CHAPTER 11

ENGINEERING

SECTION 1 - GENERAL

636. Introduction. *Sponsor: HQ AIR SO1 Airworthiness (Aw) & Quality Management (QM) Policy*

Service personnel, civil servants and contractors undertake Defence engineering tasks across a broad spectrum of disciplines which have a direct impact on operational effectiveness, personal safety and efficiency. It is therefore essential that regulations and policy are in place to provide clear direction and auditable lines of responsibilities for engineers. This regulation supports the Military Aviation Authority (MAA) Regulatory Publications (MRP), which provide the overarching tri-Service Military Air Environment (MAE) engineering regulation to which all subordinate policy and regulations shall adhere to; however, this regulation is the overarching tri-Service policy, to which all subordinate regulations shall adhere to, within the ground engineering environment.

637. Applicability. *Sponsor: HQ AIR SO1 Aw & QM Pol*

This regulation applies to all Service personnel engaged in engineering and associated tasks across the RAF.

638. *(Omitted)*

SECTION 2 - RESPONSIBILITIES

639. *(Omitted)*

J640. Principal Engineer[2] *Sponsor: HQ AIR SO1 Aw & QM Pol*

Principal Engineers (PEs) are authorised by the relevant Front Line Command or PTL and will be the senior engineers responsible for the engineering standards and practices within a ship, unit, station, establishment or theatre of operation. PEs shall have direct access to the appropriate commander to whom they are responsible for all professional engineering matters and act as the single point of contact for engineering advice for the scope of their responsibility, including activity not necessarily under their direct command. In addition to any command responsibilities, delegated Preservation of Airworthiness responsibilities where applicable and specific items detailed in their Terms of Reference or contract, PEs shall be responsible for:

(1) The establishment and operation of an organizational structure, in terms of personnel, procedures and geographical layout that provides a sound framework for safe, efficient and effective engineering activity.

(2) The management, care, custody and security of all personnel and equipment assets within their charge.

(3) The professional management of engineering resources under their control.

(4) Ensuring that the required engineering standards and authorised practices are employed.

(5) Compliance with the relevant orders and instructions issued by higher formation, contracting authority or Host Nation.

(6) The efficient engineering management of technical equipment, including aircraft, for which they are responsible.

(7) Ensuring that an integrated Quality Management System, that adheres to mid-level policy (AP100C-10), and Quality culture exist across all support activities.

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[2] For RN read Principal Air Engineer.

J641. Subordinate Engineers. *Sponsor: HQ AIR SO1 Aw & QM Pol*

Subordinate Engineers[3] (SE), are engineer officers, warrant officers, or civilians of equivalent status and exceptionally SNCOs, who are responsible to the PE for the performance of their engineering duties. SEs may include personnel not directly under command of the PE. They are responsible for:

(1) Advising the PE on all engineering matters appropriate to their appointment.

(2) The professional management of engineering resources under their control.

(3) Ensuring that the required engineering standards and authorised practices are employed.

(4) The efficient engineering management of the aircraft or other technical equipment for which they are responsible.

J642. Engineering Tradesmen[3]. *Sponsor: HQ AIR SO1 Aw & QM Pol*

(1) **Managers.** Managers[4], shall be responsible to their immediate superiors, service or civilian, for the efficient management of resources within their area of control and for controlling the quality and quantity of work produced. These responsibilities apply also to NCOs who are placed in charge of bays, sections or flights.

(2) **Supervisors.** Supervisors[5] shall be responsible to the appropriate managers, service or civilian, or subordinate engineer where no managers are established, for the engineering administration, appropriate to their ranks and appointments, of the duties of their trades. Supervisors shall also be responsible for supervising the work done by the tradesmen under their control, for ensuring that correct engineering standards and practices are used, for assuring the quality and completeness of the work undertaken, and for the further professional development of the skills and knowledge of their subordinate tradesmen.

(3) **Operatives.** Operatives[6] shall be employed in the maintenance of technical equipment or aircraft. Supervisors may also be employed as operatives, as circumstances require. Operatives are responsible to their supervisors, service or civilian, for carrying out tasks as directed and in accordance with correct trade practices and the relevant regulations and procedures. Operatives shall also be responsible for the quality and completeness of their work and, where authorized to self-supervise, will have responsibility for the work they undertake when acting as a self-supervisor.

643-646. *(Omitted)*

SECTION 3 - ORDERS AND INSTRUCTIONS

647. Engineering Policy, Orders and Instructions. *Sponsor: HQ AIR SO1 Aw & QM Pol*

Engineering policy and instructions shall provide clear and concise direction on the execution of engineering practices. Specifically, primary MAE Regulation, Acceptable Means of Compliance (AMC) and Guidance Material (GM) is set out in the MRP, supported by the MAP-01 and MAP-02. The MRP shall be followed in the absence of any other instruction, or unless specifically directed otherwise, eg mid-level policy (AP600 within the CIS environment). Subordinate policy shall provide amplification to the higher policy or task specific policy when not covered by the primary guidance. FLCs and PTs are responsible for promulgating amplifying regulation as required.

648. *(Omitted)*

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[3] For RN read subordinate Air Engineer.

[3] For RN read Air Engineering Technicians.

[4] For RAF normally OR7 to OR9 subject to appointment.

[5] For RAF normally OR4 to OR6

[6] For RAF normally OR2 or OR3

649. Acquaintance with Orders. *Sponsor: HQ AIR SO1 Aw & QM Pol*

All personnel operating within a Defence engineering environment are to ensure that they have access to, are familiar with, and abide by engineering policy and instructions.

650-652. *(Omitted)*

SECTION 4 - MAINTENANCE OF AIRCRAFT AND OTHER TECHNICAL EQUIPMENT

653. Maintenance – General. *Sponsor: HQ AIR SO1 Aw & QM Pol*

The engineering authority for each type of aircraft or other technical equipment is to:

(1) Undertake its higher engineering management as described in the MRP, supported by mid level policy (AP600 for CIS environment).

(2) Define the policy for its maintenance and promulgate instructions accordingly.

654. *(Omitted)*

655. Control of Maintenance. *Sponsor: HQ AIR SO1 Aw & QM Pol*

The maintenance of aircraft and other technical equipment shall be controlled in accordance with the policy laid down in the MRP, supported by mid-level policy (AP600 for CIS environment) or as specifically detailed within the equipments maintenance support contract.

656-699 *(Omitted)*