Audit Reporting and Post Audit

Aim

- Provide an understanding of the audit reporting process in alignment with the ICAO/EASA framework

Objectives

- Provide an understanding of audit report writing, including findings and observations
- Discuss how to evaluate and respond to corrective action plans
- Explain how to record and close audits/inspections
- Introduce the UK Performance Based Oversight system

Audit Report

- Sent to accountable manager within 20 working days
- Includes findings and observations
- Each has a target date for action (findings) or response (observations)
- Findings require a corrective action plan
- Observations require a response
- Report does not include examples of good practice
- Reports can be generated for any oversight activity

Writing Findings and Observations (1)

- Be factual/precise, e.g. which requirement has not been met
- Use examples to support the writing of the non-compliance
- Check it is easily understood to the reader
- Ensure it is robust and would withstand challenge
- Don’t issue instructions in the non-compliance narrative
- If possible, link common issues
- Allow yourself time – don’t rush
- In a team consider peer review

Writing Findings and Observations (2)

- Identify the SARP/EASA clause
- Explain why the item is not compliant
- Invite the aerodrome to review or take action
- Aerodrome should suggest actions – you are the regulator
- Be prepared for challenge
- Identifying and writing findings exercise:
  - Handout material

Findings (Level 1 and Level 2)

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certificate or the certificate or
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.

Level 1 Finding

- A level 1 finding shall be issued by the Competent Authority when any significant non-compliance is detected …… which lowers safety or seriously endangers safety.
- If there are any level 1 findings, the competent authority shall take immediate and appropriate action to;
  - prohibit or limit the activities of the organisation involved and, if appropriate,
  - revoke the certificate or approval:
  - limit or suspend it in whole or in part, depending on the extent of the level 1 finding,

until successful corrective action has been taken by the organisation.

Level 2 Finding

- A level 2 finding shall be issued by the Competent Authority when any non-compliance is detected …….. which could lower or possibly hazard safety.

- For level 2 findings, the competent authority shall

  - (a) grant the aerodrome operator or the provider of apron management services a corrective action implementation period included in an action plan appropriate to the nature of the finding; and
  - (b) assess the corrective action and implementation plan proposed by the aerodrome operator or the provider of apron management services and, if the assessment concludes that they are sufficient to address the non-compliance(s), accept these.

- Corrective action implementation period appropriate to the nature of the finding, not be more than three months.

- May extend the three-month period subject to a satisfactory corrective action plan agreed by the competent authority.

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 (in accordance with industry best practice or guidance material).
- 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.

Audit Findings Examples

https://caa-my.sharepoint.com/personal/graeme_ritchie_caa_co_uk/Documents/Documents/CAAi/COSCAP/Supporting%20Documents/Example%20Findings.docx

Writing Audit Findings – Exercise 1

Scenario – Compliance Monitoring

- EASA ADR.OR.D.005 (b)(11) states:
  - *The management system shall include a formal process to monitor compliance of the organisation with the relevant requirements.*

- During an audit against the EASA certification requirements, you ask to see how the airport monitors compliance with the EASA requirements.

- The auditee states that “we have our audits from external verification houses which means that we are fully compliant”.

- **Is this compliant? If not draft a finding**

Writing Audit Findings – Exercise 1

- **ADR.OR.D.005 (b)(11) requires aerodromes to have a formal process to monitor compliance against the relevant requirements**

- **Draft Finding:**

  - The airport does not have a formal process to monitor compliance against EASA requirements
  - The airport has no documented or undocumented process in place which details how they monitor compliance against EASA requirements, instead, relying on external audits against different standards

Writing Audit Findings – Exercise 2

Scenario – RFFS Response Time

ADR.OPS.B.010 Rescue and firefighting services

(a) The aerodrome operator shall ensure that:

(1) aerodrome rescue and firefighting facilities, equipment and services are provided;

(2) adequate equipment, fire extinguishing agents and sufficient personnel are available in a timely manner;

(3) rescue and firefighting personnel are properly trained, equipped and qualified to operate in the aerodrome environment; and

(4) rescue and firefighting personnel potentially required to act in aviation emergencies demonstrate their medical fitness to execute their functions satisfactorily, taking into account the type of activity.

Writing Audit Findings – Exercise 2

Scenario – RFFS Response Time

AMC5 ADR.OPS.B.010(a)(2) Rescue and firefighting services

RESPONSE TIME

The aerodrome operator should ensure that:

(d) suitable guidance, equipment and/or procedures for rescue and firefighting services are provided, to meet the operational objective, as nearly as possible, in less than optimum conditions of visibility, especially during low visibility operations.

Writing Audit Findings – Exercise 2

Scenario – RFFS Response Time

- During an audit against you identify that the RFFS does not have any search procedures for low visibility operations, such that the RFFS cannot cannot meet the response time objective.

- **Draft a finding**

- Is it Level 1 or Level 2?
- If you decide that it is Level 1 what action would you (NAA) take?

Writing Audit Findings – Exercise 2

- **Draft Finding**
  - The RFFS does not have any search procedures for low visibility operations, so cannot assure itself that response times can be achieved
- **Other Actions**
  - Prohibit operations in low visibilities

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Audit Follow-up

www.caa.co.uk/international

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CAA International, part of the UK Civil Aviation Authority

Post Audit Process

- Following the oversight activity the inspector is required to:
  - Complete the audit report – (QPulse recording system)
  - Send audit report to Accountable Manager
  - File records
  - Complete checklist
  - Note non-compliance target dates
  - Track responses and actions and close audit report once satisfactory response has been received
  - Send closed report to Accountable Manager

Post Audit – Evaluating Responses/ Action Plans

- Monitor action and response target dates
- Acknowledge every response
- If you are satisfied that the finding has been corrected then close the finding – but only when verified as complete
- If you are not satisfied challenge:
  - Aerodrome might suggest alternative means of compliance
- Look to agree solution acceptable to CAA and aerodrome
  - Aerodrome example (Fairoaks)
- File all correspondence

Post Audit Follow Up

- Who is primarily responsible for addressing a non-compliance?
  - The compliance manager?
  - The nominated post holder / departmental manager?
  - The accountable manager?
  - All of the above?

Post Audit Follow Up

- Primary responsibility – we would expect that departmental managers of the area audited should address findings NOT the Compliance/Quality Department….but it is the Compliance Department of the organisation that would communicate with the Regulator (external) or with the relevant department head (internal)

Audit Follow Up

After receiving the notification of findings, the organisation should identify and define the actions for all findings to address the effects of the non-compliance and its root cause(s) and contributing factor(s).

The organisation should develop a corrective action plan

Audit Follow Up

The corrective action plan should:

- include the correction of the issue (corrective actions and preventive actions), as well as the planning to implement these actions;
- be timely submitted to the competent authority for acceptance before it is effectively implemented.

After receiving the acceptance of the corrective action plan from the competent authority, the organisation should implement the associated actions.

Audit Follow Up

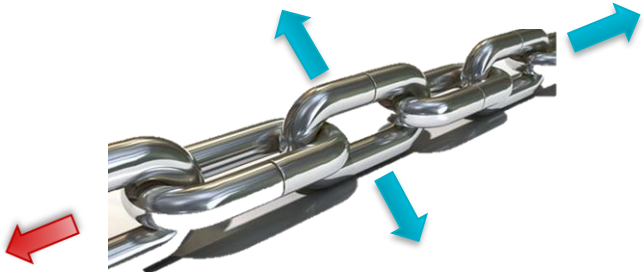
What is the difference between Causes and Contributing factors?

Causal Factors

are those factors that, if eliminated, would have prevented the occurrence (event)

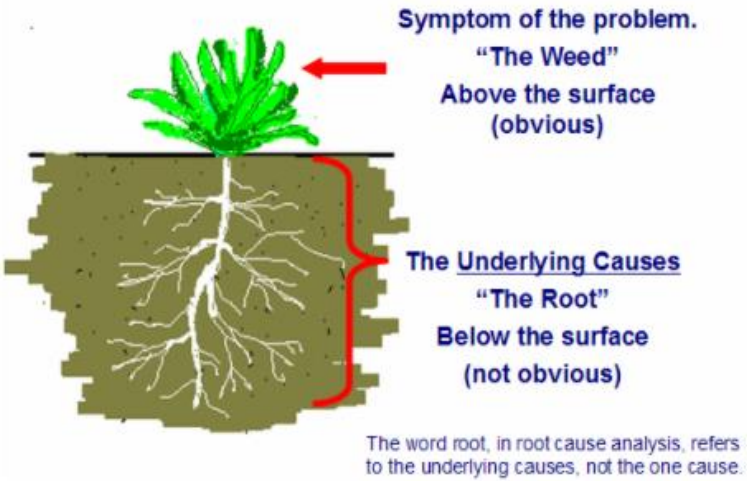
Contributing Factors

are issues identified during the investigation that could not have independently caused the event, but may have influenced the outcome

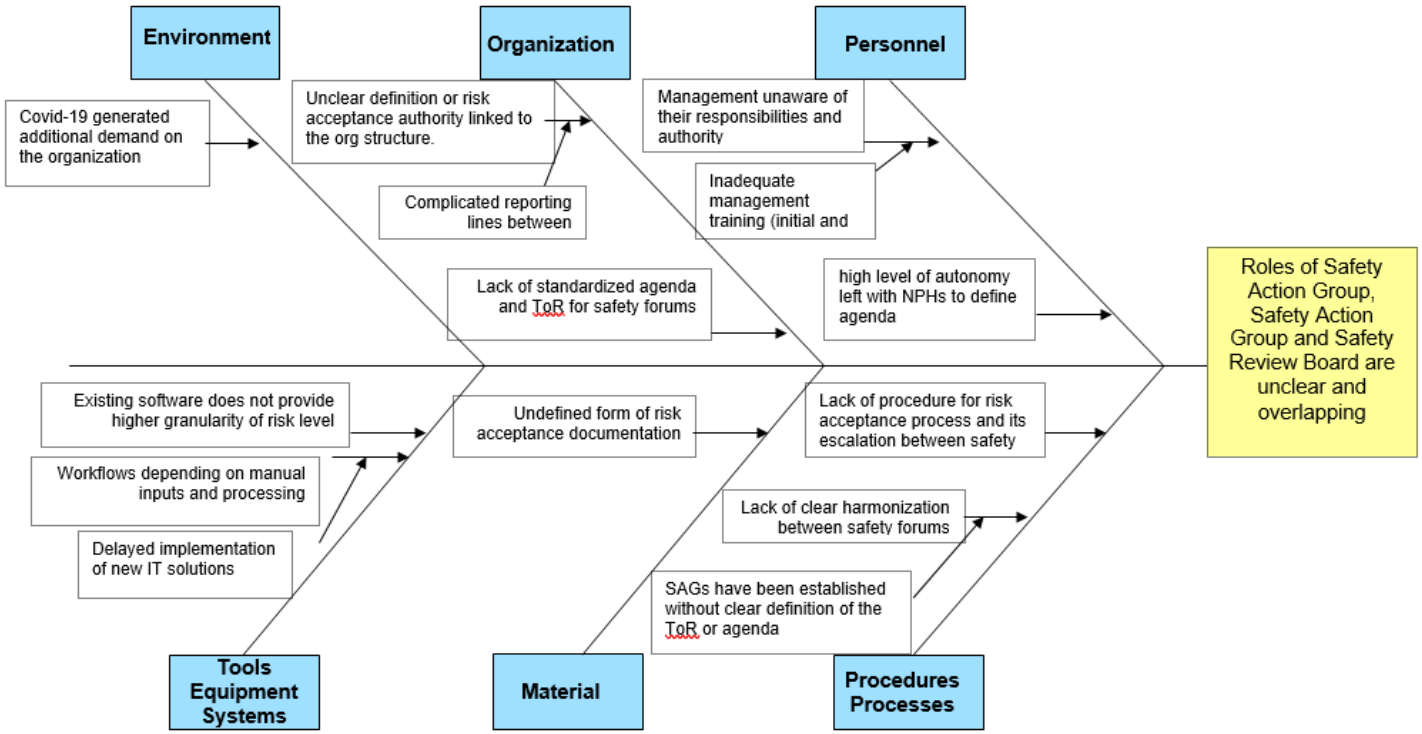


Root Cause Analysis (RCA)

Root cause analysis (RCA) is a systematic process for identifying “root causes” of problems or events and an approach for responding to them. RCA is based on the basic idea that effective management requires more than merely “putting out fires” for problems that develop, but finding a way to prevent them. Ref CAP 1760 for details



Fishbone for a non-compliance



Root Cause Analysis Can Prevent Accidents

Case Study

- During an autopilot-coupled ILS approach immediately after a maintenance input, the aircraft drifted to the right of the localiser after selection of Flap 30. When the autopilot was disconnected, a large amount of manual left roll control was needed to prevent the aircraft from turning to the right. It was necessary to maintain this control input until touch down. The aircraft landed safely despite these difficulties, with no injuries to any of the passengers or crew.
- On inspection, it was found that Flap Leading Edge access panels were not fitted. Their purpose is to maintain the aerodynamic profile of the flap leading edge. They had not been refitted before the aircraft left the hangar after the maintenance input

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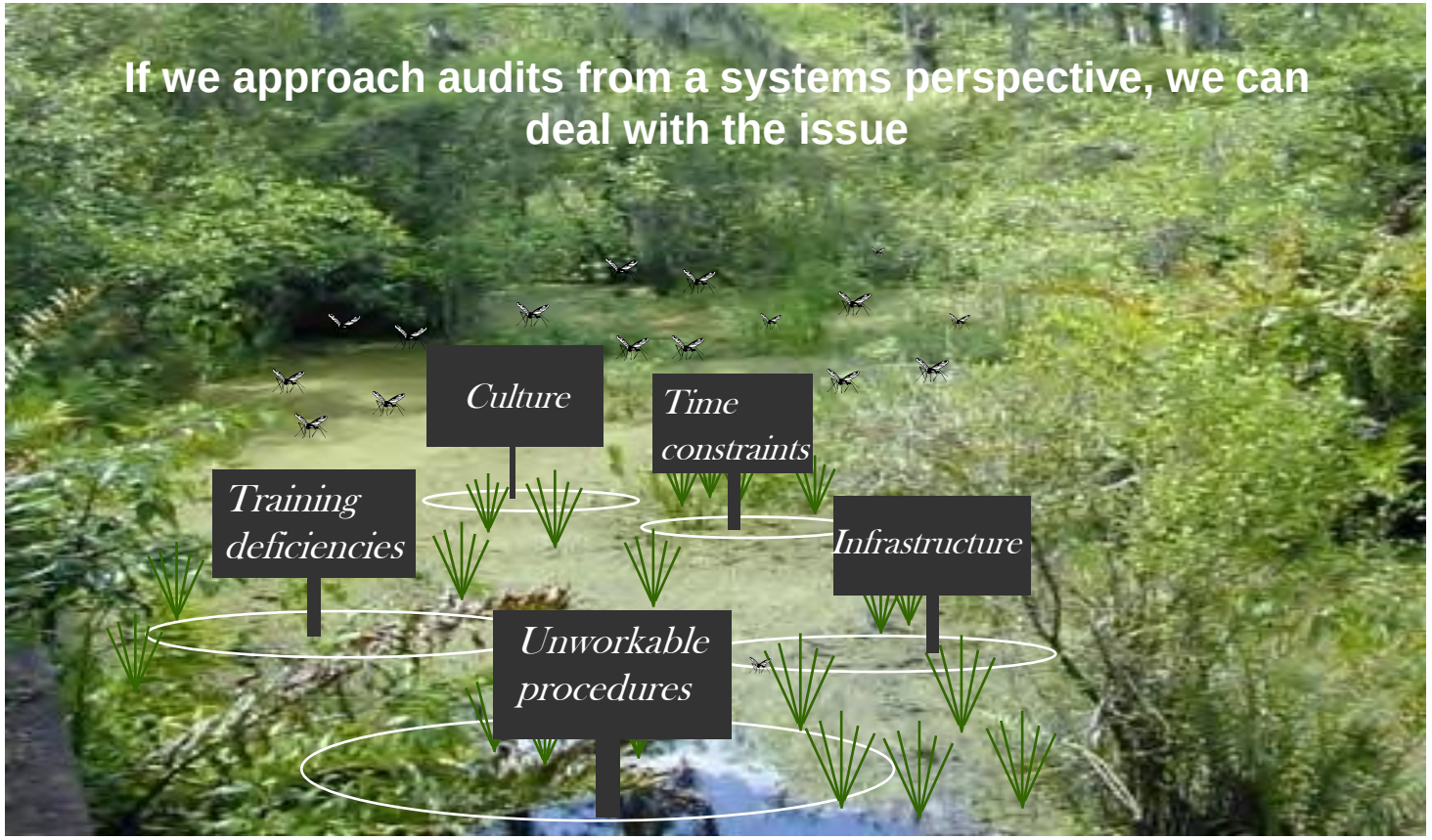
Audit findings are like mosquitoes

We can swat them one by one, but they still keep coming – if we don't address the system that breeds them!

Find root cause

Audit Follow Up Audit findings



Audit Follow Up –Corrective/Preventive Action

- **Immediate corrections –** May be needed to bring the system back to compliance / safety

- **Corrective Action**
  - Steps taken to remove the causes of an existing non-compliance or undesirable situation
  - **Root cause analysis**
  - Typically action carried out within 3 months (For Level 2)

- **Preventive Action**
  - Steps taken to remove the causes of potential non-compliance or potential situation that are not desirable
  - Timescales could be over longer period

Audit Follow Up – Corrective/Preventive Action

Follow up and correct action plans

3-Point Closure Plan

1. Immediate Corrective Action – Short-term action taken to contain the non-compliance and stop it from continuing.
2. Root Cause Analysis – Thorough analysis of the non-compliance to identify the true origin/cause of the non-compliance.
3. Root Cause Correction/Preventative Action – Action that should significantly reduce or eliminate the chance of recurrence.

5-Point Closure Plan

1. Immediate Corrective Action
2. Root Cause Analysis
3. Root Cause Correction/Preventative Action
4. Follow Up – Action that has been, or will be, completed by the responsible manager, Compliance Monitoring Manager or auditor to verify the effectiveness of the corrective action taken.
5. Closure – A statement from the Compliance Monitoring Manager stating that he/she is satisfied that the closure action can be submitted to the CAA.

Audit Follow Up – Accepted Response Example

Number	ADR.4459 (d)	Requirement	ADR.OPS.B.015 Monitoring and inspection of movement area and related facilities

Observation Details:
ADR.OPS.B.015 Aerodrome Monitoring and Inspection

d) The runway inspections are conducted in the direction of aircraft traffic whereas the European Action Plan for the Prevention of Runway Incursions (EAPPRI 3) recommends that inspections are done in the opposite direction to runway movements. The inspection regime was an element in an Air Accidents Investigation Branch report in 2018, following which it was reviewed. It is suggested that the regime and supporting safety assurance are reviewed given the EAPPRI recommendation and the length of time since the last review.

Action response

Root Cause: The Gatwick runway inspection process differs from the inferred recommendations of EAPPRI3 and UK Regs. A timely review of procedures was not established.

Corrective Action Plan: Review of current risk assessment carried out and a new hazard review with associated risk assessment produced specifically for runway inspection direction. The requirement to review procedures every 2 years has been added to the annual plan (alternate year to LVO/LVP review).

Demonstration of Implementation: Risk assessments and safety report attached.

Additional Information: One for future discussion, during satisfaction of this Observation it was noted that there is no specific reference stating that runway inspections should be carried out against the direction of travel.

Audit Follow Up - Problems Closing Findings

- What if an organisation fails to close a finding?
- Immediate contact with Compliance Quality Manager/ Accountable Manager
  - Corrective action plan
  - Consider impact on oversight of organisation
  - Enforcement action
- **Failure to close an audit finding is a serious matter and requires positive action by the Regulator**

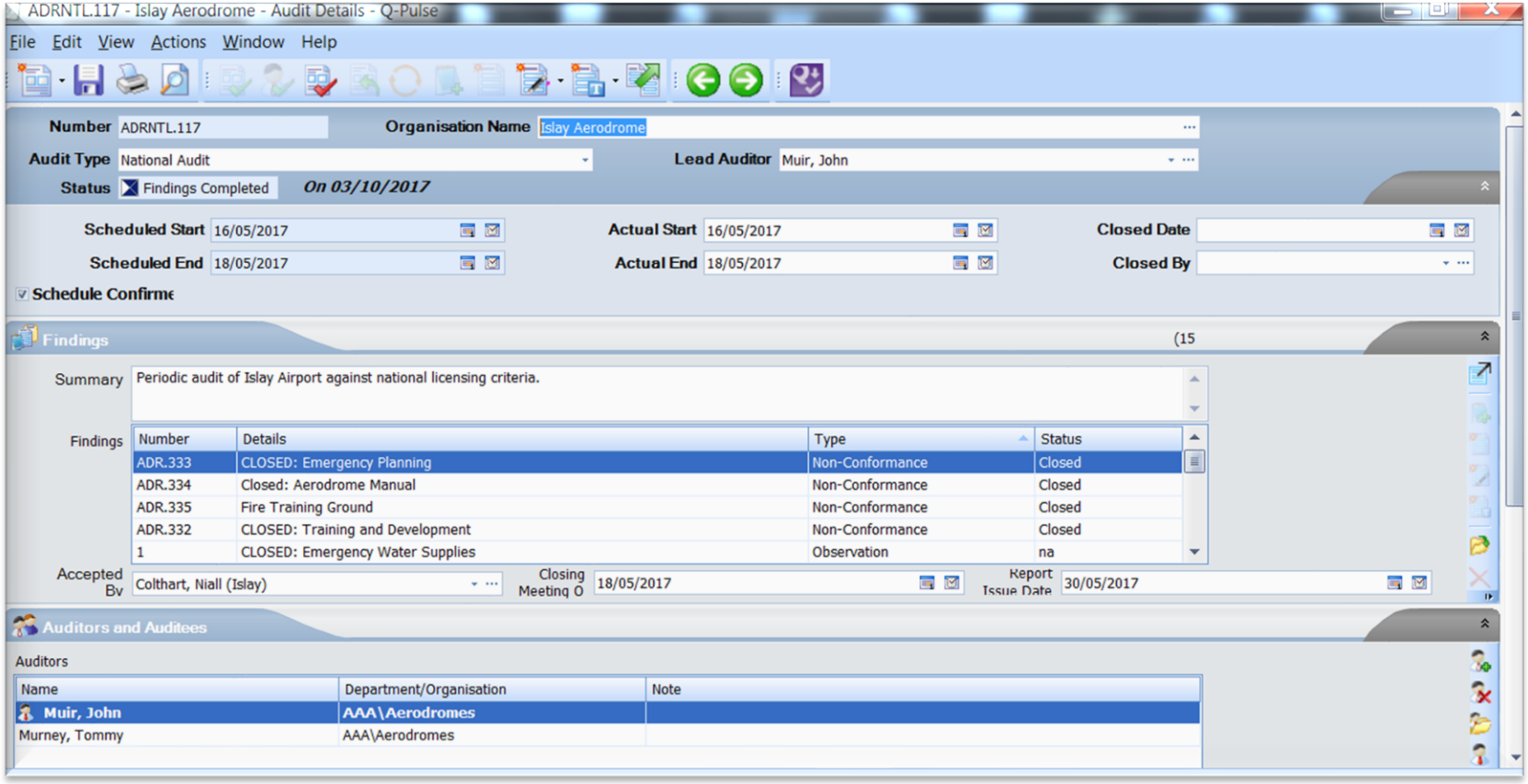
Audit Follow Up - Audit Findings Challenges

- **Getting your organisation to take notice**
- Getting the organisation to cause analysis
- Concentrate on key issues
- Clearly identify the action required
- Be persistent
- Escalate as required

Audit Follow Up - Audit Findings Challenges

- **Feedback to Senior management/ quality board**
- Identify the good and give credit
- Highlight key issues and required action
- Agree responsibility and timescale for corrective action
- Ensure meeting outcomes and agreements are documented
- Follow up!!!
- Keeping on top of difficult issues (recurring themes on management meeting agendas)

Tracking & Recording Corrective Actions



Post Audit – Performance Based Oversight (PBO)

- The UK has additional steps beyond the audit to engage with and industry to meets its aims for overseeing and improving aviation safety
- The process has 3 steps:
  - Assessing and recording the aerodrome for the elements covered at the audit
  - Internal Review meeting
  - Accountable Manager meeting

PBO – Assessing and Recording Data

- Complete Entity Profiling Tool (EPT)
  - Review each specialist area covered
  - Add confidence level and rationale for each activity audited
  - SMS
  - Update Changes looking back and forward
  - Consider what future oversight is required:
    - Baseline and focus (what will be looked at)
  - Identify risks and issues:
    - Review risks previously raised and close or bring forward
    - Record new risks, taking into account the entity's Top 5 risks on their risk register.

PBO – Internal Review Meeting

- Held around 1 month after the audit
- Multi-disciplinary review of the aerodrome/entity
- Purpose of Meeting:
  - Review entity safety risks, CAA areas of concern and assess the safety risk performance management of the entity
  - Record agreed safety risk assessment of the entity
  - Consider and prepare areas for discussion for the Accountable Manager Meeting
  - Review and agree any changes and focus to the future oversight of the entity
- Send risks/concerns to Accountable Manager

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PBO – Internal Review Meeting

- Risks / issues for the accountable manager meeting

Number	Concerns
1	Reductions in airport capacity due to lack of ATCOs as a result of current recruitment, training and retention issues
2	Rising traffic levels and ground complexity resulting in higher numbers of ground events and potentially to reductions in the number of aircraft able to be handled.

PBO – Accountable Manager Meeting

- The aim is to develop a shared understanding of the major risks to safety performance across the organisation
- Key discussion points:
  - Entity performance on managing safety and identified safety risks
  - What actions are in progress to mitigate risks
  - Planned future oversight activity
  - Sector risks, risk trends and issues, where possible
  - Any other issues identified by the entity
- Summarise with post-meeting letter

PBO – Accountable Manager Meeting

- Outcomes from accountable manager meeting

Number	Safety Risk	Action Agreed	Target Completion Date
1	Airport closure due to lack of ATCOs as a result of current recruitment, training and retention issues	ADR & NATS continuing to progress increased ATCO staffing with recent additions and further planned to ensure sufficient resource is available with resilience. Safety is being maintained and ADR//NATS working to ensure operational performance with minimum impact on ATCO workload/fatigue through several initiatives.	Monitor
2	Rising traffic levels and ground complexity resulting in higher numbers of ground events and potentially to reductions in the number of aircraft able to be handled.	ADR aware of increased event numbers so focussing on specific training into risk perception at kay areas. Liaising closely with ground handlers and driver training provider to focus on the issue.	Monitor

PBO Benefits

1. Improvements in the performance of the CAA and industry to manage the oversight of safety risks

- Gathering / sharing better safety risk intelligence
- Strengthen prioritisation and decision making
- Safety risk discussions with Accountable Managers

2. Improvements in the CAA's ability to allocate resources to areas with the greatest potential to enhance safety

- Allocating resources to risk
- Vary oversight levels based on evidence
- Working with industry for joint safety goals

3. Increased efficiency and effectiveness of the CAA's safety regulation activities and projects

- Standardising / automating oversight processes
- Standardising the governance of safety projects
- Removing legacy systems and tools

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Any Questions?