wishing to refuel on Western GA APN off TWY J and H. AVTUR only AVBL by prior arrangement with Viva Refuelling agent.

RESCUE AND FIREFIGHTING SERVICES

1. RFFS Category and Hours of Operation as per local NOTAM
2. 131.0mHz AVBL HO
3. Water Rescue Service AVBL

APRONS AND TAXIWAYS

1. TWY C not AVBL for ACFT ABV MAX 21M wingspan or ACFT ABV 12,000KG.
2. TWY C AVBL HJ only.
3. TWY D not AVBL for ACFT ABV 5,700KG.
4. TWY E and TWY F not AVBL for ACFT ABV MAX 27.4M wingspan.
5. TWY G not AVBL for ACFT ABV 18.5M MAX wingspan.
6. TWY H not AVBL for ACFT ABV 12,000KG and restricted to 24M MAX wingspan.
7. TWY J, PCN 8/F /A/580 (84PSI)/T
8. TWY L, PCN 8/F /A/580 (84PSI)/T
9. Eastern GA APN BTN TWY F and TWY G restricted to 18.5M MAX wingspan.
10. Some sections of the Eastern GA APN Surface slopes exceed the standard (east of TWY D and north of TWY G)
11. Western GA APN not AVBL for ACFT ABV 12,000KG and restricted to 24M MAX wingspan.
12. Western GA APN restrictions not AVBL to HEL OPS for ACFT ABV MTOW 1,100KG with skids EXC with prior approval FM Duty Safety Officer, Tel: 0418 570 233.

SURFACE MOVEMENT GUIDANCE

1. CAUTION: Runway Holding Position for RWY 14/32 from the Eastern GA APN is marked along western edge of the APN.
2. Movement Area Guidance sign on TWY H.
3. RWY 14 MAGS - Illuminated Runway Designation MAG signs and taxiway location MAG signs to RPT Apron.

AERODROME OBSTACLES

1. 2 X lit smoke stack2, 262FT AMSL, BRG 272, 2.5 NM *(4,600 M)* FM ARP

2. Masts:
a) 405FT AMSL, BRG 342, 3.3 NM (6,480M) FM ARP. Lit
b) 350FT AMSL, BRG 018, 3.5NM(6,480M) FM ARP. 2 X unlit
3. Terrain:
   a) 819FT AMSL BRG 316 MAG 7.5 NM *(13854 M)* FM ARP infringes RWY 14 APCH
   b) 508FT AMSL BRG 319 MAG 6.4 NM (11858 M) FM ARP infringes RWY 14 APCH
4. Towers
   a) 1171FT AMSL BRG 315 MAG 7.7 NM *(14266 M)* FM ARP infringes RWY 14 APCH
   b) 189FT AMSL, BRG 308, 1.8 NM (3,360 M) FM THR RWY14. Unmarked

METEOROLOGICAL INFORMATION PROVIDED

1. TAF CAT B, METAR/SPECI
2. AWIS PH 07 3564 3724– Report faults to BoM

PHYSICAL CHARACTERISTICS

14/32	139	65a	PCN57 /F /C /1400 (203PSI) /T Grooved WID45 RWS 150

AERODROME AND APPROACH LIGHTING

(Request has been submitted to update ERSA for PAL+AFRU to AFRU+PAL and remove notes (1) and (2))

RWY 14/32	MIRL(1)	PAL+AFRU 124.5		SDBY PWR AVBL
RWY 14/32	PAPI(2)	PAL+AFRU 124.5	3.0 DEG53.3FT	SDBY PWR AVBL
RWY 14	RTIL(1)	PAL+AFRU 124.5		

(1) PAL + AFRU requires three one-second pulses to activate. (See INTRO para 23.5)
(2) PAL + AFRU requires three one-second pulses to activate. (See INTRO para 23.5). Double sided.

1. RWY edge light spacing: 14/32: 57M.
2. CAUTION: On approach to RWY 14 in poor visibility, lighting along section of Bruce Highway aligned N/S approximately 1.5NM W of AD may be mistaken for RWY.
3. RWY THR identification lighting RWY 14 are activated in conjunction with RWY lighting.
4. Lighting status confirmed on CTAF.
5. Lighting set to Stage 2 during CTAF HR.
6. SDBY PWR does NOT include WDI for RWY 14 or 32.

OTHER LIGHTING

ABN ALTN 8 WG

1. Secondary PWR switchover time: 15 SEC
2. TWY LGT: Green CL on A, B, E, H and J

ATS COMMUNICATIONS FACILITIES

FIA	BRISBANE CENTRE	135.5
APP	MACKAY APPROACH	125.65
ATIS	MACKAY	112.7 128.0
SMC	MACKAY SHOWGROUND	121.7
TWR	MACKAY TOWER	124.5

1. TWR HR:
   MON-FRI: 2220-1020 UTC
   SAT-SUN: 2020-0930 UTC
2. Phone MK TWR: 07 4951 8431^ OR 07 4951 8491^. BN CEN: 07 3866 3224^.

3. Mackay TWR provides combined TWR & APP CTL services within Class D airspace 4500FT AMSL & BLW DRG TWR HR. CTC TWR for clearance.
4. Outside TWR HR, as published at Note 1, Mackay APP provides ATS:
   a. WI the lateral boundary of the CRT on ground, Class G SFC to 700FT AGL and Class E ABV 700FT AGL to an upper level of 1,000FT AMSL
   b. WI the CTA steps Class E ABVC 1,000FT AMSL to an upper level of 4,500FT AMSL
   c. WI the CTA steps Class C ABV 4,500FT AMSL to an upper level of 8,500FT AMSL
5. TWR HR may change at short notice, check status of airspace with ATS or Mackay ATIS.
6. Brisbane Centre 135.5 operates Mackay Class C airspace H24.

RADIO NAVIGATION AND LANDING AIDS

DME	MK	112.7/74x	211022.9S	1491114.6E		(1)
NDB	MK	308	210944.1S	1491110.5E	Range 75 (HN75)	(2)
VOR	MK	112.7	211022.8S	1491114.0E		

(1) Antenna ELEV 41FT AMSL
(2) 204/0.7 to ARP

LOCAL TRAFFIC REGULATIONS

1. Simulated asymmetric DEP or simulated engine failure after take-off:
   a. Not permitted RWY 32;
   b. Not permitted until ACFT CLR of built-up areas;
   c. DRG TWR HR, prior approval from ATC required.
2. Wide bodied ACFT restricted to TWY A and parking position 1A.
3. ACFT requesting PRKG on Bays 1 through to 5A, in addition to completing the 'Mackay Airport Aircraft Parking Approval', require a ground handling agency to be appointed to handle all ground OPS during their stay. Details via airport website.
4. Western GA APN parking - ACFT (including HEL) BLW 12,000KG requiring access to RPT terminal to park on Western GA APN, accessed from TWY J via TWY H. Access from Western APN to RPT terminal or landside is via pedestrian Gate 21A. The northern edge of the Western GA APN parking area is restricted to DAY operations only. All other ACFT to park at Eastern GA in the parking area ADJ to TWY D via TWY E and from TWY L via TWY D.
5. HEL LDG site ADJ TWY C now AVBL to HEL OPS ACFT ABV 1,100KG
6 Civil HEL Operations
   a. Air taxi to/from parking at EAST HELIPARK via TWY J-L;
   b. MAX rotor diameter 15M. If diameter greater than 15M, 24HR PN required for parking allocation;
   c. Caution: Floodlighting towers up to 45M AMSL on sporting fields in sector NE of AD.
7. **TRAINING FLIGHTS**
   a. Circuit training for ACFT ABV 5700KG restricted to 2100-1100 UTC.
   b. For NAVAID training, phone Mackay TWR for approval DRG TWR HR.
8. Landing RWY 14 - Jet ACFT ABV 30,000KG MTOW, when operationally possible, are requested to avoid excessive braking and to use full RWY length and turning nodes provided.
9. Run up bay on Eastern GA located on southern side of Eastern GA APN in BTN TWY D and E.
10. For TFC management, ACFT issued a MACKAY ONE DEPARTURE (RADAR) should not enter the departure RWY until an assigned departure heading is obtained, or, an instruction to report lined up is issued.

FLIGHT PROCEDURES

1. **OPERATONS OUTSIDE TWR HR**:

a. Mackay Approach 125.65 will be the primary means for communications BTN pilots operating in the Class C and E airspace in the vicinity of Mackay AD.
b. Taxi, landing or takeoff clearances will not be issued. Pilot in command has sole responsibility for ACFT ground movement and avoidance of other ACFT and OBST.
c. Taxi advice and arrival reports to ATC shall be made on 125.65. Advice of other traffic on the manoeuvring area will be provided.
d. Mackay CTAF 124.5 will remain the primary means for communications BTN pilots operating on or in the vicinity of Mackay AD in Class G airspace.
e. The serviceability of approach navigation aids at Mackay will be monitored by Brisbane Centre.
f. Current wind, QNH and temperature will be provided by Mackay Approach to departing ACFT on first contact, and to arriving ACFT. Cloud cover, visibility and other meteorological phenomena from the current METAR or SPCI will be provided to ACFT inbound to Mackay on request.

1.1 **IFR Departures**

a. Include RWY and preferred departure procedure with, or prior to, Taxi report to Mackay Approach. Mackay Approach may negotiate an alternative departure if required for traffic reasons.
b. Taxi, landing or takeoff clearances will not be issued. Pilot in command has sole responsibility for ACFT ground movement and avoidance of other ACFT and OBST.
c. ATC will instruct ACFT taxiing for departure to report "ready" at the RWY HLDG point for departure inductions. For TFC management, ACFT SHOULD NOT enter the departure RWY until
   (i) if in receipt of a SID (RADAR) – assigned departure heading obtained,
   (ii) if not in receipt of a SID (RADAR) – an airways clearance obtained, OR
   (iii) an instruction to REPORT LINED UP is issued.
d. ACFT must commence takeoff within three (3) minutes of issue of DEP instructions; otherwise new instructions must be obtained.

1.2 **IFR Arrivals**

On receipt of current Mackay weather information, advise Mackay Approach of intended landing RWY and preferred approach procedure.

CTAF – AFRU 124.5
Outside TWR HR.

NOISE ABATEMENT PROCEDURES
Noise Abatement Procedures (NAP) apply. Refer AIP DAP.

ADDITIONAL INFORMATION
1. Bird and animal hazard exists year round with risk species varying depending on weather conditions. Pilots should contact ATC or ARO for real-time wildlife hazard report. (Request to update ERSA it remove struck out item with section below.

~~a. Black Kite, Whistling Kite, Masked Lapwing, Bush Stone-Curlew, Magpie Lark, Cattle Egret and Nankeen Kestrel present all year round.~~
~~b. Flying Foxes are a seasonal risk at dawn and dusk on the APCH to the RWY (on and off the airfield). Peak risk period is DEC-FEB although potential risk exists year round.~~
~~c. Flocks of magpie geese and duck species frequently infringing operational airspace, risk highest in the morning and evening periods.~~
~~d. Adverse weather increases risk from gulls, terns and migratory waders.~~

Bird Hazard exists. Increased numbers of the following

species are expected during the specified times:

a. Flying-fox can be a hazard at any time of the year,

peaking MAR to MAY, as they may transit RWY at

dusk.

b. APR to OCT – increased Masked Lapwing activity.

c. JUL to JAN – increased Bush Stone-curlew activity.

d. Increased bird activity during and post rainfall and

adverse weather events, including Australian White Ibis,

Straw-necked Ibis, Magpie Goose, Cattle Egret and Whistling Duck.

e. Increased bird activity between 0600-0900 and dusk daily as flocks'

transit between off-airport sites, including Australian White

Ibis, Straw-necked Ibis and Magpie Goose.

f. Adverse weather increases risk from gulls, terns and migratory waders.

g. Species specific NOTAM will be issued during periods of

increased activity

2. PJE on AD HJ - SFC-10,000FT AMSL.
3. In conditions of light mist or fog, high intensity floodlighting adjacent to short final on approach RWY 14 may cause distraction.
4. Some areas of EGA and WGA may not comply with lighting standards. Pilots should exercise caution at night.
5. UA (multicopter BLW 7KG) OPR BRG 220 MAG to BRG 312 MAG FM ARP WI 2.3NM to 4.3NM FM ARP (Mackay Ring Road Project) OPR will MNT TWR FREQ 124.5 OPR CTC PH: 0418 883 910, operating SFC to 145FT AGL.

CHARTS RELATED TO THE AERODROME

1. WAC 3234, 3235.
2. Also refer to AIP Departure and Approach Procedure.

MACKAY

RWY	(CN)	TORA	TODA	ASDA	LDA
RWY 14	(4)	1981 (6499)	2041 (6696) (2.36%)	1981 (6499)	1981 (6499)
RWY 32	(4)	1981 (6499)	2041 (6696) (2.15%)	1981 (6499)	1981 (6499)

RWY 14/32 APCH SFC based on 150M inner edges.
Slope Level. RWY WID 45 RWS WID 150 Graded 150.

SUPPLEMENTARY TAKE-OFF DISTANCES

RWY 14	1808 (5931) (1.6)	1924 (6312) (1.9)	2007 (6584) (2.2)
RWY 32	1859 (6099) (1.6)	1975 (6480) (1.9)	

Obstacle Chart Type A N/A

----------END OF MANUAL----------