

## Apprenticeship Standard for: Aviation Maintenance Mechanic (Military)

The following Standard reflects employers' requirements for the skills, knowledge and behaviours required to be competent in the job role.

### Role Profile

Aviation Maintenance Mechanics carry out Flight-Line maintenance and ground handling of a wide range of military aircraft and civil aircraft operated in the military environment, from small aeroplanes to passenger airliners, jet fighters and helicopters, maintained by the military or by approved organisations on their behalf. They are expected to carry out approved scheduled maintenance processes and defect rectification within the limits of their authority, to maintain the airworthiness of the aircraft. It involves specialist work, maintaining aircraft serviceability according to approved requirements and work instructions, using relevant hand tools and equipment. They must comply with civil and or military regulatory and organisational requirements. They will demonstrate their ability to identify defects and problems using the appropriate processes and understand the limits of their authority/approval. They will understand why Standard Operating Procedures are produced for maintaining aircraft and the importance of using them. The Maintenance Mechanic will also assist Aircraft Maintenance Fitter/Technicians to carry out specialist work, maintaining aircraft systems according to approved requirements and work instructions. The Maintenance Mechanic will recognise and be able to work safely within the airworthiness environment.

### Role Requirements (Knowledge and Skills)

There are different organisational (military) requirements which need a range of options depending upon the employer context.

#### **Core**

1. Complying with statutory, quality and organisational requirements for aviation safety and occupational health and safety while carrying out aircraft maintenance activities
2. Human Factors in aviation – developing an understanding of attitudes and behaviours to ensure aviation safety
3. Aircraft Flight-Line maintenance, handling and operations
4. Understand the fundamentals of Airframe Structural Inspection and Husbandry
5. Identify and use Aircraft Publications, raise and complete Service and Maintenance Documentation
6. Safe selection and use of hand and mechanical tools and equipment while carrying out maintenance of aircraft
7. Use of basic measuring and or test equipment while carrying out aircraft maintenance activities
8. Use of ground support equipment

#### **Employer Selected Options (Select two from the options below)**

Options are available through the Apprenticeship depending on the context of the employer's business, whether in civil or military aviation, rotary or fixed wing aircraft, in workshop, line or base maintenance. All routes have core knowledge requirements but practical skills options are likely to differ but are of comparable weighting. Full details of the requirements including core and options, minimum requirements and rules of combination are contained in the **Employer Occupational Brief (EOB) within the Assessment Strategy**.

Employer Selected Options:

1. Work safely with others on Aircraft armament systems: a solid grounding in the processes and procedures required to ensure the safety of themselves and others while working on aircraft fitted with armament systems
2. Undertake Aircraft Assisted Escape System (AAES) checks and safety precautions associated with cockpit access: ensuring a sound knowledge of the safety measures employed on AAES, the permissible safety conditions of an AAES and how to check those conditions, as well as the required training and authorisation
3. Act as safety person for another tradesperson undertaking a hazardous maintenance task: ensuring the apprentice knows and understands the working practices and procedures required by a safety person for a hazardous task, including the implications, regulations, and how to minimise situations hazardous to aircraft, associated equipment or personnel
4. Undertake mechanical component replacement: a solid grounding in the replacement of aircraft mechanical components; know the procedures, safety precautions, regulations and associated implications, ensuring adherence to the correct maintenance practices
5. Undertake avionic component replacement a solid grounding in the replacement of aircraft avionic components; know the procedures, safety precautions, regulations and associated implications, ensuring adherence to the correct maintenance practices

6. Assist with Aircraft functional checks on non-complex systems: ensuring the apprentice knows and understands the working practices and procedures required, and the limits of their authority and responsibility when working as a member of a team while assisting in functional checks following the maintenance of aircraft systems

### **Role Requirements: Employee Behaviours**

Modern maintenance organisations require their employees to have a set of behaviours that will ensure success both in their role and in the overall organisational objectives. The required behaviours are:

1. **Strong work ethic:** motivated, proactive, committed
2. **Dependability and responsibility:** punctual, reliable
3. **Positive attitude:** constructive thinking, motivated to succeed, committed to equality and diversity, environmental, social and economic sustainability
4. **Team player:** able to work and interact effectively within a team
5. **Effective communication:** spoken, listening, body language, presentation, written
6. **Adaptability:** able to adjust to change
7. **Honesty and integrity:** truthful, sincere and ethical
8. **Self-motivation:** self-starter, able to make appropriate decisions and contribute to their own professional development
9. **Personal commitment:** prepared to make a personal commitment to the industry

### **Entry Requirements**

Individual employers will set the criteria. Employers who recruit candidates without English or Maths at Level 1 or equivalent must ensure that the candidate achieves this requirement and takes the test for Level 2 English and Maths prior to taking the end-point assessment.

### **Duration of Apprenticeship**

Typically 18 months, timescales may reduce if an apprentice has prior relevant qualifications/experience.

### **Qualifications & Development**

After a period of foundation skills and technical knowledge development all apprentices will be required to achieve the following technical knowledge qualification and four mandatory competency qualification units will be completed in a protected environment (working titles -currently in development).

- Level 2 Certificate in Aircraft Maintenance (Military Aircraft)
- Level 2 Aviation Maintenance Mechanic (Competence)

After a further period of skills and technical knowledge development all apprentices will be required to achieve the following qualification (working title - currently in development)

- Level 2 Aviation Maintenance Mechanic (Competence) - optional units completed in an active environment

All of the qualification requirements specified in the foundation phase and development phase are mandatory outcomes for the completion and final certification of the Apprenticeship Standard. Each qualification has a core and options approach and employers will select the most applicable pathway and unit options to meet their business requirements. Further detail can be found in the Employer Occupational Brief which is an annex to the Assessment Plan.

There will be an assessment at the end of the development phase where the apprentice will need to demonstrate full competence against the qualification outcomes for knowledge, skills and behaviours, set out in the Standard and Employer Occupational Brief. On successful completion of the employer endorsement phase (sign off) apprentices will be then be put forward to be awarded their Apprenticeship completion certificate.

### **Recognition**

Where the Apprenticeship is undertaken in a military context, completion will be recognised by the Training Requirements Authority (TRA) at the appropriate level of professional competence.

### **Level and Review**

This Apprenticeship Standard is at Level 2 (equivalent to GCSEs at A\*-C) and will be reviewed after three years to ensure it continues to meet employers' requirements and provides the basis for progression to higher qualifications and or job roles.