

Job Analysis

	Electrical Shop Inventory		
Job Title	Electrician (AVM)	Worker	
DOT Number	219.387-030 and 829.261-018	Claim Number	
Employer	Port of Seattle	Employer Phone #	(206) 787-3000
Employer Contact	Darin Benofsky	Date of Analysis	4/15/08; 3/3/11; 8/29/11; 1/24/17; 12/11/18
Job of Injury	Transferable New Job Skills Job	40 Hours Per	Week 🛛 5 Days Per Week

Job Description, Essential Functions, Tasks and Skills:



The Port of Seattle is a municipal corporation created on September 5, 1911 by the voters of King County. The Port of Seattle is divided into operating divisions, plus other departments that support the divisions and the broad mission of the Port: 1) Aviation Division, 2) Maritime Division, and 3) Economic Development Division.

The Aviation Division owns and operates Seattle-Tacoma International Airport. Sea-Tac Airport handles more than 40 million passengers a year, and offers state-of-the-art air cargo facilities. The Aviation Division employs a maintenance staff which is responsible for all tasks associated with the maintenance and on-going operations at Sea-Tac Airport.

This job analysis is for an individual working as an <u>Electrical Shop Inventory Electrician</u> for Aviation Maintenance.

Essential Functions:

The regional power supplier delivers electricity to two substations on the Sea-Tac Airport property, and the employees of the Aviation Maintenance Electrical Shop are then responsible for distribution of power and maintenance of the distribution systems for all of the standard and emergency electrical systems at Sea-Tac Airport.

The primary purpose of the Electrical Shop Inventory Electrician is to control, manage, and restock the supplies and electrical components that are physically stored in the main Aviation Maintenance Electrical Shop.

Most of the inventoried supplies and components needed to maintain, repair, and modify the electrical systems overseen by the Aviation



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Maintenance Electrical Shop are centrally stored in the Aviation Maintenance Distribution Center. Therefore, the Inventory Electrician will interface with Distribution Center personnel on a frequent basis.

Additional responsibilities of the Inventory Electrician may include inspections of electrical systems and components for the purpose of procuring proper supplies, and providing estimates for small jobs/projects.

The position of the Inventory Electrician is staffed with Electricians/Wiremen from the Aviation Maintenance Electrical Shop on a rotating basis. The Inventory Electrician works during the day shift.



Essential Functions:

- Meet/connect with Foreman on a daily basis.
- Assist other workers in locating parts/components in the secure supply area. Note: Electricians/Wiremen visit the supply area to gather the parts and components needed to complete assigned work orders.
- Instruct and assist shop personnel how to complete inventory tracking forms/records.
- Enter data from inventory tracking forms/sheets into Maximo to issue and track materials used on specific work orders/projects.
- Maintain the filing system used to maintain the records of the items used from the supply area.
- Accept and sign for deliveries from the central Distribution Center.
- Reconcile the items delivered to the Electrical Shop from the Distribution Center with the items identified on the packing slip to identify any discrepancies. If discrepancies are identified, notify supervisor and manage discrepancies as needed.



- Separate consumables from stocked/inventoried items. Stock items on specific shelves or in specific drawers. Monitor consumables and ensure on-going availability in the supply area.
- Perform regular inventory counts to identify parts, components, and or consumables needed. Research in Maximo if orders for specific items have been triggered based on specified minimums. Prepare request for specific items if not already automatically ordered in Maximo.
- Process and manage last-minute rush orders.



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- Perform inventory counts in coordination with the Distribution Center audit staff. Receive reports from the audit staff and reconcile/explain potential discrepancies identified by the audit staff.
- Potentially identify when parts/components do not have a specific part number in Maximo. Work with Distribution Center personnel to create a part number, create physical space and or relocate materials, and determine appropriate stocking levels in the Aviation Maintenance Electrical Shop. Stocked parts data may then entered into the system.
- Potentially deliver parts and components to Electricians/Wiremen in the field.
- Participate in meetings with management to refine/develop policies and procedures related to material management.
- Work with Planners/Schedulers to identify material delivery dates so work may be planned.
- Perform minor electrical tasks, such as breaker resets, field visits, material estimating for jobs/projects, and general customer service.



Necessary skills and abilities may include:

- Working knowledge of Windows-based computers, related accessories, time tracking software, keyboarding, data input skills, and electronic mail software. Thorough knowledge of the Maximo system, as it pertains to the Inventory, Purchasing, and Work Order modules.
- Skills to complete the assigned task(s) in a timely and efficient manner.
- Ability to utilize critical thinking and judgment in defining, analyzing, and resolving problems.
- Strong and effective communication skills (written and oral), and excellent interpersonal skills (including while on radio).
- Ability to effectively organize paperwork files and physical items, and be detail-oriented while working.
- Ability to work well in a team environment, as well as independently without immediate supervision.
- Ability to identify an issue, and develop a solution for consideration by supervisors.
- Able to judge the accuracy and appropriateness of data presented in reports. Ability to promote departmental goals of centralized inventory control in a positive manner.
- Ability to read and interpret blueprints.





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Machinery, Tools, Equipment, Personal Protective Equipment:

- Windows-based computer, computer accessories, and project management software (Maximo), plus Microsoft Office applications.
- Shelves (up to 98" high) and drawers (up to 59" high) used to store parts/components.
- Hand tools and electronic meters and gauges.
- Forklift and pallet jack, hand trucks, and wheeled carts.
- Work trucks. Scooters (small 4-wheeled vehicles).
- Overhead hoist.
- Ladders. Stepstools. Wheeled stools.
- 2-way radio.
- Office equipment, including telephone, work tables, stools, chairs, file cabinets, and other items.
- Office supplies, including clipboards, pens, file folders, and paperclips.

The Electrical Shop Inventory Electrician would be required to wear approved safety boots/footwear at all times. A hard hat would be required as necessary





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Education / Training:

The Inventory Electrician position is staffed on a rotating basis by a Journeyman level Electrician/Wireman from the Aviation Maintenance Electrical Shop. Electricians at the Port of Seattle are represented by the International Brotherhood of Electrical Workers Local 46-Seattle.

<u>Minimum Requirements</u>: Completion of a Washington State approved electrical apprenticeship or equivalent program or experience. Must have a valid Washington State EL01 Electricians Certificate. Must possess a valid Washington State driver's license, and have the ability to obtain a Commercial Driver's License (CDL) (if required), and pass a security background check.

<u>Preferred Qualifications</u>: Five years working experience as a Journey level Electrician/Wireman in a maintenance environment. Strong background with electronics, PLCs, ladder logic, VFDs, and GPUs. Windows-based computer knowledge and radio communication skills. Certified Cable Splicer.

Training and or enough hands-on experience with computers to have a working knowledge of Windowsbased computers, related accessories, time tracking software, keyboarding, data entry, and electronic mail software.

Per the Dictionary of Occupational Titles (DOT): 219.387-030 Inventory Control Clerk Specific Vocational Preparation (SVP) 5 (From six months to one year) 829.261-018 Electrician, Maintenance Specific Vocational Preparation (SVP): 8 (From four to ten years)



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COGNITIVE AND BEHAVIORAL ELEMENTS/DEMANDS

Frequency Definitions:	
Continuously = Occurs 66-100% of the time. Occasionally = Occurs 1-33% of t	the time
Frequently = Occurs 33-66% of the time. Rarely = May occur less than 1% o	
Never = Does not ever occur.	
Comprehension	
Articulating and comprehending information in conversations.	Continuously
Reading, comprehending, and using written materials.	Frequently
Understanding and solving problems involving math and using the results.	Continuously
Using technology/instruments/tools & information systems.	Continuously
Working with two and three dimensional formats.	Occasionally
Remembering	
Remembering spoken instructions.	Continuously
Remembering written instructions.	Frequently
Remembering visual information.	Continuously
Recalling information incidental to task at hand.	Continuously
Memorizing facts or sequences.	Frequently
Remembering simple instructions.	Continuously
Remembering detailed instructions.	Continuously
Learning & Processing	
Effectively learning and mastering information from classroom training.	Occasionally
Effectively learning and mastering information from on-the-job training.	Continuously
Learning from past directions, observations, and/or mistakes.	Continuously
Using common sense in routine decision making.	Continuously
Recognizing and anticipating potential hazards and taking precautions.	Occasionally
Thinking critically and making sound decisions.	Frequently
Integrating ideas and data for complex decisions.	Occasionally
Determining and following precise sequences.	Frequently
Coordinating and compiling data and information.	Continuously
Analyzing, synthesizing data and information.	Continuously
Tasking and Planning	
Performing repetitive or short-cycle work.	Continuously
Working under specific instructions.	Continuously
Completing complex tasks.	Occasionally
Directing, controlling, or planning for others as necessary for basic tasks.	Occasionally
Directing, controlling, or planning for others as necessary for complex tasks.	Rarely
Multi-tasking.	Continuously
Planning, prioritizing, and structuring daily activities.	Continuously



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Use Appropriate Behavior for Professional Work Environment			
Receiving criticism and accepting limits appropriately.	Frequently		
Maintaining emotional control and organization under increased stress.	Continuously		
Maintaining socially appropriate affect, temperament, and behavior.	Continuously		
Monitoring own quality of performance and altering behaviors to correct mistakes or	Continuously		
improve outcome.			
Working independently and/or unsupervised.	Continuously		
Adapting to frequent interruptions, changes in priorities, or changes in work location.	Occasionally		
Responding effectively to emergency situations.	Occasionally		

Frequency Designations: Required Beneficial Not Necessary			
Maintaining Attendance and An Assigned Work Schedule			
Maintaining predictable and reliable attendance each work shift.	Beneficial		
Being punctual.	Beneficial		
Taking rest periods at set times or only at times determined by breaks in job responsibilities.	Not Necessary		
Adjusting to a flexible schedule of work days and or shifts.	Not Necessary		



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PHYSICAL DEMANDS

Note: There is flexibility in this position to incorporate job modifications to accommodate restrictions established by a physician.

N/A: Not Applicable		F: Frequent $(30\%-70\%)$ of the time)		
S: Seldom (1-10% of the time)		C: Constant (Over 70% of the time)		
O: Occasional (10-30% of the	/	WNL: Within Normal Limits (talking, hearing, etc.)		
STRENGTH: Sedentary	<u> </u>	Light Medium Heavy Very Heavy		
	Frequency			
Sitting	O	Working on computer entering data, creating/updating work orders,		
Sitting	U	while stocking items, and potentially while driving cart/scooter/truck.		
		Stools are available in the supply area.		
Standing	F	Working on computer entering data and checking system data.		
0		Checking parts/component inventories in supply area. Restocking		
		parts/components. Checking shipments received from the Distribution		
		Center. Talking with co-workers.		
Walking	F	Walking short distances within the supplies/parts area, walking within		
		the Electrical Shop, or walking in the Sea-Tac terminal building (most		
		often not over 100 yards from Electrical Shop). Very rarely, potentially		
		longer distances within the Sea-Tac terminal. Walking will generally be		
Lifting (up to 20 pounds)	F	over concrete, asphalt, or tile. Lifting electrical parts and accessories, electrical assemblies, system		
Lifting (up to 20 pounds)	components, boxes of electrical supplies, rolls/spools of wire (500' reel of			
		wire is approx. 5-10 lbs.), hand and power tools, and reams of paper for		
		printer. Note: Cases/boxes of electrical parts and supplies can generally		
		be broken down into individual components to reduce the amount of		
	lifting needed.			
Lifting (20 to 40 pounds)	S	Lifting larger assemblies, system components, runway lights (35-40 lbs.),		
		coils of flex conduit (35 lbs.), and rolls/spools of wire (2,500' reel of wire		
		is approx. 35 lbs.). Note: Larger items can generally be lifted with a		
		forklift or overhead hoist, or the Inventory Electrician can request		
		assistance from another Electrician to lift larger items to reduce the		
	.	amount of necessary lifting.		
Carrying (up to 20 pounds)	F	Carrying electrical parts and accessories, electrical assemblies, system		
		components, boxes of electrical supplies, rolls/spools of wire (500' reel of wire is approx. 5-10 lbs.), hand and power tools, and reams of paper for		
		printer. Note: Cases/boxes of electrical parts and supplies can generally		
		be broken down into individual components to reduce the amount of		
		carrying needed. Also, larger items can be moved with a forklift, pallet		
		jack, wheeled cart, hand truck, or overhead hoist to reduce the amount of		
		necessary carrying.		



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Pushing/Pulling (Up to 20 pounds of force).	F	Opening/closing drawers containing parts and supplies. Pulling/ pushing wheeled carts with parts, supplies, and components. Moving stepstools and ladders. Opening/closing file cabinet drawers. Opening doors and electrical panels while conducting inspections. Clearing and resetting circuit breakers on electrical panels.		
Climbing Stairs/Ladders	0	Supply area has stepstools and ladders that can be used to reach higher shelves. A worker may encounter stairs when working outside of the shop area. <u>NOTE</u> : If the worker has to visit various levels of the terminal building, elevators are available.		
Working at Heights/ Balancing	0	When using the stepstools and ladders in the supply area.		
Twisting at Waist	S	Can be minimized with effort by the worker to move their feet.		
Bending at Waist	S-O	Can interchange with crouching/kneeling. Gathering supplies/components to restock, checking parts/component inventories on shelves or in drawers, or checking shipments received from the Distribution Center.		
Bending Neck	C	All of the assigned tasks involve neck movement: conducting inspections; climbing ladders; gathering electrical parts and components.		
Crouching/Kneeling	S	Restocking parts/components stored at or below waist level. Checking parts/component inventories on shelves or in drawers, or checking shipments received from the DC warehouse. <u>NOTE</u> : A wheeled stool is located in the supply area to reduce the amount of crouching/kneeling done by the worker.		
Crawling	N/A			
Stooping	S	While entering/exiting carts/scooter driven to work or inspection sites.		
Reaching	F	Stocking parts/components in supply area (drawers up to 59" high; shelves up to 98" high). Retrieving and filing paperwork. Opening doors and electrical panels while conducting inspections. Clearing and resetting circuit breakers on electrical panels. <u>NOTE</u> : Reaching can be from the floor to overhead. Ladders and stepstools are available to reduce the amount of reaching needed.		
Driving	0	Driving cart/scooter to work or inspection sites.		
Foot Controls	0	Driving cart/scooter to work or inspection sites.		
Repetitive Motion	N/A	The variety of tasks assigned to the individual in this position eliminates repetitive motions.		
Handling/Grasping	F	60% Pinch Grasp40% Whole Hand Grasp		
Fine Finger Manipulation	F	Processing paperwork, typing on computer keyboard, and picking up smaller parts/components. Using keys to start vehicles and enter buildings. Using keypads located at secured doors. Using 2-way radio.		
Talking	С	Communicating with supervisors and co-workers, and potentially customers to troubleshoot simple electrical issues (breaker trips).		
Hearing	С	Communicating with supervisors and co-workers, and potentially customers to troubleshoot simple electrical issues (breaker trips).		
Seeing	С	Visual abilities would be considered important in this position.		



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Writing	F	Completing inventory forms, making notes regarding inventory issues when reconciling system counts to physical counts, noting needed parts/components, documenting results from inspections, and taking notes during meetings.
Keyboarding	F	Entering data into Maximo, checking on the status of work orders, creating work orders, ordering parts/supplies, sending and receiving electronic mails.
Normal Job Site Hazards	S	Working with electricity (risk of electrocution), working at heights (ladders and stepstools), and falling objects.
Expected Environmental Conditions	F	Work is primarily performed inside a shop environment, or inside utility rooms housing the components of the Sea-Tac Airport electrical systems. A worker may be exposed to external weather conditions when walking outside to reach other shops or other areas of the Sea-Tac Airport terminal building.

The above job analysis represents the requirements of a specific job based on personal observations, discussions with employer representatives, and/or workers. On occasion, practicality and feasibility prevent the direct observation and/or gathering of objective quantifiable data. For this reason, a "best estimate" may have been used when reporting physical demand frequencies.

Analysis was done on the job site?	⊠Yes	No No	
Job Analysis Reviewed By:	Dan Hytry	y, Manager, A	viation Maintenance
Completed by Vocational Provider	Brice York, BA	A, CDMS	_
Date December 11, 2018 Signa	ture of Vocation	al Provider	



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	FOR PHYSICIAN'S/EVALUATOR'S USE ONLY
	The injured worker can perform the physical activities described in the job analysis and can return to work on
	The injured worker can perform the physical activities described in the job analysis on a part-time basis for hours per day. The worker can be expected to progress to regular duties in weeks/months.
	The injured worker can perform the described job, but only with the modifications/ restrictions in the attached report and/or listed below. These modifications/restrictions are (check one):
	Temporary for weeks months
	The injured worker cannot perform the physical activities described in the job analysis based on the physical limitations in the attached report and/or listed below. These limitations are (check one): Temporary for weeks months Permanent
СОММ	ENTS:
Date	Physician's/Evaluator's Signature
	Physician's/Evaluator's Name Printed

PLEASE RETURN COMPLETED FORM VIA FACSIMILE TO:

Port of Seattle Employee Health & Safety Department at (206) 787-3406