



Conducting Certification & Surveillance Audits

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- Provide an overview on the oversight/audit process in alignment with the ICAO/EASA framework
 - Audit Planning
 - Role of the Auditor
 - Different types of Audit
 - How to develop an Audit Plan
 - Audit Procedures
 - Performing an audit
 - Documenting non-conformities
 - Audit reports

Objectives



- Ensure there is an agreed methodology for carrying out the audits
- Provide an overview of the critical elements required to devise an audit, programme schedule and plan
- Discuss the details of the responsibilities, actions and methodology required to deliver an audit
- Agree a method of recording and closing audits and inspections

8 Critical Elements



CE-7 The implementation of a continuous surveillance programme consisting of inspections and audits to ensure that aviation license, certificate, authorization and/or approval holders continue to meet the established requirements and functions at the level of competency and safety required by the State

- CAA Website
- Developed a series of Question Bank (QBs)
- <http://www.caa.co.uk/Commercial-industry/Airports/Aerodrome-licences/Certificates/Compliance-monitoring/>
- Produced a revised Information Notice (IN) to provide further guidance
- Includes 'sample' Compliance Monitoring System
- CAA will define an aerodromes' "performance" based, in part, on its system to monitor compliance



Auditing in the Aviation System



- As an auditor we operate in a system (e.g. international, nationally or more locally). Within that system an audit is normally undertaken against the following:
 - Regulation
 - Industry Experience
 - Standards or Policies
 - Procedure or Process
 - Anything else?

Oversight can consist of:

- Audits
- Desktop exercises
- Meetings (e.g. Local Runway Safety Team)
- Visits (including unannounced)

All are oversight activity and could result in an 'Oversight' report and findings/observations being issued.

Why do we Audit?



To :

- Check regulatory compliance
- Check compliance with process / procedure
- Verify/confirm closure of audit actions
- To see what is going on, to assess performance
- Identify areas for improvement
- Identify non-compliances or findings
- To provide feedback

Regulation based audits – Normally compliance audit

- An audit undertaken to confirm whether an organisation is following the terms of an agreement, or the rules and regulations applicable to an activity or practice prescribed by an external agency or authority.
- Can also be termed rule-based
- **Audit approach:** desktop, remote or onsite basis



Process based audits

- Look at the effectiveness of the organisation's procedures
- **Audit approach:** desktop, remote or onsite basis
- CAA audits should look at both compliance and effectiveness:
 - Are there procedures in place?
 - Is the aerodrome following them?
 - Are they effective/do they work?



Auditing Roles & Responsibilities

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Auditing Roles & Responsibilities



- Audit Client – Request an audit or organisation being overseen by regulator, or auditee if internal audit.
- Lead auditor – to audit and manage the process to achieve defined audit objectives
- Auditor(s) – to audit under direction of Lead auditor
- Auditee(s) – to assist the auditor during the collection of objective evidence (including management)
- Guide(s) – to assist the audit team

Audit Preparation – UK CAA Roles and Responsibilities



- Support team is responsible for notifying the Aerodrome prior to audit (See Audit Notification Procedure).
- Inspecting Officer and Inspectors responsible for pre- and post-audit work.
- Inspectors are individually responsible for arranging their own accommodation and travel arrangements.
- Lead Inspector is responsible for coordinating the team.
- Team members are responsible for carrying out their allocated part of the audit and ensuring that it is recorded accordingly.
- Inspectors are responsible for reporting any safety intelligence acquired during the audit to other capability areas in line with Performance Based Oversight (PBO) principles.

Inspector Roles and Responsibilities



- Prepare for audit by reviewing question banks and other source material to identify items to examine on site.
- Assess whether audit content needs changing to reflect current safety trends / data.
- Draft and communicate audit programme to aerodrome.
- Complete inspector's checklist as audit progresses.
- Hold opening meeting with relevant aerodrome managers to introduce team members and outline audit focus areas, including theme items where applicable.
- Conduct team meetings during audit for updates and discussion.

Inspector Roles and Responsibilities



- Where possible, report on audit progress and issues arising at the end of each day.
- Prepare for closing meeting including items that may appear on the oversight report.
- Hold closing meeting with relevant aerodrome managers to summarise the outcome of the on-site audit activities, stating that findings and observations will be communicated in the audit report within 20 working days.
- Advise aerodrome managers of next steps in PBO processes (IRM and Accountable Manager communication).
- Manage ongoing findings and observations.

Procedure	
Safety and Airspace Regulation Group	
Management System	
ADR-0V-PR-014	Managing Findings and Observations
Created/Revised by: Neil Gray/Kate Bromley-Pear	Issue No: 2
Approved by: Neil Barton	Date: 23 JULY 2018

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Auditing Planning

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Audit Process



Gather evidence to accomplish audit objectives

1. Conduct interview discussions
2. Review documentation and processes
3. PEOPLE|PROCESS|OUTPUT

Follow Up

1. Wait for operators' response, ensuring responses are within the dates agreed at report issue.
2. Review corrective action
3. Close/Extend
4. Plan future oversight

Plan

Communicate

Conduct

Report

Follow Up & Close

Opening Meeting

Define audit objectives & methodology

1. Schedule dates*
2. Gather background info and identify risks
3. Conduct planning meeting
4. Create audit notification and schedule

Closing Meeting

Communicate audit results

1. Write, publish and distribute the oversight report to the CMM and to other appropriate personnel as required.

Audit Process



- Audit Steps:
 - Audit Planning
 - Audit Preparation & Notification
 - Audit Communication
 - Conducting the Audit
 - Audit Report (Findings/Non-Compliances)
 - Audit Follow up & Closure

Audit Preparation



- 10 weeks before the audit
- Inform the support team which QBs are going to be used for audit (including any changes identified from intelligence/safety data)
- Support team sends letter to aerodrome notifying them of the forthcoming audit, attaching the applicable 'compliance' questions (QBS) for them to complete
- National aerodrome receives Aerodrome Safety Report to complete

The image shows a sample of an 'AERODROME SAFETY REPORT' form. At the top, it says 'CAA - Safety and Airspace Regulation Group' and 'RESTRICTED - MANAGEMENT (WHEN COMPLETED)'. Below this, it identifies the 'CIVIL AVIATION AUTHORITY' and 'Safety and Airspace Regulation Group'. The main title is 'AERODROME SAFETY REPORT A, B & C CATEGORY AERODROME' followed by 'CAA AERODROME LICENSING AUDIT'. There are two input fields: 'NAME OF AERODROME' and 'DATE OF AUDIT'. Below the form, there is a section titled 'ALL AERODROMES ARE TO COMPLETE THIS REPORT PRIOR TO EACH PERIODIC CAA AERODROME LICENSING AUDIT'. This is followed by a 'PURPOSE' section explaining that the report is for demonstrating safety management and for self-audit. The 'CONTENT' section is partially visible, starting with 'PART 1 - AERODROME ADDRESS AND PRINCIPAL DETAILS'.

Audit Preparation




4 weeks before the audit:

- Support team receives and files completed 'compliance' questions
- Send a reminder if required!
- Support team posts the completed pre-audit checklist for the Inspector

- Inspector starts to prepare

CIVIL AVIATION AUTHORITY
Safety and Airspace Regulation Group
Airspace, ATM and Aerodromes Division
Aerodrome Oversight



AERODROME CERTIFICATION AUDIT/INSPECTION
PRE-AUDIT CHECKLIST

Aerodrome	
Date of Audit	
Inspectors	

Enclosed Documents: (highlighted in yellow if included in the pack)

Core Regulatory Documents (Certificate, CB, DAAD, OB)	Previous Audit Report
Aerodrome Manual	Previous Audit Checklists
SM S Manual	Question Banks
AIP Entry – via link in QPulse	NOTAM – via link in QPulse
AIP Aerodrome Chart – via QPulse	BIRD stat Reports – via Sharepoint Folder
AIP Parking and Docking Chart – via link in QPulse	MORA – via Sharepoint Folder
AIP Type A Chart – via link in QPulse	Checklists – via QPulse
Contact Details Check sheet	Accountable Manager Safety Risks

Additional Comments:
[Aerodrome name] [Year] Audit Pack

Signed: _____ Date: _____

Audit Preparation – Source Material



- Pre-audit checklist contains:
 - Completed question banks
 - Previous audit report and actions
 - Safety Management Systems
 - Theme items
 - MOR Data/Safety intelligence
 - Accountable Managers follow-up
 - AIP entries
 - Aerodrome and SMS manuals, plus supplementary notices instructions
- Inspector will review the completed question banks and select which items to examine at the forthcoming audit

Certificated Aerodromes – Question Banks



QB1	Management of Change	QB12	Low Visibility Operations	QB23	Apron Management
QB2	Use of Alcohol	QB13	Wildlife Management	QB24	Aerodrome Manual
QB3	Compliance Monitoring	QB14	Obstacles and Flight Procedures	QB25	Aerodrome Safeguarding
QB4	Contracted Activities	QB15	Occurrence Reporting	QB26	Demonstration of Compliance
QB5	Coordination with Other Organisations	QB16	Operation of Vehicles	QB27	Findings and Corrective Actions
QB6	Personnel Requirements	QB17	Rescue & Fire Fighting Services	QB28	Fuel Quality
QB7	Prevention of Fire	QB18	Safety Directives	QB29	Management System
QB8	Record Keeping	QB19	Safety Programmes & Committees	QB30	Emergency Planning
QB9	Training and Proficiency	QB20	Safety Reporting System		
QB10	Aerodrome Monitoring and Inspection	QB21	Surface Movement Guidance and Control Systems (SMGCS)		
QB11		QB22			

Audit Preparation – National Aerodromes



- Standard approach to ensure consistency
- Assess whether the focus needs changing to reflect safety trends/data
- Upload checklist

Checklist			
Audit Details			
Number ADRNTL352	Organisation Name Manpool Aerodrome		
Scheduled Start Date 16/07/2018	Audit Type AAA/Aerodromes/National/National Audit		
Status Performed			
Checklist			
Title	Description	Completed By	Completed Date
Manpool Airport Audit			
Questions			
Number	Question Text	Response	
1	National Checklist Ops		
1.1	Aerodrome Inspection		
1.1.1	Runway Strips		
1.1.2	Runway Cleared & Graded		
1.1.3	Runway End Safety Areas (RESA)		

Audit Preparation – Inspectors Checklist



- Consistency of approach is important – across aerodromes and across the inspection team
- Inspector's checklist is intended to ensure consistency and completeness (for onsite and desktop audits)

Oversight Audit (Preparation)



- Inspector will select the scope items in database to match the question banks (QB)
- Inspector will select the scope items that match the QBs AND select the 'performance' questions appropriate to the checklist items that will be subject to a performance assessment.
- Inspector will create the audit schedule/programme

Audit Schedule



GATWICK AIRPORT CAA AUDIT 2018

OPS

	0900-1000	1000-1100	1100-1200		1300-1330	1330-1500	1500-1600	1600-1700
8 th May					In brief RFFS Classroom	QB 03 - Compliance Monitoring Room: AOB 108	QB 01 - Management of Change Room: AOB 108	QB 13 - Wildlife Management RFFS Classroom
9 th May	Airfield Inspection/Tour	QB29 Management Systems RFFS Classroom		LUNCH BREAK	QB23 Apron Management RFFS Classroom			Livex Prep/spare
10 th May	QB04 Contracted Activities RFFS Classroom	QB05 Coordination with other organisations RFFS Classroom	QB15 Occurrence Reporting QB20 Safety Reporting Systems RFFS Classroom		QB15 Occurrence Reporting QB20 Safety Reporting Systems RFFS Classroom		Outbrief Prep Room: AOB 108	16.30 Out brief RFFS Training Room

RFFS

	0930-1000	1000-1100	1100-1200		1300-1400	1400-1500	1500-1600	1600-1700
8 th May					Station Management Response time	Communication and alerting systems	RFFS Level of Protection	RFFS Vehicle and rescue equipment
9 th May	PPE & RPE	Extinguishing agents	Personnel & Medical standards	LUNCH BREAK	Live Ex Tommy Murney, Simon Petts and Simon O'Brian			
10 th May	ICS/Training update	QB05 Coordination with other organisations RFFS Classroom	QB15 Occurrence Reporting QB20 Safety Reporting Systems RFFS Classroom		QB15 Occurrence Reporting QB20 Safety Reporting Systems RFFS Classroom		Outbrief Prep Room: AOB 108	Out Brief

Audit Schedule



Gatwick Airport Onsite Audit 2023 – OPS Programme

OPS

	09:00 – 12:30		13:30-18:00
9 May	In Brief 09:00 Core Documents Review SMGCS Aerodrome Inspection	Lunch break	Higher Code Aircraft Apron Management & Operation of Vehicles
10 May	Aerodrome Maintenance Aerodrome Monitoring & Inspection		Aerodrome Safeguarding Training
11 May	Safety Culture (Safety Programmes & Reporting) 10.00 ASOG Aeronautical Data Quality		Out-brief prep Out Brief c15:00



- Focus is on compliance verification:
 - Inspector will check for evidence to support the aerodrome's answer on the selected QBs.
 - The remaining answers will be checked for obvious errors, but no further action taken.
 - The completed 'compliance' questions will be attached to the database as evidence of the aerodrome demonstrating compliance.

Compliance verification example

17.0

WILDLIFE HAZARD MANAGEMENT PROCEDURES

ADR.OPS.B.020
WILDLIFE MANAGEMENT

Birds and mammals are one of the major hazards to aircraft. As a result, the airport's policy is to minimise the risk of birdstrikes to aircraft on and around the aerodrome by the planned and co-ordinated use of effective control methods. Bristol Airport follows the guidance provided by the Competent Authority and AMC/GM to Annex IV, specifically AMC1 and GM2. The exact procedures to be followed are detailed in BRS AOP: B3 Bird Hazard Control and BRS AOP: D1 Habitat Management, and should be read in conjunction with Bristol Airport's Wildlife Management Policy.

NCE QUESTIONS	Q No	Question	AMC Ref	Yes/ No	Where is it documented/Additional Comment
	1	Does the aerodrome have a system to assess the wildlife hazard on, and in the surroundings of, the aerodrome?	ADR.OPS. B.020 (a)	YES	Section 17.0 Aerodrome Manual AOP B4 Wildlife Management Policy
	2	Has the operator established procedures to minimise the risk of collisions between wildlife and aircraft at the aerodrome?	ADR.OPS. B.020 (b)	YES	AOP B4 AOP B5 Wildlife Management Policy
	3	Does the aerodrome operator have in place a notification process, to inform the competent authority when a wildlife hazard problem has been identified?	ADR.OPS. B.020(c)	YES	Wildlife Management Policy?
	4	Does the Aerodrome participate in a national wildlife strike hazard reduction programme (for example the UK Bird Strike	AMC 1 ADR.OPS. B.020 (a)	YES	Wildlife Management Policy

Compliance Based Oversight



We are assessing the **compliance** of the activity against the relevant national requirement, EASA Implementing Rule (IR) and Acceptable Means of Compliance (AMC).

Example:

The Local Runway Safety Team meeting is the evidence that the aerodrome is meeting its obligations under **ADR.OR.D.027 Safety programmes** and **AMC1 ADR.OR.D.027**

FINDINGS ARE NORMALLY MADE AGAINST COMPLIANCE

Compliance vs Performance Question Banks



- Core oversight purpose is to assure ourselves of compliance
- Some areas involve compliance only
- Many technical areas also require performance assessment
- Use compliance and performance QBs

The image shows a screenshot of a question bank form titled 'QB13 WILDLIFE MANAGEMENT'. The form is divided into two main sections: 'ADN OPS 8.020 (a)' and 'ADN OPS 8.020 (b)'. Each section contains a table with columns for 'ID', 'Question', 'Y/N', and 'State where this is documented/Other comments'. The questions are numbered 1 through 6. The form is a template for recording audit findings.

ID	Question	Y/N	State where this is documented/Other comments
ADN OPS 8.020 (a)	1 Does the aerodrome have a system to assess the wildlife hazard on, and in the surroundings of, the aerodrome?	Check on item	
ADN OPS 8.020 (b)	2 Has the operator established procedures to minimise the risk of collisions between wildlife and aircraft at the aerodrome?	Check on item	
ADN OPS 8.020 (c)	3 Does the aerodrome operator have in place a notification process, to inform the competent authority when a wildlife hazard problem has been identified?	Check on item	
AMC 1 ADN OPS 8.020 (a)	4 Does the aerodrome participate in a national wildlife strike hazard reduction programme (for example the UK Bird Strike Committee)?	Check on item	
AMC 1 ADN OPS 8.020 (b)	5 Has the aerodrome operator established procedures to record and report, to the competent authority, wildlife strikes to aircraft that have occurred at the aerodrome?	Check on item	
AMC 1 ADN OPS 8.020 (c)	6 Has the aerodrome operator assessed itself that wildlife hazard assessments are made by competent personnel?	Check on item	

CAA - Wildlife Management Page 1 of 2 Version 2

Performance Based Oversight



We are assessing the **effectiveness** of the activity.

Example:

- The Local Runway Safety Team meeting is well attended by all appropriate stakeholders.
- The meeting reviews past activities to understand performance.
- Actions are allocated and delivered.
- Data supports strategic decisions.
- The meeting is proactive as well as reactive.

OBSERVATIONS ARE NORMALLY MADE AGAINST PERFORMANCE



Conducting the Audit

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Opening Meeting



- Introductions – auditors and auditees
- Scope – what's in and what's out
- Confirm audit timetable
- Staff availability – who are you seeing. Will you have a guide?
- Process you will be doing e.g. sample and verify or evaluate against criteria
- Availability of inspector's room, wi-fi, telephone etc
- Security arrangements, use of cameras
- Describe findings
- Confirm confidentiality
- Confirm when you will feedback to the head of department
- Confirm what to do if anything needs to be clarified
- Confirm what will happen if a serious non-conformity is identified

Conducting the Audit (1)



- Go to each relevant department
- Explain to each auditee what you are looking at/for
- Ask short questions and listen to responses to questions
- Often start with “show me” – it’s a powerful tool
- Try not to interrupt the auditee
- Audit against the requirements not your views or opinions
- Be prepared to show how a finding is a non-compliance with the requirement
- Provide clear and unambiguous findings

Conducting the Audit (2)



- An auditor needs to be a communicator
- Communications has to be two-way
- Give praise where there are areas of good practice
- Thank auditees for their input
- Be prepared to improvise/change your plan
- Don't be afraid to ask the stupid question!

Conducting the Audit (3)



- **5W's and H**
 - What?
 - Why?
 - When?
 - Where?
 - Who?
 - How?

- *“Who is responsible for?”*
- *“What records do you keep?”*
- *“How does the system?”*

Conducting the Audit



- Show patience and understanding
 - Don't say you understand if you don't!!
- Use open who, what, why, when and how questions rather than closed yes/no
- Observe processes, activities, environment, people etc. including body language
- Check supporting records, documents and any other relevant information:
 - Ensure correct document management procedures are in place e.g. version control
 - Ease of finding the correct documentation
- If there are no problems, move on – do not keep digging!!

Establish the facts

- Get help from the auditee
- Verify the findings
- Record all the evidence exactly as it is presented to you
- Don't assume
- Use the auditees terminology
- **Focus on compliance – not finding a non-compliance**
- Ask for additional information where there is insufficient evidence available
- Confirm understanding of the facts with the auditee

Auditor's Requirements



- Flexible
 - Changing situations
 - Different management styles
 - Different management/employee levels of auditees
- Competent
 - Know rationale for nonconformities
 - Appropriateness of specific proposed actions
- Knowledgeable
 - Understanding of airport/department cultures and practices

Writing Non-compliances



- Factual
- Accurate
- Complete and Concise

Seriousness

- What could go wrong if left unchecked?
- Will the safety management system detect it before an incident does?

Findings (Level 1 and Level 2)



A level 1 finding is issued when a finding is detected which is considered to be a serious breach of the certification basis.

In the case of level 1 findings, the CAA shall take appropriate action to prohibit or restrict the operation, or take action to revoke the certificate or to suspend the certificate or to limit or extend the certificate or to suspend the certificate upon the expiry of the period of validity of the certificate taken by the aerodrome operator.

aerodrome operator's proposed corrective action plan, the certificate or the certificate of approval shall be **lower or possibly hazard safe**.

In the case of level 2 findings, the CAA shall:

- grant the aerodrome operator a corrective action implementation period included in an action plan appropriate to the nature of the finding; and
- assess the corrective action and implementation plan proposed by the aerodrome operator and, if the assessment concludes that they are sufficient to address the non-compliance(s), accept these.
- Where the aerodrome operator fails to submit an acceptable corrective action plan, or to perform the corrective action within the time period accepted or extended by the CAA, the finding shall be raised to a level 1 finding.

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, you must justify your rationale.

Close out Meeting



- Lead auditor chairs the meeting
- Thank the auditees (hospitality etc.)
- Explain what we saw, heard and did....did we cover what we agreed as the scope of the audit?
- All auditors will summarise their findings and observations:
 - Non-compliances
 - Observations
 - Areas of good practice
- Audit conclusions
- Agreed actions and follow ups
- Confidentiality agreement



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Any Questions?

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