



# Bock Consulting

## Job Analysis

	Technical Reviewer		
	Operating Engineer	Worker	
Job Title	(Conveyance Shop)		
DOT Number(s)	950.131-014 and 019.081-010	Claim Number	
Employer	Port of Seattle	Employer Phone #	(206) 787-3000
Employer Contact	Ryan Pazaruski	Date of Analysis	November 21, 2016

- Job of Injury    
 Transferable Skills Job    
 New Job    
 40 hours Per Week    
 4 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 the position of Technical Reviewer Operating Engineer (Conveyance Shop) (“TROE”).

The primary purpose of this position is to act as an advocate for the Operating Engineers from the Conveyance Shop, while working collaboratively with, and in support of, the Aviation Maintenance Capital Liaison team to ensure construction and installation projects are completed with maintainability, safety, and total cost of ownership in mind.

The TROE will primarily work in the Collaborative Technical Review area, located in the airport office building (“AOB”). Work may also be completed in the Conveyance Shop, or at various locations throughout the airport.

The work performed by a TROE can generally be categorized





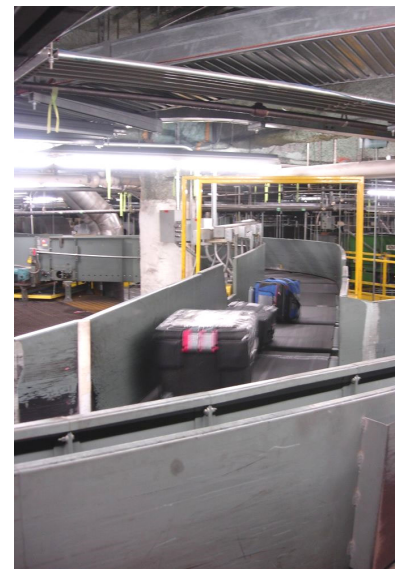
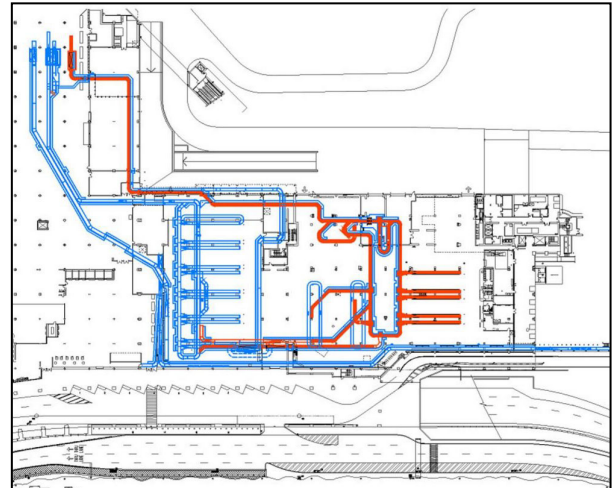
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as follows:

Work Category	Estimated Time
Office-Based Work	50-75%
Meetings	10-30%
Visiting Field Sites	5-20%
Total	100%

Essential Functions of TROE

- Use Bluebeam software to review designs and other submittals. Documents and submittals may include:
  - Design drawing packages at various levels of design (30%, 60%, 90%, etc.).
  - Contract specifications at various levels of design, verifying conformance with Port and F&I Standards.
  - Contractor submittals, including verification against contract documents, and anticipated craft needs included in design stages.
- Identify safety and accessibility issues that may impact the long-term operability and maintainability of the mechanical systems installed in the Aviation Division facilities. Make recommendations on plans/projects to ensure that the Operating Engineers will be able to maintain the installed systems in a safe and economical manner.
- Participate in project meetings to gather and evaluate information related to project status, and communicate items that are required versus preferred, and differentiate between craft needs and Port needs.
- Participate pre-construction job walks, periodic in-progress site inspections, and pre-installation site walks.
- Collaborate with others to ensure that the Port receives project deliverables as anticipated.
- Participate in punch list job walks and timely documentation of issues to address.
- Assist in the identification and coordination of warranty issues.
- Participate in project commissioning and project acceptance as requested.
- Assist with Shutdown Requests (SDR) from Conveyance Shop personnel related to projects.
- Perform other tasks as assigned.



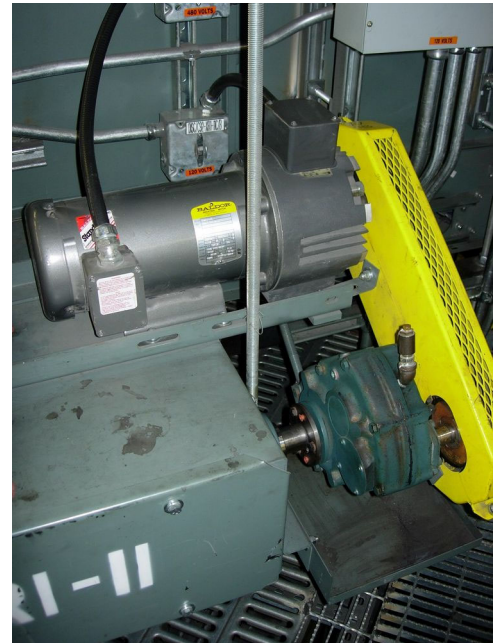


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While performing assigned tasks, the TROE will interact with a variety of individuals, including designers, engineers, contractors, project managers, construction managers, inspectors, tenants, and personnel from outside agencies.

Necessary skills and abilities may include:

- Strong technical knowledge related to large commercial mechanical systems and facilities, including a thorough and working knowledge of operations and maintenance of the mechanical systems at Sea-Tac Airport.
- Overall and detailed knowledge of airport operations, and how the mechanical systems interface with the systems of other crafts.
- Ability to read plans, blueprints, or drawings.
- Ability to visualize relationships between components, devices, and equipment to be constructed, and understand the relationships between items to be constructed with existing systems and equipment.
- Ability to utilize critical thinking and judgment in defining, analyzing, and proposing resolutions to identified issues.
- Ability to communicate effectively, both verbally and in writing.
- Knowledge of applicable safety codes, regulations and standard maintenance practices.
- Experience with contract specifications, submittals, and the Request for Information (“RFI”) process.
- Excellent time management and prioritization skills, with the ability to be detail oriented and multi-task.
- Ability to adapt to project and scheduled changes.
- Ability to meet strict deadlines.
- Ability to work independently, but also within a team environment.
- Working knowledge of Windows-based computers and related accessories, including keyboarding and data input skills. Working knowledge of Microsoft Office, Sharepoint and Maximo.







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Machinery, Tools, Equipment, Personal Protective Equipment:

- Windows-based computers (with applicable accessories, including keyboards, mice, and printers). Computers are loaded with a wide variety of software, including Microsoft Office applications (Word, Excel, and Outlook), Microsoft Sharepoint, and Maximo.
- Multi-line telephone. Mobile phone/device (with camera).
- Ladders. Manlifts.
- Port vehicles.
- General office equipment, including desks, chairs, photocopying and facsimile machines, and file cabinets, shelves, and storage cabinets.
- General office supplies, including pens, paper, binders, and other items.



A safety vest is worn when visiting project sites. A hardhat, eye protection, protective footwear, and ear protection are worn as required.

Education / Training:

Minimum Qualifications:

- Journeyman Operating Engineer in the Aviation Maintenance Conveyance Shop.
- Knowledge of Windows-based computers, applicable accessories, and various software applications, including Microsoft Office, Sharepoint and Maximo.

Preferred Qualifications:

- Understanding of project costing and scheduling
- Demonstrated technical writing skills
- Familiarity with the Port's F&I Standards.

**Per the Dictionary of Occupational Titles (DOT):**

**950.131-014 Stationary Engineer Supervisor** Specific Vocational Preparation (SVP): 7 (Two to four years)

**019.081-010 Maintainability Engineer** SVP: 8 (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 the time  
**Frequently** = Occurs 33-66% of the time.      **Rarely** = May occur less than 1% of the time.  
**Never** = Does not ever occur.

<b>Comprehension</b>	
Articulating and comprehending information in conversations.	Continuously
Reading, comprehending, and using written materials.	Continuously
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.	Continuously
<b>Remembering</b>	
Remembering spoken instructions.	Frequently
Remembering written instructions.	Frequently
Remembering visual information.	Continuously
Recalling information incidental to task at hand.	Continuously
Memorizing facts or sequences.	Occasionally
Remembering simple instructions.	Continuously
Remembering detailed instructions.	Continuously
<b>Learning &amp; Processing</b>	
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.	Continuously
Determining and following precise sequences.	Occasionally
Coordinating and compiling data and information.	Continuously
Analyzing, synthesizing data and information.	Continuously
<b>Tasking and Planning</b>	
Performing repetitive or short-cycle work.	Occasionally
Working under specific instructions.	Continuously
Completing complex tasks.	Continuously
Directing, controlling, or planning for others as necessary for basic tasks.	Occasionally
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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<b>Use Appropriate Behavior for Professional Work Environment</b>	
Receiving criticism and accepting limits appropriately.	Continuously
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.	Continuously
Responding effectively to emergency situations.	Never

Frequency Designations: <b>Required Beneficial Not Necessary</b>	
<b>Maintaining Attendance and An Assigned Work Schedule</b>	
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.	Required



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**PHYSICAL DEMANDS**

**N/A:** Not Applicable

**S:** Seldom (1-10% of the time)

**O:** Occasional (10-30% of the time)

**STRENGTH:**  Sedentary  Light

**F:** Frequent (30%-70% of the time)

**C:** Constant (Over 70% of the time)

**WNL:** Within Normal Limits (talking, hearing, etc.)

Medium  Heavy  Very Heavy

Frequency

Comments

Sitting	<b>F-C</b>	Working on computer, working at desk, talking on the phone, and participating in meetings. Potentially while driving vehicle to project sites.
Standing	<b>S-O</b>	Gathering items not reachable while seated, making photocopies, picking up print-outs, sending faxes, and talking with other individuals. Conducting site visits and/or system/equipment reviews.
Walking	<b>S-O</b>	Walking in the primary office workspace to printer/fax/copier, to talk to other individuals, or to gather files and supplies. Walking to conference rooms or shop for meetings. Conducting inspections and field visits.
Lifting (up to 5 pounds)	<b>O</b>	Lifting documents, files, telephone receiver, mobile phone/device, office supplies, and 1 ream of copy paper.
Lifting (5 to 10 pounds)	<b>S</b>	Lifting large files, binders, hard copy plans, printed reference materials, and 2 reams of copy paper.
Carrying (up to 5 pounds)	<b>O</b>	Carrying documents, files, telephone receiver, mobile phone/device, office supplies, and 1 ream of copy paper.
Carrying (5 to 10 pounds)	<b>S</b>	Carrying large files, binders, hard copy plans, printed reference materials, and 2 reams of copy paper.
Pushing/Pulling (up to 10 pounds)	<b>S</b>	Opening/closing file cabinet drawers, and drawers on copy/fax machine. Opening cabinets and gathering supplies. Opening/closing building and vehicle doors. Driving vehicle.
Climbing Stairs/Ladders	<b>N/A-S</b>	Stairs may be encountered when out of the primary office work area. Ladders may be used to inspect equipment/systems.
Work at Heights/Balancing	<b>N/A-S</b>	If working from a ladder or manlift.
Bending at Waist	<b>O</b>	Working with items on desk, gathering items from file cabinet drawers, gathering printouts or copies, and gathering supplies/other items stored below waist level. Conducting field visits. Entering/exiting and operating vehicle.
Bending Neck	<b>C</b>	All of the tasks assigned to the TROE involve neck movements.
Twisting at Waist	<b>S</b>	Reaching for items on desk, in file cabinets, on shelves, or on photocopier/fax machine. Talking with other individuals. Inspecting equipment/systems in the field. Worker can minimize twisting by rotating chair while seated in the office, or moving feet while standing.
Crouching/Kneeling	<b>N/A-S</b>	Potentially when conducting field visits.
Stooping	<b>N/A-S</b>	Potentially when conducting field visits.
Reaching (floor to waist)	<b>N/A-S</b>	Reaching for items below waist level. Gathering items on photocopier/fax machine. Pointing to items below waist level.
Reaching (waist to shoulder)	<b>F</b>	Reaching for items on desk or worktable, in file cabinets, on shelves, or on photocopier/fax machine. Using computer mouse. Climbing ladder. Pointing to items between waist and shoulder level.



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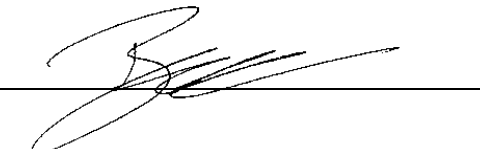
Reaching (over shoulder)	N/A-S	Retrieving items from shelves when seated at desk. Gathering items on shelves or in cabinets over shoulder level. Climbing ladder. Pointing to items over shoulder level.
Driving	N/A-S	Potentially driving to project sites on the airport property, or to off-site meetings/training.
Foot Controls	N/A-S	While driving.
Repetitive Motion	O	Using computer mouse and keyboard to enter or access data, or open and manipulate electronic drawings/blueprints.
Handling/Grasping	O	70 % Pinch Grasp 30 % Whole Hand Grasp
Fine Finger Manipulation	F	Writing. Dialing telephone. Using photocopier and fax machine. Using computer mouse and keyboard to enter or access data, or open and manipulate electronic drawings/blueprints.
Writing	S	Taking notes.
Keyboarding	F	Entering or accessing data, preparing and responding to emails, preparing correspondence and reports. Adding notes to electronic drawings/blueprints.
Talking	F	Communicating with co-workers, personnel from external entities, and vendors, in person or over the phone.
Hearing	C	Communicating with co-workers, personnel from external entities, and vendors. Listening for telephone. Listening for hazards when in the field.
Seeing	C	Normal or corrected vision. Visual abilities would be considered very important in this position, as the TROE is primarily tasked with reviewing drawings/blueprints to identify issues.
Normal Job Site Hazards	S	Generally limited in the primary office workspace. While in a shop or in the field, worker may be exposed to fumes, dust, loud noises, moving machinery, moving vehicles, chemicals and solvents, confined/tight spaces, working at heights, and wet/slippery surfaces.
Expected Environmental Conditions	C	A majority of work is performed in a temperature controlled office environment. Will visit shop environment and conduct field visits in and around the airport facilities. Areas visited may or may not be temperature controlled. May be exposed to external weather conditions at times. May work in confined/tight spaces, at heights, and work in environments typically found on construction sites. A PPE is required on construction sites.

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: Ryan Pazaruski

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

Date November 21, 2016 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**