

***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 the planner/scheduler for the Utilities Shop (Shop), in the Engineering and Maintenance Department at Washington Dulles International Airport (IAD), Metropolitan Washington Airports Authority (Airports Authority). Reviews and screens all requests for utilities maintenance work: analyzes and researches job requirements, develops detailed plans, assembles planned job packages, administers the procurement process, and coordinates and schedules work orders. Serves as shop custodian for the Computerized Maintenance Management System (CMMS); inputs items/work orders, maintains essential records and reference libraries; interprets cost information; and develops management reports. Recommends improvements to CMMS and assists Section Supervisor with job budgetary projections, job tracking, and analysis. Performs related duties.

Reviews and screens Shop work requests for completeness, accuracy and necessity. Ensures description of work is clear, codes are valid and correct, priority and requested completions are realistic and provide practical lead-time, authorization is proper, and the requested work is needed. Develops preliminary estimate as required to obtain approval to proceed. Obtains appropriate permit (Construction or Work) from the Code Department or the Engineering Division, as required, for alteration and/or modification requests.

Reviews the job to be performed and determines the best way to accomplish the work; consults with the requestor and Shop supervisor, as appropriate, in determining the scope of work. Determines the required level of planning. Visits the job site and analyzes the job in the field, as necessary. Clarifies the request and refines the description to include the precise location, job content, scope, and priority. Visualizing job execution and outlining the requirements, determines steps necessary to execute the job, prepares sketches or takes photographs to clarify intent of the work or to serve as reference, takes necessary (exact) measurements, determines any coordination requirements, and checks/determines safety requirements/hazards.

Performs research regarding job, e.g., frequency of recurrence of the problem, requirement for more permanent solution, repair/replace decision, make/buy decision, alternative approach(s)/best solution, the possible need for engineering assistance, and identification of necessary tag outs.

Details and phases job requirements: selects and describes the best way to perform the job, determines and sequences the job by specific and logical tasks or steps, identifies task dependencies and considers application of project evaluation and review technique (PERT) or critical path method (CPM) network analysis to facilitate the planning of complex jobs, determines required skill sets for each task (craft and skill level), and prepares cross work orders to other sections/shops as required.

Determines resource requirements: establishes the required crew size and work hours for each task of the job sequence; estimates or applies available benchmarks; determines if extra travel or job prep is needed; lists determinable materials, parts, and special tools required; prepares the Bill of Materials (BOM); determines what items are in stock and reserves them; sources those

items which must be direct ordered; and prepares requisitions for items in authorized inventory, purchase requests for direct purchases of materials or equipment rental, and Work Orders for in-house fabrication.

Determines equipment and external resource needs and disposal issues (expense, time, special handling). Completes total cost estimate in terms of labor, material and external charges. Coordinates and expedites necessary authorizations based on final cost estimate. Ensures jobs do not overrun authorized budget.

Assembles the planned job package including: detailed Work Order, job plan detail by task with step-by-step procedures and site set-down plan (if a significant tear-down), labor deployment plan by craft and skill, man-hour estimates, BOM, acquisition plan, required permits, clearances and Tag Outs to the point feasible and safe (final steps must be taken by the responsible mechanic and equipment operator), prints, sketches, photos, special procedures, specifications, sizes, tolerances and other references which the assigned crew is likely to have need of. Coordinates approval of assembled package with Section Supervisor and the requestor.

Sources materials requiring direct purchase, monitors and expedites materials/parts delivery, coordinates receipt of all maintenance materials whether for direct purchases or stock replenishments, within Oracle and the procurement process. Coordinates kits and staging, secures those scheduled job items available from Warehouse and documents all requisitions via the CMMS. Periodically reviews warehouse stock to ensure required stock items are, in fact, still required based on the Weekly Master Schedule. In cooperation with Purchasing, removes items that are no longer required and requests new items that are necessary. Orders all materials and tools required through the appropriate request process to ensure optimum productivity; may purchase items on P-Card. Releases work orders for scheduling only when all required resources (other than manpower) are on hand.

Coordinates scheduling process: maintains computerized backlog file of work orders awaiting scheduling ensuring those unplanned, requiring engineering, awaiting materials, awaiting equipment access, etc., are tracked accordingly. Issues current and well organized relevant backlog reports to management and maintenance supervision in preparation for weekly schedule coordination. Remains abreast of customer workloads, short- and long-term plans, and priorities. Helps customer think far enough in advance to facilitate effective planning. Provides continuity to customer maintenance knowledge, records, and information. Determines resource availability, moderates Weekly Planning Meetings, ensures that all preventive/predictive routines are scheduled at their predetermined frequencies, prepares work programs to keep resources balanced with workload and to define the man-hours of work to be loaded onto each crew's schedule ensuring requested completion dates (real or implied by assigned priority) are met, and ensures that even low priority jobs reach the schedule in a reasonable period of time, coordinates daily schedule to address new high priority work orders with those already in the weekly plan. Issues Weekly Schedule. Strives to optimize schedule compliance, despite essential schedule "breakers." Ensures that the Supervisor receives and understands the planning package for each scheduled job. Follows up to ensure that all agreed-upon supportive actions of others are performed on schedule.

Serves as Section custodian for the maintenance of the CMMS and Section expert for CMMS use. Provides assistance and coaching to Section members in use of CMMS. Ensures proper maintenance timekeeping, payroll input, and cost distribution in CMMS. Creates management reports, maintains records and files, and maintains on-going shop records for backlogged work orders, missed frequencies, cancellations, partially completed work, etc., in CMMS. Investigates reasons for such conditions and work stoppage due to material problems and takes or recommends corrective action. Recommends systems improvements and assists supervisor with budgetary preparation, tracking and analysis. Tracks and interprets historical equipment cost information. Loads facility information into the CMMS including activity, item, location, and schedule for all HVAC maintenance requirements.

Contacts equipment representatives for information in relation to development of specifications for equipment and/or services required. Writes and edits specification proposals for various equipment, equipment testing, and tools purchased by the Airports Authority. Assists during final walk-through, commissioning, and start-up of new equipment and facilities. Participates in budgetary preparation, tracking, and analysis. Assists the Shop Supervisor in periodic analysis of cost trends with recommendations for continual improvement.

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 managers, supervisors, professionals, and support staff), vendors/suppliers/tenants, airport users, and the general public.

Uses a computer and (a) modern office suite software (such as MS Office) to plan, schedule, communicate, word process, prepare and develop reports, and perform research (Internet use, as in searching for products); (b) enterprise systems/software for inventory management, record items issued and stored, record backlogged items, maintain vendor information, requisitioning, budgeting (including entering budget codes and ensuring work stays within budget) and resolution of P-Card purchases, and other functions; and (c) specialty systems/software used in the Section such as the CMMS to record progress and document quality of finished work.

--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.\*

***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 all of the MQs listed below at the time of vacancy announcement closure.

1. A high school diploma, a Certificate of General Educational Development (GED), or an equivalent combination of education, experience and training.

2. Five years of progressively responsible experience (post high school) in the installation, maintenance, troubleshooting, and repair of HVAC equipment and systems, which includes: two years specializing in installation, test, diagnosis, maintenance, and repair of a range of HVAC equipment and systems such as, but not limited to, HVAC systems, boilers, ice builder systems, chillers, energy/ automated building control systems, and computerized control systems, and similar equipment. This includes knowledge of the theories, principles, requirements, and standards of the HVAC trade.

A Master's License as an HVAC Mechanic is evidence of five years of progressively responsible HVAC trade experience, but is not, by itself, evidence of the two years of experience specializing in test, diagnosis, maintenance, and repair of a range of HVAC equipment and systems, as specified.

3. Experience or training demonstrating the ability to plan and schedule skilled trade work such as the ability to analyze work orders and work requests to identify tasks, hours, skill sets, equipment, tools, parts, technical information and materials required; consider priorities of work; plan the sequence of work; estimate costs; prepare schedules; document assignment, approval, completion and reporting of work; and identify ways and means of improving productivity through planning/scheduling and related processes.

## **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.

None.

## **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 typically be acquired on the job; ability to rapidly acquire them is required at the time of vacancy announcement closure.*

1. Knowledge of, and skill in, planning and scheduling skilled trade work. This includes skill in analyzing work orders and work requests to identify tasks, hours, skill sets, equipment, tools, parts, technical information and materials required; considering priorities of work; planning the sequence of work; estimating costs; preparing schedules; documenting assignments, approval, completion, and reporting of work; and identifying ways and means of improving productivity through planning/scheduling and related processes.
2. Substantial journey level knowledge of and skill in the HVAC trade to plan and schedule journey level work involving the trade. This body of knowledge includes but is not limited to knowledge of HVAC systems, boilers, ice builder systems, chillers, energy/ automated building control systems, and computerized control systems and the theory of their operation

altogether to understand key elements of work to be done at levels sufficient to analyze, plan, generate, schedule and add to the continuous improvement of the maintenance and repair operations of the HVAC shop.

3. Knowledge of materials, tools, parts, equipment, procurement processes, suppliers, safety requirements and work flow, related to mechanical utilities work, to locate procurement sources for non-routine items, describe their characteristics, evaluate new equipment, recommend substitute materials, and develop work instructions.
4. Skill in using a computer and (a) modern office suite software (such as MS Office) to plan, schedule, communicate, word process, prepare and develop reports, and perform research (Internet use, as in searching for product information and keeping up with technology); (b) ERP (enterprise) systems/software for procurement-logistics tasks, budgeting, time and attendance, and other functions; and (c) specialty systems/software used in the Shop such as CMMS to track work and the PICs software to track historical information.
5. Skill in using manufacturers' manuals, specifications, schematics and blueprints to determine appropriate settings or alignments and trace systems. Ability to develop new drawings or modify existing schematics.
6. Knowledge of, and skill in applying, safety rules and procedures; knowledge of Code Regulations and Standards involving HVAC systems and electrical/control systems; and knowledge of Federal, state, and Airports Authority safety rules and procedures to effectively plan and schedule work for the Shop.
7. Skill in problem solving to select, organize and logically process relevant information (verbal, numerical or abstract) to solve a problem. This includes mechanical skills and the ability to recognize problems and identify information and in analyzing maintenance and repair operations as well as skill in planning, scheduling and reporting routine and non-routine work, in analyzing work to identify options for improving productivity and controlling costs, in performing budget support duties and in performing related functions.
8. Skill in written communication to understand written information (including instructions, descriptions, and ideas) and to express such information in writing so that others will understand. Examples include reviewing and preparing a variety of work order and workflow documents (including, but not limited to, O&M manuals, blue prints, as builds, schematics, contract specifications, etc.) and to compose work instructions, bills of material relating to work orders and contract tasks, reports on backlog, work status, and descriptions of worker and contractor performance.
9. Skill in oral communication to understand verbal information (including instructions, descriptions, and ideas) and to express such information verbally so that others will understand. This includes the ability to encourage oral communication by others such as vendors and journey level skilled trade workers, to exchange information on work processes, equipment, materials and other considerations essential to effective planning, scheduling and reporting of maintenance and repair work.

10. Interpersonal skills to interact effectively with business contacts in a business like, customer service-oriented manner.

11. Ability and willingness to comply with holdover and recall requirements.

**RESPONSIBILITY** Is responsible, as Planner/Scheduler for the Utilities Shop for reviewing work requirements, especially as they relate to other shops and priorities, anticipating material and equipment for special projects, estimating costs of projects, assisting in the documentation of preventive maintenance procedures and facilities data, and related work that facilitates the efficiency and adequacy of the Shop's operations. Reports to the HVAC Supervisor (Supervisor). The Supervisor assigns work in line with functional responsibilities, goals and resources and provides other parameters for ongoing work, adjusting priorities as needed. The Supervisor provides general instructions concerning specific work assignments, new or revised procedures, and technical advice and guidance on special cases. Within this framework, works independently on a day-to-day basis and advises the Supervisor on the status of work in progress and any significant problems. The work is evaluated by the soundness of decisions and effectiveness in coordinating with customers, other trades planners, engineers, work order clerks and other shop supervisors as well as quantity, quality, timeliness, customer service, teamwork, adherence to guidelines, and other factors, including specific performance management requirements.

**EFFORT** The work is primarily sedentary. Frequently sits when doing planning/scheduling. Stands or stays in one position and walks or otherwise moves about when meeting with Shop personnel and visiting job locations. Uses computer equipment for various applications. Reviews technical manuals, schematics and other documents containing small print. Regularly operates vehicles around moving aircraft and operates vehicles using judgment in consideration of weather, traffic and other factors. Communicates by radio.

**WORKING CONDITIONS** Works primarily in an adequately lighted, ventilated and temperature controlled office. However, regularly performs work on the Shop floor, outside and at job sites. At job sites, or traveling to and from them, is exposed to inclement weather, excessive noises, dust, fumes and other conditions associated with equipment, maintenance and construction work. Is subject to burns or scalds from the high-temperature hot water systems. Takes care, follows general and/or special safety precautions to protect self and others and uses personal protective gear as appropriate.

**OTHER SIGNIFICANT JOB ASPECTS** Subject to holdover and recall on a 24-hour basis for essential services such as HVAC and snow removal.