

APPENDIX A

WIRING SYSTEMS MINIMUM INITIAL TRAINING PROGRAM

Target group 1:	Qualified staff performing wire maintenance
Target group 2:	Qualified staff performing maintenance inspections on wiring systems
Target group 3:	Qualified staff performing electrical/avionic engineering on in service aircraft
Target group 4:	Qualified staff performing general maintenance/inspections not involving wire maintenance.(LRU change is not)
Target group 5:	Qualified staff performing other engineering or planning work on in service aircraft
Target group 6:	Other service staff with duties in proximity to wire (e.g. cleaners, cargo loaders)

TARGET GROUP	1	2	3	4	5	6
A – INTRODUCTION 4 hours 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. Verify 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	X				
7. LRU replacement general practices	X	X		X		
B – WIRING PRACTICES DOCUMENTATION 5 hours Know the construction and navigation of the applicable airplane wiring system overhaul or wiring practices manual	1	2	3	4	5	6
8. Chapter 20 structure/overview	X	X	X			
9. Chapter cross-reference Index	X	X	X			
10. Important Data and Tables	X	X	X			
11. Wiring Diagram Manual	X	X	X			
12. Other Documentation as applicable	X	X	X			
C – INSPECTION 3 hours Know the different types of inspections, human factors in inspections, zonal areas and typical damages	1	2	3	4	5	6
13. General Visual Inspection (GVI), Detailed Inspection (DI), Special Detailed Inspection (SDI), Zonal Inspection and Enhanced Zonal Inspection Analysis Procedure (EZAP)	X	X		X	X	
14. Human factors in inspection		X			X	
15. Zonal areas of inspection		X			X	
16. Wiring system damage	X	X		X	X	

D – HOUSEKEEPING: 3 hours	1	2	3	4	5	6
Know the contamination sources, materials, cleaning and protection procedures						
17. Airplane external contamination sources	X	X		X		X
18. Airplane internal contamination sources	X	X		X		X
19. Other contamination sources	X	X		X		X
20. Contamination protection planning	X		X	X	X	
21. Protection during airplane maintenance and repair	X		X	X	X	
22. Cleaning processes	X		X	X	X	X
E – WIRE: 6 hours	1	2	3	4	5	6
Demonstrate the correct identification of different wire types, their inspection criteria, and damage tolerance, repair and preventative maintenance procedures						
23. Identification, type and construction	X	X	X			
24. Insulation damage limits	X	X	X			
25. Inspection criteria and standards of wire and wire bundles		X	X			
26. Wire bundle installation practices	X	X	X			
27. Typical damage and areas found (airplane specific)	X	X	X	X	X	X Low level
28. Maintenance and repair procedures	X	X	X			
29. Sleeving	X	X	X			
30. Unused wires-termination and storage	X	X	X			
31. Electrical bonding and grounds	X	X	X	X Bond	X	
F – CONNECTIVE DEVICES: 3 hours	1	2	3	4	5	6
Know the procedures to identify, inspect and find the correct repair for typical types of connectors found on the technician's airplane.						
32. General types and identification	X	X	X			
33. Cautions and protections	X	X	X			
34. Visual inspection procedures	X	X	X			
35. Typical damage found	X	X	X			
36. Repair procedures	X	X	X			
G – CONNECTIVE DEVICE REPAIR: 6 hours	1	2	3	4	5	6
Demonstrate the procedures to replacement of all parts for typical types of connectors found on the technician's airplane.						
37. Circular Connectors	X					
38. Rectangular Connectors	X					
39. Terminal Blocks-Modular	X					
40. Terminal Blocks- Non-modular	X					
41. Grounding Modules	X					
42. Pressure Seals	X					