AERODROME MANUAL

BOULIA AERODROME

Master Copy

Copy No. 4

Amended 19-06-2022

Prepared for:
Boulia Shire Council

Prepared by:
Aerodrome Operation Support Pty Ltd
PO Box 6511
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Australia
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+61 7 3715 5563 (F)

CONTENTS

PART 2 – AERODROME ADMINISTRATION AND OPERATING PROCEDURES

FOREWORD

FWD 1: Importance of the Manual

This aerodrome manual is a mandatory requirement for aerodrome certification. It is a reference document that:

Contains all relevant information concerning the aerodrome's site, facilities, services, equipment, daily and emergency operating procedures, organisational structure and management protocols.

Demonstrates that the aerodrome conforms to the certification standards and practices stipulated in the Civil Aviation Safety Regulations 1998 Part 139 Aerodromes (or CASR 139), and that if implemented, it will minimise or eliminate any shortcomings which could adversely affect the safety of aircraft operations.

Provides a checklist of aerodrome certification standards to be maintained, to ensure a minimum safe level of airside services at the aerodrome.

Provides information that enables the Civil Aviation Safety Authority (or CASA) to assess the suitability of the aerodrome to cater for the aircraft operations and to judge an aerodrome owner and / or operator's suitability to hold a certificate.

Serves as a basic guide for conducting site inspections, for granting an aerodrome certificate, and for conducting subsequent safety and technical inspections which may be performed internally by aerodrome staff or externally by professional consultants or CASA.

Serves as an agreement between the aerodrome owner and / or operator, and the CASA with respect to the standards, conditions and minimum level of service to be maintained at the aerodrome.

Becomes a legal document with sub-legislative powers as promulgated by the certification process under CASR 139.

The purpose of the aerodrome manual is primarily to ensure the complete protection of human lives, and secondly, to protect equipment and infrastructure. This is intended to be achieved by following the manual's procedures to conduct safe aircraft operations.

Given its importance, the aerodrome manual must be treated as a living document which remains under constant review and amendment which is the responsibility of the aerodrome owner / operator; represented by their Aerodrome Management team where the Aerodrome Management team is as defined in Part 2.1: Aerodrome Administration below.

FWD 2: Aerodrome Manual Format

The aerodrome manual is and must be maintained in a format that can be readily updated.

It is written to be fully compliant with the CASR 139 legislation and the Manual of Standards Part 139 – Aerodromes (or MOS 139).

This aerodrome manual is intended to be presented in a simple but complete single bound document or available as an electronic document.
However, it may be presented as separate documents. For example, at some major aerodromes, the aerodrome emergency plan and the airside vehicle control handbook may each be a large stand-alone publication. Where this is the case, the aerodrome manual must accurately reflect and integrate the component publications with exact references otherwise they arguably forego their sub-legislative powers, and / or Aerodrome Management can be deemed non-compliant to the CASR 139.

Generally, this manual has been produced as at least one of four original copies that differ only by their cover page where it is stated as copy 1, 2, 3 or 4.

Note: Copy 1 is intended for the designated Aerodrome Manager's use.
Copy 2 is intended for the CASA's use.
Copy 3 is intended for the duty Reporting Officer's use.
Copy 4 is the version intended for viewing online.

It is federal law that all copies of the aerodrome manual be identical and maintained as such. Hence, if a change is made to any one of the original copies, then each and every original copy must be physically updated to reflect the same change.

If other copies are produced for other record keeping purposes, then they must be either clearly physically stamped or electronically water marked to each page, "NOT FOR USE"; else by federal law, those other copies must be reflected within this aerodrome manual and physically maintained current.

This aerodrome manual is a living legal document which will and must undergo immediate change to accurately reflect how the aerodrome is and must be conducted and operated on a day-to-day basis as lives are at stake all the time.

FWD 3: Acknowledgement of Responsibilities

FWD 3.1: Aerodrome Manual Controller

I have read and understood the entire FOREWORD section of this aerodrome manual, and therefore shall be responsible for keeping all original copies of this aerodrome manual the same (or identical), accurate, and immediately physically updated to reflect its written content and procedures consistent with that actually implemented and performed airside for the purpose of achieving safe aircraft operations in accordance with the CASR 139 and the MOS 139.

Aerodrome Manual Controller

Date: 20 / 06 / 2022 Signature: _____ Name: JOSEPH KIM

FWD 3.2: Aerodrome Manager

I have read and understood the entire FOREWORD section of this aerodrome manual, and therefore accept full and final responsibility of ensuring that this and all other original aerodrome manuals remain accurate, current and compliant with the CASR 139 and the MOS 139 by implementing successful review and amendment procedures to aid the Aerodrome manual Controller in his / her duties for the purpose of achieving and / or maintaining safe aircraft operations.

Aerodrome Manager

Date: 20 / 06 / 2022 Signature: _____ Name: JOSEPH KIM

FWD 3.3: Aerodrome Owner or Most Senior Person in Charge

I have read and understood the entire FOREWORD section of this aerodrome manual. In my senior position, I have full appreciation for the value of human life and the need to protect human lives, airside equipment and capital infrastructure especially since aircraft services operate in a generally much more hazardous environment to other industries. As and / or on behalf of the Aerodrome owner, I offer full support to the Aerodrome Manager to enable him / her to perform their duties in full accordance with the CASR 139 and the MOIS 139 knowing that this minimises associated risks, and therefore, hazards.

Most Senior Person

Date: 20 / 06 / 2022 Signature: _____ Name: LYNN MOORE

Amendment Record
19 June 2022

INTRODUCTION

INTRO 1: Checklist of Current Pages

Every part, section and subsection title (or topic) discussed within this aerodrome manual has been captured in the CONTENTS section at the front of this manual.

Thus the CONTENTS is complete and comprehensive.

An example of the CONTENTS format is as such:

ROMA AERODROME MANUAL — Last full issue: 15 February 2011

CONTENTS

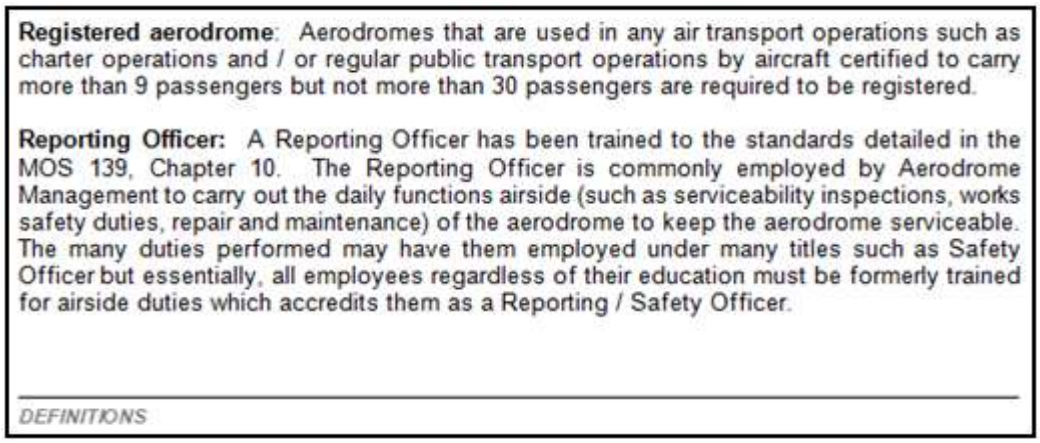
The topics outlined in the CONTENTS that comprise the aerodrome manual, form the checklist from which its location and currency can be monitored and readily attained.

The page numbering system adopted is sequentially uninterrupted from the FOREWORD through to and including ABBREVIATIONS; centred at the bottom of each page.

This system was chosen after close and careful consideration for the following reasons:

- **To leave no question and no confusion about which page a particular part, section or subsection is located. For example, there is only one page 36. That is, there is no other page 36 duplicated under a major heading elsewhere. Confusion is removed.**
- **To quickly gauge and appreciate the start, end and therefore depth (or total number of pages) of each part, section and / or subsection topic relative to each other. Thus, the difference between the page numbers in the CONTENTS indicates the total number of pages for the particular part, section or subsection.**

Note that each page number is prefaced with the major heading (left hand side of the footer) to aid navigation of this document. For instance, page 131 occurs in the DEFINITIONS section of the manual as exampled below:



Registered aerodrome: Aerodromes that are used in any air transport operations such as charter operations and / or regular public transport operations by aircraft certified to carry more than 9 passengers but not more than 30 passengers are required to be registered.

Reporting Officer: A Reporting Officer has been trained to the standards detailed in the MOS 139, Chapter 10. The Reporting Officer is commonly employed by Aerodrome Management to carry out the daily functions airside (such as serviceability inspections, works safety duties, repair and maintenance) of the aerodrome to keep the aerodrome serviceable. The many duties performed may have them employed under many titles such as Safety Officer but essentially, all employees regardless of their education must be formerly trained for airside duties which accredits them as a Reporting / Safety Officer.

DEFINITIONS

It is also post-scripted with its last and current amendment date.

Hence, the document always retains its original full issue date (on the right hand side of the header) but has scope to have individual pages be updated such that it can be tracked to when it happened (set on the right hand side of the footer).

This last and current amendment date is what is to be reflected in the CONTENTS.

INTRO 2: Amendment History

CASA desire that the history, in chronological order, be retained or recorded beginning from its initial full issue of the aerodrome manual.

Hence, this section provides the ability to keep such a record using the table provide on the next page.

In hard copy form, the table can be used to pen in any amendments or comments held by the Aerodrome Manager and Aerodrome Manual Controller.

When the 'Master Copy 4' aerodrome manual is updated electronically, the table below can then be formally updated to reflect the actual amendment.

Once formally updated, all original copies of the aerodrome manual must be immediately physically updated. Hence, this generally includes the Aerodrome Manager's copy no. 1, CASA's copy no. 2, and the duty Reporting Officer's copy no. 3.

An up-to-date electronic copy of the aerodrome manual that is different to that physically available, warrants a CASA audit as it is non-compliant to CASR 139.

A physical update following an electronic update must be effected immediately.

The Aerodrome Manager and the Aerodrome Manual Controller must go out of their way to ensure that this happens.

AMENDMENT HISTORY			
Number:	**Date:**	**Page Number:**	**Description:**
1	**28 March 2008**	**All**	**Initial full issue of the aerodrome manual**
2	**15 July 2011**	**All**	**Full update and re-issue of the aerodrome manual**
3	**24 July 2012**	**All**	**Full update and re-issue of the aerodrome manual**
4	**July 2014**	**All**	**Full update and re-issue of the aerodrome manual**
5	**January 2015**	**7, 8, 11, 20, 85**	**Update current information**
6	**July 2015**	**3, 7, 12, 20, 21, 30, 89**	**Update current information**
7	**June 2016**	**7, 8, 20, 30**	**Update current information**
8	**May 2017**	**3, 6, 7, 8,10, 12, 20, 21, 25, 30**	**Update current information**
9	**Dec 2018**	**8, 13, 42, 50, 55, 63, 70, 71, 81, 86, 89, 93, 98, 101, 103, 107, 108, 110, 118, 119, 120, 121, 131**	**Update current information**
10	**Aug 2019**	**15,16,17,18,21,25,27,29,30,34,36,43,46,66,72,73,77,80,82,84,87,92,94,95,100,104,109,111,112,114,116**	**Update current information**
11	**June 2022**		**Update current information**

INTRO 3: Master Contact List

The Most Senior Person in Charge, the Aerodrome Manager, and the Aerodrome Manual Controller must be identical to those mentioned and signed in the FWD 3: Acknowledgement of Responsibilities above.

The master contact list contains all phone number relevant to the aerodrome and this aerodrome manual. It is complete.

Hence, there are three contact lists within the Aerodrome Manual, and they must always be maintained current and consistent.

The contact lists are located in:

INTRO 3: Master Contact List,

- **Intro 3.1 Boulia Shire Council Contact List**
- **Intro 3.2 Emergency Services**
- **Intro 3.3 Aviation Agencies**

INTRO 3.1: Boulia Shire Council (or Council)

Most Senior Person in Charge of the Aerodrome		
Chief Executive Officer	**Lynn Moore**	**07 4746 3188 (W)** **0429 463 188 (M)**
Aerodrome Manager		
Technical Officer	**Joseph Kim**	**07 4746 3188 (W)** **0409 028 474 (M)**
Aerodrome Manual Controller		
Technical Officer	**Joseph Kim**	**07 4746 3188 (W)** **0409 028 474 (M)**
Aerodrome Reporting Officer		
Foreman	**Ronnie Callope**	**07 4746 3188 (W)** **0427 163 773 (M)**
Deputy Reporting Officer		
	Marie Gundersen	**07 4746 3188 (W)** **0427 128 212 (M)**
Electrical Officer		
Contract Electrician	**Tim Edgar**	**0429 846 002 (M)**

Council's Engineers George Burns and Associates
07 4651 2177 (W)
0427 963 173 (M)

Amendment Record
19 June 2022

INTRO 3.2: Emergency Services

Police (emergency)
000

Boulia Police (W)	**07 4744 1644 (W)**
Boulia Police (AH)	**07 4744 1111 (AH)**
Mount Isa Police District Manager	**0429 645 664**
Fire brigade	**000**
Fire Station Mount Isa	**07 4747 2355 (W)**
Ambulance / Hospital – Senior Officer(Longreach)	**07 4568 9220 (W)**
Boulia Primary Health Clinic / Ambulance	**07 4746 2300 (W)**
SES Local Controller	**0429 463 188 (M)**
Royal Flying Doctor Service – Mount Isa	**07 4743 2800 (W)**
Royal Flying Doctor Service - Emergency Mount Isa (AH)	**07 4743 2802 (A/H)**

Attention: Chief Pilot
11 Barkly Highway
Mt Isa. QLD 4825

INTRO 3.3: Aviation Agencies

Airservices Australia (ASA)	**1800 802 584 (W)**
Australian NOTAM Office (NOF)	**02 6268 5063 (W)**
c /- Manager Flight Service	02 6268 5044 (F)
GPO Box 367	
Canberra ACT 2601	nof@airservicesaustralia.com (E)

Navigational Aids Technical Fault Reporting Centre (24H)
07 3866 3550(W)

Civil Aviation Safety Authority (CASA)	**National Switchboard**	**131 757 (W)**
	Aerodrome Inspector	**131 757 (W)**
Australian Transport Safety Bureau (ATSB) (24H)		**1800 011 034 (W)**

Aerodrome Technical Inspectors / Advisors

JASKO (Andrew Stewart)	**07 3705 2042 (W)**

Amendment Record
19 June 2022

INTRO 3.4: Other Aerodrome Contacts

Regional Express (REX) **02 9023 3500 (W)**
Attention: Chief Pilot
PO Box 807
Mascot NSW 1460

REX Operations **02 9023 3579 (W)**
0419 305 403 (M)

REX Emergency Contact **02 9693 2819 (W)**

Aerodrome Inspector
Civil Aviation Safety Authority
Northern Region-Brisbane
GPO Box 2005
Canberra ACT 2005 aerodromes@casa.gov.au (E)
(Send any changes to the manual to them)

Air Services System Manager, 02 6268 4111 (W)
PO Box 367 02 6268 5683 (Fax)
Canberra ACT 2601 **docs.amend@airservicesaustralia.com (E)**
(Send any changes to contact list to them also)

Australian Transport Safety Bureau (ATSB) 02 6274 6434 (F)
PO Box 600
Civic Square, ACT 2608
(send bird strike reports to this fax)

Australian Transport Safety Bureau (ATSB) 1800 011 034 (T)
Duty Air Safety Investigator (24 hours)

Army Aviation Centre
Army Airfield
Attention: Flight Planning Officer
Oakey QLD 4401

Amendment Record
2 August 2019

INTRO 4: Distribution List

This aerodrome manual has been produced in hardcopy for Aerodrome Manager's copy No 1. and the Reporting Officers Copy No 3. The remaining copies 2 (CASA's copy) and 4 (the Master Copy) are electronic copies held in councils electronic document management system.

Aerodrome Manager's Copy No. 1

This copy resides with the Aerodrome Manager and is readily accessible to the Aerodrome Manual Controller. Together, both the Aerodrome Manager and the Aerodrome Manual Controller must keep all original copies up-to-date and identical.

CASA's Copy No. 2

The aerodrome owner / operator, represented by their Aerodrome Management, must give CASA an exact copy of the manual. This document is held and forwarded to CASA in electronic format to the address located in INTRO 3: Master Contact list.

Reporting Officer's Copy No. 3

This final aerodrome manual copy must reside at the aerodrome, and be readily accessible to the duty Reporting Officer/s.

Master Copy No. 4

This is the copy held which is amended and used to update all other copies. It is held in councils electronic document management system and published to Boulia Shire Councils web page.

THE AERODROME MANUAL COPIES ONLY DIFFER ON THEIR TITLE PAGE.

The following persons hold partial copies of the aerodrome manual:

The Aerodrome Emergency Committee (AEC) members as identified in Part 2.2.0.3: AEP Distribution List.
Each AEC member has been provided with a copy of Part 2.2: Aerodrome Emergency Plan and Master contact list.

INTRO 5: Supporting Operational Documents

If this aerodrome manual relies on any other documents to outline airside associated procedures which are not sufficiently detailed or referenced in the remainder of this manual, then they must be referenced within this aerodrome manual now. Examples of the types of supporting operation documents that may additionally serve to outline airside procedures are:

- Equipment manuals associated with the use and operation of airside tools, equipment, and computer and / or office hardware such as that for the FAX machines, PAPIs, AFRU, standby generators, security CCTV and so on if deemed necessary.
- Software manuals associated with the use and operation of software for operational monitoring and data recording purposes such as that for database, spreadsheet, and documental use and so on if deemed necessary.
- Any other airside related documents with other specified and / or implied procedures and responsibilities such as the:
    - Drug and Alcohol Management Plan (or DAMP which is required under the CASR 1998 Part 99 Drug and Alcohol Management Plans and Testing, or CASR 99),
    - Transport Security Program (or TSP which is required under the Aviation Transport Security Act 2004 and accompanying Aviation Transport Security Regulations 2005), and
    - Safety Management System (or SMS which is required under the CASR 139 and the MOS 139)

Amendment Record
2nd August 2019

Following is a list of supporting operational documents:

DOCUMENT	PURPOSE	LOCATION
Drug and Alcohol Management Plan	To implement mandatory drug and alcohol testing procedures and raise awareness of the serious risks associated with their use in the aviation industry.	**Aerodrome Manager's Office**
Transport Security Program	**To raise awareness of the serious risks associated with the aviation industry and to implement appropriate security procedures to minimise these risks.**	**Aerodrome Manager's Office**
Safety Management System	**To provide a complementary set of procedures to this aerodrome manual that effects a system for the management of safety at an aerodrome (including the organisational structure, responsibilities, procedures, processes, and provisions for the implementation of aerodrome safety policies by an aerodrome operator) which provides for the control of safety at, and safe use of the aerodrome.**	**Aerodrome Manager's Office**

PART 1: AERODROME INFORMATION

Part 1.1: Aerodrome History

Boulia is located approximately 296 kilometers by road south of Mount Isa, and lies on the Burke River, which was named after the explorer Robert O'Hara Burke who passed through the area with the Burke and Wills expedition in 1860. The township was gazetted in 1879, and is the administrative centre of the Boulia Shire, population approximately 200, which covers an area of 61,176 square kilometers.

Boulia Township's first contact with air transport came with the first recorded license in 1930. Records indicate continuing licensing of the aerodrome since 1942.

In 2010 RWY 14/32 was extended to 1801m. The runway, taxiway and aprons are sealed.

Part 1.2: Current Status

Today, Boulia Aerodrome services air traffic from all phases of commercial, public and private enterprises.

The majority of aircraft movements are by aircraft below 5700kg MTOW.

- Four weekly RPT services are provided by REX Airlines using Saab 340 34 seat aircraft.

Adequate facilities are provided at the aerodrome. Itinerant as well as permanent parking areas are provided with a minimum charge. All the pavements for parking, apron and taxiways are bitumen sealed and clearly marked.

Part 1.2.1: Facilities

The following facilities have been noted:

- Passenger terminal.
- Public telephone adjacent to the terminal building.
- Primary Wind Indicator (illuminated) is located north of the main apron.

Part 1.2.2: Level of Service

- Four (4) weekly Regular Public Transport (RPT) services by Saab 340 aircraft.
- Medical evacuations by the RFDS and the Aerial Ambulance.
- Weekly Clinic flights by the RFDS.
- Courier and charter operations.

Part 1.2.3: Charging Schedule

The following charging schedule is implemented at the aerodrome:

BOULIA SHIRE COUNCIL

AIRPORT CHARGES / LANDING CHARGES

Regular Public Transport (RPT) Operators	*Refer to Boulia Shire Council Fees and Charges*
All other aircraft:	
Based on Maximum Take-off Weight (MTOW)	
Aircraft under 800kg (MTOW)	*Refer to Boulia Shire Council Fees and Charges*
Aircraft over 800kg (MTOW)	*Refer to Boulia Shire Council Fees and Charges*

REFUELLING COSTS

Av Gas Charge per litre	Based on actual cost plus 20% varies monthly
Other Jet Fuel etc	Only Available by pre-arrangement and cost will be per drum landed in Boulia plus 20%

Refuelling Fee:

During normal hours(8am to 4pm)	*Refer to Boulia Shire Council Fees and Charges*
After Hours/Weekends-**Prior Arrangement**	*Refer to Boulia Shire Council Fees and Charges*
After Hours /Weekends- N**o arrangement**	*Refer to Boulia Shire Council Fees and Charges*

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2 August 2019

Part 1.3: Aerodrome Certification

Boulia Aerodrome has been certified by CASA, under CASR139.

Part 1.3.1: Certificate

Boulia Aerodrome's Certificate 1-75DPL (issued 28/3/2008) is provided below:

Australian Government
Civil Aviation Safety Authority

CIVIL AVIATION ACT 1988

Aerodrome Certificate

Certificate Number **1-75DPL**

This certificate authorises

BOULIA SHIRE COUNCIL

ARN 225556

to operate the following aerodrome

BOULIA

This certificate is issued under regulation 139.050 of the *Civil Aviation Safety Regulations 1998 (CASR 1998)*. The certificate is subject to any conditions set out on page 2 of this certificate or notified under subregulation 139.060(3) of *CASR 1998*.

This certificate is effective from 27 March 2008, and remains in force until cancelled, except during any period in which it is suspended.

Richard Allen
Coordinator, Aerodromes
Airways & Aerodromes Branch
Airspace and Aerodrome Regulation Group

Delegate of the Civil Aviation Safety Authority

27 March 2008

Part 1.3.2: CASA Certificate Conditions

The following conditions have been placed on the certification of Boulia Aerodrome:

- None

Part 1.4: CASR 139 / MOS 139 Accepted Anomalies

There are no accepted anomalies at this time.

Part 1.5: CASR 139 / MOS 139 Exemptions

The following are the facilities and operating procedures at the aerodrome that do not comply with the directions, instructions, and / or orders issued by CASA but have been granted exemptions(s) from the compliance by CASA under CASR 139, Section 139.020:

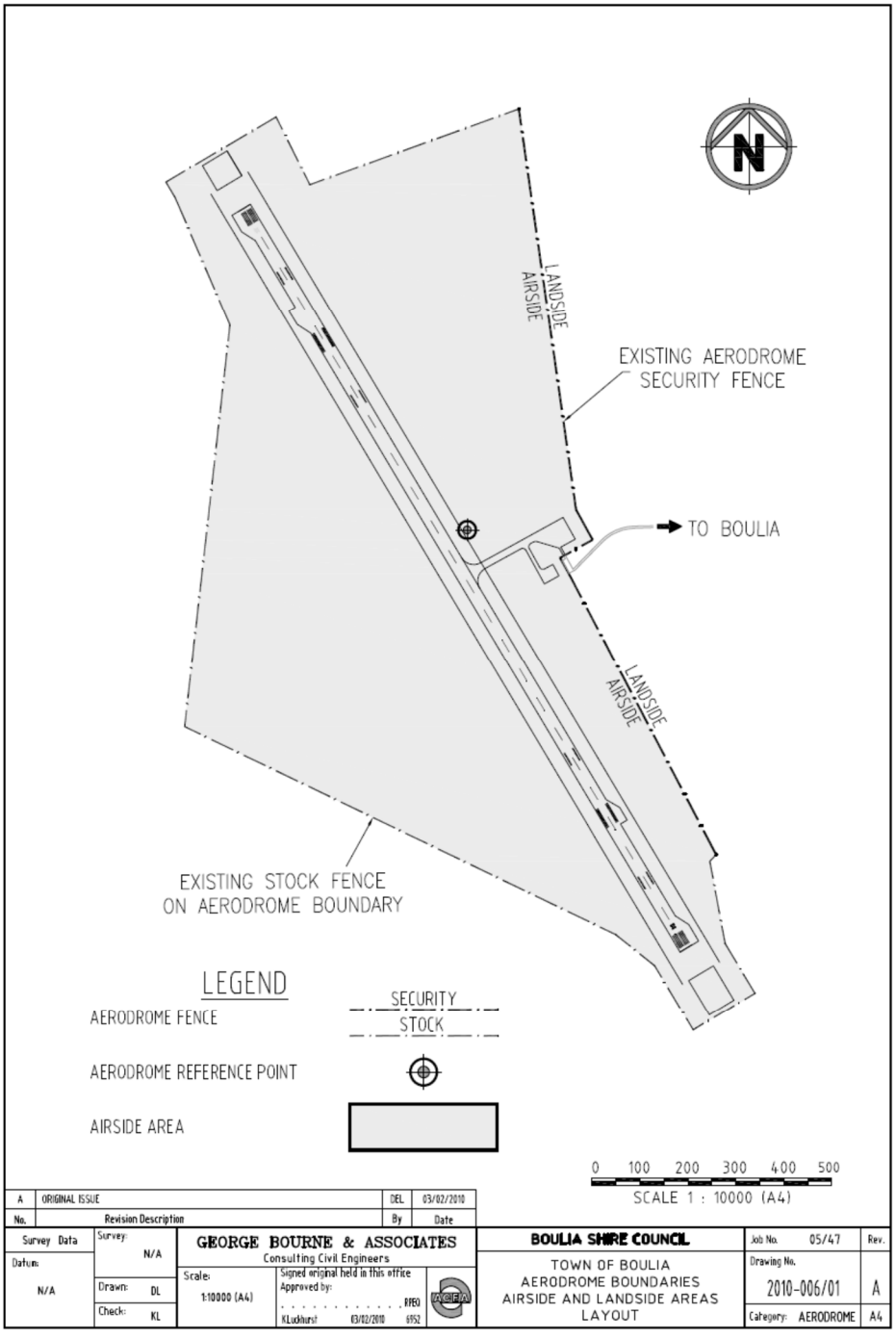
- There are no current exemptions.

Part 1.6: Aerodrome Site

For the subparagraph in CASR139, Section 139.095 (a) (i), the particulars are as follows:

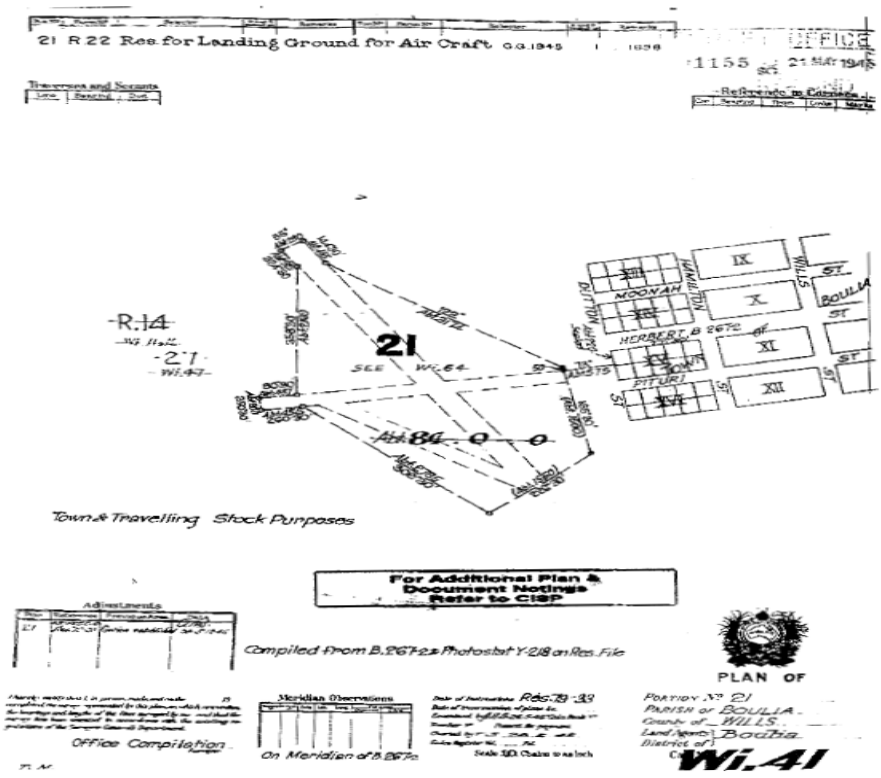
Part 1.6.1: A Plan of the Aerodrome Facilities

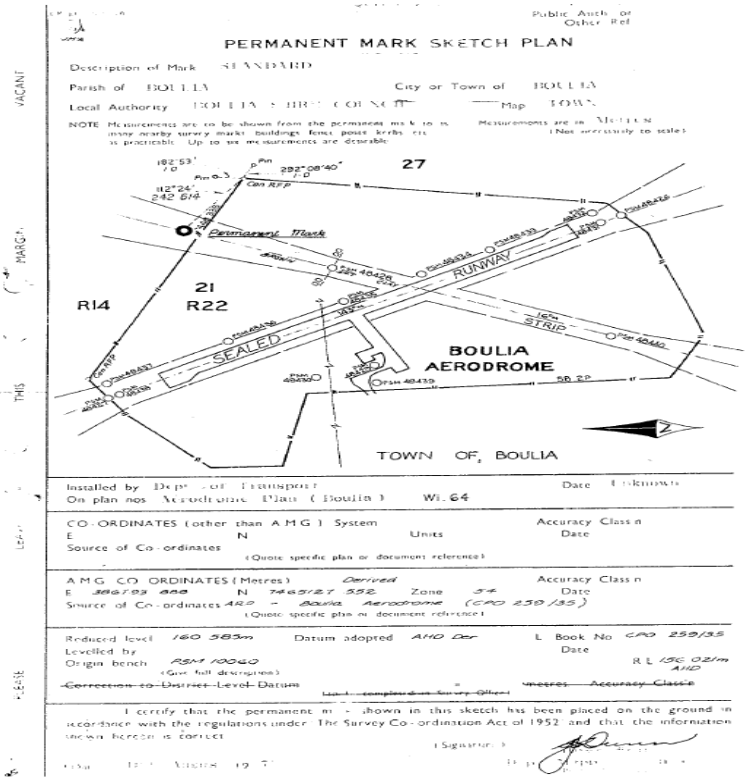
A plan of the aerodrome showing the main aerodrome facilities, including the wind direction indicators, for the operation of the aerodrome is shown below:



Part 1.6.2: A Plan of the Aerodrome Boundaries

A plan of the aerodrome showing the original aerodrome boundaries is shown below:.





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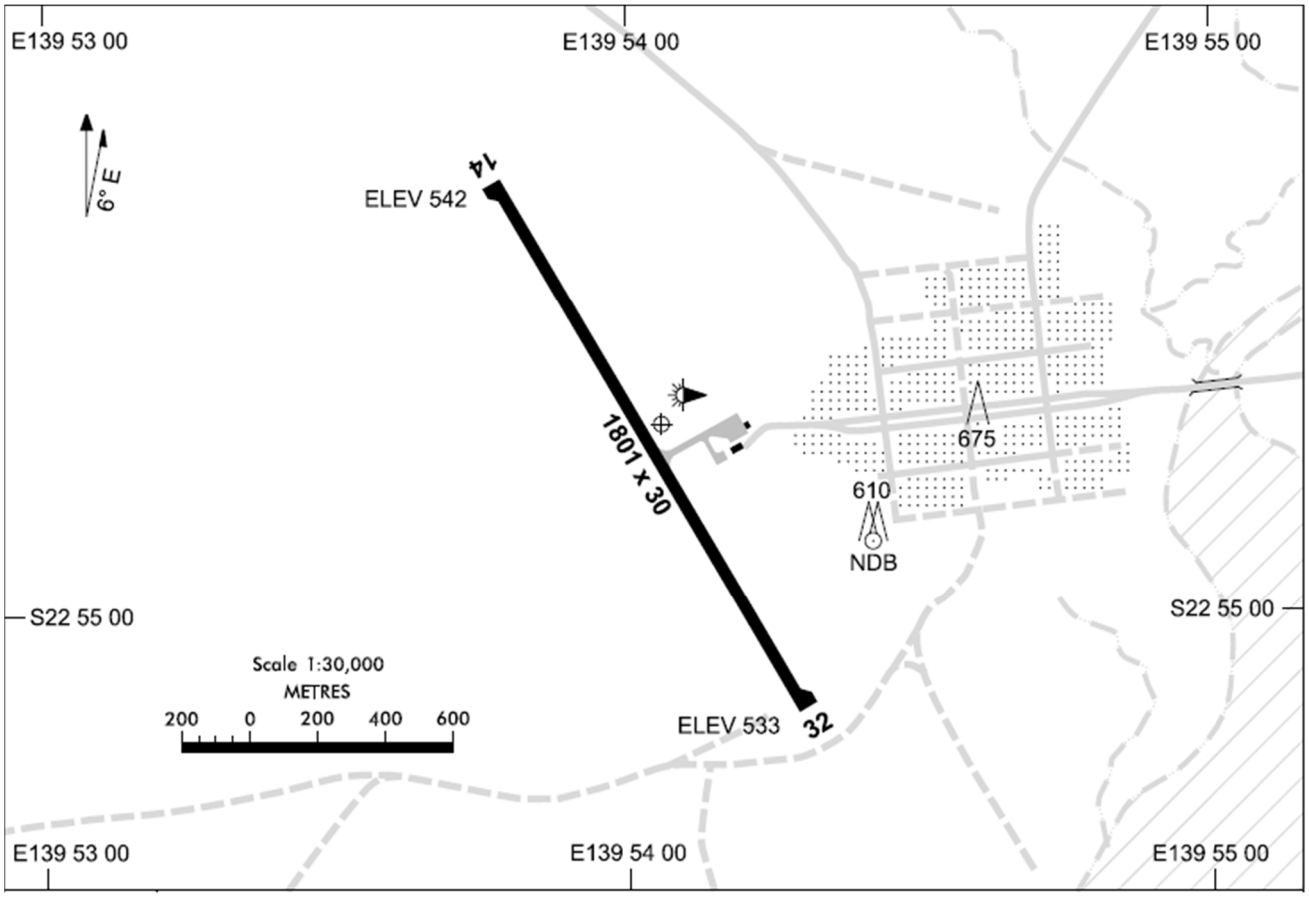
Part 1.6.3: A Plan showing Aerodrome Facilities, Equipment and nearest town outside of Boundaries

A plan showing the distance of the aerodrome from the nearest city, town or other populous area, and the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome are shown below:

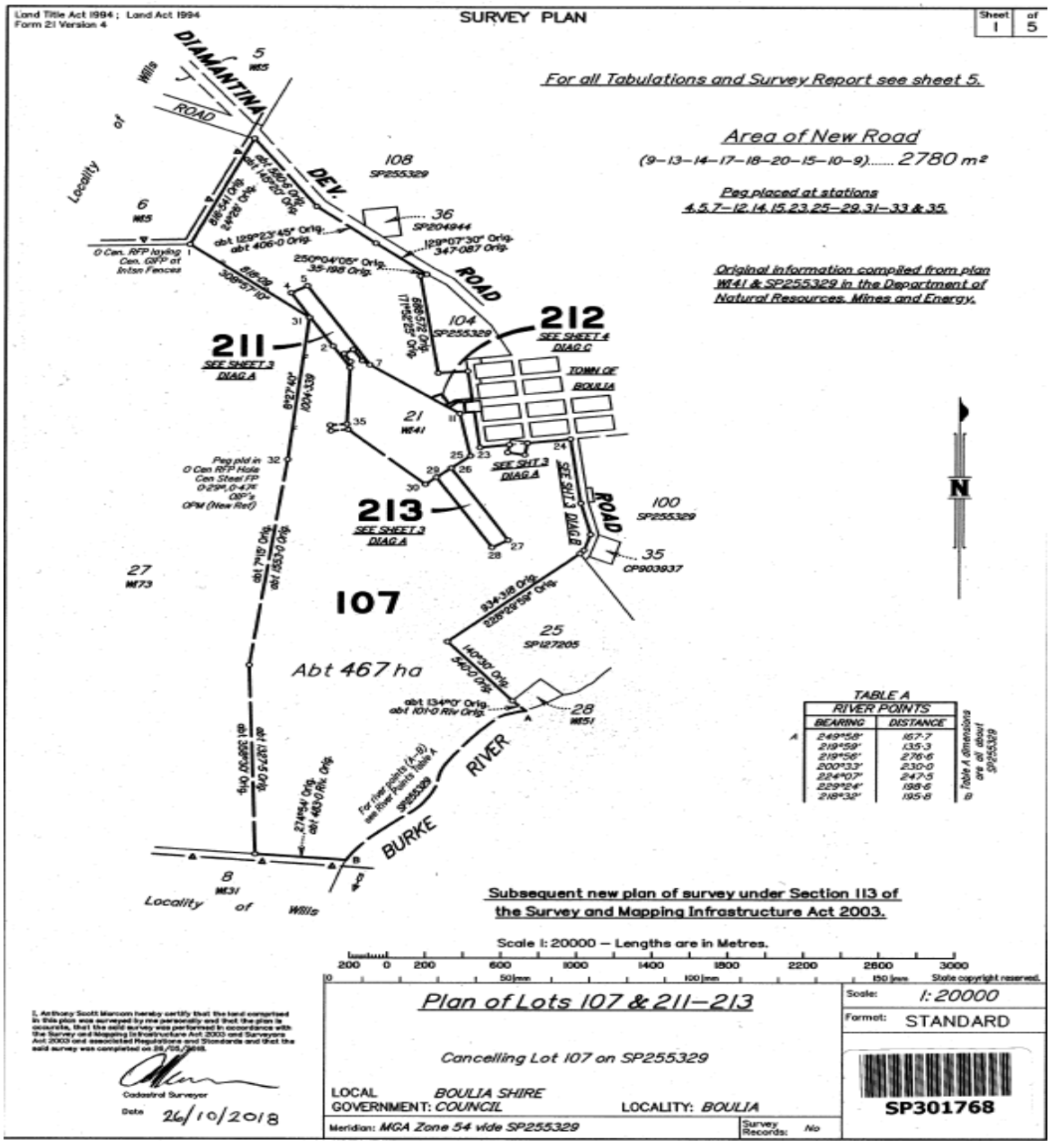


Part 1.6.4: Particulars of the Aerodrome Site Title

The particulars of the aerodrome site title are as shown below:

Boulia Aerodrome is located on Lot 107 on SP255329, County of Waldegrave, Parish of Boulia containing 467 hectares.

This is verified on the "Certificate of Title" Volume 8183, Folio 157:



A plan of the aerodrome showing details of the movement areas, the location of all wind indicators, and the widths of all taxiways are shown on the drawing below:

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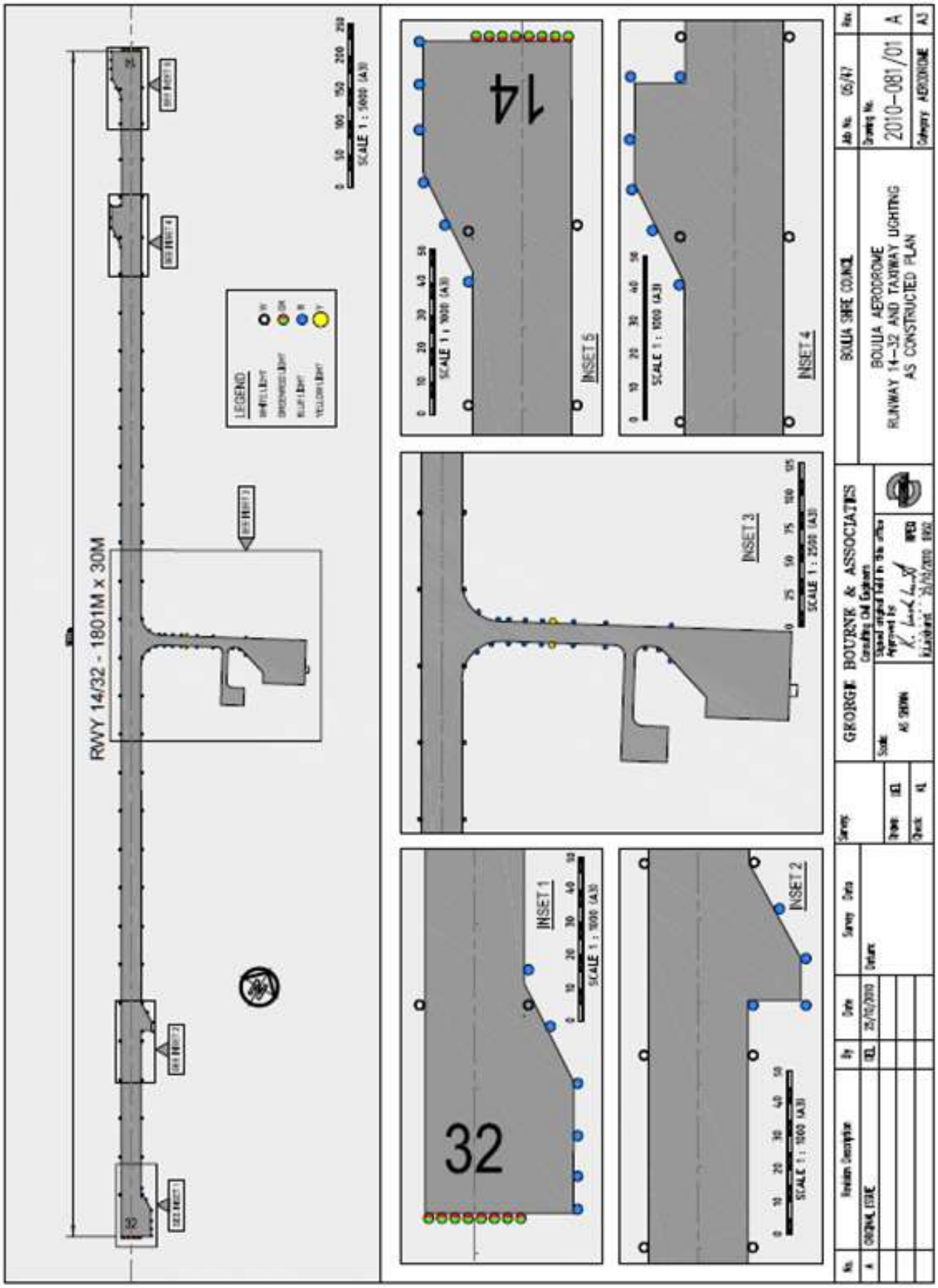

RWY 14/32 - 1801M x 30M
LEGEND
INSET 1
INSET 2
INSET 3
INSET 4
INSET 5
32
14
BOULIA SHIRE COUNCIL
BOULIA AERODROME
RUNWAY 14–32 AND TAXIWAY LIGHTING
AS CONSTRUCTED PLAN
2010–081/01
GEORGE BOURNE & ASSOCIATES

PART 2: AERODROME ADMINISTRATION AND OPERATING PROCEDURES

Part 2.1: Aerodrome Administration

Part 2.1.1: Council Contact List

The Most Senior Person in Charge (CEO), the Aerodrome Manager, and the Aerodrome Manual Controller must be identical to those mentioned and signed in the FWD 3: Acknowledgement of Responsibilities sub-section above.

Note that there are three contact lists within the aerodrome manual, and they must always be maintained current and consistent.

The master contact list is a complete list of all contacts. The contact list below comprises a part thereof of the master contact list. The contact lists within the aerodrome manual are located as follows:

- INTRO 3: Master Contact List,
  - **Intro 3.1 Council Contact List**
  - **Intro 3.2 Emergency Services**
  - **Intro 3.3 Aviation Agencies**

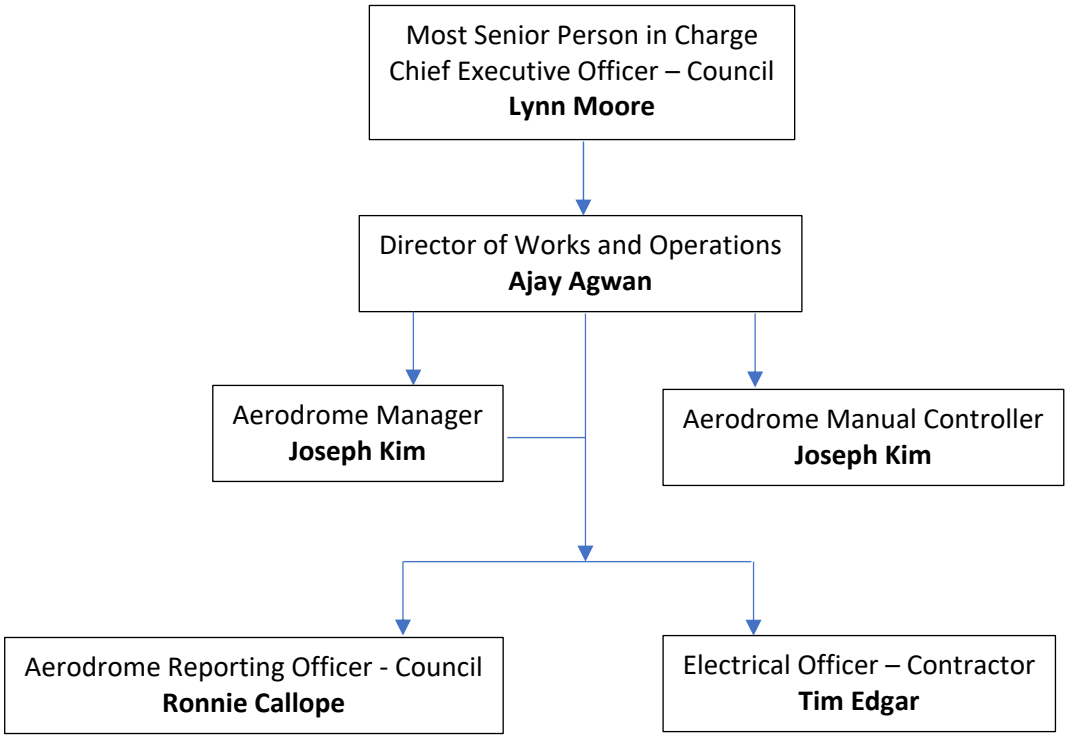
Aerodrome Management or Administration (Council) Contact List:

Most Senior Person in Charge of the Aerodrome		
Chief Executive Officer	**Lynn Moore**	**07 4746 3188 (W)** **0429 463 188 (M)**
Aerodrome Manager		
Technical Officer	**Joseph Kim**	**07 4746 3188 (W)** **0477 622 384 (M)**
Aerodrome Manual Controller		
Technical Officer	**Joseph Kim**	**07 4746 3188 (W)** **0477 622 384 (M)**
Aerodrome Reporting Officer		
Foreman	**Ronnie Callope**	**07 4746 3188 (W)** **0427 163 773 (M)**
Deputy Reporting Officer		
	Marie Gundersen	**07 4746 3188 (W)** **0427 128 212 (M)**
Electrical Officer- Contract Electrician	**Tim Edgar**	**0429 846 002 (M)**
Council's Engineers -George Burns and Assoc.		**07 4651 2177 (W)** **0427 963 173 (M)**

Amendment Record
19 June 2022

Part 2.1.2: Organisational Structure

The structure of the organisation and the lines of responsibility for the various personnel are contained in the following Organisation Chart:



Part 2.1.3: Management Positions

Part 2.1.3.1: Responsible for the operations and maintenance of the aerodrome

The Council has the ultimate responsibility for the maintenance and operation of the aerodrome. Council decides on the allocation of funds for further development of the facilities, items of major maintenance, routine maintenance and operational costs, and the allocation of equipment and human resources. Decisions are made in accord with both hierarchy and expertise, and all in conjunction with the Most Senior Person In Charge (CEO) who is appropriately advised by the Aerodrome Manager.

- Note that the Most Senior Person In Charge must remain fully aware of their obligations as signatured in the FWD 3: Acknowledgement of Responsibilities sub-section above.

Overall management and day to day operations is delegated to the Aerodrome Manager. Within defined limitations set by the Council, the Aerodrome Manager is responsible for the financial control of allocated funds, staff and the co-ordination of all aerodrome activities.

- Note that the Aerodrome Manager must remain fully aware of their obligations as signatured in the FWD 3: Acknowledgement of Responsibilities sub-section above.

The Aerodrome Manager has the overall responsibility for all routine operational safety and maintenance specific to the aerodrome. He advises Council on major maintenance requirements and developmental proposals and is responsible for removal of all infringing obstructions in and / or the maintenance of all obstacles below the protected OLS.

The Aerodrome Manager is also responsible for ensuring that the aerodrome facilities and equipment are planned, constructed, installed and maintained in accordance with the MOS 139 standards.

In addition, the Aerodrome Manager is responsible for ensuring that all personnel (such as the nominated / deputy / relief / back-up Aerodrome Reporting Officers, Works Safety Officers and personnel conducting safety / technical / serviceability / monitoring / maintenance inspections and repairs) are trained in accordance with the MOS 139 with all such training records monitored and maintained current, and that other record keeping processes (such as serviceability logs, issued NOTAMs, and all mechanical /electrical / civil works maintenance and repairs routine or otherwise) are efficiently in place and properly maintained.

Part 2.1.3.2: Responsibilities and contact details of the Aerodrome Manual Controller

The contact details of the nominated Aerodrome Manual Controller are given in:

- Intro3: Master Contact List
  - **Intro 3.1 Council Contact List**

Also included in the various contact lists is the Aerodrome Manual Controller's official position within Council, daytime contact or work phone number, and after hours contact or mobile phone number.

The Aerodrome Manual Controller must remain fully aware of their obligations as signatured in the FWD 3: Acknowledgement of Responsibilities sub-section above.

The Aerodrome Manual Controller's obligations are expanded to include but not limited to the following responsibilities:

- Keep a record of the persons who hold copies of the whole or part of the aerodrome manual.
- Distributing updates of information for the aerodrome manual (in printed or electronic form) to those persons and compliance with a specified time.
- Monitor currency of all distributed copies.
- Amending the aerodrome manual whenever necessary to maintain its accuracy.
- Complying with directions given by CASA to amend the aerodrome manual.
- Must tell CASA, in writing, of any amendment that the operator makes to the aerodrome manual for the aerodrome within 30 days after the amendment is made.
- Include information on where electronic master copy of the aerodrome manual is held.

Note that the current number of distributed aerodrome manual copies (including partial copies) are given in the Intro 4: Distribution List sub-section above.

- The aerodrome manual copies only differ on their title page with the balance remaining identical.
- Note that all partial copies distributed must be also maintained current for those having a current interest in the aerodrome.

Part 2.1.4: Conditions, Exemptions, Directions and Variations

Part 2.1.4.1: Details of exemptions applicable

Essentially, the aerodrome must comply with the CASR 139 and the MOS 139. If they are not able to comply, then an exemption from CASA (under CASR 139 regulation 139.020) must be sought and received, and the conditions of the exemption must be implemented for the aerodrome to operate as a certified aerodrome.

For each exemption granted, the following information must be provided:

- The position of the person responsible for applying for and administering the exemption.
- The CASA reference / identification number given to the exemption.
- The date on which the exemption came into effect.
- The condition/s subject to which the exemption is granted.

No exemptions are applicable to the aerodrome, and this has been additionally stated in Part 1.5: CASR 139 / MOS 139 CASA Exemptions above.

Part 2.1.4.2: Details of any conditions applicable

The details of any conditions applicable to the aerodrome certificate are given below. For each condition, the following information must be provided:

- Detail the action taken or methodology undertaken to comply with the conditions.
- The position of the person responsible for ensuring compliance with conditions.

No conditions are applicable to the aerodrome.

Part 2.1.4.3: Details of CASA issued directions

The details of any directions issued by CASA must be stated below inclusive of the position of the person responsible for ensuring compliance with the directions:

- No directions have been issued by CASA.

Part 2.1.4.4: Details of CASA agreed variations to standards

The details of any variations to standards (MOS 139) that have been agreed to with CASA must be stated below inclusive of the position of the person responsible for identifying non-compliances with standards, notifying CASA and administering any variations agreed to:

- No non-compliances and therefore

Part 2.1.4.5: Details of CASR 139 / MOS 139 accepted anomalies

The regulations and standards are periodically reviewed, updated and re-issued. They do differ in comparison to their predecessors. They clearly stipulate the conditions for an aerodrome operate if new or upgraded aerodromes. However, within the regulations and standards, there is scope to allow existing non-registered or non-certified aerodromes become registered or certified without having to upgrade all their physical attributes to preferred standards.

- No anomalies are identified.

Part 2.2: Aerodrome Emergency Plan (AEP)

Air travel in Australia and around the world, for business or pleasure, is within the reach of a rapidly growing number of people. The frequency of aircraft movements at airports or aerodromes are at an ever-increasing pace with a trend towards the use of larger capacity aircraft.

Although it is true that aircraft safety is continuing to improve due to continued advancements and practical implementation of aircraft technology including ground support systems, an aircraft accident is an ever-present threat for which planning and preparedness must continue.

International Civil Aviation Organisation (ICAO) surveys show that in most accidents on or near airports / aerodromes, the majority of aircraft occupants survive.

A comprehensive and frequently practiced Aerodrome Emergency Plan, developed and maintained in consultation with all responsible agencies, is essential to ensure that loss of life and suffering in the event of f

This document has been produced following guidelines provided by the National Airport Emergency Planning Committee (NAEPC), Emergency Management Australia, AirServices Australia, the Civil Aviation Safety Authority, Australian Defence Force, State Emergency Organisations, the Australian Airports Association, Department of Infrastructure, Regional Development and Cities, Local Government, Australian Transport Safety Bureau, International Domestic and Regional Airlines and a range of airport / aerodrome owners and operators.

Part 2.2.0.1: AEP Authority and Undertaking

The Aerodrome Emergency Plan has been prepared by the Aerodrome Emergency Committee in compliance with the CASR 139 and the MOS 139 and meets the State Emergency Service's Requirements.

Aerodrome Manual Controller

Date: _____ / _____ / _____ Signature: _____ Name: _____

In addition to the above, the Aerodrome Emergency Plan has been issued as a sub plan of Council's Disaster Plan (or DISPLAN) in accordance with State Emergency Services requirements. I undertake to review this Aerodrome emergency Plan at least annually in accord with the plan, and whenever amended, re-issue and distribute it in full accordingly.

Chairman, Aerodrome Emergency Committee

Date: _____ / _____ / _____ Signature: _____ Name: _____

Part 2.2.0.2: AEP Scope and Format

This AEP has been written for Boulia Aerodrome in accord with CASR 139 Appendix 1(b) to subparagraph 139.095(a)(ii).

The AEP has been addressed under two major categories; planning and procedures.

- Under the planning section, the importance of achieving a workable plan is addressed, and how it is best arrived at.
- Under the procedural section, all topic headings are maintained consistent with that contained in CASR139 Appendix 1(b) to subparagraphs
- 139.095(a)(ii) to assure direct address and compliance.
- Hence, some headings may appear cumbersome and possibly confusing at first reading.

Part 2.2.0.3: AEP Distribution List

In addition to aerodrome manuals, the Aerodrome Emergency Plan has been distributed as follows:

- Boulia Queensland Police Service 1 copy
- Boulia Queensland Fire and Rescue Services (QFRS) 1 copy
- Boulia Queensland Ambulance Services (Longreach) 1 copy
- Boulia Primary Health Clinic 1 copy
- State Emergency Services, Local Controller 1 copy

Part 2.2.1: Aerodrome Emergency Planning

Part 2.2.1.1: General

Almost without exception, qualified and experienced emergency planners will say that the most important aspect of planning is the process itself; together with the active involvement of those who will have responsibilities when an emergency response is essential.

Participation in the process ensures commitment to the AEP and formulation of a workable document.

Part 2.2.1.2: The Process

The economic and social effects of emergencies including destruction of property, dislocation of communities and loss of life are increasing in scope and severity. Coping with hazards gives us a reason and focus for planning. If hazards, natural or technological, did not exist or threaten, there would be no reason to plan. However, hazards do exist within all communities whether they are recognized or not.

Emergencies and / or disasters which can result from these hazards are both different in quality and quantity to "normal" events or incidents and require special arrangements for coping with them.

Special arrangements should be derived from the planning process and reflected in a written document. A lack of these special arrangements will inevitably result in confusion and inappropriate reactions. A lack of testing of and practice in these special arrangements will mean a much less effective response.

The key to formulating effective special arrangements is the planning process, from which all related programs, strategies and arrangements should flow. It is absolutely essential that those who will be involved in responding to emergencies are involved in the planning process and agree to their part therein.

The Aerodrome Emergency Committee (AEC) faces an increasingly difficult task with respect to formulating plans and procedures. The size of passenger aircraft is growing, and emergency management and planning is becoming more complex. The AEC must see their responsibilities in the context of other emergency management arrangements, at a local, regional, or State / Territory level.

It is vital that emergency arrangements envisaged for the aerodrome fit in with already established and proven standard operation procedures within each of the support services.

The Aerodrome Emergency Plan cover roles and responsibilities for a number of possible scenarios - the "what is to be done" in response, rather than the "how it is to be done".

Supporting plans and procedures, which are produced by all responding agencies in their Standard Operating Procedures, should cover the "how".

Amendment Record
2nd August 2019

Part 2.2.2: Aerodrome Emergency Procedures

The aerodrome emergency procedures have been prepared below. They are stated and / or inferred within the agreed directions, arrangements, roles / responsibilities and duties outlined for and / or between the various agencies responding to emergencies at our aerodrome.

This AEP and its procedures are written specific to the aerodrome. It is meant to compliment and / or assimilate any and / or all the other emergency service organisation procedures, which are probably held and maintained external to the aerodrome and Council.
It is not the intention of this AEP to re-/produce or duplicate potentially contradictive procedures that are externally developed by the other emergency service organisations.

Hence, each AEC member including the Aerodrome Operator (Council), will have its own detailed procedures consistent and complimenting with this AEP which are reviewed and documented separately to this AEP.

Part 2.2.2.1: The composition of the aerodrome emergency committee and contact details for the emergency service organisation represented on the committee

As the aerodrome owner, Council is responsible for establishing aerodrome emergency procedures for the Aerodrome. Emergency planning is the process of preparing an aerodrome to cope with an emergency occurring at the aerodrome or in its vicinity. The objective is to minimise the effects of an emergency, particularly with respect to the saving of lives, preserving infrastructure / facilities / equipment, and maintaining aircraft operations. The procedures are developed to co-ordinate the response of the different aerodrome agencies which include all emergency services that could be of assistance in responding to the emergency at the aerodrome.

The established procedures are endorsed by all agencies involved and form part of the Council's DISPLAN.

This document details the procedures which are to be followed when an emergency arises due to, say, an aircraft crash alert, an aircraft crash, a building or ground fires, a bomb threat and / or accidental spillage of hazardous materials.

NOTE: For the purpose of this document the "Officer in Charge" (or OIC) will be the most senior representative in attendance for the particular agency or emergency service.

Part 2.2.2.1.1: Composition of the AEC

The Aerodrome Emergency Committee (AEC) comprises the following personnel:

- Most Senior Person In Charge — Council
- Aerodrome Manager — Council
- Aerodrome Manual Controller — Council
- Aerodrome Reporting Officer — Council
- Senior Police Officer – Queensland Police Service (QPS) — Boulia
- Senior Officer – Queensland Fire and Rescue Service (QFRS) — Boulia
- Senior Officer – Queensland Ambulance Services (QAS) — Boulia
- Senior Officer – Primary Health Clinic /Hospital — Boulia
- Local Controller – State Emergency Services (SES) — Boulia
- Airline Agent — Boulia

The Civil Aviation Safety Authority (CASA) is not part of the AEP committee, but should be consulted on matters affecting the CASA. Any updates of the AEP must be advised and supplied to CASA.

Part 2.2.2.1.2: Emergency Notification Chart

A chart (Figure 1 in Part 2.2.2.1.2 below) has been presented below to indicate the preferred method of communication to initiate an aerodrome emergency call out.

It serves as a guide but more importantly it is there to ensure that all appropriate emergency services and agents are contacted.

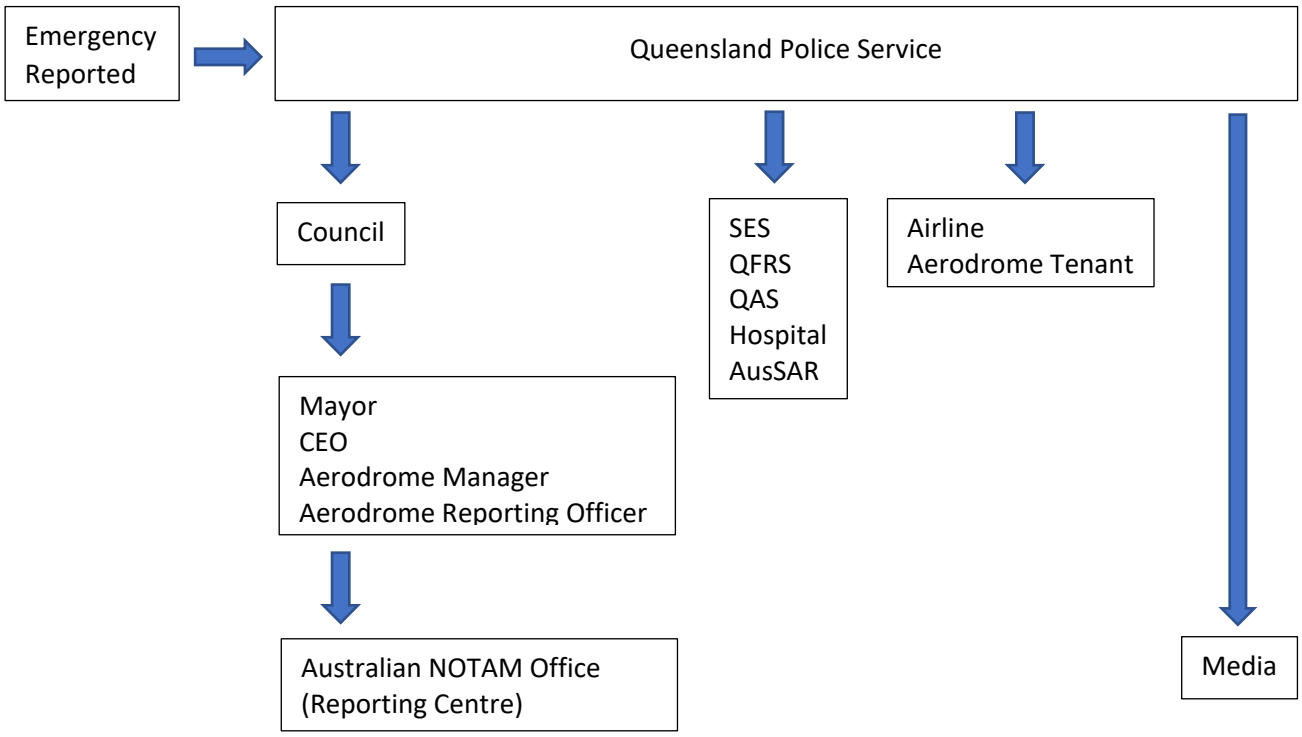


Figure 1 in Part 2.2.2.1.2

Part 2.2.2.1.3: Emergency Callout Contact List

The Most Senior Person in Charge, the Aerodrome Manager, and the Aerodrome Manual Controller must be identical to those mentioned and signed in the FWD 3: Acknowledgement of Responsibilities sub-section above.

Note that there are three contact lists within the aerodrome manual, and they must be maintained current and consistent at all times. The master contact list is a complete list of all contacts. The contact lists within the aerodrome manual are located as follows:

- INTRO 3: Master Contact List
  - **Intro 3.1 Council Contact List**
  - **Intro 3.2 Emergency Services**
  - **Intro 3.3 Aviation Agencies**

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2nd August 2019

Contact telephone numbers are located Intro 3 –Master contact list. Not all need to be contacted. They are supplied to cover those emergency scenarios where they might be required.

An emergency is initiated by first contacting the QPS, and then from there, contact be made as shown in Figure 1 in Part 2.2.2.1.2 – Emergency Notification Chart.

Part 2.2.2.1.4: Role of the AEC

The role of the AEC is a s follows:

- Elect a timely and motivated Chairman for the AEC
  - The Chairman elect must proactively assume responsibility of ensuring that the roles of the AEC are met.
  - Should the Chairman elect be vacated for any reason, then the Aerodrome Manager shall assume this interim position until a new Chairman is elected.
- Prepare an AEP in accordance with the requirements of the MOS 139, Section 10.7, including procedures for coordinating the responses of all emergency service organisations referred to in the AEP.
- In consultation with the emergency service organisations referred to on the AEP, review the AEP at least once per annum, and make any changes to the plan that are necessary to ensure that it operates properly.
- Conduct an emergency exercise annually alternating from a desktop emergency exercise to a full field emergency exercise the following year.
  - Note: If a real aerodrome / airside emergency occurs then this can be substituted for the emergency exercise.
- When requested by the aerodrome operator after an emergency exercise has been carried out or an emergency has occurred at the aerodrome, the committee shall:
  - Review the effectiveness of the responses to the emergency
  - Assess the adequacy of the emergency plan to deal with emergencies at the aerodrome
  - Take the necessary corrective action to ensure that the AEP operates properly

Part 2.2.2.1.5: Frequency of Meetings

The AEC must meet as many times as necessary to maintain this AEP current and effective. As a minimum the AEC must meet at least once per annum to review the AEP after it has conducted either a desktop or full field emergency exercise (refer to Part 2.2.2.1.4).

Part 2.2.2.1.6: Operational Response Figures and Forms

The following figures and forms to support the operational responses to various forms of emergencies covered below in Part 2.2.2.5. The operational response to an emergency, including arrangements for aerodrome access and assembly areas.

Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome – “Crash Map” and “Assembling Area”

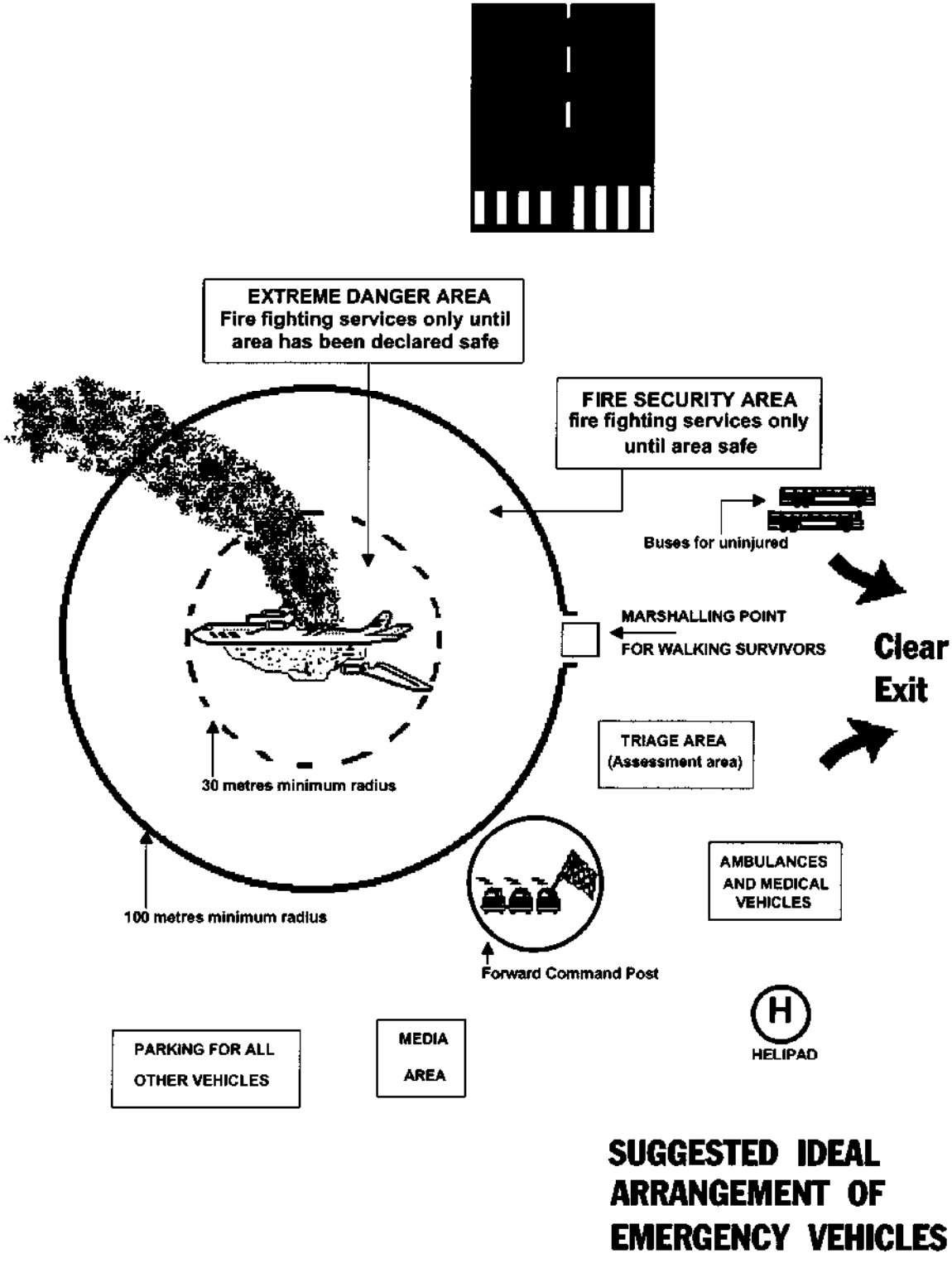

Figure 3 in Part 2.2.2.1.6: Example of “Crash Site Arrangement” and “Forward Command Post”

BOMB / EXTORTION THREAT FORM

INSTRUCTIONS:

1. **Please complete this form in TRIPLICATE.**
   DISTRIBUTION: ORIGINAL - Recipient's copy
   Copy for police
2. **Immediately:**
   (a) If equipped, implement tape recording action as per instruction, and
   (b) Alert Supervisor by use pre-arranged signalling system to initiate call trace assistance and notification action.
3. **IF POSSIBLE DO NOT ALLOW CALLER TO DICTATE SPEED OR HASTE DURING CONVERSATION, USE DELAYING TACTICS TO KEEP CALLER TALKING (e.g. request repetitions, ask questions as suggested below).**
4. **DO NOT TERMINATE CALL - LEAVE LINE OPEN.**

Recipient's name	
Location	Phone No. and Extn.

Date	Time

EXACT LANGUAGE OF THREAT ***(Pay particular attention to times)***

_____

_____

_____

TRY TO OBTAIN INFORMATION:

BOMB THREAT DETAILS	EXTORTION THREAT DETAILS *(ONLY if money demanded)*
WHERE is it?	WHERE do you want the money?
	WHERE do you want it delivered?
WHEN will it explode?	HOW do you want delivery? _____
WHAT type is it? (Time? Attitude? Anti-handling? Other?)	WHAT amount?
	WHAT denomination?
	ARE you going to call again?
	WHEN?

WHY are you doing this?

WHAT IS YOUR NAME?

CONTINUE TO DELAY IF POSSIBLE

ANALYSIS ***(Tick any appropiate square)***

ORIGIN OF CALL
☐ Local ☐ Trunk ☐ STD
☐ Public ☐ Private

SEX
☐ Male ☐ Female

AGE
☐ Adult ☐ Child

MANNER
☐ Calm ☐ Angry
☐ Deliberate
☐ Emotional
Other _____

LANGUAGE COMMAND
☐ Good ☐ Fair
☐ Poor

ACCENT
☐ Local ☐ Foreign

VOICE TYPE
☐ Loud ☐ Soft
☐ Raspy ☐ Pleasant
Other _____

SPEECH
☐ Fast ☐ Slow ☐ Distinct
☐ Impediment ☐ Stutter ☐ Nasal
☐ Hesitant ☐ Uneducated
Other _____

BACKGROUND NOISE
☐ Music ☐ Voices ☐ Machines
☐ Traffic ☐ Trains ☐ Aircraft
☐ Children ☐ Typing
Other _____

DID CALLER APPEAR FAMILIAR WITH AIRCRAFT OR BUILDING BY HIS DESCRIPTION OF BOMB LOCATION? ☐ Yes ☐ No

EMERGENCY ACTION TAKEN _____

_____

_____

Form 1 in Part 2.2.2.1.6: Bomb / Extortion Threat Form

Part 2.2.2.2: A description of the role of each emergency service organisation involved in the plan

Queensland Police Service (QPS)

A soon as any police presence is established at the scene of an aerodrome emergency or exercise, that Police Officer or the most Senior Police Officer is required to assume overall co-ordination of the agencies responding to the emergency. The person who had initially assumed coordination of the situation prior to police intervention should now hand over the role to the police.

- The most Senior Police Officer is in charge of all available emergency services and other people which includes the Aerodrome Manager.

The police represent the coroner at a crash site and may be authorised to direct the custody, transport and storage of deceased persons. The coroner is responsible for determining cause of death and in the case of aviation casualties, draws on the specialized skills of the CASA Operational and Flight Crew Licensing Standards Branch and the ATSB.

The police are required to account for all people on board a crashed aircraft. In discharging this function it will normally be necessary to secure the crash site area and impose control over persons entering and leaving the site.

The police may also be given the responsibility of guarding any aircraft wreckage on behalf of the ATSB.

Queensland Ambulance Service (QAS)

QAS will provide emergency care, initial triage treatment and transport of injured persons to hospitals.

Queensland Fire and Rescue Services (QFRS)

The Queensland Fire and Rescue Services will combat fire, carry out rescue procedures and / or contain chemical incidents as required.

State Emergency Services (SES)

The SES will liaise with controllers and provide assistance as required.

Aerodrome Manager, Aerodrome Manual Controller, and Aerodrome Reporting Officer

On being advised by the police that an aircraft crash has occurred, the Aerodrome manager, or, it unavailable, the Aerodrome Reporting Officer will:

- If the crash is in the vicinity of the aerodrome or is affecting the aerodrome, initiate an appropriate NOTAM (Notice to Airmen)
- If the crash is on or affecting the aerodrome, ensure that aerodrome markers are put out to indicate that a runway or the whole aerodrome is closed to aircraft operations
- Consider options which permit emergency flights to use the aerodrome if the wreckage is affecting normal runway operations
- Provide Council personnel, vehicles and equipment to assist the QPS as requested
- Arrange transport of emergency equipment to the scene of the accident or to the rendezvous point
- Switch on aerodrome lighting or set out a flare path if required for emergency flights
- When the emergency has been terminated, and if required, activate the Disabled Aircraft Removal procedures outlined in Part 2.13 in this aerodrome manual
- Conduct a runway inspection, and clear any debris, foreign substances and objects form the runway
- Arrange with the Australian NOTAM Office to reopen the aerodrome or runway where appropriate

Part 2.2.2.3 The activation, control and coordination of the emergency service organisations during an emergency

An emergency can be activated by anyone observing an aircraft accident, or a potential airside incident or accident which if left unattended will result in the loss of life. Once an emergency is activated, the QPS assumes authority over the complete coordination of all emergency service organisations until the emergency has been concluded.

Part 2.2.2.4: The aerodrome's emergency facilities and arrangements for keeping them in readiness

The Council's facilities such as water tankers, fire hydrants, portable generators and so on, will be available on short notice. A list and location of available equipment is supplied below.

The fire hydrants installed on the aerodrome will be maintained in accordance with the requirement of Australian Standards AS 1851.4-1992: Maintenance of fire protection equipment - Fire hydrant installations.

List and Location of available equipment:

- One available at fuel pump on aerodrome
  - Standpipe located in Council compound
- Fire extinguishers are located as follows:
  - One available at fuel pump on aerodrome
  - One available at aerodrome terminal on aerodrome
- Fire extinguishers located in Council compound
- First Aid Kit:
  - Nil available on aerodrome
  - First aid kits available from the ambulance service and the hospital
- Towing Vehicles

Part 2.2.2.5: The operational response to an emergency, including arrangements for aerodrome access and assembly areas

As a minimum, 6 states of emergencies have been considered in this sub-section for appropriate operational response. This AEP need not be limited to the six categories of emergencies, and over time, more may be included. The categories of emergencies considered include a:

- Local standby emergency
- Full emergency
- Bomb Threat emergency
- Spillage of hazardous materials emergency
- Ground or building fire emergency; and
- Hijacking or unauthorised use of an aircraft emergency

From the first instance of any emergency procedure activation, all AEC members (and personnel under their guidance) shall understand and abide with the following protocols:

During an emergency it is essential that personnel assisting are not hindered in the execution of their duties by enquiries not related to the emergency.

- Any enquiries from the news media or from the public must be referred to the Council OIC, who will direct them to the QPS spokesman who may then invoke or allow engagement with airline company representative as appropriate
- No information other than to confirm or deny the existence of an emergency is to be given out by any Council OIC
- Those persons responsible for alerting the emergency services must give the QPS the advantage of any possible advanced warning
- The emergency services will proceed to the aerodrome and stand-by without having announced their intentions to the general public
- If a state of alert is called, all agencies should be prepared to implement full emergency procedures

Part 2.2.2.5.1: Local Stand-by Emergency

- A local standby emergency principally occurs when a potential aircraft crash is imminent within airside facilities and someone on the ground has been alerted.
- However, should an unforeseen emergency arise that does not explicitly fall under the categories of a full emergency, bomb threat emergency, spillage of hazardous material emergency, ground or building fire emergency, and / or hijacking or unauthorised use of an aircraft emergency arise, then a local standby emergency can be activated.
- Generally, a state of alert is applicable when a crash may result from a hazardous landing or other circumstances including:
- Suspected or observed defects in undercarriage lowering or locking system
- Loss of power to the extent that a forced landing is imminent
- Fire in an aircraft has been observed or reported
- Any occasion in which the pilot-in-command (PIC) requests that the emergency services are to stand-by.

Part 2.2.2.5.1.1: Notification

- Any Council staff, airline representatives, members of the public or other person becoming aware of an aircraft crash / accident shall notify the QPS immediately.
- In addition, notification of an incident shall be given to the Australian NOTAM Office (NOF) for the issuing of an appropriate NOTAM.
- The 24-hour telephone number can be located in **INTRO 3: Master contact list**
- In an emergency, the NOF will aid with issuing an appropriate NOTAM if required
- Normally, aerodrome management is responsible for this task

The local QPS will then initiate the appropriate emergency action:

- This begins with the notification of relevant AEC members as shown in the Figure 1 in Part 2.2.2.1.2: Emergency Notification Chart (page 36)
- Where the local QPS is not the first on site or unable to initiate an appropriate emergency action, then responsibility of this action falls on the first emergency service to arrive inclusive of the Aerodrome Manager and / or the duty Aerodrome Reporting Officer

Part 2.2.2.5.1.2: Crash Site Arrangement

- Since no crash has taken place, no crash site arrangement is necessary.

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2 August 2019

Part 2.2.2.5.1.3: Forward Command Post (FCP)

- In the event of a local stand-by (aircraft crash alert) the interim Forward Command Post will be an assembling area adjacent to the aerodrome terminal.
- The assembling area / interim FCP as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area”

Part 2.2.2.5.1.4: Assembling Area

- The assembly point for emergency services during a local standby emergency (such as a hazardous landing or crash alert) is as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome "Crash Map" and "Assembling Area"
- The assembling area is the first point of congregation of all participating emergency services when a local standby emergency is initiated.

Part 2.2.2.5.1.5: Responsibilities

The division of responsibilities for directing rescue and firefighting operations at the scene of a crash is as follows:

- Initial response is under the control of the first emergency service to arrive.
- If the Aerodrome Manager and / or the Aerodrome Reporting Officer arrive before the QPS, then they will assume the control or co-ordination of available services under close advice from the emergency services at hand to allow the emergency services to perform their task without distraction
- On arrival at the aerodrome, the first QPS officer will take over co-ordination of all activities.
- The rescuing of persons from crashed aircraft falls immediately under the control of the QFRS and remains so.
- However, if they are in transit, then the first personnel to arrive will do what they can in the interim
- The medical presentative of the FCP has overall responsibility for ensuring appropriate emergency treatments, dispatch and removal of casualties.

Part 2.2.2.5.1.6: Procedures as inferred in following duties

Duties of Airservices Australia (ASA)

- Airservices Australia (ASA) do not have a formal involvement with respect to emergencies on the aerodrome except for the issuing of an appropriate NOTAM as advised by the Aerodrome Manager or Duty Aerodrome Reporting Offices

Duties of AusSAR

- Not required unless requested by the QPS

Duties of the Aerodrome Manager and / or Aerodrome Reporting Officer(s)

- Advise the QPS of the emergency if they were first informed
- Initiate an appropriate NOTAM to close the aerodrome if the crash is at / nearby the aerodrome and is unsafe to airside operations
- Proceed to the assembling area as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area”
- If first on the scene or if no QPS OIC is present, then assume responsibility to co-ordinate all emergency services and actions until arrival of QPS
- When a QPS Officers arrives, then supportively hand over all responsibility of coordinating the entire emergency
- Prepare and provide Council personnel, vehicles and equipment to assist QPS as requested
- Arrange transport of emergency equipment to the scene of the accident or to the rendezvous point
- Following cessation of the emergency and QPS involvement, assume overall control of the aerodrome movement areas and if required, activate the Disabled Aircraft Removal procedures outlined in Part 2.13, conduct a runway inspection (clearing any debris, foreign substances and objects from the runway), and request cancellation of any NOTAM advising of the closure of the aerodrome or runway when and where appropriate

Duties of the Terminal Staff:

- Notify the QPS of the crash in the first instance
- Provide the location of the crash, possibly using the “Crash Map” as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area”
- Provide pertinent information such as the number of people on board, dangerous cargo and so on
- Notify the Aerodrome Manager and / or the duty Aerodrome Reporting Officer in the second instance
- Provide a representative staff person to proceed to the assembly area as shown in Figure 2 in Part 2.2.2.1.6 Boulia Aerodrome “Crash Map” and “Assembling Area” to report for service to the QPS

Duties of the QPS:

If the emergency is reported by telephone, obtain the following information:

- Name, address, and telephone number of caller
- Location of crash
- If aircraft is on fire
- Aircraft registration and type
- Damage to aircraft and injuries to passengers and crew
- Notify the appropriate emergency services / AEC members as shown in Figure 1 in Part 2.2.2.1.2 Emergency Notification Chart
- Act in accordance with the DISPLAN
- Proceed to the assembly area as shown in figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area” and take control of the services
- Prepare to implement full emergency procedures and if a crash / incident occurs, then establish the FCP
- Establish air / ground radio communications, if practicable
- Arrange for the activation of runway lights with Council, if required

Duties of the QFRS:

- Proceed to the assembly area as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area” and confer with the QPS OIC who is coordinating the emergency, and agree on what assistance in required
- Prepare to implement full emergency procedures

Duties of the QAS:

- Proceed to the assembly area as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area” and confer with the QPS OIC to cooperate and assist as directed
- Prepare to implement full emergency procedures

Duties of the SES:

- Notify the appropriate SES Rescue Unit and the SES Divisional Controller
- Proceed to the assembly area as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area”, and confer with the QPS OIC to cooperate and assist as directed
- Prepare to implement full emergency procedures

Duties of the Airline Agent or aircraft owner / operator:

Ensure that the emergency services are fully aware of any critical information related to the aircraft such as people on board and / or dangerous cargo on board

Part 2.2.2.5.2: Full Emergency

A full emergency occurs when an aircraft crash has been alerted within airside facilities.

Part 2.2.2.5.2.1: Notification

Any Council staff, airline representatives, members of the public or other person becoming aware of an aircraft crash / accident shall notify the QPS immediately.

In addition, notification of an incident shall be given to the Australian NOTAM Office (NOF) for the issuing of an appropriate NOTAM.

- The 24-hour telephone number- refer INTRO 3 :Master contact list
    - In an emergency, the NOF will aid with issuing an appropriate NOTAM if required
    - Normally, aerodrome management is responsible for this task

The local QPS will then initiate the appropriate emergency action:

- This begins with the notification of relevant AEC members as shown in the Figure 1 in Part 2.2.2.1.2: Emergency Notification Chart

Part 2.2.2.5.2.2: Crash Site Arrangement

Safe areas need to be arranged for the various emergency services and any other foreseen concerns.

Vehicles and equipment must be arranged so that access is unimpeded and emergency services can best be provided.

An example of a crash site arrangement is as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post"

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2nd August 2019

Part 2.2.2.5.2.3: Forward Command Post (FCP)

A Forward Command Post (FCP) will be established at the scene of an aircraft crash on the aerodrome by the Aerodrome Reporting Officer or the first emergency service to arrive

- Refer to Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post" for an example and location of an FCP.

QFRS vehicles are to proceed directly to the scene of the crash and set up as preferred with priority.

All other services are to report to the FCP and assist the QPS with advice.

- The QPS will then direct all emergency services equipment, vehicles and personnel

Part 2.2.2.5.2.4: Danger / Fire Security Areas

Danger / fire security areas shall be decided by the QFRS OIC, and its set out including that of the overall crash site shall be marked out (under advice) by the Senior QPS OIC as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post" (page 38).

No person shall proceed within the designated danger fire security areas unless directed by a QFRS OIC, or until the danger areas have been declared "safe".

Part 2.2.2.5.2.5: Responsibilities

The division of responsibilities for directing rescue and firefighting operations at the scene of a crash is as follows:

- Initial response is under the control of the first emergency service to arrive
    - If the Aerodrome Manager and / or the Aerodrome Reporting Officer arrive before the QPS, then they will assume the control or co-ordination of available services under close advice from the emergency services at hand to allow the emergency services to perform their task without distraction
- On arrival at the aerodrome, the first QPS Officer will take over coordination of all activities
- The rescuing of persons from crashed aircraft falls immediately under the control of the QFRS and remains so.
    - However, if they are in transit, then the first personnel to arrive will do what they can in the interim
- The medical representative at the Forward Command Post has overall responsibility for ensuring appropriate emergency treatment, dispatch and removal of casualties.

Part 2.2.2.5.2.6: Procedures as inferred in following duties

Duties of Airservices Australia (ASA)

- Airservices Australia (ASA) do not have a formal involvement with respect to emergencies on the aerodrome except for the issuing of an appropriate NOTAM when advised to do so (usually by but not limited to the Aerodrome Manager or Duty Aerodrome Reporting Officers

Duties of AusSAR

- The Search and Rescue Officer (SARO) from AusSAR (Australian Search and Rescue) will respond to specific requests by the QPS as appropriate
- For emergencies not involving the aerodrome, the SARO will take responsibility for the appropriate action jointly with the QPS

Duties of the Aerodrome Manager and / or Aerodrome Reporting Officer(s)

- Advise the QPS of the emergency if they were first informed
- Initiate an appropriate NOTAM to close the aerodrome if the crash is at / nearby the aerodrome and is unsafe to airside operations
- Proceed to the crash area FCP as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post"
- If first on scene or if no QPS Officer is present, then assume responsibility to coordinate all emergency services and actions until arrival of QPS
- When a QPS Officer arrives, then supportively hand over all responsibility of coordinating the entire emergency
- If the crash is on or affecting the aerodrome, ensure that aerodrome markers are put out to indicate that a runway or the whole aerodrome is closed to aircraft operations
- Prepare and provide Council personnel, vehicles and equipment to assist QPS as requested
- Arrange transport of emergency equipment to the scene of the accident or to the rendezvous point
- Following cessation of the emergency and QPS involvement, assume overall control of the aerodrome movement areas and if required, activate the Disabled Aircraft Removal procedures outlined in Part 2.13, conduct a runway inspection (clearing any debris, foreign substances and objects from the runway), and request cancellation of any NOTAM advising of the closure of the aerodrome or runway when and where appropriate

Duties of the Terminal Staff

- Advise the QPS of the emergency if they were first informed
- Provide the location of the crash, possibly using the “Crash Map” as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area”
- Provide pertinent information such as the number of people on board, dangerous cargo and so on
- Notify the Aerodrome Manager and / or the duty Aerodrome Reporting Officer in the second instance
- Provide a representative staff person to proceed to the assembly area as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome "Crash Map" and "Assembling Area" to report for service to the QPS

Duties of the QPS

- If the emergency is reported by telephone, obtain the following information:
    - Name, address, and telephone number of the caller
    - Location of crash
    - If aircraft is on fire
    - Aircraft registration and type
    - Damage to aircraft and injuries to passengers and crew
- Notify the appropriate emergency services / AEC members as shown in Figure 1 in Part 2.2.2.1.2 Emergency Notification Chart
- Proceed to the scene of the crash
- Establish an FCP at least 100 metres upwind from the crash site as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post.
- Establish and control an assembly area of all other services
- Establish communications with all other services
- Isolate and secure the crash site, admitting only essential firefighting personnel and equipment
- Direct appropriate support into the area
- Arrange for unrestricted passage of emergency vehicles to and from the crash site
- Coordinate all action by other services
- Ascertain from the Senior Fire Officer (QFRS) on scene when the area is safe for other emergency services to enter
- Direct walking survivors to the triage area and account for all persons on board
- Guard the wreckage until the Australian transport Safety Bureau (ATSB) assumes responsibility
- Where possible, photograph and mark the position of deceased person(s) prior to removal
- Liaise with news media
- Notify Search and Rescue Officer (SARO) from AusSAR (Australian Search and Rescue) when emergency is concluded

Duties of the QFRS

- Proceed to the scene of the crash and commence rescue and firefighting operations
- Establish fire control and take charge of rescue and firefighting operations
- As soon as practicable establish liaison with the QPS OIC at the FCP and carry out operations under his general control
- Secure an area around the crash site as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post"
- Notify the FCP when the crash area is “safe”
    - Note: The term area is “safe” means that the QFRS Officer has declared the secured area around the crash site to be safe for entry by authorised emergency personnel subject to their observance of extreme caution.
- Ensure that any persons entering the safe area must be prepared for any change in the existing conditions.
- Ensure total adherence to the "NO SMOKING" rule
- Define entry / exit routes to avoid break-up of foam protected areas

Duties of the QAS

- Report to the FCP as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post", liaise with and follow the directions of the QPS Officer coordinating the emergency
- Provide radio equipped QAS Officer to act as medical coordinator at the FCP at all times
- Convey medical teams to FCP and then to the triage area
- When instructed to proceed, establish a triage area, loading point and ambulance control to ensure a positive liaison with QPS OIC
- When the area is declared safe, assist with rescue operations

Duties of the Hospital

- Report to the FCP as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post", liaise with and follow the directions of the QPS Officer coordinating the emergency
- Provide Medical Officer to liaise at the crash site
- Provide Medical Team at crash site if required
- Prepare to receive casualties

Duties of the SES

- Notify the appropriate SES Rescue Unit and the SES Divisional Controller
- Report to the FCP as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post"
- Implement full emergency procedures
- Provide and establish an SES Officer to liaise with the QPS OIC
- Commence rescue operations in unison with QFRS, when directed by the QPS OIC.
    - Note – very close cooperation in this phase is required.
- Place all other SES Units and resources on full alert, held in reserve and only committed when the situation demands
- The local SES Controller will at all times act in accordance with standing procedures
- The local SES Controller will respond to all legitimate requests from the QPS OIC
- The local SES Controller will keep the Divisional SES Controller adequately advised whom remains at stand-by

Duties of the Airline Agent or aircraft owner / operator

- Ensure that the emergency services are fully aware of any critical information related to the aircraft such as people on board and / or dangerous cargo on board

Part 2.2.2.5.3: Bomb Threat Emergency

- When information has been received that a bomb or other explosive device has been placed on or in the vicinity of an aircraft or on the aerodrome, then a bomb threat emergency is activated.
- Assessment of a bomb threat is usually dependent upon the information contained in the threat itself. It is therefore important that the person who directly receives the threat records as much information as possible. A bomb / extortion threat form as shown in Form 1 in Part 2.2.2.1.6: Bomb / Extortion Threat Form (page 39) is given to record or report any information conversed.
- In addition, an incoming call can be traced to its source provided that the recipient of the call leaves the line open until advised by Telstra that the call can be terminated. While the line is kept open, Telstra will attempt to trace the call.

Part 2.2.2.5.3.1: Bomb Search Area

- A bomb search area has been located at the south eastern (THR 32) end of runway 14/32.
- Where possible, the threatened aircraft should be directed to this area to be dealt with.
- The bomb search area should similarly set out to a crash site arrangement as shown in Figure 3 in Part 2.2.2.1.6: Example "Crash Site Arrangement" and "Forward Command Post" (page 38).
- A distance of not less than 100 metres around the aircraft shall be clear of all persons except those actively engaged in the search

Part 2.2.2.5.3.2: Aircraft Landing

- After landing, an aircraft with a genuine threat shall be directed by the QPS or a delegated groundsman to the bomb search area where the passengers shall be deplaned from the aircraft and removed from the area before the aircraft is searched.
- Disembarked passengers will be directed to the terminal by the QPS.

Part 2.2.2.5.3.3: Aircraft on the ground

- When the threatened aircraft is parked and, in the opinion of the aircraft operator's designated representative or the pilot-in-command, can be moved, then persons on board shall be deplaned and the aircraft moved to the bomb search area.
- When the threatened aircraft is parked and in the opinion of the aircraft operator's designated representative or the pilot-in-command cannot be moved, then persons on board shall be deplaned.
- After deplaning, a distance of no less than 100m around the aircraft shall be cleared of all persons except those actively engaged in searching. This includes terminal buildings and other facilities.

Part 2.2.2.5.3.4: Aircraft Subject to Search

- The aircraft operator is responsible for the movement of a threatened aircraft to the bomb search area, the searching of the aircraft for explosive devices and the transportation of passengers, baggage and cargo.
- Responsibility for determining the scope of a search rests with the aircraft operator's designated representative or the pilot-in-command.
- As part of the aircraft search, it may be necessary for passengers and crew from the aircraft to be transported to a location near the bomb search area or elsewhere to identify their baggage.
- The aircraft operator's designated representative or the pilot-in-command may request that the physical search of threatened aircraft for explosives be conducted in association with the QPS with technical assistance being provided by the aircraft operator.
- When an aircraft is subject to search, the threat shall be considered to remain genuine until the aircraft operator's designated representative or the pilot-in-command advises that the threat has been reclassified as hoax.
- Should an item suspected of containing explosives be discovered, assistance should immediately be sought from the QPS.

- Circumstances may dictate a course of action other than those outlined above, depending on events surrounding the particular threat. However, any variance should be for reasons which are considered necessary for the preservation of life and not for reasons of commercial expediency.

Part 2.2.2.5.3.5: Procedures as inferred in following duties

Duties of the person receiving the telephone call:

- Obtain as much information as possible, using Form 1 in Part 2.2.2.1.6: Bomb / Extortion Threat Form
- Not replace the handset
- Contact QPS for authority to trace call (see Part 2.2.2.1.3: Emergency Call Out Contact List
- Advise the Police and Chief Executive Officer (Council) of the bomb threat

Duties of Council after being advised of a bomb threat:

- Notify the QPS
- Notify Council staff associated with the aerodrome:
- Mayor
- Chief Executive Officer
- Aerodrome Manager
- Aerodrome Reporting Officer
- Close the aerodrome by NOTAM after the aircraft has landed, stating a 30-minute review time
- Provide radio equipped Aerodrome Reporting Officer at the FCP to liaise and aid the QPS OIC
- Cancel the “aerodrome closed” NOTAM when passengers and aircraft have cleared the maneuvering area

Duties of the QPS

- Initiate a bomb threat emergency by notifying all appropriate emergency services / agencies as shown in in Figure 1 in Part 2.2.2.1.2 Emergency Notification Chart
- Establish air / ground radio communications, if practicable
- Establish an FCP near the designated search area
- Assist in evacuation of the aircraft
- Assist in search of the aircraft under direction of the airline agent / operator
- Assume control of the emergency, and accordingly liaise and coordinate all present emergency services / agencies

Duties of the QFRS, QAS and hospital staff

- Proceed to the FCP and establish liaison with the QPS OIC
- Standby adjacent to, but outside the clearance limits of the search area
- Prepare to implement full emergency procedures

Part 2.2.2.5.4: Spillage of Hazardous Materials Emergency

- In the event of a spillage at the aerodrome of a material which is or can be assumed to be hazardous it is essential that action be taken quickly to collect, absorb or neutralize the material. Such materials could arrive at the aerodrome as airfreight cargo or be transported by road and / or stored at the aerodrome for use by operators (this latter category could include fuels, oils and agricultural spraying materials).
- The company at fault of the hazardous materials spillage will be responsible for initiating and cleaning up the spillage, and bearing the costs associated.

The following procedures in the form of duties to a discovered spillage of hazardous material on the aerodrome apply:

Duties of Person

- If known, then advise the business or company responsible for the spillage, and give its location
- Advise the staff at the aerodrome terminal, and / or the duty Aerodrome Reporting Officer, and / or Council of the spillage and give its location.

Duties of the responsible business or company

- Determine the nature of the substance involved
- Determine the magnitude of the spillage and assess whether the potential hazard is “minor” or “major”
- If the spillage is assessed as “major”, then notify the QPS and QFRS, and allow them to take charge of the spillage clean-up task
- If the spillage is assessed as “minor” then determine the correct procedure for cleaning up the spillage, and initiate / coordinate the clean-up of the spillage

Duties of Council

- Confirm that those responsible have been notified, else advise the business or company responsible for the spillage, and its location
- Confirm that an appropriately trained person or entity such as the QFRS are undertaking the clean-up task
- If necessary, issue a NOTAM to arrange the closure of the aerodrome
- Alert any other aerodrome staff.
- Advise / Alert any other aerodrome tenants if necessary.

Duties of QPS if called for assistance

- Take charge of the emergency
- Become informed of the emergency at hand
- Control any crowd or vehicles which may include the evacuation of an area if required
- Assist the QFRS

Duties of QFRS if called for assistance

- Proceed to the emergency and take charge of dealing with and / or cleaning up the spillage

Part 2.2.2.5.5 Ground or building fire emergency

The following procedures in the form of duties apply to a discovered ground or building fire on the aerodrome:

Duties of Person

- Advise the fire brigade / QFRS of the fire and give its location
- Advise the staff at the aerodrome terminal, and / or the duty Aerodrome Reporting Officer, and / or Council of the fire and give its location
- Only if appropriately trained, attempt to control the fire until the arrival of the QFRS

Duties of Council

- Confirm that the QFRS have been notified
- Advise the QPS
- If necessary, issue a NOTAM to arrange the closure of the aerodrome
- Alert any other aerodrome staff.
- Advise / Alert any other aerodrome tenants if necessary
- Only if appropriately trained, attempt to control the fire until the arrival of the QFRS

Duties of QPS if called for assistance

- Take charge of the emergency
- Become informed of the emergency at hand
- Control any crowd or vehicles which may include the evacuation of an area if required
- Assist the QFRS

Duties of QFRS

- Proceed to the scene of the fire and take charge of firefighting operations

Part 2.2.2.5.6: Hijacking or unauthorised use of an aircraft emergency

- Any information relating to the hijacking or unauthorised use of an aircraft should be immediately notified to the Boulia QPS from which the QPS will then respond in accordance to their internal procedures

Part 2.2.2.6: The response to a local standby call-out

- All the support services will line up in the assembly area as identified on the Crash Map as shown in Figure 2 in Part 2.2.2.1.6: Boulia Aerodrome “Crash Map” and “Assembling Area”
- The vehicles will await the arrival of the aircraft and then proceed to the crash site if the aircraft comes to grief

Part 2.2.2.7: The response to a full emergency call-out

- As the support vehicles arrive, they will proceed to the FCP and report to the QPS OIC

Part 2.2.2.8: The arrangements to return the aerodrome to operational status after an emergency

- The responsibility for the termination of an emergency is that of the Council OIC of the aerodrome but only after consultation and joint agreement with the QFRS OIC and the Senior Police OIC
- When the emergency is terminated, the Council OIC may then or have the Aerodrome Reporting Officer:
- Activate the Disabled Aircraft Removal procedures outlined in Part 2.13 in this aerodrome manual if required
- Conduct a runway inspection, and clear any debris, foreign substances and objects from the runway
- Arrange with the Australian NOTAM Office to reopen aerodrome or runway where appropriate
- Inform the balance of pertinent Council staff and other agencies involved

Part 2.2.2.9: The arrangements for a periodic review of the AEP by the AEC

- In coordination with the AEC Chairman and in accord with the CASR 139 and the MOS 139, the Aerodrome Manager will initiate and finalise a full review of the AEP involving the AEC

- In consultation with the AEC, the AEP must be reviewed at least once per year and no later
- It must occur within 7 days of having conducted an emergency exercise (desktop or full field) or following an actual emergency event
- The purpose of the AEC annual meeting is to:
- Review the effectiveness of the responses to the emergency. Each emergency service will be able to quickly appraise the effectiveness of their own internal procedures but an in-depth review of each organisations procedures is not the priority here unless it overlaps or conflicts with the other emergency service procedures
- Assess the adequacy of the emergency plan to deal with emergencies at the aerodrome
- Determine if this AEP requires change(s)
- Document the outcomes or take minutes of the AEP review
- Action, administer or implement the changes to this AEP as required
- Keep records of the reviews for at least 3 years

Part 2.2.2.10: The arrangements for testing the AEP every 2 years

- Following an annual review of the AEP, the effectiveness of the AEP must at least be annually tested either via an emergency exercise or actual emergency
- This involves conducting an emergency exercise annually, alternating from a desktop emergency exercise one year to a full field emergency exercise the following
- In the event of an actual aircraft emergency occurring within 6 months before an emergency exercise is due, CASA may approve deferment of a scheduled exercise if a full AEP review (as detailed in Part 2.2.2.9 is conducted within 7 days of the emergency. Note – records should be kept for at least 3 years.

This is the end of the Aerodrome Emergency Plan.

Part 2.3: Aerodrome Lighting

All new and existing lighting facilities will be installed in accordance with the requirements of MOS 139.

Before certain lighting facilities are put into operation, and where appropriate they will be:

- Checked by an electrical engineer or licenced electrician
- Surveyed when required by a suitably qualified person
- Flight checked by a CASA approved pilot

Details of these checks will be forwarded to CASA for approval of the issue of an appropriate permanent NOTAM.

Part 2.3.1: A Description of the Aerodrome Lighting System

Boulia Aerodrome's airside lighting comprises of:

- Ground Lighting
  - Runway edge lighting for RWY 14/32
    - A single stage Low Intensity Runway Lighting (LIRL) system is provide and is activated via Pilot Activated Lighting (PAL)
    - The lights are nominally spaced at 60 metres longitudinally and 32 metres laterally
  - Runway end / threshold lighting for RWY 14/32
    - At both ends of the runway, the configuration consists of 8 lights
    - The two (2) outermost lights are fitted with an omni-directional green lens and the six (6) inner lights are fitted with a bi-directional green / red lens showing green to a landing aircraft and red to an aircraft taxiing for departure
  - Taxiway edge lights
    - Blue taxiway edge lights are provided to the Regular Public Transport (RPT) Apron
  - Taxiway holding point lights
    - Amber taxiway edge lights are provided either side of the holding point on the RPT taxiway
- Other Lighting
  - Apron Lights
    - Three (3) apron flood lights are installed (1 for the General Aviation (GA) Apron, and 2 for the RPT Apron). They are connected to the PAL system and both can be manually switched on when required
- Illuminated Wind Indicator Lights
  - Four (4) pairs (8 lights) of 150W porta-flood lamps have been fitted, providing a total illumination of 1200W.

The following lighting infrastructure is not provided and nor are they required:

- Precision Approach Path Indicator (PAPI)
- Obstruction / Obstacle Lights
- Aerodrome Beacon
- No hazard / obstruction lighting is provided within the immediate vicinity of the aerodrome

All lights can be activated manually via the aerodrome lighting control box at the aerodrome, and remotely via the PAL system on the PAL + AFRU frequency 126.70 MHz.

Stand-by power or generator backup is not provided. A full set of kerosene flares are maintained as a second level backup.

An AFRU "beep back" owned by the Council is provided and operates on 126.70 MHz (CTAF)

Part 2.3.2: The arrangements for carrying out inspections and the checklists for inspections

Inspections of the aerodrome lighting system shall be conducted daily, weekly, and annually.
Each type of inspection covers different areas with regards to lighting serviceability and maintenance.

Checklists exist for each inspection and when applied, they serve as a log which can be stored as a matter of record.

- The checklist for daily and / or weekly lighting inspections occur on the same form
  - An example of the daily / weekly serviceability lighting inspection checklist / logbook is given in Form 2 in Part 2.3.2.2: Lighting Serviceability Inspection Checklist
- The checklist for an annual lighting inspection is more complicated because it is more thorough, involves physical work and maintenance which must be carried out by a qualified electrician
  - The annual lighting inspection described in detail in Part 2.3.2.3: Annual Lighting Inspection (page 55). It is the equivalent of an annual electrical technical inspection as required by the CASR 139 and the MOS 139.
  - Once finished, a detailed report may or may not be written and presented to Aerodrome Management by the qualified electrician which captures all inspections, results and work covered. However, Aerodrome Management will have the electrician's complete and sign Form 3 in Part 2.3.2.3: Summary Report – Annual Electrical Technical Inspection (page 55) as this becomes evidence or proof that a CASR 139 / MOS 139 compliant annual electrical technical inspection was in fact completed.
    - Form 3 in Part 2.3.2.3: Summary Report – Annual Electrical Technical Inspection is in addition a comprehensive checklist in its own right.

Part 2.3.2.1: Serviceability Lighting Inspection

Serviceability lighting inspections will be carried out by the duty Aerodrome Reporting Officer during the serviceability inspections conducted on the days when an RPT service is scheduled, with the observations recorded in the aerodrome serviceability inspection logbook.

The lighting serviceability inspection is essentially a visual check after the lights have been either manually / remotely activated.

The following lighting facilities will be inspected for damage or unserviceability:

- Runway and taxiway lights
- Illuminated wind direction indicator

Minor maintenance to these units will be carried out by the Aerodrome Reporting Officer of found to be unserviceable which includes:

- Replacement of burnt out bulbs
- Cleaning reflectors and glassware
- Replacing damaged light units or parts thereof

The entire inspection including any maintenance carried out will be recorded in the aerodrome serviceability inspection logbook.

- Any maintenance outside the scope of minor maintenance will be referred to a qualified electrician for rectification
  - Such types of maintenance requirement will be recorded in the aerodrome serviceability inspection logbook
- An example of the daily serviceability lighting inspection checklist is given in Form 2 of Part 2.3.2.2: Lighting Serviceability Inspection Checklist
  - The left-hand side of the serviceability inspection checklist is checked off daily

Part 2.3.2.2: Weekly Lighting Inspection

Weekly lighting inspections of the following equipment, **if applicable or installed,** shall be carried out by the Aerodrome Reporting Officer:

- Runway and taxiway lighting (as per Part 2.3.2.1: Daily Lighting Inspection
- Aerodrome / airport lighting cubicle
- PAALC / PAL system
- PAPI lighting system (if installed)
- Hazard lights / beacons (if provided)
- Non-operational lighting
- Apron lighting and security lighting
- Obstacle lighting
- Standby generator (if provided)
- Emergency lighting
- AFRU

The weekly lighting inspection is essentially a visual check after the lights and / or equipment have either been manually / remotely activated.

The entire inspection will be recorded in the aerodrome serviceability inspection logbook.

- Any maintenance will be referred to a qualified electrician for rectification
  - Such types of maintenance requirement will be recorded in the aerodrome serviceability inspection logbook
- An example of the daily serviceability lighting inspection checklist is given in Form 2 of Part 2.3.2.2: Lighting Serviceability Inspection Checklist
  - The right-hand side of the serviceability inspection checklist is checked off weekly

Lighting Serviceability Inspection

Date: / / **Time:** **Weather:**

Inspected by: **Signed:** **Date:** / /

Sighted & Signed by Supervisor: **Date:** / /

Runway	Yes	No
RWY edge lights (white) working / clean / level	☐	☐
Turning Node lights (blue) working / clean / level	☐	☐
Threshold Lights (green) working / clean / level	☐	☐
RWY end lights (red) working / clean / level	☐	☐
Are any lights obscured by grass growth?	☐	☐
Any exposed edges around footings?	☐	☐

Taxiway	Yes	No
TWY edge lights (blue) working / clean / level	☐	☐
TWY centre line (green) working / clean	☐	☐
Hold point lights (amber) working / clean / level	☐	☐
Are any lights obscured by grass growth?	☐	☐
Any exposed edges around footings?	☐	☐

Illuminated Wind Indicators	Yes	No
Are all windsock lamps in working order?	☐	☐
Are all windsock plugs and fittings in good order?	☐	☐
Did wind indicator flash for last 10 min of cycle?	☐	☐

Apron Areas	Yes	No
Apron Edge Lights (blue) working / clean / level	☐	☐
Apron centre line (green) working / clean	☐	☐
Are apron floodlights operational?	☐	☐

Obstacle lights	Yes	No
Are all obstacle lights working?	☐	☐

Approach Lighting	Yes	No
Are PAPI Lighting or T-VASIS working?	☐	☐
Are RTIL's working?	☐	☐

Other Aerodrome Facilities	Yes	No
Is aerodrome beacon working?	☐	☐
Is pilot activated lighting (PAL) working?	☐	☐
Automated frequency response unit (AFRU)	☐	☐
Manual operation of lighting system?	☐	☐

Unserviceable Movement Areas	Yes	No
Have unserviceable areas been sufficiently marked by temporary lighting?	☐	☐

Other lighting	Yes	No
	☐	☐
	☐	☐
	☐	☐

Notes & Actions

Part 2.3.2.3: Annual Lighting Inspection

The annual lighting inspection is in fact and will be the equivalent of an annual electrical technical inspection as required and in accordance with CASR 139 sub-paragraphs 139.230(2)(b), 139.230(2)(c), and 139.240(2)(b), which stipulates that this annual electrical technical inspection must and will be conducted by a licensed / qualified electrician or electrical engineer.

Council may elect to have this inspection completed once per year (that is, literally an annual inspection), or perform the equivalent of the annual inspection over the course of the year in parts. A part inspection, conducted at different times, must ensure that each electrical system is inspected at intervals of not more than twelve months apart.

Once finished, a detailed report may or may not be written and presented to Aerodrome Management by the qualified electrician / electrical engineer which captures all inspections undertaken, results, and work covered. However, Aerodrome Management will have the electrician/s complete and sign Form 3 in Part 2.3.2.3: Summary Report - Annual Electrical Technical Inspection (located below) as this becomes proof or evidence that a CASR139 / MOS139 compliant annual electrical technical inspection was in fact completed.

- It is very difficult to find a licensed electrician that has appropriate airside training such that they are capable of performing an annual technical inspection including testing and servicing / maintenance repair for all electrical components.
- It is likely that at least two or more electricians may actually be engaged to fully satisfy the requirements of an annual electrical technical inspection.
    - For example, the annual inspection and service of the PAL and / or AFRU systems requires specialist training which most electrician will not have had.
- In the cases where several qualified electricians are engaged, then each will be given a copy of Form 3 in Part 2.3.2.3: Summary Report - Annual Electrical Technical Inspection (located below) to complete those areas and signature the work completed.
    - Hence, the mandatory annual electrical technical inspection will most probably be satisfied by the compilation of two or more completed forms (being Form 3 in Part 2.3.2.3: Summary Report - Annual Electrical Technical Inspection

SUMMARY REPORT: ANNUAL ELECTRICAL / LIGHTING TECHNICAL INSPECTION						
CHECKLIST: Items to be inspected, tested and maintained within every 12 months. Strike out those Items that are not applicable.			Service-able? (Y/N)?	Comments and / or fill out if inspected progressively.		
Items	Ref			Date	Lic. Ref.	Sign. Initial
Ground Lighting: RWY and TWY	1	Mechanics: In and out - Clean, gaskets, lens color, unbroken and working.				
	2	Wiring: Insulation resistance, voltage, exposure, contacts, terminations.				
	3	Alignment: Verticality, beam direction.				
	4	Lamp: Luminance, wattage, current, resistance.				
Apron Lighting	5	Mechanics: In and out - Clean, unbroken and working.				
	6	Wiring: Insulation resistance, voltage, exposure, contacts, terminations.				
	7	Alignment: Verticality, beam direction.				
	8	Lamp: Luminance, wattage, current, resistance.				
Illuminated Wind Indicator/s	9	Mechanics: In and out - Clean, unbroken and working. Windsock swivel mechanism working.				
	10	Wiring: Insulation resistance, voltage, exposure, contacts, terminations.				
	11	Alignment: Beam direction.				
	12	Lamp: Luminance, wattage, current, resistance.				
Beacon, Hazard, Obstacle Lighting if owned	13	Mechanics: In and out - Clean, unbroken, color, flashing/rotation correctness and working.				
	14	Wiring: Insulation resistance, voltage, exposure, contacts, terminations.				
	15	Lamp: Luminance, wattage, current, resistance.				
Reticulated Wiring / Cables	16	Mechanics: In and out - Clean, unbroken and working.				
	17	Wiring circuit: Insulation resistance, voltage, exposure, contacts, terminations.				
Control Equipment / Switchboard: Light cubicle	18	Mechanics / cubicle: In and out - Clean, unbroken and working.				
	19	Wiring: Insulation resistance, voltage, exposure, contacts, terminations.				
	20	Relays, fuses, breakers - Tested and working.				
	21	Earthing - Tested and working.				
AFRU, PAL / PAALC Systems	22	Housing / mechanics: In and out - Clean, unbroken and working.				
	23	Wiring: Insulation resistance, voltage, exposure, contacts, terminations.				
	24	Power supply - Tested and working.				
	25	Modules - Tested and working.				
	26	Activation and response: Tested and working.				
	27	AFRU / PAL (receiver) unit: Service arranged.				
Navig.n Aids	28	Owner to service / maintain.				
T-VASIS / PAPI System	29	Housing / mechanics: In and out - Clean, unbroken and working.				
	30	Alignment: Units level, beam direction/angle.				
	31	Lamp: Luminance, wattage, current, resistance.				
	32	Wiring: Insulation resistance, voltage, exposure, contacts, terminations.				
	33	Power supply - Tested and working.				
	34	Modules - Tested and working.				
	35	Activation and response: Tested and working.				
Earthing Pts	36	Check each point for resistance to earth.				
Standby Gen.	37	Generator to be annually serviced and maintained.				

COMMENTS:	Progressively inspected by:
	Eg. 53526 JOHN SMITH
	L1
	L2
	L3
	L4
	L5

Completed by (PRINT NAME):	Electrician's License No.:	Signature:	Date:

Form 3 in Part 2.3.2.3: Summary Report – Annual Electrical Technical Inspection

Part 2.3.2.3.1: Annual Electrical Technical Inspection Schedule

CASR 139 CASR139 sub-paragraphs 139.230(2)(b) and 139.230(2)(c), states that the following must be inspected and tested:

- Aerodrome Lighting
- Electrical reticulation systems,
- Visual approach slope indicator (where provided), and
- Earthing points

More or less this can be interpreted to anything electrical that is directly related to aircraft safety, and thus the above expands to the following electrical components which will be scheduled for inspection, testing and maintenance at the aerodrome if existing and / or applicable:

- Aerodrome lighting
  - Runway ground lights including:
    - Threshold lights
    - Edge lights
    - Threshold / end lights
  - Taxiway ground lights including:
    - Edge lights
    - Holding point lights
    - Centreline lights
  - Apron lights
  - Illuminated wind direction indicators
  - Other warning / notification lights including:
    - Aerodrome beacon light
    - Hazard lights
    - Obstacle lights
- Electrical reticulation systems which more or less covers other directly related electrical components including:
  - All wiring
  - Aerodrome control equipment such as the lighting cubicle / switchboards
  - AFRU
  - PAL / PAALC system
  - Standby generator
  - Council owned navigational aids such as:
    - NDB / VOR / DME
- Visual approach slope indicator which may be either the:
  - T-VASIS lighting system
  - PAPI lighting system
- Earthing Points

Each one of the above electrical components must be scheduled for annual electrical technical inspection at least once each year, or more accurately, no later than 12 months from its last equivalent inspection.

- Aerodrome Management will ensure that this is achieved

Form 3 3 in Part 2.3.2.3: Summary Report – Annual Electrical Technical Inspection (page 65) has been designed to cover every one of the above electrical technical components.

- Thus, it can be used as a comprehensive checklist
- As one of the electrical components has been annually inspected, tested and maintained serviceable, it can be signed completed on the Form 3 in Part 2.3.2.3: Summary Report - Annual Electrical Technical Inspection

Part 2.3.3: The arrangements for recording the results of inspections and for taking following up action to correct deficiencies

All serviceability and weekly lighting inspections will be conducted by the Aerodrome Reporting Officer and the results will be recorded on the equivalent or copy of Form 2 in Part 2.3.2.2: Lighting Serviceability Inspection Checklist

- On the checklist, all defects or unserviceable finding will be recorded
- In addition, all defects rectified during the inspection will be recorded
- The remaining recorded defects beyond the scope of the Aerodrome Reporting Officer to fix will be immediately formally passed on to Council's electrician to fix in accordance with Council procedures
    - After doing so, the Aerodrome Reporting Officer is to additionally inform the Aerodrome Manager of the pending works order
    - When the defect is rectified by the Council electrician, it will be noted or recorded by the Aerodrome Reporting Officer in that day's lighting inspection log sheet being the equivalent or copy of Form 2 in Part 2.3.2.2: Lighting Serviceability Inspection Checklist
- The lighting inspection log sheets (exampled as Form 2 in Part 2.3.2.2: Lighting Serviceability Inspection Checklist shall be collated as a matter of legal record (that is, an electrical serviceability inspection logbook), and to comply with CASR 139

When Council's electrician (or contractor) receives a works order to fix an electrical defect airside, they will create an action plan to rectify the problem as soon as practical. The action plan and the day the defect was rectified, should always all be logged by Council's electrician and held available for audit readiness.

All electrical components on the aerodrome, identified in Part 2.3.2.3.1: Annual Electrical Technical Inspection Schedule above, must be annually technically inspected as described in the same section. This work must be carried out by a qualified electrician or electrical engineer and the results must be recorded on the equivalent or copy of Form 3 in Part 2.3.2.3: Summary Report - Annual Electrical Technical Inspection.

- Defects uncovered from these inspections must immediately be rectified by the electrician
- All works orders and planned actions resulting from the annual inspections must be logged, and so too their completion date by Council's electrician. Similar to the dealing of the defects arising from the daily and weekly lighting inspections, all logged records must be held available for audit readiness at all times
- The completed equivalent or copy of Form 3 in Part 2.3.2.3: Summary Report - Annual Electrical Technical Inspection will be collated as a matter of legal record, and together, they will satisfy the requirements of an annual Aerodrome Technical Inspection (ATI) and / or CASA audit.

Part 2.3.4: The arrangements for switching lights on and off, including backup arrangements for pilot activated lighting (PAL)

The activation of the aerodrome's lighting facilities shall be undertaken in accordance with the following procedures:

- Manual activation by authorised persons using the key activation switch in the lighting cubicle at the terminal building
- Airband frequency activation by a pilot through the PAALC system
- Activation by electrical maintenance staff using local control within the aerodrome lighting equipment cubicle for maintenance purposes

If for whatever reason the PAL lighting system becomes inoperable, then manual activation measures / procedures will be administered. If both PAL and manual activation is not possible, then emergency flares will be used, but only in emergency situations.

- The duty Aerodrome Reporting Officer will place flares as required by MOS 139

Part 2.3.5: The arrangements for carrying out routing maintenance and emergency maintenance

Routine maintenance is conducted during the three types of serviceability inspections (i.e. daily, weekly and annual lighting inspections).

The Aerodrome Reporting Officer will notify the Aerodrome Manager (or delegate) of urgent electrical failures. Repairs of aerodrome lighting beyond the scope of the Reporting Officer will be undertaken by the Council's electrician as requested and / or as arranged by the Aerodrome Manager (or delegate), or by the duty Aerodrome Reporting Officer who is authorised to initiate such corrective action.

All works relating to urgent or routine maintenance and inspections of aerodrome lighting equipment are to comply with the MOS 139, Chapters 9 and 10.

The Australian NOF, telephone +61 2 6268 5063, shall be advised on any aerodrome lighting unserviceability detected and before any operational airport lighting equipment is removed from service for maintenance purposes. The Reporting Centre shall be notified of the maintenance duration times and recall times for the equipment involved.

- Part 2.3.5.1: Unserviceability of Aerodrome Lighting / Systems
- Part 2.3.5.2: Aerodrome Lighting Outages / Unserviceable lighting

If faults are found during routine maintenance which will render equipment unserviceable, the NOF shall be notified of the fault and expected unserviceability times.

The NOF shall be advised at completion of maintenance when equipment is returned to service.

Part 2.3.5.1: Unserviceability of Aerodrome Lighting Systems

The MOS 139, sub-section 9.1.4 (Minimum Lighting System Requirements) specifies that an aerodrome opened for night operations must be provided with appropriate lighting for at least the following facilities (and light systems within the provide facility)

- Runway lighting facility comprising of
  - Threshold / end light system
  - Runway edge light system
  - Possible stop light system(s)
  - Possible runway turning node lighting system(s)
- Taxiway lighting facility comprising of
  - Holding Point light system
  - Either edge or centre light system
- Apron light facility intended for night use
- At least one illuminated wind direction indicator facility, and
- If applicable, any lit obstacles stipulated by CASA where:
  - Each lit obstacle is a lighting system in their own right
- If applicable, the approved visual approach slope indicator system

The aerodrome operator must monitor and maintain all lights and lighting systems associated with the aerodrome visual ground aids, both day and night, on a continuing basis for correctness and so that they are easily seen. Monitoring of lighting systems must be carried out in accordance with the frequencies and procedures set out in Part 2.3.2: The arrangements for carrying out inspections and the checklist for inspections.

- Note that the grass areas around any ground fixed light must be maintained such that the lights are not in any way obscured
- Lights must be kept free from dirt so that their colour is not degraded
- Damage to lights, including loss or degradation of light must be made good immediately

Part 2.3.5.2: Aerodrome Lighting Outages / Unserviceable lighting

Any aerodrome light outage detected must be fixed as soon as is practicable.

The specifications listed below are intended to define the maintenance performance level objectives.

They are not intended to define whether the lighting system is operationally out of service. Nor are they meant to condone outage but are intended o to indicate when lighting outage must be notified to the NOTAM office. The specifications must be used as triggers for NOTAM action, to advise pilots of actual outage, unless the outage can be rectified before the next period of use.

- For details of the raising of NOTAMs, refer to the MOS 139 Section 10.3

If the aerodrome has provided the lighting facilities and / or the lighting systems discussed below, then the outage descriptions apply, else they have been included just in case the aerodrome includes the lighting facilities / systems with a future upgrade.

- A light and / or ground light is deemed to be on outage when the main beam is out of its specified alignment
- A light and / or ground light is deemed to be on outage when the main beam average intensity is less than 50 per cent of the specified value in the MOS 139. For light units where the designed main beam average intensity is above the specified value, the 5- per cent value shall be related to that specified deign value in the MOS 139.
- A flashing or occulting light is deemed to be on outage when:
  - The light ceases to flash or occult
  - The frequency and / or duration of flash is outside the specified range by a factor of 2:1 or greater
  - Within a 10-minute period, more than 20% of flashed fail to occur
- A lighting system is deemed to be on outage when:
  - In the case of a lighting system comprising less than 4 lights (such as the intermediate holding position lights or runway threshold identification lights) any of the lights are on outage
  - In the case of a lighting system comprising 4 or 5 lights (such as the wind direction indictor lights or runway guard lights), more than 1 light is on outage
  - In the case of a lighting system comprising 6 to 13 lights (such as the threshold lights or LAHSO lights), more than 2 lights are on outage, or 2 adjacent lights are on outage
  - In the case of a lighting system comprising more than 13 lights (such as the runway and / or taxiway edge lights), more than 15% of the lights are on outage, or 2 adjacent lights are on outage

If applicable, for a T-VASIS, the outage standards take into account both the number of outage lamps within a light unit, and also the number of light units within the T-VASIS system

- The standards are:
  - Whenever a red filter has deteriorated such that it does not produce the correct colour light beam, is missing, or is damaged, all the lamps within the affected light unit must be extinguished until the red filter is rectified. The affected light unit is included as an outage light unit when applying decisions to below.
  - A T-VASIS system is deemed on outage when:
    - Bar units, more than 2 light units or 2 adjacent light units are on outage
    - Fly-up units, more than 1 light units are on outage
    - Fly-down units, more than 1 light units are on outage
  - An AT-VASIS system is deemed on outage when:
    - Bar units, more than 1 light unit is on outage
    - Fly-up units, any light units are on outage
    - Fly-down units, any light units are on outage

If applicable, for a PAPI, the outage standards take into account both the number of lamps on outage within a light unit, and also the number of light units within the PAPI system

- The standards are:
  - PAPI light unit is deemed on outage when more than one lamp in a 3 or more-lamp unit is on outage, or any lamp in a less-than-3-lamp-unit is on outage
  - Whenever a red filter has deteriorated such that it does not produce the correct colour light beam, is missing, or is damaged, all the lamps associated with that filter must be extinguished until the red filter is rectified. The affected lamp/s are included as outage lamps when determining f a PAPI light unit is deemed to be on outage (as specified immediately above)
  - A double sided PAPI system (comprising 8 light units):
    - Deemed to be on outage but useable when all light units in one wing bar are fully functioning, and any light units in the other wing bar are on outage. The system may remain in use, but a NOTAM must be issued detailing the number of light units on outage, and non which side of the runway they are
    - Deemed on outage when one or more light units in each wing bar is on outage. The double sided PAPI system must be extinguished until the system is rectified
  - A single sided PAPI system (comprising 4 light units) is deemed to be on outage when any light unit is on outage. The PAPI system must be extinguished until the system is rectified.

At an aerodrome where the lighting system is provided with interleaf circuitry, the lighting system is deemed to be on outage when any one of the circuits fails.

Part 2.3.6: The arrangements for providing secondary power, stand-by power and portable lighting if any

All airport lighting facilities (including apron floodlighting) may be provided with a stand-by diesel powered generating set. This stand-by generator (if provided) will be test run weekly by an Aerodrome Reporting Officer who will also provide details of these services or test runs in a logbook.

- The Aerodrome Reporting Officer or his delegate is responsible for ensuring that all flares are regularly maintained and if applicable, then reserve kerosene lamps and / or batteries are available. The flares are to be serviced and refuelled and or batteries changed immediately after having been used, so as to be readily available for future use.

Part 2.3.7: The titles and roles of the persons who are responsible for the inspection and maintenance of the lighting

The Aerodrome Manager will be responsible for:

- Ensuring that the planning, installation, operation and maintenance of lighting are conducted in accordance with the requirements of the CASR 139 sub-paragraphs 139.190 and 139.195 and MOS 139
- Ensuring that the requirements of CASR 139 sub-paragraphs 139.200 and the MOS 139 Section 9.1.15 are adhered to before installing new lighting facilities and / or systems, and bringing them into operational use
- Ensuring that the required daily and weekly lighting (serviceability) inspections, and annual lighting (electrical technical) inspections are conducted (as specified in Part 2.3.2) and appropriately recorded (as specified in Part 2.3.3)
- Ensuring arrangement for any remedial work to be carried out without undue delay
- Ensuring that any electrical personnel working on the aerodrome are suitably experienced in aerodrome operational lighting facilities and installations, appropriately trained (equivalent to that training accredited to the Aerodrome Reporting Officer) or safety escorted by the Aerodrome Reporting Officer or Safety Officer

Aerodrome Managements electrician / contractor will be responsible for:

- Maintaining the aerodromes operational lighting facilities
- Installing and / or upgrading all new electrical facilities
- Recording all records as specified in Part 2.3.3

The duty Aerodrome Reporting Officer will be responsible for:

- Conducting all visual inspections for damage of the lighting system during serviceability inspections as specified in Part 2.3.2
- Maintaining all records as specified in Part 2.3.3
- Identifying the need for and issuing NOTAM/s as required

The names and telephone numbers of the persons mentioned above are covered in INTRO 3: Master Contact List.

Amendment Record
2 August 2019

Part 2.4: Aerodrome Reporting

Part 2.4.1: The arrangements for reporting any changes that may affect aircraft operations to AIS and local air traffic services and recording the reporting of changes during and outside the normal hours of aerodrome operation

Where a change in the aerodrome condition requires a Notice to Airmen (NOTAM) to be issued, the nominated Aerodrome Reporting Officer will send notification to the NOTAM Office (NOF) by e-mail (nof@airservicesaustralia.com) or telephone. Telephone advice will be confirmed in writing as soon as possible.

NOTAM is an acronym for “NOTice to AirMen”. NOTAMs are issued by the Australian NOTAM Office (NOF) in response to information received. They advise persons concerned with flying operations of matters which may affect aircraft operations or safety.

NOTAM contents include the following:

- Aerodrome
- Date and time of effect
- Approximate duration
- Time, if the condition is only applicable during certain times
- Details of restriction

Because of the wide range of NOTAMs, it is not practicable to establish rigid standard format for the composition of all NOTAMs.

Information for inclusion in NOTAMs should be confined to a brief but complete report of the facts.

Reporting Officers are not expected to originate NOTAMs in an abbreviated format. The NOF will ensure that NOTAMs are originated in an abbreviated form and are in accordance with published copies of AIP GEN or other pilot documents.

Temporary changes requiring a NOTAM are usually detected during daily or routing serviceability inspections (as described in Part 2.6. On the more common occurrences such as soft wet surface conditions, maintenance to movement areas and closure of facilities, details can be passed directly to the NOF for issuing of a NOTAM.

Formulation of more complex NOTAMs such as notification of cranes or alterations to declared distances may be directed to, say, Council’s consultant [performing the annual Aerodrome Technical Inspection (ATI).

A standard (NOTAM Request Form) has been produced by the NOF. It may be filled out and e-mailed or facsimiled to the NOF. The NOF will formally reply to the issued NOTAM a confirmation advisement of the exact NOTAM issued.

The issued and confirmed NOTAM must and will be filed by Aerodrome Management for ready access.

The following occurrences must be reported to the NOF:

- Changes (temporary or permanent) in the published aerodrome information including additional changes to current permanent NOTAM
- Aerodrome works affecting runways or the obstacle limitation surfaces (OLS), including time limited works that require more than 10 minutes to reinstate to serviceable order
- Unserviceable portions of the runway or failure in aerodrome lighting or obstacle lighting
- Temporary obstacles to aircraft operations
- Changes in excess of 0.05% of the published gradient areas
- Emergence of new obstacles
- When a radio navigation air or landing aid owned by the aerodrome operator is unserviceable or returned to service
- When an Aerodrome Frequency Response Unit (AFRU) owned by the aerodrome operator is unserviceable or returned to service
- Any other significant event which affects the safety of aircraft using the aerodrome

RESET FORM SAVE FORM SUBMIT FORM

Airservices Australia NOTAM Request Form

airservices

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

Office use only	☐ Group ☐ Originator ☐ NOTAM directory ☐ IAIP ☐ QCode ☐ T/P/S ☐ INTL Abbrev ☐ Summary line	
Item A)	Location ○ AD [ ][ ][ ][ ] ○ FIR _____ ○ Airspace _____	☐
NOTAM N ☐ New NOTAM R ☐ Review (extend/amend) NOTAM No: _____ NOTAM C ☐ Cancel (Item B must be WIE) NOTAM No: _____ Template Number (if applicable): _____		☐
Date/Time Convention	☐ Eastern Standard ☐ Central Standard ☐ Western Standard ☒ UTC/Zulu (preferred) ☐ Eastern Daylight ☐ Central Daylight	☐
Item B)	Start time Date (YYMMDD) _____ Time (HHMM) _____ ☐ Immediately (WIE)	☐
Item C)	Finish time Date (YYMMDD) _____ Time (HHMM) _____ ☐ Confirmed (leave blank for all CNL NOTAM) or ☐ Permanent ☐ Estimated (requires review or cancellation)	☐
Item D) (optional) Reset Item D)	Periods of Activity FROM _____ TO _____ Individual timings (YYMMDDHHMM) FROM _____ TO _____ Daily timings (HHMM) FROM _____ TO _____ OR FROM _____ TO _____ ☐ HJ FROM _____ TO _____ ☐ HN FROM _____ TO _____ FROM _____ TO _____	☐
Item E)	New / Review – Full text of NOTAM to be included or Cancel – First line of NOTAM only	
		☐
Reset field	Obstacle NOTAM Has the obstacle been assessed by Airservices IFP? ☐ Yes ☐ No Assessment code: _____ ☐ No impact ☐ Not required	☐
Item F) (optional) Reset Item F)	Lower Limit: ☐ SFC or _____ (Leave blank for cancellations) ☐ Flight Level ☐ Feet AGL ☐ Feet AMSL	☐
Item G) (optional) Reset Item G)	Upper Limit: ☐ *UNL or _____ (Leave blank for cancellations) ☐ Flight Level ☐ Feet AGL ☐ Feet AMSL	
NAIPS User Name: _____ NOTAM Group Name: _____ Contact Name: _____ Phone Number: _____ Email: _____ Organisation: _____		☐

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

ATS-FORM-0018 Version 13: Effective 12 November 2020

Part 2.4.2: Contact details of the persons and organisations to which changes are to be reported with the telephone numbers for contacting these persons included in the master contact list

If applicable, the names and contact details of the RPT provider, RFDS, Courier(s), Charter services and CASA, are provided in INTRO 3: Master Contact List.

Part 2.4.3: The titles and roles of the persons who are responsible for aerodrome reporting with their telephone numbers for contacting these persons included in the master contact list

The Aerodrome Manger is responsible for the issue of any NOTAMs. Under delegation from the Aerodrome Manager, the Aerodrome Reporting Officer may additionally issue any NOTAMs. If a technical NOTAM is required to be issued, then the Aerodrome Manager or delegate Aerodrome Reporting Officer may instruct their Aerodrome Technical Inspector / Advisor to formulate a NOTAM on behalf of Aerodrome Management after close consultation. The names and contact details of these people are provided in INTRO 3: Master Contact List.

The Aerodrome Manager is responsible for:

- Providing suitably trained Aerodrome Reporting Officers
- Maintaining a current list of Aerodrome Reporting Officers and their current contact details in INTRO 3: Master Contact List
- Providing the NOF with a current list of Aerodrome Reporting Officers names and contact details
- Issuing NOTAMs via telephone, facsimile, or e-mail
    - Immediately confirming NOTAMs if issued by telephone
- Delegating and permitting Aerodrome Reporting Officers to issue a NOTAM
    - Confirming the issue of any delegated NOTAM action
- Checking and reviewing NOTAMs before submission (not applicable in emergency situations)
- Reviewing any information that is not subject to requiring NOTAM action (or non-NOTAMable aerodrome information) but still in need of submission to the AIS
- Ensuring that the file of all issued NOTAMs and non-NOTAMable aerodrome information is properly maintained, readily accessible and differentiated if required

The Aerodrome Reporting Officers are responsible for:

- Identifying operational changes that require the issue of a NOTAM
- Preparing the NOTAM for review by the Aerodrome Manager (not applicable in emergency situations)
- Sending (issuing) the NOTAM by facsimile or e-mail
- Issuing NOTAMs by telephone, facsimile or e-mail
    - If by chance the NOTAM is issued by telephone, then the NOTAM must be confirmed with the highest priority
- Confirming with the NOF that the NOTAM has in fact been issued
- Filing all NOTAM records
- Advising the AIS by facsimile or e-mail of any changes to the / any aerodrome information not subject to requiring a NOTAM, and ensuring that this communication is filed appropriately alongside the NOTAM records
- Maintaining a file of all issued NOTAMs and non-NOTAMable aerodrome information

The Aerodrome Technical Inspector(s) / Advisor(s) are responsible for:

- After close consultation with Aerodrome Management, formulating a NOTAM

Part 2.4.4: The arrangements for reporting and filing changes of aerodrome information published in AIP to AIS and CASA

Any changes detected and / or any unserviceability noted during any aerodrome inspection or resulting from new works affecting published information shall e reported to AIS and / or CASA. The officer making the assessment, normally the Aerodrome Manager will be responsible for reporting the change.

Typical changes include the following:

- Physical conditions
- Published information
- Obstacle information
- Serviceability of AFRU and PAL systems

Part 2.4.4.1: Immediate Effect to Aircraft Safety

For changes in aerodrome information published in ERSA (Enroute Supplement Australia) which will have an immediate effect to aircraft safety, Aerodrome Management will apply the following procedures:

- Issue a temporary NOTAM to the NOF using the NOTAM Request Form (page 69). The procedures for completing the NOTAM Request Form are self-explanatory
- If necessary, arrange to have the changed facility suitably marked
- Include all details, including NOTAM number in the aerodrome serviceability inspections logbook as a minimum or by maintaining a separate NOTAM record inclusive of a copy of the issued NOTAM and its confirmation
- When it becomes evident that the condition is lasting, a permanent NOTAM will be issued
- Aerodrome Management may wish to engage their consultant to check, write and / or advise on the adequacy of the temporary or permanent NOTAM, and, if required, issue the NOTAM

If a permanent NOTAM is necessitated, then it must be reflected in PART 3 of the Aerodrome Manual.

Note: Any changes to the Aerodrome Manual, copies of such amendments will be forwarded for acceptance to:

Aerodrome Inspector
Civil Aviation Safety Authority
GPO Box 2005
Canberra ACT 2005

or

aerodromes@casa.gov.au

Part 2.4.4.2: No immediate Effect to Aircraft Safety

When any information published in the various AIPs is or will be incorrect, and the changes will not have an immediate effect to aircraft safety, advice will be forwarded by Aerodrome Management (or their consultant) in writing or by electronic mail to

System Manager, Documents – Canberra
PO Box 367
Canberra ACT 2601

+61 2 6268 4111 (T)
+61 2 6268 5683 (F)
docs.amend@airservicesaustralia.com (E)

Part 2.5: Unauthorised Entry to Aerodrome

Part 2.5.1: The arrangements for controlling airside access

The aerodrome perimeter is protected by a 2.4m high security fence. The gates in the fence are locked at all times. “NO TRESPASSING” and “NO ENTRY” signs are displayed at all access points to the airside areas at prescribed intervals.

Part 2.5.2 The names and roles of the persons who are responsible for controlling access to the movement areas and the telephone numbers for contacting them during and after working hours

Access to the airside areas of the aerodrome is controlled by the Aerodrome Reporting Offices under the authority of the Aerodrome Manager.

For serious or repeated acts of trespass, the responsible officer will seek Police assistance. Where a breach has occurred, follow up action will be initiated in accordance with Council Local Laws.

Access to the aerodrome is also now controlled or restricted in accord with the aerodrome’s Transport Security Program (TSP).

The names and telephone numbers of those concerned are provided in INTRO 3: Master Contact List

Amendment Record
2 August 2019

Part 2.6: Aerodrome Serviceability Inspections

Part 2.6.1: The arrangements for carrying out the inspection during and after working hours

The serviceability inspections will be carried out by the duty Aerodrome Reporting Officer.

Outside of normal maintenance staff hours, inspections may be arranged on a “call-out” basis, if the NOF or Air Traffic Services (ATS) have reason to believe that the Aerodrome may not be serviceable (based on pilot reports).

- Out of hours call-out contact details are listed in the front of this manual **Intro 3 Master contact list**

Part 2.6.2: Details of the intervals at which the inspections are carried out and the times of the Inspections

Aerodrome serviceability inspections will be conducted, at a minimum, on each day that an RPT operation is scheduled, as early as possible, but not less than 30 minutes prior to the first RPT movement.

Additional serviceability inspections will also be carried out on an as needs basis and will include requests by the NOF in the event of the following:

- A major incident or accident involving the closure of a runway
- Unusual weather conditions (e.g. heavy rain, wind, or electrical storms)
- Reports of foreign objects or damage on runways
- Re-opening of runway or movement areas after closure due to works
- Reports of wildlife hazard / strike

Part 2.6.3: The arrangements for keeping an inspection logbook and the place where the logbook is kept

A brief report of each criteria covered in this section is to be recorded in the logbook by the Aerodrome Reporting Officer or his / her relief.

The logbook for the reporting of Aerodrome Serviceability Inspections and reporting action will be held by the Aerodrome Reporting Officer.

It shall be made available for scrutiny by the Aerodrome Manager, whenever requested. It will also be made available for CASA audit processes as required,

Completed logbooks will be held by the Aerodrome Manager and will be kept for a minimum period of 24 months after the audit of the last entry.

Amendment Record
2 August 2019

Part 2.6.4: Logbook Contents

The logbook is to contain telephone numbers of people to be contacted in an emergency situation.

Information entered into the logbook is to be preceded by the date and time. The following are samples of items to be entered by the Aerodrome Reporting Officer:

- Inspections carried out
- Details of tasks performed
- Unusual events requiring further investigation or follow up action will be identified in the logbook
- Details of weather prevailing at the commencement of duty
- Any significant changes in weather such as rainstorms, dust storms, reduced visibility or high winds
- The time, location and type of articles which are picked up on pavements or movement areas
- Times that any portion of the movement area are withdrawn from or returned to operations
- Any unusual occurrence such as bird strikes, unauthorised movement of persons, vehicles or plant on the movement area, aircraft incidents or accidents
- Location of pavement failures or other unserviceable areas (notify Aerodrome Manager for action)
- Bird movements on or in the vicinity of the aerodrome
- Messages or instructions which are relevant to the Aerodrome Reporting Officer function
- Works such as time limited works or works carried out under a Method of Working Plan (MOWP)

Part 2.6.5: Details of the inspection checklist

Inspection by the Aerodrome Reporting Officer is to be thorough and effective overing all aspects detailed following.

Runways:

The purpose of the runway inspection is to ensure that it is safe for aircraft operations

During the runway inspection, the Aerodrome Reporting Officer shall achieve the best possible coverage of the runway pavement.

During these runway inspections, the Aerodrome Reporting Officer is required to observe the following:

- Surface condition – debris on the runway (i.e. loose stones, tools, bolts, broken glass etc)
- Shoulder Erosion
- Grass Height
- Rideability of the runway surface
- Fuel or oil spillage
- Markings (both temporary and permanent) are correct
- Pavement deterioration (i.e. cracks, failures. birdbaths, deep depressions near underground pipes)
- Runway end safety areas, clearways and stopways (if provided)
- Inspection of the Obstacle Limitation Surfaces (OLS)

Runways Strips:

During the runway strip inspection, the Aerodrome Reporting Officer shall observe the following:

- Undue roughness, cavitation, holes
- Obstructions (equipment, plant etc)
- Grass does not obscure any markers / aids (i.e. gables, flush markers etc)
- Boundary markers are correctly positioned and aligned

Taxiways and taxiway strips

During the taxiway / taxiway strip inspections the Aerodrome reporting Officer shall observe and take action on unsafe situations as they arise:

- Debris on taxiway or shoulder (i.e. loose stones, tools, aircraft components, grass cuttings etc)
- Pavement deterioration
- Shoulder erosion
- Grass height adjacent to taxiways
- Markings

Aprons:

During the apron inspection the Aerodrome Reporting Officer will observe the following:

- Debris (loose stones, rubbish etc)
- Fuel or oil spills
- Pavement Deterioration
- Markings
- Incorrect parking of aircraft
- Incorrect parking of handling equipment
- Speeding or unauthorised vehicles
- Correctness of apron markings
- Apron shoulder grass height, erosion etc
- Trolleys, cargo boxes, drums etc which could be blown by wind or jet blast

Wind Indicator and Signal Circle:

Observe if the wind indicator sleeve is swinging freely, tattered and in need of replacement:

- Check if the ground circles around the primary wind indicator and the signal circle area provide adequate visual contrast
- Ensure that the circle areas are correctly marked

Bird Hazard:

Bird and / or animal hazard on, or in the vicinity of the movement area:

- Dispersal / harassment as required
- Environmental controls

Perimeter Fencing:

During perimeter fence patrols, the Aerodrome Reporting Officer will observe any unusual occurrences such as unauthorised entry by persons or animals.

Gates shall be checked to ensure they are shut and locked. Emergency gates are to be checked to ensure that they provide clear access (i.e. remove parked cars).

Obstacle Limitation Surfaces (OLS):

Obstacles that penetrate the OLS may be required to be marked and lit and should be referred to the Civil Aviation Safety Authority (CASA).

During the daily inspection the Aerodrome Reporting Officer shall check the following aspects of the OLS and ensure that:

- Known critical obstacles in the approach and take-off climb area surfaces are still present
- Transitional surfaces are not infringed
- If temporary obstacles such as construction cranes etc have appeared in either the approach or take-off climb area, the transitional surface areas, or the inner horizontal surface, and appropriate NOTAM is raised
- Known obstacles are correctly marked
- Known or reported obstructions to PANS-OPS surfaces will be monitored and reported to Airservices Australia

Aerodrome Frequency Response Unit (AFRU):

The AFRU (mandatory on a certified aerodrome) will be tested for serviceability during each inspection.

Part 2.6.6: The arrangements for communicating with air traffic control during the inspections

No Air Traffic Control services are provided at the aerodrome.

- A “listening watch” of the CTAF 126.70 will be maintained by the duty Aerodrome Reporting Officer whilst he serviceability inspection is being conducted

Part 2.6.7: The arrangements for reporting the results of the inspections and for taking prompt follow up action to ensure correction of unsafe conditions

Any changes in aerodrome serviceability that require immediate NOTAM action will be notified to the NOF and corrective action taken immediately.

If a serviceability inspection detects an unserviceability that requires immediate remedial action which cannot be completed by aerodrome staff. The duty Aerodrome Reporting Officer will mark the unserviceable area and report the unserviceability to the Aerodrome Manager. Council has internal procedures that over the action taken from this point on.

- All works will be completed in accordance with Part 2 – Section 8 (Aerodrome Works Safety) of this manual

The Aerodrome Manager or Project Officer will ensure that the works are completed to the required standards before they are declared complete and returned to service.

Part 2.6.8: The names, titles and roles of the persons who are responsible for serviceability inspections

The telephone numbers for contacting these persons are provided in INTRO 3: Master Contact List
The Aerodrome Manger is responsible for:

- Ensuring that suitable trained Aerodrome Reporting Officers are available, and a current roster is in place
- Ensuring that there are adequate facilities and materials for the Aerodrome Reporting Officer to carry out their functions, including logbooks, unserviceability markers, VHF radios and suitable vehicles
- Initiating a technical inspection of necessary following a serviceability inspection
- Initiating an out of normal working hours serviceability inspection due to sever weather
- Monitoring and where possible improving the process of identifying faults found during serviceability inspections
- Ensuring all aerodrome remedial works that have been found as a result of inspections are prioritised and completed in a timely fashion
- Ensuring appropriate staff are available to carry out remedial works.
- Ensuring that intervals, times and content of inspections are as per MOS 139.

The Aerodrome Reporting Officer is responsible for:

- Carrying out serviceability inspections
- Completing the Aerodrome Reporting Officers logbook checklists and signing off on the inspections
- Reporting any significant factors that may affect normal operations to the Aerodrome Manager

The names and telephone numbers of the Aerodrome Manager, Chief Executive Officer and the Aerodrome Reporting Officers are provided in INTRO 3: Master Contact List

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Part 2.7: **Aerodrome Technical Inspections**

Aerodrome Serviceability Inspection

Date : ____/____/____ Time : _____ Weather : _____

RUNWAY & RUNWAY STRIP SURFACES	YES	NO
Are all the pavements clean and clear ?		
Any runway lights or lenses found broken ?		
Any surface softness or excessive grass height ?		
Any rutting, scouring or drainage problems ?		
Are all pavement markings in good condition ?		
Are all cones and / or gables in good condition ?		
WIND INDICATORS & SIGNAL CIRCLE		
Do any swivels require greasing ?		
Are all the socks in a serviceable condition ?		
Are circle backgrounds dark & free of weeds ?		
Correctly marked & all cones in good order ?		
TAXIWAYS AND APRON AREAS		
Are all the pavements clean and clear?		
Are pavement markings & cones in good condition?		
Any broken lights or lenses observed ?		
Any drainage problems observed ?		
Any surface softness or excessive grass height ?		

APPROACH & TRANSITIONAL SURFACES	YES	NO
Any new obstructions or infringements observed ?		
Any cranes working in the approaches ?		
BIRD OR ANIMAL HAZARDS		
Is there an unusual number of birds present ?		
Any kangaroos, pigs or other animals observed ?		
Any action taken ?		
PERIMETER FENCE AND GATES		
Has the fence been breached ?		
Was all gates found closed / locked ?		
Any action taken ?		
UNSERVICEABLE MOVEMENT AREAS		
Are there any unserviceable areas ?		
Are they correctly marked ?		
Are there any current NOTAMs to review ?		
AS A RESULT OF YOUR INSPECTION HAS THE AUSTRALIAN NOTAM OFFICE BEEN ADVISED FOR NOTAM ACTION ?	**YES**	**NO**

Maintenance planned for today : _____

_____

_____

_____

Additional remarks : _____

_____

_____

_____

_____

_____

_____

Inspected by : _____ **Signed :** _____
(Print name)

Sighted & signed by Supervisor : _____ **Date : / /**

Serviceability check list of aerodrome lighting on the back of this page.

Part 2.7.1: The items that need to be technically inspected and when the inspections are to be carried out

The Aerodrome Manager will ensure that any technical inspection complies with the requirements of CASR 139.320.

CASR 139.320 – Aerodrome Technical Inspections reads that an inspection must include:

- An instrument survey of the approach, take-off and transitional surfaces
- An inspection and testing of the aerodrome lighting and electrical reticulation systems, including the visual approach slope indicator
- An electrical testing of any earthing points at the aerodrome
- An inspection and assessment of the movement area pavements and drainage
- An inspection of signs on the movement area
- An inspection of facilities at the aerodrome used for any of the following:
    - Aerodrome emergencies
    - The handling of hazardous materials
    - Bird and animal hazard management
    - Stand-by and emergency lighting
- An inspection of airside vehicles control arrangements (if any)
- A check of the currency and accuracy of:
    - Aerodrome information published in AIP
    - Aerodrome operating procedures specified in the aerodrome manual for the aerodrome

The Aerodrome Manager will ensure that aerodrome technical inspections are conducted at the frequency specified in and that the inspections include the facilities detailed in CASR 139.235.

The Aerodrome Manager will also ensure that the inspection complies with all the applicable standards for an aerodrome technical inspection as set out in the MOS 139.

CASR 139.235 reads as follows:

- The operator of a certified aerodrome must ensure that:
    - An aerodrome technical inspection is conducted at intervals of not more than 12 months; or
    - If the operator has elected to have part or parts of the inspection conducted at different times under sub-regulation (2), each facility for the aerodrome to be inspected is inspected at intervals of not more than 12 months
- The operator may elect to have a part or parts of an aerodrome technical inspection carried out at different times from the other parts
- If it appears from an aerodrome serviceability inspection that a particular facility at the aerodrome requires an aerodrome technical inspection, the Aerodrome Manager must ensure that the necessary technical inspection of the facility is conducted as soon as practicable

If the Aerodrome Manager decides to conduct part of the technical inspection at different times of the year they will:

- Keep records of each part of each inspection; and
- Retain each record for at least three (3) years after the part of the inspection to which the record relates was conducted; or

Will in any other case:

- Keep records of each inspection; and
- Retain each record for at least three (3) years after the inspection to which the record relates was conducted

The Aerodrome Manager will ensure a minimum of disruption is caused to aircraft operations during the assessment of all movement areas and the Obstacle Limitation Surfaces.

Part 2.7.2: The arrangements for technically qualified people to carry out the inspections

The Aerodrome Manager will ensure that the persons engaged to conduct technical inspections, whether internal employees or consultants, have the following qualifications.

Movement area and pavements:

- Must be inspected by a person who has a recognised degree, diploma or certificate in civil engineering or appropriate technical experience

Lighting and Electrical Facilities:

- Must be inspected by an electrical engineer or a licensed electrician (preferably with aerodrome lighting experience)

Obstacle Limitation Surface:

- Must be inspected by a person who is technically qualified or experienced in surveying and has a sound knowledge and understanding of the standards and survey procedures for obstacle limitation surfaces

Part 2.7.3: The arrangements for recording results of the inspections and for taking prompt follow up action to ensure correction of defects

The persons or organisations delegated with the task of conducting the Technical Inspection must provide a report to Aerodrome Management which specifies the items covered by the inspection, the inspection findings and highlights any deficiencies found.

The Aerodrome Manager will ensure that normal internal Council procedures are applied to the task of correcting the deficiencies to the satisfaction of both the Aerodrome Manager and the Aerodrome Reporting Officer.

Once each deficiency has been acquitted, a note of the acquittal will be attached to the Technical Report.

Technical Reports will be filed in Council's central filing system and will be made available for audit purposes. Each report ill be kept for a minimum of three (3) years as is required by CASR 139.235

Part 2.7.4: Contact details

The names and telephone numbers of the Aerodrome Manager, Chief Executive Officer and the Aerodrome Reporting Officers are provided in **INTRO 3: Master Contact List**

Amendment Record
2 August 2019

Part 2.8: Aerodrome Works Safety

Part 2.8.1: Introduction

The operator of a certified aerodrome must arrange aerodrome works so as not to create any hazard to aircraft or confusion to pilots. The Aerodrome Manual must include particulars of the procedures for planning and safely carrying out aerodrome works.

Aerodrome works may be carried out without the closure of the aerodrome, provided safety precautions are adhered to.

Aerodrome works may be carried out in the following manner:

- Where the works are of a nature that they will disrupt aircraft operations, they must be carried out under a proper plan called the method of working plan, and
- Where works are of a maintenance nature, they must be carried out as time limited works

Where a threshold is required to be temporarily displaced for more than 300 metres, due to aerodrome works, the matter must be referred to the relevant CASA office to assess the operational significance of that displacement.

Part 2.8.2: The preparation of a method of working plan identifying areas of the aerodrome affected during each stage of the work and steps taken to ensure safety standards are met

From time to time the aerodrome may be serviced by an RPT operations using different types of aircraft. Whenever the RPT service is by an aircraft above 5700 kilograms maximum take-off weight (MTOW), a Method of Working Plan (MOWP) must be prepared if the proposed works does not fit into either time limited works or work on a closed runway.

If the RPT service which will be affected by the proposed wok is operated using an aircraft below 5700 kilograms maximum take-off weight, the Aerodrome Inspector (Civil Aviation Safety Authority) should be consulted to decide whether an MOWP is required or not.

Any competent officer of the Council may draw up an MOWP or they may delegate the responsibility to a consultant.

The Aerodrome Manager must appoint, in writing, a Project Officer and a Works Safety Officer for each MOWP.

As the aerodrome owner / operator it is the Council's duty to ensure that the regulatory requirements are complied with and that any works for which this MOWP is required are carried out in accordance with the MOWP.

Part 2.8.2.1: Preparation of the MOWP

The MOWP will be prepared in accordance with the requirements as per MOS 139 – Aerodromes, Chapter 10 Section 10.11 Method of Working Plans. A sample MOWP title page is shown in Appendix B.

The completed MOWP is to be signed by the Chief Executive Officer and the Aerodrome Manager prior to distribution.

A copy of the MOWP must be given to the Aerodrome Inspector (Civil Aviation Safety Authority) as soon as possible after the MOWP or alteration is prepared, to give him / her time to advise of any amendments required.

Part 2.8.3: The arrangements for telling aircraft operators and other aerodrome users of the method of working plan and the telephone numbers for contacting those operators and users during and after working hours

Details of all fixed base operators and aircraft operators who will be provided with a copy of the Method of Working Plan are listed in the Contact List –**Intro 3 Master contacts list**. The distribution list of the MOWP must include at least the following persons and organisations:

- Project Manager
- Works Safety Officer
- Aerodrome Security Manager (if any)
- Works Organiser
- CASA Aerodrome Inspector
- Air Traffic Services and the Aviation Rescue and Fire Fighting Service Unit for the aerodrome (if applicable)
- Royal Flying Doctor Service
- Air transport aircraft operators using the aerodrome at which the aerodrome works are to be carried out
- Fixed base operators using the aerodrome at which the aerodrome works are to be carried out

The applicable persons and organisations are included in the Distribution List on Page 84.

Part 2.8.4: The arrangements for communicating with Air Traffic Control and aircraft during the carrying out of the works

Air Traffic Control is not provided at the aerodrome.

The Works Safety Officer will keep a “listening watch” on the CAF and will advise all aircraft that attempt to operate into the aerodrome of the situation.

Part 2.8.5: The arrangements for carrying out time limited works

Time Limited Works apply when work can be carried out without disrupting normal aircraft operations and the movement area can be restored to normal safety standards within 30 minutes.

The following work may fall within this category:

- Mowing of grassed runway strips
- Sweeping or rolling of runway and taxiway surfaces
- Painting of runway and taxiway centreline markings
- Minor pavement repairs
- Surveys and inspections

CASA requires that where time limited works are being planned which requires more than 10 minutes to restore the normal safety standards a NOTAM must be issued at least 24 hours prior to the start of the works.

Part 2.8.5.1: Restrictions on Time Limited Works

Time Limited Works must not be carried out at night or if the visibility is less than 5 kilometres without the approval from the Civil Aviation Safety Authority.

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Part 2.8.5.2: Work on a closed runway

When it is not practical to do work as “Time Limited Works”, under certain conditions it is permitted to close the runway for the duration of the works. This applies particularly to work which cannot be readily stopped and restored to normal safety standards within 30 minutes.

The following type of work may fall within this category:

- Reseal of a runway
- Large pavement repairs
- Drainage improvement
- Painting of runway centrelines and markings
- Installation of runway lighting
- Emergency runway repairs. For this category of work, the Aerodrome Reporting Officer must advise RPT operators and the Aerodrome Inspector – Civil Aviation Safety Authority, in advance and raise a NOTAM advising of the closure not less than 14 days prior to the closure.

For unscheduled work, such as urgent pavement repairs, it may not be possible to give adequate warning of the closure. The Aerodrome Reporting Office must still advise everyone concerned and raise a NOTAM giving as much notice as possible.

Part 2.8.6: The names, telephone numbers and roles of the persons and organisations responsible for planning and carrying out the works, and the arrangements for contacting those persons and organisations at all times

The Aerodrome Manager must appoint, in writing, a Works Safety Officer to ensure the safe conduct of the works.

- This person must have been trained in accordance with the Manual of Standards (MOS) 139.

The Works Safety Officer must be present at all times when work associated with the MOWP is being performed and the aerodrome is open to aircraft operations.

The Works Safety Officer must satisfy the Aerodrome Manager or Project Officer that he is able to perform the following functions:

- Ensure the safety of aircraft by ensuring that work is performed in accordance with the MOWP
- Raise the appropriate NOTAM's as required and ensure that the text of each is exactly as set out in the MOWP
- Discuss with the Works Organizer on a daily basis, any matters necessary to ensure the safety of aircraft operations
- Ensure that all markings are placed in accordance with the MOWP
- Ensure that vehicles, plant and equipment are under Safety Officer supervision or within properly marked and lit work areas
- Ensure that all other requirements of the MOWP relating to vehicles and plant are complied with
- Ensure that access routes to works areas are in accordance with the MOWP and that access is restricted to those routes
- Locate any power or telephone cables and ensure that any excavation does not damage them
- Require the immediate removal of vehicles, plant and personnel from the movement area where necessary to ensure the safety of aircraft operations
- Ensure the movement area is safe for normal aircraft operations following removal of vehicles, plant, equipment and personnel from the works area

When work is being carried out on the aerodrome, particular care must be taken that the safety of aircraft operations is not compromised.

It is the responsibility of the officer preparing the MOWP (or amendment) to liaise fully with the aircraft operators affected, the construction body and the Civil Aviation Safety Authority.

The airline operators are to be contacted at the outset of the planning of works. They will be in the best position to provide runway length / take off distances they require. This knowledge is essential to enable stage lengths, timing and works restrictions to be planned.

They will require the maximum lead time to prepare for amended loading / performance charts for their particular aircraft.

The names and telephone numbers of the Aerodrome Manager, Chief Executive Officer and the Aerodrome Reporting Officers, are provided in INTRO 3: Master Contact List.

Contact details for those other persons and organisations responsible for planning and carrying out the works will be included in the MOWP.

APPENDIX A: The Distribution List for the MOWP

The following is the list of persons and organisations that are to be issued with a copy of the MOWP. Contact details can be located at **Intro 3: Master Contact list**

Boulia Shire Council

- Aerodrome Manager — 1 copy each
- Chief Executive Officer
- Project Manager
- Aerodrome Reporting Officer
- Aerodrome Works Safety Officer

Australian NOTAM Office	2 copies
Aerodrome Inspector	2 copies
George Bourne & Associates	2 copies
Royal Flying Doctor Services	1 copy
Army Aviation Centre	1 copy
Rex Airlines	1 copy

Amendment Record
2nd August 2019

APPENDIX B: Example of an MOWP Title Page

MOWP:	YBOU / 01 / 2018
Issue Number:	01
Date of Issue:	01 January 2018
Amendment Number:	01
Date of Amendment:	01 January 2018

Method of Working Plan

Aerodrome:	BOULIA (YBOU)
Project Description:	Installation of Runway Lighting
Dates:	01 – 31 January 2018
Dates of Approval of MOWP:	01 January 2018
Date of commencement of works:	01 January 2018
Date of completion of works:	31 January 2018
Date of expiry of MOWP:	31 January 2018

Contents:

Part 2.9: Aircraft Parking Control

Part 2.9.1: Introduction

The aerodrome operator must include in the aerodrome manual particulars of the procedures for aircraft parking control, on those aprons, to ensure the safety of aircraft during ground manoeuvring, if apron congestion is a problem.

Part 2.9.1.1: Apron Congestion

Appropriate apron safety procedures must be developed by the aerodrome operator in conjunction with relevant organisations such as the airlines, ground handlers and caterers; and monitored for compliance, on a regular basis.

Part 2.9.1.2: Apron Safety Management

Aerodrome operators must ensure that, irrespective of who is responsible for aircraft parking, procedures are in place and documented for aircraft docking, ground servicing, engine start and push back operations.

Apron safety management procedures must:

- Ensure that people involved are appropriately trained and experienced
- Ensure that people engaged in these activities are provided with appropriate equipment such as communications, high visibility garments and fire extinguishing equipment suitable for at least initial intervention in the event of a fuel fire.

If apron operational activities are undertaken by organisation(s) other than the aerodrome operator, then the aerodrome operator must ensure the apron safety management procedures are followed.

Part 2.9.2: The arrangements between air traffic control and apron management

- No Air Traffic Control is provided at the aerodrome.

Part 2.9.3: The arrangements for allocating aircraft parking positions

Aircraft parking control procedures are the arrangements made for allocating aircraft parking positions.

- No Air Traffic Control Tower is provided at this aerodrome

For this aerodrome the following procedures apply:

Part 2.9.3.1: RPT Apron

One position is marked on the RPT apron for the parking of a Dash 8, ATR42 / SF34 & F50 type aircraft. Other operators presently using the aerodrome operate aircraft that do not require markings.

Parking on the RPT apron is restricted to the RPT aircraft only, or those aircraft that are too heavy to park elsewhere.

- The plan for the RPT Apron is provided at the end of this section

Part 2.9.3.2: Light Aircraft Apron

- A sealed apron with tie-down cables is available for parking of aircraft below 5700 kilograms.

Part 2.9.3.3: Itinerant Aircraft Parking

- Itinerant aircraft are permitted to park on the RPT apron with prior approval from the Aerodrome Manager. Aircraft below 5700 kilograms will be required to park in the Light Aircraft parking area. Alternative parking may be arranged for aircraft requiring extended parking or special arrangements.

Part 2.9.4: The arrangements for initiating engine start and ensuring clearances for aircraft push-back

- No arrangements for initiating engine start and ensuring clearances for aircraft push-back have been made at this aerodrome, and nor are they required. The pilot in command is responsible for initiating engine start.

Part 2.9.5: An inventory and description of the activation and deactivation of any visual docking guidance system used at the aerodrome

- No visual guidance docking systems have been provided at the aerodrome and nor are they required.

Part 2.9.6: The marshalling service

- The aerodrome owner does not provide a marshalling service. If marshalling is required the AOC holder, local agent or delegate will provide the service.

Part 2.9.7: The leader (van) service or “follow-me” service

- No leader (van) or 'follow-me' services are provided at the aerodrome.

Part 2.9.8: The roles of the persons responsible for planning and implementing aircraft parking control

Aerodrome Manager: The Aerodrome Manager has overall responsibility for the aircraft parking procedures.

He is also responsible for:

- Final approval of amendments of aircraft parking areas and dedicated parking positions
- Arrange for a qualified consultant to produce amendments and/or new design of the apron parking plan
- Monitor the ‘correctness’ of aircraft parking in allocated positions
- Ensure that parking positions are designed by competent persons and the markings are maintained in accordance with the Manual of Standards Part 139 – Aerodromes.
- Apron and all other markings or markers have been placed with his approval.

Aerodrome Reporting Officer: The Aerodrome Reporting Officer is responsible for reporting any unsafe or potentially unsafe situations to the Aerodrome Manager.

The names and telephone numbers of the Aerodrome Manager, Chief Executive Officer and the Aerodrome Reporting Officers, are provided **in INTRO 3: Master Contact List**.

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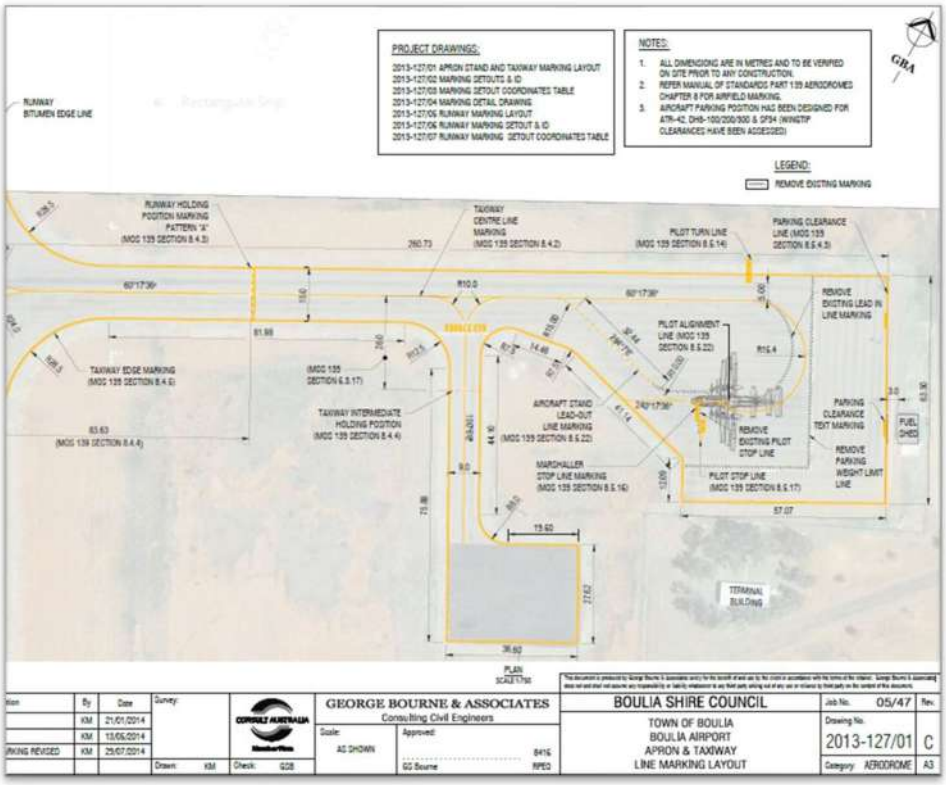
2 August 2019


PROJECT DRAWINGS:
2013-127/01 APRON STAND AND TAXIWAY MARKING LAYOUT
2013-127/02 MARKING SETOUTS & ID
2013-127/03 MARKING SETOUT COORDINATES TABLE
2013-127/04 MARKING DETAIL DRAWING
2013-127/05 RUNWAY MARKING LAYOUT
2013-127/06 RUNWAY MARKING SETOUT & ID
2013-127/07 RUNWAY MARKING SETOUT COORDINATES TABLE
NOTES:
1. ALL DIMENSIONS ARE IN METRES AND TO BE VERIFIED ON SITE PRIOR TO ANY CONSTRUCTION.
2. REFER MANUAL OF STANDARDS PART 139 AERODROMES CHAPTER 8 FOR AIRFIELD MARKING.
3. AIRCRAFT PARKING POSITION HAS BEEN DESIGNED FOR ATR-42, DH8-100/200/300 & DF34 (WINGTIP CLEARANCES HAVE BEEN ASSESSED)
LEGEND:
REMOVE EXISTING MARKING
RUNWAY
BITUMEN EDGE LINE
RUNWAY HOLDING POSITION MARKING PATTERN 'A' (MOS 139 SECTION 8.4.3)
TAXIWAY CENTRE LINE MARKING (MOS 139 SECTION 8.4.2)
PILOT TURN LINE (MOS 139 SECTION 8.5.14)
PARKING CLEARANCE LINE (MOS 139 SECTION 8.5.4.3)
REMOVE EXISTING LEAD IN LINE MARKING
PILOT ALIGNMENT LINE (MOS 139 SECTION 8.5.22)
TAXIWAY EDGE MARKING (MOS 139 SECTION 8.4.5)
(MOS 139 SECTION 8.5.17)
TAXIWAY INTERMEDIATE HOLDING POSITION (MOS 139 SECTION 8.4.4)
AIRCRAFT STAND LEAD-OUT LINE MARKING (MOS 139 SECTION 8.5.22)
REMOVE EXISTING PILOT STOP LINE
PARKING CLEARANCE TEXT MARKING
REMOVE PARKING WEIGHT LIMIT LINE
FUEL SHED
MARSHALLER STOP LINE MARKING (MOS 139 SECTION 8.5.16)
PILOT STOP LINE (MOS 139 SECTION 8.5.17)
TERMINAL BUILDING
PLAN
SCALE 1:750
GEORGE BOURNE & ASSOCIATES
Consulting Civil Engineers
BOULIA SHIRE COUNCIL
TOWN OF BOULIA
BOULIA AIRPORT
APRON & TAXIWAY
LINE MARKING LAYOUT
Job No. 05/47
Drawing No. 2013-127/01
Rev. C
Category AERODROME
A3
Drawn KM
Check GGB
Scale AS SHOWN
Approved GG Bourne
RPEQ

Part 2.10: Airside Vehicle Control

Part 2.10.1: Introduction

Particulars of the procedures for preventing unauthorised entry into the movement area, including the arrangements for controlling airside access, and airside vehicle control, are to be included in the aerodrome manual.

At aerodromes catering for air transport operations by aircraft of more than 30 passenger seats, a fence or other suitable barrier will be provided where practicable, around the movement area of the aerodrome.

Part 2.10.2: Definitions

For the purpose of these instructions, the following definitions will apply:

Landside Areas (Public Areas)	Those parts of the aerodrome that allow unrestricted public or private vehicular entry, e.g. public areas within and around a terminal building, car parking areas and public roads
Airside Areas (Prohibited Areas)	Those parts of the aerodrome to which entry is prohibited except to persons having lawful authority or excuse to enter or remain
Aprons	Defined as those areas within the movement area and adjacent to a terminal building, hangars and freight areas for the purpose of loading / unloading, parking, refuelling and servicing of aircraft. Included within the apron areas, if defined, are the apron vehicle access lanes.
Movement Areas	That part of an aerodrome to be used for the surface movement of aircraft including manoeuvring areas and aprons
Manoeuvring Areas	Those parts of the aerodrome which are used specifically for the take-off and landing of aircraft and for the movement of aircraft associated with the take-off and landing, i.e. runways, runway strips and taxiways excluding aprons
Perimeter Road	A road, on the airside, which allows vehicles access to various areas of the aerodrome without entering the movement areas

Part 2.10.3: The applicable traffic rules (including speed limits) and the means of enforcement of the rules

The following rules apply to all persons, and their vehicles, authorised to have vehicular access to airside areas.

Part 2.10.3.1: Vehicle Requirements

Vehicles and ground maintenance equipment operated airside will be maintained in a sound mechanical and roadworthy condition, so as to prevent avoidable breakdowns and spillages of oil, lubricants and hydraulic fluids.

All vehicles will have current registration and comply with relevant State Laws and Regulations.

- In certain circumstances the Aerodrome Manager may exempt specialised equipment from this requirement.

Vehicles operating on the movement area at night or in conditions of poor visibility will display dipped headlights and must be lit in accordance with MOS Chapter 9.19.1, unless accompanied by a vehicle that is so equipped.

MOS Chapter 9.19.1 states:

Vehicle warning lights are provided to indicate to pilots and others the presence of moving vehicles or plant within the manoeuvring area.

- A vehicle warning light or lights must be mounted on the top of the vehicle, so as to provide 360° visibility.
- The lights must be amber / yellow / orange, and be flashing or rotating of a standard type commercially available as an automotive accessory

Vehicles operating on the manoeuvring area by day will be marked in accordance with MOS Chapter 8.10.4.

MOS Chapter 8.10.4 states:

A vehicle used regularly on the movement area by day should be painted yellow or orange. Where so painted, it does not require additional marking.

- Vehicles not painted yellow or orange must be marked, either by using a flashing dome light on top of the vehicle, or by flags.
- Flags must not be less than 0.9m square and consist of an orange and white chequered pattern, each square of which must have sides not less than 0.3m. Where orange merges with the background, another colour that contrasts with the background must be used.

Vehicles used to carry loose materials, equipment, garbage and wastepaper will be covered to prevent spillage onto the Movement Area.

Part 2.10.3.2: Driving Rules

Any person operating a vehicle airside is to:

- Hold a current State Driver's License that is appropriate for the type of vehicle being driven;
- understand the terminology used to describe the areas on the airside part of the aerodrome and be familiar with their location;
- understand the significance of apron signs, aerodrome markers and pavement markings;
- understand the specific traffic rules and driving rules pertaining to operating a vehicle airside at this aerodrome;
- comply with any other requirements, which may be imposed by the aerodrome operator.

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

On Airside, the directions of the Aerodrome Reporting Officer or other authorised person must be followed at all times.

Vehicles not specifically approved to operate airside, and which are required to proceed beyond gates displaying prohibited entry signs onto Airside Areas, must only do so under the escort or direction of the Aerodrome Reporting Officer or other authorised person.

No vehicle shall be driven under an aircraft or within 3m of any part of an aircraft except when required for the servicing of that aircraft.

A vehicle shall not be used to service, load or unload an aircraft unless a representative of the aircraft operator or his agent is present to direct the movements of the vehicles.

No vehicle shall operate within 15 metres of an aircraft in the process of refuelling or de-refuelling unless in accordance with the requirements of CAO 20.9 (Civil Aviation Order).

The only vehicles permitted on the Apron Areas are:

- Vehicles directly connected with the refuelling or servicing of an aircraft
- Vehicles carrying heavy or awkward articles of freight which cannot be handled by the normal freight trolleys
- Vehicles directly concerned with Aerodrome Works
- Vehicles approved by an authorised Officer or authorised Airline Officer
- Ambulance, Police and Fire vehicles in emergency circumstances

Vehicles must stay well clear and not pass close behind aircraft operating either a red rotating beacon or strobe lights, as this indicates that:

- the aircraft's engines are running or are about to be started
- the aircraft is or is about to be, under tow
- the aircraft is or is about to commence taxying.

When aircraft departures are in progress under conditions of poor visibility, vehicular traffic on the movement area shall be restricted to those vehicles under the control of the Reporting Officer.

For all low visibility operations (not presently provided at the aerodrome) non-essential vehicles shall not be permitted on the manoeuvring area.

No person shall ride or operate a vehicle when the passenger / cargo load is in excess of the designated capacity of that vehicle.

Drivers must not leave vehicles or equipment parked so that they will obstruct aircraft, vehicles or pedestrians.

Drivers must not operate a vehicle in reverse unless under guidance by another person or he / she has established that it is safe to do so.

Drivers must at all times stop and give way to aircraft taxiing, being pushed back or preparing to power out of apron parking positions.

Part 2.10.3.3: Speed Limits

Speed Limits for vehicles, unless otherwise indicated are:

• Within 15m of any aircraft	10km / hour
• On Apron Areas	15km / hour
• Elsewhere on the Movement Area	25km / hour
• Perimeter/Airside Road	60km / hour

No restrictions apply in recognised emergencies, except when in close proximity to aircraft.

Part 2.10.3.4: Enforcement

The Chief Executive Officer or Aerodrome Manager reserves the right to withdraw a person’s airside driving authorization should any infringement of the above rules be observed / reported.

Both State and Local Police may also enforce these rules.

Part 2.10.4: The method of instructing and testing drivers in relation to the applicable traffic rules

On receipt of an application the Aerodrome Manager and / or Chief Executive Officer will establish whether the need for airside access is sufficient to be authorised.

Once the need has been established the applicant must produce a current driver's license which is appropriate for the type of vehicle involved and proof that the vehicle is both roadworthy and registered.

- The applicant must inform the Aerodrome Manager each time the license or registration is renewed or revoked.

All drivers operating on the manoeuvring areas (i.e. taxiways and runways) must have an Aeronautical Radio Operators Certificate (AROC) to operate an air band radio in the vehicle.

Part 2.10.5: The names, telephone numbers and roles of the persons responsible for airside vehicle control

The role of the Aerodrome Manager is:

- To ensure airside drivers have been issued with an ASIC identification card
- to establish the need for an airside applicant is sufficient to be approved
- to check if applicants' driver's licence is current
- to provide the applicant with a copy of the Airside Vehicle Control procedures

The role of the Reporting Officer is:

- To ensure that only approved drivers/vehicles are operating on airside areas
- to ensure that drivers operating on airside areas display their ASIC identification
- to ensure that vehicle speeds are appropriate and in accordance with the procedures

The names and telephone numbers of the Aerodrome Manager, Chief Executive Officer and the Aerodrome Reporting Officer are provided in **INTRO 3: Master Contact List**.

Amendment Record
19 June 2022

Part 2.11: Bird and Animal Hazard Management

Part 2.11.1: General

Aerodrome Management must monitor and record, on a regular basis, the presence of birds or animals on or in the vicinity of the aerodrome. Monitoring personnel must be suitably trained for this purpose.

Where regular monitoring confirms the existence of a bird or animal hazard to aircraft operations, or when CASA so directs, Aerodrome Management must produce a bird or animal hazard management plan in accordance with the MOS PART 139 - Aerodromes, Section 10.14, which will be included as part of this Aerodrome Manual.

The current records of bird and animal activity do not indicate that a Management Plan is required.

- A NOTAM will be raised when a seasonal bird hazard or animal hazard is reported, (as per MOS 139, Section 10.14.1.7.)

Part 2.11.2: Arrangements for assessing any Bird or Animal Hazards

Each time the Reporting Officer conducts a serviceability Inspection a record of the presence, or absence, of birds and animals on or in the vicinity of the aerodrome shall be recorded in the aerodrome logbook. These records will also indicate an approximate number of birds/animals sighted and a description of their location.

A record of bird and animal dispersal activities on the airport is to be kept by the Reporting Officer in the logbook.

- This record is to contain details of every dispersal activity.

Part 2.11.3: Arrangements for the removal of any bird or animal hazards

Part 2.11.3.1: Bird harassment

The main criteria are to make the aerodrome as unattractive to birds as possible through routine maintenance and cleaning of rubbish within the aerodrome boundary.

This is done in part through:

- regulating the height of grass to reduce bird feeding and nestling areas;
- preventing the accumulation of rubbish that may attract birds;
- environmental management within the aerodrome vicinity;
- planning control.

As it may take some minutes to disperse birds near aircraft flight paths, harassment procedures should be commenced well in advance of aircraft movements.

In taking dispersal action the Aerodrome Reporting Officer must consider any imminent aircraft movements, other personnel, public areas, helicopters and vehicles.

In any case the Aerodrome Reporting Officer shall ensure that birds are not dispersed in the direction of active runways and associated flight paths.

Part 2.11.3.2: Animal Harassment

The best means of controlling the entry of these animals onto the aerodrome is a weekly inspection of the boundary fences to ensure they are intact. Where a break has occurred, it should be repaired as soon as possible.

- The fence provided should be appropriate to protect aircraft safety.

If there is any unusual activity of birds, insects (locusts) or wildlife on the aerodrome a suitable NOTAM will be issued by the Aerodrome Reporting Officer.

- Appropriate action and harassment procedures will be implemented.

Part 2.11.4: Bird Strikes

The Reporting officer will record all bird strikes in the logbook.

Part 2.11.4.1: Reporting of Bird Strikes

All bird strikes shall be reported to the Australian Transport Safety Bureau (ATSB) whether or not the aircraft suffered damage.

The reporting officer will complete the "Bird Strike Report" form (see Aviation Bird and Animal Strike Notification form (page 96)) and forward a copy to:

Australian Transport Safety Bureau (ATSB)
PO Box 600
Civic Square, ACT 2608

+61 2 6274 6434 (F)

The original is retained / filed by the Reporting Officer or delegate.

Part 2.11.5: Airport Management Procedures

The Aerodrome Manager and Chief Executive Officer considers all proposed land use activities on or near the airport in relation to potential bird hazards.

Maintenance procedures take into account the requirement to reduce bird activity on the aerodrome, which is achieved by way of habitat management (i.e. converting the aerodrome into an environment which is unattractive to birds).

Additionally, all landscaping proposals referred by planning development are examined to ensure that no hazard is created by the proposal.

Part 2.11.6: Environmental Management

The management plan, if and when required, will be prepared by a suitably qualified person such as an ornithologist or a biologist, etc.

The management plan will address:

- hazard assessment, including monitoring action and analysis
- pilot notification
- liaison and working relationships with land use planning authorities
- on-airport bird and animal attractors which provide food, water or shelter
- suitable harassment methods
- an ongoing strategy for bird and animal hazard reduction, including provision of appropriate fencing

Amendment Record
2 August 2019

Part 2.11.7: The names and roles of the persons responsible for dealing with bird and animal hazards, and the telephone numbers for contacting them during and after working hours

The Aerodrome Manager is responsible for:

- Considering proposed land use activities on or near the aerodrome
- prepare environmental wildlife planning control procedures, if required
- if required, instigate amendment of Council land use policies

The Reporting Officer is responsible for:

- Record the presence of bird and animal observed on or adjacent to the aerodrome during serviceability inspections
- recording action taken in the dispersion of local fauna
- providing records of bird strike forms forwarded to ATSB
- issuing NOTAM if unusual bird activity is observed on the aerodrome and record the cause for this attraction

The names and telephone numbers of the Aerodrome Manager, Chief Executive Officer and the Aerodrome Reporting Officer are provided in **INTRO 3: Master Contact List**.

Amendment Record
2 August 2019

Aviation Bird & Animal Strike Notification

Submit by Post: Reply Paid 967, PO Box 967, Civic Square ACT 2608 (No postage stamp required) or Facsimile: (02) 6274 6434

This report is submitted by:
☐ Airline ☐ Pilot ☐ ATC ☐ Aerodrome ☐ Engineer ☐ Other

Aircraft operator name:

Contact name:

Contact telephone / mobile:

Contact email:

Aircraft make: | Aircraft model:

Engine make: | Engine model:

Aircraft registration:

Date of strike: Day | Month | Year

Time of strike: ☐ Dawn ☐ Day ☐ Dusk ☐ Night

Aerodrome name:

Departure aerodrome: | Arrival aerodrome:

Runway used: | Position on runway:

Flight details:
Pilot warned of birds/ animals: ☐ Yes ☐ No

Phase of flight:
☐ Taxi ☐ Take-off run ☐ Climb ☐ En-route
☐ Desent ☐ Approach ☐ Landing roll ☐ Parked

Effect on flight:
☐ None ☐ Aborted take-off ☐ Precautionary landing
☐ Engine shut down ☐ Other ☐ Specify

Weather details:
Sky conditions:
☐ No cloud ☐ Some cloud ☐ Overcast

Precipitation:
☐ None ☐ Fog ☐ Rain ☐ Snow

Aircraft details:
Part(s) of aircraft hit by bird/animal:

	Struck	Damaged		Struck	Damaged
Radome	☐	☐	Engine No. 1	☐	☐
Windshield	☐	☐	Engine No. 2	☐	☐
Nose (excluding above)	☐	☐	Engine No. 3	☐	☐
Propeller	☐	☐	Engine No. 4	☐	☐
Wing / Rotor	☐	☐	Fuselage	☐	☐
Landing Gear	☐	☐	Tail	☐	☐
Lights	☐	☐			
Other	☐	☐ Specify			

Bird or Animal details:
Bird or Animal species (e.g. Seagull, Kangaroo):

Number of Birds / Animals:

	Seen	Struck
1	☐	☐
2–10	☐	☐
11–100	☐	☐
More than 100	☐	☐ Estimated number

Size of Bird/s / Animal/s:
☐ Small ☐ Medium ☐ Large

Bird activity:
☐ Low ☐ Normal ☐ High

Environment details: *e.g. bird / animal control method used*

Remarks: *describe aircraft damage, passenger injuries and other pertinent information*

Direct cost information:
Aircraft time out of service due to strike: hrs

Estimated cost of repairs or replacement: AUD$

Indirect cost information:
Estimated other costs: AUD$ *e.g. loss of revenue, fuel, hotels.*

Special information on engine damage strikes:

Engine position number:	1	2	3	4
Reason for failure / shutdown:				
Uncontained failure	☐	☐	☐	☐
Fire	☐	☐	☐	☐
Shutdown – vibration	☐	☐	☐	☐
Shutdown – temperature	☐	☐	☐	☐
Shutdown – fire warning	☐	☐	☐	☐
Shutdown – other	☐	☐	☐	☐
Shutdown – unkown	☐	☐	☐	☐
Estimated percentage of thrust loss*	%	%	%	%
Estimated number of birds ingested				

*There may be difficult to determine but even estimates are useful

Reported by: | Position:

Company name: | Date:

Part 2.12: Obstacle Control

Part 2.12.1: General Information

This section specifies the procedures required to monitor the OLS and the timely reporting of new and existing obstacles including building development on and in the vicinity of the aerodrome in relation to the height of buildings and other structures. These requirements are based on the standards set out in the Manual of Standards (MOS) PART 139 - Aerodromes, Chapter 7.

At Boulia Aerodrome, the Obstacle Limitation Surface (OLS) is based on a Code 3C Non-Instrument runway.

- AirServices Australia has published “Circling Approach Procedures” for RWY 14/32.

Part 2.12.2: The procedures for monitoring the obstacle limitation surfaces and the Type A chart take-off surfaces for obstacles

As part of the daily serviceability inspection a visual check shall be carried out of the approach and take-off climb surface areas, the transitional surfaces and the inner horizontal surface close to the aerodrome.

An instrument check of the OLS shall be carried out during the annual Aerodrome Technical Inspection.

- A Type A chart is only mandatory on aerodromes with international aircraft operations.
    - Such a chart has not been produced for Boulia Aerodrome

Part 2.12.3: The procedures for monitoring building developments (in relation to the height of buildings and other structures) within the horizontal limits of the obstacle limitation surface.

As the aerodrome owner, Boulia Shire Council is responsible for monitoring the location and height of any obstruction within the Obstacle Limitation Surface (OLS) area that constitute an obstruction to aircraft operations, and to report all such infringements of the OLS to the Civil Aviation Safety Authority.

In order to maintain safety of aircraft operations, Boulia Shire Council is to carry out, either through its own staff or by an approved consultant, regular surveys of the approach and take-off areas and transitional surfaces to determine whether there are infringements to the OLS, and to take appropriate action to either remove or mark such infringements.

In addition, the Aerodrome Manager is to ensure appropriate notification of any infringement is made to pilots. As such, Aerodrome Management, will advise the NOF of the details of the obstruction so that a NOTAM can be issued.

Such information will include:

- The nature of the obstacle, e.g. structure, machinery, tree, etc.
- gaseous efflux greater than 4.3m/second
- distance and magnetic bearing of the obstacle from the end of the runway
- height of the obstruction above Australian Height Datum
- whether the obstacle is permanent or the time periods applicable, if the obstacle is temporary
- amended declared distances, gradients and STODA’s if applicable

To ensure the useability of the aerodrome will not be reduced by obstacles, the Aerodrome Manager or Chief Executive Officer will liaise with the relevant State authorities, and Commonwealth and State Government instrumentalities (e.g. Telstra) to prevent development which will become an obstacle.

The Council shall also ensure that the Council’s Planning Schemes include sufficient provisions to enable the control of incompatible land-use and development within the OLS area.

Part 2.12.4: If the aerodrome has instrument approach procedures - the procedures for monitoring for new objects or building developments in any other areas nominated by the instrument procedure designers.

Circling approach procedures have been designed for Boulia Aerodrome. The Council has not been provided with copies of the design obstacle critical to the procedures by Airservices Australia.

The Aerodrome Manager shall ensure that such identified critical obstacles are regular monitored and that the Council's Planning Schemes include sufficient provisions to enable the control of incompatible land-use and development within the OLS and PAN-OPS areas.

- A copy of the design procedures and the critical obstructions which need to be monitored will be provided at appendix 'B'.
    - No critical obstructions have been identified by Airservices Australia

Part 2.12.5: The arrangements between CASA, local planning authorities and other relevant organisations in relation to the approval of building developments that may infringe the obstacle limitation surfaces

Obstacles within the OLS:

Normally, a structure will not be approved if it will penetrate the OLS. In the first instance the Chief Executive Officer, Aerodrome Manager or consultant, will assess any penetration or potential penetrations of the OLS. If the Council wishes to support the infringement, the Civil Aviation Safety Authority (CASA) will be consulted for advice on adverse effects on air navigation and measures to mitigate the hazard.

Such requests for an assessment by the CASA are to be directed to:

Aerodrome Inspector
Civil Aviation Safety Authority
GPO Box 2005
CANBERRA ACT 2601

Obstacles outside the OLS:

The Chief Executive Officer, Aerodrome Manager or consultant, will also liaise with airline operators as to the effect of the obstacle on aircraft operations before deciding to approve such development or land-use.

Request for building approvals outside the limits of the OLS shall be referred to the CASA in the following circumstances:

- If the object extends above a height of 110m above local ground level, it must be assessed by the CASA to determine whether it is a hazard to aircraft operations
    - any object that extends above a height of 110m above local ground level is regarded as an obstacle unless assessed by the CASA to be otherwise.

Such requests for an assessment by the CASA are to be directed to:

Flying Operations
Civil Aviation Safety Authority
PO Box 2005
CANBERRA ACT 2601

In assessing the compatibility of a proposed structure, Boulia Shire Council 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 useability.

When directed by the CASA, the Council is to arrange for the marking and / or lighting of obstacles, including terrain, in accordance with the standards and procedures set out in the Manual of Standards PART 139 - Aerodromes, Chapter 9, Section 4.

- The cost of such markings and lighting to be resolved with the owner of the obstacle
- the on-going maintenance of the markings and lighting shall remain with the proponent or owner

Part 2.12.6: Obstacle Limitation Surface Plan

An Obstacle Limitation Surface Plan has not been prepared for the aerodrome. The OLS is based on the following:

Runway	**14/32**

Runway Code	Code 3 Non-precision instrument runway

Approach Surface	
Inner Edge Width	150 metres
Splay	15%
Length	15000 metres
Slopes	3.33% for 3000 metres (first section) 2.5% for 3600 metres (second section) 0.0% for 8400 metres (third section)

Take-off Surface	
Inner Edge Width	180 metres
Splay	12.5%
Length	15000 metres (maximum width 1800 metres)
Slope	2.0%

Inner Horizontal Surface	45 metres AAL

Conical Surface	120 metres AAL

Part 2.12.7: The names, telephone numbers and roles of the persons responsible for planning and implementing obstacle control

The Chief Executive Officer is responsible for:

- Ensuring that the Council's Planning Schemes include sufficient provisions to enable the control of incompatible land-use and development within the OLS and PAN-OPS surface areas
- Ensuring that request for building approvals, critical to the OLS, and objects above 110m in height outside the limits of the OLS are referred to CASA.

The Aerodrome Manager is responsible for:

- Ensuring that an annual survey is conducted of the approach/take-off climb surface areas and the transitional surfaces
- Ensuring that the Obstacle Limitation Surface (OLS) and PAN-OPS areas are monitored every 12 months
- To ensure that any obstruction to aircraft operations within the OLS are advised off by NOTAM.
- To ensure that critical obstructions both within and outside the OLS be forwarded to CASA for assessment

The role of the Aerodrome Reporting Officer is:

- To conduct serviceability inspections of the approach and take-off climb surface areas, transitional and inner horizontal surfaces, and report any infringement for NOTAM action (if required) or any other action needed.

The names and telephone numbers of the Chief Executive Officer, Aerodrome Manager and the Reporting Officer are provided in **INTRO 3: Master Contact List.**

Amendment Record
2 August 2019

Part 2.13: Disabled Aircraft Removal

Part 2.13.1: Introduction

A disabled aircraft remaining on any part of the runway or runway strip creates an obstruction resulting in total or partial closure of that runway. Any such closure restricts normal operation of aircraft and the aerodrome is no longer available to serve the community. The duration of the closure is dependent on the severity of the disablement and the availability of equipment to effect the removal.

It is in the best interests of the community that co-ordinated arrangements exist to marshal community resources to remove a disabled aircraft as quickly as possible, having full regard to statutory requirements and responsibilities of authorities involved.

Part 2.13.2: Objective

The objective to provide for an efficient, coordinated response to quickly and safely remove an aircraft which caused temporary closure of a runway or taxiway in a non-emergency situation.

These procedures are intended to deal only with disabled aircraft within the aerodrome boundary and provide an effective and prompt response to deal with the initial operational effects of an aircraft disablement, including matters associated with air safety investigation, and to provide adequate guidelines to plan a recovery operation involving the largest type of aircraft regularly using Boulia Aerodrome.

Part 2.13.3: Authorisation

In all but extreme emergency situations the Council will seek the Australian Transport Safety Bureau (ATSB) authority / approval before any action to remove a disabled aircraft is taken.

There are 2 sources of authority for the removal of disabled aircraft available to the Council, and they are:

- Transport Safety Investigation Act 2003
  - This Act deems that an aircraft involved in an accident comes into the custody of the Director of Air Safety Investigation and cannot be removed or interfered with except with the permission of the Director or an authorised representative. An Australian Transport Safety Bureau (ATSB) investigator can exercise this authority.
  - Under the Act it is permissible to extricate persons, animals or mail and to take whatever action may be necessary to "protect the wreckage from further damage and to prevent danger to aircraft, other transport or the public."

- Common law rights
  - Under this provision the Chief Executive Officer in liaison with the Aerodrome Manager can give approval for the removal of a disabled aircraft after considering all aspects, including financial and community disadvantages of reduction of movement area availability.

Part 2.13.4: Immediate Operational 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).

- Appropriate NOTAM action shall be taken

Where an aircraft up to approximately 3400 kilograms 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 Australian Transport Safety Bureau shall be advised, through the local police, that such action is proceeding

Part 2.13.5: Role of the Aerodrome Operator, ATSB, ATC and aircraft owners

Aerodrome Operator:

- The Chief Executive Officer or Aerodrome Manager's role during the recovery phase is that of a co-ordinator with a vested interest in returning the aerodrome to normal operating condition as soon as possible. As appropriate he / she will:
  - Ensure that ATSB has been notified and obtained their requirements with respect to the aircraft
  - Arrange for security of the aircraft in co-ordination with ATSB
  - Determine runway length available and arrange for displaced threshold for landing aircraft, if required
  - Issue the appropriate NOTAM
  - Arrange for the notification to the holder of the aircraft "Certificate of Registration"
  - Inspect all areas prior to resumption of normal operations
  - 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
  - Co-ordinate all aspects of the removal effort
  - Convene a meeting with the airline / operator Recovery Co-ordinator, ATSB investigator and where necessary representatives from CASA, oil company and recovery equipment company.
  - Ensure that the following considerations are taken into account in planning the removal operation:
    - Keep chronological records of meetings and recovery operations
    - Arrange storage areas for mail cargo and records etc
    - Determine recovery equipment and manpower needs
    - Obtain aircraft manufacturer's data on recovery
    - Establish suitable access routes to and from recovery area
    - Determine storage area for recovered aircraft
    - Determine need to defuel aircraft
    - Monitor weather conditions, particularly when crane lifting, or air bag operations planned
    - If necessary, arrange lighting to site
    - Consider need for presence of a fire tender at recovery site
    - Determine whether runway clearance limits are likely to be infringed during recovery operation
    - If excavations are necessary, obtain a clearance in respect to underground services
    - Arrange necessary surface restorations
    - Convene a post recovery operation critique

Australian Transport Safety Bureau:

- The Australian Transport Safety Bureau is responsible for the investigation of all aircraft accidents and incidents involving civil aircraft operations within Australia in accordance with the provision of the Transport Safety Investigation Act 2003.
- An aircraft which is the subject of an accident is deemed to be in the custody of the Director, Air Safety Investigation, and shall not be removed or otherwise interfered with without the permission of the Investigating Officer (ATSB) except for:
  - The extrication of persons, animals and mails from the wreckage of an aircraft;
  - the protection of wreckage from destruction by fire or other cause;
  - the prevention of immediate danger to the safety of persons or property;
  - the removal of the aircraft and its contents to a place of safety when the aircraft is wrecked on water;
  - If the aircraft has come from within Australian territory and the written agreement of the Director has been obtained to removal of goods or baggage, the removal of goods or baggage can be carried out under the supervision of the Police;
  - if the aircraft has come from outside Australian territory and the written agreement of the Director has been obtained to 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 Customs.

Air Traffic Control:

- Air Traffic Control is not provided

Aircraft Owners, Operators and Tenants:

- The holder of the aircraft "Certificate of Registration" or his / her delegate is responsible for the prompt disposal of disabled aircraft and parts thereof, unless required or directed to delay such action by the Australian Transport Safety Bureau (ATSB)
- Each aircraft operator using Boulia 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 manoeuvring 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 Chief Executive Officer will decide whether to initiate action to have the aircraft removed at the expense and risk of the owner

Recovery Co-ordinator Duties:

- A company official should be designated 'Recovery Co-ordinator' 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
    - Have all required company facilities, including personnel and equipment, made available to him
    - Meet with the Chief Executive Officer (or Aerodrome Manager) and ATSB Investigator and develop a comprehensive plan for the removal of the aircraft
    - Arrange for a company representative to be available to answer any questions from the press, to issue press releases as may be appropriate and co-ordinate with Chief Executive Officer or Aerodrome Manager for access of the press to the accident scene
    - Participate in recovery critique

Part 2.13.6: Arrangements for notifying the aircraft owner

The Chief Executive Officer or Aerodrome Manager will endeavour to contact the aircraft owner as soon as is practicably possible.

The contact details of the aircraft owner will be gained from either of the following;

- the aircraft's pilot (if available), or
- the aircraft register which is available from the Civil Aviation Safety Authority's website: https://www.casa.gov.au/aircraft-register

Part 2.13.7: Arrangements for liaising with the ATSB and ATC

The Chief Executive Officer or Aerodrome Manager will liaise with both the ATSB and ATC as soon as is practicably possible and will keep both abreast of the situation.

Part 2.13.8: Arrangements for obtaining equipment and persons to remove the aircraft

There are no salvage contractors in the vicinity of the airport. For assistance in arranging removal equipment contact:

- The Aerodrome Manager

Part 2.13.9: Names and telephone contacts

The names and telephone numbers of the Chief Executive Officer, Aerodrome Manager and the Reporting Officer are provided in **INTRO 3: Master Contact List**.

Additional telephone contacts available at Intro 3: Master Contact list:

Australian Transport Safety Bureau (ATSB)
Duty Air Safety Investigator (24 hours)

Flying Operations
Civil Aviation Safety Authority
PO Box 2005
CANBERRA ACT 2601

The “Aviation Accident or Incident Notification” form as shown on the following pages can be downloaded from the ATSB web site link: www.atsb.gov.au/mandatory/asair.aspx

Amendment Record
2 August 2019

Aviation Accident or Incident Notification

Australian Government
Australian Transport Safety Bureau

Indicates information required for a wildlife strike.

Personal particulars of reporter:

Your name | Todays date

Role of reporter in relation to the aircraft:
☐ Crew ☐ Air Traffic Controller ☐ CASA
☐ Owner ☐ Rescue/fire service ☐ Aerodrome operator
☐ Operator ☐ LAME ☐ Other

Contact address
State Code

Telephone | Facsimile | Email

Crew and operator particulars:

Name of pilot in command | Nationality | Type of licence held | Licence number/ARN | Telephone

Name of pilot flying at the time of occurrence | Nationality | Type of licence held | Licence number/ARN | Telephone

Name of additional crew (if applicable) | Nationality | Crew position | Telephone

Aircraft registration | Flight number | Aircraft manufacturer and model

Name of aircraft owner | Aircraft operator (e.g. AOC holder/flying school) | If under hire name of aircraft renter/hirer

Operator's telephone | Facsimile | Email

Accident/incident details:

Date of occurrence | Local time | Location e.g. name of airport or 27 NM west of Bowral, NSW (include latitude & longitude if possible)

Last departure point | Departure time | First point of intended landing | Actual point of landing (if different)

Number of persons on board:

If known, names and nationalities of all serious injuries and fatalities, please enclose additional page/s as necessary.

	Total crew on board	No. with no injuries	No. of minor injuries	No. of serious injuries	No. of fatalities	Nationality	Name/s
	Total passengers	No. with no injuries	No. of minor injuries	No. of serious injuries	No. of fatalities	Nationality	Name/s
Persons injured on the ground:			No. of minor injuries	No. of serious injuries	No. of fatalities	Nationality	Name/s

Aircraft damage:

☐ Destroyed ☐ Substantial ☐ Minor ☐ Nil

Damage description

Effect on flight:

☐ None ☐ Rejected takeoff ☐ Precautionary landing ☐ Engine/s shut down ☐ Other

Weather conditions:

Wind (speed, direction and gusts) | Visibility | Precipitation | Cloud (type, amount and base) | Temperature

Other information relevant to the event:

Flight rules: ☐ VFR ☐ IFR

Flight conditions: ☐ VMC ☐ IMC

Light conditions: ☐ Daylight ☐ Night ☐ Dawn ☐ Dusk

☐ Aircraft standing ☐ Taxiing ☐ Takeoff ☐ Climb ☐ En-route
☐ Manoeuvring ☐ Descent ☐ Approach ☐ Landing ☐ Other

Airspace designation | Height/altitude of occurrence AGL/AMSL | Runway number

Type of operation:

☐ Flying training – solo ☐ Flying training – dual ☐ Military ☐ Sports aviation ☐ Gliding ☐ Air transport – passenger
☐ *Charter ☐ *Private ☐ *Agricultural ☐ *Aerial work ☐ *Other ☐ Air transport – cargo

*Purpose of flight

Please turn over

Wildlife strike:

Was a bird or animal involved

No ☐
Yes ☐ No. of birds ☐ Small ☐ Medium ☐ Large Species

No. of animals ☐ Species

Please fully describe the accident or incident:

All relevant documentation should be forwarded to ATSB. Include your suggestions as to how this type of occurrence could be prevented.

Please enclose additional page/s as necessary

Factors contributing to the occurrence:

Did this occurrence involve a false indication — No ☐ Yes ☐ (e.g. instrument, landing gear, fire warning)

Do you think that maintenance of the aircraft was a factor — No ☐ Yes ☐

Did an aircraft component fail — No ☐ Yes ☐

Do you think aircraft design was a factor in this occurence — No ☐ Yes ☐

Are there any human performance issues or deficiencies in the aviation system that may have contributed to this occurence?

No ☐
Yes ☐

☐ Distracting events/interruptions ☐ Environment (noise, visibility) ☐ Equipment design ☐ Fatigue
☐ Interpersonal problems at work ☐ Knowledge or experience ☐ Medical/physiological factors
☐ High workload ☐ Pre-occupation ☐ Training ☐ Recency
☐ Other

Results of operator's technical and/or operational investigation at time of submitting report or Chief Pilot /CFI comments where applicable

Please enclose additional page/s as necessary

Action carried out by operator to prevent recurrence

For accidents only:

For accidents (occurrences involving fatalities or serious injuries to any person in the aircraft or on the ground, substantial damage or destroyed aircraft) only, please include the following information:

Additional pilot in command details:

Date of birth: | Total flying hours | Total hours last 90 days | Hours on type | Hours on type last 90 days

ELT information:

ELT manufacturer and model ☐ Fixed ☐ Portable

☐ Manual activation ☐ Automatic ☐ Did not activate (why?)

ELT location ☐ Cockpit ☐ Cabin ☐ Rear/tail ☐ Other

Sept 2004

When complete, post to: ATSB Notifications Reply Paid 967, PO Box 967, Civic Square, ACT 2608. No postage stamp required.
Or Fax to 02 6274 6434

Part 2.14: Handling of Hazardous Materials

Part 2.14.1: The names, telephone numbers and roles of the persons who are to receive and handle hazardous materials

The Council, as the owner and operator of Boulia Aerodrome, does not act as handling agents for hazardous materials.

- The Council will ensure that the carrier or operator is maintaining the facilities correctly by copies of compliance checks from the fuel company.

The carrier or facility operator maintains exclusive responsibility for these materials.

A Council owned and operated AVGAS bowser is located on the aerodrome.

- Jet A1 (drums only) is only available by prior arrangement.

All staff associated with the refuelling of aircraft have received formal training and are aware of the required safety procedures.

Part 2.14.2: The arrangements for special areas on the aerodrome to be set up for the storage of flammable liquids (including aviation fuels) and any other hazardous materials

The handling, storing and transporting of Hazardous Materials on Boulia Aerodrome is governed by provisions of Australian Standard 1940-1988, 'SAA Flammable and Combustible Liquids Code' and related Australian Standards.

Aircraft freight companies are required, under Civil Aviation Safety Regulations (CASR) 1998 Part 92, to comply with provisions of IATA Dangerous Goods Regulations.

Manuals on Company procedures are produced by concerned companies and used in conjunction with the Dangerous Goods Regulations.

The provisions of these referenced documents shall apply to all Hazardous Materials present on the aerodrome as cargo and to the storage and use of such materials within bounds of the aerodrome.

Articles and materials deemed to be hazardous include but are not limited to all flammable liquids and solids, oxidisers, corrosives, flammable or non-flammable compressed gases, poisons, proprietary explosives, radioactive materials and organic peroxides.

Part 2.14.3: The methods to be followed for the delivery, storage, dispensing and handling of these materials

Part 2.14.3.1: Aircraft fuel

Aircraft fuel used on Boulia Aerodrome are divided into two categories:

- Piston engine fuel which is a high-octane petrol designated as AVGAS.
- Turbine engine fuel, such as aviation kerosene with designations of AVTUR or JET A-1is only available in drums by specific requests.

All aircraft fuels are dispensed in accordance with the requirements of Civil Aviation Order (CAO) PART 20, Section 20.9 - Precautions in Refuelling, Engine and Ground Radar Operations.

The storage of bulk aircraft fuel will be restricted to authorised refuelling companies who shall employ sufficiently trained personnel and procedures to ensure the safe delivery, storage, dispensing and handling of petro-chemical products.

All bulk aircraft fuel supplied shall be maintained in fuel tanks in specifically designated fuel farms approved by the Chief Executive Officer.

Part 2.14.3.2: Flammable Material

Approved operators may be authorised to construct and maintain flammable materials stores. Generally, these stores will be associated with aircraft maintenance facilities and will only contain such materials as cleaning spirits, paints, thinners and small amounts of aircraft fuel.

- Such stores require to be approved by the Council and shall be designed and maintained in accordance with relevant Australian Standards.

Part 2.14.3.3: Waste Materials

The operators of aircraft servicing facilities, terminal buildings and aircraft refuelling facilities shall provide suitable metal receptacles with self-closing covers for the storage of petro-chemical wastes and associated hazardous waste materials.

- All wastes falling within the general classification shall be removed by the facility operator from the airport premises at regular intervals.

Part 2.14.3.4: Explosives

Term storage of explosives on Boulia Aerodrome is not permitted.

The loading and unloading of explosives to and from aircraft shall only be permitted in areas so dedicated for such operations.

- If such activities are planned at the aerodrome, they will be carried out in accordance with the requirements of CAAP 89I-1 (1) - Safety distances for explosive laden aircraft

The primary position for such operations will be on Runway 14/32, which would be closed for other operations during the period involved. Liaison with the Aerodrome Manager / Aerodrome Reporting Officer will be carried out prior to the planning of these operations.

Part 2.14.3.5: Fire Protection

All hazardous material stores will have immediate response firefighting equipment installed which comply with relevant standards, and strictly enforce "NO SMOKING" procedures.

No person shall smoke or carry lit cigarettes, cigars, pipes, matches or any open flame within 15m of a refuelling facility or flammable or hazardous material stores, unless in a building or other enclosed area where smoking or open flames are specifically permitted.

Fire extinguishers and fire protection equipment installed for the protection of facilities storing and handling hazardous articles and materials shall not be tampered with or used for any purpose other than firefighting or fire prevention.

- All firefighting and fire prevention equipment on Boulia Aerodrome shall be maintained in accordance with the requirements of all applicable Australian Standards.

Part 2.14.4: Spills and Leakages

No petro-chemical products or hazardous or polluting materials, including agricultural products as well as fuel and oils, shall be dumped or permitted to leak or drain onto paved or unpaved surfaces on the aerodrome or into aerodrome drainage, sewerage systems or ponded areas. Such materials shall be collected into approved containers and disposed of under applicable Government regulations.

When an aircraft fuel spill occurs at an aircraft fuel dispersing device or fuel storage facility, refuelling operations shall be discontinued immediately, the Aerodrome Manager is to be notified and clean up and treatment of fuel affected areas commenced.

Part 2.14.4.1: Oil Spillage

Damage caused by spillage of corrosive fluids on movement area pavements.

Aerodrome pavements are frequently damaged by accidental or negligent substantial spillage of aviation fuel, hydraulic fluids, oils etc., as well as by small fuel spillages associated with normal aircraft servicing operations.

Part 2.14.4.2: Responsibilities

To alleviate damage, the following action is to be taken immediately a fuel or oil spillage occurs:

- The company concerned shall neutralise the spillage.

Costs of repairs of pavement damage caused by accidental or negligent spillage will be recovered from the company or persons concerned.

Fair wear and tear assessments involving small spillages associated with normal aircraft servicing operations where the resultant pavement damage is minor, may be borne by the Council.

Operator action is to include:

- When spillages occur, the operating company shall take immediate action to remove the deleterious fluid from the pavement, or request assistance from Council staff (Aerodrome Reporting Officer).
- Investigate the cause of spillage and institute action to correct any inefficient procedures, which may have contributed to the spillage.
- Promptly report details of the spillage to the Director of Asset Services.

Aerodrome Management action is to include:

- Council engineering / technical staff or appointed consultant will inspect and assess the damage and advise the Chief Executive Officer or delegated officer in writing of the circumstances together with the estimated cost of repairs including neutralisation costs if applicable.
- The Chief Executive Officer or delegated officer shall, after a study of all the circumstances relevant to the incident, decide if cost recovery action is justified.

Part 2.14.5: Names and telephone contacts

The names and telephone numbers of the Chief Executive Officer Aerodrome Manager and the Reporting Officer are provided in **INTRO 3: Master Contact List** .

Amendment Record
2 August 2019

Part 2.15: Protection of Radar and Navigational Aids

Part 2.15.1: The arrangements for the control of activities near radar and navigational aid installations

A Non-Directional Beacon (NDB) is provided at the Boulia Aerodrome. It is owned and maintained by Airservices Australia.

NDB

- Operating Frequency: BOU 398 KHZ
- Position: S 22°54.9' E 139°54.4'
- Range: 75 nautical miles (HN 75)

Part 2.15.1.1: Control of Activities near installations

Any new structures / buildings which may affect navigational aids will be referred to Airservices Australia (AA) for approval.

The Aerodrome Manager will liaise with AA to ensure that any new structures / buildings adjacent to or on the aerodrome will not infringe the minimum siting criteria requirements for individual aids or compromise the performance of existing facilities.

- Details of the minimum siting criteria are contained in the Manual of Standards Part 139, Aerodromes 11.1.5.4

Part 2.15.1.1.1: Vehicular Movements

Vehicular movements shall be conducted in strict accordance with the clearances set out in MOS 139 Chapter 11.1.13.3 Vehicular movements.

NDB: With the exception of authorised vehicles no vehicle shall approach the antenna within a distance closer than 60m.

Part 2.15.1.1.2: Restricted Area

Restricted areas around the facilities, as set out in MOS 139 Chapter 11.1.13.5 restricted area, will be observed.

NDB: No special requirements, where necessary fencing should be provided to keep cattle and horses clear of the earth-mat area.

Part 2.15.2: The arrangements, made in consultation with the provider of the navigational aid installation, for supply and installation of signs warning of hazardous microwave radiation

Signs warning of the hazardous microwave radiation emitted by the navigational aids will be provided and erected by Airservices Australia. Council will ensure that the signs are secured and will report any defects or required replacements to AA.

Part 2.15.3: The arrangements for ground maintenance near these installations

Council provides the maintenance around the navigational facilities under an agreement reached with Airservices Australia.

Maintenance of the area is done to the standards as set out in MOS 139 – Aerodromes, Chapter 11.1.13.6 site maintenance.

NDB: No special requirements other than to keep undergrowth from exceeding a height of 0.6m and to maintain a neat appearance of the site. Ploughing is not permitted over any portion of the earth-mat area.

- Grazing of sheep is permissible but cattle and horses must be kept clear.

Part 2.15.4: Names and telephone numbers

The names and telephone numbers of the Chief Executive Officer, Aerodrome Manager and the Aerodrome Reporting Officer, are provided in **INTRO 3: Master Contact List** .

Amendment Record
2 August 2019

Part 2.16: Low Visibility Operations

Part 2.16.1: The arrangements for measuring visibility along a runway and passing the information to air traffic control

As Air Traffic Control (ATC) is not provided at Boulia Aerodrome, low visibility observations or Runway Visual Range (RVR) assessments & observations are not provided.

Part 2.16.2: The names and roles of the persons who are responsible for managing low visibility operations, and the telephone numbers for contacting during and after work hours

The names and telephone numbers of the Chief Executive Officer, Aerodrome Manager and the Aerodrome Reporting Officer are provided in **INTRO 3: Master Contact List**.

Amendment Record
2 August 2019

Part 2.17: Aerodrome Radio Communication Services

Part 2.17.1: CASA Requirements

If CASA considers it necessary in the interests of the safety of air navigation, CASA may, in writing, give directions to the aerodrome operator about collecting:

- Statistics about;
  - the types of aircraft using the aerodrome; and
  - the times of aircraft movements at the aerodrome; and
- Other information specified by CASA in the direction that is relevant to deciding what radio communication services or air traffic services should be provided at the aerodrome.

Part 2.17.2: Frequency Response System

Frequency Confirmation System (CASR139.380):

- A ground radio system at an aerodrome that, if it receives a transmission from an aircraft on the radio frequency for the aerodrome, sends a signal or message to the aircraft confirming that the transmission has been received.

Non-controlled aerodrome:

- means an aerodrome at which an air traffic control service is not operating.

Aerodromes that must have a frequency confirmation system:

- The operator of a non-controlled aerodrome must ensure that there is a frequency confirmation system for the aerodrome if:
  - the aerodrome is a “Certified” or “Registered”; or
  - a military aerodrome
- The frequency confirmation system must comply with the standards for frequency confirmation systems set out in the Manual of Standards.

AFRU (Aerodrome Frequency Response Unit):

- An AFRU is installed at Boulia Aerodrome and operates on the CTAF frequency 126.70MHz

Part 2.17.3: Air / Ground Radio Service

Part 2.17.3.1: Definitions

AAIS: (automatic aerodrome information service) means the service that provides current, routine information for aircraft arriving at or departing from an aerodrome by means of repetitive broadcasts on a discrete frequency.

Air / ground radio service means an aerodrome radio information service that provides aircraft operating in the CTAF of an aerodrome with the services and information specified in section 14.2 of the Manual of Standards.

Certified air / ground radio service or CA/GRS: in relation to an aerodrome, means an air / ground radio service for the aerodrome certified in accordance with CASR139 sub-regulation 139.410.

Part 2.17.3.2: An Air / Ground Service is not provided on the aerodrome.

Part 2.17.4: Aerodrome Frequency Response Unit (AFRU)

The AFRU installed on the aerodrome is an electronic, ground based, aviation safety enhancement device, intended for use on the CTAF frequency at Boulia Aerodrome.

- It is a combined AFRU + PAL unit

It is essentially an internally controlled VHF transceiver with a pre-recorded message transmission capability. AFRU transmissions are triggered when the AFRU receiver detects aircraft transmissions on the correct aerodrome frequency.

- This response capability is intended to reduce the incidence of incorrect VHF radio frequency channel selection by pilots.

If the pilot is aware of the presence of an AFRU in the CTAF area, the AFRU will assist in alerting pilots to these situations by providing an automatic transmission on the aerodrome frequency to confirm the receipt of a transmission by an aircraft within radio range.

The confirming AFRU transmission will be either a short pre-recorded voice message (e.g. aerodrome name followed by the CTAF frequency, or a short (300 millisecond) tone burst, depending upon radio transmission activity by aircraft operating on that frequency in the preceding 5 minutes, and the form of the pilot's transmission to the AFRU.

Part 2.17.4.1: Maintenance of the AFRU

The AFRU is maintained in accordance with the requirement of Manual of Standards Part 139 - Aerodromes, Section 14.3: Frequency Confirmation System.

The annual check of the system is carried out by Airservices Australia using section on the annual electrical inspection form provided.

- Or the form on the next page can be used.
  - The result can be transcribed to the form.

Part 2.17.5: Names and telephone contacts

The names and telephone numbers of the Chief Executive Officer, Aerodrome Manager and the Aerodrome Reporting Officer are provided in **INTRO 3: Master Contact List**

Amendment Record
2 August 2019

Annual Technical Inspection of AFRU (Aerodrome Frequency Response Unit)				
MOS Reference	Item to be Checked		Results	Remarks
14.3.5.2	Frequency Coverage	Range		
14.3.5.4	Channel Separation	kHz		
14.3.5.7	Carrier Frequency Stability	Reading		
14.3.5.8	Receiver Stability	Reading		
14.3.5.9	Receiver Selectivity	Reading		
14.3.5.10	Transmitter Radiated Power Output	Reading		
14.3.5.12	Transmitter Recorded Voice Message	Length		
13.3.5.14	Transmitter Beep-back Tone	Hz		
		Tone Burst		
Repairs Carried out and parts supplied				
Licensed Electrician			Registration Number	
Print Name				
Signed			Date	

Part 2.18: Pavement Concessions

Part 2.18.1: Pavement Ratings

The pavement ratings for Boulia Aerodrome is the same for the:

- RWY 14/32, taxiway and the RPT apron.
- RWY 14/32 – PCN 6 / F / A / 730 (106 PSI) / U.

Part 2.18.2: Pavement Concessions

The requirement for a pavement concession arises if the Aircraft Classification Number (ACN) is greater than the Pavement Classification Number (PCN) for the runway, taxiway and apron, as published above, or if the aircraft tyre pressure is higher than the rated tyre pressure.

Requests for pavement concessions are to be directed to the:

Chief Executive Officer
Boulia Shire Council
Herbert Street
BOULIA QLD 4829

Email: ceo@boulia.qld.gov.au

+61 7 4746 3188 (T)

The request will be considered by the Aerodrome Manager, delegated officer or consultant based on established ACN / PCN practices.

A register of all pavement concession requests and approvals is held by the Aerodrome Manager.

Part 2.18.3: Names and telephone contacts

The names and telephone numbers of the Chief Executive Officer, Aerodrome Manager and the Aerodrome Reporting Officer are provided in **INTRO 3: Master Contact List** .

Amendment Record
2 August 2019

Boulia Aerodrome Pavement Concession Form

Address: **Chief Executive Officer**
Boulia Shire Council
Herbert Street
BOULIA QLD 4829

Aerodrome Pavement Rating:

RWY 14/32: PCN 6 / F / A / 730 (106 PSI) / U

Aircraft Operator:

Telephone number	
FAX	

Pavement Concession for:

Aircraft type	
Registration	
Runway	
Tyre pressure	
Mass	

Number of movements ☐

Priority: **Routine** ☐ **Urgent** ☐

(or delegate) **Approved** ☐ **Not approved** ☐

Modified Tyre Pressure ☐ **ACN** ☐

Subject to these conditons: _____

_____

_____

_____

_____

Special Conditions:

1. **Parking not to conflict with RPT parking.**
2. **Maximum radius turns only.**
3. **Turning on runway at nodes only.**

Damage Report required

Yes ☐ **No** ☐

Summary:

_____

_____

_____

_____

_____

Name: _____ **Designation:** _____

Signed: _____ **Date:** _____

PART 3: PARTICULARS OF AERODROME TO BE PUBLISHED IN AIP

Part 3.1: General Information

The following information is provided for each runway at the aerodrome in a similar layout to that published in ERSA:

Aerodrome Name:	Boulia
Abbreviation:	YBOU
State:	Queensland
Aerodrome Reference Point:	22° 54.8' S – 139° 54.0' E
World Aeronautical Chart:	WAC 3233
Aerodrome Elevation (AMSL):	542ft
Aerodrome Charges:	All ACFT
Type A Chart:	Not provided
Aerodrome Beacon:	Not provided
CTAF:	126.70MHz (confirmation provided by AFRU).
Aerodrome Operator:	Boulia Shire Council 18 Herbert Street BOULIA QLD 4829 +61 7 4647 3188 (T) +61 0427 163 773 (Aerodrome Reporting Officer)

Part 3.2: Information for Runways

The following information is provided for each runway at the aerodrome in a similar layout to that published in ERSA:

Runway 14/32

- Runway bearing: 143 degrees magnetic.
- Runway reference code: Code 3 – RNAV (GNSS) instrument non precision
- Runway dimensions: Length 1801m x 30m in width.
- Shoulders: None
- Runway slope: Level
- Length of clearway: 60m each end
- Length of stopway: Not provided
- Dimensions of runway strip: Length 1921m
- Width 90m
- Graded
- Pavement surface / strength: PCN 6 / F / A / 730 (106PSI) / U
  Sealed

	TORA	TODA	ASDA	LDA
Declared distances:				
RWY 14:	1801	1861	1801	1801
RWY 32:	1801	1861	1801	1801

- RL of runway end / threshold: THR 14 – 165.20m (542FT)
  THR 32 – 162.48m (533FT)
- Aerodrome obstacle chart; Type A: Not applicable
- Supplementary Take-Off Distances
  - Checked annually and amended as required.
  - Details of changes to the current published Supplementary Take-Off Distances (STODA's) will be provided in the mandatory annual Aerodrome Technical Inspection Report.

Part 3.3: Information on Visual Aid Systems

The following information about visual aid systems at the aerodrome is provided:

Runway Lighting (LIRL):	Provided on RWY 14/32
Approach lighting:	Not provided
PAPI - left / right side:	Not provided
Illuminated Wind Indicator:	Provided
Hazard Lighting (LIOL):	None provided
PAL + AFRU:	Provided on 117.60MHz
AFRU + PAL:	Provided on CTAF 126.70 MHz
Stand-by power:	Not provided

Part 3.4: Information for Taxiways

The following local information about the aerodrome is provided:

A Regular Public Transport (RPT) taxiway is provided off RWY 14/32:

- Location: East of RWY 18/36
- Suitability: All code C ACFT with a wheelbase < 18m
- Width: 15m
- Shoulders: Not provided
- Graded TWS width: 12.5m provided to each side
- Total TWS width: 26m provided to each side
- Pavement surface / strength: Similar to RWY 14/32

A General Aviation (GA) taxiway is provided off the RPT taxiway:

- Location: South of RPT taxiway
- Suitability: All code B ACFT
- Width: 7.5m
- Shoulders: None
- Graded RWS width: 11m provided to each side
- Total RWS width: 16.5m provided to each side
- Pavement surface / strength: Sealed
  Unrated
  Suitable for ACFT < 5700kg

Part 3.5: Local Information

The following local information about the aerodrome is provided:

The hours of operation: H24 - non-ATC aerodrome.
The available ground services:

- Boulia Council provides AVGAS (bowser) and Jet A1 (drums PN REQ)
  - Phone +61 7 4746 3188 (T)
    +61 7 4746 3176 (T – A/H)
    +61 427 163 773 (M)

Any special procedures: Nil
Any local precautions: Possible bird hazard.

Part 3.6: Aerodrome Radio Communication Services

The following information about the aerodrome is provided:

The aerodrome is non-controlled:	No ATC provided
Frequency Confirmation System:	A "beep back" is provided on the CTAF
PAL + AFRU:	Available for RWY 14/32 - PAL 126.70 MHz
AFRU + PAL:	Provided on CTAF 126.70 MHz Located in control box inside terminal Serviced as stated in Part 2.3 Unserviceability reported as stated in Part 2.3
Stand-by power:	Not provided

DEFINITIONS

Aerodrome

A defined area on land or water (including any buildings, installations, and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aerodrome beacon

Aeronautical beacon used to indicate the location of an aerodrome from the air.

Aerodrome elevation

The elevation of the highest point of the landing area.

Aerodrome Frequency Response Unit (AFRU)

A third-party operated radio communication service operating on the CTAF frequency at non-controlled aerodromes.

Aerodrome reference point (ARP)

The designated geographical location of an aerodrome.

Aerodrome reference temperature

The monthly mean of the maximum daily temperature for the hottest month of the year (the hottest month being that which has the highest monthly mean temperature).

Aerodrome traffic density

This means the number of aircraft movements in the mean busy hour, and is divided into the following categories:

(i) Light – not greater than 15 movements per runway or typically less than 20 total aerodrome movements;
(ii) Medium – 16 to 25 movements per runway or typically between 20 to 35 total aerodrome movements;
(iii) Heavy – 26 or more movements per runway or typically more than 35 aerodrome movements.

1: The number of movements in the mean busy hour is the arithmetic mean over the year of the number of movements in the daily busiest hour.
2: Either a take-off or a landing constitutes a movement.

Aerodrome works

Construction or maintenance works carried out at an aerodrome, on or adjacent to the movement area, that may create obstacles or restrict the normal take-off and landing of aircraft.

Aeronautical beacon

An aeronautical ground light visible at all azimuths, either continuously or intermittently, to designate a particular point on the surface of the earth.

Aeronautical ground light

Any light specially provided as an aid to air navigation, other than a light displayed on an aircraft.

Aeronautical study

An investigation of a problem concerned with some phase of flight and aimed at identifying possible solutions and selecting the one most acceptable from the point of view of flight safety.

Aeroplane reference field length

The minimum field length required for take-off at maximum certificated take-off mass, sea level, standard atmospheric conditions, still air and zero runway slope, as shown in the appropriate aeroplane flight manual prescribed by the certificating authority or equivalent data from the aeroplane manufacturer. Field length means balanced field length for aeroplanes, if applicable, or take-off distance in other cases.

Aircraft classification number (ACN)

A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category.

Aircraft parking position

A designated area on an apron intended to be used for parking an aircraft. Also known as an aircraft stand.

Air Operator's Certificate (AOC)

Issued to operators carrying out Public Transport, Charter, Aerial Work, Flying School, Agricultural Work and Helicopter operations on a commercial basis.

Aeroplane Landing Area (ALA)

Or Aircraft Landing Area or Authorised Landing Area is an aerodrome for use only by aircraft below 5700kg MTOM (Maximum Take Off Mass) with a maximum seating capacity of 10 passengers.

Airport

An aerodrome at which the facilities have, in the opinion of the CASA, been sufficiently developed to be of importance to civil aviation.

Airservices Australia (AA)

An aviation body established under the Air Services Act 1995, separate from the CASA, providing ATC, flight service, briefing and NOTAM service and so on.

Airside

The movement area of an aerodrome, adjacent terrain and buildings or portions thereof, access of which is controlled.

Approach and Take-Off Climb Surfaces

Defined portions of the OLS of the ground, quadrilateral in shape, at the end of the runway strip.

Apron

A defined area on a land aerodrome intended to accommodate aircraft for the purposes of loading or unloading passengers, mail or cargo, fuelling, parking, or maintenance.

Apron management service

A service provided to regulate the activities and the movement of aircraft and vehicles on the apron.

Balanced field length

A field length where the distance to accelerate and stop is equal to the take-off distance of an aeroplane experiencing an engine failure at the critical engine failure recognition speed (V1).

Barrette

Three or more aeronautical ground lights closely spaced in a transverse line so that from a distance they appear as a short bar of light.

Capacity discharge light

A lamp in which high-intensity flashes of extremely short duration are produced by the discharge of electricity at high voltage through a gas enclosed in a tube.

Certified aerodrome

Aerodromes that are used in any air transport operations with charter operations and / or regular public transport operations by aircraft certified to carry more than 30 passengers or which have a payload of more than 3,400 kg are required to be certified.

Civil Aviation Order (CAO)

A Civil Aviation Order is a mandatory instruction issued by CASA (Civil Aviation Safety Authority).

Clearway

A defined area at the end of the take-off run available on the ground or water under the control of the aerodrome operator, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.

Conical Surface

Part of the OLS which slopes upwards and outwards from the edge of the inner horizontal surface to a specified height above the inner horizontal surface.

Critical aeroplane

The aeroplane or aeroplanes identified from among the aeroplanes the aerodrome is intended to serve as having the most demanding operational requirements with respect to the determination of movement area dimensions, pavement bearing strength and other physical characteristics in the design of aerodromes.

Critical obstacle

The obstacle within the take-off climb area and/or the approach area, which subtends the greatest vertical angle when measured from the inner edge of the take-off climb surface and/or the approach surface.

Crosswind component

The surface wind component at right angles to the runway centre line.

Declared distances:

1.	Take-off run available (TORA):	The length of runway declared available and suitable for the ground run of an aeroplane taking off.
2.	Take-off distances available (TODA):	The length of the take-off run available plus the length of the clearway, if provided.
3.	Accelerate-stop distance available (ASDA):	The length of the take-off run available plus the length of the stopway, if provided.
4.	Landing distance available (LDA):	The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

Dependent parallel approaches

Simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway centre lines are prescribed.

Displaced threshold

A threshold not located at the extremity of a runway.

Drug and Alcohol Management Plan (DAMP)

A mandatory requirement for all "Registered" and "Certified" aerodromes.

Effective intensity

The effective intensity of a flashing light is equal to the intensity of a fixed light of the same colour, which will produce the same visual range under identical conditions of observation.

Elevation

The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from the mean sea level.

Fixed light

A light having constant luminous intensity when observed from a fixed point.

Foreign Object Debris (FOD)

Rubbish, stones, tools and aircraft component and so on, left behind on aircraft pavements can damage aircraft engines.

Frangible object

An object of low mass designed to break, distort or yield on impact so as to present the minimum hazard to aircraft.

Hazard beacon

An aeronautical beacon used to designate a danger to air navigation.

Holding bay

A defined area where aircraft can be held, or bypassed, to facilitate efficient surface movement of aircraft.

Inner Horizontal Surface

Part of the OLS being the horizontal plane 45m above the reference elevation datum extending to the lower edge / start of the conical surface.

Instrument approach procedures

The procedures to be followed by aircraft in letting down from cruising level and landing at an aerodrome. A series of predetermined manoeuvres by reference to flight instruments for the orderly transfer of an aircraft from the beginning of the initial approach to a landing, or to a point from which a landing may be made.

Instrument meteorological conditions (IMC)

Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minimum specified for visual meteorological conditions.

Instrument runway

One of the following types of runway intended for the operation of aircraft using instrument approach procedures:

1.	Non-precision approach runway:	An instrument runway served by visual aids and a radio aid providing at least directional guidance adequate for a straight-in approach with a published minimum descent altitude, also known as landing minima for a particular radio aid or a combination of radio aids.
2.	Precision approach runway, category I:	An instrument runway served by ILS or MLS and visual aids intended for operations with a decision height not lower than 60m (200ft) and either a visibility not less than 800m or a runway visual range not less than 550m.
3.	Precision approach runway, category II:	An instrument runway served by ILS or MLS and visual aids intended for operations with a decision height lower than 60m (200ft) but not lower than 30m (100ft) and a runway visual range not less than 350m.
4.	Precision approach runway, category III:	An instrument runway served by ILS or MLS to and along the surface of the runway; and
	a.	Intended for operations with a decision height lower than 30 m (100 ft), or no decision height and a runway visual range not less than 200m.
	b.	Intended for operations with a decision height lower than 15m (50ft), or no decision height and a runway visual range less than 200m but not less than 50m.
	c.	Intended for operations with no decision height and no runway visual range limitations.

Note: Visual aids need not necessarily be matched to the scale of non-visual aids provided. The criterion for the selection of visual aids is the conditions in which operations are intended to be conducted.

Intermediate holding position

A designated holding position intended for traffic control at which taxiing aircraft and vehicles shall stop and hold until further clearance to proceed, when so instructed by the aerodrome control tower.

Joint user aerodromes

An aerodrome under the control of a part of the Defence Force in respect of which an arrangement under Section 20 of the appropriate Act is in force.

Landing area

That part of a movement area intended for the landing or take-off of aircraft.

Landing Distance Available (LDA)

The length of runway which is declared to be available and suitable for the ground landing run of an aeroplane. The landing distance available commences at the threshold and in most cases corresponds to the physical length of the runway pavement:

- The threshold may be displaced from the runway end of the pavement when it is considered necessary to make a corresponding displacement of the approach area and surface by reason of obstructions in the approach path to the runway.

Landside

That portion of an aerodrome not designated "Air Side" and to which the general public has free access.

Light failure

A light shall be deemed to be unserviceable when the main beam average intensity is less than 50% of the value specified in the appropriate figure showing the Isocandela diagram. For light units where the designed main beam average intensity is above the value shown in the isocandela diagram, the 50% value shall be related to that design value. (When assessing the main beam, specified angles of beam elevation, toe-in and beam spread shall be taken into consideration).

Lighting system reliability

The probability that the complete installation operates within the specified tolerances and that the system is operationally usable.

Manoeuvring area

That part of the aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

Marker

An object displayed above ground level in order to indicate an obstacle or delineate a boundary.

Marking/s

A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.

Mass

The terms mass and weight used in this MOS139 have the same meaning.

MAUM

Maximum all up mass.

MTOW

Maximum take-off weight.

Movement

Either a take-off or a landing by an aircraft.

Movement area

That part of the aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

Navigational Aid

Electronic and electrical equipment which enables enroute and terminating guidance to pilots, such as Distance Measuring Equipment (DME), Instrument Landing Systems (ILS), Non-Directional Beacons (NDB) and VHF Omni Range (VOR).

Near parallel runways

Non-intersecting runways whose extended centre lines have an angle of convergence/divergence of 15 degrees or less.

Non-instrument runway

A runway intended for the operation of aircraft using visual approach procedures.

Non-precision approach runway

See instrument runway.

Notices to airmen (NOTAMs)

A notice issued by the NOTAM office containing information or instruction concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to persons concerned with flight operations.

Obstacles

All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.

Obstacle free zone (OFZ)

The airspace above the inner approach surface, inner transitional surfaces, balked landing surfaces, and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangible mounted one required for air navigation purposes.

Obstacle limitation surfaces (OLS)

A series of planes associated with each runway at an aerodrome that defines the desirable limits to which objects may project into the airspace around the aerodrome so that aircraft operations at the aerodrome may be conducted safely.

Obstruction

Any natural or man-made object which projects above the aerodrome clearance surfaces and constitutes an obstruction or a potential hazard to aircraft moving in the navigable air space in the vicinity of the aerodrome.

Passenger Transport

A term used for both RPT and Charter operations involved in passenger transportation.

Pavement classification number (PCN)

A number expressing the bearing strength of a pavement for unrestricted operations by aircraft with ACN value less than or equal to the PCN.

Precision approach runway

See instrument runway.

Primary runway(s)

Runway(s) used in preference to others whenever conditions permit.

Radio aids

Also known as non-visual aids. These aids may consist of NDB, VOR, VOR/DME or GPS.

Registered aerodrome

Aerodromes that are used in any air transport operations such as charter operations and / or regular public transport operations by aircraft certified to carry more than 9 passengers but not more than 30 passengers are required to be registered.

Reporting Officer

A Reporting Officer has been trained to the standards detailed in the MOS139, Chapter 10. The Reporting Officer is commonly employed by Aerodrome Management to carry out the daily functions airside (such as serviceability inspections, works safety duties, repair and maintenance) of the aerodrome to keep the aerodrome serviceable.

The many duties performed may have them employed under many titles such as Safety Officer but essentially, all employees regardless of their education must be formerly trained for airside duties which accredits them as a Reporting / Safety Officer.

Runway

A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

Runway end safety area (RESA)

An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.

Runway holding position

A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorised by the aerodrome control tower.

Runway guard light

A light system intended to caution pilots or vehicle drivers that they are about to enter an active runway.

Runway strip

A defined area including the runway and stopway, if provided, intended:
1. To reduce the risk of damage to aircraft running off a runway; and
2. To protect aircraft flying over it during take-off or landing operations.

Runway visual range (RVR)

The range over which the pilot of an aircraft on the centre line of the runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

Shoulders

An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.

Signal circle

An area on an aerodrome used for the display of ground signals.

Stopway

A defined rectangular area on the ground at the end of the take-off run available
prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.

Switch-over time (light)

The time required for the actual intensity of a light measured in a given direction to fall from 50% and recover to 50% during a power supply changeover, when the light is being operated at intensities of 25% or above.

Take-off runway

A runway intended for take-off only.

Taxi Holding Point

A marked (and, as appropriate, lit) position on a taxiway at its intersection with a runway or another taxiway, at which a taxiing aircraft or a vehicle may be required to hold (that is, stop temporarily), in order to be sufficiently clear of the runway or other taxiway so that aircraft may operate safely.

Taxiway

A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome from another, including:

1.	Aircraft parking position taxilane:	A portion of an apron designated as a taxiway and intended to provide access to aircraft parking positions only
2.	Apron taxiway:	A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron
3.	Rapid exit taxiway:	A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.

Taxiway intersection

A junction of two or more taxiways.

Taxiway strip

An area including a taxiway intended to protect an aircraft operating on the taxiway and to reduce the risk of damage to an aircraft accidentally running off the taxiway.

Threshold

The beginning of that portion of the runway usable for landing.

Time limited works

Aerodrome works that may be carried out if normal aircraft operations are not disrupted and the movement area can be restored to normal safety standards in not more than 30 minutes.

Touchdown zone

The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway.

Transitional Surface

Part of the OLS being an inclined plane associated with the runway strip and the approach surfaces.

Usability factor

The percentage of time during which the use of a runway or system of runways is not restricted because of crosswind component.

Unserviceable Area

A portion of the movement area not available for aircraft use because of the physical condition of the surface, or because of any obstruction on the area.

Visibility

The ability, as determined by atmospheric conditions and expressed in units of distance, to see and identify prominent unlit objects by day and prominent lit objects by night.

Visual aids

May consist of T-VASIS, PAPI, runway markings and runway lights. Visual meteorological conditions (VMC) Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal or better than specified minima.

Weight

The terms weight and mass used in this MOS 139 have the same meaning.

Wind Indicator

A free-swinging windsock mounted on a pole to relay information on the ground strength and direction of prevailing wind.

ABBREVIATIONS

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
	ABBREVIATION	DEFINITION (* - can be used in NOTAM)		ABBREVIATION	DEFINITION (* - can be used in NOTAM)
	AA	Airservices Australia	*	AT-VASIS	Abbreviated 'T' Visual Approach Slope Indicator System
*	AAL	Above Aerodrome level	*	A-VASIS	Abbreviated Visual Approach Slope Indicator System
*	ABM	Abeam	*	ABM	Abeam
*	ABN	Aerodrome beacon	*	ABT	About
*	ABT	About	*	AAL	Above Aerodrome level
	AC	Advisory Circular	*	AGL	Above ground level
*	ACFT	Aircraft	*	AMSL	Above mean sea level
*	ACN	Aircraft classification number	*	ASDA	Accelerate-stop distance available
*	ACPT	Accept or accepted	*	ACPT	Accept or accepted
*	ACT	Active / activated / activity	*	ACT	Active / activated / activity
*	AD	Aerodrome	*	ATA	Actual time of arrival
*	ADDGM	Aerodrome Diagrams	*	ATD	Actual time of departure
*	ADDN	Addition or additional	*	ADDN	Addition or additional
*	ADJ	Adjacent	*	ADJ	Adjacent
*	ADZ	Advise	*	ADZ	Advise
	AEC	Aerodrome Emergency Committee		AC	Advisory Circular
	AEP	Aerodrome Emergency Plan	*	AD	Aerodrome
*	AFM	Yes or affirm or affirmative or that is correct		ARO	Aerodrome Reporting Officer
	AFRU	Aerodrome Frequency Response Unit	*	TWR	Aerodrome control or aerodrome control tower
*	AFT	After (time or place)	*	ADDGM	Aerodrome Diagrams
*	AGL	Above ground level		AEC	Aerodrome Emergency Committee
*	AGN	Again		AEP	Aerodrome Emergency Plan
*	AIP	Aeronautical Information Publication		AFRU	Aerodrome Frequency Response Unit
*	AIS	Aeronautical Information Service	*	AOC	Aerodrome obstruction chart
*	ALA	Aeroplane landing area (previously known as Authorised landing area)	*	ARP	Aerodrome reference point
*	ALS	Approach lighting system		ARFFS	Aerodrome Rescue and Fire Fighting Service
*	ALT	Altitude		ASI	Aerodrome Safety Inspection/s
*	ALTN	Alternate (Aerodrome)		ATI	Aerodrome Technical Inspection/s
*	ALTN	Alternate or alternating (light alternates in colour)	*	AWIS	Aerodrome weather information service

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
	ABBREVIATION	DEFINITION (* - can be used in NOTAM)		ABBREVIATION	DEFINITION (* - can be used in NOTAM)
	AMD	Amend(ed)	*	AIC	Aeronautical Information Circular
	AMDT	Amendment (AIP Amendment)		AIP	Aeronautical Information Publication
	AMSL	Above mean sea level		AIS	Aeronautical Information Service
	AO	Audit Observation		ALA	Aeroplane landing area (previously known as Authorised landing area)
	AOC	Aerodrome obstruction chart		AFT	After....(time or place)
	AP	Airport		AGN	Again
	APCH	Approach		ATC	Air Traffic Control (in general)
	APCHS	Approach Surface		ATS	Air traffic services
	APR	April		ACFT	Aircraft
	APRX	Approximate(ly)		ACN	Aircraft classification number
	ARFFS	Aerodrome Rescue and Fire Fighting Service		AP	Airport
	ARNG	Arrange		ASO	Airport Safety Officer
	ARO	Aerodrome Reporting Officer		AA	Airservices Australia
	ARP	Aerodrome reference point		AWY	Airway
	ARR	Arrive or arrival		AUW	All-up weight
	ASAP	As soon as possible		ALTN	Alternate (Aerodrome)
	ASDA	Accelerate-stop distance available		ALTN	Alternate or alternating (light alternates in colour)
	ASI	Aerodrome Safety Inspection/s		QNH	Altimeter sub-scale setting to obtain elevation or altitude
	ASIC	Aviation Security Identification Card		ALT	Altitude
	ASO	Airport Safety Officer		AMD	Amend(ed)
	ASPH	Asphalt		AMDT	Amendment (AIP Amendment)
	ASSW	Associated with		PANS-OPS	Another airspace surface but outside the OLS (refer to PANS-OPS, Doc 8168, Volume 2)
	ATA	Actual time of arrival		APCH	Approach
	ATC	Air Traffic Control (in general)		ALS	Approach lighting system
	ATD	Actual time of departure		APCHS	Approach Surface
	ATI	Aerodrome Technical Inspection/s		APRX	Approximate(ly)
	ATIS	Automatic terminal information service		APR	April
	ATS	Air traffic services		ARNG	Arrange
	ATSB	Australian Transport Safety Bureau		ARR	Arrive or arrival
	ATTN	Attention		ASAP	As soon as possible

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
	AT-VASIS	Abbreviated 'T' Visual Approach Slope Indicator System		ASPH	Asphalt
	AUTH	Authorised or authorisation		ASSW	Associated with
	AUW	All-up weight		ATTN	Attention
	AUX	Auxiliary		AO	Audit Observation
	A-VASIS	Abbreviated Visual Approach Slope Indicator System		ATSB	Australian Transport Safety Bureau
	AVBL	Available		AUTH	Authorised or authorisation
	AVG	Average		ATIS	Automatic terminal information service
	AVGAS	Aviation gasoline		AUX	Auxiliary
	AVTUR	Aviation Turpentine		AVBL	Available
	AWIS	Aerodrome weather information service		AVG	Average
	AWY	Airway		ASIC	Aviation Security Identification Card
	AZM	Azimuth		AVTUR	Aviation Turpentine
	B	Blue		AZM	Azimuth
	BAHMP	Bird and Animal Hazard Management Plan		BLS	Baulked Landing Surface
	BCN	Beacon (aeronautical ground light)		BCN	Beacon (aeronautical ground light)
	BDRY	Boundary		BRG	Bearing
	BECMG	Becoming		BECMG	Becoming
	BFR	Before		BFR	Before
	BKN	Broken		BLW	Below
	BLDG	Building		BTN	Between
	BLS	Baulked Landing Surface		BAHMP	Bird and Animal Hazard Management Plan
	BLW	Below		BTB	Bitumen Treated Base
	BR	Mist		B	Blue
	BRG	Bearing		BDRY	Boundary
	BRKG	Braking		BRKG	Braking
	BTB	Bitumen Treated Base		BKN	Broken
	BTN	Between		BLDG	Building
*	C	Celsius (Centigrade)	*	VIA	By way of..
*	C	Centre (runway)	*	CLBG	Calibration
*	C/L	Centreline	*	CSGN	Callsign (used to request a callsign)
	CAAP	Civil Aviation Advisory Publication	*	CAT	Category
	CAO	Civil Aviation Order	*	CTN	Caution
	CASA	Civil Aviation Safety Authority	*	C	Celsius (Centigrade)
	CASR139	Civil Aviation Safety Regulation 1998 Part 139 Aerodromes	*	CM	Centimetre
*	CAT	Category	*	C	Centre (runway)

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
	CCTV	Closed Circuit Television/s	*	C/L	Centreline
*	CF	Change frequency to...	*	CF	Change frequency to...
*	CFM	Confirm(ing) or I confirm	*	CH	Channel
*	CHG	Modification	*	CK	Check
*	CHTR	Non-scheduled commercial transport	*	CIV	Civil
*	CIT	Near or over large town		CAO	Civil Aviation Order
*	CIV	Civil		CASA	Civil Aviation Safety Authority
*	CK	Check		CASR139	Civil Aviation Safety Regulation 1998 Part 139 Aerodromes
*	CLBG	Calibration	*	CLR	Clear cleared to clearance
*	CLR	Clear cleared to clearance	*	CWY	Clearway
*	CLSD	Close or closed or closing	*	CLSD	Close or closed or closing
*	CM	Centimetre		CCTV	Closed Circuit Television/s
*	CMPL	Completion or completed or complete	*	CN	Code number (runway)
*	CMSD	Commissioned	*	CMSD	Commissioned
*	CN	Code number (runway)	*	CTAF	Common Traffic Advisory Frequency
*	CONC	Concrete	*	COM	Communications
*	COND	Condition	*	CMPL	Completion or completed or complete
*	CONS	Continuous(ly)	*	CONC	Concrete
*	CONST	Construction or constructed	*	COND	Condition
*	CONT	Continue(s) or continued	*	CFM	Confirm(ing) or I confirm
*	COR	Correction or correct or corrected	*	COS	Conical surface
*	COS	Conical surface		CS	Conical Surface
*	COV	Cover or covered or covering	*	CONST	Construction or constructed
	CS	Conical Surface	*	CTC	Contact
*	CSGN	Callsign (used to request a callsign)	*	CONT	Continue(s) or continued
	CTAF(R)	Common Traffic Advisory Frequency (Radio mandatory)	*	CONS	Continuous(ly)
*	CTC	Contact	*	UTC	Co-ordinated Universal Time
*	CTN	Caution	*	COR	Correction or correct or corrected
*	CUST	Customs	*	COV	Cover or covered or covering
*	CWY	Clearway	*	X	Cross
*	DAP	Departure and Approach procedures	*	XBAR	Crossbar (of approach lighting system)
*	DCMSD	Decommissioned	*	XNG	Crossing
*	DCT	Direct	*	CUST	Customs
*	DEG	Degrees	*	DNG	Danger or dangerous
*	DEP	Depart or departure	*	DCMSD	Decommissioned
*	DEST	Destination	*	DEG	Degrees

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	DEV	Deviation or deviated	*	DLA	Delay or delayed
*	DISP	Displaced	*	DEP	Depart or departure
	DISPLAN	Disaster Plan		DITRDLG	Department of Infrastructure Regional Development and Cities
*	DIST	Distance	*	DAP	Departure and Approach procedures
	DITRDLG	Department of Infrastructure Regional Development and Cities	*	DPT	Depth
*	DIV	Divert or diverting or diversion	*	DEST	Destination
*	DLA	Delay or delayed	*	DTRT	Deteriorate deteriorating
*	DME	Distance measuring equipment	*	DEV	Deviation or deviated
*	DNG	Danger or dangerous	*	DCT	Direct
*	DOC	Document		DISPLAN	Disaster Plan
*	DOCK	Docking	*	DISP	Displaced
*	DOM	Domestic	*	DIST	Distance
*	DPT	Depth	*	DME	Distance measuring equipment
*	DRG	During	*	DIV	Divert or diverting or diversion
*	DS	Dust storm	*	DOCK	Docking
*	DTRT	Deteriorate deteriorating	*	DOC	Document
*	DU	Dust	*	DOM	Domestic
*	DUR	Duration	*	DVOR	Doppler VOR
*	DVOR	Doppler VOR	*	DUR	Duration
*	E	East or east longitude	*	DRG	During
*	EAT	Expected approach time	*	DU	Dust
*	EB	Eastbound	*	DS	Dust storm
*	ELEV	Elevation	*	ENE	East north-east
*	EMERG	Emergency	*	E	East or east longitude
*	END	Stop-end(related to RVR)	*	ESE	East south-east
*	ENE	East north-east	*	EB	Eastbound
*	ENG	Engine	*	EOL	Effective operational length
*	ENRT	En route	*	ELEV	Elevation
*	EOL	Effective operational length	*	EMERG	Emergency
*	EQPT	Equipment	*	ENRT	En route
*	ERSA	Enroute Supplement Australia (AIP)	*	ENG	Engine
*	ESE	East south-east	*	ERSA	Enroute Supplement Australia (AIP)
*	EST	Estimate or estimated	*	EQPT	Equipment
*	ETA	Estimated/estimating time of arrival	*	EST	Estimate or estimated
*	ETD	Estimated/estimating time of departure	*	ETA	Estimated/estimating time of arrival
*	EV	Every	*	ETD	Estimated/estimating time of departure

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	EXC	Except	*	EV	Every
*	EXER	Exercises or exercising or to exercise	*	EXC	Except
*	EXP	Expect(ed)(ing)	*	EXER	Exercises or exercising or to exercise
*	EXTD	Extend(ed)(ing)	*	EXP	Expect(ed)(ing)
*	FAC	Facility facilities	*	EAT	Expected approach time
*	FAX	Facsimile transmission	*	EXTD	Extend(ed)(ing)
	FCP	Forward Command Post	*	FAC	Facility facilities
	FCS	Frequency Confirmation System	*	FAX	Facsimile transmission
*	FCST	Forecast		FWD	Forward
*	FEB	February	*	FEB	February
*	FG	Fog	*	FT	Feet (dimensional unit)
*	FIS	Flight information service	*	FLD	Field
*	FLD	Field	*	FST	First
*	FLG	Flight	*	FLR	Flares
*	FLR	Flares	*	FLG	Flight
*	FLUC	Fluctuating fluctuation fluctuated	*	FIS	Flight information service
*	FLW	Follow(s) following	*	PLN	Flight plan (domestic)
*	FLY	Fly or flying	*	FS	Flight service (in general)
*	FM	From	*	FSC	Flight service centre
	FOD	Foreign Object Debris	*	FSU	Flight service unit
*	FREQ	Frequency	*	FLUC	Fluctuating fluctuation fluctuated
*	FRI	Friday	*	FLY	Fly or flying
*	FRQ	Frequent	*	FG	Fog
*	FT	Feet (dimensional unit)	*	FREQ	Frequency
*	FU	Smoke		FCS	Frequency Confirmation System
	FWD	Forward	*	FRQ	Frequent
*	G	Green	*	FRI	Friday
	GA	General Aviation	*	FM	From
*	GEN	General		GA	General Aviation
*	GLD	Glider	*	GAAP	General Aviation Aerodrome Procedures
*	GLY	Glider flying	*	PVT	General Aviation or AWK
*	GND	Ground	*	AWK	General Aviation or PVT
*	GP	Glide path	*	GP	Glide path
*	GRADU	Gradual(ly)	*	GLD	Glider
*	GRVL	Gravel	*	GLY	Glider flying
*	H24	Continuous day and night service	*	GRADU	Gradual(ly)
*	HBN	Hazard beacon	*	GRVL	Gravel
*	HDG	Heading	*	G	Green
*	HEL	Helicopter	*	GND	Ground

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	HGT	Height or height above	*	HBN	Hazard beacon
*	HIAL	High intensity approach lighting	*	HZ	Haze
*	HIOL	High intensity obstacle lights	*	HDG	Heading
*	HIRL	High intensity runway lighting	*	HVY	Heavy
*	HJ	Sunrise to sunset	*	HGT	Height or height above
*	HLDG	Hold(ing)	*	HEL	Helicopter
*	HLS	Helicopter Landing Site	*	HLS	Helicopter Landing Site
*	HN	Sunset to sunrise	*	HZ	Hertz (cycles per second)
*	HO	Service available to meet operational requirements	*	HIAL	High intensity approach lighting
*	HR	Hour	*	HIOL	High intensity obstacle lights
*	HS	Homestead	*	HIRL	High intensity runway lighting
*	HS	Service available during scheduled hours of operation	*	HYR	Higher
*	HVY	Heavy	*	HLDG	Hold(ing)
*	HX	No specific working hours	*	HS	Homestead
*	HYR	Higher	*	HZS	Horizontal surface
*	HZ	Haze	*	HR	Hour
*	HZ	Hertz (cycles per second)	*	ISA	ICAO standard atmosphere
*	HZS	Horizontal surface		IWI	Illuminated Wind Indicator
*	IAC	Instrument approach chart	*	IMT	Immediate(ly)
*	IAL	Instrument approach and landing charts	*	IMM	Immigration
	IAS	Inner Approach Surface	*	IMPR	Improve(ment) improving
*	ICAO	International Civil Aviation Organisation	*	INBD	Inbound
*	IFR	Instrument flight rule	*	INFO	Information
	IHS	Inner Horizontal Surface		IAS	Inner Approach Surface
*	ILS	Instrument landing system		IHS	Inner Horizontal Surface
*	IM	Inner marker	*	IM	Inner marker
*	IMC	Instrument meteorological conditions		ITS	Inner Transitional Surface
*	IMM	Immigration	*	INOP	Inoperative
*	IMPR	Improve(ment) improving	*	INSTL	Install or installed or installation
*	IMT	Immediate(ly)	*	INSTR	Instrument
*	INBD	Inbound	*	IAL	Instrument approach and landing charts
*	INFO	Information	*	IAC	Instrument approach chart
*	INOP	Inoperative	*	IFR	Instrument flight rule
*	INSTL	Install or installed or installation	*	ILS	Instrument landing system
*	INSTR	Instrument	*	IMC	Instrument meteorological conditions
*	INT	Intersection	*	INTSF	Intensify(ing)
*	INTER	Intermittent(ly)	*	INTST	Intensity
*	INTL	International	*	INTER	Intermittent(ly)

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	INTRP	Interrupt(ion)(ed)	*	INTL	International
*	INTSF	Intensify(ing)	*	ICAO	International Civil Aviation Organisation
*	INTST	Intensity	*	INTRP	Interrupt(ion)(ed)
*	ISA	ICAO standard atmosphere	*	INT	Intersection
*	ISOL	Isolated	*	ISOL	Isolated
	ITS	Inner Transitional Surface	*	JANUARY	January
	IWI	Illuminated Wind Indicator		Jet A1	Jet Aviation Turpentine
*	JANUARY	January	*	JBAR	Jet barrier
*	JBAR	Jet barrier	*	JTST	Jet stream
	Jet A1	Jet Aviation Turpentine	*	JULY	July
*	JTST	Jet stream	*	JUNE	June
*	JULY	July	*	KG	Kilogram
*	JUNE	June	*	KM	Kilometres
*	KG	Kilogram	*	KMH	Kilometres per hour
*	KM	Kilometres	*	KPA	Kilopascals
*	KMH	Kilometres per hour	*	KW	Kilowatts
*	KPA	Kilopascals	*	KT	Knots
*	KT	Knots	*	LDG	Landing
*	KW	Kilowatts	*	LDI	Landing direction indicator
*	L	Left (runway identification)	*	LDA	Landing distance available
*	LAT	Latitude	*	LAT	Latitude
*	LDA	Landing distance available	*	LVE	Leave or leaving
*	LDG	Landing	*	L	Left (runway identification)
*	LDI	Landing direction indicator	*	LEN	Length
	LED	Light Emitting Diode	*	LVL	Level
*	LEN	Length		LED	Light Emitting Diode
*	LGT	Light or lighting	*	LGT	Light or lighting
*	LGTD	Lighted	*	LGTD	Lighted
*	LIOL	Low intensity obstacle lights	*	LTD	Limited
*	LIRL	Low intensity runway lights	*	LOC	Local locally location located
*	LLZ	Localiser	*	LMT	Local mean time
*	LMT	Local mean time	*	LLZ	Localiser
*	LOC	Local locally location located	*	LONG	Longitude
*	LONG	Longitude	*	LIOL	Low intensity obstacle lights
*	LTD	Limited	*	LIRL	Low intensity runway lights
*	LVE	Leave or leaving	*	MAG	Magnetic
*	LVL	Level	*	QDR	Magnetic bearing
*	M	Metres (preceded by figures)	*	QFU	Magnetic orientation of runway
*	MAE	Men and equipment	*	VAR	Magnetic variation
*	MAG	Magnetic	*	MNTN	Maintain(ed)(ing)
	MAGS	Movement Area Guidance Signs	*	MAINT	Maintenance
*	MAINT	Maintenance	*	MBZ	Mandatory Broadcast Zone
*	MAN	Manual	*	MAN	Manual
*	MAPT	Missed approach point		MOS139	Manual Of Standards 139 – Aerodromes

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
	MAUM	Maximum All Up Mass	*	MKR	Marker radio beacon
*	MAX	Maximum	*	MAX	Maximum
*	MBRW	Maximum brakes release weight		MAUM	Maximum All Up Mass
*	MBZ	Mandatory Broadcast Zone	*	MBRW	Maximum brakes release weight
*	MED	Medical	*	MLW	Maximum landing weight
*	MEHT	Minimum eye height over threshold (VASI system)	*	MTOW	Maximum take-off weight
*	MHZ	Megahertz	*	MTP	Maximum tyre pressure
*	MID	Mid-point (related to RVR)	*	MSL	Mean sea level
*	MIL	Military	*	MED	Medical
*	MIN	Minutes	*	MIOL	Medium intensity obstacle lights
*	MIOL	Medium intensity obstacle lights	*	MIRL	Medium intensity runway lights
*	MIRL	Medium intensity runway lights	*	MHZ	Megahertz
*	MISC	Miscellaneous	*	MAE	Men and equipment
*	MKR	Marker radio beacon	*	MSG	Message
*	MLS	Microwave landing system	*	MOWP	Method of working plan
*	MLW	Maximum landing weight	*	M	Metres (preceded by figures)
*	MM	Middle marker	*	MPS	Metres per second
*	MNM	Minimum	*	MLS	Microwave landing system
*	MNT	Monitor (ed and ing)	*	MM	Middle marker
*	MNTN	Maintain(ed)(ing)	*	MID	Mid-point (related to RVR)
*	MOC	Minimum obstacle clearance (required)	*	MIL	Military
*	MOD	Moderate(ly)	*	MNM	Minimum
	MOS139	Manual Of Standards 139 – Aerodromes	*	MEHT	Minimum eye height over threshold (VASI system)
*	MOV	Move(d)(ment) moving	*	MOC	Minimum obstacle clearance (required)
*	MOWP	Method of working plan	*	MS	Minus
*	MPS	Metres per second	*	MIN	Minutes
*	MS	Minus	*	MISC	Miscellaneous
*	MSG	Message	*	MAPT	Missed approach point
*	MSL	Mean sea level	*	BR	Mist
*	MT	Mountain	*	MOD	Moderate(ly)
*	MTOW	Maximum take off weight	*	CHG	Modification
*	MTP	Maximum tyre pressure	*	MNT	Monitor (ed and ing)
*	N	North or north latitude	*	MT	Mountain
*	NAV	Navigation	*	MOV	Move(d)(ment) moving
*	NB	Northbound		MAGS	Movement Area Guidance Signs
*	NBFR	Not before	*	NM	Nautical mile
*	NC	No change	*	NAV	Navigation
	NCN	Non Compliance Notice	*	CIT	Near or over large town
*	NDB	Non-directional radio beacon	*	NXT	Next

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	NEG	No or negative or permission not granted or that is not correct	*	NGT	Night
*	NGT	Night	*	NV	Night visual flight rule
*	NIL	None or nothing	*	NC	No change
*	NM	Nautical mile	*	NEG	No or negative or permission not granted or that is not correct
*	NNE	North north-east	*	NOSAR	No SAR action required
*	NNW	North north-west	*	HX	No specific working hours
*	NOF	NOTAM Office		NCN	Non-Compliance Notice
*	NOSAR	No SAR action required	*	CHTR	Non-scheduled commercial transport
*	NOTAM	Notice to airmen	*	NDB	Non-directional radio beacon
	NPA	Non-precision approach	*	NIL	None or nothing
*	NR	Number		NPA	Non-precision approach
*	NV	Night visual flight rule	*	NNE	North north-east
*	NW	North-west	*	NNW	North north-west
*	NXT	Next	*	N	North or north latitude
*	O/R	On request	*	NB	Northbound
*	OBS	Observe(d) observation	*	NW	North-west
*	OBSC	Obscure	*	NBFR	Not before
*	OBST	Obstacle	*	NOF	NOTAM Office
*	OBSTR	Obstruction	*	NOTAM	Notice to airmen
*	OCA/H	Obstacle clearance altitude/height	*	NR	Number
*	OCC	Occulting (light)	*	OBSC	Obscure
*	OCL	Obstacle clearance limit	*	OBS	Observe(d) observation
*	OCNL	Occasional(ly)	*	OBST	Obstacle
	OFZ	Obstacle Free Zone comprising of IAS, ITS and BLS.	*	OCA/H	Obstacle clearance altitude/height
*	OHD	Overhead	*	OCL	Obstacle clearance limit
	OHS	Outer Horizontal Surface		OFZ	Obstacle Free Zone comprising of IAS, ITS and BLS.
	OIC	Officer In Charge - Most Senior (such as for Council)		OLS	Obstacle Limitation Surfaces comprising OFZ, TKOFS, APCHS, TRANS, HIS, CS, OHS
*	OK	We agree or it is correct	*	OBSTR	Obstruction
	OLS	Obstacle Limitation Surfaces comprising OFZ, TKOFS, APCHS, TRANS, HIS, CS, OHS	*	OCNL	Occasional(ly)
*	OM	Outer marker	*	OCC	Occulting (light)
*	OPN	Open(ed)(ing)		OIC	Officer In Charge - Most Senior (such as for Council)
*	OPR	Operate operator operative operating operational	*	O/R	On request

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	OPRT	Operation	*	OTP	On top
*	OPS	Operations	*	OPN	Open(ed)(ing)
*	OTP	On top	*	OPR	Operate operator operative operating operational
*	OUBD	Outbound	*	OPRT	Operation
*	PAL	Pilot activated lighting	*	OPS	Operations
*	PANS	Procedures for air navigation services	*	OUBD	Outbound
	PANS-OPS	Another airspace surface but outside the OLS (refer to PANS-OPS, Doc 8168, Volume 2)		OHS	Outer Horizontal Surface
*	PAPI	Precision approach path indicator	*	OM	Outer marker
*	PARL	Parallel	*	OHD	Overhead
*	PAX	Passengers	*	PARL	Parallel
*	PCN	Pavement classification number	*	PRKG	Parking
	PE	Photo Electric		PTS	Passenger Transport Services
*	PER	Performance	*	PAX	Passengers
*	PH	Public Holidays	*	PSG	Passing
*	PLN	Flight plan (domestic)	*	PCN	Pavement classification number
*	PN	Prior notice required	*	PER	Performance
*	POB	Persons on board	*	POB	Persons on board
*	PRKG	Parking		PE	Photo Electric
*	PROB	Probable probability	*	PAL	Pilot activated lighting
*	PROC	Procedure	*	PS	Plus
*	PROV	Provisional		PVC	Polymer of Vinyl Chloride
*	PS	Plus	*	PSN	Position
*	PSG	Passing	*	PWR	Power
*	PSN	Position	*	PAPI	Precision approach path indicator
	PTS	Passenger Transport Services	*	PN	Prior notice required
	PVC	Polymer of Vinyl Chloride	*	PROB	Probable probability
*	PVT	General Aviation or AWK	*	PROC	Procedure
*	PWR	Power	*	PANS	Procedures for air navigation services
	QAS	Queensland Ambulance Services	*	PROV	Provisional
	QAL	Queensland Airports Limited	*	PH	Public Holidays
*	QDR	Magnetic bearing	*	QUAD	Quadrant(al)
	QFRS	Queensland Fire and Rescue Services		QAS	Queensland Ambulance Services
*	QFU	Magnetic orientation of runway		QAL	Queensland Airports Limited
*	QNH	Altimeter sub-scale setting to obtain elevation or altitude		QFRS	Queensland Fire and Rescue Services
	QPS	Queensland Police Service		QPS	Queensland Police Service
*	QTE	True bearing	*	RDL	Radial

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	QUAD	Quadrant(al)	*	RAD	Radius
*	RA	Rain	*	RAG	Ragged
*	RAC	Rules of the air and air traffic services (associated with AIP)	*	RA	Rain
*	RAD	Radius	*	RAPID	Rapid or rapidly
*	RAG	Ragged	*	RCH	Reach or reaching
*	RAPID	Rapid or rapidly	*	RB	Read back
*	RB	Read back	*	RE	Recent (to qualify other abbreviations)
	RCA	Request for Corrective Action	*	REF	Reference
*	RCC	Rescue Coordination Centre	*	RDH	Reference datum height (for ILS)
*	RCH	Reach or reaching	*	REG	Registration
*	RCL	Runway centreline		RPT	Regular Public Transport
*	RCLL	Runway centreline light	*	RMK	Remarks
*	RDH	Reference datum height (for ILS)	*	REP	Report(ed)(ing)(ing point)
*	RDL	Radial		RCA	Request for Corrective Action
	RDS	Runway Distance Supplement	*	REQ	Requested
*	RE	Recent (to qualify other abbreviations)	*	RQ	Require
*	REDL	Runway edge light	*	RQMNTS	Requirements
*	REF	Reference	*	RERTE	Reroute
*	REG	Registration	*	RFFS	Rescue and Fire Fighting Services
*	RENL	Runway end light	*	RCC	Rescue Coordination Centre
*	REP	Report(ed)(ing)(ing point)	*	RSC	Rescue Sub Centre
*	REQ	Requested	*	RESTR	Restriction
*	RERTE	Reroute	*	RTS	Return to service
	RESA	Runway End Safety Area	*	RTN	Return(ed)(ing)
*	RESTR	Restriction	*	REV	Review
*	REV	Review	*	RTE	Route
*	RFFS	Rescue and Fire Fighting Services	*	RAC	Rules of the air and air traffic services (associated with AIP)
*	RLLS	Runway lead in lighting system	*	RWY	Runway
*	RMK	Remarks	*	RCL	Runway centreline
	RPT	Regular Public Transport	*	RCLL	Runway centreline light
*	RQ	Require		RDS	Runway Distance Supplement
*	RQMNTS	Requirements	*	REDL	Runway edge light
*	RSC	Rescue Sub Centre	*	RENL	Runway end light
*	RSCD	Runway surface condition		RESA	Runway End Safety Area
*	RTE	Route	*	RLLS	Runway lead in lighting system
*	RTHL	Runway threshold light	*	RWS	Runway strip
*	RTN	Return(ed)(ing)	*	RSCD	Runway surface condition
*	RTS	Return to service	*	RTHL	Runway threshold light
*	RTZL	Runway touchdown zone light	*	RTZL	Runway touchdown zone light
*	RVR	Runway visual range	*	RVR	Runway visual range

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	RWS	Runway strip		SMS	Safety Management System
*	RWY	Runway	*	SA	Sand
*	S	Scheduled commercial air transport	*	SS	Sandstorm
*	S	South or south latitude	*	SCT	Scattered
*	SA	Sand	*	SKED	Scheduled
*	SALS	Simple approach lighting system	*	S	Scheduled commercial air transport
*	SAR	Search and Rescue	*	SAR	Search and Rescue
*	SARTIME	Time search action required	*	SRY	Second(ary)
*	SB	Southbound	*	SSR	Secondary surveillance radar
*	SCT	Scattered	*	SEC	Seconds
*	SDBY	Standby	*	SECT	Sector
*	SDC	Standard departure clearance	*	HS	Service available during scheduled hours of operation
*	SE	South-east	*	HO	Service available to meet operational requirements
*	SEC	Seconds	*	SER	Service(ing) served
*	SECT	Sector	*	SVCBL	Serviceable
*	SER	Service(ing) served	*	SEV	Severe
	SES	State Emergency Services	*	STOL	Short take-off and landing
*	SEV	Severe	*	SH	Showers
*	SFC	Surface	*	SALS	Simple approach lighting system
*	SH	Showers	*	SIMOPS	Simultaneous Runway Operations
*	SID	Standard instrument departure	*	SIMUL	Simultaneous(ly)
*	SIMOPS	Simultaneous Runway Operations	*	SLW	Slow(ly)
*	SIMUL	Simultaneous(ly)	*	FU	Smoke
*	SKED	Scheduled	*	SN	Snow
*	SLW	Slow(ly)	*	SWS	Soft Wet Surface
*	SMC	Surface movement control	*	S	South or south latitude
*	SMR	Surface movement radar	*	SSE	South south-east
	SMS	Safety Management System	*	SSW	South south-west
*	SN	Snow	*	SB	Southbound
*	SNOWTAM	Special series NOTAM (message type designator)	*	SE	South-east
*	SOC	Start of climb	*	SW	South-west
*	SOT	Start of TORA (take-off run available)	*	SNOWTAM	Special series NOTAM (message type designator)
*	SPA	Sport aviation	*	SPA	Sport aviation
*	SR	Sunrise	*	STD	Standard
*	SRY	Second(ary)	*	SDC	Standard departure clearance
*	SS	Sandstorm	*	STAR	Standard instrument arrival
*	SS	Sunset	*	SID	Standard instrument departure

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	SSE	South south-east	*	SDBY	Standby
*	SSR	Secondary surveillance radar	*	SOC	Start of climb
*	SSW	South south-west	*	SOT	Start of TORA (take-off run available)
*	STA	Straight in approach		SES	State Emergency Services
*	STAR	Standard instrument arrival	*	STN	Station
*	STD	Standard	*	STNR	Stationary
*	STN	Station	*	STS	Status
*	STNR	Stationary	*	END	Stop-end (related to RVR)
*	STODA	Supplementary take-off distance	*	SWY	Stopway
*	STOL	Short take-off and landing	*	STWL	Stopway light
*	STS	Status	*	STA	Straight in approach
*	STWL	Stopway light	*	SUBJ	Subject to
*	SUBJ	Subject to	*	SR	Sunrise
*	SUP	Supplement (AIP Supplement)	*	HJ	Sunrise to sunset
*	SVCBL	Serviceable	*	SS	Sunset
*	SW	South-west	*	HN	Sunset to sunrise
*	SWS	Soft Wet Surface	*	SUP	Supplement (AIP Supplement)
*	SWY	Stopway	*	STODA	Supplementary take-off distance
*	T	Temperature	*	SFC	Surface
*	TACAN	UHF tactical air navigation aid	*	SMC	Surface movement control
*	TAR	Terminal area surveillance radar	*	SMR	Surface movement radar
*	TAX	Taxiing or taxi	*	TKOF	Take-off
*	TBA	To be advised	*	TODA	Take-off distance available
*	TC	Tropical cyclone	*	TORA	Take-off run available
*	TCH	Threshold crossing height		TKOFS	Take-off Surface
*	TDO	Tornado	*	TGS	Taxiing guidance system
*	TDZ	Touchdown zone	*	TAX	Taxiing or taxi
*	TECR	Technical reason	*	TWY	Taxiway
*	TEL	Telephone	*	TWYL	Taxiway link
*	TEMPO	Temporary	*	TECR	Technical reason
*	TEND	Trend or tending to	*	TEL	Telephone
*	TFC	Traffic	*	T	Temperature
*	TGS	Taxiing guidance system	*	TEMPO	Temporary
*	THR	Threshold	*	TAR	Terminal area surveillance radar
*	THRU	Through	*	TMA	Terminal control area
*	THU	Thursday	*	THR	Threshold
*	TIL	Until	*	TCH	Threshold crossing height
*	TKOF	Take-off	*	THRU	Through
	TKOFS	Take-off Surface	*	TS	Thunderstorm
*	TLW	Time-limited WIP (work in progress)	*	THU	Thursday
	TLW	Time Limited Works		TLW	Time Limited Works
*	TMA	Terminal control area	*	SARTIME	Time search action required

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	TNS	Transitional surface	*	TLW	Time-limited WIP (work in progress)
*	TODA	Take-off distance available	*	TBA	To be advised
*	TORA	Take-off run available	*	TDO	Tornado
*	TR	Track	*	TDZ	Touchdown zone
	TRANS	Transitional Surface	*	TR	Track
*	TS	Thunderstorm	*	TFC	Traffic
	TSP	Transport Security Program	*	TNS	Transitional surface
*	TURB	Turbulence		TRANS	Transitional Surface
*	T-VASIS	'T' visual approach slope indicator system		TSP	Transport Security Program
*	TWR	Aerodrome control or aerodrome control tower	*	TEND	Trend or tending to
*	TWY	Taxiway	*	TC	Tropical cyclone
*	TWYL	Taxiway link	*	QTE	True bearing
*	TYP	Type of aircraft	*	TURB	Turbulence
*	TYPH	Typhoon	*	T-VASIS	T-visual approach slope indicator system
*	U/S	Unserviceable	*	TYP	Type of aircraft
*	UAB	Until advised by	*	TYPH	Typhoon
*	UFN	Until further notice	*	TACAN	UHF tactical air navigation aid
*	UHF	Ultra-high frequency (300-3000 MHz)	*	UHF	Ultra-high frequency (300-3000 MHz)
*	UL	Upper limits	*	UNA	Unable
*	UNA	Unable	*	UNAP	Unable to approve
*	UNAP	Unable to approve	*	UNL	Unlimited
*	UNL	Unlimited	*	U/S	Unserviceable
*	UTC	Co-ordinated Universal Time	*	TIL	Until
*	VAR	Magnetic variation	*	UAB	Until advised by
*	VASIS	Visual approach slope indicator system	*	UFN	Until further notice
*	VCY	Vicinity	*	UL	Upper limits
*	VEC	Visual en route chart	*	VRB	Variable
*	VER	Vertical	*	VER	Vertical
*	VFR	Visual flight rules	*	VTOL	Vertical take-off and landing
*	VHF	Very high frequency (30-300 MHz)	*	VHF	Very high frequency (30-300 MHz)
*	VIA	By way of..	*	VIP	Very important person
*	VIP	Very important person	*	VLF	Very low frequency (3-30 kHz)
*	VIS	Visibility	*	VOR	VHF omni-direction radio range
*	VLF	Very low frequency (3-30 kHz)	*	VCY	Vicinity
*	VMC	Visual meteorological conditions	*	VIS	Visibility
*	VOR	VHF omni-direction radio range	*	VASIS	Visual approach slope indicator system
*	VRB	Variable	*	VEC	Visual en route chart
*	VTC	Visual terminal chart	*	VFR	Visual flight rules

ABBREVIATION IN ALPHABETICAL ORDER			DEFINITION IN ALPHABETICAL ORDER		
ABBREVIATION		DEFINITION (* - can be used in NOTAM)	ABBREVIATION		DEFINITION (* - can be used in NOTAM)
*	VTOL	Vertical take-off and landing	*	VMC	Visual meteorological conditions
*	W	West or west longitude	*	VTC	Visual terminal chart
*	W	White	*	WRNG	Warning
*	WAC	World Aeronautical Chart (1:1 000000)	*	OK	We agree or it is correct
*	WDI	Wind direction indicator	*	WKN	Weaken(ing)
*	WEF	With effect from or effective from	*	WX	Weather
*	WI	Within	*	WT	Weight
*	WID	Widespread	*	WNW	West north-west
*	WIE	With immediate effect or effective immediately	*	W	West or west longitude
*	WIP	Work in progress	*	WSW	West south-west
*	WKN	Weaken(ing)	*	W	White
*	WNW	West north-west	*	WID	Widespread
*	WO	Without	*	WDI	Wind direction indicator
*	WRNG	Warning	*	WS	Wind shear
*	WS	Wind shear	*	WEF	With effect from or effective from
*	WSW	West south-west	*	WIE	With immediate effect or effective immediately
*	WT	Weight	*	WI	Within
*	WX	Weather	*	WO	Without
*	X	Cross	*	WIP	Work in progress
*	XBAR	Crossbar (of approach lighting system)	*	WAC	World Aeronautical Chart (1:1 000000)
*	XNG	Crossing	*	YD	Yards
*	YCZ	Yellow caution zone (runway lighting)	*	YCZ	Yellow caution zone (runway lighting)
*	YD	Yards	*	AFM	Yes or affirm or affirmative or that is correct
*	YR	Yours	*	YR	Yours