



Australian Government

Civil Aviation Safety Authority

SURVEILLANCE REPORT

**Norfolk Island Intl - YSNF - Norfolk
Island Regional Council**

s47G

Aerodromes

Surveillance Dates: 31/10/2017 to 03/11/2017

Executive Summary

This Surveillance Report outlines the findings of a surveillance event conducted on Norfolk Island Regional Council, as the certified operator of Norfolk Island International Airport. The surveillance was conducted from 31 October to 3 November 2017 against the Civil Aviation Safety Regulations (CASR) 1998, Part 139 - Aerodromes and the associated Manual of Standards (MOS) - Part 139 Aerodromes.

At the time of surveillance aircraft operations at the aerodrome included scheduled passenger flights from Sydney, Brisbane and Auckland. The flights were conducted by two international airlines using Airbus A320 and Boeing B737 jet aircraft. Due to the remote location of the aerodrome it also provides an important alternate, or planned servicing location for aircraft up to the size of A320. Aeromedical flights also provide an important service for the island community. The aerodrome operator requires 24 hours prior notice for all arrivals other than aeromedical flights.

The last surveillance event subject to this report was a Level 1 event conducted on 10 May 2016. The surveillance identified (4) four Non-Compliance Notices (NCNs) and (5) five Observations. All previous NCNs had been affectively acquitted.

The report for this surveillance introduces revised terminology for the findings issued. Findings previously issued as NCNs are now referred to as Safety Findings (SFs), and findings previously issued as Observations are now referred to as Safety Observations (SOs). This surveillance event identified (4) four Safety Findings (SFs) and (6) six Safety Observations.

In addressing the root cause of these findings, the authorisation holder must consider the breaches identified during the surveillance, and although the instances are possibly isolated, the system consequences must be considered. It is through a detailed examination of the upstream system(s) and organisational factors that a better understanding of the context in which the breaches have occurred can be achieved. Improved organisational defences against such hazards can then be achieved.

CASA wishes to acknowledge the authorisation holder for their openness, cooperation and disposition to achieving holistic safety outcomes.

Iain Lobegeier
Surveillance Lead
20/12/2017

Statement of confidential nature of the contents

This Surveillance Report is a confidential document between CASA and the authorisation holder. CASA will not disclose this report or its content to any third person except, in pursuance of its functions, with the express permission of the authorisation holder or as required by law.

Surveillance objective

The objective of the surveillance is to assess the ability and willingness of an authorisation holder to comply with all applicable legislative obligations.

Surveillance team

Name	Discipline
Iain Lobegeier (Lead)	Aerodrome Inspector

Dates and places – Onsite surveillance

Date	Location
03/11/2017 - 03/11/2017	Fire station on the aerodrome
31/10/2017 - 03/11/2017	Inspections on the aerodrome and interviews in the aerodrome offices.
02/11/2017 - 02/11/2017	Meeting with General Manager, Council Offices, Quality Row, Kingston.
01/11/2017 - 01/11/2017	Night inspection of aerodrome.
02/11/2017 - 02/11/2017	Work Safety Meeting at Council Offices, Taylors Road, Burnt Pine.

Surveillance scope

The surveillance scope is the extent and boundaries of the surveillance activity.

Scope item	Findings Issued
Data and Documents	3
Personnel Rostering	Nil
Personnel Standards	Nil
Maintenance Assurance	1
Maintenance System	4
Safety Policy and Objectives	1
Safety Risk Management	1
Aerodrome Emergency Response	Nil
Equipment, Personnel and Aircraft Movement Control	Nil

* Item added to original scope

** Item originally scoped but not completed

Summary of surveillance findings

Surveillance finding(s) are the result of the evaluation of the collected surveillance evidence against the surveillance criteria.

No.	Type	Subject/Title	Due Date
813060	SO	Runway surface	N/A
813061	SO	Apron surface	N/A
813062	SO	Safety mangement	N/A
813063	SO	Assessment of runway surface	N/A
813064	SO	Content of aerodrome manual	N/A
813065	SO	Wildlife management records	N/A
717931	SF	Aerodrome markings	10/01/2018
717932	SF	Notice of deviation	10/01/2018
717933	SF	Notice of changes in information published in AIP-ERSA	10/01/2018
717935	SF	Notice of obstacles	10/01/2018

A total of 10 finding(s) have been issued as a result of this surveillance. Of these finding(s) 4 are Safety Finding(s) that require a response by the due date.

Technical summary

Norfolk Island aerodrome has two runways with a single taxiway connecting the apron area. There is an asphalt sealed apron and an unsealed apron with a good coverage of Kikuyu turf. The primary runway has an asphalt seal and is capable of supporting Code 4C jet operations. The secondary runway has a bitumen seal and provides a cross wind option for light aircraft. A portion of the secondary runway is used for the taxi route from the runway intersection to the apron.

At the time of the surveillance the line marking on the primary runway (11/29) was significantly faded and would provide minimal guidance for aircraft approaching the runway to land (refer to Safety Finding 717931). The aerodrome operator had invested in a replacement line marking machine but did not have all of the required parts to introduce it into service. CASA recommended that a NOTAM be raised to alert pilots to the reduced level of guidance provided by the line marking and the NOTAM was raised without delay.

The surface of the main runway had a very coarse finish to the extent where some portions exhibited low binder levels and some aggregate had been lost. This surface, with the support of drainage grooves, should provide adequate friction levels to prevent aircraft from aquaplaning. Due to the low frequency of aircraft movements rubber deposits on the surface were also very low. There is a requirement for designated international aerodromes with runways serving Code 4 jet aeroplanes, conducting international air transport operations, to test the surface friction levels with a continuous friction measuring device.

It was advised that testing had been completed at the time of the last runway surface overlay using a continuous friction measuring device. However this test occurred approximately 10 years ago and no further evaluation has occurred. The logistics and subsequent expense of transporting the test equipment to the island is considerable, but an assessment had not been conducted to determine a suitable time interval for conducting tests with continuous friction measuring equipment (refer to Safety Observation 813063). The International Civil Aviation Organisation, Airport Services Manual, Part 2 (Doc 9137 at Appendix 5 and 6), provides methods to determine when detailed friction

testing is required. The aerodrome operator intends to evaluate the runway surface in accordance with these methods.

Additional findings regarding the condition of the movement area pavements have been issued. Safety Observations 813060 and 813061 refer to localised areas of Runway 11/29, and the main apron, respectively. While these areas are not extensive the condition of the pavement and/or sealed surface is very poor. Near the runway intersection an area of the asphalt surface has cracked extensively and presents a risk of failure. A further area adjacent to the cracked asphalt has experienced a high loss of aggregate from the surface.

Load bearing failure for a small area of the main apron has resulted in deep ruts and subsequent mounds of displaced pavement. The failure has occurred at Parking Position 1 at the location for the main landing gear of an A320 aircraft. The presence of the ruts and mounds does not allow for aircraft to park on the marked parking position.

To address the apron pavement failure aircraft have been parked offset to the alignment line for the parking position. This has been managed by prior communication with the aircraft operator, and aircraft marshalling. The aerodrome operator advised that the apron parking layout will also be redesigned.

Further action had been taken to prevent aircraft taxiing over the apron failure. Parking Position 2 was being used to service A320 aircraft. However the apron parking plan included in the Aerodrome Manual does not permit the use of Parking Position 2 for the A320. The aerodrome operator had adopted a strategy to use 2 aircraft marshallers to guide the pilot. The deviation from the procedure set out in the aerodrome manual had not been reported to CASA (refer to Safety Finding 717932). It was observed that the use of Parking Position 2 for A320 aircraft could be managed if the positioning of ground servicing equipment, and parking of light aircraft on the adjacent apron was controlled. Safe wing tip clearance may not be available for an A320 to depart from Parking Position 2 when another A320 occupies Parking Position 1. If an A320 is parked offset to the parking alignment line for Parking Position 1 it is unlikely that safe wing tip clearances would be available for the departure from Parking Position 2.

The review of the aerodrome data and documents found that some information was not included in the Aeronautical Information Publication-EnRoute Supplement Australia (AIP-ERSA) and the Aerodrome Manual. These items are included in Safety Finding 717933 and Safety Observation 813064. With the exception of the low visibility operations section for the aerodrome manual, the items included in the findings should not require further explanation. Low visibility conditions frequently occur at the aerodrome due to a propensity for low cloud and the relatively high elevation of the facility. The aerodrome manual did not include operating procedures for ground activities, or for staff to follow when these conditions occur.

There were no obstacles published in AIP-ERSA. It was also observed that the aerodrome operator has been removing or lopping trees detected during the annual obstacle survey. However there were trees within the approach surface for Runway 22 that had not been addressed since detection in November 2016 and a NOTAM had not been raised to alert pilots to the presence of these obstacles (refer to Safety Finding 717935). It was observed that some of the trees may not currently require removal as the survey results had been assessed for a 3.33% approach slope, as required for an instrument approach. There are no instrument procedures published for the Runway 22 approach and therefore a steeper 4% approach gradient could be used to assess obstacles.

Correspondence was available to demonstrate an intention for the safety management committee to meet at the time of this surveillance. The scheduled frequency for these meetings had been exceeded. (refer to Safety Observation 813062).

The commitment to wildlife management was also observed with runway checks conducted prior to all aircraft movements. Data collected from wildlife observations was not

collated for ongoing risk management purposes (refer to Safety Observation 813065).

Documents used as standards and reference

Document Name
AIP-En Route Supplement Australia (ERSA) issued 17 August 2017
Civil Aviation Safety Regulations 1998. Compilation No. 65 01 September 2015
Manual of Standards Part 139 – Aerodromes. Version 1.14: January 2017
Norfolk Island Airport - Aerodrome Technical Inspection - November 2016 (Aerodrome Operation Support Pty Ltd)
Norfolk Island International Airport - Aerodrome Manual - Version V9.16
Norfolk Island International Airport - SMS Manual - Version 4, April 2017

Key people interviewed during the surveillance

Name	Position	Date
	Aerodrome Reporting Officer	01/11/2017 - 03/11/2017
	Electrician, Norfolk Island Regional Council	02/11/2017 - 03/11/2017
	Airport Operations Assistant	31/10/2017 - 03/11/2017
	Airport Operations Manager	31/10/2017 - 03/11/2017
	Aerodrome Reporting Officer	31/10/2017 - 03/11/2017

s47F



Authorisation holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council	Issued Date:	20/12/2017
ARN:	1017028	Safety Observation No:	813060
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Subject/Title:	Runway surface		
System:	Aerodrome Maintenance		
Element:	Maintenance System		

Safety Observation Details:

Deterioration of the runway surface was observed for a portion of Runway 11/29 near the runway intersection.

Extensive cracking of the asphalt seal, and loss of aggregate from the seal had occurred.

Issuing Inspector Name: Iain Lobegeier

A Safety Observation is a document used to advise an authorisation holder of:

- latent conditions resulting in system deficiencies that, while not constituting a breach, have the potential to result in a breach if not addressed, and/or
- potential areas for improvement in safety performance



Authorisation holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council	Issued Date:	20/12/2017
ARN:	1017028	Safety Observation No:	813061
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Subject/Title:	Apron surface		
System:	Aerodrome Maintenance		
Element:	Maintenance System		

Safety Observation Details:

Extensive pavement rutting and deformation was observed at Parking Position 1. The marked parking position was not serviceable for the intended type and size of design aircraft.

Issuing Inspector Name: Iain Lobegeier

A Safety Observation is a document used to advise an authorisation holder of:

- latent conditions resulting in system deficiencies that, while not constituting a breach, have the potential to result in a breach if not addressed, and/or
- potential areas for improvement in safety performance



Authorisation holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council	Issued Date:	20/12/2017
ARN:	1017028	Safety Observation No:	813062
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Subject/Title:	Safety mangement		
System:	Safety Management		
Element:	Safety Policy and Objectives		

Safety Observation Details:

The Safety Management System Committee did not meet at least once each year as required in the policy.

The last committee meeting occurred in April 2016.

Issuing Inspector Name: Iain Lobegeier

A Safety Observation is a document used to advise an authorisation holder of:

- latent conditions resulting in system deficiencies that, while not constituting a breach, have the potential to result in a breach if not addressed, and/or
- potential areas for improvement in safety performance



Authorisation holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council	Issued Date:	20/12/2017
ARN:	1017028	Safety Observation No:	813063
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Subject/Title:	Assessment of runway surface		
System:	Aerodrome Maintenance		
Element:	Maintenance System		

Safety Observation Details:

Engineering assessments had not been completed to determine a suitable time interval for conducting surface friction measurements on the runway used for Code 4 jet aeroplanes, conducting international air transport operations.

The manual does not contain a process that validates the runway's surface frictional characteristics.

Issuing Inspector Name: Iain Lobegeier

A Safety Observation is a document used to advise an authorisation holder of:

- latent conditions resulting in system deficiencies that, while not constituting a breach, have the potential to result in a breach if not addressed, and/or
- potential areas for improvement in safety performance



Authorisation holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council	Issued Date:	20/12/2017
ARN:	1017028	Safety Observation No:	813064
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Subject/Title:	Content of aerodrome manual		
System:	Administration		
Element:	Data and Documents		

Safety Observation Details:

Version V9.16 of the aerodrome manual contained information that was not current, or was not complete:

- Commissioning records for the Precision Approach Path Indicator lighting system were not included;
- A new aerodrome certificate had been issued but was not included; and,
- There was no guidance for staff to follow during conditions of reduced visibility (i.e. when supporting aircraft take-off and approach operations in periods of visibility by day or by night in accordance with the Aeronautical Information Publication).

Issuing Inspector Name: Iain Lobegeier

A Safety Observation is a document used to advise an authorisation holder of:

- latent conditions resulting in system deficiencies that, while not constituting a breach, have the potential to result in a breach if not addressed, and/or
- potential areas for improvement in safety performance



Authorisation holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council	Issued Date:	20/12/2017
ARN:	1017028	Safety Observation No:	813065
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Subject/Title:	Wildlife management records		
System:	Safety Management		
Element:	Safety Risk Management		

Safety Observation Details:

Wildlife monitoring activities were occurring and the observations were being recorded. The collected data was not being collated for planning, or risk assessment purposes.

Issuing Inspector Name: Iain Lobegeier

A Safety Observation is a document used to advise an authorisation holder of:

- latent conditions resulting in system deficiencies that, while not constituting a breach, have the potential to result in a breach if not addressed, and/or
- potential areas for improvement in safety performance



Authorisation Holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council		
ARN: 1017028	EDRMS Ref: EF12/10787-6	Safety Finding Ref No:	717931
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Regulatory reference:	reg 139.170 (2) of the Civil Aviation Safety Regulations 1998		
Subject/Title:	Aerodrome markings		
System-Element:	Aerodrome Maintenance - Maintenance System		

Note: In applying the principles of procedural fairness, CASA approaches its regulatory functions in a consultative and collaborative manner. Therefore CASA extends to the authorisation holder the opportunity to consider, comment on or object to this Safety Finding.

It should also be noted that issue of a Safety Finding does not in any way prejudice CASA's prerogative to take at any time such regulatory or other legal action as may be appropriate in the circumstances.

Details of deficiency:
Pavement markings on Runway 11/29 had deteriorated and did not contrast clearly with the runway surface.
Criteria:
reg 139.170 Aerodrome markings (2) The operator must ensure that all aerodrome markings are maintained in accordance with the standards set out in the Manual of Standards. Manual of Standards Part 139 - Aerodromes para 8.1.4.1 Markings must be clearly visible against the background upon which they are placed.
Issuing inspector: Iain Lobegeier
Date issued: 20/12/2017
Due date: 10/01/2018



Authorisation Holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council		
ARN: 1017028	EDRMS Ref: EF12/10787-6	Safety Finding Ref No:	717932
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Regulatory reference:	reg 139.150 of the Civil Aviation Safety Regulations 1998		
Subject/Title:	Notice of deviation		
System-Element:	Administration - Data and Documents		

Note: In applying the principles of procedural fairness, CASA approaches its regulatory functions in a consultative and collaborative manner. Therefore CASA extends to the authorisation holder the opportunity to consider, comment on or object to this Safety Finding.

It should also be noted that issue of a Safety Finding does not in any way prejudice CASA's prerogative to take at any time such regulatory or other legal action as may be appropriate in the circumstances.

Details of deficiency:
Aircraft Parking Position 2 was being used to park Airbus A320 aircraft. The apron parking plan advises that Parking Position 2 is not suitable for this aircraft type. The aerodrome operator did not advise CASA within 30 days of changing this procedure.
Criteria:
reg 139.150 Notice of deviation (1) This regulation applies if a deviation from a procedure set out in the aerodrome manual for a certified aerodrome is made to ensure the safety of aircraft. (2) The operator of the aerodrome must tell CASA, in writing, of the deviation within 30 days after the deviation was made.
Issuing inspector: Iain Lobegeier
Date issued: 20/12/2017
Due date: 10/01/2018



Authorisation Holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council		
ARN: 1017028	EDRMS Ref: EF12/10787-6	Safety Finding Ref No:	717933
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Regulatory reference:	reg 139.160 of the Civil Aviation Safety Regulations 1998		
Subject/Title:	Notice of changes in information published in AIP-ERSA		
System-Element:	Administration - Data and Documents		

Note: In applying the principles of procedural fairness, CASA approaches its regulatory functions in a consultative and collaborative manner. Therefore CASA extends to the authorisation holder the opportunity to consider, comment on or object to this Safety Finding.

It should also be noted that issue of a Safety Finding does not in any way prejudice CASA's prerogative to take at any time such regulatory or other legal action as may be appropriate in the circumstances.

Details of deficiency:
The Aeronautical Information Publication-EnRoute Supplement Australia (AIP-ERSA) did not include information about obstacles that penetrate the Obstacle Limitation Surfaces.
Criteria:
reg 139.160 Notice of changes in information published in AIP-ERSA (1) To maintain the accuracy of the information published in AIP-ERSA in relation to a certified aerodrome, the operator of the aerodrome must tell AIS, in writing, as soon as practicable of any change required to that information (other than a change that is published in NOTAMS).
Issuing inspector: Iain Lobegeier
Date issued: 20/12/2017
Due date: 10/01/2018



Authorisation Holder:	Norfolk Island Intl - YSNF - Norfolk Island Regional Council		
ARN: 1017028	EDRMS Ref: EF12/10787-6	Safety Finding Ref No:	717935
Contact address:	PO Box 95 Norfolk Island NSW	Postcode:	2899
Regulatory reference:	reg 139.360 of the Civil Aviation Safety Regulations 1998		
Subject/Title:	Notice of obstacles		
System-Element:	Aerodrome Maintenance - Maintenance Assurance		

Note: In applying the principles of procedural fairness, CASA approaches its regulatory functions in a consultative and collaborative manner. Therefore CASA extends to the authorisation holder the opportunity to consider, comment on or object to this Safety Finding.

It should also be noted that issue of a Safety Finding does not in any way prejudice CASA's prerogative to take at any time such regulatory or other legal action as may be appropriate in the circumstances.

Details of deficiency:
<p>The NOTAM office was not notified about the presence of obstacles. Obstacles penetrating the approach surface for Runway 22 were detected in the instrument survey of the approach, take-off and transitional surfaces conducted in November 2016, but were not reported or removed.</p> <p>Six trees were reported to be penetrating the approach surface for Runway 22.</p>
Criteria:
<p>reg 139.360 Notice of obstacles</p> <p>(2) If the operator becomes aware of the presence of an obstacle, the operator must:</p> <ul style="list-style-type: none">(a) tell the NOTAM Office immediately; and(b) give the NOTAM Office details of:<ul style="list-style-type: none">(i) the height and location of the obstacle; and(ii) amended declared distances and gradients, if applicable.
Issuing inspector: Iain Lobegeier
Date issued: 20/12/2017
Due date: 10/01/2018