

Overview

This standard identifies the competences you need to carry out servicing activities on aircrew life preserver equipment, in accordance with approved procedures. You will be required to select the appropriate tools and equipment to use, based on the servicing activities to be carried out, and to check that they are in a safe and serviceable condition. The servicing activities will include dismantling the equipment to the appropriate level and cleaning the various parts using suitable solutions. You will carry out a thorough examination of the life preserver equipment and associated parts, in line with the relevant schedule, identifying and replacing any 'lifer' items, damaged, worn or defective parts. You will then reassemble the life preserver equipment, make any required adjustments, and check and test the equipment operation and performance.

Your responsibilities will require you to comply with organisational policy and procedures for the servicing activities undertaken, and to report any problems with these activities that you cannot personally resolve, or that are outside your permitted authority, to the relevant people. You will be expected to work either with a high level of supervision or as a member of a team, and you will take personal responsibility for your own actions and for the quality and accuracy of the work that you carry out. Where team working is involved, you must demonstrate a significant personal contribution during the team activities in order to satisfy the requirements of this standard, and you must demonstrate competence in all the areas required by the standard.

Your underpinning knowledge will provide a sound basis for your work and will provide an informed approach to applying the appropriate servicing techniques and procedures. You will have a basic understanding of the equipment being serviced, and its application, and will know about the servicing requirements and equipment used, 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 carrying out the servicing operations. You will be required to demonstrate safe working practices throughout and will understand the responsibility you owe to yourself and others in the workplace.

Performance criteria

You must be able to:

- P1 work safely at all times, complying with health and safety and other relevant regulations, directives and guidelines
- P2 follow the relevant servicing schedules to carry out the required work
- P3 carry out the servicing activities within the limits of your personal authority
- P4 carry out the servicing activities in the specified sequence and in an agreed timescale
- P5 carefully examine the life preserver equipment and replace worn or damaged components
- P6 report any instances where the servicing activities cannot be fully met or where there are identified defects outside the planned schedule
- P7 complete and store all relevant documentation in accordance with organisational requirements
- P8 dispose of waste materials in line with organisational and environmentally safe procedures

Knowledge and understanding

You need to know and understand:

- K1 how to work safely at all times, complying with health and safety and other relevant regulations, directives and guidelines
- K2 the hazards associated with servicing aircrew life preserver equipment, and how they can be minimised
- K3 the importance of wearing the appropriate personal protective equipment (PPE), and of keeping the work area clean and tidy
- K4 the servicing/maintenance schedules and specifications that are used during the servicing activities, and the importance of following the procedures listed in these documents (to include Urgent Technical Instructions (UTI), Satisfying Routine Technical Instructions (RTI), Maintenance Instructions (MI), Preliminary Warning Instructions (PWI) and Serious Defect Signals)
- K5 the types of faults, defects or wear characteristics that are likely to occur with the aircrew life preserver equipment
- K6 how to determine when components require adjustment, repair or replacement
- K7 the components to be replaced in the aircrew life preserver equipment, and the method of replacement
- K8 the importance of the correct securing and locking of connections
- K9 how to identify the components to be used for the life preserver equipment being serviced
- K10 the quality control procedures to be followed during the servicing procedures
- K11 how to conduct any necessary checks to ensure that the equipment functions to specification
- K12 the issues that can occur with the servicing of the life preserver equipment, and the importance of informing appropriate people of any defects

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K13 the importance of tool control, and the organisational tool control procedures to be used

K14 the tools and equipment used in the servicing activities, and their calibration/care and control procedures

K15 the importance of ensuring that, when the servicing is completed, the equipment is free from dirt, swarf and foreign objects (FOD)

K16 the disposal methods for waste and petrol, oil and lubricants (POL)

K17 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

K18 the extent of your own responsibility, 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 of the aircrew life preserver equipment:
 - 1.1 use the correct issue of the servicing or maintenance schedule
 - 1.2 adhere to procedures or systems in place for risk assessment, personal protective equipment and other relevant safety regulations and procedures to realise a safe system of work
 - 1.3 check the calibration dates of tools and equipment to be used
 - 1.4 use approved servicing techniques and procedures at all times
 - 1.5 return all tools and equipment to the correct location on completion of the activities
 - 1.6 leave the work area in a safe and tidy condition
2. Carry out all of the following servicing activities, using appropriate methods and techniques:
 - 2.1 dismantling equipment to an appropriate level (such as removal of personal locator beacon (PLB) and CO cylinder)
 - 2.2 cleaning the equipment using appropriate solutions
 - 2.3 monitoring the condition/deterioration of components
 - 2.4 Plus, three more from the following:
 - 2.5 replacing all 'lified' components
 - 2.6 replacing all damaged or defective components
 - 2.7 reassembling the equipment
 - 2.8 carrying out any required modifications to the equipment
 - 2.9 carrying out adjustments to components and connections
 - 2.10 checking equipment operation and performance
 - 2.11 testing the equipment in accordance with the relevant air publication (AP)
3. Carry out a thorough examination of the life preserver, to include checking all of the following:
 - 3.1 waistcoat front closure plate for damage, wear and insecurity
 - 3.2 waist adjustment straps and buckles for damage and correct locking action
 - 3.3 all internal and external stowage pockets for damage, wear and security
 - 3.4 inflation valves and oral tubes for damage and deterioration
 - 3.5 stole pouch and peripheral slide fastener for damage and wear - check the operation
 - 3.6 cylinder pocket and operating knob housing for security of water ingress, eyelets and snap fasteners
 - 3.7 all fasteners and eyelets for damage, wear and insecurity
 - 3.8 webbing tape hinges and tape touch-and-close for damage, wear and security
 - 3.9 stole lacing loops, webbing loops and lifting beackets for damage, wear and security
 - 3.10 life line and toggle, whistle and lanyard, heliograph - examine for correct length and security of knots
 - 3.11 water activated battery and lamp assembly, for damage, length of lanyard and security of knots

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- 3.12 pyrotechnic signal kit for damage and integrity of seals
 - 3.13 `Mic/Tel' flap and D-ring for damage and wear
 - 3.14 CO cylinder for corrosion, dents, damage and integrity of gas seal and screw threads
4. Replace a range of life preserver equipment components, to include four of the following:
- 4.1 inflatable stole
 - 4.2 waistcoat
 - 4.3 personal locator beacon (PLB)
 - 4.4 pyrotechnic signal kit
 - 4.5 personal locator beacon battery
 - 4.6 drinking water
 - 4.7 personal locator beacon aerial
 - 4.8 heliograph
 - 4.9 CO cylinder
 - 4.10 automatic life preserver inflation unit (ALPIU)
 - 4.11 water activated battery and lamp
 - 4.12 `Halkey Roberts' manual inflator
 - 4.13 first aid kit
5. Carry out servicing requirements, in accordance with one of the following types of instructions:
- 5.1 Urgent Technical Instructions (UTI)
 - 5.2 Satisfying Routine Technical Instructions (RTI)
 - 5.3 Maintenance Instructions (MI)
 - 5.4 Preliminary Warning Instructions (PWI)
 - 5.5 Serious Defect Signals
6. Carry out servicing work which complies with one of the following standards:
- 6.1 Civil Aviation Authority (CAA)/European Aviation Safety Agency (EASA)
 - 6.2 Ministry of Defence (MoD)
 - 6.3 Military Aviation Authority (MAA)
 - 6.4 Aerospace Quality Management Standards (AS)
 - 6.5 Federal Aviation Authority (FAA)
 - 6.6 BS, ISO or BSEN procedures
 - 6.7 customer standards and requirements
 - 6.8 organisational standards and procedures
 - 6.9 manufacturers standards and procedures
7. Complete the relevant servicing records, to include one from the following, and pass it to the appropriate people:
- 7.1 servicing/maintenance schedule/log
 - 7.2 job cards
 - 7.3 aircraft service/flight log
 - 7.4 other specific recording method

Servicing aircrew life preserver equipment

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