

APATS 2019 – Singapore

Some key elements on maintenance organisation

Luigi G.M. PRETI Maintenance Organisation Expert / EASA International Officer in Singapore

Your safety is our mission.

An agency of the European Union

TE.GEN.00409-001





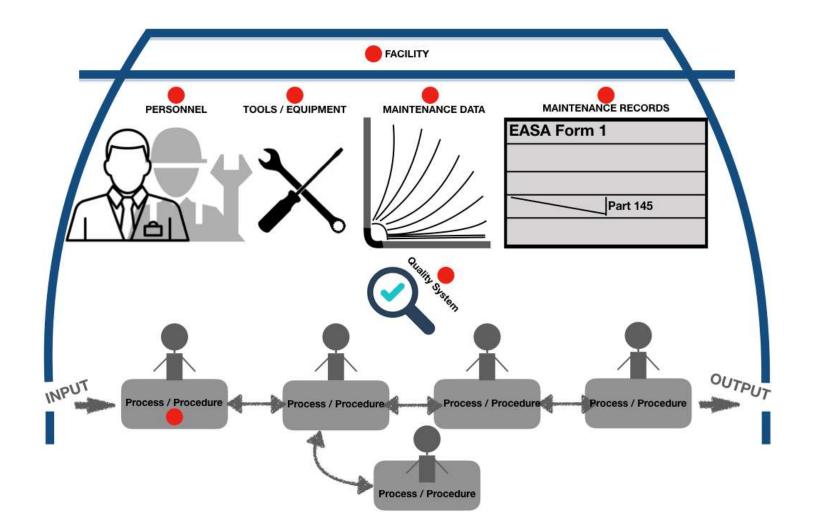


THIS PRESENTATION DOES NOT INCLUDE ALL THE DETAILS OF THE EASA PART 145 AS ONLY FEW ELEMENTS OF THE EASA PART 145 HAVE BEEN HEREBY TAKEN IN CONSIDERATION WITH THE SPECIFIC INTENT OF HIGHLIGHTING **SOME** OF THE REPETITIVE FINDINGS THAT HAVE BEEN ENCOUNTERED DURING THE OVERSIGHT OF FOREIGN EASA PART 145 APPROVED ORGANISATIONS.

CONTENT AND RELEVANT INFORMATION WITHIN THIS PRESENTATION SHOULD NOT BE CONSIDERED AS SUFFICIENT OR EXHAUSTIVE IN ORDER TO ENSURE COMPLIANCE TO THE EASA PART 145.



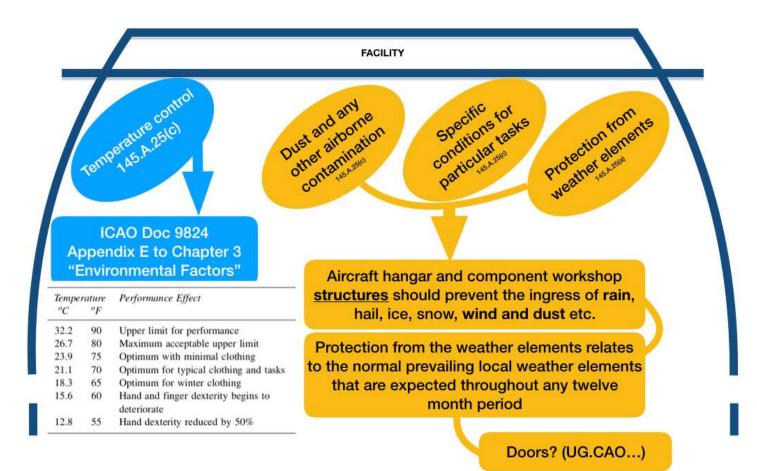
7 Bullet Points

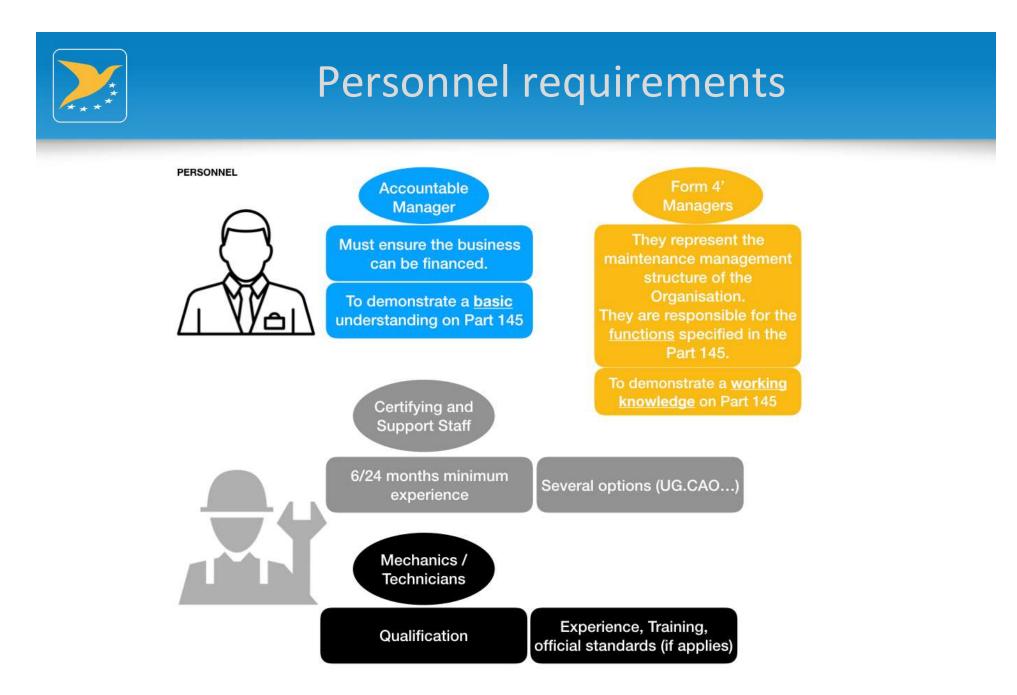


EASA Part 145



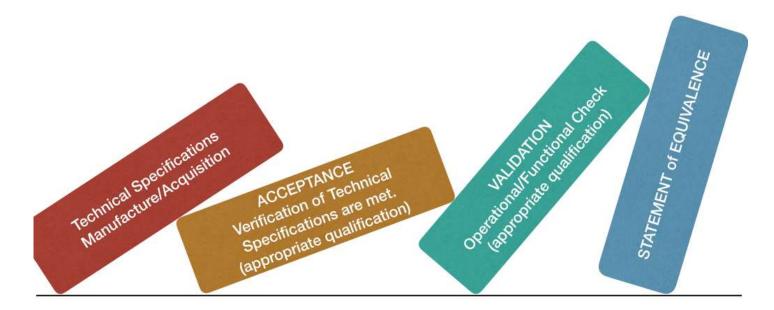
Facility requirements







X 145.A.40(a)(i) Where the manufacturer specifies a particular tool or equipment, the organisation shall use that tool or equipment, unless the use of <u>alternative tooling</u> or equipment is agreed by the competent authority via procedures specified in the exposition (MOE).



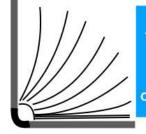
Use of alternative tools / equipment might require modification of maintenance instructions in order to detail how to carry out the particular maintenance task with that equivalent tool / equipment (MOE procedure).

NOTE: Maintenance instructions modification should result in equivalent or improved maintenance standards NOTE: Engineering design of repairs and modifications are excluded. Any modification of the maintenance instructions linked to CDCCL constitutes an aircraft modification that should be approved in accordance with Part-21.





Maintenance data



145.A.45(a)

The organisation shall hold and use <u>applicable</u> current maintenance data in the performance of maintenance, including modifications and repairs.'Applicable' means relevant to any aircraft, component or process specified in the organisation's approval class rating schedule and in any associated capability list

Use of not applicable maintenance data (A1 vs B1) (A1 vs Cx) (B1 vs C7)

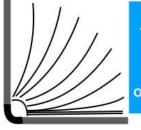
Quick Engine Change parts (QEC parts): a collection of components and accessories installed onto the basic engine to speed up the installation of the assembly onto an aircraft(*)

(*) Not an EASA' definition NOTE: Engine Manufacturers have their own definition of QEC)

QEC parts: Agree a procedure with your EASA Maintenance Organisation Expert (C7)



Maintenance data



145.A.45(a)

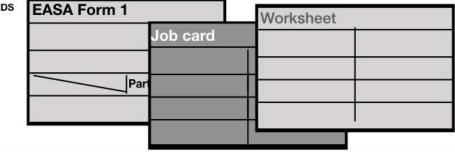
The organisation shall hold and <u>use</u> applicable current maintenance data in the performance of maintenance, including modifications and repairs.'Applicable' means relevant to any aircraft, component or process specified in the organisation's approval class rating schedule and in any associated capability list





Maintenance and airworthiness review records

MAINTENANCE RECORDS



145.A.55(a):

The organisation shall record all details of maintenance work carried out. As a minimum, the organisation shall retain records necessary to prove that all requirements have been met for the issue of the certificate of release to service, including subcontractor's release documents....

A significant non compliance which lowers the safety standard and hazards seriously the flight safety

Always ensure <u>traceability</u> of maintenance performed by systematically recording all required details of maintenance works carried out, especially when explicitly required by the maintenance instructions.

Don't sign off what has not actually be done





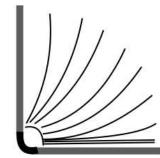
Maintenance and airworthiness review records

145.A.45(e)

The organisation shall provide a common work card/worksheet system to be used throughout relevant parts of the organisation. In addition, the organisation shall either transcribe accurately the maintenance data ... onto such work cards/worksheets or make precise reference to the particular maintenance task or tasks contained in such maintenance data... Complex maintenance tasks shall be transcribed onto the work cards or worksheets and subdivided into clear stages to ensure a record of the accomplishment of the complete maintenance task.

	Worksheet		
Job card			
		12	

MAINTENANCE RECORDS



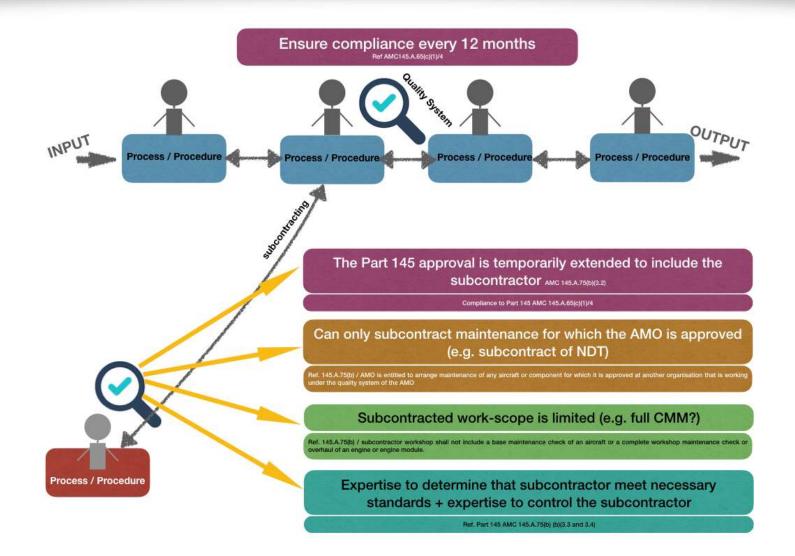
MAINTENANCE DATA

MAINTENANCE RECORDS

145.A.55(b)

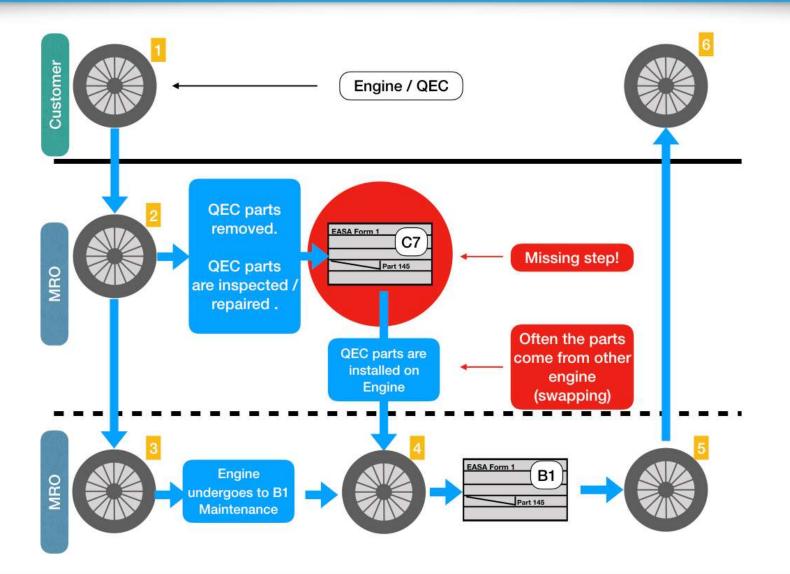
The organisation shall provide a copy of each certificate of release to service to the aircraft operator, together with a copy of any specific repair/modification data used for repairs/ modifications carried out

Processes, procedures, Quality system



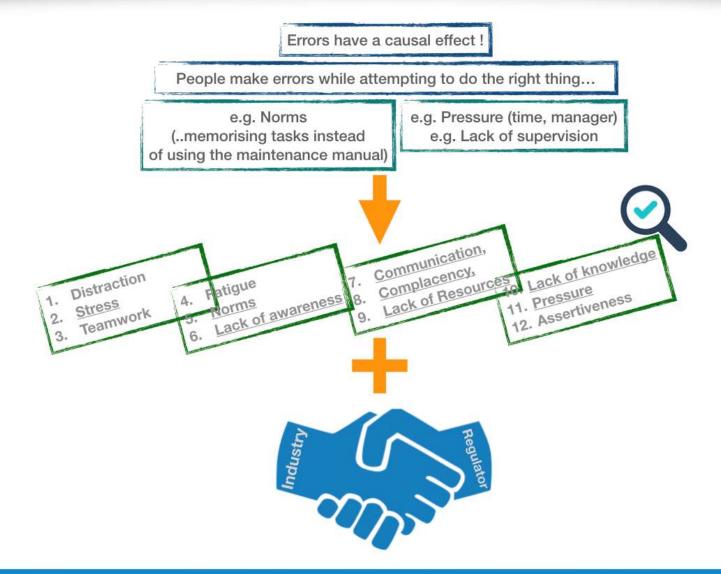
145.A.65, 145.A.75

Processes, procedures, Quality system



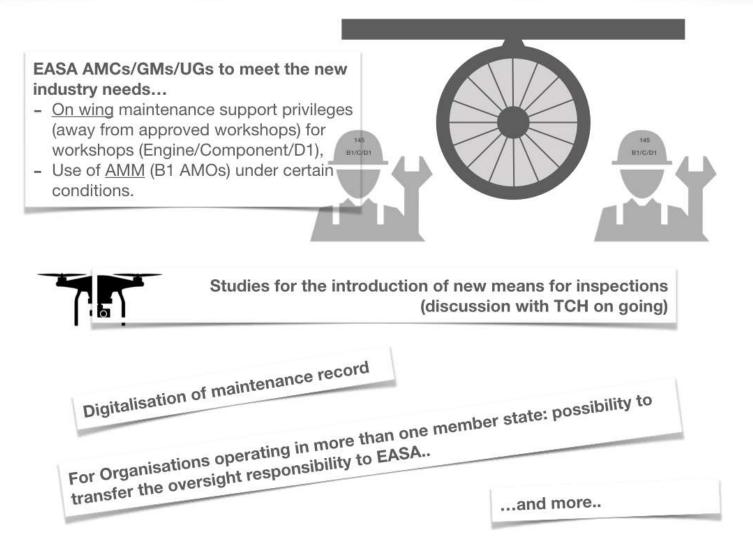
145.A.65, 145.A.75

Unwanted outcomes





Multilevel support for the Industry





THANK YOU !

EASA Office in Singapore @ Delegation of the EU to Singapore, 250 North Bridge Road, #38-03 Raffles City Tower, Singapore 179101

Your safety is our mission.

An agency of the European Union