

WIRING SYSTEMS MINIMUM TRAINING PROGRAM

Target group A: Qualified staff performing maintenance on aircraft (incl. LRU change)

Target group B: Qualified staff performing maintenance on aircraft including electric/avionic work (e.g. wire repair)

Target group C: Qualified staff performing maintenance inspections on wiring systems

Target group D: Other service staff with duties in proximity to wire (e.g. cleaners, cargo loaders)

<u>Estimated module number :</u>	A	B	C	D
A – INTRODUCTION Demonstrate the safe handling of airplane electrical systems, Line Replaceable Units (LRU's), tooling, troubleshooting procedures, and electrical measurement.				
1. Safety practices	X	X	X	X
2. Electrostatic Discharge Sensitive (ESDS) Device handling and protection	X	X	X	
3. Tools, special tools and equipment		X	X	
4. <u>Verify</u> calibration/certification of instruments, tools, and equipment		X	X	
5. Required wiring checks using the Troubleshooting Procedures and Charts		X		
6. Measurement and troubleshooting using meters.		X		
B – CHAPTER 20 <u>STRUCTURE WIRING PRACTICES</u> Know the construction and navigation of the applicable airplane wiring system overhaul or wiring practices manual				
7. Chapter 20 structure/overview		X	X	
8. Chapter cross-reference Index		X	X	
9. Important Data and Tables		X	X	
C – INSPECTION Understand the General Visual Inspection and Detailed inspection procedures, human factors in inspection, zonal areas, and typical damage that can occur.				
10. General Visual Inspection (GVI), Detailed Inspection (DI) and Special Detailed Inspection (SDI), criteria and standards	X GVI only	X GVI only	X	
11. Human factors in inspection			X	
12. Zonal areas of inspection			X	
13. Wiring system damage	X	X	X	
D – HOUSEKEEPING: Know the contamination sources, materials, cleaning and protection procedures				

14. Airplane external contamination sources	X	X	X	X
15. Airplane internal contamination sources	X	X	X	X
16. Other contamination sources	X	X	X	X
17. Contamination protection planning	X	X		
18. Protection during airplane maintenance and repair	X	X		
19. Cleaning processes	X	X		X
<u>E – WIRE:</u> Demonstrate the correct identification of different wire types, their inspection criteria, and damage tolerance, repair and preventative maintenance procedures	A	B	C	D
20. Identification, type and construction		X		
21. Insulation qualities damage limits		X	X	
22. Inspection criteria and standards of wire and wire bundles			X	
23. Wire bundle installation practices		X	X	
24. Typical damage and areas found (airplane specific)	X	X	X	X Low level
25. Maintenance and repair procedures		X		
26. Sleeving		X		
27. Unused wires-termination and storage		X		
28. Electrical bonding and grounds	X Bond	X	X	
<u>F – CONNECTIVE DEVICES:</u> Know the procedures to identify, inspect and find the correct repair for typical types of connectors found on the technician's airplane.				
29. General types and identification		X		
30. Cautions and protections		X		
31. Visual inspection procedures		X	X	
32. Typical damage found		X	X	
33. Repair procedures		X		
<u>G – CONNECTIVE DEVICE REPAIR (AIRBUS):</u> Demonstrate the procedures to replacement of all parts for typical types of connectors found on the technician's airplane.	A	B	C	D
34. Circular Connectors Types NAS 1599, MIL-C-83723, EN2997		X		
35. Circular Connectors Types MIL-C-26482 & MIL-C-26500				
36. Circular Connectors Types MIL-C-5015 & EN6047				
37. Rectangular Connectors- ARINC 404 & ARINC 600		X		
38. Rectangular Connectors- Types EN3545 & Sub-D Type MIL-C-24308				
39. Terminal Blocks-Modular Type NSA937901 ASNE0467		X		
40. Terminal Blocks- Non-modular Type NSA937905, ASNE0467		X		

41. Grounding Modules Type ASNE0425		X		
42. Pressure Seals-DTP Types		X		
43. Pressure Seals-Compound filled shell types				
H – LINE REPLACEABLE UNITS (LRU):	A	B	C	D
Know the removal, testing and repair of LRU's and connective devices.				
44. Removal and replacement techniques	X	X		
45. Testing of LRU connectors				
46. "No Fault Found" Company Policy	X	X		
47. Troubleshooting procedures.		X		

Blue = Additional material

Red = Deleted material

4320:120h = 36 men/months