



New Mexico State Personnel Office

2600 Cerrillos Road
Santa Fe, New Mexico 87505-0127

Classification Description

AIRCRAFT MECHANICS AND SERVICE TECHNICIANS

<u>Class Title</u>	<u>Class Code</u>	<u>Pay Band</u>	<u>Alt Pay Band*</u>
Aircraft Mechanics and Srvc Technicians	U3011B	45	65
Aircraft Mechanics and Srvc Technicians	U3011O	50	70
Aircraft Mechanics and Srvc Technicians	U3011A	55	75

**In accordance with SPB Rule 1.7.4.10 NMAC, the assignment to alternative pay bands shall be reviewed annually to determine their appropriateness.*

Occupation Description

Diagnose, adjust, repair, or overhaul aircraft engines and assemblies, such as hydraulic and pneumatic systems. Include helicopter and aircraft engine specialists.

Nature of Work

Aircraft Mechanics and Service Technicians keep aircraft in peak operating condition, aircraft and avionics equipment mechanics and service technicians perform scheduled maintenance, make repairs, and complete inspections required by the FAA. Many aircraft mechanics specialize in preventive maintenance. They inspect aircraft engines, landing gear, instruments, pressurized sections, accessories, brakes, valves, pumps, air-conditioning systems and other parts of the aircraft. They do the necessary maintenance and replacement of parts. They also keep records related to the maintenance performed on the aircraft. Mechanics and technicians conduct inspections following a schedule based on the number of hours the aircraft has flown, calendar days since the last inspection, cycles of operation, or a combination of these factors.

In planes of all sorts, aircraft mechanics examine engines by working through specially designed openings while standing on ladders or scaffolds or by using hoists or lifts to remove the entire engine from the craft. Mechanics use precision instruments to measure parts for wear and use x-ray and magnetic inspection equipment to check for invisible cracks. They repair or replace worn or defective parts. Mechanics also may repair sheet metal or composite surfaces; measure the tension of control cables; and check for corrosion, distortion, and cracks in the fuselage, wings, and tail. After completing all repairs, they must test the equipment to ensure that it works properly.

Other mechanics specialize in repair work rather than inspection. They find and fix problems that pilots describe. For example, during a preflight check, a pilot may discover that the aircraft's fuel gauge does not work. To solve the problem, mechanics may troubleshoot the electrical system, using electrical test equipment to make sure that no wires are broken or shorted out, and replace any defective electrical or electronic components. Mechanics work as fast as safety permits so that the aircraft can be put back into service quickly.

Some mechanics work on one or many different types of aircraft, such as jets, propeller-driven airplanes, and helicopters. Others specialize in one section of a particular type of aircraft, such

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as the engine, hydraulics, or electrical system. In small, independent repair shops, mechanics usually inspect and repair many different types of aircraft.

Distinguishing Characteristics of Levels

Note: Examples of Work are intended to be cumulative for each progressively higher level of work. The omission of specific statements does not preclude management from assigning other duties which are reasonably within the scope of the duties.

Basic

- Employees in this Role assist in routine inspection and maintenance of agency air craft and aircraft equipment under the direction of more experienced employees.

Recommended Education and Experience for Full Performance

High school diploma or GED and graduation from an FAA-Approved Aviation Maintenance Technician School and two (2) years of experience working in a technically supervised mechanics role.

Minimum Qualifications

High School diploma or GED and graduation from an FAA-Approved Aviation Maintenance Technician School and six (6) months of experience working in a technically supervised mechanics role.

Operational

- Employees in this Role Independently perform inspection, servicing, and repair of agency aircraft and aircraft equipment.
- Employees assist in the maintenance of agency air craft.

Recommended Education and Experience for Full Performance*

Associates Degree in Avionics, Aviation Technology or Aviation Maintenance Management from a Federal Aviation Administration certified technical school and three (3) years of experience working in a technically supervised mechanics role.

Minimum Qualifications

High School diploma or GED and graduation from an FAA-Approved Aviation Maintenance Technician School and one (1) year of experience working in a technically supervised mechanics role.

Advanced

- Employees in this Role perform technical work of considerable difficulty involving the inspection, servicing, and repair of agency aircraft and specialized aircraft equipment.
- Employees monitor the maintenance of agency air craft.
- Employees monitor inspections performed by contractors.

Recommended Education and Experience for Full Performance

Associates Degree in Avionics, Aviation Technology or Aviation Maintenance Management from a Federal Aviation Administration certified technical school and four (4) years of experience working in a technically supervised mechanics role.

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Minimum Qualifications

High School diploma or GED and graduation from an FAA-Approved Aviation Maintenance Technician School and two (2) years of experience working in a technically supervised mechanics role.

Knowledge and Skills

*Note: This information has been produced by compiling information and documentation provided by O*NET. O*NET™ is a trademark of the U.S. Department of Labor, Employment and Training Administration.*

Knowledge

Mechanical — Knowledge of machines and tools, including their designs, uses, repair, and maintenance.

Design — Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Mathematics — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

Physics — Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic and sub-atomic structures and processes.

Transportation — Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including the relative costs and benefits.

Law and Government — Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.

Administration and Management — Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

Chemistry — Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

Skills

Equipment Maintenance — Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

Repairing — Repairing machines or systems using the needed tools.

Troubleshooting — Determining causes of operating errors and deciding what to do about it.

Operation Monitoring — Watching gauges, dials, or other indicators to make sure a machine is

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working properly.

Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Quality Control Analysis — Conducting tests and inspections of products, services, or processes to evaluate quality or performance.

Reading Comprehension — Understanding written sentences and paragraphs in work related documents.

Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

Speaking — Talking to others to convey information effectively.

Statutory Requirements: Under Federal Aviation Administration Rules you must:

- At least 18 years old; able to read, write, speak, and understand English.
- You must get 18 months of practical experience with either power plants or airframes, or 30 months of practical experience working on both at the same time. As an alternative to this experience requirement, you can graduate from an FAA-Approved Aviation Maintenance Technician School.
- You must pass four types of tests:
 - Pre-employment drug/alcohol test.
 - a written examination
 - an oral test
 - a practical test

Conditions of Employment: Working Conditions for individual positions in this classification will vary based on each *agency's utilization, essential functions, and the recruitment needs* at the time a vacancy is posted. All requirements are subject to possible modification to reasonably accommodate individuals with disabilities.

Default FLSA Status: Non-Exempt. FLSA status may be determined to be different at the agency level based on the agency's utilization of the position.

Bargaining Unit: This position may be covered by a collective bargaining agreement and all terms/conditions of that agreement apply and must be adhered to.

Established: 06/01/2007

Revised: 09/20/2011

**Adapted from the United States Bureau of Labor Statistics and are intended to illustrate the typical education and experience required for this occupation.*

Note: Classification description subject to change. Please refer to the SPO website www.spo.state.nm.us to ensure this represents the most current copy of the description.