

Item: 7

Development and Infrastructure Committee: 7 February 2023

Civil Aviation Authority – Inspection of Council Airfields.

Report by Corporate Director for Enterprise and Sustainable Regeneration.

1. Purpose of Report

To consider the Aerodrome Audit Report 2022 following the Civil Aviation Authority Inspection of the Council's airfields.

2. Recommendations

The Committee is invited to note:

2.1.

That, following its biennial inspection of Council airfields, which took place between 13 to 15 September 2022 the Civil Aviation Authority has issued the Aerodrome Audit Report, attached at Appendix 1 of this report.

2.2.

That the Aerodrome Audit Report found no Level 1 non-compliance items across the six airfields but reported five Level 2 non-compliance items and eight observations, as detailed in section 4.3 of this report.

2.3.

That, on 9 December 2022, officers met with the CAA inspectors to provide an update on progress with addressing the observations referred to above, which has been summarised in the CAA report, attached as Appendix 2 to this report.

The Committee is invited to scrutinise:

2.4.

The outcome of the CAA Inspection of Council airfields, together with the RAG status of the actions and observations, attached as Appendices 1 and 2 respectively to this report, in order to obtain assurance that action has been taken where necessary.

3. Background

3.1.

As a Licensee for the north isles airfields, the Council is subject to a Civil Aviation Authority (CAA) inspection and audit report every two years (previously annually).

The previous inspection and audit undertaken in 2018, was reported to the Development and Infrastructure Committee on 11 September 2018. There were no inspections carried out over the COVID-19 pandemic.

3.2.

Annual Aerodrome inspections, such as the subject of this report, and the closing of remedial actions are a condition of the Aerodrome Operating Licence. Failure to close out remedial actions to an agreed schedule, and/or the issuing of a Level 1 non-compliance creating a significant safety hazard, will result in the withdrawal of certification and the resultant closure of Orkney Islands Airfields. The definition of findings is outlined on page 7 of the CAA report, attached as Appendix 1 to this report.

4. Audit Findings

4.1.

The 2022 inspection was undertaken during the period 13 to 15 September 2022. An on-site audit was conducted in Eday, North Ronaldsay, Sanday, Stronsay and Westray, to verify continued compliance with aerodrome licensing requirements set out in the Civil Aviation Publication 168 Licensing of Aerodromes, the Air Navigation Order, the Aerodrome Licence, ICAO Annex 14 and the Aerodrome Manual. Due to the cancellation of the inter-island air service following a technical issue, a desktop only exercise was completed for Papa Westray.

4.2.

The audits were conducted by two CAA inspectors who will be providing oversight of the airfields in the future. They have proposed quarterly or six-monthly meetings during the year to discuss progress with observations and a general discussion about airfields which has been welcomed.

4.3.

The full CAA audit report, attached as Appendix 1 to this report, identifies five Level 2 items for action and eight observations which may affect aerodrome safety, for which the inspectorate recommends that the Licence Holder (the Council) considers appropriate remedial action. There were no Category 1 non-compliance items creating a significant safety hazard.

4.4.

Overall, the feedback was very positive from the CAA inspectors, recognising the commitment of the Council to continuously improve and maintain the airfields in a safe, fit for purpose condition.

4.5.

The Airfield Officer and the Service Manager (Transportation) met with the CAA inspectors on 9 December 2022 to update on progress with addressing the Level 2 items for action and observations. As such, some actions have now been closed off

whilst the review date of some other actions have been extended, for example, to provide sufficient time to complete training for all staff. The RAG status of each action and observation is summarised in Appendix 2 to this report.

4.6.

All airfield manuals and supporting documentation have been updated as recommended, additional supplies of Monnex Dry Power were purchased and distributed across the airfields and the Airfield Officer has carried out training to the Airfields Attendants to address these non-compliance items.

4.7.

The Committee is invited to scrutinise the outcome of the CAA Inspection and the RAG status of the actions and observations. The observations within the Civil Aviation Authority audit are seen as being part of the Council's drive for continuous improvement whilst maintaining a 100% safety record at the airfields.

5. Corporate Governance

This report relates to the Council complying with governance and procedural issues and therefore does not directly support and contribute to improved outcomes for communities as outlined in the Council Plan and the Local Outcomes Improvement Plan.

6. Financial Implications

There are no financial implications associated directly from the noting recommendations of this report.

7. Legal Aspects

The Council requires to comply with the requirements of its Aerodrome Operating Licence. Annual aerodrome inspections assist the Council in complying with such requirements.

8. Contact Officers

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9. Appendices

Appendix 1: CAA Audit – September 2022.

Appendix 2: CAA Audit – RAG Status.

Oversight Report

Report Date:
23 September 2022



Details

Audit Reference Number

ADR.142

Organisation Name

Orkney Islands Council

Lead Auditor

David Hindson

Audit Type

AAA\Aerodromes\Onsite\Ongoing Oversight

Dates

Start Date

13/09/2022

End Date

15/09/2022

Closed Date

Overview

A periodic on site audit was conducted at Eday, North Ronaldsay, Papa Westray (desktop only), Sanday, Stronsay and Westray to verify continued compliance with aerodrome licensing requirements set out in the Civil Aviation Publication (CAP) 168 'Licensing of Aerodromes', the Air Navigation Order, the Aerodrome Licence, ICAO Annex 14 and the Aerodrome Manual.

The Accountable Manager should confirm rectification of Findings to the relevant Aerodrome Inspector by the Target Date shown.

Although corrective action is not obligatory for an observation, acknowledgement and any intended action should be notified to the relevant Aerodrome Inspector by the Target Date shown. If you reject an observation, please provide your rationale.

Audit Scope

Licensing Documentation

Safety Management Systems

Aerodrome Inspection

Surveys

Apron Management

Runway/Taxiway Incursion Prevention

Aeronautical Ground Lighting (AGL)

Wildlife Hazard Management

Aerodrome Safeguarding

On-Aerodrome Developments

RFFS Low Cat 1-2 Aerodromes

Emergency Planning

CAA Audit Team

Neil Gray

David Hindson

Auditees

Findings				
Number	ADR.3998	Requirement	CAP 168 - Chapter 8 - Appendix 8B: Extinguishing agents	
Details				
CAP168 Chapter 8 Appendix 8B Extinguishing Agents:				
<p>All Orkney Island Council (OIC) Aerodromes promulgate RFFS Category 1 and have chosen to provide Dry Powder as the main complementary fire extinguishing agent. The minimum quantity required for RFFS Category 1 is 45 kg (Table 8B.3), this quantity must be carried on the RFFS vehicle so that it can be immediately available for discharge in the event of an aircraft fire. In addition, the aerodrome should hold a 100% reserve quantity (Para 20). A review of the provision at the OIC Aerodromes revealed a deficiency in the quantity of dry powder carried on the vehicle and/or held in reserve. The Airfield Manager should ensure the quantities of complementary extinguishing agent carried on the RFFS vehicles, and held in reserve, meet the minimum requirements set out in the CAP168. When correcting this non-compliance the Airfield Manager should note the following:</p> <ul style="list-style-type: none"> • Where a high-performance Dry Powder is used it may be permissible to reduce the minimum amount provided (see CAP168 Para 8.84). OIC Aerodromes carry 'Monnex' Dry Powder which is regarded as high performance. • Where the quantity of CO2 carried on the RFFS vehicles exceeds the minimum quantity required (2kg – Para 17) the surplus quantity may be used to off-set the minimum quantity of dry powder at a rate of 2kg CO2 = 1kg of Dry Powder. • The Airfield Manager should consider the risk associated with reducing the quantity of Dry Powder carried on the vehicles whilst at the same time applying remission. 				
Level	Status	Target Date	Closure Date	Raised By
2	Open	21/12/2022		Neil Gray

Number	ADR.3999	Requirement	CAP 168 - Chapter 8 - Appendix 8B: Training	
Details				
CAP168 Chapter 8 Appendix 8B Training:				
<p>A review of the RFFS training programme and associated training records revealed that a number of personnel across all OIC Aerodromes have not undertaken hot fire training within the timescales prescribed in the Orkney Islands RFFS Training Programme. Additionally, there were other training modules that have not been completed.</p>				
Level	Status	Target Date	Closure Date	Raised By
2	Open	21/12/2022		Neil Gray

Number	ADR.4003	Requirement	CAP 168 - Chapter 2: Amendment of the manual	
Details				
CAP 168 Chapter 2 Aerodrome Manual and Supporting Documentation:				
<p>During the audit various aerodrome documentation was reviewed, where it was identified that the following documents had exceeded the stipulated annual review period:</p> <ol style="list-style-type: none"> 1. Aerodrome Manual 2. Wildlife Management Manual 3. 1000m Response Plan 4. Multi Agency Response Plan 5. Airfield Record Book 6. RFFS Training Manual <p>All documentation shall be reviewed and updated to reflect the recent changes within the organisational structure. Once updated, a copy of each document shall be sent to asddocs@caa.co.uk, in order to ensure that our CAA records are up to date.</p>				
Level	Status	Target Date	Closure Date	Raised By
2	Open	22/12/2022		David Hindson

Findings

Number	ADR.4004	Requirement	Safety Management Systems		
Details					
Safety Management System (SMS):					
Whilst reviewing version 2.5 of the OIC Airfield Safety Management Manual dated 20th January 2021, it was identified that an annual review had not been undertaken. The following shall be considered as part of this review:					
1. Due to changes within the organisational structure, the current Safety Policy within section 1, paragraph 4 of the Airfield Safety Management Manual is not signed by the current Accountable Manager.					
2. The organisational chart and the associated roles and responsibilities shall also be reviewed and updated accordingly to reflect the current OIC structure.					
3. Section 4, paragraph 1.1 of the SMS states that basic SMS Training is provided to all staff and refreshed annually. At the time of the audit, there were no records evident to suggest that this training had taken place.					
Level	Status	Target Date	Closure Date	Raised By	
2	Open	22/12/2022		David Hindson	

Number	ADR.4007	Requirement	Appendix 2D Runway Incursion Awareness		
Details					
CAP 168 Chapter 2, Appendix 2D Runway Incursion Awareness and Driver Training:					
Whilst reviewing the driver training records, it was noted that a number of live operational staff were operating on the airfield with expired airside driving permits. During the audit the Airfield Manager did carry out some refresher training, but further training will be required to ensure that all driver training remains valid in accordance with the OIC Training requirements.					
Level	Status	Target Date	Closure Date	Raised By	
2	Open	22/12/2022		David Hindson	

Observations

Number	ADR.4001	Requirement	CAP 168 - Chapter 8 - Appendix 8B: Emergency planning/emergency orders		
Details					
OBSERVATION: CAP168 Chapter 8 Appendix 8B Emergency Planning/Emergency Orders					
Owing to the remote location of the aerodromes, and the limited availability of off-aerodrome emergency services, it would be beneficial for them to be given regular opportunities to familiarise themselves with the emergency procedures as well as the topography of the aerodrome. It was reported that at some aerodromes this had not happened for some time.					
Level	Status	Target Date	Closure Date	Raised By	
AAA-Observations	Open	21/12/2022		Neil Gray	

Number	ADR.4002	Requirement	CAP 168 - Chapter 8 - Appendix 8B: Vehicles and ancillary equipment		
Details					
OBSERVATION: CAP168 Chapter 8 Appendix 8B Vehicles and Ancillary Equipment					
The RFFS vehicles were fitted with a small electric winch. The following was unclear:					
<ul style="list-style-type: none"> • Whether or not they are intended to be used • Whether personnel were training in the inspection, maintenance and safe use of the equipment • When they were last tested/inspected by a competent person • Procedures and limitations of use 					
Level	Status	Target Date	Closure Date	Raised By	
AAA-Observations	Open	21/12/2022		Neil Gray	

Number	ADR.4006	Requirement	CAP 168 - Chapter 3: Aerodrome surface conditions		
Details					
OBSERVATION: General Airfield Maintenance					
During an inspection of the Airfields, the following observations were made:					
1. Although the runways at all airfields were regularly swept to evenly distribute the gravel, it was recommended that rolling the surface should be considered in or to further compact the gravel surface, thus potentially reducing any future FOD risk.					
2. In order to maintain consistency across all airfields, consideration should given towards installing red reflective lin laners along the edges of each runway turn-pad in order to further enhance the delineation of the turn-pad edges, thus reducing the potential risk of a runway excursion.					
3. Some of the reflective sleeves fitted to the lin laners that were used to delineate the runway, taxiway and runway-turn pad edges were damaged and should be replaced to enhance visibility.					
4. The double white Apron paint markings at Eday and North Ronaldsay require refreshing, particularly at the entrance point from the main Apron to the Taxiway leading to the main runway.					
5. Whilst inspecting the runway surface at Stronsay, surface erosion was present at the RWY 20 threshold, where large stones were exposed. If not addressed, these larger stones may become loose, creating a potential FOD risk.					
6. After a recent event involving an unauthorised vehicle entering the runway at Westray, one stop-end light fitting located at the RWY 09 Threshold has been damaged, resulting in the fitting becoming loose. The Aerodrome and Airfield Manager were aware of this defect and corrective action shall be taken to secure this fitting.					
Level	Status	Target Date	Closure Date	Raised By	
AAA-Observations	Open	22/12/2022		David Hindson	

Number	ADR.4008	Requirement	Aerodrome Inspection		
Details					
OBSERVATION: Monitoring and Inspection					
Overall there was a robust inspection regime in place at all airfields, however the following observations were made:					
1. It was evident that not all airfields were performing the weekly emergency battery light checks detailed within AOI 7. Record Sheet no.3 could not be observed at both Sanday and Stronsay as they had no forms available.					
2. It was good to see that a process was in place for performing airfield Handover and Handback during works in progress. Note however that these Handover / Handback forms were only available at some airfields and could not be observed at both Sanday and Stronsay.					
Level	Status	Target Date	Closure Date	Raised By	
AAA-Observations	Open	22/12/2022		David Hindson	

Number	ADR.4009	Requirement	Wildlife Hazard Management		
Details					

OBSERVATION: Wildlife Hazard Management

During the audit the following observations were raised:

1. The form used to record all bird activity / sightings should include a time column so that all entries are time stamped. This will meet the recommendations detailed within CAP772.
2. It is considered good practice to record "Nil Seen" within the comments field of each bird patrol entry, should no bird activity be observed during the inspection. This will provide a clear record that a bird patrol did occur at that particular time.
3. Stronsay stated that the bio-acoustic bird scaring system fitted within the vehicle was unserviceable, where the distress call could not be heard through the speakers.
4. The removal of all grass cuttings from the airfield should be considered, as over time the build up of dead thatch will attract insects, creating a food source for birds / other wildlife.
5. It was unknown when the last 0.5km and 4km local bird hazard assessment was carried out, and it is recommended that this should be re-assessed when reviewing the Airfield Wildlife Hazard Management Manual for each aerodrome, in order to understand any changes in wildlife activity and any potential new attractants.

Level	Status	Target Date	Closure Date	Raised By
AAA-Observations	Open	22/12/2022		David Hindson

Number	ADR.4010	Requirement	Runway/Taxiway Incursion Prevention		
Details					
OBSERVATION: Radio Communication					
During an inspection of the fire vehicle at Eday, the staff raised concerns regarding significant interference on the VHF radio, which if not addressed could result in difficulty when trying to maintain a listening watch whilst driving on the airfield.					
Level	Status	Target Date	Closure Date	Raised By	
AAA-Observations	Open	22/12/2022		David Hindson	

Number	ADR.4000	Requirement	CAP 168 - Chapter 9 Emergency Planning		
Details					
OBSERVATION: CAP168 Chapter 9 Emergency Planning					
The aerodrome operator is required to develop procedures for testing the adequacy of the Aerodrome Emergency Plan. Several table-top exercises were carried out in 2018/19 for which attendance by some of the associated stakeholders appeared to be poor. The date of the last practical 'live-play' testing of emergency plans could not be identified. The Airfield Manager should consider the benefit of devising a means to test the effectiveness of the aerodrome emergency plans in a way that meets the requirements of the licensing regulation whilst acknowledging local emergency arrangements.					
Level	Status	Target Date	Closure Date	Raised By	
AAA-Observations	Open	21/12/2022		Neil Gray	

Number	ADR.4005	Requirement	Aerodrome Manual		
Details					

OBSERVATION: Aerodrome Manual

Having reviewed the Aerodrome Manuals for each of the six aerodromes, below is a list of some areas that should be reviewed and amended. Note that this list is not exhaustive, where a full review of the manuals shall be undertaken prior to final issue:

1. The declared landing distance available (LDA) detailed within version 6.7 of Sanday's Aerodrome Manual (section 3, paragraph 3.6) is not aligned with the AIP entry and should state 467m due to the 30m starter extension.
2. Consideration should be given to refer to the correct AIP reference within the Aerodrome Manual, which will prevent the need manage two sets of data; such information will include runway declared distances and ARP coordinates etc.
3. Section 3, paragraph 3.5 states that the CAA will measure runway distances. This is incorrect, where OIC shall measure the runway declared distances as part of their survey and then submit a survey declaration form to AIS via Aurora as part of an AIP change request. The CAA will review and approve this change request prior to it being promulgated within the AIP, where a new 1560C form will be issued to reflect the newly published distances.
4. Bird Strike Occurrence form makes reference to Malcolm Parson's e-mail address, which should be amended to reflect the correct contact.
5. The declared landing distance table detailed within version 6.7 of Papa Westray's Aerodrome Manual (section 3, paragraph 3.6) makes reference to Runway 04-22 and should state Runway 03-21.

Level	Status	Target Date	Closure Date	Raised By
AAA-Observations	Open	22/12/2022		David Hindson

Definition of Findings

LEVEL 1 (ONE) NON-COMPLIANCE CREATING A SIGNIFICANT SAFETY HAZARD

Level 1 items will be reported to the Accountable Manager for action if a major failure of compliance has been identified with the aerodrome licensing requirements set out in either the Air Navigation Order, the Aerodrome Licence, ICAO Annex 14 or Civil Aviation Publication (CAP) 168.

If any Level 1 items are reported, the major failure of compliance must be rectified immediately or within the short timescales indicated. Failure to do so will result in the CAA having to take regulatory action, which could result in suspension of the Aerodrome Licence.

LEVEL 2 (TWO) NON-COMPLIANCE

Level 2 items will be reported to the Accountable Manager for action if it has been identified that the Aerodrome is not in full compliance with the aerodrome licensing requirements set out in either the Air Navigation Order, the Aerodrome Licence, ICAO Annex 14, Civil Aviation Publication (CAP) 168 or the Aerodrome Manual.

If any Level 2 items are reported, the CAA Aerodrome Oversight team must be informed that these items have been rectified by the dates agreed with the aerodrome during the inspection, and shown in the Latest Correction Date box. Failure to rectify any items within the agreed time scale may result in the CAA having to take regulatory action, which could result in suspension of the Aerodrome Licence.

OBSERVATIONS

An Observation may be raised where there is potential for future non-compliance if no action is taken, or where we wish to indicate an opportunity for safety improvement or something that is not good practice. Corrective action is not obligatory for an observation, but acknowledgment and the identification of any intended action is expected. If you reject an observation, please justify your rationale.

Report issue

Issued to	Original Report Issue Date
James Buck	23/09/2022

Appendix 2 – Update

RAG Status of Level 2 actions and observations following CAA Audit:

Number	Requirement	Details	Actions	Status
ADR.3998 (Level 2)	CAP 168 – Chapter 8 – Appendix 8B: Extinguishing Agents	Quantity required of Dry Powder	<p>Additional Monnex purchased through local supplier to comply with amount required in each airfield/vehicle.</p> <p>In Papa Westray, the RFFS vehicle is unable to accommodate the amount of Monnex Dry Powder required on the vehicle. As such, this has been substituted by CO2 Dry Powder on the vehicle, which complies as per the requirements outlined in the observation Report (paragraph 17).</p>	Closed
ADR.3999 (Level 2)	CAP 168 – Chapter 8 – Appendix 8B – Training	Out of date training	<p>Airfield Officer now has a programme in place to carry out Hot Fire Training which is currently in progress.</p> <p>As the spare RFFS vehicle has been deployed to North Ronaldsay whilst their vehicle is undergoing repairs, this may slip back the date of some training to be completed.</p>	Extended 31/03/23

Number	Requirement	Details	Actions	Status
ADR.4003 (Level 2)	CAP 168 – Chapter 2 – Amendment of the manual	Documents exceeded annual review period	All airfield manuals have now been updated and distributed to appropriate stakeholders.	Complete 15/12/22
ADR.4004 (Level 2)	Safety Management Systems	Annual review not undertaken	As above. Organisational structure and charts have been updated.	Complete 15/12/22
ADR.4007 (Level 2)	Appendix 2D Runway Incursion Awareness	Expired airside driving permits	Training in progress by the Airfield Officer at present.	Open 21/12/22
ADR.4001 (Observation)	CAP 168 – Chapter 8 – Appendix 8B: Emergency Planning/Emergency Orders	Emergency exercise	Observation – it was noted that an exercise of this type has not taken place for 3 years, most likely due to the Covid-19 pandemic. This has been discussed with the Airfields Officer with the view to establish an exercise next year.	Closed & Monitor
ADR.4002 (Observation)	Cap 168 – Chapter 8 – Appendix 8B: Vehicles and Ancillary Equipment	Winch clarification	The new RFFS vehicles are not fitted with a winch. Airfields Co-ordinators and Airfields Attendants have been advised that if the vehicle is fitted with a winch (older vehicle models), then they should not be used/operated.	Closed

Number	Requirement	Details	Actions	Status
ADR.4006 (Observation)	Cap 168 – Chapter 3 – Aerodrome Surface Conditions	Runways swept regularly. Consideration of installation of red reflective lin laners, reflective sleeves, apron painting, Stronsay surface erosion Damaged lighting.	Team ensure that the airfields are swept regularly to evenly distribute gravel. Lin laners and reflective sleeves have been ordered. Apron painting on North Ronaldsay has been carried out and actioned for Eday. Request to engineering has been made for maintenance works to be carried out on Stronsay as well as Papa Westray, North Ronaldsay, Westray and Sanday. Light fitting on Westray has been reported on Council system so that this will be repaired.	Closed & Monitor
ADR.4008 (Observation)	Aerodrome Inspection	Monitoring and Inspection	Missing record sheets in Stronsay and Sanday (Weekly emergency battery light checks and handover/handback forms).	Closed
ADR.4009 (Observation)	Wildlife Hazard Management	Form – add time column Record 'Nil Seen' Stronsay vehicle – not working Grass cutting removal Re-assess local bird	Time column now added to forms within airfield manuals. Team instructed to record Nil Seen as applicable. Grass cutting removal to be taken forward. Need to appoint external source to re-assess bird hazard assessment.	Closed & Monitor

Number	Requirement	Details	Actions	Status
		hazard assessment		
ADR.4010 (Observation)	Radio Communication	Eday fire vehicle – radio interference	Logged and fixed. Interference coming from reversing camera.	Closed
ADR.4000 (Observation)	CAP 168 – Chapter 9 Emergency Planning	Test the effectiveness of the aerodrome emergency plans to meet requirements	In discussion with Airfields Officer re: possibility of establishing a table-top exercise.	Closed & Monitor
ADR.4005 (Observation)	Aerodrome Manual	LDA – Sanday AIP Reference Runway Distance Bird Strike Occurrence Declared landing distance – Papa Westray	As above, all airfield manuals are in the process of being updated to comply with the observations noted.	Complete 15/12/22