Program Manager (AeroTrain)

Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time.

DUTIES Serves as a Program Manager for the Automated People Mover (AeroTrain) at Washington Dulles International Airport (IAD) for the Metropolitan Washington Airports Authority (Airports Authority). Oversees the AeroTrain’s Operations and Maintenance (O&M) Contractor (Contractor) and serves as IAD’s Contracting Officer’s Technical Representative (COTR) providing technical and management guidance to ensure a safe, reliable, and efficient transit service for the passengers utilizing the AeroTrain. Provides continuing liaison between the Contractor and IAD management regarding issues, expectations, problems, and solutions including access to AeroTrain systems, tunnels, and other areas to enable IAD personnel to perform airport maintenance activities. Performs related functions.

Manages the AeroTrain Program

Coordinates IAD resources (personnel and material) with the Contractor resources (personnel and material) committed to the daily and long-term operations/management of the AeroTrain. Serves as the central focal point to disseminate AeroTrain data and information inside and outside the Airports Authority, as appropriate. Coordinates with IAD or Airports Authority offices, air carriers, tenants and other parties regarding AeroTrain items such as passenger loads and special events and to identify wants and needs so as to minimize interferences with Contractor performance.

Establishes/modifies AeroTrain schedules to effectively and economically meet passenger and airline requirements. Coordinates schedules with Contractor and IAD. Approves withdrawing the AeroTrain System from passenger service, when necessary, and communicates such decision(s) to the air carriers and other key parties. Coordinates and requests special services such as adjusting operating schedules for special events, special tours of the system, and demonstrations at the AeroTrain Central Control Center and/or the Maintenance and Storage Facility.

Monitors the performance and reviews and assesses availability of the AeroTrain system on a daily basis with the Contractor. Reviews operational data and analysis included in the monthly Systems Assurance Monitoring Reports. Reviews the results of bi-monthly failure operating mode tests. Reviews the AeroTrain Central Control Center operations, including mode of operation, observing passenger activities, and the response to passenger inquiries via the AeroTrain communication system. Recommends changes based upon “lessons learned.” Prepares a monthly report of activities detailing AeroTrain performance.

Reviews the Failure Analysis and Correction Reports (Reports) and for any month of noncompliance, ensures the Report provides detailed analysis of each failure and corrective action plan; reviews and approves the corrective action plan. Hires independent third party to obtain operating and failure data when Systems Service Availability Reports are in doubt or do not accurately measure what is occurring. Reviews and assesses the technical
condition of the overall AeroTrain system, as well as critical subsystems and key components. Identifies any maintenance or repair practices or procedures that potentially compromise or degrade the AeroTrain. Reviews and approves any modifications, redesign, and/or replacement of AeroTrain system components resulting from system assurance monitoring. Analyzes technical issues with the system and provides technical interfaces with the Contractor or third parties (including IAD maintenance/trade shops), as appropriate. Documents maintenance and repair costs and related items.

Reviews and recommends changes to system design and configuration. Reviews and approves acceptance test procedures for system upgrades and modifications. Recommends and performs additional tests as judged necessary on the behalf of the Airports Authority to verify correct installation and functioning of equipment.

Recognizes shortcomings of the operations and maintenance (O&M) process and analyzes or recommends corrections to identified shortcomings.

Coordinates IAD plans to interface with the future AeroTrain phases. Provides leadership in planning orderly expansion of the AeroTrain system to accommodate future stations and to move the Airports Authority into the operations and maintenance of the AeroTrain. Plans for the support of increasing demands on the AeroTrain in terms of passenger numbers.

Ensures compliance with regulatory, life-safety requirements, including regulations that stipulate the system is to be maintained and operated in accordance with 49 CFR Part 659, Rail Fixed Guideway Systems, State Safety Oversight, security procedures, and other issues by coordinating AeroTrain activities with all key parties, such as the Airports Authority’s Fire and Rescue Department and Police Department, the IAD Airport Operations Department and the Transportation Security Administration (TSA). Reviews and assesses safety-related aspects of the total AeroTrain system – equipment and operations. Jointly plans and conducts, with Contractor representatives, emergency management exercises involving the AeroTrain including a system-wide readiness drill twice per year; the drills include Airports Authority’s operations, maintenance, security, and life safety personnel and testing of airport-wide communications, back-up transportation modes, and physical response plans. Prepares a report presenting the results of the readiness drill.

Prepares the AeroTrain O&M annual program budget submission. Reviews and approves updates or revisions to the O&M Plan. Ensures approved updates are reflected in budget submissions or reviews.

Manages Contractor Performance / Serves As COTR

Conducts periodic tours or inspections of the AeroTrain system with the Contractor’s Director. Reviews and assesses the AeroTrain O&M Contractor’s staffing levels, ongoing training, certifications, and general readiness. Monitors the AeroTrain Maintenance Management Information System (MMIS) and the Integrated Management System (IMS) to ensure all human resource requirements, management and control of purchasing and fixed assets, maintenance records, and inventory control records are addressed and up-to-date. Determines the
appropriateness of contractor requested substitutions for Airports Authority standard practices and procedures and recommends or approves changes. Approves procedures and forms used for record keeping and provides instructions to serialize all contract correspondence.

Reviews monthly management reports from Contractor. Ensures summaries address special events, incidents, accidents and performance achieved, including operating statistics systems assurance monitoring and configuration management and control. Provides direction and advice to the AeroTrain O&M Contractor regarding failure management and emergency operations.

Reviews all maintenance personnel qualifications, certifications and performance data to track proficiency and performance, and directs further training, counseling or other personnel action as deemed appropriate. Uses readiness test scores from the System Simulator, evaluates them and approves operator proficiency for Central Control Operators or directs appropriate action.

Approves contractor actions and payment. Approves the replacement of materials, parts, or components, which are outside warranty or contract requirements and determines the reimbursement cost for the repair or replacement work. Accepts contractor modifications or upgrades or rejects them and seeks remedies through the contractor’s performance bonds. Calculates system service availability and applies payment factors to determine monthly payments to the contractor. Makes recommendations to the Airports Authority’s Contracting Officer regarding adjustments to the AeroTrain O&M Contractor’s monthly payment. Reviews damage reports and approves reimbursement to the contractor for repairs and replacement as appropriate.

Ensures Contractor compliance with safety and security policies and procedures. Ensures the Contractor develops, implements and maintains on-going safety and security programs. Reviews reports of unsafe conditions and ensures appropriate remedies are taken. Reviews and approves the AeroTrain Emergency Procedure plan.

Other

-- Communicates and interacts effectively with internal and external business contacts, including but not limited to other members of the unit/team, other Airports Authority employees (such as the Airport Manager, the Airports Authority’s Engineering Department, other IAD managers, supervisors, professionals, and support staff), airline station managers, vendors, suppliers, manufacturer’s representatives, tenants, and airport users.

-- Uses a computer, tablet, or smart phone for various applications (email and communications, word processing, data entry, compiling information for reports, spreadsheets, graphics, flow charting, planning, scheduling, presentations, etc.), as well as specialized software/systems used in the operation and maintenance for the AeroTrain.

-- Operates a motor vehicle airside and landside, on and off the airport complex, to attend meetings, visit jobs sites and suppliers, and perform related functions.

-- *Performs other duties as assigned or as determined on own initiative.*
Critical features of this job are described under the headings below. They may be subject to change through reasonable accommodation or otherwise.

MINIMUM QUALIFICATIONS (MQs)

To be rated qualified for this job, an applicant must meet both of the MQs listed below.

1. A bachelor’s degree in any field providing a strong foundation for success in the DUTIES in this job description, or an equivalent combination of education, experience and training that totals four years.

2. Six years of progressively responsible experience that includes substantive work in most of the DUTIES in this job description and provides evidence of knowledge of, and skill in:

   a. Overseeing/Managing operations and associated maintenance of a driverless passenger transit system, which includes maintenance planning and scheduling, system operations and control room operations, and

   b. Overseeing/Managing an operations and maintenance (O&M) contract, which includes managing the O&M contractor, determining appropriate actions under the contract, managing the budget, negotiating change orders and, as appropriate, issuing notices of failure to perform, and

   c. Overseeing/Managing a large contract service provider in an owner/contractor relationship, which includes building a collaborative management structure and working with multiple stakeholders to ensure a positive result for the end user.

Education and training beyond what is needed to satisfy MQ 1 above may be substituted for up to two of these six years of experience (MQ 2) on a week-to-week basis provided the education and training provide evidence of the knowledge, skills and abilities required by items 2(a) through 2(c).

PREFERRED QUALIFICATIONS

The qualifications listed below (if any) are preferred and may be considered in the selection process, but are not required to be rated qualified for this job.

1. A Bachelor’s Degree with concentration in Civil Engineering, Computer Engineering or Electrical Engineering or another field directly related to the DUTIES in this job description.

2. Experience managing, helping manage or monitoring, the performance of, a computer-based train control system, especially a computer- and radio-based Automated People Mover System in an airport environment.

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER FACTORS (KSAOs)

The following KSAOs are required for successful performance of this job and are a basis for rating and ranking applicants who are found to meet the MQs. *Local, Federal, airport industry or Airports Authority-specific bodies of knowledge listed below may be acquired on the job, typically; ability to rapidly acquire them is required at the time of vacancy announcement closure.*

1. Knowledge of Airports Authority management functions to manage the operations of the program area within Airports Authority policies, procedures and practices.

2. Knowledge of the management of driverless passenger transit systems, such as AeroTrain systems, to include: maintenance planning and scheduling, system operations and control room operations, contract management and staff organization and performance.

3. Technical knowledge of: AeroTrain vehicles, power distribution system, uninterruptible power systems, central control command, control and communications, guideway equipment, station equipment, maintenance facilities work and equipment, corrosion control and grounding, station door systems, and system interfaces to assess the status of critical subsystems and key components.

4. Operational knowledge of (a) system operation, (b) system environmental, technical safety and security requirements, (c) system service availability requirement processes and (d) other key requirements, standards and issues to ensure effective system operation and regulatory compliance and provide effective liaison with stakeholders.

5. Skill in problem solving to select, organize and logically process relevant information (verbal, numerical or abstract) to solve a problem. This includes skill in the ability to recognize subtle aspects of problems and identify relevant information to develop solutions. Examples include recognizing shortcomings of the existing O&M process, identifying options and making recommendations to correct the shortcomings; coordinating and planning to interface with the future AeroTrain phases; developing, analyzing and evaluating productivity and cost data; recommending new policies and procedures to increase productivity while controlling costs; and helping solve, minimize or avoid maintenance management system problems that arise.

6. Skill in oral communication to understand verbal information (facts, assertions and ideas) and to express such information verbally so that others will understand and in certain circumstances be convinced or persuaded, such as explaining reasons behind why certain actions are necessary. This includes skill in encouraging effective oral communication by others (such as the O&M Contractor and IAD maintenance/trades staff) and in making formal presentations about the AeroTrain and its operations.

7. Interpersonal skills to interact effectively with business contacts in a businesslike, customer service-oriented manner. This includes skill in developing and maintaining relationships with key stakeholders, such as, but not limited to, the O&M Contractor, air
carriers, tenants, standards committees, original equipment manufacturer (OEM) representatives, consultants, contractors, and other Airports Authority organizations.

8. Knowledge of maintenance management, maintenance trades and multi-trade, multi-function and multi-organizational work relationships to oversee maintenance management, and advise higher levels of management. Maintenance trades include electrical, masonry, metal working, carpentry, HVAC, automotive repair and painting.

9. Knowledge of Airports Authority maintenance programs, policies and procedures; knowledge of Airport services and security requirements; knowledge of Airports Authority contracting policies and processes; and knowledge of other airport-related requirements, standards and procedures altogether to ensure the effectiveness of the operations of the AeroTrain and serve as the COTR.

10. Skill in written communication to understand written information (facts, assertions and ideas), draw inferences, form hypotheses and develop logical arguments, and to express such information in writing so that others will understand, and in certain circumstances, be convinced and/or persuaded. This includes skill in reviewing the written work of others, including peers and contractors, to resolve discrepancies in reports, exchange data and information, etc., as well as skill in preparing memoranda, drafting technical documents, etc.

11. Skill in working on multiple tasks and projects concurrently and in ensuring coordination and integration among related efforts. This includes attention to detail in planning and scheduling.

12. Skill in using a computer and modern office suite software to maintain records, develop reports and perform other functions, such as communications, planning and scheduling utilizing Outlook, word processing utilizing Word, spreadsheets utilizing Excel, presentations utilizing PowerPoint, as well as database management and automated maintenance management systems as would be consistent with the AeroTrain operations and maintenance functions.

RESPONSIBILITIES  Manages the Washington Dulles International Airport (IAD) Automated People Mover program (AeroTrain). The incumbent plans, organizes and controls the operation and maintenance of the system using a contract service provider. Work directly impacts the effectiveness and efficiency of passenger conveyance at IAD and the overall level of customer satisfaction as well as future expansion of the system. (Most passengers use the AeroTrain.)

The incumbent reports to the Manager, Maintenance Engineering who provides assignments in terms of scope of functional responsibilities, special assignments or concerns, authority, budget and similar factors. The incumbent is expected to ensure that the system’s operations are effective, efficient, smooth and adhere to established policies and generally-accepted facilities engineering management practices, and that day-to-day internal and external coordination is effective. The incumbent also participates in the resolution of controversial matters which require coordination with senior and lower level management. Special projects may be reviewed in detail at various milestones. Recommendations and decisions are expected to reflect sound analyses.
Guidelines include, but are not limited to, maintenance management texts, software documentation, life-safety and security requirements and standards, the Airports Authority’s contracting process, the specific contract with the O&M Contractor and program management policies, procedures and practices. Most guidelines may be directly applied, but others require care consideration of facts and context and others leave gaps. The incumbent uses seasoned judgment to adjust and apply guidelines to particular situations.

**EFFORT** The work is primarily sedentary. Incumbent may sit for extended periods while performing desk work. On a regular basis, visits other offices and work sites. Regularly opens and closes file drawers and carries or otherwise moves items weighing up to 25 pounds; sometimes moves items weighing 35 pounds or more. Constantly uses computer hardware and software, communicates by telephone and two-way radio and reviews computer printouts and documents containing small print, e.g., the size in a newspaper or smaller. In driving, operates vehicle using judgment in consideration of weather, traffic and other factors.

**WORKING CONDITIONS** Works in an adequately lighted, ventilated and temperature-controlled office setting. When in the field, visiting maintenance and construction sites, exercises care and wears personal protective gear, as required. Is subject to job pressures from short deadlines and changing priorities and job frustrations from demands for service that exceed available resources. Is subject to recurring interpersonal conflict situations involving complaints from key customers. This may include irate airline station managers and other officials who are dissatisfied with the service(s) provided.

**OTHER SIGNIFICANT JOB ASPECTS** Is subject to hold-over and recall on a 24-hour basis for essential services and emergencies, such as winter operations duties.