RA 2211 - Authorization of Aircrew to Carry Out Maintenance Tasks

Rationale

Aircrew may be required to conduct flight servicing to improve flexibility of use of Air Systems. Airworthiness will be compromised if this activity is conducted by inappropriately authorized personnel, therefore Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) are to ensure that Aircrew are appropriately trained and assessed as competent in order to be authorized for such activities.

Contents

2211(1): Authorization of Aircrew to Carry Out Flight Servicing 2211(2): Authorization of Aircrew to Carry Out Air System Maintenance Work

2211(3): In-Flight Corrective Maintenance

2211(4): Training of Aircrew to Enter a Cockpit Containing Aircraft Assisted Escape Systems

Regulation 2211(1)

Authorization of Aircrew to Carry Out Flight Servicing

2211(1) Aircrew required to carry out Flight Servicing **shall** be authorized and competent.

Acceptable Means of Compliance 2211(1)

Authorization of Aircrew to Carry Out Flight Servicing

- 1. Prior to receiving authority to flight service (AFS), individual Aircrew **should** conduct appropriate training and demonstrate competence to carry out flight servicing. The competency check **should** demonstrate an adequate understanding of:
 - a. The Air System technical publications.
 - b. The Air System technical log (MOD Form 700 or equivalent).
 - c. The relevant regulations within the MRP RA 4000 Series: Continuing Airworthiness Engineering.
 - d. ► The relevant details within the Manual of Airworthiness Maintenance Processes (MAM-P)¹. ◀
- 2. ADH and AM(MF) **should** ensure that a formal record of Authorization is maintained 14.

Guidance Material 2211(1)

Authorization of Aircrew to Carry Out Flight Servicing

- 3. AFS may include, but is not limited to:
 - a. Flight servicing ▶ 1 ◄.
 - b. System replenishments.
 - c. Fuelling operations ▶ ◀.
 - d. Loading and unloading of ▶ ◀ pyrotechnics▶2◀.
 - e. Supervision of ground handling ▶3◀.
- 4. The AFS authorizer will be a ▶ Suitably Qualified and Experienced Person (SQEP) ◀ holding the appropriate ▶ ◀ Authority Level ▶ ◀ J▶⁴◀. This may be, but is not limited to, the Squadron Air Engineer Officer (RN), Officer Commanding Workshops (Army), Senior Engineering Officer (RAF) or, for Defence Contractor Flying Organizations, an equivalent authorized engineer.

¹ ▶ Refer to MAM-P Chapter 2.3 – Authorization of Aircrew to Carry Out Air System Maintenance Work.

² Refer to MAM-P Chapter 8.2 – Weapon Preparation and Loading.

³ Refer to MAM-P Chapter 3.4 – Ground Operations.

⁴ Refer to MAM-P Chapter 0.6 – Authority Levels and Tasks. ◀

Guidance Material 2211(1)

- 5. The Authorization will:
 - a. Explicitly detail the scope of the activities which apply, including, if applicable, certification in the technical log (MOD Form 700 or equivalent) that the Aircraft is ready for flight.
 - b. Be valid for a maximum period of one year or until ▶assignment to a new unit ◄, whichever is sooner. Re-Authorization will require the individual to pass a competency check.
- 6. An acceptable process for granting aircrew AFS is contained within ►MAM-P¹. ◀
- 7. **Ground Handling of ► Aircraft.** ◀ The requirements for personnel involved in the ground handling of ► Aircraft, ◀ including Aircrew, are contained within ► MAM-P³. ◀

Regulation 2211(2)

Authorization of Aircrew to Carry Out Air System Maintenance Work

2211(2) Aircrew required to carry out a specified range of Preventive and Corrective Maintenance activities pertinent to the type / mark of Air System or Air System equipment on which they are qualified to fly **shall** be authorized and competent.

Acceptable Means of Compliance 2211(2)

Authorization of Aircrew to Carry Out Air System Maintenance Work

- 8. Prior to receiving Authorization to carry out Maintenance, individual Aircrew **should** undergo appropriate training and demonstrate competence to carry out Maintenance. The competency check **should** demonstrate an adequate understanding of:
 - a. The Air System technical publications.
 - b. The Air System technical log (MOD Form 700 or equivalent).
 - c. The relevant regulations within the MRP RA 4000 Series: Continuing Airworthiness Engineering.
 - d. ►The relevant details within the MAM-P¹. ◀
- 9. ADH and AM(MF) **should** ensure that a formal record of Authorization is maintained 14.

Guidance Material 2211(2)

Authorization of Aircrew to Carry Out Air System Maintenance Work

- 10. The Authorization may include, but is not limited to:
 - a. Minor Corrective or Preventive Maintenance ▶ 1 ◀.
 - b. Role changes ►1,5◀.
 - c. Authority to defer Maintenance or record limitations (regulated by RA 4812⁶ ► ◄). Where applicable, the scope of Air System items / systems to which this could be permitted will be published in the Topic 2(N/A/R)1; however, individual Authorization may restrict this scope further.
- 11. The Authorizer will be ►SQEP ← holding the appropriate ► ← Authority Level ► ← J ► 4 ←. This may be, but is not limited to, the Squadron Air Engineer Officer (RN), Officer Commanding Workshops (Army), Senior Engineering Officer (RAF) or, for Defence Contractor Flying Organizations, an equivalent authorized engineer.
- 12. The Authorization will:

⁵ ►Refer to MAM-P Chapter 7.4 - Air System Role Equipment: Maintenance, Modification and Control. ◄

⁶ Refer to RA 4812 – Certification of ►Air System Release ◄ and Component Release (MRP 145.A.50).

Guidance Material 2211(2)

- Explicitly detail the scope of the activities which apply, including, if applicable, certification in the technical log (MOD Form 700 or equivalent) that the Air System is ready for flight.
- Be valid for a maximum period of one year or until >assignment to a new unit ◀, whichever is sooner. Re-Authorization will require the individual to pass a competency check.
- An acceptable process for granting Aircrew Authorization is contained within 13. ►MAM-P¹. ◀

Regulation 2211(3)

In-Flight Corrective Maintenance

In-flight Corrective Maintenance shall only be carried out at 2211(3) the specific request of the Aircraft Commander and shall be limited in scope.

Acceptable Means of Compliance 2211(3)

In-Flight Corrective Maintenance

- In-flight Corrective Maintenance **should** be limited to system reconfiguration. adjustments and component changes on a prescribed list of systems promulgated by the platform Type Airworthiness Authority (TAA) 7.
- 15. In-flight Corrective Maintenance should only be conducted by authorized personnel.
- Any Maintenance conducted in-flight should be recorded in accordance with ► MAM-P 8. **◄**

Guidance **Material** 2211(3)

In-Flight Corrective Maintenance

- A list of systems on which in-flight Corrective Maintenance may be attempted is promulgated by the TAA in the Topic 2(N/A/R)1, where applicable.
- An acceptable process for controlling in-flight Corrective Maintenance is detailed in ►MAM-P 8. <

Regulation 2211(4)

Training of Aircrew to Enter Cockpits Containing Aircraft Assisted **Escape Systems**

Aircrew who require access to a cockpit containing Aircraft 2211(4) Assisted Escape Systems (AAES) shall be appropriately trained.

Acceptable Means of Compliance 2211(4)

Training of Aircrew to Enter Cockpits Containing Aircraft Assisted **Escape Systems**

ADH and AM(MF) **should** ensure that appropriate training is conducted for the particular Air System, and detail the periodicity of continuation training. All training **should** be recorded on appropriate auditable training documents.

⁷ ► Where the Air System is Civilian-Owned, ownership of regulatory responsibility by either the TAA or Type Airworthiness Manager (TAM) needs to be agreed within the Sponsor's approved model for Type Airworthiness (TAw) management; refer to RA 1162 – Air Safety Governance Arrangements for Civilian Operated (Development) and (In-Service) Air Systems, or refer to RA 1163 – Air Safety Governance Arrangements for Special Case Flying Air Systems. Dependant on the agreed delegation of TAw responsibilities TAM may be read in place of TAA as appropriate throughout this RA. ⁸ Refer to MAM-P Chapter 4.1 – Types of Maintenance. ◀

Guidance **Material** 2211(4)

Training of Aircrew to Enter Cockpits Containing Aircraft Assisted **Escape Systems**

The periodicity of initial and subsequent AAES (eg ejection seat) training and ▶Role ◀ Performance Statements applicable to selected categories of personnel are promulgated in technical publications.

Further technical policy on working with AAES is contained within ►MAM-P⁹. ◀

⁹ ►Refer to MAM-P Chapter 7.1 – Aircraft Assisted Escape Systems. ◀