

Carry out pre and post aircraft de-icing checks

Overview

This standard is about carrying out pre and post aircraft de-icing checks. This involves checking the aircraft to identify the need for de-icing on the ground and carrying out a check after de-icing to confirm the aircraft surfaces are free from contamination and the aircraft can be released to fly.

This standard is for those responsible for carrying out pre and post aircraft de-icing checks. This may be a separate function in some organisations, or it may link into other job tasks involved with aircraft ground de-icing.

When you have completed this standard, you will be able to demonstrate your knowledge of and ability to:

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Performance criteria

You must be able to:

1. Identify the critical aircraft surfaces which need to be checked pre and post de-icing
2. Wear the required personal protective equipment (PPE) for checking critical aircraft surfaces in line with organisational and the airport/airfield's and relevant legal requirements
3. Decide on the action to be taken based on the results of the pre and post aircraft de-icing checks
4. Select, position and operate the equipment required for accessing the critical aircraft surfaces to be checked in line with organisational and the airport/airfield's procedures and relevant legal requirements
5. Respond to issues with equipment and PPE and emergency situations which may occur whilst carrying out pre and post aircraft de-icing checks in line with organisational and the airport/airfield's procedures and relevant legal requirements
6. Carry out a de-icing check to confirm the need for ground de-icing and post de-icing to confirm all critical surfaces are free from contamination
7. Carry out a tactile check of the required critical surfaces or representative areas according organisational and airport/airfield procedures and airline requirements
8. Maintain your own, colleagues', passengers' and visitors' health, safety and welfare when carrying out pre and post aircraft de-icing checks
9. Communicate the action to be taken to colleagues as required in line with organisational and airport/airfield procedures

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Knowledge and understanding

You need to know and understand:

1. The local rules and legal requirements which relate to de-icing procedures and associated checks
2. The airline or customer specific checks which may be required in addition to your organisational and airport/airfield standard checks
3. How to prepare to carry out a de-icing check to identify the need for ground de-icing or confirm all critical surfaces are free from contamination
4. How to select the equipment required to access critical aircraft surfaces to carry out pre and post aircraft de-icing checks
5. Your organisation's and the airport/airfield's health and safety procedures for positioning and operating access equipment, wearing PPE and safe systems of work
6. The actions to take, including defect reporting, for issues identified with equipment, PPE and in emergency situations
7. The characteristics and common critical areas of aircraft to be inspected
8. The safety precautions to take when carrying out pre and post aircraft de-icing checks
9. The conditions which can lead to the formation of frost or ice on the aircraft (cold soak, prevailing weather conditions etc)
10. The types of contamination you are checking for
11. How to carry out a de-icing check to confirm the need for ground de-icing and post de-icing to confirm all critical surfaces are free from contamination
12. The acceptable limits for the application of de-icing fluids as given by the aircraft manufacturer
13. The areas to be inspected and the inspection methods to use
14. How to interpret the results of your inspection and decide on the action to take
15. Your organisation's procedures for communicating your decision (based on your inspection) for either confirming the need for ground de-icing, or confirming all critical surfaces are free from contamination

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Scope/range

Colleagues include:

- a) flight crew
- b) engineer
- c) ground crew
- d) aircraft de-icing crew

Emergency situations include:

- a) equipment breakdown
- b) fire at the aircraft
- c) fire in the terminal building
- d) fire on the access equipment you are using

Common critical areas to be inspected:

- a) wings, both upper and lower
- b) vertical and horizontal tail surfaces
- c) fuselage
- d) engine inlets and fan blades – front and back
- e) control surfaces
- f) pitot heads and static ports
- g) landing gear and landing gear doors
- h) antennas and sensors
- i) other aerodynamic surfaces and propellers

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Safety precautions include:

- a) in cold weather
- b) in high winds
- c) restricting access

Types of contamination include:

- a) frost
- b) ice
- c) snow
- d) clear ice

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Glossary

PPE

Personal Protective Equipment

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Suite Aviation Operations on the Ground

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