Apprenticeship Standard for:
Airworthiness, Planning, Quality and Safety Technician

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

Role Profile

Airworthiness, Planning, Quality and Safety Technicians work on reviewing data, making and implementing decisions, and monitoring their effect on the operation and airworthiness of aircraft of all types from small aeroplanes to airliners, jet fighters, airships and helicopters, both civil and military, using approved airworthiness information and processes. It involves highly skilled, complex and specialist work, monitoring continuing airworthiness data and aircraft systems according to applicable requirements and work instructions, using relevant documentation. They may work within civil or military organisations identifying and researching applicable information, ensuring that all aircraft documentation is accurately completed. They will be expected to work both individually or as part of a larger team. They will identify and resolve problems using the appropriate processes within the limits of their authority/approval. They will understand how and why procedures are produced for keeping aircraft airworthy and the importance of following them. Progression from this role could include supervisory and management roles.

Role Requirements (Knowledge and Skills)

There are different civil and/or military requirements which need a range of options depending upon the employer context.

Core

1. Understand the maintenance needs of operating an aircraft, including the importance of the development and management of the maintenance programme
2. Understanding the regulatory and organisational requirements and need for producing, monitoring and completing aircraft continuing airworthiness document sets and associated tasks
3. Understanding of statutory and compliance with, quality and organisational requirements for aviation safety and occupational health and safety in a continuing airworthiness organisation
4. Human Factors in aviation – developing an understanding of attitudes and behaviours to ensure aviation safety
5. Practices, processes and philosophy of aircraft maintenance for servicing, scheduled, condition based, unplanned maintenance work, and defect rectification
6. Understanding the relationship between the aircraft operator and the aircraft maintenance organisation and the regulatory responsibilities of each
7. Understand, operate and interrogate different types of computer software, information systems and documentation necessary to carry out their role
8. Use of mathematical techniques, algebraic expressions, formulae, calculation and physics to understand the theory of flight, aerodynamics and aviation maintenance processes
9. Reading and interpreting general and approved engineering data; drawings, specifications, maintenance manuals, computer generated information and aircraft documentation
10. Asset and inventory management within a continuing airworthiness environment

Employer Selected Options (minimum of 2)

Several 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 continuing airworthiness management or aircraft maintenance and repair organisations. Full details of the requirements are contained in the **Employer Occupational Brief (EOB) within the Assessment Strategy.**

Employer Selected Options:

1. Apply principles and methods used to implement aviation safety management systems
2. Apply reliability monitoring and analysis of aircraft and their systems
3. Apply compliance monitoring and quality auditing of the organisation and aircraft
4. Understand how to work with other personnel internal and external to the organisation, providing good customer service
5. Apply fleet planning, maintenance scheduling and aircraft on the ground (AOG) requirements

Role Requirements: Employee Behaviours

Modern continuing airworthiness organisations require their apprentices to have a set of behaviours that will ensure success both in their role and in the overall company objectives. The 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, safety mind-set
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 lead their own professional development
9. Personal commitment: prepared to make a personal commitment to the industry

Entry Requirements

Individual employers will set the criteria, but most candidates will have four GCSEs or equivalent C grade or above on entry (including English, Maths & Science). Employers who recruit candidates without English, Maths or Science at Grade C or above must ensure that the candidate achieves this requirement, or an equivalent at Level 2, prior to completion of the Apprenticeship.

Duration of Apprenticeship

Typically 36 months, timescales may reduce if an apprentice has prior relevant qualifications/experience.

Qualifications and Development

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

- Level 2 Aerospace and Aviation (Foundation Competence)

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

- Level 3 Aerospace and Aviation (Development Competence)
  plus
- Level 3 Aviation Airworthiness (Development Technical Knowledge)
  or
  Certification against the EASA part 66 modules

All of the qualification requirements in the foundation and development phases 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. Knowledge and vocational qualifications that meet national and/or regulatory requirements will be included on the Apprenticeship Certificate.

Recognition

Completion of the Apprenticeship is designed to be recognised by relevant Professional Engineering Institutions at the appropriate level of professional registration (EngTech).

Level and Review

This Apprenticeship Standard is at Level 3 (equivalent to A levels) and will be reviewed every three years after first cohort recruited to ensure it remains relevant and continues to meet employers' requirements and provides the basis for progression to higher qualifications and or job roles.