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Job Analysis

Job Title	Automotive Machinist Foreman – Aviation Maintenance	Worker	
DOT Number	620.261-010 & 620.131-014	Claim Number	
Employer	Port of Seattle	Employer Phone #	(206) 787-6884
Employer Contact	Benny Austin	Date of Analysis	October 6, 2011

☐ Job of Injury ☐ Previous Job ☐ New Job ☒ 10 Hours Per Day ☒ 4 Days Per Week[1]

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) Capital Development Division, 3) Real Estate Division, and 4) Seaport Division. The Aviation Division operates Seattle-Tacoma International Airport. Sea-Tac is the 17th busiest passenger airport in the United States, serving more than 31.5 million passengers in 2010.

This job analysis was developed for an Automotive Machinist Foreman working for Aviation Maintenance.

Essential Functions

The Automotive Machinist Foreman is responsible for the day-to-day supervision and organization of the Automotive Machinists who maintain more than 850 vehicles and pieces of equipment used to maintain the Aviation Division's assets. Tasks may include coordinating routine/preventative maintenance and repairs, coordinating responses to critical repair requests when a vehicle or piece of equipment needs immediate repair, and overseeing installing accessories on vehicles or equipment and component fabrication. Items repaired by the Automotive Machinists may range from passenger buses and heavy construction equipment, to police vehicles and lawn mowers.

[1] Hours may increase to 12 hour shifts seven days a week during snow emergencies.

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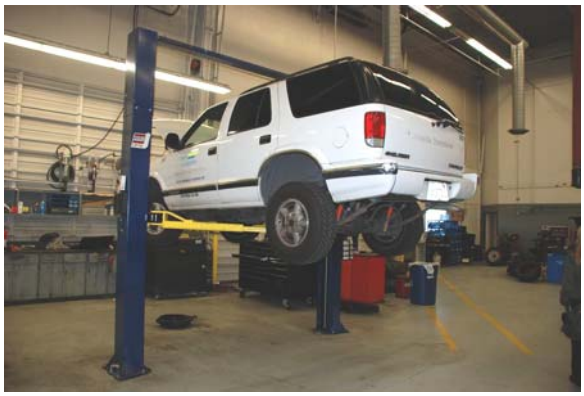
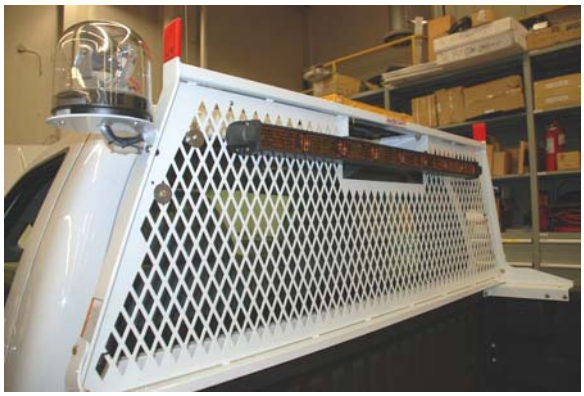
Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle DOT # 620.261-010 & 620.131-014

In addition, a Foreman is expected to be able to perform the essential functions of an Automotive Machinist as needed without help from other personnel.



The Foreman spends time in a central office performing administrative duties, as well as coordinating work within the shop. A Foreman may also have to visit a work site in or around the airport facility to provide assistance or oversee a critical repair.

In the Aviation Maintenance Automotive Shop, there are two Foremen positions: Shop Foreman and Administrative Foreman. The individuals in these two positions switch positions approximately every three months. The Shop Foreman is primarily tasked with taking calls regarding maintenance and repairs and coordinating work within the shop. The Administrative Foreman focuses on shop-related office/administrative work.



In general, the work performed by an Automotive Machinist Foreman can be categorized as follows:

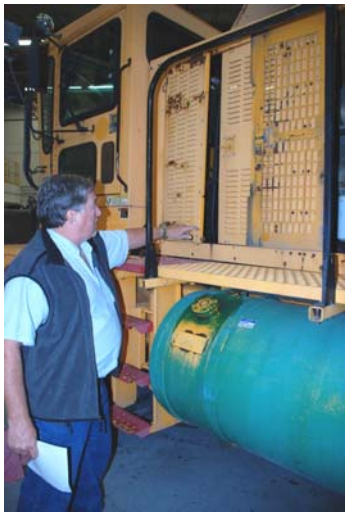
Work Category	Estimated Time
Office/desk/administrative work (including meetings)	30-60%
Supervising work and personnel and providing assistance in and around shop area	20-30%
Supervising work and personnel and providing assistance in the field	0-10%
Performing trade-specific work	10-30%
Total	100%

Tasks Assigned to the Automotive Machinist Foreman may include:

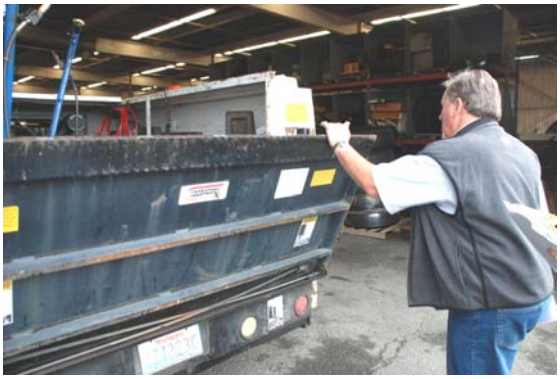
- Receive notifications of new work orders/requests (via telephone, email, or job tracking system). Develop plans for completing requested repairs/maintenance projects. Plan for parts, equipment, PPE, and staffing needs to complete the requested work.
- Discuss or examine items to be repaired. Troubleshoot, identify, and discuss the nature of equipment malfunctions or failures with other Aviation Maintenance personnel.

Bock Consulting

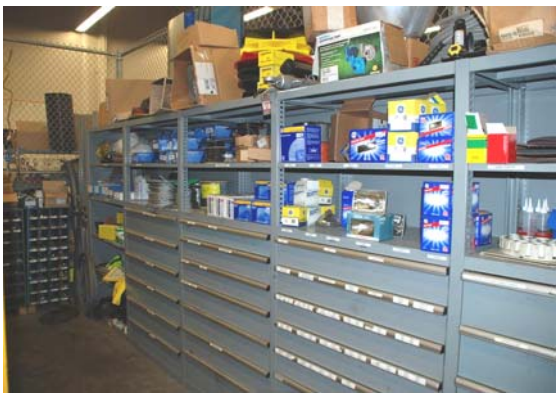
Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle
DOT # 620.261-010 & 620.131-014



- Refer to technical manuals, charts, and or written or on-line documentation related to the specific equipment being repaired.
- Order parts and or supplies needed for projects. Work with General Foreman or Purchasing to ensure correct products and items are ordered and available when needed. May periodically work with vendors related to parts and supplies needed.
- Prepare personnel schedules and assign work tasks.
- Enter time by work order on a daily basis into job tracking system (Maximo). Review daily time entered by crew and approve, as applicable.
- Complete all required forms and documents.
- Send and respond to electronic mails.
- Oversee/inspect completed work. Ensure work is being performed in a safe manner.
- Meet/connect with crew daily (or as applicable) to manage workflow, address issues, and reassign personnel based on work demands.



- Potentially lead periodic meetings to provide training and discuss important safety issues.
- Attend periodic meetings with supervisors and other entities.
- Coordinate work priorities with supervisors.
- Assist Automotive Machinists with technical input, answer questions, and provide troubleshooting advice as needed.
- Assist crew in choosing parts and supplies needed for assignments.
- Potentially gather parts, supplies, and or materials needed for assigned tasks.



- Potentially perform preventative maintenance tasks on vehicles and other equipment.
  - Replacing brake pads and windshield wipers on Aviation Maintenance vehicles.
  - Replacing and adjusting headlights.
  - Replacing hydraulic hoses on heavy equipment.
  - Installing accessories on equipment (such as radios, flashing lights, extra mirrors).
  - Ensuring all safety equipment on vehicles is inspected as outlined by Port and Aviation Maintenance policies.

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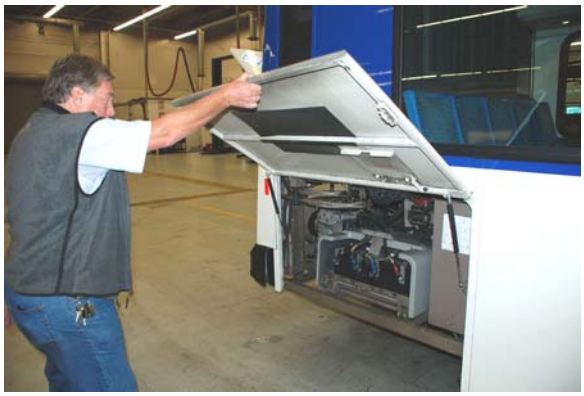
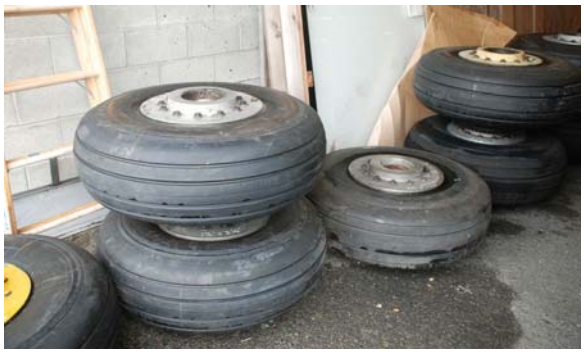
Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle
DOT # 620.261-010 & 620.131-014

- Maintaining metal fabrication machines.



- Potentially respond to critical issues and trouble calls, such as flat tires and failed hydraulic hoses to repair (likely in the field) to ensure work can be completed on time.
- Complete inventory logs and paperwork as required to maintain up to date records.
- Perform other tasks as requested.



Worker's Skills and Traits

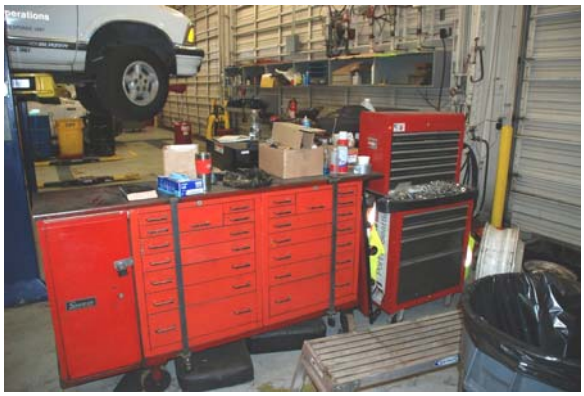
- Identifying the best method to correctly complete an assigned task. The ability to utilize critical thinking and judgment in defining, analyzing, and resolving problems.
- The ability to take initiative and be responsible for getting work done with limited supervision in an expedient and timely fashion. Must demonstrate effective judgment and decision making.
- Excellent time management and prioritization skill, with the ability to multi-task.
- Ability to manage people and work performed by others.
- Have the physical abilities and skills to accomplish all of the assigned tasks in a timely and efficient manner. A full range of motion is generally needed to complete all of the tasks assigned to an Automotive Machinist. From time to time, it may be necessary to work in awkward positions to perform various tasks.
- Ability to communicate effectively, both verbally and in writing.
- Excellent interpersonal skills (including on radio).
- Ability to read and interpret manuals, instructions, and various technical documents and be detail oriented while working.
- Must maintain professional appearance and manner while working.
- Ability to work independently, but also within a team as required.
- Able to work in a safe and efficient manner.
- Must be organized, detail oriented, and have the ability to work within specific instructions.
- Must have fundamental knowledge of Windows-based computers, related accessories, have keyboarding and data input skills, and have basic knowledge of Microsoft Office software.
- Must be able work with a diverse group of people.
- Ability to safely operate a motor vehicle.

Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle
DOT # 620.261-010 & 620.131-014

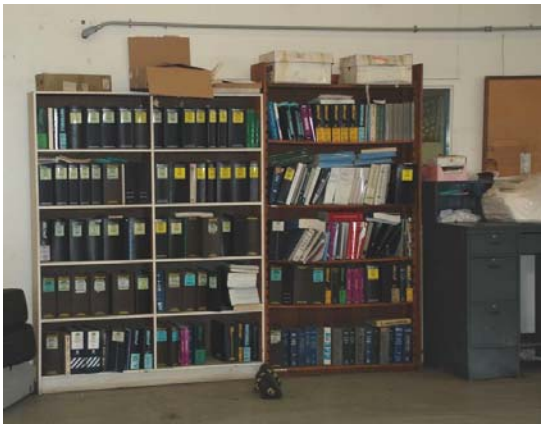
Machinery, Tools, Equipment, Personal Protective Equipment

- Windows-based computers and computer accessories. Inventory management/project management software (Maximo), and Microsoft Office software.

- General office equipment, such as desks, worktable, chairs, and telephones.
- General office supplies, such as pens/pencils, notepads, and copy paper.
- Hand tools, including socket sets, wrenches, torque wrench, hex/Allen wrenches, screw drivers, torx bits, pliers, cutters, Channel Locks, vise grip pliers, files, hammers, punches, chisels, and pry bars. Brake service tools, including brake spring pliers, and hold down tool.
- Pneumatic tools, including air ratchets, and air impact wrenches.
- Electrical tools, including multi meter, 12-volt circuit tester, remote starter switch, and insulation piercing test probes.

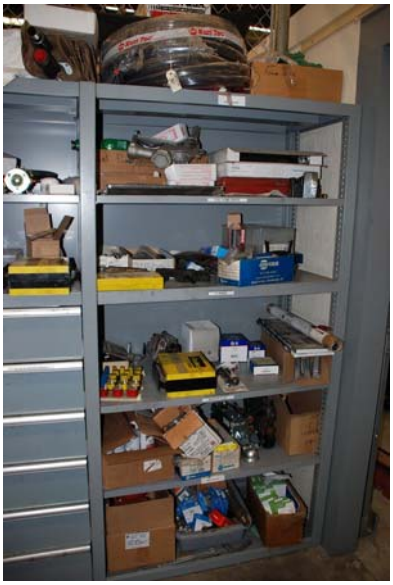


- Testing equipment, such as cylinder leakage tester, compression gauge, and radiator pressure tester.
- Various automotive and mechanical parts such as mufflers, brake drums, batteries, and tires.
- Other small tools, such as flash light, knife, inspection mirror, spark plug gauge, micrometer, and tape measure.
- Vehicle lifts.
- Wheel balancing machine.
- Rolling/wheeled carts.
- Creeper.
- Toolboxes.
- Cutting torch. Welding torch & Equipment.
- Sand blaster.
- Parts washer.
- Two-way radios.
- Work trucks, automobiles, and forklift.
- Portable jacks. Hand lifts. Manlifts. Forklifts.
- Maintenance manuals and reference guides (hard



copy and electronic).
- Shop workbenches. Shelving units. Cabinets.
- Personal protective equipment: Safety vests. Safety glasses/protective eyewear. Hearing protection. Face shield. Gloves.

Education / Training

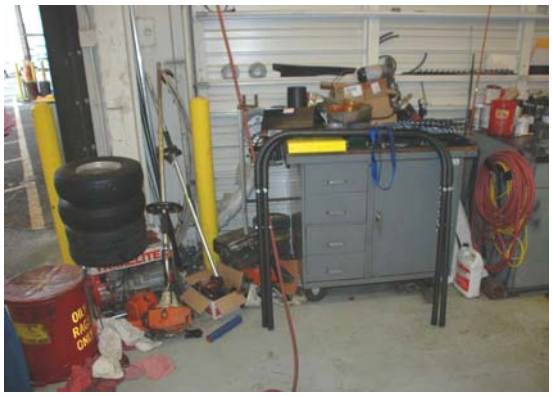


The Automotive Machinists in Aviation Maintenance, including the Foremen, are members of the International Union of Auto Machinists Local #289.

The Foremen would be Journeyman level Machinists with significant experience in the maintenance and repair of a wide range of vehicles and equipment.

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

Foremen must also complete the Front Line Supervisor Training as a Port of Seattle requirement. This training is offered once a year and must be completed during the first year as a Foreman.



Must possess a valid Washington State driver's license, have the ability to obtain a Commercial Driver's License (CDL) (if required), and pass a security background check.

Per the Dictionary of Occupational Titles (DOT):
620.261-010 Vehicle Equipment Mechanic - Specific Vocational Preparation (SVP): 7 (Two to four years)
620.131.-014 Supervisor, Garage - Specific Vocational Preparation (SVP): 7 (Two to four years)

Bock Consulting

Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle
DOT # 620.261-010 & 620.131-014

COGNITIVE AND BEHAVIORAL ELEMENTS/DEMANDS

The psychological and cognitive demands of this position vary depending on assignments and duties.

Frequency Definitions:
Continuously = Occurs 66-100% of the time. **Occasionally** = Occurs 1-33% of the time
Frequently = Occurs 33-66% of the time. **Rarely** = May occur less than 1% of the time.
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.	Frequently
	Using technology/instruments/tools & information systems.	Continuously
	Working with two and three dimensional formats.	Frequently
Remembering		
	Remembering spoken instructions.	Continuously
	Remembering written instructions.	Continuously
	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.	Continuously
	Thinking critically and making sound decisions.	Continuously
	Integrating ideas and data for complex decisions.	Occasionally
	Determining and following precise sequences.	Frequently
	Coordinating and compiling data and information.	Occasionally
	Analyzing, synthesizing data and information.	Occasionally
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.	Continuously
	Directing, controlling, or planning for others as necessary for complex tasks.	Frequently
	Multi-tasking.	Continuously
	Planning, prioritizing, and structuring daily activities.	Continuously

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Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle
DOT # 620.261-010 & 620.131-014

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 improve outcome.	Continuously
Working independently and/or unsupervised.	Continuously
Adapting to frequent interruptions, changes in priorities, or changes in work location.	Frequently
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.	Required
Being punctual.	Required
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.	Beneficial

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Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle
DOT # 620.261-010 & 620.131-014

PHYSICAL DEMANDS

N/A: Not Applicable
S: Seldom (1-10% of the time)
O: Occasional (10-30% of the time)
F: Frequent (30%-70% of the time)
C: Constant (Over 70% of the time)
WNL: Within Normal Limits (talking, hearing, etc.)

STRENGTH: ☐ Sedentary ☐ Light ☐ Medium ☒ Heavy ☐ Very Heavy

	Frequency	Comments
Sitting	**F**	**While performing administrative duties, participating in meetings, operating vehicles, sitting in vehicle or on ground while working, and sitting on stool at workbench. Frequency may be on the higher end of range when acting as Administrative Foreman, and on the lower end when acting as Shop Foreman.**
Standing	**O-F**	**Interchange with walking. Depends on assigned tasks. Picking up parts and supplies from shop inventory, working on vehicles or larger pieces of equipment, or standing at workbench or talking with co-workers. Standing may be on concrete, asphalt, dirt, gravel, even and uneven surfaces, or wet or oily surfaces. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**
Walking	**O-F**	**Interchange with sitting and standing. Depends on assigned tasks. Picking up parts and supplies from shop inventory, walking within shop, walking to equipment in field, and walking to meetings or to talk with co-workers. Walking may be over concrete, asphalt, dirt, gravel, even or uneven surfaces, or wet or oily surfaces. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**
Lifting (up to 10 pounds)	**F**	**While lifting paperwork, office supplies, documents, binders, parts, automotive/mechanical supplies, smaller tools and equipment, and radio.**
Lifting (10 to 25 pounds)	**O**	**While lifting medium sized parts (passenger vehicle alternators weigh 10 to 25 lbs), cases of supplies, system components, smaller batteries, wheels, and tires (separately). Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**
Lifting (25 to 70 pounds)	**S**	**While lifting large parts (i.e., brake drums for large equipment weigh 70 lbs.), batteries (passenger vehicle 50-60 lbs), and smaller wheels with mounted tires. Note: There is equipment, including an overhead hoist and forklift, located in the shop that can be used to lift heavier items. In addition, assistance from co-workers is generally available when lifting heavier items. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**

Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle
DOT # 620.261-010 & 620.131-014

Lifting (70 to 100 pounds)	**Rare**	**While lifting large parts (i.e., brake drums for 40' passenger bus weigh 100 lbs.), larger batteries, and larger wheels with mounted tires. Note: There is equipment, including an overhead hoist and forklift, located in the shop that can be used to lift heavier items. In addition, assistance from co-workers is generally available when lifting heavier items.**
Carrying (up to 10 pounds)	**F**	**While carrying paperwork, office supplies, documents, binders, parts, automotive/mechanical supplies, smaller tools and equipment, and radio.**
Carrying (10 to 25 pounds)	**S-O**	**While carrying medium sized parts (alternators weigh 10 to 25 lbs), cases of supplies, system components, smaller batteries, wheels, and tires (separately). Note: Wheeled carts, overhead hoist, and forklift are available to use to transport heavier items in and around shop area, and potentially in the field. In addition, assistance from co-workers is generally available when transporting heavier items. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**
Carrying (25 to 70 pounds)	**S**	**While carrying large parts (i.e., brake drums for large equipment– 70 lbs.) and larger batteries (50-60 lbs) short distances. Note: There is equipment, including an overhead hoist and forklift, located in the shop that can be used to move heavier items. Wheeled carts are also available to use to transport heavier items in and around shop, and potentially in the field. Assistance from co-workers is generally also available when moving heavier items. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**
Bending at Waist	**F**	**While working at desk, gathering items from or placing items in files, obtaining reference materials, obtaining or replacing items/supplies located below waist level, entering/exiting vehicles, and performing assigned tasks on vehicles. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**
Bending Neck	**C**	**While performing assigned tasks.**
Pushing/Pulling (Up to 20 pounds)	**O**	**While opening/closing doors, opening/closing drawers, gathering supplies and parts from shelves, using tools, loosening a bolt, pulling parts from or placing parts into tight locations located on vehicles and equipment, removing wheels, rolling tires and or tires and wheels, and operating hoist and portable jacks. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**
Pushing/Pulling (20 to 60 pounds)	**Rare**	**There are circumstances where extra force may be needed to loosen a bolt to remove a part/component. For example, when a wheel is rusted onto a hub or a starter is rusted into place.**
Climbing Stairs/Ladders	**S**	**Workers may encounter stairs in the shop facilities, and potentially while working in the field. Ladders may be used for some tasks. Short ladders or stairs attached to a vehicle may be used to reach the cab or the top of a vehicle.**

Job Analysis: Automotive Machinist Foreman (Aviation Maintenance) – Port of Seattle
DOT # 620.261-010 & 620.131-014

Crouching/Kneeling	**S**	**Depending on work assigned. Working below knee level; gathering items stored at or below knee levels. Note: Workers may wear knee pads while working. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**			
Twisting at Waist	**S**	**Depends on assigned tasks. Twisting can be limited if the worker moves feet while working.**			
Reaching (Floor to Shoulder)	**F**	**Depends on assigned tasks. While gathering items on desk or in drawers, obtaining/storing parts and supplies, driving vehicles, while using tools and equipment, removing, repairing, and replacing parts and components of vehicles and equipment, operating controls, knobs, and switches on vehicles and machines. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**			
Reaching (Over the Shoulder)	**S-O**	**Depends on assigned tasks. While gathering items stored on shelves over desk or over height when standing, while removing, repairing, and replacing parts and components of vehicles and equipment Vehicles may be lifted on a hoist overhead to access parts/components for repair. The Foreman may lie on a creeper or on the floor under a vehicle to repair or replace parts overhead or conduct an inspection. Frequency may be on the higher end of range when acting as Shop Foreman and on the lower end when acting as Administrative Foreman.**			
Repetitive Motion	**N/A**	**The variety and sequencing of tasks assigned to a Foreman eliminates repetitive motion.**			
Handling/Grasping	**F**	**60**	% Pinch Grasp	**40**	% Whole Hand Grasp
Fine Finger Manipulation	**F**	**While processing paperwork, writing notes, using keys to start vehicles and equipment, using tools, equipment controls, knobs, and switches, repairing and or replacing parts, hand tightening nuts and other fasteners, leafing through printed manuals, using computer mouse, dialing phone, using 2-way radio, and picking up smaller items and parts.**			
Keyboarding	**F**	**While creating and closing work orders in time tracking system, entering time and work performed on a daily basis, creating and responding to electronic mail, creating work schedules, documenting inspections and repairs, using online resources to look up parts and equipment guides. Frequency may be on the lower end of range when acting as Shop Foreman, and on the higher end when acting as Administrative Foreman.**			
Driving	**S**	**While moving vehicles, driving to job sites and test driving vehicles and equipment. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**			
Operating Foot Controls	**S**	**While moving vehicles, driving to job sites or meetings and test driving vehicles and equipment. Frequency may be on the higher end of range when acting as Shop Foreman, and on the lower end when acting as Administrative Foreman.**			

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Talking	**C**	**Communicating with co-workers, supervisors, other Aviation Maintenance personnel (to discuss repairs), vendors, and potentially the public.**
Hearing	**C**	**Communicating with co-workers, supervisors, other Aviation Maintenance personnel, vendors, and potentially the public. Listening to sounds of various engines and equipments. Listening for hazards and radio traffic.**
Seeing	**C**	**Visual abilities would be considered important in this position.**
Writing	**S**	**Writing notes or parts numbers.**
Normal Job Site Hazards	**F**	**Workers may be exposed to fumes, dust, loud noise, moving machinery, moving vehicles, hot metal parts (burn hazard), chemicals, solvents, petroleum products, and slippery surfaces. Specifically when working out of the shop, workers may be exposed to traffic.**
Expected Environmental Conditions	**C**	**Workers may work in a shop office or general shop environment, but may also work in the field, which would expose them to outside weather conditions.**

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

Job Analysis Reviewed By: Benny Austin

Completed by Vocational Provider Brice York, B.A., CDMS

Date **October 6, 2011**

Signature of Vocational 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
☐ Permanent

☐ 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

COMMENTS:

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

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