Avionics Technician



Youth Apprenticeship

AVIONICS TECHNICIAN

Avionic Technician youth apprentices gain various, high-demand aircraft avionics skills. All youth apprentices must take the Aviation Maintenance Fundamentals in 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 Avionics youth apprenticeship.

OCCUPATIONAL COMPETENCIES

Avionics Technician youth apprentices must complete **a total of 8** Avionics Technician competencies in year 2. Employers can substitute up to **1** competency in each year with other occupationally appropriate skills. Substitutions must be added to the competency list for assessment. Note that where necessary, skills can be simulated.

Competencies

- 1. Assist with maintenance of communication and navigation systems
- 2. Assist with building harnesses
- 3. Assist with troubleshooting of electronic issues
- 4. Assist with maintenance of aircraft instrumentation and indication systems
- 5. Perform routine network system maintenance
- 6. Monitor network performance
- 7. Support network upgrades and patches
- 8. Support maintenance of information and system security

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)
- Information Technology (IT) Network (Avionics Technician)

WISCONSIN— YOUTH APPRENTICESHIP SINCE 1991

Avionics Technician

Youth Apprenticeship

ON-THE-JOB LEARNING PERFORMANCE STANDARDS GUIDE

(TO BE COMPLETED BY YA CONSORTIUM)

YOUTH APPRENTICE INFORMATION

Youth Apprentice Name						
YA Coordinator		YA Consortium				
School District		High School Graduation Date				
REQUIREMENTS						
Aviation Maintenance Competency checklist Employability Skills che Related instruction equ Minimum of 450 work HOURS ecord the hours the youth ap	ecklist (in this OJL Guic ual to 1 high school cre hours	de) or the DPI Em	-			
Total Hours Employed	Company Name	<u> </u>	Teleph	one Number		
RELATED INSTRUCTION						
YEAR 1: Indicate which related		ne vouth annrent	ce comn	leted		
LAN 1. Indicate which related	instruction courses ti	ie youtil appreint	ce comp	ieteu.		
Dual Course Number and Credit	Title	Credits Instruction Pr		Instruction Provider		

SIGNATURES

The On-the-Job Learning Performance Standards Guide includes a list of competencies youth apprentices learn through mentoring and training at the worksite.

Instructions for the Worksite Employers/Mentors and School-Based or YA coordinators: This document should be reviewed with the employer/mentor, 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 coordinator, and the apprentice sign below.

Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
businessy company	Businessy company
Date Signed	Date Signed
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-based and/or the Coordinator	School-based and/or YA Coordinator
School District or Organization	School District or Organization
-	
Date Signed	Date Signed
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)

Youth apprentices must demonstrate key employability skills.

The DWD YA program employability skills requirement may be attained and demonstrated through two processes. (See options listed below.) Employability skills must be completed for every year a student is in the program. The DPI Employability Skills Certificate may be counted as meeting one of those two years, provided the certificate is earned in the same year the student is enrolled in youth apprenticeship or they can complete the YA Employability Skills in the OJL. The Employability Skills Certificate must be obtained through the DPI.

1.	If a student has successfully completed a Wisconsin Department of Public Instruction (DPI)
	State-Certified Cooperative Education, Co-Op Employability Skill certification then they have me
	the YA Employability Skills requirement for that year. A copy of the student's DPI Co-Op
	Employability Skill Certificate must be maintained on file with their YA regional consortium.
	☐ Earned Wisconsin Employability Skills Certificate (checked if applicable) or,
2.	Completed and rated "Employability Skills" through this YA OJL guide as described below.

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

The following skills are required of all youth apprentices.

Employability Skills		Rating	
Competency and Rating Criteria	Minimum Rating of 2 for EAC Check Rating		
	1	2	3
 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 			

	Employability Skills		Rating	
		Minimun	n Rating of 2	2 for EACH
	Competency and Rating Criteria	(Check Ratin	g
		1	2	3
Ex	communicates effectively with others camples of qualities and habits that the employee might exhibit clude 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			
Ex	collaborates with others camples of qualities and habits that the employee might exhibit colude 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			
Ex	laintains composure under pressure camples of qualities and habits that the employee might exhibit clude Uses critical thinking to determine the best options or outcomes when faced with a challenging situation Carries out assigned duties while under pressure Acts in a respectful, professional, and non-offensive manner while under pressure Applies stress management techniques to cope under pressure			
Ex	emonstrates integrity camples of qualities and habits that the employee might exhibit clude Carries out responsibilities in an ethical, legal and confidential manner Responds to situations in a timely manner Takes personal responsibility to correct problems Models behaviors that demonstrate self-discipline, reliability, and dependability			

	Employability Skills		Rating	
		Minimun	n Rating of	2 for EACH
	Competency and Rating Criteria		Check Ratir	ıg 📗
	, , ,	1	2	3
6.	 Performs quality work Examples of qualities and habits that the employee might exhibit include Carries out written and verbal directions accurately Completes work efficiently and effectively Performs calculations accurately Conserves resources, supplies, and materials to minimize costs and environmental impact Uses equipment, technology, and work strategies to improve workflow Applies problem-solving strategies to improve productivity Adheres to worksite regulations and practices Maintains an organized work area 			
7.	Provides quality goods or services (internal and external) Examples of qualities and habits that the employee might exhibit include Shows support for the organizational goals and principles by own personal actions Displays a respectful and professional image to customers Displays an enthusiastic attitude and desire to take care of customer needs Seeks out ways to increase customer satisfaction Produces goods to workplace specifications			
8.	 Shows initiative and self-direction Examples of qualities and habits that the employee might exhibit include Prioritizes and carries out responsibilities without being told Responds with enthusiasm and flexibility to handle tasks that need immediate attention Reflects on any unsatisfactory outcome as an opportunity to learn Improves personal performance by doing something different or differently Analyzes how own actions impact the overall organization Supports own action with sound reasoning and principles Balances personal activities to minimize interference with work responsibilities 			

Employability Skills		Rating	
	Minimun	n Rating of 2	2 for EACH
Competency and Rating Criteria		Check Ratin	g
	1	2	3
 9. Adapts to change Examples of qualities and habits that the employee might exhibit include Shows flexibility and willingness to learn new skills for various job roles Uses problem-solving and critical-thinking skills to cope with changing circumstances Modifies own work behavior based on feedback, unsatisfactory outcomes, efficiency, and effectiveness Displays a "can do" attitude 			
 10. Demonstrates safety and security regulations and practices Examples of qualities and habits that the employee might exhibit include Follows personal safety requirements Maintains a safe work environment 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 Applies technology effectively in the workplace Assesses and evaluates information on the job Assesses training manuals, website, and other media related to the job 			
 12. Fulfills training or certification requirements for employment Examples of this requirement may include Participation in required career-related training and/or educational programs Passing certification tests to qualify for licensure and/or certification Participation in company training or orientation 			
 13. Sets personal goals for improvement Examples of this requirement may include Setting goals that are specific and measurable Setting work-related goals that align with the organization's mission Identifying strategies to reach goals Reflecting on goal progress to regularly evaluate and modify goals 			

OCCUPATIONAL COMPETENCIES

(TO BE COMPLETED BY YA EMPLOYER/MENTOR)

Avionics Technician youth apprentices must complete **a total of 8** Avionics competencies in year 2. Employers can substitute up to **1** competency in each year with other occupationally appropriate skills. Substitutions must be added to the competency list for assessment. Note that where necessary, skills can be simulated.

Rating Scale

- 3: Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2: Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1: Needs improvement | Requires much assistance and supervision | Rarely displays this behavior

If any competencies are rated "1" on the final performance review checklist that is submitted to WI DWD it is considered a failed checklist.

	Occupational Competencies		Rating	
			n Rating of 2	
	Competency and Rating Criteria		Check Rating	
1.	Assist with maintenance of communication and navigation	1	2	3
1.	systems		Ш	Ш
	•			
	obtain equipment and materials neededfollow safety and service procedures			
	·			
	follow electro-static discharge (ESD) guidelines			
	change an Internet Protocol (IP) address			
	support set up of network			
	support database updates			
	• clean parts			
	cleanup work area			
	 return tools to proper location 			
	 complete service documentation 			

	Occupational Competencies		Rating	
			n Rating of 2	
	Competency and Rating Criteria		Check Ratin	_
		1	2	3
2.	Assist with building harnesses			
	obtain equipment and materials needed			
	follow safety and service procedures			
	 follow electro-static discharge (ESD) guidelines 			
	 read wiring diagrams 			
	 identify connectors, pins, wire numbers 			
	 route wires according to specifications/diagrams 			
	 terminate wires and connectors 			
	 verify wiring completed according to the print (conforming to wiring) 			
	• clean parts			
	cleanup work area			
	return tools to proper location			
	complete service documentation			
3.	Assist with troubleshooting of electronic issues			
	 obtain equipment and materials needed 			
	 follow safety and service procedures 			
	 follow electro-static discharge (ESD) guidelines 			
	 use troubleshooting flowcharts 			
	 identify how systems interface 			
	 interpret print measurements 			
	• identify ground path and power path to the component			
	• clean parts			
	cleanup work area			
	 return tools to proper location 			
	complete service documentation			
4.	Assist with maintenance of aircraft instrumentation and			
	indication systems			
	obtain equipment and materials needed			
	follow safety and service procedures			
	 follow electro-static discharge (ESD) guidelines 			
	maintain pitot-static system			
	use test equipment			
	 wiring diagrams/prints, etc. 			
	• clean parts			
	cleanup work area			
	 return tools to proper location 			
	 complete service documentation 			
				i

	Occupational Competencies		Rating	
			n Rating of 2	
	Competency and Rating Criteria		Check Ratin	
_	Defense de la constitución	1	2	3
5.	Perform routine network system maintenance		Ш	Ш
	obtain equipment and materials needed			
	follow safety and service procedures			
	follow preventive maintenance plan			
	run diagnostics as required			
	 report system issues to worksite professional 			
	 identify new or replacement networking components 			
	needed			
	 analyze maintenance processes and outcomes with 			
	worksite professional			
	complete work with minimum disruption of process flow			
	complete service documentation			
6.	Monitor network performance			
0.	obtain equipment and materials needed		Ш	
	 follow safety and service procedures 			
	 monitor system status and performance 			
	identify criticality of issue			
	 follow process to respond to system alerts 			
	 follow process to respond to security problems 			
	 identify patterns of failure 			
	 provide solution recommendations 			
	refer issues to worksite professional			
	complete service documentation			
	complete service documentation			
7.	Support network upgrades and patches			
	obtain equipment and materials needed			
	 follow safety and service procedures 			
	 use appropriate tools for the upgrade 			
	follow appropriate installation procedure			
	backs up system before upgrade or patch, as required			
	• complete work with minimum disruption of process flow			
	refer issues to worksite professional			
	complete service documentation			

Occupational Competencies		Rating		
Competency and Rating Criteria		Minimum Rating of 2 for EACH Check Rating		
	1	2	3	
8. Support maintenance of information and system security				
 obtain equipment and materials needed 				
follow safety and service procedures				
 identify the impact of sensitive data exposure 				
 use virus and malware protection tool 				
use strong passwords				
 monitor security of company and personal data 				
complete service documentation				
Competency Substitute (if you replaced a competency above, note the competency and rating)				
Comments:	1			



Post-Program Completion Survey

Youth Apprenticeship

YA POST-PROGRAM COMPLETION SURVEY: EMPLOYER FEEDBACK

Employers complete the following information. YA Coordinators will enter this into the Post-Program Completion Survey.

YA Employer Post-Program Completion Questions	
Will you offer or have you offered the Youth Apprentice a continuing position with your company?	☐ Yes ☐ No
If continuing position offered to youth apprentice, did they accept?	☐ Yes ☐ No
If yes, please answer the questions below:	
Was the offer for full time or part time work?	Full-time Part-time
Title of the position offered:	
What is the wage of the continuing employment offer?	
If applicable, will the youth apprentice advance to a Registered Apprenticeship?	

YA POST-PROGRAM COMPLETION SURVEY: COMPLETED BY YA CONSORTIUM

The <u>Post-Program Completion Survey</u> form is to be provided to each student completing the Youth Apprenticeship program to capture information on the student's plans after leaving the program. This **form should be completed by the Youth Apprenticeship Coordinator** to capture information from all high school seniors and their employers after successful completion of the Youth Apprenticeship Program.

The form should be completed during the final meeting between the student, mentor, and Youth Apprenticeship Coordinator, when the final checklist or On-the-Job Learning (OJL) Guide is filled out and signed. Information captured on this form must be entered online using the Youth Apprenticeship Online Data Application (YODA) System.

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