Ai

Airframe and Powerplant (A&P)

Youth Apprenticeship

AIRFRAME AND POWERPLANT (A&P)

Airframe and Powerplant (A&P) youth apprentices gain various, high-demand aircraft maintenance skills. All youth apprentices must take the Aviation Maintenance Fundamentals the first year. Apprentices must adhere to industry safety and security standards.

Length of Apprenticeship: One year. Youth apprentices must complete the Aviation Maintenance Fundamentals prior to entering the Airframe and Powerplant (A&P) youth apprenticeship.

REQUIRED COMPETENCIES

YOUTH APPRENTICESHIP

Youth apprentices must become proficient in both general employability and occupation-specific competencies. All of these, and examples of how each can be demonstrated, are found in the following pages. A total of 9 occupational competencies must be learned for this occupation. Employers may substitute out one of these and should write in the competency they are adding. Youth apprentices must be evaluated on these competencies at least two times each year of their apprenticeship.

Competencies

- 1. Assist with aircraft engine maintenance
- 2. Service aircraft fire detection and extinguishing systems
- 3. Service aircraft engine cooling systems
- 4. Service aircraft engine exhaust system
- 5. Service aircraft oxygen systems
- 6. Assist with basic sheet metal work
- 7. Assist with service to rigging and controls
- 8. Assist with maintenance to non-metallic structures
- 9. Assist servicing of landing gear, brakes, and wheels

POST-SECONDARY PATHWAY OPPORTUNITIES

There are several post-secondary pathway opportunities in this area. The -following is a partial list.

- Aviation Technician Powerplant
- Aviation Mechanic (Airframe)

WISCONSIN— YOUTH APPRENTICESHIP SINCE 1991

Airframe and Powerplant (A&P)

Youth Apprenticeship

ON-THE-JOB LEARNING PERFORMANCE STANDARDS GUIDE

YOUTH APPRENTICE INFORMATION

Youth Apprentice Name	
YA Coordinator	
YA Consortium	
School District	
SIGNATURES	
The On-the-Job Learning Performance Standards	Guide includes a list of competencies youth
apprentices learn through mentoring and training	·
	s and School-Based or YA coordinators: This document school-based or YA coordinator on a regular basis with
the youth apprentice to record progress and plan	future steps to ensure completion of the required
competencies. Mentors, school-based/YA coordin	nator, and the apprentice sign below.
	to a
	over/Mentor
1st Evaluation (Required) Employer/Mentor Signature	2 nd Evaluation (Required) Employer/Mentor Signature
Employer/Wentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed
3 rd Evaluation (Optional)	4th Evaluation (Optional)
Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed

School-Based and/or YA Coordinator

1st Evaluation (Required)

2nd Evaluation (Required)

School-Based and/or YA Coordinator Signature	School-Based and/or YA Coordinator Signature
School-Based and/or YA Coordinator	School-Based and/or YA Coordinator
School District or Organization	School District or Organization
Date Signed	Date Signed

3rd Evaluation (Optional)

4th Evaluation (Optional)

School-Based and/or YA Coordinator Signature	School-Based and/or YA Coordinator Signature
School-Based and/or YA Coordinator	School-Based and/or YA Coordinator
School District or Organization	School District or Organization
Date Signed	Date Signed

Youth Apprentice

1st Evaluation (Required)

2nd Evaluation (Required)

Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed

3rd Evaluation (Optional)

4th Evaluation (Optional)

Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed

EMPLOYABILITY SKILLS (TO BE COMPLETED BY YA EMPLOYER/MENTOR)

All youth apprentices must demonstrate the key employability skills listed below in order to complete the YA program. They do so by earning at least a "Meets Expectation" rating in each. **At least two evaluations are required each year of a youth apprenticeship.** More columns are included below for those who choose to conduct more frequent reviews.

1	Working to Meet Expectations: Needs improvement; requires much assistance and supervision;
	rarely displays this behavior
2	Meets Expectations: Meets entry-level criteria; requires some supervision; often displays this
	behavior
3	Exceeds Expectations: Exceeds entry-level criteria; requires minimal supervision; consistently
	displays this behavior

Employability Skills		Rati	ing	
	Year One Evaluation Rating			iting
Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final
 Develops positive work relationships with others. Examples of qualities and habits that the employee might exhibit include Interacts with others with respect and in a non-judgmental manner Responds to others in an appropriate and non-offensive manner Helps co-workers and peers accomplish tasks or goals Applies problem-solving strategies to improve relations with others When managing others, shows traits such as compassion, listening, coaching, team development, and appreciation 	☐ 1	☐ 1	☐ 1	☐ 1
	☐ 2	☐ 2	☐ 2	☐ 2
	☐ 3	☐ 3	☐ 3	☐ 3
 Communicates effectively with others Examples of qualities and habits that the employee might exhibit include Adjusts the communication approach for the target audience, purpose, and situation to maximize impact Organizes messages/information in a logical and helpful manner Speaks clearly and writes legibly Models behaviors to show active listening Applies what was read to actual practice Asks appropriate questions for clarity 	☐ 1	☐ 1	☐ 1	☐ 1
	☐ 2	☐ 2	☐ 2	☐ 2
	☐ 3	☐ 3	☐ 3	☐ 3
 Collaborates with others Examples of qualities and habits that the employee might exhibit include Works effectively in teams with people of diverse backgrounds regardless of sex, race, ethnicity, nationality, sexuality, religion, political views, and abilities Shares responsibility for collaborative work and decision making Uses the problem-solving process to work through differences of opinion in a constructive manner to achieve a reasonable compromise Avoids contributing to an unproductive group conflict Shares information and carries out responsibilities in a timely manner 	□ 1	□ 1	□ 1	☐ 1
	□ 2	□ 2	□ 2	☐ 2
	□ 3	□ 3	□ 3	☐ 3

Emp	oloyability Skills	Rating			
_	-	Year One Evaluation Rating		ating	
Competency a	nd Rating Criteria	Initial	Mid	Mid	Final
			Year 1	Year 2	
 Uses critical thinking to determine faced with a challenging situatio Carries out assigned duties while 	t the employee might exhibit include ne the best options or outcomes when on e under pressure I, and non-offensive manner while under	☐ 1 ☐ 2 ☐ 3	□ 1 □ 2 □ 3	□1 □2 □3	□1 □2 □3
 Carries out responsibilities in an Responds to situations in a time Takes personal responsibility to 	-	□ 1 □ 2 □ 3	□ 1 □ 2 □ 3	□ 1 □ 2 □ 3	□ 1 □ 2 □ 3
 Carries out written and verbal d Completes work efficiently and d Performs calculations accurately Conserves resources, supplies, a environmental impact 	effectively Indicate the minimize costs and the materials to minimize costs and the materials to improve workflow dies to improve productivity and practices	□1 □2 □3	□1 □2 □3	□1 □2 □3	□1 □2 □3
Shows support for the organizat actionsDisplays a respectful and profess	t the employee might exhibit include ional goals and principles by own personal sional image to customers e and desire to take care of customer needs omer satisfaction	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3
 Prioritizes and carries out responsible. Responds with enthusiasm and distribution. Reflects on any unsatisfactory or 	t the employee might exhibit include nsibilities without being told flexibility to handle tasks that need utcome as an opportunity to learn by doing something different or differently ct the overall organization I reasoning and principles	☐ 1 ☐ 2 ☐ 3	□1 □2 □3	□1 □2 □3	□1 □2 □3

Employability Skills Rating				
	Year One Evaluation Rating		ating	
Competency and Rating Criteria	Initial	Mid	Mid	Final
		Year 1	Year 2	
9. Adapts to change	□ 1	□ 1	□ 1	□1
Examples of qualities and habits that the employee might exhibit include	☐ 2	2	2	2
Shows flexibility and willingness to learn new skills for various job roles				□ 3
Uses problem-solving and critical-thinking skills to cope with changing		🗆 🤊	🗆 🤊	
circumstances				
Modifies own work behavior based on feedback, unsatisfactory outcomes, officions and official and o				
efficiency, and effectiveness • Displays a "can do" attitude				
Displays a call do attitude				
10. Demonstrates safety and security regulations and practices		□ 1	□ 1	□ 1
Examples of qualities and habits that the employee might exhibit include		=		
Follows personal safety requirements	<u> </u> 2	<u> </u> 2	<u> </u> 2	
Maintains a safe work environment		∐3	∐3	3
Demonstrates professional role in an emergency				
Follows security procedures				
Maintains confidentiality				
11. Applies job-related technology, information, and media				
Examples of qualities and habits that the employee might exhibit include		<u> </u> 1	∐1	
Applies technology effectively in the workplace	│	│	│	│
Assesses and evaluates information on the job	□ 3	□ 3	□ 3	□ 3
Assesses training manuals, website, and other media related to the job				
12. Fulfills training or certification requirements for employment	□ 1	□ 1	□ 1	□ 1
Examples of this requirement may include	□ 2	□ 2	□ 2	□2
Participation in required career-related training and/or educational	— 	 3	_ □3	 3
programs • Passing contification tests to qualify for licensure and/or contification				
 Passing certification tests to qualify for licensure and/or certification Participation in company training or orientation 				
Tarticipation in company training or orientation				
13. Sets personal goals for improvement	□ 1	□ 1	□ 1	□1
Examples of this requirement may include	<u> </u>			
Setting goals that are specific and measurable	□ 2			☐3
Setting work-related goals that align with the organization's mission	🗆 🤊	🗆 3	🗀 🍮	🗆 3
Identifying strategies to reach goals				
Reflecting on goal progress to regularly evaluate and modify goals				

OCCUPATIONAL COMPETENCIES (TO BE COMPLETED BY YA EMPLOYER/MENTOR)

Youth apprentices must earn a rating of at least "MEETS EXPECTATIONS" in each competency by the conclusion of the apprenticeship. A total of 9 competencies, 8 must be from the list below. If necessary, employers can substitute one competency with another occupationally appropriate skill. That skill should be added to the competency list for assessment. Where necessary, skills can be simulated. At least two evaluations are required each year of a youth apprenticeship. More columns are included below for those who choose to conduct more frequent reviews.

1	Working to Meet Expectations: Needs improvement; requires much assistance and supervision;
	rarely displays this behavior
2	Meets Expectations: Meets entry-level criteria; requires some supervision; often displays this
	behavior
3	Exceeds Expectations: Exceeds entry-level criteria; requires minimal supervision; consistently
	displays this behavior

	Occupational Competencies		Rati	ing	
			Evalu	ation	
		Minii	num Rati		ACH
	Competency and Rating Criteria		Check I		
		Initial	Mid	Mid	Final
_			Year 1	Year 2	
1.	Assist with aircraft engine maintenance	□ □ 1	□ 1	□ 1	
	Obtain equipment and materials needed	□ 2	□ 2	□ 2	□ 2
	 Follow safety and service procedures 	□ 3	□3	□3	□3
	Perform visual inspection of engine				
	 Assist with install of accessories 				
	Troubleshoot faults				
	Assist with periodic maintenance				
	Assist with engine installation				
	Clean parts				
	Cleanup work area				
	Return tools to proper location				
	Complete service documentation				
2.	Service aircraft fire detection and extinguishing systems	□ 1	1	1	□ 1
	Obtain equipment and materials needed	□2	□2	□2	□2
	 Follow safety and service procedures 		 □3	 □3	
	 Perform visual inspection of fire detection and extinguishing system 				
	Assist with functional test of system				
	Troubleshoot system				
	Support replacement of faulty components				
	Clean parts				
	Cleanup work area				
	Return tools to proper location				
	Complete service documentation				

	Occupational Competencies		Rat	ing	
			Evalu		
	Commenter and Detire Criteria	Minii		ing of 2 E	ACH
	Competency and Rating Criteria		Check I	Mid	
		Initial	Year 1	Year 2	Final
3.	Service aircraft engine cooling systems	□1	1	1	□1
	Obtain equipment and materials needed		 2		 2
	Follow safety and service procedures		☐ 3	☐ 3	□-
	Perform visual inspection of engine cooling system	🗀 🤊	🗆 🤊	🗆 🤊	
	Troubleshoot cooling systems				
	Assist with cooling system repairs				
	Clean parts				
	Cleanup work area				
	Return tools to proper location				
	Complete service documentation				
4.	,	□ 1	□ 1	□ 1	□ 1
	Obtain equipment and materials needed	□ 2	□ 2	□ 2	□ 2
	Follow safety and service procedures	☐ 3	☐ 3	□ 3	□ 3
	Perform inspection of exhaust system				
	Assist with visual and functional test of exhaust system				
	Assist with repair of exhaust system				
	Troubleshoot engine exhaust system				
	Clean parts				
	Cleanup work area Detugn to all to grant locations				
	Return tools to proper location Complete coming decumentation				
	Complete service documentation				
5.	Service aircraft oxygen systems	□1	□1	□1	□ 1
	Obtain equipment and materials needed				 2
	Follow safety and service procedures				□ 3
	Perform inspection of oxygen systems				
	Troubleshoot oxygen systems				
	Assist repair of oxygen systems				
	Clean parts				
	Cleanup work area				
	Return tools to proper location				
	Complete service documentation				
L			l	l	

Occupational Competencies		Rating		
		Evaluation		
	Minimum Rating of 2 EACH			
Competency and Rating Criteria		Check Rating		
	Initial	Mid	Mid	Final
	IIIItiai	Year 1	Year 2	Fillal
6. Assist with basic sheet metal work	□ 1	□ 1	□ 1	□ 1
Obtain equipment and materials needed	□ 2	□2	□ 2	□2
Follow safety and service procedures	<u> </u>			
Interpret blueprint				
Perform visual inspection of sheet metal				
Recommend sheet metal repairs				
Assist cutting of sheet metal				
Assist forming of sheet metal				
Assist drilling of sheet metal				
Assist deburring sheet metal				
Assist riveting				
Assist fastening				
Clean parts				
Cleanup work area				
Return tools to proper location				
Complete service documentation				
complete service documentation				
7. Assist with service to rigging and controls	□ 1	□ 1	□ 1	□ 1
Obtain equipment and materials needed				□ -
Follow safety and service procedures	1 =			
Assist with functional check	∐3	3	∐3	_
Assist with free play check				
Assist with adjustments of aircraft rigging and controls				
Clean parts				
Cleanup work area				
Return tools to proper location				
Complete service documentation				
Complete service accumentation				
8. Assist with maintenance to non-metallic structures	1	□1	1	□ 1
Obtain equipment and materials needed			☐	
Follow safety and service procedures			□ ² □ 3	
Visual inspection				
Assist with tap test (acoustic test)				
Clean windows				
Remove window scratches				
Assist with install of windows				
Assist with repair of composite structures				
Clean parts				
Cleanup work area				
Return tools to proper location				
Complete service documentation				
,				
9. Assist servicing of landing gear, brakes, and wheels	□ 1	□1	□1	□1

Occupational Competencies	Rating			
	Evaluation Minimum Rating of 2 EACH Check Rating , Mid Mid,			
Competency and Rating Criteria				
	Initial	Year 1	Year 2	Final
 Obtain equipment and materials needed Follow safety and service procedures Assist with visual inspection of landing gear/brakes/wheels Assist with functional check of landing gear/brakes/wheels Assist with repair of landing gear/brakes/wheels Cleanup work area Return tools to proper location Complete service documentation 	☐ 2 ☐ 3	☐ 2 ☐ 3	☐ 2 ☐ 3	□ 2 □ 3
Competency Substitute (if you replaced a competency above, note the competency and rating)	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3
Comments:				

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