



New Mexico State Personnel Office

2600 Cerrillos Road
Santa Fe, New Mexico 87505-0127

Classification Description

SPACEPORT AEROSPACE ENGINEER

<u>Class Title</u>	<u>Class Code</u>	<u>Pay Band</u>	<u>Alt Pay Band*</u>
Spaceport Aerospace Engineer	E40495	75	90

**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

Performs flight safety assessments of space vehicles and launch platforms; monitors commercial space launches and reentries and operation of launch and reentry sites. Coordinates Spaceport space activities with the Office of Commercial Space Transportation of the Federal Aviation Administration (FAA/AST) and with the US Army White Sands Missile Range (WSMR). Complies with International Trading in Arms Regulations (ITAR).

Nature of Work

Coordinates and monitors space launch and related operations. Recommends improvements in range equipment and procedures. Performs analysis in areas such as flight safety risk assessment, trajectories of space vehicles and meteorological data interpretation. Participates in developing and maintaining Range Operations Plans, Flight Safety Plans, FAA Launch Site Operator License credentials, Environmental Impact Statement compliance reports, mission reports and other pertinent documents.

Distinguishing Characteristics

The omission of specific statements does not preclude management from assigning other duties which are reasonably within the scope of the duties.

- Plans, coordinates and conducts mission readiness reviews prior to launches.
- Participates in environmental and operational tests associated with aircraft, aerospace systems, and related equipment.
- Analyzes project requests, proposals, and engineering data to determine feasibility of Spaceport America's ability to support.
- Evaluates product data and design from inspections and reports for conformance to engineering principles, customer requirements, and quality standards.
- Maintains mission records and reports for future reference.
- Develops technical reports, handbooks, and user guides for use by engineering staff, management, or customers.
- Reviews performance reports and documentation from customers and field engineers, and inspects malfunctioning or damaged products to determine problem.

Recommended Education and Experience for Full Performance

Bachelor's Degree in Aerospace or Aeronautical Engineering, Mechanical Engineering, Civil Engineering, Systems Engineering, or a physical science (with an emphasis on applied analysis) and seven(7) years of experience in space systems, applying aeronautical principles,

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performing statistics-based risk assessments, analyzing space vehicle trajectories, working with guidance, navigation and control systems, developing and interpreting maps. US Citizenship is required.

Minimum Qualifications

Bachelor's Degree in Aerospace or Aeronautical Engineering, Mechanical Engineering, Civil Engineering, systems engineering, or physical science (with an emphasis on applied analysis) and five(5) years of experience in space launch operations planning and execution systems, applying aeronautical and engineering principles to launch operations analysis, performing statistics-based risk assessments, analyzing space vehicle trajectories, working with guidance, navigation and control systems, developing and interpreting maps. US Citizenship is required.

Knowledge and Skills

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Knowledge

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.

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

Physics — Knowledge of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, and microscopic processes.

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

Mechanical — Knowledge of mechanical equipment, including designs, uses, repair, and maintenance.

Computers and Electronics — Knowledge of electronic equipment and systems, and computer hardware and software, including applications and programming.

English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Logistics and Operations — Knowledge of logistics and facility operations as they apply to planning, scheduling, and operations of complex installations.

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.

Public Safety and Security — Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

Skills

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

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

Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

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

Operations Analysis — Analyzing needs and product requirements to create a design.

Speaking — Talking to others to convey information effectively.

Mathematics — Using mathematics to solve problems.

Science — Using scientific principles and methods to solve problems.

Writing — Communicating effectively in writing as appropriate for the needs of the audience.

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

Statutory Requirements:

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. Position must be filled by a US citizen.

Default FLSA Status: 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: 03/26/2014

Revised: 9/16/2014 (min. qual. Modification)

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.