3.12 Low-visibility operations (LVO)

Low-visibility operations at Rockhampton Airport are implemented when:

- the visibility on any part of the aerodrome is insufficient for ANS to exercise control over alltraffic on the basis of visual surveillance; or
- the cloud ceiling is less than 200ft; or
- the visibility on any part of the aerodrome is less than 800m.

Reference points when viewed in a clockwise pattern from the ANS tower are;

- the Runway 33 windsock is 1540m
- the fence marker located on the western perimeter fence 100m south of Gate 11 is 800m.
- the DVOR is 900m
- the Runway 04 windsock is 1400m
- the fence marker located to the east of the ARFFS training ground is 800m
- the Runway 15 PAPI, west side is 740m
- the Runway 15 windsock is 997m
- the intersection of Aviation Drive and Canoona Road is 800m (the General Aviation Precinctaccess)

3.12.1 Low-visibility personnel

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

Name	Role	Phone number	After-hours phone number
John Winter	Coordinator Airport Operations	0419 842 650	0419 842 650
Ashley Bundesen	Airport Operations Supervisor	0428 327 156	0448 619 596
Troy Careless	Airport Operations Supervisor	0458 368 367	0448 619 596
Ross Barney	Aerodrome Reporting Officer	0438 757 633	0409 368 314
Philip Howkins	Aerodrome Reporting Officer	0400 352 877	0409 368 314
Alvin Oehlert	Aerodrome Reporting Officer	0439 341 040	0409 368 314
Micah Schulte	Aerodrome Reporting Officer	0447 382 758	0409 368 314

3.12.1.1 Runway visibility (RV) assessment personnel

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

Name	Position
John Winter	Coordinator Airport Operations
Ashley Bundesen	Airport Operations Supervisor
Troy Careless	Airport Operations Supervisor
Ross Barney	Aerodrome Reporting Officer
Philip Howkins	Aerodrome Reporting Officer
Alvin Oehlert	Aerodrome Reporting Officer
Micah Schulte	Aerodrome Reporting Officer

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

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

After initial appointment, to confirm that the appointed RV assessor(s) continue to meet these requirements, assessments are to be conducted every 3 years.

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

Maintained by: Airport Compliance Officer
Stored securely within: RRC Corporate IT system

3.12.2 Vehicular traffic in low-visibility operations

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

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

Once notified, the reporting officer is to ensure:

1. Rockhampton Aerodrome staff will operate the only vehicles authorised to operate on the aircraft manoeuvring areas during LVP.
2. Vehicle movements are contained within the limits of the RPT Apron by positioning an authorised Aerodrome Reporting Officer in a vehicle on the apron taxiway.

3. The perimeter lock down of the airside area provides the Aerodrome Reporting Officers with the opportunity to visit all airside areas and direct any drivers or personnel on foot, to leave the manoeuvring area. This task is to be completed as early as possible before sight conditions deteriorate.
4. Method of Working Plan (MOWP) documents contain direction for work sites to be vacated when LVP commences. Works Safety Officers and airside workers are instructed on LVP requirements during MOWP inductions.
5. When LVP commences ANS will update the information currently broadcast on the AutomaticTerminal Information Service (ATIS). The broadcast message will advise pilots of the changed operating conditions.
6. The ARO will place a portable warning sign at the RPT Apron access from the baggage make-up area. The information on the sign will provide clear instruction of the change in operatingconditions
7. When ANS advises the ARO that visibility has reduced to, or is likely to reduce to, 800 metresor less the ARO will seek assistance from other available RRC AROs and /or the ARFFS to commence a check of the perimeter of the airside area. The following procedure will be followed;

    a. To expedite the perimeter check, 2 vehicles should depart from an agreed pointand travel in opposite directions to check the integrity of the perimeter fence and to ensure that vehicular access points to the airside area have been secured. There is no requirement to wait for a second vehicle and driver to commence the perimeter check.

       The ARO will provide the driver of the second perimeter check vehicle with a key to the Low Visibility control padlocks.

    b. During the perimeter check low visibility control padlocks are to be placed on the vehicle gates: 20, 21, 23, 26, 28, 29 and 30. The correct number of padlocks will be storedon a metal disc/bar that has been drilled to accommodate the exact number of locks.

       As a check to ensure completion of the locking process, all locks will be removed fromthe disc/bar upon completion of the perimeter check. A warning sign will also be placed/ uncovered on all vehicle access gates so that personnel approaching the gate are warnednot to proceed through the gate.

       A pyramid shaped warning sign is placed at each of the following locations to warn lesseesnot to operate vehicles on taxiways or runways;

       (i) Blocking the entrance at the Fire Station (Gate 3).
       (ii) Just off the apron at the Capricorn Helicopter Rescue Service near the aircraft trolley rails.
       (iii) On the GA Apron facing the Gorman Hangar, the Rose Aircraft Engineers Hangar, the McDonald Hangar, the Stirling Helicopter Hangar, the RFDS Hangar and the Peace Ministries Hangar.

A pyramid shaped sign is placed at the apron entrance from the baggage make-up area, and Gates 1, 6 and 7, to warn RPT Apron users to confine their access to the RPT Apron.

Note: That Airside Driver Authorisation may be cancelled for individuals who ignore the directions of the Low Visibility Procedure signs, or directions of RRC or ARFFS personnel who are preparing the airside area for Low Visibility Procedures.

c. After completion of the perimeter checks at least one vehicle will be placed on the RPT Apron to ensure that no vehicles enter the taxiways or runways from the RPT or RAAF Apron (the RPT Apron Guard).

d. Should the RPT Apron guard consider that visibility has reduced to the extent that a second guard is required, the ARO is to be advised. The ARO will then seek assistance to provide a second person to guard the RPT Apron to ensure that no unauthorised vehicles access the runways and taxiways. The apron guard will be provided by the RRC and /or the ARFFS.

e. Upon completion of the perimeter check the ARO will contact RRC and ARFFS officers assisting in Low Visibility Procedures to ensure that the perimeter is secure and that no vehicles have been observed on, or entering the taxiways or runways.

   The ARO will also retrieve the key to the Low Visibility control padlocks from the driver of the second perimeter check vehicle. At this time only the ARO will hold all keys to the Low Visibility control padlocks.

f. When Low Visibility Procedures cease, the ARO will ensure that all Low Visibility control padlocks and low visibility signs have been removed and that the aerodrome is returned to normal operational conditions.

   Note: Should a pilot decide to commence taxiing an aircraft on an apron prior to securing the aerodrome, the ARO will advise ANS (on the tower frequency) that the Aerodrome has not been fully prepared for low visibility procedures. Alternately outside of ANS operational hours, the ARO will make a CTAF announcement that the aerodrome has not been fully prepared to low visibility procedures.

3.12.3 CNS facilities in low-visibility operations

All CNS facilities are located in landside locations and therefore no movement area access is required.

3.12.4 Manoeuvring area inspections in low-visibility operations

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

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

When the ARO is certain that the airside perimeter and access to the taxiways and runways is secure, he/she will request permission from ANS, or observe CTAF radio protocol, to commencethe serviceability inspection of the runways and taxiways required for Low Visibility Procedures.

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

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

*Unless specific concerns have been raised for the function of these systems, they are to be checked during the initial serviceability inspection at commencement of low-visibility operations. Ongoing checks during low-visibility operations do not include these lighting systems.

Upon completion of the runway and taxiway serviceability inspection the ARO will advise ANS (or pilot during CTAF operations) of the outcome of the inspection. Runway and taxiway unserviceability must be addressed by following the usual procedure for that unserviceability.

Where practicable, the ARO will perform additional runway inspections prior to aircraft movements under low visibility conditions.

Particular caution must be taken for all access to runway strips. Radio communications in particular must be clear and fully understood. The only mobile phone communications permittedwithin the manoeuvring area are to be directly between ANS and the ARO Officer.

3.12.5 Measuring runway visibility

RRC employees do not perform Runway Visual Range (RVR) assessments. When visibility is reduced due to fog, smoke or other atmospheric conditions, the ARO may transport pilots to the applicable runway to enable them to assess runway visibility. The ARO must complete the procedures for minimising vehicular traffic within the movement area during periods of low visibility procedures prior to transporting pilots to any runways.

Runway lights are used to measure visibility along runway 15/33. Diagrams to assist pilots to determine the runway visibility, with the aid of visible runway lights, are available below. The relevant attachments are:

Appendix – RV15

Appendix – RV33

To establish the commencement of Low Visibility Procedures:

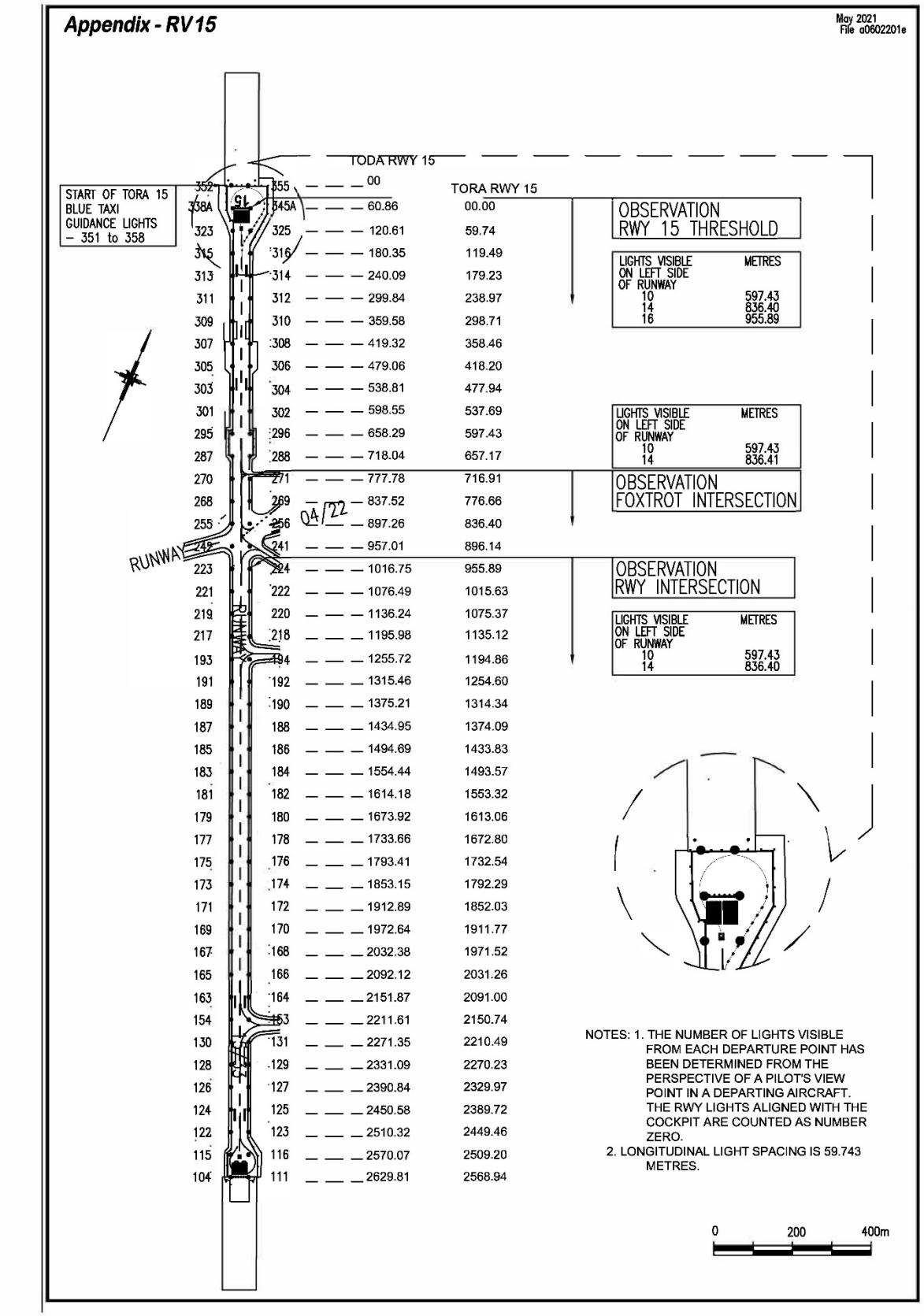
(a) ANS will observe the capacity to see the Doppler very high frequency omni-directional radar (DVOR) facility to the west of Runway 15/33, or;
(b) When ANS is not on duty the ARO will park their vehicle on the apron in front of the Tower and observe the capacity to see the Doppler very high frequency omni-directional radar (DVOR) facility to the west of Runway 15/33.

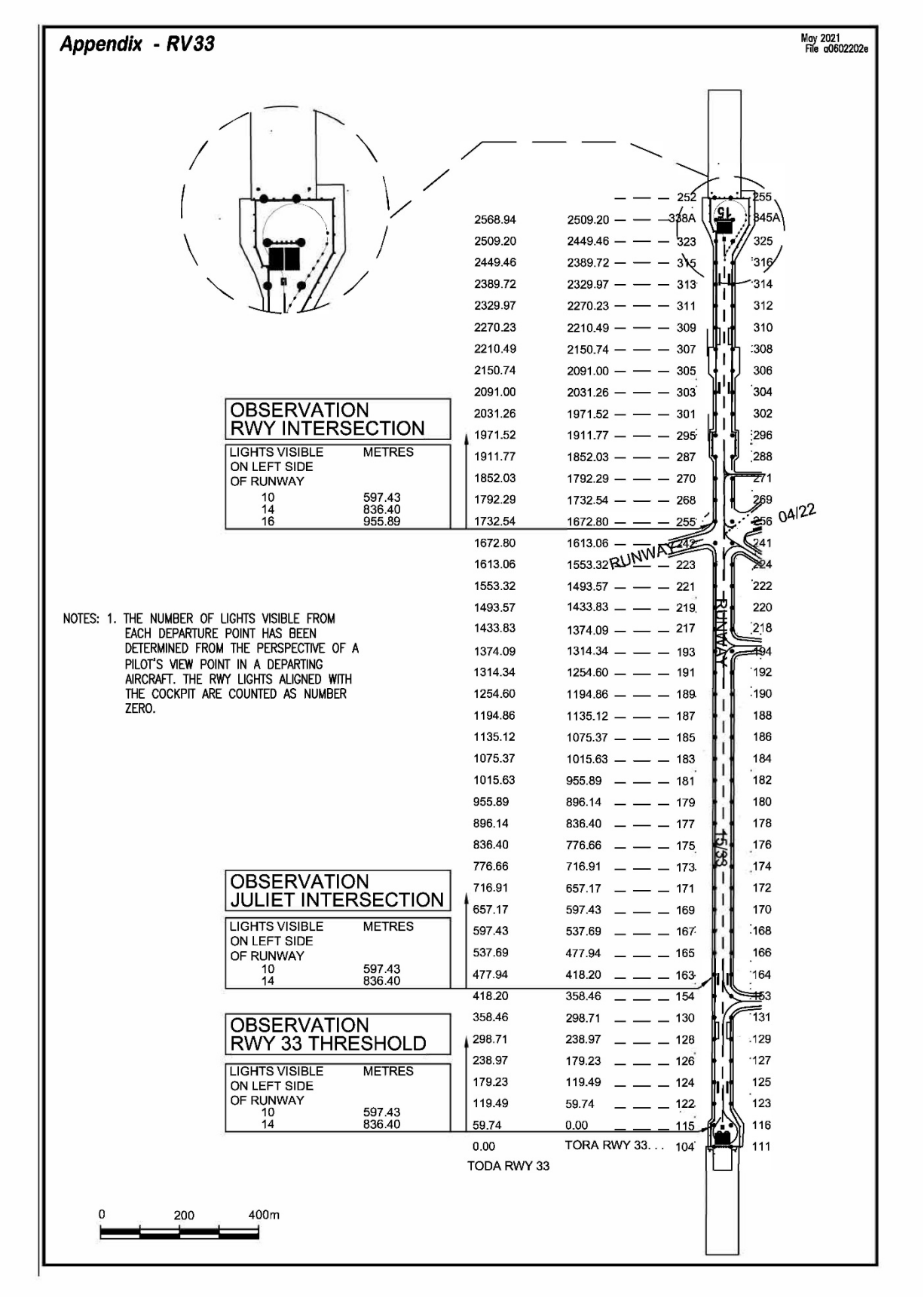
When performing runway visibility assessments, optical devices (other than medically prescribed sight correction lenses) that enhance normal distance vision are not to be used. Unless otherwise impossible, observations are not to be made through a vehicle's window or windscreen.

To conduct the runway visibility assessment, the appointed RV assessor is to:

- make the assessment from an observation point nominated on the observation diagram
- establish the farthest light that can be seen and identified, and
- using the observation diagram, determine the distance in metres.

The RV assessor is to record in the DSO Log each visibility assessment conducted.


Appendix - RV15
May 2021
File a0602201e
TODA RWY 15
TORA RWY 15
START OF TORA 15
BLUE TAXI
GUIDANCE LIGHTS
– 351 to 358
OBSERVATION
RWY 15 THRESHOLD
LIGHTS VISIBLE ON LEFT SIDE OF RUNWAY
METRES
10 597.43
14 836.40
16 955.89
OBSERVATION
FOXTROT INTERSECTION
LIGHTS VISIBLE ON LEFT SIDE OF RUNWAY
METRES
10 597.43
14 836.41
OBSERVATION
RWY INTERSECTION
LIGHTS VISIBLE ON LEFT SIDE OF RUNWAY
METRES
10 597.43
14 836.40
RUNWAY
04/22
NOTES: 1. THE NUMBER OF LIGHTS VISIBLE FROM EACH DEPARTURE POINT HAS BEEN DETERMINED FROM THE PERSPECTIVE OF A PILOT'S VIEW POINT IN A DEPARTING AIRCRAFT. THE RWY LIGHTS ALIGNED WITH THE COCKPIT ARE COUNTED AS NUMBER ZERO.
2. LONGITUDINAL LIGHT SPACING IS 59.743 METRES.
0 200 400m


Appendix - RV33
May 2021
File a0602202e
OBSERVATION
RWY INTERSECTION
LIGHTS VISIBLE ON LEFT SIDE OF RUNWAY
METRES
10 597.43
14 836.40
16 955.89
OBSERVATION
JULIET INTERSECTION
LIGHTS VISIBLE ON LEFT SIDE OF RUNWAY
METRES
10 597.43
14 836.40
OBSERVATION
RWY 33 THRESHOLD
LIGHTS VISIBLE ON LEFT SIDE OF RUNWAY
METRES
10 597.43
14 836.40
NOTES: 1. THE NUMBER OF LIGHTS VISIBLE FROM EACH DEPARTURE POINT HAS BEEN DETERMINED FROM THE PERSPECTIVE OF A PILOT'S VIEW POINT IN A DEPARTING AIRCRAFT. THE RWY LIGHTS ALIGNED WITH THE COCKPIT ARE COUNTED AS NUMBER ZERO.
2568.94 2509.20 338A 345A
2509.20 2449.46 323 325
2449.46 2389.72 315 316
2389.72 2329.97 313 314
2329.97 2270.23 311 312
2270.23 2210.49 309 310
2210.49 2150.74 307 308
2150.74 2091.00 305 306
2091.00 2031.26 303 304
2031.26 1971.52 301 302
1971.52 1911.77 295 296
1911.77 1852.03 287 288
1852.03 1792.29 270 271
1792.29 1732.54 268 269
1732.54 1672.80 255 256
1672.80 1613.06 242 241
1613.06 1553.32 223 224
1553.32 1493.57 221 222
1493.57 1433.83 219 220
1433.83 1374.09 217 218
1374.09 1314.34 193 194
1314.34 1254.60 191 192
1254.60 1194.86 189 190
1194.86 1135.12 187 188
1135.12 1075.37 185 186
1075.37 1015.63 183 184
1015.63 955.89 181 182
955.89 896.14 179 180
896.14 836.40 177 178
836.40 776.66 175 176
776.66 716.91 173 174
716.91 657.17 171 172
657.17 597.43 169 170
597.43 537.69 167 168
537.69 477.94 165 166
477.94 418.20 163 164
418.20 358.46 154 153
358.46 298.71 130 131
298.71 238.97 128 129
238.97 179.23 126 127
179.23 119.49 124 125
119.49 59.74 122 123
59.74 0.00 115 116
0.00 TODA RWY 33
TORA RWY 33... 104 111
04/22
RUNWAY
15/33
0 200 400m

3.12.6 Communicating visibility measurements to ATC or pilots

The RV assessor does not report visibility to the ATC or a pilot. Rather, the RV assessor will transport the pilot to the applicable runway and with the aid of diagrams, the pilot will determine the runway visibility by means of visible runway lights.

3.12.7 Transmissometers

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

3.12.8 Low-visibility procedures (LVP)

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

These procedures were developed in consultation with:

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

3.12.8.1 Specific circumstances for LVP

The specific circumstances in which LVP measures are to be initiated, fully implemented and terminated are documented in OPS02 – Low Visibility Procedure.

This procedure is a subsidiary document to this manual and is available at within the Airport Reference Library.

3.12.8.2 Nominated rate of aerodrome movements

To ensure safe operations the rate of aircraft movement during LVP will not exceed one aircrafton the manoeuvring area at any time.

Rockhampton Regional Council has developed procedures to control vehicle airside access and vehicle movements during LVP. The procedures are detailed with Section 3.12.2.

Airservices Australia has developed procedures for use in their operations. The SCAO and the Supervisor for the Rockhampton ANS liaise as required to ensure the procedures are conversant.

To complement the procedures an extensive security fence has been constructed to provide aircraft movement area security for LVP. The aircraft movement area has been marked in accordance with the requirements detailed in the Part 139 (Aerodromes) MOS 2019 to provide surface movement guidance for instrument non-precision runway operations on Runway 15/33.

3.12.8.3 LVP-related training and authorisation for airside drivers

Vehicle movement during LVP is restricted to the RPT Apron, and the minimum vehicles thatare required to manage the security of the aircraft manoeuvring areas. The training and authorisation processes for the drivers of the vehicles permitted to operate during LVP are detailed in Rockhampton Aerodrome Airside Driving Handbook.

3.12.8.4 Control of airside operations

The airside area is secured to control vehicle access to the aircraft manoeuvring area. Gates normally accessible to authorised drivers (other than RRC Aerodrome staff) are locked out witha padlock unique to LVP, and portable warnings signs are placed across other access points.

At all times access to the airside area is maintained in accordance with Aviation Transport Security legislation. Aviation Security Identification Card (ASIC) holders, and their authorised, and escorted visitors are the only personnel permitted to access the secure area at any time. This access is in accordance with a lawful need.

3.12.8.5 Withdrawal of non-essential vehicles and personnel

The procedures for withdrawing non-essential vehicles and personnel when low-visibility procedures are included in Section 3.12.2 Item 3.

During low visibility procedures the ARO will liaise with ANS to ensure:

1) non-essential vehicles and pedestrians are not permitted on the movement area;
2) other than for the ARO, ANS will not provide clearances for any vehicle or pedestrian to enteror cross an operational runway or taxiway, unless that vehicle is escorted by the ARO. ARFFS vehicles responding to an emergency are exempt from this requirement;
3) non-essential works on the movement area will be suspended and work areas will be vacated.

3.12.8.6 Suspension of visual and non-visual aid maintenance

No routine maintenance on visual and non-visual aids will be conducted when LVPs are in effect.

3.12.8.7 Securing airside access and preventing entry

The procedures for securing airside access and preventing inappropriate or inadvertent entry when low-visibility procedures are in effect are documented in OPS02 – Low Visibility Procedure.

This procedure is a subsidiary document to this manual and is held within the Airport Reference Library.

3.12.8.8 Alerting of LVP

When LVP commences ANS will update the information currently broadcast on the Automatic Terminal Information Service (ATIS). The broadcast message will advise pilots of the changed operating conditions.

The ARO will place a portable warning sign at the RPT Apron access from the baggage make-up area. The information on the sign will provide clear instruction of the change in operating conditions

3.12.8.9 Coordinating LVP activities with ATC

During LVP the ARO will use frequency 118.1 to advise ANS of intended actions, and to seek approval to access runway strip areas.

During CTAF operations the ARO will call Brisbane ANS centre to advise them of the requirement for LVP to monitor frequency 123.75.

3.12.8.10 Physical checks of lighting and warning devices

The procedures for physically checking lighting installations and warning devices during LVP are documented in OPS02 – Low Visibility Procedure.

This procedure is a subsidiary document to this manual and is held within the Airport Reference Library.

3.12.8.11 Protection of areas for ILS

ILS is not installed at Rockhampton Airport.

3.12.8.12 Emergency responses during LVP

In the situation of an aircraft crash during LVP the aerodrome will close.

There is potential for difficulty to be experienced by emergency services responding to an aircraft crash site during LVP. To address and minimise delays in response times the ARFFS use infrared imagery as an integral part of their LVP response plan.

In any condition of visibility it is the responsibility for the AROs to assist off-site emergency response agencies to arrive at a crash scene. The transport time of the off aerodromeemergency service vehicles is not as critical as the response time of the ARFFS. Drivers on aerodrome during an LVP emergency response must proceed with caution and allow the ARFFSto achieve their critical response times.

In the event of an occurrence of unlawful interference with aviation during LVP the aerodrome will close. The MA or delegate will advise ANS that an unlawful event has occurred and that aircraft movements should cease due to an uncertain operating environment. The only aircraft movement that would be acceptable under these circumstances is the relocation of an aircraft to the remote parking locations at the Taxiway Juliet holding point or the 04 Threshold.

3.12.8.13 LVP status

Following notification from ARO, and when on duty, ATC will be the single point from which definitive information about the current status of LVP will be promulgated and may be confirmed.

3.12.8.14 Review of low-visibility procedures

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

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