2019

POA Seminar MORs

Airworthiness – Peter Moule / Matt Lillywhite May 2019

MORs

- MOR Responsibilities
- What is the Airworthiness Process for MORs
- MOR Trending
- What are we doing with the data
- What would we like from you

UK Industry - Safety Performance

How frequently?

Fatal accident – commercial passenger aeroplane

Fatal accident – public transport helicopter

Fatal accident – GA aircraft

High severity occurrence (MOR A)

Serious occurrence (MOR A, B)

An occurrence (MOR)



Continued Airworthiness – Feedback System



What is Industry's Role

- Determine the significance of the event Mandatory / Voluntary – Risk Rating
- Report those event types in accordance with the Regulation
- Determine your own actions
- Ensure (in the majority of cases) that the Type Design Organisation is notified
- Follow up in accordance with the timescales
- Review effect within your Safety / SMS system







MORs - 376/2014

- On 20 April 2014 Regulation (EU) No. 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation came into effect.
- On 15 November 2015 it came into full effect.
- The list of reportable occurrences are published in <u>Commission Implementing Regulation 2015/1018</u>. (Development of those in CAP 382)
- The Regulation places additional requirements on organisations, competent authorities and EASA beyond what is currently contained within existing legislation for both occurrence reporting and internal occurrence reporting systems.
 - Initial Report 3 Days
 - Follow up 30 Days
 - Final Report 3 Months



Commission Implementing Regulation (EU) 2015/1018 lays down the list classifying occurrences in civil aviation to be mandatorily reported according to Regulation (EU) No 376/2014 of the European Parliament and of the Council

MANUFACTURING

 Products, parts or appliances released from the production organisation with deviations from applicable design data <u>that could lead to a potential unsafe</u> <u>condition</u> as identified with the holder of the typecertificate or design approval

This is quite a 'high standard'

21.A.165 (f) Obligations of the holder

- report to the holder of the type-certificate or design approval, all cases where products, parts or appliances have been released by the production organisation and subsequently identified to have possible deviations from the applicable design data, and investigate with the holder of the type-certificate or design approval in order to identify those deviations which could lead to an unsafe condition;
- report to the Agency and the competent authority of the Member State the deviations which could lead to an unsafe condition identified according to point (1). Such reports shall be made in a form and manner established by the Agency under point 21.A.3A(b)(2) or accepted by the competent authority of the Member State;



Production MORs

What does this mean?

- We have almost no precursor indications or 'heads up', prior to a significant production MOR
- Production MORs are relatively infrequent, but often when they occur they have a significant wide-reaching impact
- How can we try and 'intercept' or pre-empt these events?
 - Changes in processes
 - NDT
 - Feedback between POA DOA
 - Material suppliers 'common mode'

So What Happens to Your MOR

Reporter

- Submit initial Report 72 Hours
- Determine action Voluntary / Mandatory/SAG
- Determine Action OPEN / CLOSED
- Update 30 days / Closure 3 months

CAA Safety Data

- Receive / Process / Taxonomize
- Initial Status OPEN / CLOSED
- Weekly Review all Airworthiness MOR
- Agree Status OPEN / CLOSED
- Significant MORs Propose Actions Ratified at Weekly Management Committee Meeting
- Distribute to Surveyors

CAA Surveyor

CAA CAW

- Receive all MORs for their organisations
- Agree Status OPEN/CLOSED
- Either highlighted for awareness (CLOSED) / Or for action (OPEN)

Airworthiness MOR Trending

SPI Event	Fixed Wing	Rotorcraft	Source
Chip	In Progress	Complete	MOR Review
False Fire Warning	In Progress	Simplified Search Available	MOR Review
<u>Fire</u>	Complete	Simplified Search Available	MOR Review
FOD	Complete	In Progress	MOR Review
ICAs	In Progress	In Progress	MOR Review
IFSD	Complete	In Progress	MOR Review
LG Extension	Complete	In Progress	MOR Review
Lithium Battery / PEDs	Simplified Search Available	Simplified Search Available	SRP
Maintenance Error	In Progress	In Progress	MOR Review
MD900 MRB Pins	N/A	Simplified Search Available	SRP
Mixed Phase Icing	Complete	Review	SRP
Pitot Blockages	In Progress	In Progress	SRP
Production and Design	Complete	In Progress	MOR Review
<u>RTB</u>	Complete	In Progress	MOR Review
<u>RTOs</u>	Complete	In Progress	MOR Review
Suspect / Bogus Parts	Complete	In Progress	MOR Review
Tech Log	Complete	In Progress	MOR Review
Tooling	Simplified Search Available	Simplified Search Available	MOR Review
AD Overruns	Complete	Simplified Search Available	MOR Review
ATA Chapters	Complete	Simplified Search Available	MOR Review
Birdstrike with Damage	Complete	Simplified Search Available	MOR Review
Depressurisation Events	In Progress	N/A	MOR Review
Failure to Reach Life Limit	In Progress	In Progress	MOR Review
MEL Overrun	Complete	In Progress	MOR Review
Panel Loss	Simplified Search Available	Simplified Search Available	SRP
Rotorcraft - Main Rotor & Drive System (ATA62 & 63)	N/A	Simplified Search Available	MOR Review
Rotorcraft - Tail Rotor & Drive System (ATA64 & 65)	N/A	Simplified Search Available	MOR Review
Unreported Damage	In Progress	In Progress	SRP



Trending

Activity

Please review Trends Have we got it right?

What Do We Do with the MOR Data

- Significant Individual Events
 - Request the Surveyor liaise directly with the organisation to help determine any immediate mitigating action
 - Design related issues notify and transfer to EASA
 - Inform up thorough the Management Chain MC / LT / CAA Board
 - o Liaise with other NAAs, as appropriate
- Trending
 - Rolling review of trends 12 monthly basis present view / analysis at Airworthiness Management Committee meetings
 - Longer term set automated alert levels
 - Understand organisation culture / MOR performance
- Information to Support
 - Onshore Helicopter Review
 - A31 / A26 Activities / Deep Dive Report
 - o Trent 1000
 - EC135 / MD900 / AS350 / AS355 / A109
 - CAA Annual Safety Review CAP1595







Authority to Authority Interaction



• Continuous liaison with EASA /other NAA's – sharing of information



EASA Regular Liaison European Type Certificate Holder Production Issues FAA MRO with an EASA Approval



French DGAC Production Issues on new deliveries Revised Oversight and Process Changes



Greek Authority HCAA

UK 145 identified anomalies with the main rotor blades – HCAA followed up with Greek Operator



Romanian Authority

Investigated Airworthiness Directive (AD) status statement from a Romanian CAMO



South African Authority Poorly Overhauled

Emergency Equipment – Maintenance Organisation Approval Suspended

Summary

- Your MORs are important individually and for trending.
- Weekly review of all Airworthiness related MORs
- We use the information to influence and inform EASA / NAAs / Type Certificate Holders (TCHs)
- Please follow up with TCH's to ensure that they are aware
- Please contact us directly when the more significant events occur / or you do not feel you are making progress on a safety issue
- We are developing our trending techniques to help us assess the MOR data, to better inform our focus and actions
- For POAs Workshop activity Sufficient data for trending VORs? / KPIs?
- NPA 2019-05 SMS Requirements into Part 145 and Part 21