

# APPENDIX A to AC 120-YY

## ELECTRICAL WIRING INTERCONNECTION SYSTEMS MINIMUM INITIAL TRAINING PROGRAM

Target group 1:	Qualified staff performing wire systems maintenance
Target group 2:	Qualified staff performing maintenance inspections on electrical wiring interconnection 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 considered wire maint
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 systems
Target group 7:	Flight Deck Crew
Target group 8:	Cabin Crew

TARGET GROUP	1	2	3	4	5	6	7	8
<b>A – INTRODUCTION</b> 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	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>B – WIRING PRACTICES DOCUMENTATION</b> Know the construction and navigation of the applicable airplane wiring system overhaul or wiring practices manual	1	2	3	4	5	6	7	8
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					
<b>C – INSPECTION</b> Know the different types of inspections, human factors in inspections, zonal areas and typical damages	1	2	3	4	5	6	7	8
13. General Visual Inspection (GVI), Detailed Inspection (DET), 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	low level	low level	low level

<b>D – HOUSEKEEPING:</b> Know the contamination sources, materials, cleaning and protection procedures	1	2	3	4	5	6	7	8
17. Airplane external contamination sources	X	X		X		X	X	X
18. Airplane internal contamination sources	X	X		X		X	X	X
19. Other contamination sources	X	X		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		
<b>E – WIRE:</b> Demonstrate the correct identification of different wire types, their inspection criteria, and damage tolerance, repair and preventative maintenance procedures	1	2	3	4	5	6	7	8
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	Low level	Low level	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			
<b>F – CONNECTIVE DEVICES:</b> Know the procedures to identify, inspect and find the correct repair for typical types of connectors found on the technician's airplane.	1	2	3	4	5	6	7	8
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					
<b>G – CONNECTIVE DEVICE REPAIR:</b> Demonstrate the procedures to replacement of all parts for typical types of connectors found on the technician's airplane.	1	2	3	4	5	6	7	8
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							