RA 4811 - Maintenance Planning (MRP 145.A.47)

Rationale

In order to successfully complete Air System and Air System component Maintenance, an organization ▶ will ◀ consider the resources needed to achieve such tasks in order to ensure Air System availability and compliance with MRP Part 145. If a Maintenance organization fails to undertake adequate planning or implement an appropriate system of work, which considers Human Factors, there is an increased Risk of Maintenance error and Risk to Airworthiness. ▶ This RA ◄ details the requirements for a Maintenance organization to have adequate management systems in place, tailored to meet the complexity of the work required in order to ensure its safe completion.

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Regulation 4811(1)

Maintenance Planning System (MRP 145.A.47(a))

4811(1) The organization **shall** have a system appropriate to the amount and complexity of work to plan the availability of all necessary personnel, tools, equipment, material, Technical Information (TI) and facilities in order to ensure the safe completion of the Maintenance work.

Acceptable Means of Compliance 4811(1)

Maintenance Planning System (MRP 145.A.47(a))

- 1. For the purpose of MRP Part 145, the Maintenance planning function **should** include 2 complementary elements:
 - a. Scheduling the Maintenance work ahead, to ensure that it will not adversely interfere with other work with regards to the availability of all necessary personnel, tools, equipment, material, TI and facilities.
 - b. During Maintenance work, organizing Maintenance teams and shifts and provide all necessary support to ensure the completion of Maintenance without undue time pressure.
- 2. When establishing the Maintenance planning procedure, consideration **should** be given to the following, where applicable:
 - a. Logistics, supply coordination and inventory control.
 - b. Square metres of working accommodation.
 - c. ► Working hours estimation.
 - d. ► Working hours availability.
 - e. Preparation of work.
 - f. Hangar availability.
 - g. Environmental conditions (access, lighting standards and cleanliness).
 - h. Scheduling of Safety critical tasks.

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Maintenance Planning System (MRP 145.A.47(a))

Common GM

3. Nil.

Additional GM - Military Maintenance Organizations (MMOs) only

4. Due to the unpredictable variations in the scheduled work that most MMOs experience, a documented Maintenance Planning System is not mandatory. However, the MMO ▶ has ◄ to demonstrate that it has established a system of work (shift

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patterns, internal logistics processes, etc) that is appropriate to the scope of work it intends to conduct.

Additional GM - Approved Maintenance Organizations (AMOs) only

5. Depending on the amount and complexity of work generally performed by the Maintenance organization, the planning system may range from a very simple procedure to a complex organizational set-up, including a dedicated planning function in support of the Maintenance function.

Regulation 4811(2)

Human Factors Limitations (MRP 145.A.47(b))

4811(2) The planning of Maintenance tasks, and the organizing of shifts, **shall** take into account Human Factors Limitations.

Acceptable Means of Compliance 4811(2)

Human Factors Limitations (MRP 145.A.47(b))

6. Human Factors Limitations, in the context of this Regulation, refers to the upper and lower limits, and variations, of certain aspects of human performance (circadian rhythm, 24 hours body cycle, etc.) which personnel **should** be aware of when planning work and shifts.

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Human Factors Limitations (MRP 145.A.47(b))

7. Nil.

Regulation 4811(3)

Handover of Maintenance Tasks (MRP 145.A.47(c))

4811(3) When it is required to hand over the continuation or completion of Maintenance tasks for reasons of a shift or personnel changeover, relevant information **shall** be adequately communicated between outgoing and incoming personnel.

Acceptable Means of Compliance 4811(3)

Handover of Maintenance Tasks (MRP 145.A.47(c))

- 8. Maintenance organizations **should** have a procedure for shift and task handover, addressing the following 3 elements:
 - a. The outgoing person's ability to understand and communicate the important elements of the job or task being passed over to the incoming person.
 - b. The incoming person's ability to understand and assimilate the information being provided by the outgoing person.
 - c. A formalized process for exchanging information between outgoing and incoming persons and a planned shift overlap and a place for such exchanges to take place.

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Handover of Maintenance Tasks (MRP 145.A.47(c))

9. Nil.