

Sample Occupation Exhibit

NER-AT-005

AVIATION ELECTRONICS TECHNICIAN (AT)

AT3
AT2
AT1
ATC
ATCS

Exhibit Dates: 5/11–Present.

Occupational Field: 5 (Aviation Maintenance/Weapons).

Career Pattern

AN: Airman (E-3). **AT3:** Aviation Electronics Technician, Third Class (E-4). **AT2:** Aviation Electronics Technician, Second Class (E-5). **AT1:** Aviation Electronics Technician, First Class (E-6). **ATC:** Chief Aviation Electronics Technician (E-7). **ATCS:** Senior Chief Aviation Electronics Technician (E-8).

Description

Summary: Aviation Electronics Technicians (Intermediate) (AT(I)) perform intermediate level maintenance on aviation electronic components supported by conventional and automatic test equipment, including repair of Weapons Replaceable Assemblies (WRA) and Shop Replaceable Assemblies (SRA) and perform test equipment calibration/repair and associated bench maintenance. Aviation Electronics Technicians (Organizational) (AT(O)) perform organizational level maintenance on aviation electronics systems, to include: communications, radar, navigation, antisubmarine warfare sensors, electronic warfare, data link, fire control and tactical displays with associated equipment. **AT3:** Conducts avionics systems maintenance; troubleshoots data display and data link systems; installs and troubleshoots UHF and VHF radio systems and navigational systems; performs electronics systems maintenance and troubleshooting; repairs antennas; repairs and installs electrical connectors; interprets charts, diagrams and schematics; inspects and cleans pressurized equipment; installs waveguide components; replaces avionics gaskets and seals; calibrates test equipment; removes and installs computer disk drives; interprets computer languages; troubleshoots computer equipment; and industrial safety. **AT2:** Able to perform the duties required for AT3; performs other tasks not covered in standard service manuals; may have attended training programs in troubleshooting and repairing specialized equipment; serves as crew leader. **AT1:** Able to perform the duties required for AT2; serves as work center supervisor; diagnoses nonroutine malfunctions and demonstrates repair techniques; inspects and approves completed work assignments including the installation of new parts and components; conducts on-the-job training program and maintains training records; prepares weekly schedules of preventive maintenance; responsible for administration of the safety management system (SMS), including: safety cultures, safety risk management, human and organizational factors, methods of facilitation, quality assurance, documentation, risk management strategies, record keeping, hazard identification, and risk analysis. **ATC:** Able to perform the duties required for AT1; plans and implements safety instruction and inspection programs; prepares periodic or recurring reports; supervises quality control programs; plans, directs, organizes, schedules, and evaluates training programs for personnel; prepares and reviews naval correspondence, instructions, and messages; reviews and coordinates work schedules; prioritizes overall department work; coordinates and evaluates status and impact of department work; reviews, recommends, and monitors divisional programs (quality assurance, training, safety, etc); provides guidance on job performance; identifies and mediates inter-departmental differences; and assists, reviews, recommends, and monitors the implementation of policy statements, operation orders, and directives. **ATCS:** Able to perform the duties required for ATC; serves as liaison with other Navy units; monitors quality assurance programs; prepares directives, instructions, and correspondence; supervises personnel, production, material, and training requirements; and recommends changes in methods and techniques to promote safety and operational readiness.

Related Competencies

Avionics systems troubleshooting and maintenance topics include communications systems (HF, VHF/UHF radios); fault isolation; flight management systems; navigation systems; navigation systems (DME); navigation systems (EGPWS); navigation systems (GPS); navigation systems (IFF/Mode S); navigation systems (TACAN); navigation systems (TCAS); navigation systems (transponder); navigation systems (weather

Comment [DE1]: ACE ID number: All occupation ID numbers have three-letter codes that identify the service: MOS means an Army occupation, NER is a Navy rating, NEC is a Navy Enlisted Classification, NWO is a Navy Warrant Officer, LDO is a Navy Limited Duty Officer, MCE is a Marine Corps enlisted occupation, MCO is a Marine Corps Warrant Officer, CGR is a Coast Guard rating and CGW is a Coast Guard Warrant Officer.

Comment [DE2]: Occupation title used by the service.

Comment [DE3]: The official designation of the ranks or skill levels evaluated in this occupation, listed in order from lowest to highest.

Comment [DE4]: Start and end dates by month and year. "Present" indicates the exhibit is current.

Comment [DE5]: Describes a group of related occupations.

Comment [DE6]: Describes the career path for this occupation.

Comment [DE7]: Explains the skills, competencies and knowledge of the service member in this occupation.

Comment [DE8]: Related competencies align with the credit recommendations by subject and provide more details on the specific topics the service member has mastered.

radar); power distribution; system operation; and system repair. **Industrial safety** topics include electrical systems safety, emergency procedures, group safety, hand tool safety practices, hazardous materials, incident reporting, lockout/tagout, material safety data sheets, protective equipment, safe equipment operation, and safety reports. **Communications and navigation systems operation and troubleshooting** topics include antenna theory and alignment, cockpit voice recorder, communication radios, corrective maintenance, digital flight data recorder, electric power distribution, electronic countermeasures, navigation aids, preventive maintenance, radar systems, secure voice, system interfaces, and system testing. **Electrical systems troubleshooting and repair** topics include cables and conduits, circuit design, electrical boxes, electrical prints and drawings, electrical troubleshooting, electronic mathematics, multimeters, power distribution systems, and wiring repair. **Computer applications** topics include data entry, data management, internet research, MS Excel, MS Outlook, MS PowerPoint, MS Word, and report generation. **Supervision** topics include counseling, disciplinary actions, performance appraisals, quality assurance, scheduling, team building, and training. **Communications** topics include audience identification, briefing, communication techniques, presentation skills, public speaking, report writing, and written communication. **Advanced avionics systems** topics include antenna-transmitter systems, automatic flight control systems (AFCS), avionics analysis, avionics fault isolation and analysis, electrical power circuits, electronic test equipment, glass cockpit instrumentation, global positioning satellite (GPS) systems, heads-up displays (HUDs), multi-function display, navigation systems, radar altimeter systems, radar transmitters and receivers, and system operation. **Safety management systems** topics include documentation, emergency preparation, error examination, hazard identification, human and organizational factors, quality management systems, record keeping, risk analysis and assessment, risk management, safety culture, and safety promotion. **Management** topics include budget management, contracting, controlling, coordinating, leadership, materials management, motivation, organizing, performance management, planning, problem solving, project management, quality assurance, risk management, six sigma, and staff development. **Leadership** topics include change management, decision making, leadership development, logistics, mentoring, problem solving, team building, and time management.

Recommendation, AT3

In the lower-division baccalaureate/associate degree category, 3 semester hours in avionics systems troubleshooting and maintenance, 2 in industrial safety, 3 in communications and navigation systems operation and troubleshooting, 3 in electrical systems troubleshooting and repair, 3 in computer applications, 3 in supervision, and 3 in communications (5/11)(5/11).

Recommendation, AT2

In the lower-division baccalaureate/associate degree category, 3 semester hours in avionics systems troubleshooting and maintenance, 2 in industrial safety, 3 in communications and navigation systems operation and troubleshooting, 3 in electrical systems troubleshooting and repair, 3 in computer applications, 3 in supervision, and 3 in communications. In the upper-division baccalaureate degree category, 3 semester hours in advanced avionics systems (5/11)(5/11).

Recommendation, AT1

In the lower-division baccalaureate/associate degree category, 3 semester hours in avionics systems troubleshooting and maintenance, 2 in industrial safety, 3 in communications and navigation systems operation and troubleshooting, 3 in electrical systems troubleshooting and repair, 3 in computer applications, 3 in supervision, and 3 in communications. In the upper-division baccalaureate degree category, 3 semester hours in advanced avionics systems, 2 in safety management systems (SMS), and 3 in management (5/11)(5/11).

Recommendation, ATC

In the lower-division baccalaureate/associate degree category, 3 semester hours in avionics systems troubleshooting and maintenance, 2 in industrial safety, 3 in communications and navigation systems operation and troubleshooting, 3 in electrical systems troubleshooting and repair, 3 in computer applications, 3 in supervision, and 3 in communications. In the upper-division baccalaureate degree category, 3 semester hours in advanced avionics systems, 2 in safety management systems (SMS), 3 in management, and 3 in leadership (5/11)(5/11).

Recommendation, ATCS

In the lower-division baccalaureate/associate degree category, 3 semester hours in avionics systems troubleshooting and maintenance, 2 in industrial safety, 3 in communications and navigation systems operation

Comment [DE9]: Recommendations are tied to the service member's rank or skill level. Use the appropriate recommendation for the service member's current rank or skill level.

Comment [DE10]: The first date is the date the occupation was evaluated by a team of faculty reviewers. Team reviews must occur at least every 10 years.

Comment [DE11]: The second date is the date the course was last reviewed by ACE staff. Administrative reviews are done when there are minor changes.

and troubleshooting, 3 in electrical systems troubleshooting and repair, 3 in computer applications, 3 in supervision, and 3 in communications. In the upper-division baccalaureate degree category, 3 semester hours in advanced avionics systems, 2 in safety management systems (SMS), 3 in management, and 3 in leadership (5/11)(5/11).

THIS EXHIBIT WAS LAST UPDATED ON 07/25/2011