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# **ROCKHAMPTON AIRPORT CYCLONE PLAN**

**Rockhampton Airport  
Queensland, Australia**

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Prepared by

Rockhampton Regional Council

February 2015



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### Disclaimer

The Airport Cyclone Plan has been prepared by Rockhampton Regional Council in consultation with Airservices Australia. Persons should not take any action in sole reliance upon the contents of this plan, but should consult their own legal expert or advisor prior to taking such action. Rockhampton Regional Council disclaims all liability to any person howsoever arising, done or omitted to be done, in reliance to any degree upon this plan or portions of it.

## Revision History

Issue No:	Date:	Revised By:	Approved By:
1	December 2012	Airport Operations Coordinator	Manager Airport
2	February 2015	Airport Operations Coordinator	Manager Airport

### **Purpose of Plan**

The geographical location of Rockhampton Airport ensures that a tropical cyclone will pass through or within the near proximity of the airport at some time. This document provides information for the management of a measured response to minimise the impact of tropical cyclone or severe storm activity upon the airport's operations and assets. The preservation of life during severe weather events is the primary consideration of this plan. Protection of airport assets and the responsible continuity of airport operations is also major plan objective.

### **Scope of Plan**

The plan is produced and issued by Rockhampton Regional Council as a supporting plan to the Airport Emergency Plan.

The intent of this plan is to provide guidance to prepare for extreme weather following the issue of tropical cyclone or storm warnings from the Bureau of Meteorology (BoM). Response stages are structured to correspond with the warning advice system established by the BoM.

The plan provides response direction for Rockhampton Regional Council employees. It may also be used as guidance for the preparation of individual company or organisational plans. All major tenants and operators are encouraged to maintain an action plan detailing precautions to be taken in the event of a cyclone.

Airlines, operators, tenants and contractors are fully responsible for the safety and security of their aircraft, buildings, plant, equipment and materials. They should ensure that at all stages of alert, appropriate action is taken to remove or secure their property to safeguard it from damage and prevent it from causing damage to other property.

### **Distribution of Plan and Cyclone Watch Advice**

The Rockhampton Airport Cyclone Plan is available on the Rockhampton Airport website at: [www.rockhamptonairport.com.au](http://www.rockhamptonairport.com.au).

Airport Management will endeavour to provide operational updates on the Airport Website when it is known significant changes will impact upon passenger flight services.

Distribution details for cyclone watch and committee communications is included at Appendix 'B'.

## Cyclone Committee

When Stage 2 of the Plan is declared, the Airport Operations Coordinator (AOC) will convene a meeting of the Cyclone Committee consisting of the following members:

- RRC Airport Management Team and all available Operations and Facilities Supervisors.
- Airservices Australia, Air Traffic Services (ATC) Supervisor/Manager.
- Airservices Australia, Aviation Rescue and Fire Fighting (ARFF) Manager.
- Senior representatives from all airline ground handling agents.
- The security screening service provider Supervisor/Manager.

Reporting from the Cyclone Committee the AOC will ensure that the Rockhampton Regional Council Local Disaster Management Group are kept fully informed of the status of the airport.

For the time frame that a cyclone warning remains current (from Stage 2 to the commencement of Stage 4), the committee will meet at frequent intervals and assist with Airport Management's decision for the timings for the declaration of Stages 3 and 4.

The Cyclone Committee will re-convene at Stage 7 to commence clean-up and recommence airport operations as soon as possible.

## Airport Closure

Planned closure of the airport will only occur when all possible operating options have been considered and there are no alternatives for safe operations to continue. A planned decision to close the airport will be made jointly by the MA and the AOC following a review of all reports from the BoM, the LDMG and on-site inspection of current conditions. The predicted time for closure will be determined to maximise the availability of all planned flights and the provision of aerial support for emergency services within the region.

Closure of the Airport to scheduled services has a significant impact upon many residents and businesses within the local area. Early or unnecessary closure must be avoided. Staff must also refrain from speculative statements about imminent closures as they can have negative impacts upon the income of various people and businesses.

Should timing of closure become imminent at Stage 4 or conditions are such that operations cannot proceed, the AOC may effect an immediate closure to ensure safety. ATC may also complete an immediate closure of any part of the aircraft movement area if they become aware of an area of sealed pavement becoming inundated by water.

## Alert Phases – Overview

Airport Management has adopted a seven stage alert system for the purpose of classifying responses to a cyclone as shown in Table 1, Airport Cyclone Alert Stages, below:

Note: All wind speeds are shown in kilometres per hour (km/h) with knots (kt) in brackets. A wind speed conversion table is included at Appendix 'A'. 'Beaufort Scale' details are also included at Appendix 'A'.

Note: The minimum and maximum times quoted in Table 1 are to be used as a guide depending on the cyclone category - e.g. Category 1 uses minimum lead times while Category 3 and above use maximum lead times.

**Table 1 - Airport Cyclone Alert Stages.**

Stage	When Initiated
1.	Initiated on announcement by the Bureau of Meteorology of a Cyclone Watch, ie forecast winds above strong gale force 24-48 hours away.
2.	Initiated on announcement by the Bureau of Meteorology of a Cyclone Warning, ie forecast winds above strong gale force within 24 hours.
3.	Cyclone Warning current. This stage may be declared when wind gusts greater than 100 km/h (54 kt) are forecast to be 6-12 hours away.  Hourly monitoring of forecasts occur prior to declaring Stage 4.
4.	This stage may be declared when wind gusts greater than 100 km/h (54 kt) are forecast to be 3-6 hours away.
5.	Strong Gale Force Winds have commenced (i.e. sustained 75 km/h (41 kt) with gusts to 100 km/h (54 kt)).
6.	Strong Gale Force Winds have passed, all clear not yet announced as Stage 5 may be re-declared.
7.	Local All Clear.

## Notification of Cyclone Alert Stages.

Stages 1 and 2 will be automatically initiated on announcement of a cyclone watch or a cyclone warning respectively.

Stages 3 and 4 will be declared by the Manager Rockhampton Airport, in consultation and agreement with members of the Airport Cyclone Committee. The timing of these phases will depend on the proximity and severity of a cyclone.

At any time during Stages 1 to 4, the BoM may issue an Airport Warning. Airport Warnings from the BoM should be treated in accordance with individual company policy.



## Cyclone Alert Stages

Airport Management will advise airport tenants via Short Message Service (SMS) and Email when Stages 1 to 4 are activated. Refer to Appendix B for distribution details for airport tenants and others who may receive this advice.

There will be no formal notification of Stages 5 and 6 from Airport Management to airport tenants. The Bureau of Meteorology will issue normal cyclone warnings through the media during these stages.

At Stage 7, the AOC will contact members of the Cyclone Committee by whatever means are available to convene a meeting to plan for clean up and the resumption of airport operations as soon as possible.

### Response Actions

In the following stages, the minimum and maximum lead times are to be used as a guide depending on the cyclone category - e.g. Category 1 uses minimum lead times and Category 3 and above use maximum lead times.

#### Stage 1

Initiated on an announcement by the Bureau of Meteorology of a Cyclone Watch, i.e. winds above strong gale force (75 km/h (41 kt) or greater) are forecast to be 24-48 hours away.

Airport tenants should commence initial preparation for a cyclone and consider the following actions:

- Complete a review of company cyclone procedures.
- Securing or removing non-essential equipment from open areas and completing a general site clean-up.
- Checking emergency stores and equipment (fuel, generators, batteries, radios, medical supplies, securing and protection materials, etc).

#### Stage 2

Initiated on announcement by the Bureau of Meteorology of a Cyclone Warning, i.e. winds above strong gale force (75 km/h (41 kt) or greater) forecast for within 24 hours.

The AOC will convene a meeting of the Cyclone Committee.

Airport tenants should complete the initial preparation for a cyclone and:

- Implement company cyclone procedures.
- Finish site clean-up and securing or removing non-essential equipment from open areas.
- Continue to monitor cyclone advices from the Bureau of Meteorology directly and maintain a system of monitoring the available cyclone activity information.
- Light aircraft owners/operators should consider relocating, storing or tying down aircraft.

### Stage 3

Cyclone Warning current. This stage may be declared when wind gusts greater than 100 km/h (54 kt) are forecast to be 6 to 12 hours away.

Airport tenants should consider or commence partial shutdown of their facilities in accordance with company cyclone procedures and take the following actions:

- Move external equipment to safe areas, secure contents of premises, important documents, backup computers etc.
- Light aircraft should be relocated, stored or securely tied down.
- Consider sending non-essential staff home.
- Take precautions for the event of local flooding. Some areas of the airport may experience short term drainage issues created by heavy rainfall. Airport Management can provide guidance on areas at risk.

Airlines should consider the scheduling implications for any long haul flights or charters leading to the Stage 4 declaration.

Airport Management will monitor all updated forecasts from the Bureau of Meteorology prior to declaring Stage 4.

### Stage 4

Stage 4 may be declared when winds gusts greater than 100 km/h (54 kts) (at the airport) are forecast to be 3-6 hours away.

A staged shutdown of major airport facilities will commence upon declaration of Stage 4. This may include, runways, terminals, airport ground lighting, radar, etc.

ATC, ARFF and major airlines will cease operations as soon as practicable after the declaration of Stage 4.

Airport tenants are expected to complete shutdown of their own operations in a similar time frame.

After consultation with airlines and ATC, and based upon the planned departure time of the last aircraft, the AOC will issue a NOTAM advising of the non-availability of airport facilities. An email may also be forwarded to the MOWP Distribution List members

### Stage 5

Strong gale force winds have commenced and airport operations have ceased.

### Stage 6

Strong gale force winds have passed. An "all clear" status has not been announced as Stage 5 may be declared again. Airport operations have **not** resumed.

### **Stage 7**

Local “all clear” announcement has been made. Strong gale force winds have passed Rockhampton, although a tropical cyclone warning may still exist at Stage 2 criteria.

The AOC will convene a meeting of the Cyclone Committee to plan for resumption of operations.

Airport tenants should commence clean up of their own facilities and liaise with Airport Management on any loss of services or damage to facilities.

The Airport will recommence operations. Timings will be dependent on the severity of the cyclone, but expect a minimum of 3-6 hours before operations can re-commence. With a severe cyclone this may extend to several days.

A review of the airport’s current NOTAMs will be completed by the AOC.

### Appendix A – Tropical Cyclone Warning System

#### TROPICAL CYCLONE WARNING SYSTEM

Tropical Cyclone Advises are issued by the Bureau of Meteorology Tropical Cyclone Warning Centre (TCWC) and broadcast by radio and television stations.

Information is also available directly from the Bureau by:

*Telephone*

Cyclone advice 1300 659 212

*Internet*

[www.bom.gov.au](http://www.bom.gov.au)

A cyclone forecast track map displays the past cyclone track, and also watch and warning zone areas in distinctive colours or shades:

- *Very destructive winds*: hurricane force winds with gusts exceeding 165 km/h (90 kt) (associated with severe cyclones – Cat.3 and above).
- *Destructive winds*: gusts greater than 120 km/h (65 kt) (equivalent to storm force)
- *Stronger gales*: gusts exceeding 100 km/h (55 kt). With these winds (shown by the light pink shade below), people have difficulty moving about in open areas.

**Figure 1 – Sample Cyclone Track Map**

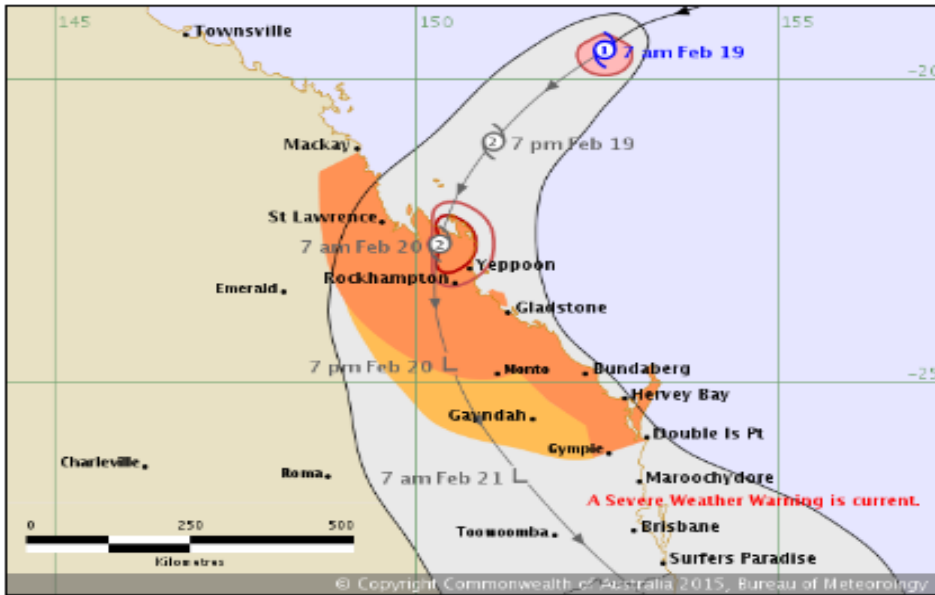
**SAMPLE – TROPICAL CYCLONE FORECAST TRACK MAP**  
 Produced by the Bureau of Meteorology

AUSTRALIAN GOVERNMENT BUREAU OF METEOROLOGY  
 TROPICAL CYCLONE WARNING CENTRE BRISBANE

**TROPICAL CYCLONE FORECAST TRACK MAP**

**Tropical Cyclone Marcia**

Issued at 7:57 am EST Thursday 19 February 2015. Refer to Tropical Cyclone Advice Number 8.



Community Threat		
Warning Zone Gales within 24 hours	Watch Zone Gales from 24-48 hours	
<b>Past Cyclone Details</b>	<b>Current Cyclone Details</b>	<b>Forecast Cyclone Details</b> (Up to 72 hours from time of issue)
Past Location and Intensity Number	Current Location and Intensity Number	Forecast Location and Intensity Number
Past Track and Movement	Very Destructive Winds	Very Destructive Wind Boundary
	Destructive Winds	Destructive Wind Boundary
	Strong Gale Force Winds	Strong Gale Force Wind Boundary
	example of region	Most Likely Future Track
		Range of Likely Tracks of Cyclone Centre

**TROPICAL CYCLONE FORECAST TRACK MAP**

This sample map displays the forecast positions of each tropical cyclone up to 24 hours ahead. The Map is available on the Bureau's web page at;

[www.bom.gov.au/cyclone](http://www.bom.gov.au/cyclone)

## Appendix A – Tropical Cyclone Warning System

This product will not contain all the information in the Tropical Cyclone Advice, especially important details on the cyclone impact, such as the sometimes dangerous threat of storm surge.

### MAIN FEATURES OF THE TROPICAL CYCLONE FORECAST TRACK MAP

#### Forecast Track

The forecast track is the most likely path of the cyclone.

The latest position is shown in **BLUE** and the 12 and 48 hour forecast positions in **BLACK**.

The numbers in the circles at the centre locations show the intensity Category, or if the system is expected to significantly weaken, an "L" is used to indicate a low pressure centre.

#### Grey Zone of Uncertainty (otherwise known as the Cone of Uncertainty)

The grey zone is the area within which the cyclone centre is expected to be in the following 24 hours.

This covers most scenarios but occasionally the cyclone may move outside this area.

Importantly, the impact of the cyclone will almost certainly extend well beyond the grey zone.

#### Wind Thresholds

Solid coloured ellipses surround the current cyclone position, similar to the Threat Map.

The open ellipses surrounding the forecast positions represent the outer extent of each category of wind strength, assuming the cyclone follows the official forecast track.

Note that the ellipses may be omitted from the 12 hour forecast position to minimise clutter.

The winds are likely to extend beyond these areas as the cyclone will almost certainly not follow the forecast track exactly. The coastal extent of the Warning zone reflects this uncertainty.

#### Cyclone Outlook

A cyclone outlook is issued every 24 hours during the cyclone season providing an assessment (low/medium/high) of the likelihood of an existing cyclone entering the Coral Sea or a new cyclone forming in the Coral Sea within 72 hours.

#### Cyclone Information Bulletin

A cyclone information bulletin is issued at 6-hourly intervals when a cyclone exists within the Queensland region, but is not expected to cause winds in excess of 62km/h (gale force) overland in Australia within 48 hours.

#### Cyclone Watch

A cyclone watch is issued for coastal communities when the onset of gales is expected within 48 hours, but not within 24 hours.

The message contains a brief estimate of the cyclone's location, intensity, severity category and movement and identifies the coastal area that could be affected.

Watch messages are renewed every six hours.

### Cyclone Warning

A cyclone warning is issued as soon as gales or stronger winds are expected to affect coastal or island communities within 24 hours. It identifies the communities being threatened and contains the cyclone's name, its location, intensity (including maximum wind gusts and its severity category) and its movement.

As well as indicating expected maximum wind gusts near the centre of the cyclone, warning messages will usually indicate the strength of the maximum wind gusts expected over particular areas in the following terms:

- Gales with gusts to 125 km/h (65 kt).
- Destructive winds with gusts above 125 km/h (65 kt).
- Very destructive winds with gusts above 165 km/h (90 kt).

Forecasts of heavy rainfall, flooding and abnormally high tides are included when necessary.

Communities under threat are also advised to take precautions necessary to mitigate the effects of the cyclone.

The cyclone siren will only be sounded by radio and television stations if destructive winds are expected within the next 12 hours.

Cyclone warnings are issued every three hours. When a cyclone is under radar surveillance close to the coast and poses a severe threat, hourly advices are issued.

A tropical cyclone advice is prefixed "FLASH" when it is the first warning to a community not previously alerted by a cyclone watch. It is also issued when major changes are made to the previous movement towards the coast or rapid intensification.

### **CYCLONE SEVERITY**

An estimate of cyclone severity is included in the advices in accordance with Table 2 "Bureau of Meteorology - Cyclone Categories". Refer below.

**Table 2 - Bureau of Meteorology – Cyclone Categories**

<b>Category/Max Wind Gust</b>	<b>Strongest Winds</b>	<b>Typical Effects</b>
Category 1 – Tropical Cyclone 90 – 125 km/h Beaufort Scale 8 & 9	Gales	Negligible house damage. Damage to some crops, trees and caravans. Craft may drag moorings.
Category 2 – Tropical Cyclone 125 – 164 km/h Beaufort Scale 10 & 11	Destructive	Minor house damage. Significant damage to signs, trees and caravans. Heavy damage to some crops. Risk of power failure. Small craft may break moorings.
Category 3 – Severe Tropical Cyclone 165 – 224 km/h Beaufort Scale 12	Very Destructive	Some roof and structural damage. Some caravans destroyed. Power failure likely.
Category 4 – Severe Tropical Cyclone 225 – 279 km/h Beaufort Scale 12	Very Destructive	Significant roofing loss and structural damage. Many caravans destroyed and blown away. Dangerous airborne debris. Widespread power failures.
Category 5 – Severe Tropical Cyclone >280 km/h Beaufort Scale 12	Very Destructive	Extremely dangerous with widespread destruction.

Note:

The severity in the zone of maximum winds and therefore the effects felt at individual locations may not be exactly as described in the accompanying table. Refer to a cyclone track map for a more accurate guide of winds at specific locations.



**Table 3 - Wind Speed Conversions**

Km/h	Knots
10	5
20	11
30	16
40	22
50	27
60	32
70	38
80	43
90	49
100	54
110	59
120	65
130	70
140	76
150	81
160	86
170	92
180	97
190	103
200	108
210	113
220	119
230	124
240	130
250	135
260	140
270	146
280	151

Knots	Km/h
10	19
20	37
30	56
40	74
50	93
60	111
70	130
80	148
90	167
100	185
110	204
120	222
130	241
140	259
150	278
160	296
170	315
180	333
190	352
200	370
210	389
220	407
230	426
240	444
250	463
260	482
270	500
280	519

Notes:

Values rounded to nearest whole number.

Sustained winds refer to the average wind speed sustained for 10 minutes.

Wind gusts refer to 3 second wind gusts.

## Appendix A – Tropical Cyclone Warning System

**Table 4 - Bureau of Meteorology – Beaufort Scale**

Beaufort scale	Cyclone category	Average wind speed (knots)	Average wind speed (km/h)	Estimating speed over land	Estimating speed over water	
0	Calm	Less than 1	less than 1	Calm, smoke rises vertically.	Sea like mirror	
1	Light Air	1 - 3	1 - 5	Direction of wind shown by smoke drift, but not by wind vanes.	Ripples with the appearance of scales are formed, but without foam crests	
2	Light breeze	4 - 6	6 - 11	Wind felt on face; leaves rustle; ordinary wind vane moved by wind.	Small wavelets, still short, but more pronounced; crests have a glassy appearance and do not break	
3	Gentle breeze	7 - 10	12 - 19	Leaves and small twigs in constant motion; wind extends light flag.	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses	
4	Moderate breeze	11 - 16	20 - 28	Raises dust and loose paper; small branches moved.	Small waves, becoming longer; fairly frequent white horses	
5	Fresh breeze	17 - 21	29 - 38	Small trees in leaf begin to sway; crested wavelets form on inland waters.	Moderate waves, taking a more pronounced long form; many white horses are formed (chance of some spray)	
6	Strong breeze	22 - 27	39 - 49	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty.	Large waves begin to form; the white foam crests are more extensive everywhere (probably some spray)	
7	Near gale	28 - 33	50 - 61	Whole trees in motion; inconvenience felt when walking against the wind.	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind	
8	Gale	1	34 - 40	62 - 74	Breaks twigs off trees; generally impedes progress.	Moderately high waves of greater length; edges of crests begin to break into the spindrift; the foam is blown in well-marked streaks along the direction of the wind
9	Strong gale	1	41 - 47	75 - 88	Slight structural damage occurs (chimney pots and slates removed).	High waves; dense streaks of foam along the direction of the wind; crests of waves begin to topple, tumble and roll over; spray may affect visibility
10	Storm	2	48 - 55	89 - 102	Seldom experienced inland; trees uprooted; considerable structural damage occurs.	Very high waves with long overhanging crests; the resulting foam, in great patches, is blown in dense white streaks along the direction of the wind; on the whole, the surface of the sea takes a white appearance; the tumbling of the sea becomes heavy and shock-like; visibility affected
11	Violent storm	2	56 - 63	103 - 117	Very rarely experienced; accompanied by widespread damage.	Exceptionally high waves (small and medium sized ships might be for a time lost to view behind the waves); the sea is completely covered with long white patches of foam lying along the direction of the wind; everywhere the edges of the wave crests are blown into froth; visibility affected
12	Hurricane	3,4,5	64 and over	118 and over	Severe and extensive damage.	The air is filled with foam and spray; sea completely white with driving spray; visibility very seriously affected

### Appendix B – Distribution of Cyclone Watch and Committee Advice

Where communication to airport tenants, stakeholders and RRC staff occurs it will be provided by Email and/or Short Message Service (SMS) text. SMS communications apply to time dependant situations and will typically be used for Stage 3, 4, and 7 updates.

Emails will be distributed by the standard distribution lists developed and maintained by Airport Management. The email distribution lists include but are not limited to:

- RRC Airport Office and Grounds Staff recipients.
- Regular Public Transport terminal and freight area recipients.
- General Aviation precinct recipients.
- Transient stakeholders including RRC construction contractors and itinerant aircraft operators.

The primary contact details for tenants and stakeholders are subject to ongoing change. Airport Management will endeavour to establish and maintain an up to date mobile phone contact list for tenants and stakeholders that wish to receive SMS notifications, but can not ensure comprehensive accuracy. Providing up to date contact details to Airport Management is essential for stakeholders that wish to receive SMS communications from the Cyclone Committee.

Website reports for public use may occur when public concerns should be addressed, or significant operational change will occur for passenger flight services. The Manager Airport will coordinate the timing and content of website information with the RRC Marketing and Media unit.

### Appendix C – Abbreviations

AOC	Airport Operations Coordinator
ARFF	Aviation Rescue & Fire Fighting
BoM	Bureau of Meteorology
CASA	Civil Aviation Safety Authority
CBS	Checked Baggage Screening
CEO	Chief Executive Officer
DOS	Duty Operations Supervisor
DSO	Duty Safety Officer
Km/h	Kilometres per hour
Kt	Knots
LDMG	Local Disaster Management Group
NOTAM	Notice to Airmen
OTS	Office of Transport Security
RPT	Regular Public Transport
RRC	Rockhampton Regional Council
SMS	Short Message Service
TCWC	Tropical Cyclone Warning Centre

## Appendix D – RRC Airport Management & Staff Responses

### Appendix D – Cyclone Stage Responses

STAGE	ACTIVITY	WIND SPEEDS	NOTIFICATION	COMMENTS / ACTIONS
Stage 1	CYCLONE WATCH - Initiated by the BOM by an announcement of a Cyclone effecting the region.	Above strong gale force 75 km/h (41 kt) or greater Forecast 24-48 hours away	Advice via RRC Email	<p>Cyclone Watch: <u>All Airport Management and Staff</u> The following actions are required within the scope of the individual areas of responsibility:</p> <ul style="list-style-type: none"> <li>• Review the Airport Cyclone Plan.</li> <li>• Review the Airport Flood Plan and consider actions required to prepare for localised flooding.</li> <li>• All RRC vehicles, power generators, tractors and chainsaws are to be refuelled, inspected for serviceability issues, and made ready for immediate and ongoing use.</li> <li>• Test run power generators.</li> <li>• Check levels of all fuel storage tanks and vessels. Arrange fuel refills to ensure supplies are as near to capacity as possible.</li> <li>• Clear all loose objects from building and aircraft movement areas. Take particular attention to any construction sites, and liaise as required to have loose materials secured or removed to a safe location.</li> <li>• All radios to be checked and batteries charged.</li> <li>• Check all drains are free of obstructions.</li> <li>• Check levee banks and flood gates.</li> <li>• Check materials are in stock to cover and secure weather sensitive equipment.</li> </ul> <p><u>Manager Airport</u></p> <ul style="list-style-type: none"> <li>• Ensure all communications and reports are completed in accordance with this plan.</li> </ul> <p><u>AOC</u></p> <ul style="list-style-type: none"> <li>• Delegate staff as required to initiate a 24 hour watch on cyclone progress.</li> </ul> <p><u>Airport Tenants</u></p> <ul style="list-style-type: none"> <li>• Should commence initial preparation for a cyclone and consider the following actions: <ul style="list-style-type: none"> <li>▪ Complete a review of company cyclone procedures.</li> <li>▪ Securing or removing non-essential equipment from open areas and completing a general site clean-up.</li> <li>▪ Checking emergency stores and equipment (fuel, generators, batteries, radios, medical supplies, securing and protection materials, etc).</li> </ul> </li> </ul>
Stage 2	CYCLONE WARNING - Initiated by the BOM by announcement of a Cyclone affecting the region.	Above strong gale force 75 km/h (41 kt) or greater Forecast within 24 hours	Advice via RRC Email	<p>Cyclone Warning: <u>All Airport Management and Staff.</u> The following actions are required within the scope of the individual areas of responsibility:</p> <ul style="list-style-type: none"> <li>• Return all non-required plant to the Maintenance Shed and secure the building.</li> <li>• Review safety of items stored in open sided shed at Gate 4.</li> <li>• Review all areas for cleanliness. Take action to remove loose items and debris.</li> <li>• If next phase of cyclone warning is likely to occur over a weekend or public holidays, ensure Stage 3 preparations are completed on the last general working day.</li> </ul> <p><u>Airport Management Team</u></p> <ul style="list-style-type: none"> <li>• Meet in the Conference Room to determine immediate actions.</li> </ul>

<p><b>Stage 2</b> <b>Cont'd</b></p>				<p><u>Manager Airport</u></p> <ul style="list-style-type: none"> <li>• Prepare media releases as required.</li> <li>• Brief RRC Customer Call Centre and update recorded phone messages as required.</li> <li>• Prepare temporary information signage for public areas.</li> <li>• Ensure required communications to tenants, stakeholders and contractors occur.</li> </ul> <p><u>AOC</u></p> <ul style="list-style-type: none"> <li>• Convene a meeting of the Cyclone Committee.</li> <li>• Report to LDMG and the Officer in Charge, Bolsover Street Police Station as required.</li> </ul> <p><u>Operations Supervisors</u></p> <ul style="list-style-type: none"> <li>• Survey light aircraft tie down lines and attempt to contact owners of any aircraft not tied down.</li> <li>• Review drainage pits are able to drain freely. Initial rainwater flows may have caused blockages.</li> </ul> <p><u>Facilities</u></p> <ul style="list-style-type: none"> <li>• Make preparations to cover and protect all vulnerable electrical and car park equipment.</li> </ul> <p><u>Airport Tenants</u></p> <p>Should complete the initial preparation for a cyclone and:</p> <ul style="list-style-type: none"> <li>▪ Implement company cyclone procedures.</li> <li>▪ Finish site clean-up and securing or removing non-essential equipment from open areas.</li> <li>▪ Continue to monitor cyclone advices from the Bureau of Meteorology directly and maintain a system of monitoring the available cyclone activity information.</li> <li>▪ Light aircraft owners/operators should consider relocating, storing or tying down aircraft.</li> </ul>
<p><b>Stage 3</b></p>	<p>CYCLONE WARNING CURRENT – BOM monitoring system.</p>	<p>Wind gusts greater than 100 km/h (54 kt)  Forecast 6-12 hours away</p>	<p>Advice via RRC Email &amp; SMS</p>	<p>Cyclone Warning Current: <u>All Airport Management and Staff.</u> The following actions are required within the scope of the individual areas of responsibility:</p> <ul style="list-style-type: none"> <li>• Ensure all essential files are secured and filing cabinets are covered (eg compliance, plans, lease, insurance, legal or commercial documents).</li> <li>• Disconnect computers. Cover phones, facsimiles and other electrical items with plastic bags (do not cover operating computers with plastic).</li> <li>• Non-essential staff to be released from duty. Essential staff include the Airport Management Team and the minimum operations and facilities staff considered necessary to complete the remaining preparation tasks.</li> <li>• DOS to carry out final airside inspection of leases at the airport to confirm loose material has been secured or removed, and light aircraft have been stored or tied down.</li> <li>• All construction contractors working on airport are to be advised that they are to finish securing their work area and leave the airport.</li> </ul> <p><u>Manager Airport</u></p> <ul style="list-style-type: none"> <li>• Arrange Stage 3 media release and complete website update.</li> <li>• Initiate Stage 3 recorded message for public enquiries. Prepare Stage 4 recorded message.</li> <li>• Ensure communication of shutdown plans to all tenants and stakeholders occurs.</li> <li>• Revise as required the temporary information signage for public areas.</li> </ul> <p><u>AOC</u></p> <ul style="list-style-type: none"> <li>• Maintain communications with the Queensland Police Service and LDMG, ensuring they are kept fully informed of the status of the airport at all times.</li> <li>• Liaise with Airline Operation Control Centres.</li> </ul> <p><u>Facilities</u></p> <ul style="list-style-type: none"> <li>• Barricade glass windows and doors of CBS room to provide refuge area and equipment protection.</li> </ul>

<p><b>Stage 3</b> <b>Cont'd</b></p>				<p><u>Airport Tenants</u></p> <ul style="list-style-type: none"> <li>Should consider or commence partial shutdown of their facilities in accordance with company cyclone procedures and take the following actions: <ul style="list-style-type: none"> <li>Move external equipment to safe areas, secure contents of premises, important documents, backup computers etc.</li> <li>Light aircraft should be relocated, stored or securely tied down.</li> <li>Consider sending non-essential staff home.</li> <li>Take precautions for the event of local flooding. Some areas of the airport may experience short term drainage issues created by heavy rainfall. Airport Management can provide guidance on areas at risk.</li> </ul> </li> </ul> <p><u>Airlines</u></p> <p>Should consider the scheduling implications for any long haul flights or charters leading to the Stage 4 declaration.</p> <ul style="list-style-type: none"> <li>Airport Management will monitor all updated forecasts from the Bureau of Meteorology prior to declaring Stage 4.</li> </ul>
<p><b>Stage 4</b></p>	<p>CYCLONE WARNING CURRENT – BOM monitoring system.</p>	<p>Wind gusts greater than 100 km/h (54 kts) (at the airport)</p> <p>Forecast 3-6 hours away</p>	<p>Advice via RRC Email &amp; SMS</p>	<p>Cyclone Warning Current:</p> <ul style="list-style-type: none"> <li>A staged shutdown of major airport facilities will commence upon declaration of Stage 4. This may include, runways, terminals, airport ground lighting, radar, etc.</li> </ul> <p><u>Manager Airport</u></p> <ul style="list-style-type: none"> <li>Arrange Stage 4 media release and complete website update.</li> <li>Initiate Stage 4 recorded message for public enquiries.</li> <li>Ensure communication of shutdown plans to all tenants and stakeholders occurs.</li> <li>Revise as required the airport closure signage for public areas.</li> <li>Make arrangements to relocate stranded passengers to a facility allocated by LDMG.</li> <li>Ensure all remaining duty and essential staff are released and vacate airport following the last departure and ATC ceases operations.</li> </ul> <p><u>AOC</u></p> <ul style="list-style-type: none"> <li>Maintain communications with the Queensland Police Service and LDMG, ensuring they are kept fully informed of the status of the airport at all times.</li> <li>As operations cease ensure terminal buildings are vacated and secured.</li> <li>Ensure overall security of airport is completed and determine minimum staffing to remain on site.</li> <li>After consultation with airlines and ATC, and based upon the planned departure time of the last aircraft, the AOC will issue a NOTAM advising of the non-availability of airport facilities. An email may also be forwarded to the MOWP Distribution List members.</li> <li>Advise CASA and OTS of pending closure of airport.</li> </ul> <p><u>Facilities</u></p> <ul style="list-style-type: none"> <li>Isolate runway lighting generator following the last aircraft departure and ATC ceases operations.</li> <li>Isolate RPT Terminal generator after the terminal operations cease.</li> <li>Complete “soft” shutdown of electrical equipment where required.</li> </ul> <p><u>ATC, ARFF and Major Airlines</u></p> <ul style="list-style-type: none"> <li>Will cease operations as soon as practicable after the declaration of Stage 4.</li> </ul> <p><u>Airport Tenants</u></p> <ul style="list-style-type: none"> <li>Expected to complete shutdown of their own operations as soon as practicable after the declaration of Stage 4.</li> </ul>

<b>Stage 5</b>	CYCLONE WARNING CURRENT	Strong gale force winds to 100 km/h (54kt) commenced	Nil advice by RRC	<p>Cyclone Warning Current:</p> <ul style="list-style-type: none"> <li>• <u>ALL AIRPORT OPERATIONS HAVE CEASED.</u></li> <li>• Security staff or others remaining on airport to take refuge in CBS room.</li> </ul> <p><u>Manager Airport</u></p> <ul style="list-style-type: none"> <li>• Arrange Stage 5 media release and complete website update.</li> <li>• Initiate Stage 5 recorded message for public enquiries.</li> </ul> <p><u>AOC</u></p> <ul style="list-style-type: none"> <li>• Maintain communications with the Queensland Police Service and LDMG, ensuring they are kept fully informed of the status of the airport at all times.</li> </ul>
<b>Stage 6</b>	CYCLONE WARNING CURRENT	Strong gale force winds to 100 km/h (54kt) Passed	Nil advice by RRC	<p>Cyclone Warning Current:</p> <p><u>"All clear" status has not been announced - Stage 5 may be re-declared.</u></p> <ul style="list-style-type: none"> <li>• <u>ALL AIRPORT OPERATIONS REMAIN CEASED.</u></li> </ul> <p><u>Manager Airport and AOC</u></p> <ul style="list-style-type: none"> <li>• Actions as per Stage 5</li> </ul>
<b>Stage 7</b>	LOCAL ALL CLEAR	Strong gale force winds have passed Rockhampton, although a Cyclone warning may still exist at Stage 2 criteria.	Advice via RRC Email & SMS	<p>CYCLONE WARNING MAY STILL EXIST:</p> <ul style="list-style-type: none"> <li>• The Airport will recommence operations. Timings will be dependent on the severity of the cyclone, but expect a minimum of 3-6 hours before operations can re-commence. With a severe cyclone this may extend to several days.</li> </ul> <p><u>All Airport Management and Staff.</u></p> <ul style="list-style-type: none"> <li>• All RRC staff to wait for call-in by telephone or through local radio stations. Return to duties is to be initiated by the Manager Airport upon approval from RRC CEO. Call-in should not commence until sustained winds are less than 75 km/h, (41kts) (although a cyclone warning may still be current).</li> </ul> <p><u>Manager Airport</u></p> <ul style="list-style-type: none"> <li>• Arrange Stage 7 media release and complete website update.</li> <li>• Initiate Stage 7 recorded message for public enquiries.</li> </ul> <p><u>AOC</u></p> <ul style="list-style-type: none"> <li>• Arrange for serviceability inspection of aviation facilities.</li> <li>• Contact the Queensland Police Service and LDMG to advise status of airport.</li> <li>• Convene Airport Cyclone Committee meeting to establish timings and priorities for resumption of airport operations.</li> <li>• Ensure NOTAMs are reviewed and issued as required.</li> </ul> <p><u>Facilities</u></p> <ul style="list-style-type: none"> <li>• Arrange for serviceability inspection of RPT terminal building and electrical equipment.</li> </ul> <p><u>Airport Tenants</u></p> <ul style="list-style-type: none"> <li>• Should commence clean-up of their own facilities and liaise with Airport Management on any loss of services or damage to facilities.</li> </ul>