

Work Process Schedule

WORK PROCESS SCHEDULE		O*NET-SOC Code: 49-2091.00
Avionics Technician		RAPIDS Code: 0464CB
Job Title: Avionics Technician		
Level:	Specialization:	
Stackable Program: ___Yes ___No		
Base Occupation Name:		
Company Contact:		
Address:	Phone:	Email:
Apprenticeship Type: <input checked="" type="checkbox"/> Competency-based <input type="checkbox"/> Time-based <input type="checkbox"/> Hybrid	Prerequisites:	

Job Function 1: Maintains safety, health, and professionalism at work			
Competencies	Core or Optional	RTI	OJT
A. Recognizes safety, health, industrial, and environmental requirements in all departments	Core		
B. Reliably follows others' instructions	Core		
C. Willingly asks questions about things not fully understood	Core		
D. Establishes a system of maintaining appropriate notes and reminders and completes any required logs, calibration records, etc.	Core		
E. Ensures proper communications between previous and next shifts, with operations and with supervision	Core		
F. Identifies problems and changes that could lead to problems by exchanging information with operators, supervisors, and others	Core		

G. Establishes trust and rapport with operators, supervisors, and others	Core		
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Job Function 2: Follows company and regulatory guidelines

Competencies	Core or Optional	RTI	OJT
A. Identifies points of contact within and outside of the organization	Core		
B. Reads, comprehends, and follows company policies, procedures, operations, and guidelines	Core		
C. Reads, comprehends, and follows regulatory guidelines applicable to the operation, servicing, and maintenance of the aircraft	Core		

Job Function 3: Locates and uses technical data

Competencies	Core or Optional	RTI	OJT
A. Reads, comprehends, and applies the information contained within installation and service documents	Core		
B. Reads, comprehends, and applies the information contained within engineering and certification drawings and documents	Core		
C. Reads, comprehends, and applies the information contained within applicable regulatory documents	Core		

Job Function 4: Demonstrates ground operation and servicing to include protection of employer and customer assets

Competencies	Core or Optional	RTI	OJT
A. Follows company guidelines for asset protection	Core		
B. Identifies typical ground operation hazards	Core		
C. Conducts preliminary visual aircraft inspection	Core		
D. Services the electrical systems	Core		
E. Marshals and secures the aircraft	Core		
F. Starts and operates the aircraft	Core		
G. Taxis the aircraft	Core		
H. Uses tie-down procedures	Core		

Job Function 5: Identifies and uses tools and test equipment			
Competencies	Core or Optional	RTI	OJT
A. Demonstrates knowledge of appropriate common hand tools for use in installation and maintenance	Core		
B. Demonstrates knowledge of appropriate specialty tools for use in installation and maintenance	Core		
C. Demonstrates knowledge of test equipment for maintenance and installation of avionics systems	Core		

Job Function 6: Performs electrical system calculations and analysis			
Competencies	Core or Optional	RTI	OJT
A. Knows and identifies basic facts and general principles about basic circuits	Core		
B. Performs calculations and analysis of basic circuit performance	Core		
C. Troubleshoots basic circuits	Core		

Job Function 7: Installs and maintains electrical wiring harnesses, electronic components, and instruments			
Competencies	Core or Optional	RTI	OJT
A. Adheres to safety practices and procedures for aircraft electrical and electronic power systems	Core		
B. Fabricates, installs, and maintains electrical wiring harnesses	Core		
C. Installs, maintains, and troubleshoots instruments	Core		
D. Interprets electrical control and power schematics to ensure the operation of the system and its components	Core		
E. Measures voltage, current, and resistance in an electrical circuit to verify system operation and power levels	Core		
F. Selects, installs, and tests circuit protection devices	Core		

Job Function 8: Fabricates, modifies, and repairs aircraft structures			
Competencies	Core or Optional	RTI	OJT
A. Identifies and selects aircraft hardware and materials	Core		
B. Selects, installs, and removes fasteners to include rivets	Core		
C. Forms layout and bends sheet metal	Core		
D. Inspects and repairs composite and nonmetallic structures	Core		
E. Understands and applies bonding techniques and practices on metallic and nonmetallic structures	Core		
F. Fabricates and installs doublers, shelves, brackets, bracing, and support	Core		
G. Installs antennas using proper techniques, bonding, and cable routing	Core		

Job Function 9: Performs operational checks of aircraft systems and components			
Competencies	Core or Optional	RTI	OJT
A. Follows safety procedures	Core		
B. Applies external power to aircraft and systems	Core		
C. Identifies and properly operates specialty test equipment for avionics and instrument system operation	Core		
D. Knows and understands applicable regulatory requirements for operational testing	Core		
E. Follows operational checkout procedures in equipment installation manual	Core		

Job Function 10: Diagnoses and troubleshoots malfunctions and operational problems			
Competencies	Core or Optional	RTI	OJT
A. Identifies and locates appropriate technical data for troubleshooting	Core		
B. Reads, understands, and follows technical data for troubleshooting	Core		
C. Knows and understands fault isolation	Core		
D. Identifies malfunctioning equipment and systems	Core		

Job Function 11: Designs and integrates avionics system installations			
Competencies	Core or Optional	RTI	OJT
A. Understands and specifies equipment required for types of aircraft operations	Core		
B. Identifies current aircraft avionics systems configuration	Core		
C. Reads drawings and interprets symbols and systems schematics	Core		
D. Knows and understands common avionics systems (communications, navigation, surveillance)	Core		
E. Determines wiring interface for a particular avionics installation	Core		
F. Maintains knowledge of installation techniques, including those required for instruments, radios, antennas, annunciator(s), and displays	Core		
G. Creates or updates electrical load analysis	Core		

Job Function 12: Configures avionics equipment and manages databases and software			
Competencies	Core or Optional	RTI	OJT
A. Identifies configuration software and database requirements for the equipment	Core		
B. Configures equipment in accordance with the manufacturer's data and customer preferences	Core		
C. Connects configuration device to aircraft equipment	Core		
D. Loads and manages software and databases	Core		

Job Function 13: Prepares, updates, and maintains maintenance records, installation, and repair work			
Competencies	Core or Optional	RTI	OJT
A. Documents the maintenance or alteration per regulatory guidelines	Core		
B. Updates and maintains weight and balance records	Core		
C. Updates and maintains aircraft equipment list	Core		
D. Creates or updates Instructions for Continued Airworthiness (ICA), Flight Manual Supplement (FMS), and others	Core		
E. Updates work order and maintenance records	Core		