

Effective Closure Actions CAA Policy and Future Oversight

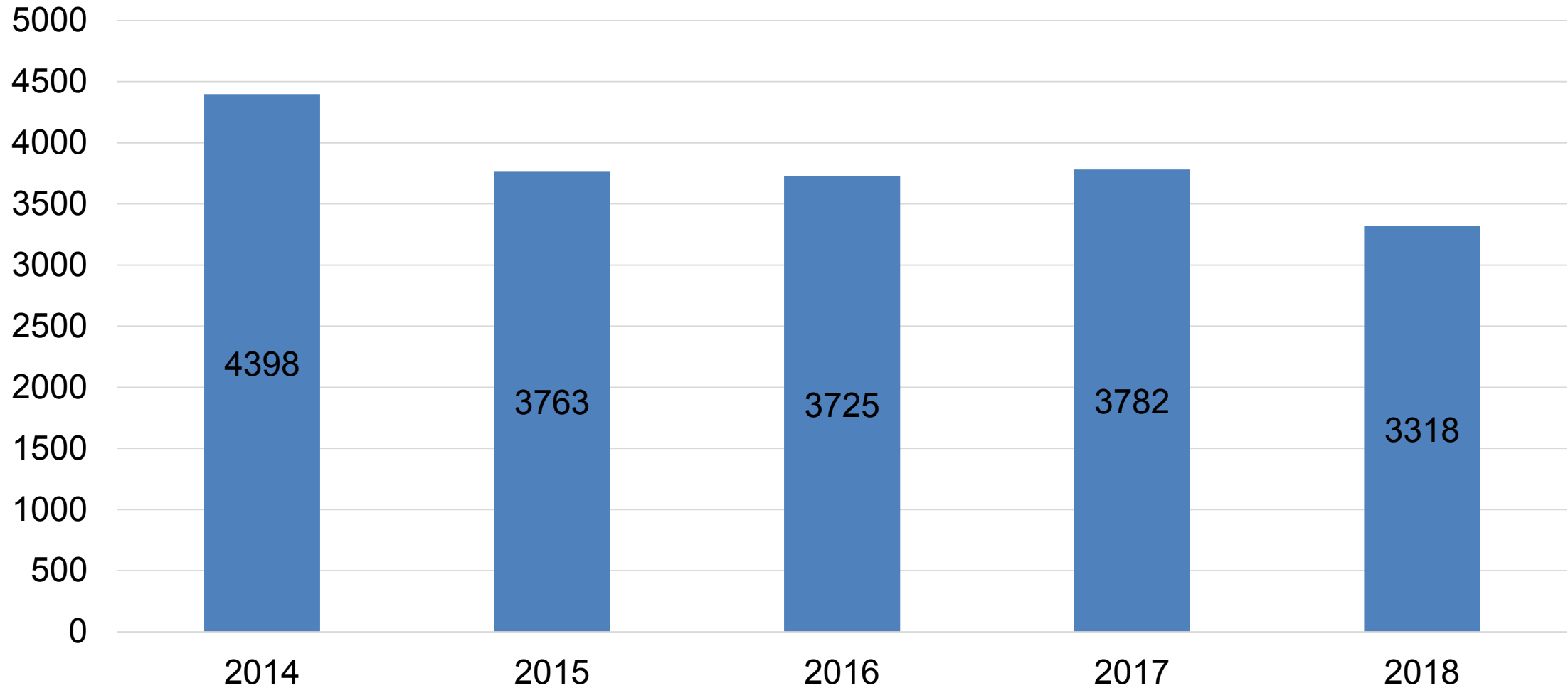


Dr Marie Langer, Airworthiness Surveyor
CAA AW Seminar Derby, 14th October 2019

We Will Discuss

- Common Issues and examples
- Examples of rejected responses to CAA findings
- Good examples of responses to CAA findings
- CAA Policy
- Future oversight

CAA Airworthiness Findings 2014-2018



Repeat Findings

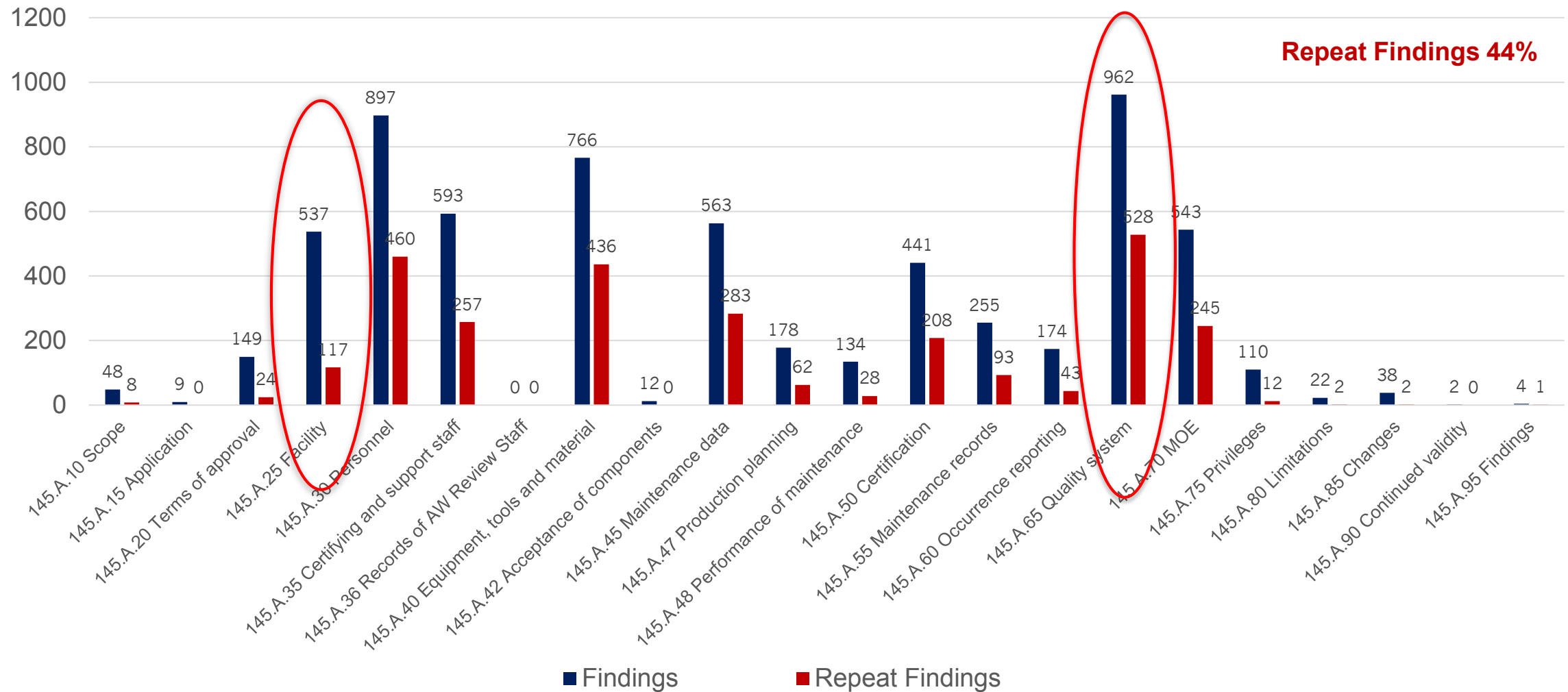
- High proportion of CAA findings raised in the past 5 years are repeat findings
- 44% for Part 145
- 35% for Pt M
- 35% for Part 21G

- Getting to the true root cause can lead to cost savings

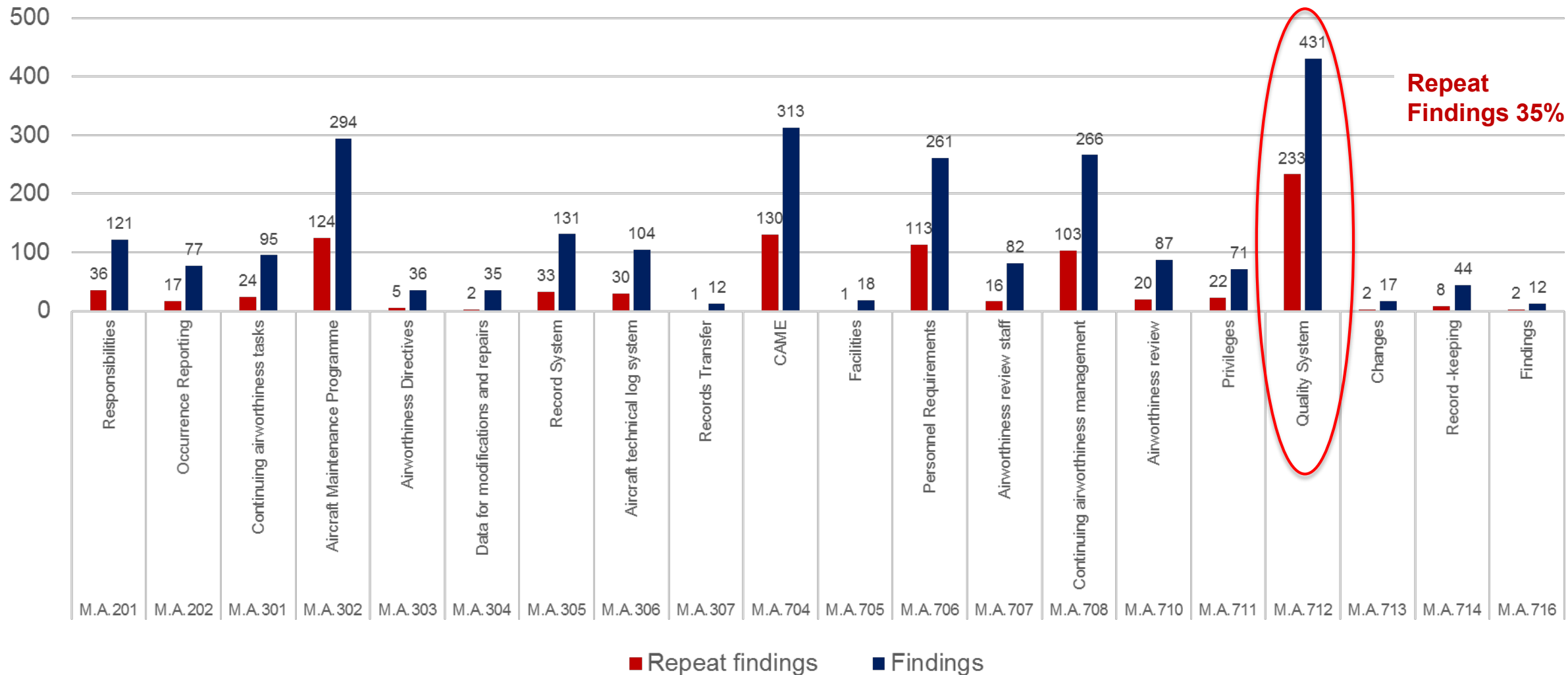
- Do you monitor repeat findings?
- Do you know if your actions were effective?



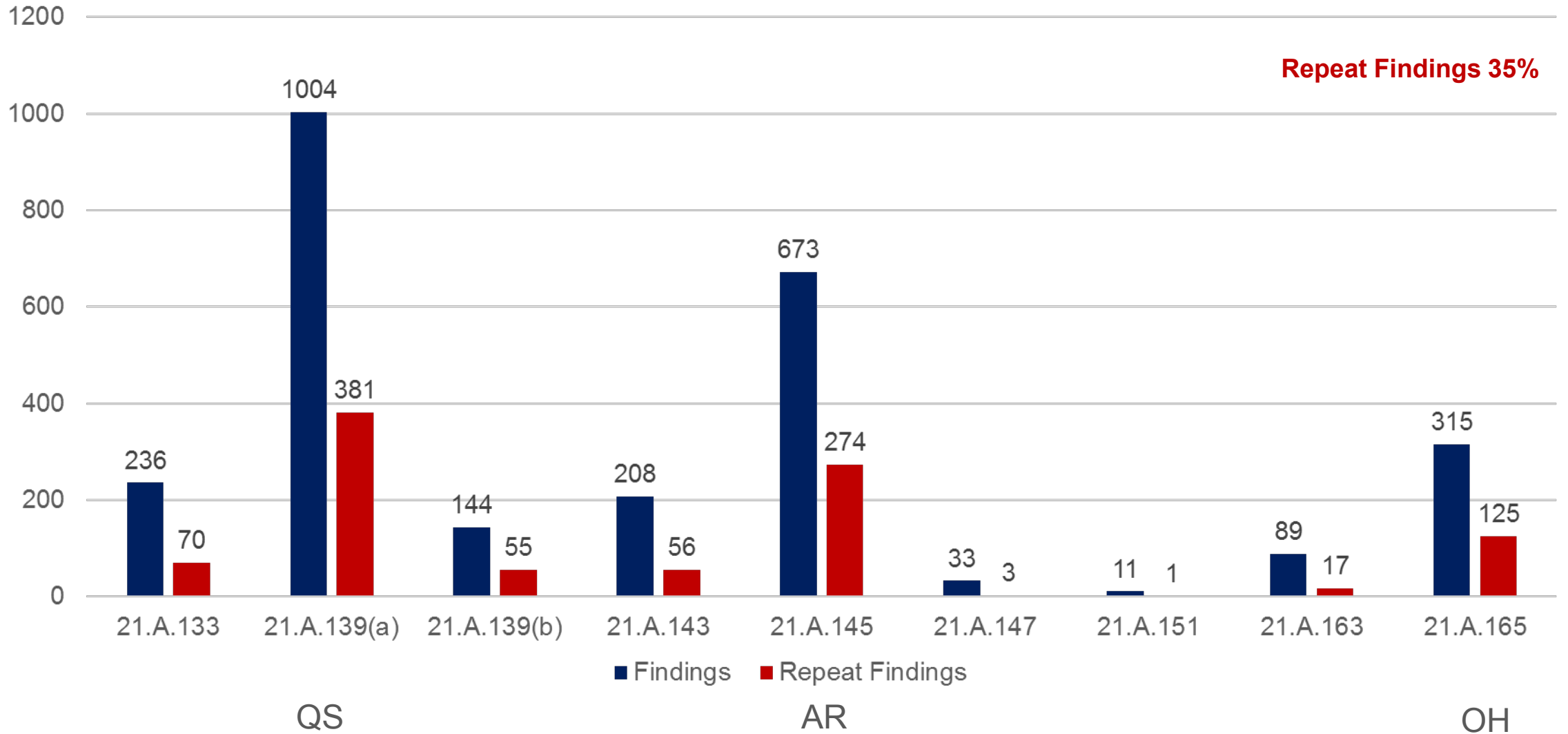
CAA AW Part 145 Findings 2014 - 2019



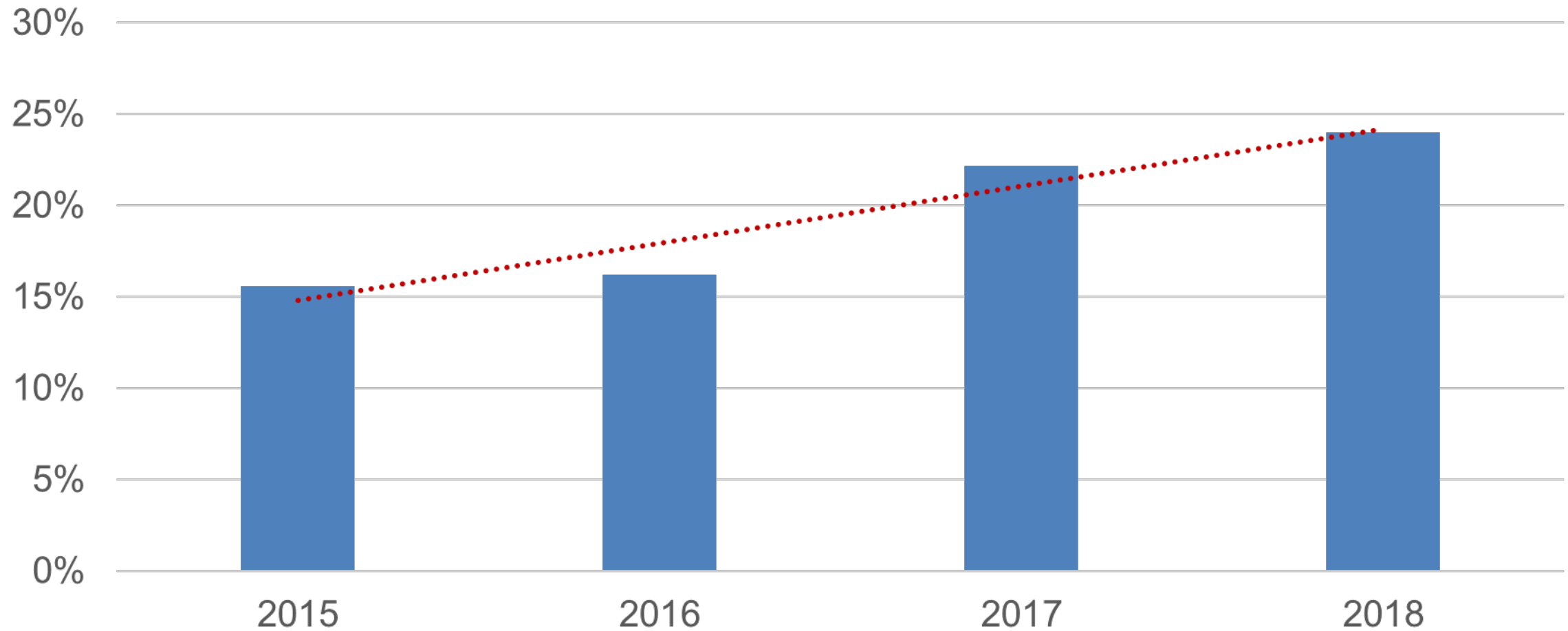
CAA AW Part M Findings 2014 - 2019



CAA AW Part 21 Findings 2014 - 2019



Percentage of Rejected Responses to CAA Findings



Common Issues

- No root cause identified
- Inadequate root cause - the organisation did not look deep enough/did not consider the wider system
- Corrective and/or preventive actions not defined
- Inadequate/inappropriate corrective and/or preventive action
- The organisation does not have a procedure for root cause analysis
- Managers (action owners) are not trained in root cause analysis
- Quality personnel are not trained in root cause analysis



Root Cause not Defined

145.A.65 Safety and quality policy, maintenance procedures and quality system

The organisation was unable to demonstrate that they were fully compliant with 145.A.65(c)2 with regard to ensuring that proper and timely corrective action is taken in response to reports resulting from independent audits.

Evidenced by:

The audit finding against 145.A.30 in January 2017 audit for XXX was closed even through the root cause and preventive actions were not appropriately defined.

The audit finding against 145.A.40 in March 2017 audit for XXX was closed even though the root cause and preventive action were not appropriately defined.

[AMC 145.A.65.(c)(2) 2.]

Inadequate Procedures

147.A.130(b) Quality System

The organisation was unable to demonstrate that they were fully compliant with 147.A.130(b), AMC 147.A.130(b) with regards to the organisation's Quality System.

Evidenced by:

During the review of the October 2016 Internal Audit, it was noted that:

1.1 - Internal Audit Procedures XXX and XXX to Open and Close Findings were not properly documented or missing.

1.2 - Root-Cause Analysis Process was not recorded to substantiate how Internal Audit Findings have been closed.

1.3 - This is followed by unapproved Audit Procedures in place to Open and Close Findings.

Corrective and/or Preventive Actions not Defined

145.A.65 Quality System

The organisation was unable to demonstrate that they were fully compliant with 145.A.65(c)2 with regard to the requirement to ensure that procedures invoke good maintenance practices.

Evidenced by:

1. The root cause of NC1199 was not appropriately defined and the preventive action failed allowing a repeat of the occurrence.
2. The defined root cause of NC1781 was a repeat of the finding wording and no preventive action was detailed which allowed a repeat (NC1996).
3. The root cause of NC1996 was not appropriately defined and no preventive action was detailed

The Finding is NOT the Root Cause

CAA Finding - 145.A.25 Facility Requirements

The stores facility contained sealants, grease and oils which were not stored in a suitable flame vault as required by the manufacturer's storage recommendations.

Organisation's Response to Finding

Root cause: All sealants, greases and oils products should be stored adequately but safely to prevent, inadvertent use, spillage and contamination of both the product and work area. How sealants, greases and oil products are stored at present is considered inadequate and contrary to normal housekeeping procedures.



Inadequate Root Cause

CAA Finding 21.A.139(b)

The organisation was unable to demonstrate that they were fully compliant with 21.A.139(b) with regard to “the quality system shall contain: 1. as applicable within the scope of approval, control procedures for: (iii) verification that incoming products, parts, material – are as specified in the applicable design data”.

Evidenced by:

The incoming Certificate of Conformity (CofC) form XXX ref. 15668 and supplied material CofC (Batch no. FRK004523) did not correspond to the specification under drawing no: XXX Issue 1.

Root cause: Error in documentation scanning/handling with incorrect release paperwork supplied by the sub-contractor.

Inadequate or Inappropriate Actions

Corrective action: the incorrect incoming paperwork was scanned into the stores system. The correct paperwork has since been obtained from XXX and has now been scanned correctly.

Preventive action: paperwork to be kept with parts and will be checked before scanning to confirm the release documents are correct in this case material specification.

Follow up: verified incorrect paperwork discarded and the correct paperwork relating to material specification XXX scanned onto the stores system.



Frequent but Ineffective Actions

- The XXX personnel were **spoken to** regarding this audit finding. They are now aware of full requirements of XXX procedure.
- The users of tool boxes have been **communicated to** on the importance of using the correct issue of documentation.
- Internal discussion **to remind** all staff of the possible safety implications associated with this type of event.

Accepted Response Example

CAA Finding 145.A.25(d)

The organisation was unable to demonstrate that they were fully compliant with 145.A.25(d) with regard to the conditions of storage in accordance with the manufacturer's instructions to prevent deterioration and damage of stored items.

Evidenced by:

Batteries stored in the bonded stores are subject to daily temperature and weekly checks. There was no evidence that weekly checks were being carried out IAW XXX.

Organisation's Response: Root Cause

Why? Store staff not aware of new procedure XXX

Why? The XXX procedure was not added to the read and sign file

Why? No evidence that Maintenance Manager requested to include the new procedure in the read and sign file

Why? **No formal procedure for amendment, review and distribution of procedures**

Accepted Response Example

CAA Finding 147.A.110

The organisation was unable to demonstrate they were fully compliant with 147.A.110(a) with regards to instructor records.

Evidenced by:

During a comprehensive review of the instructor records for both, basic and type instructors, some records were found to be incomplete and there was inconsistency with the contents of others. Example: Tutor XXX

Root cause: Management failure to ensure required documents (detailed in MTOE Pt 3.8) were acquired and stored within the Pt 147 organisation.

Organisation's Actions

- Review of MTOE procedure Pt 3.8 carried out to determine effectiveness to meet stated requirements.
- All instructor records reviewed and disparities noted and recorded. PAB records that were not transferred to records have been retained and digitally captured as pdf document in a new electronic folder.
- All records from HR department have been duplicated and retained within the Pt 147 in the new digital folder for instructor qualifications.
- Amended MTOE 3.8 to require mandatory annual review of all instructor records (to include review by Instructor) to ensure compliance with requirements. MTOE Issue 3 Rev 3 amendment submitted to CAA.

CAA Policy

- Policy in place
- Policy applicable to:
 - Internal Quality audit findings
 - CAA audit findings
 - MORs
- Full process not necessary in all cases
 - Dependent on complexity
 - As a minimum, establish if one-off

CAA Policy

- Surveyors will work closely with organisations
- Initial focus on Level 1 and High Risk Level 2 findings (dependent on organisation)
- Extensions
- CAA will continue promoting best practices
- CAA CAP 1760 published

Oversight - What We Look For



- Procedures covering root cause analysis and responses to findings
 - Do they exist? Are they followed?
- Trending of findings
 - Does the organisation have the capability to identify repeat findings
 - Does the organisation use the information to establish and audit the effectiveness of corrective/preventive actions to previous findings/occurrences

Oversight – What We Look For



- Who is responsible for establishing root cause?
- Who is responsible for defining corrective and preventive actions?
- Competence assessment of managers
 - Is root cause analysis identified as a competency?
 - Do action owners receive any training?
- Competence assessment of quality personnel
 - Are they competent in root cause analysis to be able to establish if the root cause, corrective and preventive actions are appropriate?
- **Even 5Whys can be applied incorrectly!**

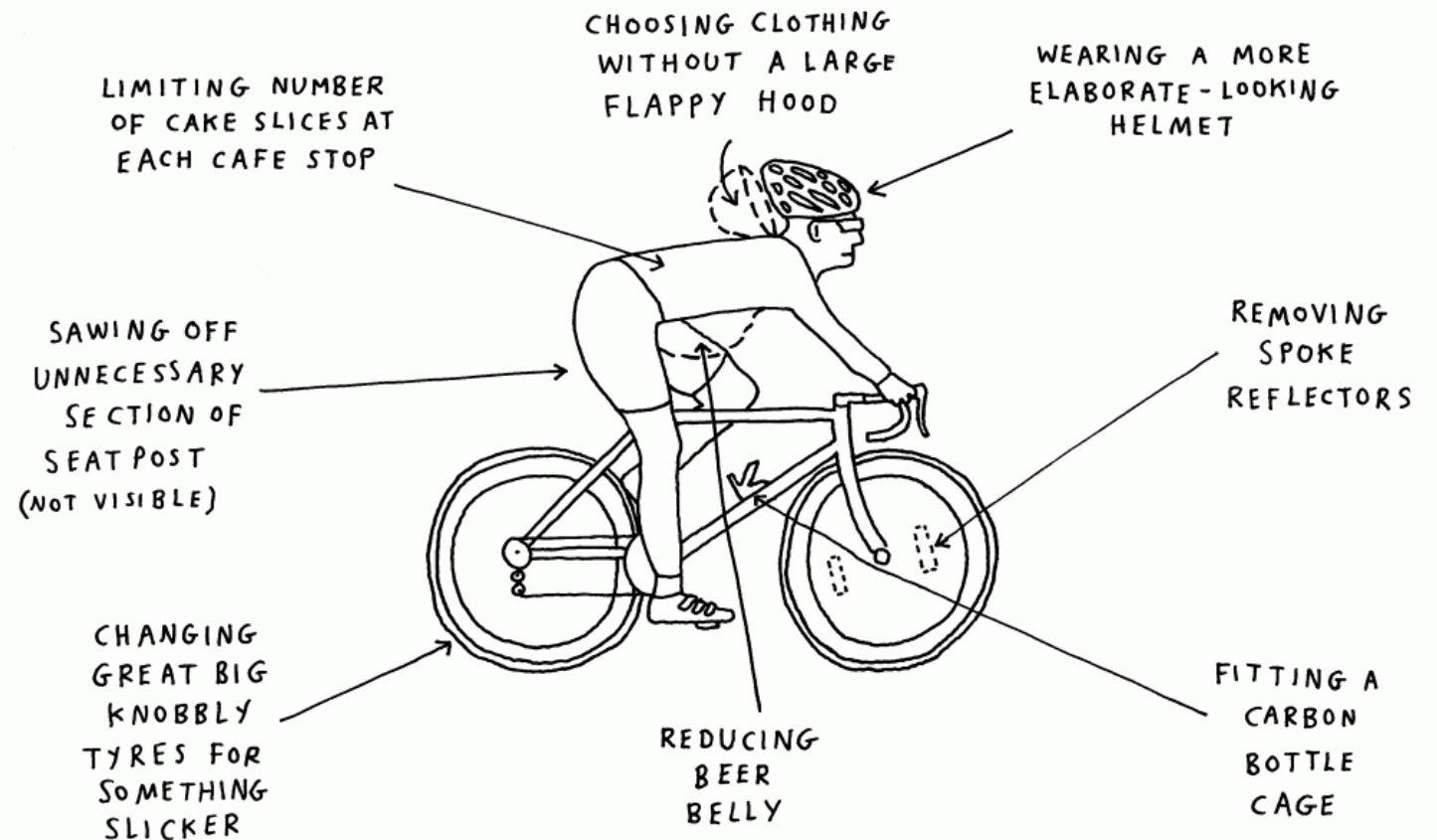
A Long-term Goal

- Limitations
- Complex Systems
- Incompatible taxonomies (MEDA, ECCAIRS, etc.)
- Resources

It will take time!

MARGINAL GAINS

HOW THE PROFESSIONALS MAKE SMALL CHANGES TO IMPROVE THEIR PERFORMANCE



***ANY
QUESTIONS***

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