
Overview

This standard identifies the competences you need to carry out flight servicing and routine maintenance activities on commercial, military or light aircraft, both fixed wing and rotary, in accordance with the aircraft maintenance manual, approved change documentation (service bulletin) and airworthiness requirements. You will be required to select the correct tools and equipment to use for the servicing activities to be carried out in accordance with the aircraft maintenance manual, and to check that they are in a safe and serviceable condition. You will be required to manoeuvre the aircraft to the appropriate location and to prepare the aircraft for the work. The servicing activities will involve defuelling and refuelling, replenishing oxygen systems, replenishing oil systems, checking undercarriages, wheels and brakes, and completing the servicing records.

Your responsibilities will require you to comply with the specific practices and procedures identified in the aircraft manual, change/service bulletin documentation and airworthiness requirements for the servicing/maintenance activities undertaken, and to report any problems with these requirements that you cannot personally resolve, or that are outside your permitted authority, to the relevant people. You must ensure that all tools, equipment and materials used are correctly accounted for on completion of the activities, and that all necessary job/task documentation is completed thoroughly, accurately and legibly. You will be expected to work with a minimum of supervision, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will provide a good understanding of your work, and will provide an informed approach to applying the appropriate aircraft servicing and maintenance techniques and procedures. You will understand the type of aircraft being serviced, the common problems that can occur, and will know about the replenishment equipment and fastening devices, in adequate depth to provide a sound basis for carrying out the activities to the required specification.

You will understand the safety precautions required when working on the aircraft, especially those for ensuring system cleanliness and the avoidance of contamination. You will be required to demonstrate safe working practices throughout, and will understand your responsibility for taking the necessary safeguards to protect yourself

and others in the workplace.

Notes:

This standard is designed to cover the practical experience requirements of the Airline Transport Association (ATA) Chapter 12

Performance criteria

You must be able to:

1. work safely at all times, complying with health and safety and other relevant regulations, directives and guidelines
2. follow the relevant maintenance schedules to carry out the required work
3. carry out the maintenance activities within the limits of your personal authority
4. carry out the maintenance activities in the specified sequence and in an agreed timescale
5. report any instances where the servicing or maintenance activities cannot be fully met or where there are identified defects outside the planned schedule
6. complete the relevant maintenance records accurately and pass them on to the appropriate person
7. dispose of waste materials in accordance with safe working practices and approved procedures
8. leave the aircraft in a safe and appropriate condition, and ensure that components and surrounding structures are maintained free from damage and foreign object debris

Knowledge and understanding

You need to know and understand:

1. the specific safety precautions and procedures to be observed whilst carrying out the aircraft servicing (including any specific legislation, approvals, regulations or codes of practice relating to the activities, equipment or materials)
2. the importance of maintenance on, and impact upon (Extended Range Twin-Engine Operations Procedures) ETOPS systems, legislation and local procedures
3. the health and safety requirements of the work area in which you are carrying out the aircraft servicing/maintenance activities, and the responsibility these requirements place on you
4. the requirements and importance of understanding and applying human factors as defined by the regulatory requirements and the potential impact if these are not adhered to
5. the authorisation you require to commence work on the aircraft
6. the hazards associated with carrying out flight servicing of the aircraft, and how to minimise them and reduce any risk
7. the hazards associated with working on and replenishing aircraft systems (such as fuel, gaseous systems and oils), and how they can be minimised
8. the protective equipment that you need to use for both personal protection (PPE) and protection of the aircraft
9. the importance of aircraft husbandry and of ensuring that, throughout the servicing activity, the aircraft and work area are maintained free from foreign objects, and the implications of FOD to the safety of the aircraft
10. why tool/equipment control is critical and what to do if a tool or piece of equipment is unaccounted for on completion of the activities
11. the maintenance schedules and servicing specifications that are used during servicing and maintenance, and the importance of following the procedures listed in these documents
12. the replenishments to be made and the method of replenishment to be used
13. electrical bonding specifications and their importance
14. how to identify the fuels, lubricants and gases to be used, and how to ensure that systems are not contaminated
15. the procedures for checking undercarriages, wheels and brakes, and what to look for (such as tyre damage, tyre creep, tyre pressure, hydraulic leaks, shock absorber/oleo extension, security of fastenings and brake wear)

16. the quality control procedures to be followed during the servicing procedures
17. how to conduct any necessary checks to ensure the system integrity and functionality
18. the problems that can occur with the servicing and maintenance activities, and how these can be overcome
19. the importance of the correct securing and locking of connections
20. the importance of personal tool control, and the organisational tool control procedures
21. how replenishment equipment is cared for, connected, operated and controlled
22. the methods and equipment used to replenish aircraft systems and how to check that the equipment is within its current certification dates
23. the tools and equipment used in the servicing activities and their calibration/care and control procedures
24. the disposal methods for waste oil, fuel and other liquids and waste
25. problems with the servicing procedures and the importance of informing appropriate people of any defects
26. the recording documentation to be completed for the activities undertaken and, where appropriate, the importance of marking and identifying specific pieces of work in relation to the documentation
27. the extent of your own authority and to whom you should report if you have problems that you cannot resolve

Scope/range related to performance criteria

1.

Carry out all of the following during the servicing and routine maintenance activities:

1.1 ensure that appropriate authorisation to work on the aircraft is obtained, and observe all relevant isolation and safety procedures

1.2 obtain and use the appropriate documentation (such as job instructions, servicing/routine maintenance documentation, technical instructions, aircraft manuals)

1.3 adhere to procedures or systems in place for risk assessment, COSHH, personal protective equipment and other relevant safety regulations and procedures to realise a safe system of work

1.4 ensure that relevant safety devices and mechanical/physical locks are in place (where appropriate)

1.5 ensure that the aircraft is correctly earthed and follow approved safe procedures for connecting ground power

1.6 use approved servicing and maintenance techniques at all times

1.7 return tools and equipment to the correct storage location on completion of the activities

1.8 ensure that work carried out is correctly documented and recorded

2.

Carry out one of the following:

2.1 refuelling

2.2 defuelling

3.

Carry out three of the following flight inspections, in accordance with the approved servicing schedule:

3.1 daily

3.2 before flight

3.3 transit

3.4 turnaround

3.5 after flight

3.6 Extended Range Twin-Engine Operations Procedures (ETOPS)

To include replenishment and servicing of all of the following:

7. gas systems

8. aircraft lights

9. structure examination

10. oil systems

11. cabin/flight deck inspections

12. landing gear examination and tyre pressure checks
13. hydraulic systems
14. engines
15. water/toilet systems (as appropriate)
16. liquid oxygen (LOX) system (as appropriate)

1.

Complete the relevant paperwork, to include one from the following and pass it to the appropriate people:

- 1.1 job cards/work sheets
- 1.2 aircraft technical log
- 1.3 aircraft log book
- 1.4 computer records
- 1.5 aircraft cabin log

2.

Carry out servicing work in compliance with one of the following:

- 2.1 Civil Aviation Authority (CAA)/European Aviation Safety Agency (EASA)
- 2.2 Extended Range Twin-Engine Operations Procedures (ETOPS) (where appropriate)
- 2.3 Ministry of Defence (MoD)
- 2.4 Military Aviation Authority (MAA)
- 2.5 Aerospace Quality Management Standards (AS)
- 2.6 Federal Aviation Authority (FAA)
- 2.7 aircraft maintenance manual/approved change documentation (service bulletin)
- 2.8 manufacturers standards and procedures

Behaviours

You will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as:

- strong work ethic
- positive attitude
- team player
- dependability
- responsibility
- honesty
- integrity
- motivation
- commitment

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Carrying out flight servicing and routine maintenance of aircraft



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