

Cape Cod Community College AMTS

Practical Project Guide for AMT 113 General Curriculum, Subject Items 22 and 23

Part 147, Appendix B, Subject G – Cleaning and Corrosion Control

Item 22. Identify and select cleaning materials (Level 3)

Item 23. Inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning (Level 3)

Project 1A & 1B

Purpose: To acquaint the student with the proper procedures in performing aircraft cleaning with emphasis on the identification and selection of the proper cleaning materials

References:

- (1) 14 CFR Federal Aviation Regulations for Aviation Maintenance Technicians, Aviation Maintenance Technician Handbook – General, Volume 1 (FAA-H-8083-30), Chapter 6
- (2) FAA AC 43-4A, Corrosion Control for Aircraft
- (3) Cessna Aircraft Company 402C Maintenance Manual
- (4) Piper Comanche PA 24-250 Service Manual
- (5) Safety Data Sheets

Equipment and Tools Needed:

- (1) Cessna 402C
- (2) Piper Comanche PA 24-250

Supplies and Materials Needed:

- (1) Personal Protective Equipment (PPE)
- (2) Appropriate Consumables
- (3) Vacuum cleaner, water buckets, sponges, rags, paper towels

Procedure:

Complete following procedure on project 1A or 1B

(1) Identify and selection of cleaning materials:

- a. The student will identify correctly which cleaning agents, cleaning solvents, and cleaning equipment are to be used, as well as the dangers/cautions of using the incorrect agent/solvent/equipment in the following areas:

- | | |
|-----------------------|----------------------|
| 1. Engine Compartment | 2. Landing Gear |
| 3. Wheels and Brakes | 4. Exterior Surfaces |
| 5. Windshield | 6. Seats |
| 7. Headliner | 8. Side Panels |
| 9. Seats | 10. Carpets |

(2) Perform aircraft cleaning to the following aircraft areas:

- a. The student will perform aircraft cleaning. During the cleaning process, the student will include a corrosion inspection to properly identify areas of corrosion for removal and treatment:

- | | |
|-----------------------|----------------------|
| 1. Engine Compartment | 2. Landing Gear |
| 3. Wheels and Brakes | 4. Exterior Surfaces |
| 5. Windshield | 6. Seats |
| 7. Headliner | 8. Side Panels |
| 9. Seats | 10. Carpets |

Project 1A Item 22. Identify and select cleaning materials (Level 3)
Item 23. Inspect, identify, remove, and treat aircraft corrosion and perform aircraft (Level 3)

- (1) 14 CFR Federal Aviation Regulations for Aviation Maintenance Technicians, Aviation Maintenance Technician Handbook – General, Volume 1 (FAA-H-8083-30), Chapter 6
- (2) FAA AC 43-4A, Corrosion Control for Aircraft
- (3) Cessna Aircraft Company 402C Maintenance Manual
- (4) Safety Data Sheets

Project 1B Item 22. Identify and select cleaning materials (Level 3)
Item 23. Inspect, identify, remove, and treat aircraft corrosion and perform aircraft (Level 3)

- (1) 14 CFR Federal Aviation Regulations for Aviation Maintenance Technicians, Aviation Maintenance Technician Handbook – General, Volume 1 (FAA-H-8083-30), Chapter 6
- (2) FAA AC 43-4A, Corrosion Control for Aircraft
- (3) Piper Comanche PA 24-250 Service Manual
- (4) Safety Data Sheets

Cape Cod Community College AMTS

Practical Project Guide for AMT 113 General Curriculum, Subject Item 23

Part 147, Appendix B, Subject G – Cleaning and Corrosion Control

Item 23. Inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning (Level 3)

Project 2A, 2B, & 2C

Purpose: To acquaint the student with the proper procedures in inspecting, identifying, removing, and treating aircraft corrosion.

References:

- (1) 14 CFR Federal Aviation Regulations for Aviation Maintenance Technicians, Aviation Maintenance Technician Handbook – General, Volume 1 (FAA-H-8083-30), Chapter 6
- (2) FAA AC 43.13-1B, Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair
- (3) FAA AC 43-4A, Corrosion Control for Aircraft
- (4) Cessna 402C Service Manual
- (5) Cessna Skymaster 337 Service Manual
- (6) Piper Comanche PA 24-250 Maintenance Manual
- (7) Access to Safety Data Sheets

Equipment and Tools Needed:

- (1) Cessna 402C
- (2) Cessna Skymaster 337
- (3) Piper Comanche 250

Supplies and Materials Needed:

- (1) Personal Protective Equipment (PPE)
- (2) Snap-On Roll-around Toolbox
- (3) Appropriate Consumables
- (4) Paint brushes, hog bristle brush, plastic tooth brushes, wire brushes, acid brushes, steel wool, sand paper, abrasive pads

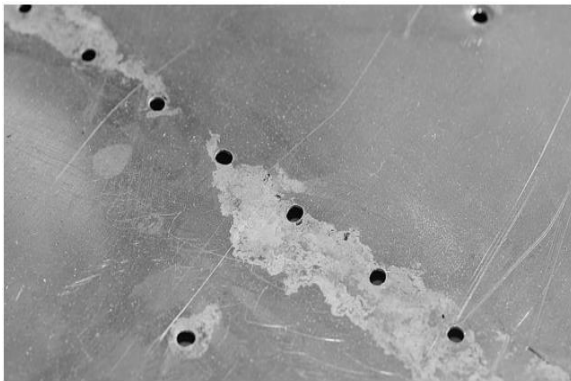
Procedure:

Complete following procedure on project 2A, 2B, or 2C

- (1) Inspect the aircraft for corrosion:

- a. The student must identify at least ten places where corrosion is present and recognize at least five different types of corrosion on aluminum alloy and steel surfaces and components
- b. During inspection, particular attention should be made to the level of corrosion (damage):
 1. Negligible damage
 2. Damage repairable by patching
 3. Damage repairable by insertion
 4. Damage necessitating replacement of parts

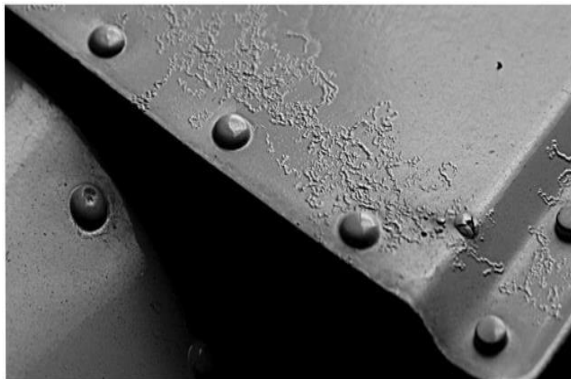
(2) Identify corrosion on the aircraft:



Surface Corrosion



Stress Corrosion



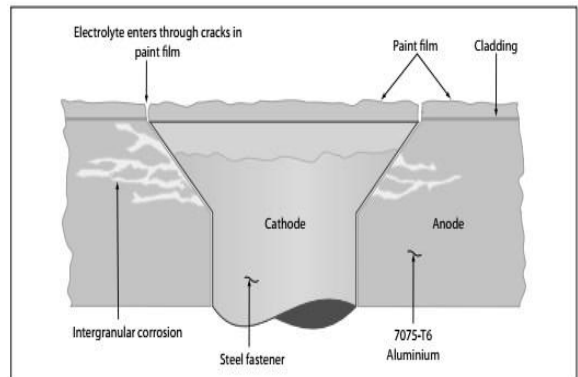
Filiform Corrosion



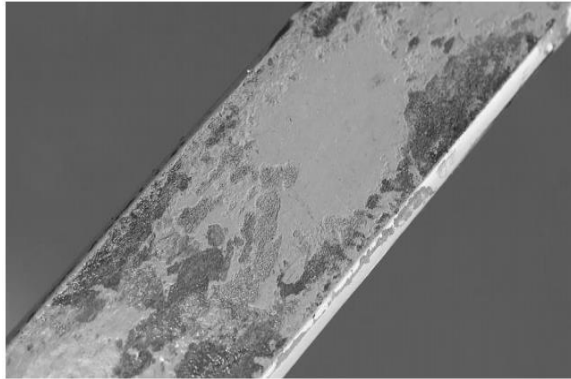
Dissimilar Metal Corrosion



Exfoliation



Intergranular Corrosion



Fretting Corrosion



Rust

- (3) Removing and treating aircraft corrosion
 - a. The student must perform at a minimum THREE corrosion removal and treatment processes

Project 2A Item 23. Inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning (Level 3)

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- (2) FAA AC 43.13-1B, Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair
- (3) FAA AC 43-4A, Corrosion Control for Aircraft
- (4) Cessna 402C Service Manual
- (5) Access to Safety Data Sheets

Project 2B Item 23. Inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning (Level 3)

- (1) 14 CFR Federal Aviation Regulations for Aviation Maintenance Technicians, Aviation Maintenance Technician Handbook – General, Volume 1 (FAA-H-8083-30), Chapter 6
- (2) FAA AC 43.13-1B, Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair
- (3) FAA AC 43-4A, Corrosion Control for Aircraft
- (4) Cessna Skymaster 337 Service Manual
- (5) Access to Safety Data Sheets

Project 2C Item 23. Inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning (Level 3)

- (1) 14 CFR Federal Aviation Regulations for Aviation Maintenance Technicians, Aviation Maintenance Technician Handbook – General, Volume 1 (FAA-H-8083-30), Chapter 6
- (2) FAA AC 43.13-1B, Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair
- (3) FAA AC 43-4A, Corrosion Control for Aircraft
- (4) Piper Comanche PA 24-250 Maintenance Manual
- (5) Access to Safety Data Sheets

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