

# Root cause and SMS update

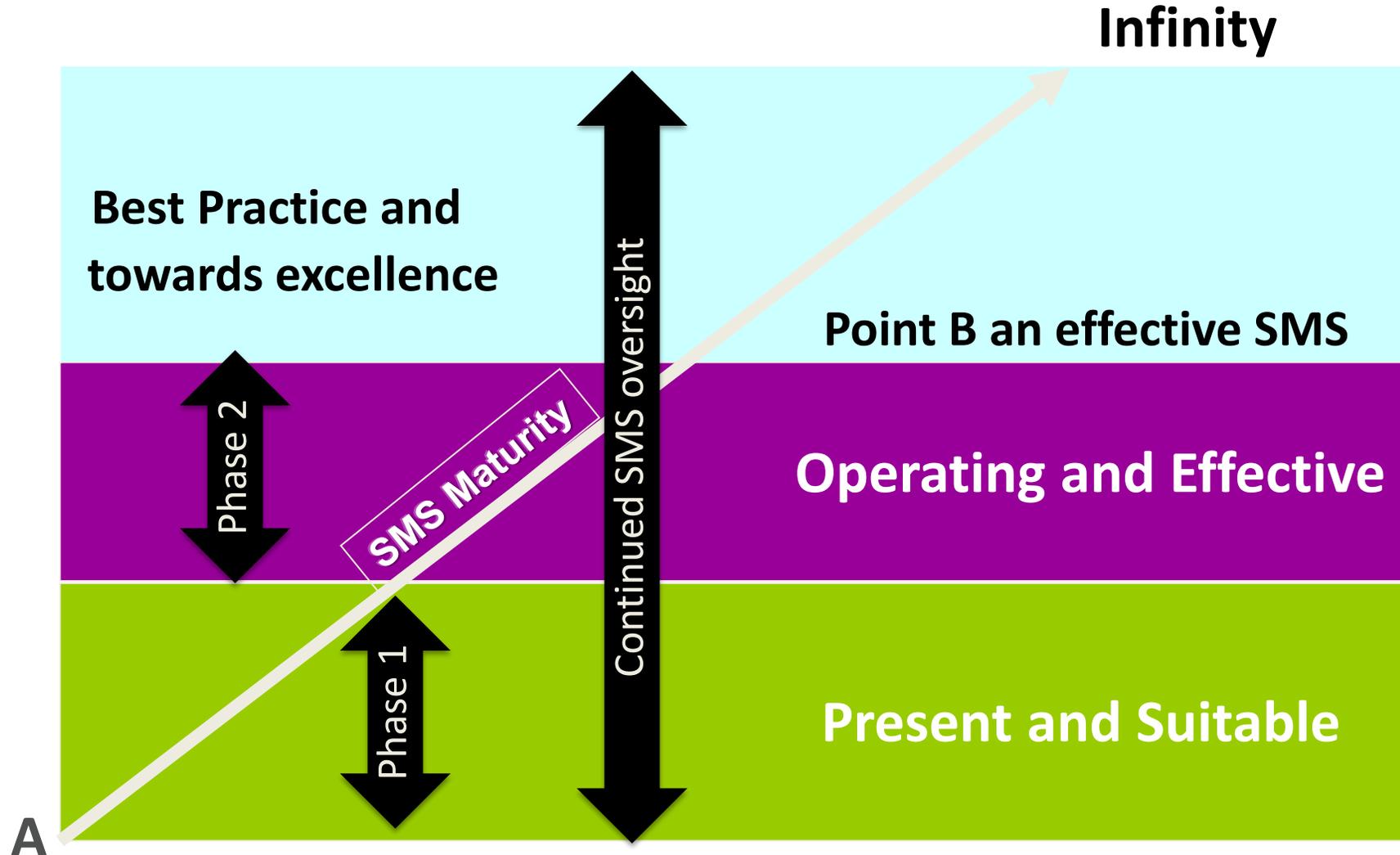


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CAA Large MRO AW Seminar 19<sup>th</sup> September 2019

# Airworthiness SMS Rule Making

- Part CAMO.A.200 (entry into force February 2020)
- This will apply SMS and human factors requirements to Part M G organisations
- New Rule making Task combining Part 21 and 145
  - NPA results discussed in Oct/Nov 2019
    - Entry into force expected in 2021
- Brexit may have an impact on entry into force dates

# SMS evaluation



# The PSOE Approach

- **Present:** There is evidence that the ‘marker’ is clearly visible and is documented within the organisation’s SMS Documentation
- **Suitable:** The marker is suitable based on the size, nature, complexity and the inherent risk in the activity
- **Operating:** There is evidence that the marker is in use and an output is being produced
- **Effective:** There is evidence that the element or component is effectively achieving the desired outcome

# Assessment of Individual Markers

COMPLIANCE + PERFORMANCE MARKERS		P	S	O	E	How it is achieved	What to look for	CAA Remarks
1.1.1	There is a confidential reporting system that complies with EU 376/2014 to captures errors, hazards and near misses that is simple to use and accessible to all staff and provides appropriate feedback to the reporter and where appropriate, to the rest of the organisation.						<p>Reporting System (in addition to MORs) is available to all personnel and is in use;            Staff familiar with it;            Review how data protection and confidentiality is achieved?            Assess volume, content and quality of reports            Evidence of feed back to reporter, the organisation and third parties.            Safety reports are acted on in a timely manner.            Check availability to contracted organisations and customers to make reports.</p>	
1.1.2C	Personnel express confidence and trust in the organisations reporting policy.						<p>Question all levels of personnel;            Number and variety of safety reports;            Evidence of self reporting;            Feedback from staff surveys.</p>	

# SMS Evaluation Summary

	Initiating	Present and suitable	Operating	Effective	Excellence
<b>Human Factors Management</b>	Human Factors is considered but not formally captured by the organisation.	Human Factors policies and processes have been defined and documented where required by regulation.	Human Factors is being managed across the organisation and is starting to be integrated into the organisation's SMS.	Human Factors is integrated into the SMS and the operations of the organisation. All staff including management are aware of human factors and apply it in the way they work.	Human Factors is embedded into the day to day activities of the organisation and fully integrated into the SMS. This is evident throughout the organisation from senior management to front line staff.

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# TA-M Sect A (8) Supplement Requirements

- for AMOs that work on aircraft that are operated in commercial air services pursuant to Subpart 5 of Part VII of the CARs that do not have provisions for a Safety Management System (SMS) in their Maintenance Organisation Exposition (MOE) will develop such provisions and detail them in their supplement.
- The AMO will establish or identify SMS procedures in accordance with Section A, paragraph 8(v) that are compliant to ICAO standards and meeting the provisions of CAR Part V subpart 73 Division II.

# CAA SMS Evaluation Form v5

Satisfies TCCA requirements  
376/2014 requirements

<https://www.caa.co.uk/Safety-initiatives-and-resources/Working-with-industry/Safety-management-systems/Safety-management-systems/>

# CAP 1760

Safety and Airspace Regulation Group

## Effective Problem Solving and Root Cause Identification

CAP 1760



Issue 02 April 2019

# CAA Website



## Approval information and guidance

- ▶ Maintenance standards improvement initiative
- ▶ Guidance for Part 145 approval holders
- ▶ Guidance for Part 147 approval holders
- ▶ Guidance for Part M Subpart G approval holders
- ▶ Guidance for Part 21 Subpart G approval holders
- ▶ Finding level and safety severity guidance
- ▶ Root cause analysis
- ▶ Seminars

<https://www.caa.co.uk/Commercial-industry/Aircraft/Airworthiness/Approval-information-and-guidance/Root-cause-analysis/>

# Root cause video

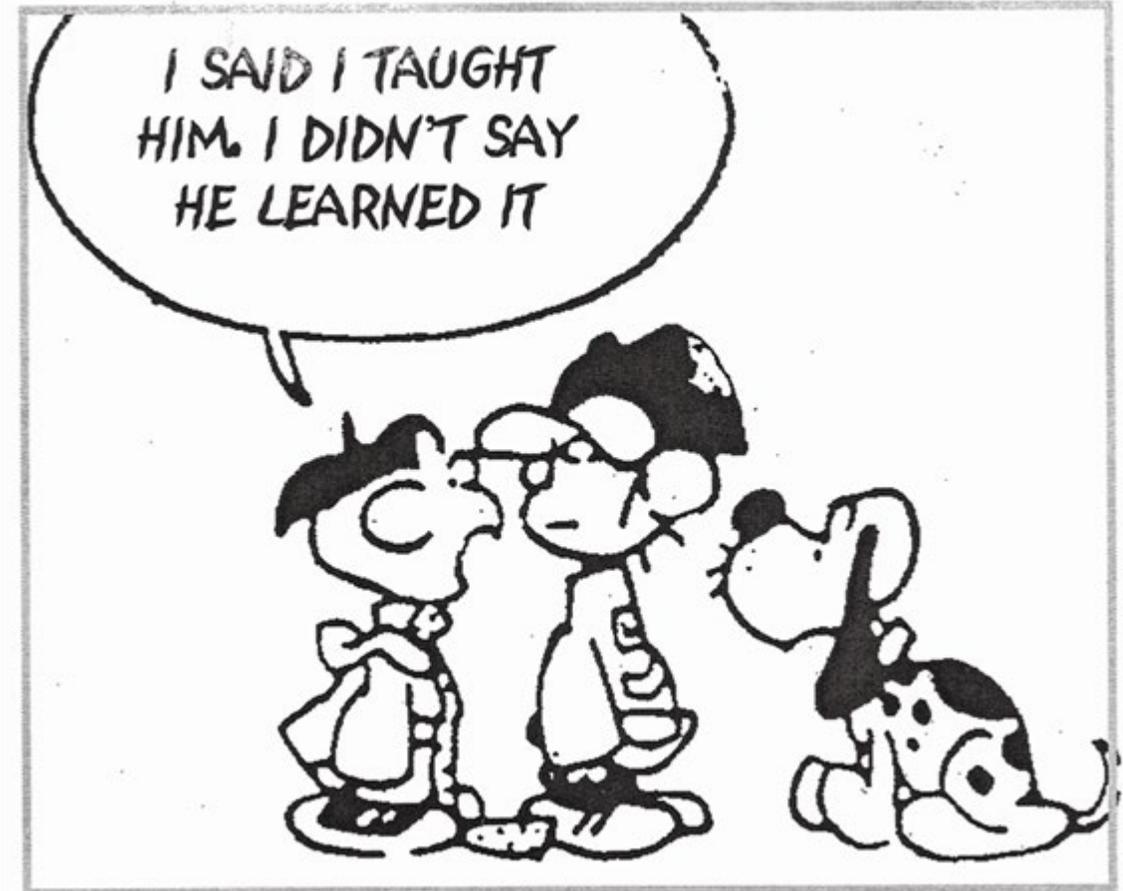


# Are We Learning?

Many organisations monitor repeat findings/events

**BUT**

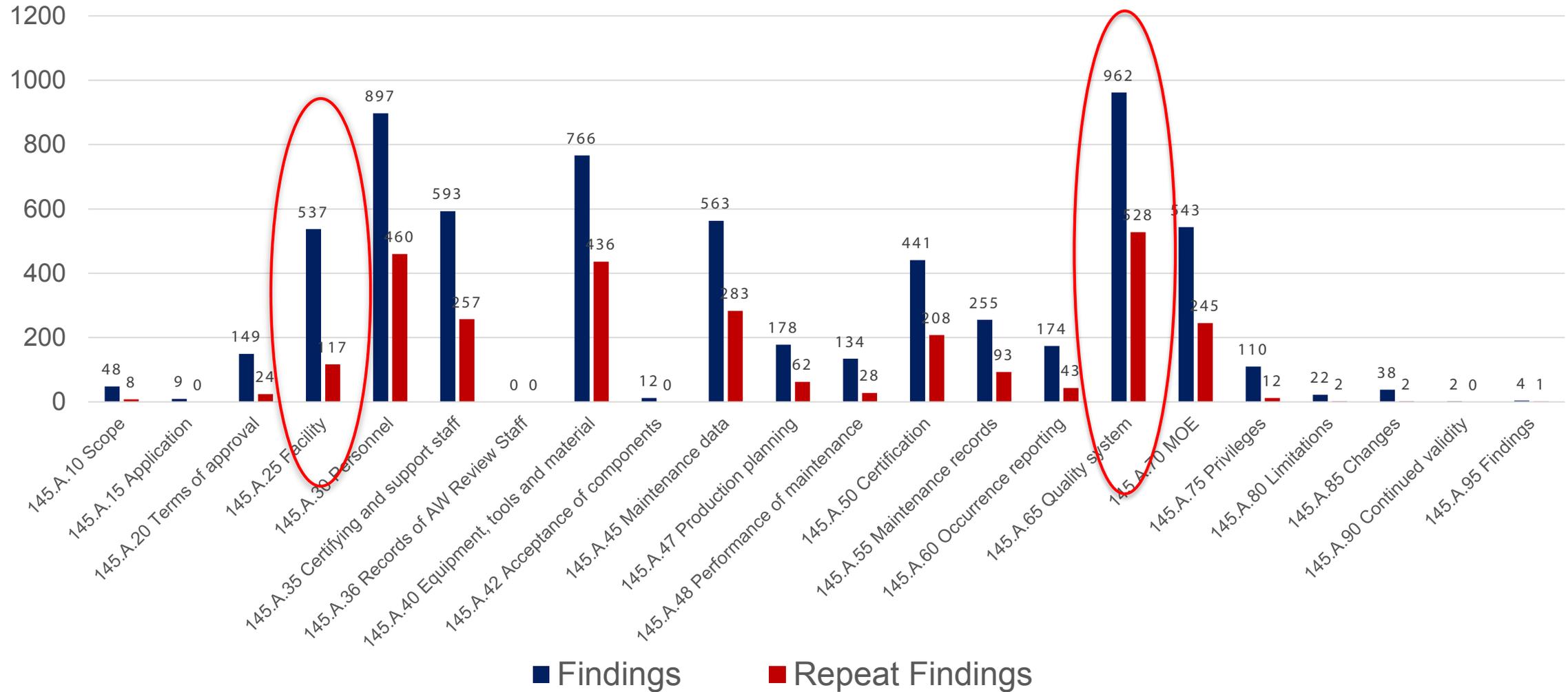
Very few organisations know/review if their previous actions to address findings/events were effective!



## Repeat Findings

- Approx. 44% of Pt 145 AW findings raised in the past 5 years are repeat findings
- Getting to the true root cause can lead to cost savings via
  - Reduction of repeat findings
  - Better use of manpower resources
  - Operational efficiencies

# Airworthiness Pt145 Findings 2018



# CAA Notification of Open Audit Findings

Dear Sir,

## UK CAA NOTIFICATION OF OPEN AUDIT FINDINGS

Further to the audit carried out on **{INSERT DATE}** by the UK CAA, the findings as listed on the attached audit report are herewith confirmed for your attention and necessary remedial action.

Please supply to us within 15 days of this letter or within the finding due date whichever is sooner, an acknowledgement of the findings; a high level corrective action plan; confirmation that a root cause analysis has been instigated, and proposed timescales to implement the corrective actions.

Further to this, to ensure UK CAA has adequate time for the findings(s) to be closed, please respond in to this office by the agreed 'Response Date', which is a minimum of 21 ( or as required) days before the 'Due Date(s)' stipulated on the report.

Should it not prove possible to implement the necessary corrective actions within the dates stipulated, at the earliest opportunity and before the required 'Response Date', please submit in writing to this office a request for an extended agreed timescale which must include a corrective action plan.

For your final detailed response to be acceptable in accordance with the applicable requirement, it should address the following points for each finding:

1. Corrective action.
2. Preventive action - Unless stated below, this should include root cause identification and root cause correction.
3. Follow up action taken or proposed action to be taken with associated timescales.

Guidance on Root Cause Analysis can be found on the [CAA website](#).

Failure to adequately action the findings prior to the defined 'Due Date' may result in the suspension or revocation of your approval. Once your report has been received and the corrective actions accepted, the Audit Report will be updated and returned to you confirming closure of each finding.



# CAA Policy

- Policy is applicable to
  - Internal Quality audit findings
  - CAA audit findings
  - MORs
- Initially, focus on responses to Level 1 and High Risk Level 2 findings
- Full process not necessary in all cases
  - Dependent on complexity
  - As a minimum, establish if one-off

*ANY  
QUESTIONS*

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