For L&I Staff Use Only	
Received 09/08/2023 CA Received 09/05/2023 CA L&I Apprenticeship Consultant	Teri Gardner 9-8-23 Teri Gardner 9-5-23 L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530

Request for Revision of Standards

TO: Washington State Apprenticeship & Training Council

FROM: **IAM/Boeing Joint Apprenticeship Committee #154**

Please update our Standards of Apprenticeship to reflect the following changes:

- Additions shall be underlined (<u>underlined</u>).
- Deletions shall be struck through (~~struck through~~).
- See attached.

Form must be signed by Committee Chair *and* Secretary *or* Program's Authorized Signer

☐ Chair ☒ Authorized Signer	Date 9/5/2023	☐ Secretary	Date
Print Name: Raymond Miller		Print Name:	
Signature: Raymond Miller		Signature:	

Approved By: **Washington State Apprenticeship & Training Council**
Signature of Secretary of the WSATC:
Date:

Attach additional sheets if necessary

FROM: **IAM/Boeing Joint Apprenticeship Committee #154**

Occupational Objective(s):	SOC#	Term [WAC 296-05-015]
COMPOSITE MANUFACTURING TECHNICIAN	~~**51.9199.99**~~ **51-9199.00**	
INDUSTRIAL MAINTENANCE FLUID TECHNICIAN	**47-2152.00**	**7360 HOURS**
FLIGHT LINE MECHANIC	**49-3011.00**	**7360 HOURS**

II : MINIMUM QUALIFICATIONS:

Physical: **Able to perform the physical requirements of the apprenticeship, with or without reasonable accommodations. ~~For Industrial Electronic Maintenance Technician apprenticeship only, must also be able to distinguish between primary colors.~~**

Testing: **All applicants must complete an assessment or courses at a Community/Technical College, or University, with minimum assessment placement results or equivalent course completions as follows:1. English course 90 or better 2. Intermediate Algebra or better, taken within the last 5 years**
~~All applicants must complete an Assessment or Course within the last 5 years at their local Washington State college. The applicant must have minimum placement results or course completion as follows: Math Intermediate Algebra, English 90. An assessment may be completed prior to the time of application, but no later than 14 days following a request for document verification.~~

Other:

2. **All applicants shall qualify by Work experience or by Vocational Training as noted below:**

   Work Experience: One year of applicable work experience is required for all apprenticeships.~~, except for Industrial Electronic Maintenance Technician and Tool & Die Maker, which require two years of work experience.~~

IV. TERM OF APPRENTICESHIP

The term of apprenticeship will be 7,360 hours of reasonably continuous employment and experience in the principal operations of the trade for the following occupations:

Industrial Maintenance Fluid Technician
Flight Line Mechanic

V. INITIAL PROBATIONARY PERIOD:

C. For the 7,360 hours apprenticeship programs, the 20% probationary period is 1,472 hours. These programs are:

Industrial Maintenance Fluid Technician
Flight Line Mechanic

VII. APPRENTICE WAGES AND WAGE PROGRESSION:

C. Wage Progression Schedules

All IAM/Boeing Joint Apprenticeship programs:

For Blue Streak Mechanic; Composite Manufacturing Technician; Industrial Maintenance Fluid Technician, Jig & Fixture Tool Maker; Machinist; Metal Structures Technician; NC Spar Mill Operator; Tool & Cutter Grinder; and Quality Assurance Inspector programs.

Job Code	Step	Hour Range or competency step	Percentage of journey-level wage rate*
AxxA0	**1**	**0000 to 1000 hours**	**70.78%**
AxxA1	**2**	**1001 to 2000 hours**	**74.11%**
AxxA2	**3**	**2001 to 3000 hours**	**77.44%**
AxxA3	**4**	**3001 to 4000 hours**	**80.70%**
AxxA4	**5**	**4001 to 5000 hours**	**84.01%**
AxxA5	**6**	**5001 to 6000 hours**	**89.52%**
AxxA6	**7**	**6001 to 7000 hours**	**90.65%**
AxxA7	**8**	**7001 to 7360 hours**	**93.93%**

For Facilities Crane Maintenance Mechanic; Flight Line Mechanic; Manufacturing Machinist; Machine Tool Maintenance Mechanic; Maintenance Machinist; Model Maker; and NC Skin Mill Operator programs.

Job Code	Step	Hour Range or competency step	Percentage of journey-level wage rate*
AxxA0	**1**	**0000 to 1000 hours**	**70.95%**
AxxA1	**2**	**1001 to 2000 hours**	**74.26%**
AxxA2	**3**	**2001 to 3000 hours**	**77.75%**
AxxA3	**4**	**3001 to 4000 hours**	**80.88%**
AxxA4	**5**	**4001 to 5000 hours**	**84.21%**
AxxA5	**6**	**5001 to 6000 hours**	**87.52%**
AxxA6	**7**	**6001 to 7000 hours**	**90.84%**
AxxA7	**8**	**7001 to 7360 hours**	**94.19%**

VIII. WORK PROCESSES:

The apprentice shall receive on the job instruction and work experience as is necessary to become a qualified journey-level worker versed in the theory and practice of the occupation covered by these standards. The following is a condensed schedule of work experience, which every apprentice shall follow as closely as conditions will permit. The following work process descriptions pertain to the occupation being defined.

A. Blue Streak Mechanic

		Code	Hours
1.	Forming, Joggle Roll/Hydro/Stretch/Brake	A	750
2.	Drilling/Countersinking	B	~~130~~ 40
3.	Machining/NC*/CNC**/Conventional	C	500
4.	Non-Metallic	D	280
5.	Waterjet/Abrasive	E	~~120~~ 240
6.	Assembly	F	~~1600~~ 1000
7.	~~Adhesive~~ Shop Aides/3D Printing	G	~~120~~ 400
8.	CATIA/ENOVIA/REDARS	H	500
9.	Layout/Lofting	I	~~800~~ 400
10.	Deburr/Polish/Burnish	J	120
11.	Trim	K	500
12.	Finish	L	80
13.	Metallurgy/Heat Treat	M	160
14.	Composite	N	~~500~~ 200
15.	Stylus Cadmium Repair	O	120
16.	Rework/Repair	P	750
17.	Rotopeen/Flap Peen	Q	40
18.	Inspection	R	~~250~~ 240
19.	EDR***-Dent Pull	S	40
20.	Shop Specific	T	1000
	TOTAL HOURS:		**7360**

* Numerical Control
** Computer Numerical Control
*** Electromagnetic Dent Removal

Q. Industrial Maintenance Fluid Technician:

		Code	Hours
1.	Fuel Farm	A	240
2.	Fitting Pipe / Plumbing and Gas Lines	B	2080
3.	Storm Water System	C	200
4.	Tank Lines	D	900
5.	Waste Treatment	E	240
6.	Fire Protection	F	520
7.	Steam Maintenance	G	900
8.	Autoclave	H	360

9.	**Backflow / Domestic Water**	**I**	**360**
10.	**Plant Air**	**J**	**240**
11.	**Hydronics**	**K**	**240**
12.	**Repair / Replace Service Plumbing**	**L**	**600**
13.	**Safety**	**M**	**240**
14.	**Paint Hangars**	**N**	**240**

TOTAL HOURS: 7360

R. Flight Line Mechanic:

		Code	Hours
1.	**General Airplane Familiarity**	**A**	**700**
2.	**Safety / Human Factors**	**B**	**80**
3.	**Maintenance Forms, Records and System Applications**	**C**	**360**
4.	**Sheet Metal & Non-Metallic Structures**	**D**	**1000**
5.	**Functional Test - Basics**	**E**	**3000**
6.	**Engines**	**F**	**380**
7.	**Ground Ops & Servicing**	**G**	**600**
8.	**Remove / Replace / Repair / Rework**	**I**	**840**
9.	**Miscellaneous**	**J**	**400**

TOTAL HOURS: 7360

IX. RELATED/SUPPLEMENTAL INSTRUCTION:

C. Additional Information:

Apprentices will be provided with a minimum of 144 hours of RSI per year, up to a total of 640 over the course of their apprenticeship, unless otherwise directed by the committee, in the following occupations:

Flight Line Mechanic
Industrial Maintenance Fluid Technician

(RSI Per Year Variance Approved 01/15/2015)

X. ADMINISTRATIVE/DISCIPLINARY PROCEDURES:

A. Administrative Procedures:

2. Advanced Standing or Credit: The sponsor may provide for advanced standing or credit for demonstrated competency, acquired experience, training or education in or related to the occupation. All sponsors need to ensure a fair and equitable process is applied to all apprentices seeking advanced standing or credit per WAC 296-05-015(11).

a. Credit for Previous Education/Challenge of Curriculum (RSI Only):

1 An apprentice who has previous industry-related education may request credit. An apprentice will be required to submit evidence of equivalent course completion with a minimum of an 80% grade. There is a maximum credit of 50% that may be awarded.

2 To be considered for credit for previous education, apprentices must have successfully completed post-secondary level class(es) in the related subject within the previous five (5) years, have a passing grade of 80% or higher and submit the proper paperwork and any additional requested information prior to consideration by the Apprenticeship Committee.

3 The final decision to grant the apprentice the requested credit, will be made in a fair and equitable manner by the Apprenticeship Committee, after the review of submitted documentation.

3. Sponsor Procedures:

~~**b. The Committee will determine the apprentice's progress in manipulative skills and technical knowledge, through examination of their records, and by tests or examinations, which may, on occasion, be deemed advisable or necessary.**~~

b.~~c~~. The Committee will assist apprentices in all matters pertaining to their employment as apprentices and in such other personnel matters as the apprentice may bring before them.

~~**d. The Committee will cooperate with supervisors, managers, human resources, and school in maintaining discipline among apprentices and ensuring their progress.**~~

~~e. The Committee will cooperate with the related training school in the preparation, presentation, and revision of related instructional matter.~~

~~f.~~c. The Apprenticeship Coordinator will provide annual reports covering the work of the Apprenticeship Committee to the Company, the Union, and the Washington State Apprenticeship and Training Council as requested.

d.~~g~~. Evaluation during probation:

From the information obtained on the weekly evaluation, the evaluating supervisor will submit, a written monthly report to his or her management. The written monthly report will take into consideration the following factors: mechanical aptitude, attitude, work habits, comprehension, retention, interest, attendance, and the individual's ability to work with other employees. After the written monthly evaluation has been reviewed and approved by the first ~~and second~~ line management, a copy of the evaluation will be forwarded to the IAM/Boeing Apprenticeship Training Office for review by the IAM/Boeing Joint Apprenticeship Committee.

e.~~h~~. Probationary Work Schedule:

During the probationary work schedule, the apprentice's shift assignments may be divided between first and second shift.

3. Sponsor Disciplinary Procedures:

Disciplinary actions:

a. Unsatisfactory Progression

A time assessed when the apprentice's progress is not satisfactory. Examples of unsatisfactory progress include, but are not limited to, failure of class, non-reporting of OJT hours, unacceptable program behavior, etc.

1) **~~The apprentice shall receive a Notice of Unsatisfactory Progression. Prior to unsatisfactory progression notice, the Apprenticeship Coordinators will meet with the apprentice to be sure that all items are documented correctly.~~ The apprentice shall receive a Notice of Unsatisfactory Progression from the Apprenticeship Coordinator and review the matter to develop an Individual Recovery Plan (IRP).**
2) **~~All Unsatisfactory Progressions will require the apprentice to attend the next regular IAM/Boeing JAC meeting to develop an Individualized Recovery Plan.~~ Unsatisfactory Progressions will require the apprentice to attend an IAM/Boeing JAC meeting to review the IRP.**
3) **~~During an Unsatisfactory Progression, the apprentice will continue to attend and maintain satisfactory Related Supplemental Instruction progress. If the apprentice is delinquent in RSI, they shall have 30 days to be in good RSI standing. During the 30 days, their RSI lesson requirement will pause. They will be required to continue to go to class and complete their 4 hours of RSI hours a week or more if the apprentice is behind in hours. If the apprentice is delinquent in turning in accurate OJT logs, they shall have 30 days to turn in their OJT logs. If OJT logs have not been received~~**

~~**during unsatisfactory progression, the apprentice will be on disciplinary probation.**~~ **During an Unsatisfactory Progression status, the apprentice is expected to continue to attend and maintain normal RSI and OJT requirements.**

5) **If the apprentice does not satisfy the IRP, they could be placed in Disciplinary Probation status.**

b. Disciplinary Probation

A Time assessed when the apprentice's progress continues to remain unsatisfactory, or the apprentice's conduct is unacceptable.

1) ~~**The apprentice shall receive a 20-Day Notice of intention of disciplinary action per Section X.C. of these Standards.**~~ **The apprentice shall receive a 20-Day Notice of intention of disciplinary action per Section X.C. of these Standards and attend the next regular IAM/Boeing JAC meeting to review their status.**
2) ~~**All Disciplinary Probation will require the apprentice to attend the next regular IAM/Boeing JAC meeting to review their status.**~~ **During a Disciplinary Probation, the apprentice will continue to attend and maintain satisfactory Related Supplemental Instruction progress**

3) ~~During a Disciplinary Probation, the apprentice will continue to attend and maintain satisfactory Related Supplemental Instruction progress. If the apprentice is on Disciplinary Probation due to RSI deficiencies, they shall have 60 days to be in good RSI standing. During the 60 days, their RSI lesson requirement will pause. They will be required to continue to go to class and complete the 4 hours of their required RSI per week or more if deemed needed by the committee. If the apprentice is delinquent in turning in accurate OJT logs, they shall have 60 days to turn in their OJT logs.~~ A third disciplinary probation may be reason for the apprentice to be cancelled from their Apprenticeship Program.
4) ~~During Disciplinary Probation, work hours (OJT) shall not be credited towards the apprenticeship program.~~ A disciplinary Probation will end when the identified deficiencies have been corrected.
5) ~~During Disciplinary Probation, the apprentice shall continue to report for work, be compensated at his or her current wage rate, and shall be designated work assignments that are equal to or below the current wage rate.~~

~~6)~~ 5) A third disciplinary probation may alone be reason to cancel the Apprenticeship Agreement.

~~7)~~ 6) A disciplinary Probation will end when the identified deficiencies have been corrected~~.~~

e. Definitions

2) Unsatisfactory Progress – RSI: ~~Receiving less than minimum hours or lessons status (defined as 9 or more lessons deficient and/or 8 or more hours deficient); multiple test failures defined as two consecutive failures of a test; a third consecutive failure of a test.~~ Failure of class (below 80%) or multiple test failures defined as two consecutive failures of a test.
3) Unsatisfactory Progress – ~~Work Performance~~ OJT: Two consecutive monthly grades of less than three (3) or a monthly grade of (1). OJT logs more than 60 days delinquent or turned in after the due date 3 times within a 12-month period. OJT logs are required to be turned in by the 10th of the month.
4) ~~Unsatisfactory Progress – OJT: OJT logs more than 30 days delinquent, without a company approved leave of absence. OJT logs will be turned in, on the 10th of the month.~~

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Received 09/05/2023 CA	Teri Gardner 9-5-23
L&I Apprenticeship Consultant	L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530

Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

Program Name	
IAM/Boeing Joint Apprenticeship Committee	
Occupation	
Industrial Maintenance Fluid Technician	
Term/OJT Hours	Total RSI Hours
7360 hours	640 hours
Training Provider	
South Seattle College	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprentice and assures that:

1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliances with WISHA and applicable federal and state regulations.
4. The RSI Plan is maintained, updated and submitted to the Department a minimum of once every 5 years (WSATC Policy 2015-01; rev, 10-21-21).
5. The RSI will be conducted by instructors who meet the qualification of the "competent instructor" as described in WAC 296-05-003:
    a. Has demonstrated a satisfactory employment performance in her/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
    b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
    c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
6. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, instruction shall be clearly defined.

Signatures on next page

Form must be signed by Committee Chair *and* Secretary *or* Program's Authorized Signer

☐ Chair ☒ Authorized Signer	Date 9-5-2023	☐ Secretary	Date
Print Name: Raymond Miller		Print Name:	
Signature: Raymond Miller		Signature:	

Training Provider Signature

Approved By (Print Name): Laura Kingston	Title: Interim Executive Dean, Georgetown, South Seattle College
Signature of the Training Provider: Laura Kingston	
Date: Sep 5, 2023	

If additional training providers are needed, go to page 4.

SBCTC

Print Name:	Title:
Signature of the Program Administrator:	
Date:	
☐ SBCTC recommends approval	☐ SBCTC recommends return to sponsor

Program Name	Occupational Objective
IAM/Boeing Joint Apprenticeship Committee	Industrial Maintenance Fluid Technician

Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of Element/Course" field.

Describe minimum hours of study per year in terms of (check one):

☐ 12-month period from date of registration.
☒ Defined 12-month school year.
☐ 2,000 hours of on-the-job training.

Element/Course: Foundations of Plumbing -year 1	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: In this course apprentices will learn the background and history of plumbing. Apprentices will gain familiarity with materials and tools used in the trade. Troubleshooting, reasoning, and problem-solving skills will also be introduced to the apprentices. In this introductory course apprentices will gain a high-level knowledge of plumbing skills including, but not limited to, heating and cooling, waste removal, and potable water delivery. They will also recognize various types of pipes, valves, plumbing fixtures, tanks, and other apparatuses that convey fluids.	

Element/Course: Backflow Assembly Tester (Trainee Cert) – year 1	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: In this course apprentices learn to identify the different types of backflow preventers, components, and functions. Apprentices learn to inspect and test backflow prevention assembly installations. Apprentices will also learn and demonstrate the proper methods to record and report assembly test results. This course follows the regulations, policies, and procedures established by the Washington State Department of Health (DOH) in cooperation with the Waterworks Operator Certification Advisory Committee. This course meets Washington State Department of Ecology Criteria for Wastewater Treatment Plant Operators and Washington State DOH Relevancy Criteria for Waterworks Operator Professional Growth.	

Element/Course: Power Plant Fundamentals – year 1	Planned Hours: 5
Mode of Instruction (check all that apply) ☐ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: In this introductory course apprentices will learn the basic steam generation system, how thermal energy is converted into electrical energy, components of the system, and design features for gaining thermal efficiency. Topics covered include: handling of water, fuel, and wastes, and the operating features and maintenance of a power plant.	

Element/Course: Generating & Using Steam in a Power Plant – year 1	Planned Hours: 10
Mode of Instruction (check all that apply) ☐ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: Apprentices will learn energy principles and boiler maintenance. They will gain an understanding of coal, oil, and natural gas combustion, as well as how to conserve energy through combustion control. Apprentices will also learn various methods of conserving energy in turbines, auxiliaries, and air conditioning systems.	

Element/Course: Industrial Rigging Principles and Practices – year 1	Planned Hours: 7

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
Apprentices will learn multiple techniques and safeguards in the use of rope, chain, hoists, and scaffolding when moving heavy plant equipment and maintaining plant utilities.

Element/Course: Equipment Installation – year 1	Planned Hours: 5

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
In this course apprentices will learn installation and maintenance procedures for large plant equipment. This course considers factors affecting proper installation in detail, from preparatory relocation of underground piping and wiring, through equipment anchoring, aligning, and test runs.

Element/Course: Basic Crane Operations – year 1	Planned Hours: 2

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
This course provides apprentices the basic information for how to rig, load, and safely operate cranes.

Element/Course: Reading Blueprints – year 1	Planned Hours: 15

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
Apprentices will learn to read and interpret several varieties of blueprints used in industrial plant. They will have the opportunity to examine hydraulic, pneumatic, piping, plumbing, electrical, air-conditioning, and refrigeration drawings. Apprentices will identify details, and markings from an assembly drawing. Apprentices will learn to name and identify from an exhibit several types of threaded fasteners and they will recognize and name building materials given their standard symbols.

Element/Course: Facilities Blueprints Interpretation – year 1	Planned Hours: 10

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
In this course apprentices will gain an understanding of Boeing's Drawing System and explain the drawing system storage and retrieval processes. Apprentices will explain the uses of drawings. Apprentices will learn to interpret the drawings and recognize various blueprint trade symbols for electrical, hydraulics, pneumatics, and plumbing.

Element/Course: Using NFPA – year 1	Planned Hours: 10

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
Apprentices will learn to locate and apply requirements for sprinkler system valves including water control valves, hose valves, and backflow prevention devices. After gaining an understanding of the purpose of NFPA 13, apprentices will learn how to achieve life safety, property protection, and environmental safety objectives. Apprentices will also learn the purpose and scope of NFPA 25. They will define and identify impairments and both critical and non-critical deficiencies. Apprentices will identify inspection, testing, and maintenance activities to be conducted on a scheduled basis and for unscheduled events.

Element/Course: Plumbing and Gas Codes – year 2	Planned Hours: 50
Mode of Instruction (check all that apply) ☐ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: In this course apprentices will gain understanding of the general regulations for plumbing materials, required sewers, location of sewers, and prohibited fittings and practices. They will also learn code standards for the installation, operation, and maintenance of gas piping and equipment. Apprentices will learn how the National Standard Plumbing Code (NSPC) is administered and they will gain an understanding of the principles on which plumbing codes are based. Apprentices will determine the correct use of materials, fittings, joints and fixtures. Additionally, apprentices will learn to determine if water and sanitary piping systems and their vents conform to code and they will use various table to determine the size of different parts of plumbing systems. Testing is addressed regarding air, water, and mercury techniques. Additional topics covered include private sewer disposal systems, septic tanks, leach fields, and storm drainage.	

Element/Course: Shop Algebra – year 2	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: South Seattle	
Description of element/course: Apprentices will learn to recognize and interpret algebraic terminology and symbolism. They will understand and apply the order of operations and be able to solve equations for unknown quantity. Finally, they will demonstrate the ability to create algebraic equations from word statements or illustrations.	

Element/Course: Algebra Basics: As Applied to Water and Wastewater Formulas – year 2	Planned Hours: 14
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: In this course apprentices will develop skills with applying Algebraic concepts to everyday formulas associated with water and wastewater system operations.	

Element/Course: Water Hydraulics – year 2	Planned Hours: 36
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: In this course apprentices will examine the general principles of water hydraulics and how they relate to the operation of water distribution systems, wastewater collection systems, and water and wastewater treatment facilities. Topics covered include mass, density, displacement, flow, velocity, pressure, Bernoulli's theorem, friction loss, minor head loss, and flow measurement. This course will enable apprentices to apply basic water hydraulic concepts to practical situations and to perform calculations related to basic water hydraulics applications. Apprentices will learn to monitor water distribution system pressure and to calibrate flow meters. Apprentices will also learn to determine water volume and water flow rate, as well as identify flow characteristics like pipe size, C-factor, and head loss.	

Element/Course: Water and Wastewater Utility Confined Space Entry – year 2	Planned Hours: 8
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: Apprentices will learn the essentials of federal and state confined space entry standards. Apprentices will learn to comply with regulations, reduce liabilities, and avoid costly penalties.	

Element/Course: Wastewater Treatment Processes – year 3	Planned Hours: 5
Mode of Instruction (check all that apply)	

☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
In this course apprentices will gain an understanding of the various stages of wastewater treatment. Focus will be placed on the removal of solids, and the use of chemical and biological processes for water purification. Apprentices will also learn about the treatment and disposal of extracted solids.

Element/Course: Industrial Plumbing and Pipefitting – year 3	Planned Hours: 40

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
Apprentices will gain the skills and knowledge needed to perform tasks associated with the trades of plumber and pipefitter. They will learn how to use the tools of the trade with an emphasis on safety. The methods used to join pipe and the procedures for supporting, installing, and testing piping systems are also covered in this course. Apprentices will learn common plumbing fixture installation and maintenance, along with a review of tanks, pumps, and boilers.

Element/Course: High Pressure Pipefitting and Sanitary Plumbing Fixtures – year 3	Planned Hours: 20

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
In this course apprentices learn the design and arrangement of pipes. They will successfully complete calculations related to pipes and pipefitting, and they will explain the differences between various valves and cocks and the uses for each. Apprentices will learn the purpose for and uses of separators and steam traps. They will gain a working knowledge of institutional fixtures and some of the common problems associated with each and various troubleshooting techniques to repair and maintain them. Finally, apprentices will demonstrate an understanding of sanitary plumbing fixtures and their manufacture.

Element/Course: Domestic, Institutional, and Cold-Water Supply – year 3	Planned Hours: 20

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
Apprentices will explain ground water supply, pneumatic water supply, and demonstrate how to measure water. In this course apprentices will learn the differences between and explain the purposes for surface water supply and reservoirs and various treatments of water. Finally, apprentices will learn various service connections and be able to explain pressure and suction tank connections, specifically.

Element/Course: Welding Shop Safety – year 3	Planned Hours: 1

Mode of Instruction (check all that apply)
☐ Classroom ☐ Lab ☒ Online ☐ Self-Study
Provided by: Boeing

Description of element/course:
While stressing the importance of safety to self and others in the shop, this course will alert apprentices to, as well as teach them how to avoid, the many hazards associated with welding. Topics covered include operator and fire safety, personal safety and proper attitude, safe use of equipment, and cylinder safety.

Element/Course: Applied Composition – year 3	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: South Seattle College	
Description of element/course: In this course apprentices will master composition skills needed in business and industry. They will learn to use principles and conventions of technical writing. Apprentices will also learn and practice electronic communications etiquette, all while developing teamwork and industry communication skills.	

Element/Course: Electrical Fundamentals for Maintenance – year 3	Planned Hours: 3
Mode of Instruction (check all that apply) ☐ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: This course will familiarize non-electrical workers with the basics of electricity and electronics to improve their ability to troubleshoot systems and to team with electrical workers. Apprentices will be familiar with electrical and electronic terminology. They will also understand electrical components used in machine tool systems and have an awareness of electrical hazards and how to control them.	

Element/Course: Electrical Fundamentals for Non-Electrical Workers – year 3	Planned Hours: 24
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: This introductory course familiarizes non-electrical workers—such as machine tool mechanics, millwrights, and plumbers—with the basics of electricity and electronics to improve their ability to troubleshoot systems and to team with electrical workers.	

Element/Course: Introduction to Computers – year 4	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: South Seattle College	
Description of element/course: Apprentices will gain an introductory understanding of Microsoft Word and Microsoft Excel. They will learn how to take screen captures and create PDFs. Apprentices will demonstrate good 'Netiquette and understand why it is important. Apprentices will learn to attach documents to email.	

Element/Course: Chemical Hazards and Preventive Maintenance – year 4	Planned Hours: 8
Mode of Instruction (check all that apply) ☐ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: In this course apprentices become familiar with OSHA's Hazard Communication Standard. They will understand the physical and health hazards presented by dangerous chemicals and they will be able to explain the information contained in a Material Safety Data Sheet (MSDS). Apprentices will also explain the need for Preventive Maintenance (PM) and they will be able to describe elements needed to establish a PM program. Apprentices will learn to list the data that can be obtained from reviewing inspection reports and they will be able to describe techniques for controlling emergency, scheduled, unscheduled, and PM work. Apprentices will understand the relationship of PM to production and quality control and they will be able to explain the requirements and advantages of the program as it applies to maintenance management.	

Element/Course: Asbestos Cement Pipe Work Practice Procedures – year 4	Planned Hours: 8
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: This course presents approved training for Asbestos Cement Pipe Work Practice Procedures in compliance with the most recent Department of Labor and Industries regulations. Apprentices will learn safe, field-proven procedures to protect them from cancer-causing asbestos fibers and how to avoid costly penalties. Students will discover how to recognize asbestos health hazards, prevent exposure to deadly asbestos fibers, and how to choose and use protective equipment. Apprentices will also perform approved AC pipe work practices.	

Element/Course: Industrial Pneumatics – year 4	Planned Hours: 9
Mode of Instruction (check all that apply) ☐ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: This course introduces Apprentices to the basic physics of energy, work, and power as related to pneumatics. Apprentices will explain gas laws, flow, pressure, and the basic components of a pneumatic system as they apply to fluid power. They will explain how the various components found in pneumatic systems function and interact with each other. Apprentices will learn about air preparation and conditioning, calculation of force and torque, and various graphic symbols. This course also emphasizes the importance of schematics in technical communication related to pneumatic circuits.	

Element/Course: Intermediate Pneumatics – year 4	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom 70% ☒ Lab 30% ☐ Online ☐ Self-Study Provided by: Boeing	
Description of element/course: Apprentices will gain an in-depth knowledge of pneumatic principles including, but not limited to load forces, flows, basic pneumatic theory, relay and air logic, and pressure and area relationships. Apprentices will also develop a working knowledge of linear and rotary actuators, as well as pressure and directional controls.	

Element/Course: Advanced Pneumatics – year 4	Planned Hours: 40
Mode of Instruction (check all that apply) ☒ Classroom 70% ☒ Lab 30% Online ☐ Self-Study Provided by: Boeing	
Description of element/course: This course will provide apprentices with a brief review of pneumatic principles that will support discussions on component and system operation and maintenance. Apprentices will become familiar with and troubleshoot various electro-pneumatic devices, such as servo and proportional components. Apprentices will learn to read and interpret pneumatic prints and they will understand the relationship between pressure and flow. Hands-on lab exercises will be used to demonstrate electronic pressure and directional controls and relay logic.	

Additional Training Providers (if necessary)

Shelley Wilson	Shelley A Wilson
Print Name Training Provider	Signature of Training Provider
Boeing Sr. Manager	WFRC
Title of Training Provider	Organization of Training Provider
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L&I Apprenticeship Consultant	L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530

Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

Program Name	
IAM/Boeing Joint Apprenticeship Committee	
Occupation	
Flight Line Mechanic	
Term/OJT Hours	Total RSI Hours
7360 hours	640 hours
Training Provider	
South Seattle College	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprentice and assures that:

1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliances with WISHA and applicable federal and state regulations.
4. The RSI Plan is maintained, updated and submitted to the Department a minimum of once every 5 years (WSATC Policy 2015-01; rev, 10-21-21).
5. The RSI will be conducted by instructors who meet the qualification of the "competent instructor" as described in WAC 296-05-003:
    a. Has demonstrated a satisfactory employment performance in her/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
    b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
    c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
6. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, instruction shall be clearly defined.

Signatures on next page

Form must be signed by Committee Chair *and* Secretary *or* Program's Authorized Signer

☐ Chair ☒ Authorized Signer	Date 9-5-2023	☐ Secretary	Date
Print Name: Raymond Miller		Print Name:	
Signature: Raymond Miller		Signature:	

Training Provider Signature

Approved By (Print Name): Laura Kingston	Title: Interim Executive Dean, Georgetown, South Seattle College
Signature of the Training Provider: Laura Kingston	
Date: 09/05/2023	

If additional training providers are needed, go to page 4.

SBCTC

Print Name:	Title:
Signature of the Program Administrator:	
Date:	
☐ SBCTC recommends approval	☐ SBCTC recommends return to sponsor

Program Name	Occupational Objective
IAM/Boeing Joint Apprenticeship Committee	Flight Line Mechanic

Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of Element/Course" field.

Describe minimum hours of study per year in terms of (check one):

☐ 12-month period from date of registration.
☒ Defined 12-month school year.
☐ 2,000 hours of on-the-job training.

Element/Course: Shop Algebra – year 1	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: South Seattle College	
Description of element/course: Apprentices will develop a working knowledge and practical application of algebraic processes as they relate to manufacturing. This course covers the properties of real numbers, simplifying expressions, and solving equations and proportions. It also covers the manipulation of algebraic formulas and their applications to shop problems such as the calculation of cutting speed, rpm, and cutting time.	

Element/Course: Technical Drawings – year 1	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☐ Online ☐ Self-Study Provided by: South Seattle College	
Description of element/course: Apprentices will learn how to interpret technical drawings, including drawing zones, the relationship of detail, standard, section and auxiliary views and application. Apprentices will learn linear dimensioning, tolerancing, lines, symbols and 3rd angle projection. They will delve into scales, datums and orthographic projection, and examine parts lists and how to navigate and utilize process specifications. Instruction includes interpreting mechanical/manufacturing blueprints per American Society of Mechanical Engineers (ASME) Y14.5 Standards (2009). Emphasis on practical applications of this standard as applied to reading and interpreting engineering production drawings and updates, advanced design change notice (ADCN) and drawing change notice (DCN).	

Element/Course: Aircraft General 1- year 1	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study Provided by: South Seattle	
Description of element/course: This course covers four main sections: Ground Operation & Servicing, Aircraft Drawings, Fluid Lines & Fittings, and Material processes. The first part of the course, students are introduced to the identification of different fuels and the necessary precautions to observe when refueling an aircraft. Students will learn the proper procedures for starting reciprocating and turbine engines and procedures for proper engine run-up, aircraft movement, and tie down. They will be able to start aircraft engines following necessary precautions, as well as how to move and secure aircraft. Awareness of ground operations hazards is also emphasized. The second part of the course will introduce the student to basic aircraft drawings, schematics, and diagrams. Topics will include drawing interpretation, symbols, plan views, blow-up diagrams, wiring diagrams, and basic drafting technique. Students will learn aircraft drawings to the proficiency required to perform normal aircraft inspection and typical repairs and alterations. Discussion of processes will include structural materials, basic heat treatment, and identifying appropriate non-destructive testing methods. The students will also be introduced to inspection measuring devices.	

Element/Course: Hydraulic and Pneumatic Basics – year 2	Planned Hours: 40

Mode of Instruction (check all that apply)

☐ Classroom ☐ Lab ☒ Online ☐ Self-Study

Provided by: Boeing

Description of element/course:

These modules will introduce the apprentice to the physics of applied hydraulics and pneumatics. The apprentice will learn the components and application of a hydraulic system, explain symbols, basic formulas and the purpose of hydraulic actuators.

Apprentices will learn basic components of a pneumatic system, the safety and maintenance of pneumatic hand tools, learn calculation of force and torque, graphic symbols and schematics, pneumatic pressure testing and safety, troubleshooting. Apprentices will learn Boeing specific pneumatic process systems and techniques for duct handling, installation of fittings on hydraulic and pneumatic tubes, utilization of Infrared Camera system to inspect hydraulic and pneumatic components.

Element/Course: Geometric Dimensioning & Tolerance (GD&T) – year 2	Planned Hours: 50

Mode of Instruction (check all that apply)

☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study

Provided by: South Seattle College

Description of element/course:

Apprentices will study the theory and application of the use of standard tolerances and GD&T concentrating on geometric dimensioning and its relation to engineering drawings. This course introduces apprentice machinists to principles of GD&T governed by the ASME Y14.5 Standards (2009). Apprentices will learn to identify and interpret each of the GD&T controls for form, profile, orientation, location, and runout. Apprentices will learn to interpret symbols, datums, basic dimensions, material condition modifiers, and other GD&T concepts that are essential for the machinist. Hands-on activities will emphasize interpreting GD&T found on engineering drawings, as well as the setup, measuring, and inspection of a part or features with geometric tolerancing.

Element/Course: Airframe Structure 1 – year 2	Planned Hours: 50

Mode of Instruction (check all that apply)

☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study

Provided by: South Seattle College

Description of element/course:

This course covers six main sections: Basic physics, maintenance publications, mechanic privileges and limitation, wood structures, aircraft covering, and aircraft finishes. Basic Physics gives instruction in mechanical advantage conversion between forms of energy, vibration, gas laws, heat, and pressure. The student will be able to demonstrate their knowledge of basic physics on subjects about sound, light, heat, temperature, gas laws, fluid mechanics, aircraft structures, and theory of flight. Learning about maintenance publications reinforces the importance of regulations governing aviation maintenance and the information furnished by the aircraft, engine, and component manufacturers. The mechanic privileges and limitations section explain what is expected of the AMT by the aircraft owner, and what is allowed by the FAA. Upon completion the student will be able to explain the legal limitations of each category of maintenance airmen; and the privileges granted to Aviation Maintenance Technicians, Authorized Inspectors, and Repairmen.

In the second part of the course, the students learn about aircraft airframe structures, including wood, fabric and sheet metal, airframe inspection, application of finishes and assembly of fixed wing and rotary wing components and structures, balancing and rigging of airframe structures and components. This course is FAA approved under 14 CFR Part 147.

Element/Course: Airframe Systems & Components 1 – year 3	Planned Hours: 50

Mode of Instruction (check all that apply)

☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study

Provided by: South Seattle College

Description of element/course:

This course covers three main components: Hydraulic and pneumatic systems, aircraft landing gear systems, and assembly and rigging. Students will learn hydraulic and pneumatic power system topics include power system components, safety practices, hydraulic fluid types and characteristics, inspection, servicing, and standard maintenance practices. They will then move on to aircraft landing gear systems topics include shock struts, steering systems, wheels and tires, brakes, warning systems, electrical brake controls, anti-skid systems, retraction and position indicating systems. They will gain skills in checking, overhaul, repairs, installation, removal, servicing, inspection, and troubleshooting of landing gear systems, hydraulic and pneumatic power systems.

In the second part of the course, students will learn assembly and rigging. This highlight the relationship between aircraft rigging and the aerodynamics of flight. Upon completion of this section, the student will be able to correctly assemble an aircraft, rig the primary and secondary control surfaces, verify the correct alignment of all of the components, demonstrate their knowledge of functions of the flight controls of fixed-wing and rotary-wing aircraft, and explain the effects of improperly rigged control surfaces.

Element/Course: Airframe Structure 2 – year 3	Planned Hours: 50

Mode of Instruction (check all that apply)

☐ Classroom ☐ Lab ☒ Online ☐ Self-Study

Provided by: South Seattle College

Description of element/course:

This course covers four main sections: Sheet metal aircraft construction basics, aircraft structural fasteners, repair and inspection of structures, and composites. Students will learn about sheet metal and nonmetallic structures and examine sheet-metal and nonmetallic composite structures including the stresses on aircraft structure, and the strength of various metal materials. Upon completion, the student will demonstrate their ability to inspect sheet-metal structures, access damage, design an airworthy repair, lay-out and form sheet-metal components and assemble them using the appropriate solid rivets or special fasteners.

In the second part of this course, the student will learn the theory of welding, silver soldering, soft soldering, brazing, and be able to give a detailed description of the types, tools, materials, and methods of soldering and brazing for aircraft construction and maintenance. Upon completion the student will be able to demonstrate their ability to solder and braze.

Element/Course: Aircraft General 2 – year 3	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study Provided by: South Seattle	
Description of element/course: This course covers four main sections: Cleaning & corrosion control, weight and balance, applied math, and maintenance forms and records. The first part of the course, students will explain correct usage of cleaning materials and be able to properly clean an aircraft safely using the correct materials. This class emphasizes the identification of various types of corrosion, evaluation of corrosion damage, the proper way of removing corrosion deposits, evaluate the cleaned area after treatment, and protect it from further corrosion. The student will learn how to measure the weight and balance of an aircraft. The student will understand aircraft materials including standard aircraft hardware, lines, fittings, fabrication, installation, and removal, corrosion prevention and removal. In the second part of the course, students will be introduced to applied math principles as they relate to aircraft maintenance. Maintenance Forms and Records emphasize the importance of the legal aspects of aviation maintenance. Students will be able to properly describe the work done to an aircraft and make the proper maintenance record entries. At the end of this section students will be able to make the correct maintenance record for a 100-hour inspection and compile a discrepancy list for an aircraft that has failed an inspection. The student will also be able to describe a repair of an aircraft structure and properly complete an FAA Form 337.	

Element/Course: Electricity Systems and Theory – year 4	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study Provided by: South Seattle College	
Description of element/course: This course introduces the fundamentals of basic electricity and prepares the way for further study of electrical circuitry and how aircraft electrical systems function. Apprentices will analyze the relationship between voltage, current, resistance, power, capacitance, and inductance in an electrical circuit. They will be able to read and interpret electrical circuit diagrams and demonstrate how to inspect and service batteries. Basic electricity includes Ohms law, Kirchhoff's Current law, Watt's law, batteries, wiring, Direct Current (DC) and Alternating Current (AC). Apprentices will define magnetism and how it is used to generate power and power electric motors. They will explain the power distribution in the aircraft and how the wiring is protected from overloads. Teaching levels are high in this class to ensure students can explain general principles, demonstrate sufficient skills to simulate return to service, and perform with a high degree of practical application.	

Element/Course: Powerplant Theory and Maintenance – year 4	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study Provided by: South Seattle College	
Description of element/course: This course covers five main components: Types of engines/motors, crankshafts, propellers, and inspection and operating principles. Apprentices will develop an understanding of the operation of generators, alternators, DC motors, and AC motors, and their repair and overhaul. They will also learn the special requirements of electrical theory and components operating in high temperature areas and how to install wiring, controls, switches, and indicators and protect them from its effects. This course is FAA approved under, 14 CFR Part 147	

Element/Course: Powerplant Systems and Components – year 4	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study Provided by: South Seattle College	
Description of element/course: This course covers six main components: engine fuel and metering systems, maintenance & lubrication systems, induction of exhaust, engine ignition and electrical systems, and engine starting systems. In the second half of the course, students will learn theory and maintenance, including the inspection, repair, overhaul, service, troubleshooting, removal, and installation of aircraft reciprocating and turbine engines. Powerplant systems and components, including systems, repair, overhaul, service, troubleshooting, removal, and installation of aircraft reciprocating and turbine engine instrument, fire protection, electrical, lubrication, ignition. This course is FAA approved under, 14 CFR Part 147.	

Element/Course: Advanced Powerplant – year 4	Planned Hours: 50
Mode of Instruction (check all that apply) ☒ Classroom 75% ☒ Lab 25% ☐ Online ☐ Self-Study Provided by: South Seattle College	
Description of element/course: This course covers eight main components: Engine fire protection, induction and engine airflow systems, induction of exhaust and reverse systems, propellers, turbine auxiliary power units, testing and inspection techniques. Apprentices will continue to advance their knowledge of powerplant systems and learn and demonstrate proper test run methods of turbine and reciprocating engines. They will also learn and demonstrate proper inspection techniques and methods to use when they are troubleshooting engines.	

Additional Training Providers (if necessary)

Shelley Wilson	Shelley A Wilson
Print Name Training Provider	Signature of Training Provider
Boeing Sr. Manager	WFRC
Title of Training Provider	Organization of Training Provider
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Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530

Journey Level Wage Rate

From which apprentices' wage rates are computed

TO: Washington State Apprenticeship & Training Council

FROM: IAM/Boeing Joint Apprenticeship Committee #154

Occupation:	County(ies):	Journey Level Wage Rate:	Effective Date:
Industrial Maintenance Fluid Technician	Snohomish, King, and Pierce	$ 46.04	9/1/2023
		$	
		$	
		$	

Sponsors must submit the journey-level wage at least annually or whenever changed to the Department.

Form must be signed by Committee Chair *and* Secretary *or* Program's Authorized Signer

☐ Chair ☒ Authorized Signer	Date 9-5-2023	☐ Secretary	Date
Print Name: Raymond Miller		Print Name:	
Signature: Raymond Miller		Signature:	

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Department of Labor and Industries
Apprenticeship Section
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Olympia WA 98504-4530

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Form must be signed by Committee Chair *and* Secretary *or* Program's Authorized Signer

☐ Chair ☒ Authorized Signer	Date 9-5-2023	☐ Secretary	Date
Print Name: Raymond Miller		Print Name:	
Signature: Raymond Miller		Signature:	