

Contest Description

Edmonton Expo Centre, Edmonton

May 10 & 11, 2017

EVENT: Aerospace Technology		LEVEL: Post-Secondary	
WORLDSKILLS TRADE #: 91		LOCATION: Hall A, Edmonton Expo Centre, Edmonton	
DURATION: 12 Hrs. (Two Days)			
COMPETITION SCHEDULE:			
May 10:		May 11:	
<i>ORIENTATION/ COMPETITION START TIME</i>	<i>8:00AM- 8:30AM</i>	<i>ORIENTATION/ COMPETITION START TIME</i>	<i>8:00AM- 8:30AM</i>

CONTEST INTRODUCTION

To assess the contestants skills and knowledge in performing basic aircraft maintenance procedures.

SKILLS AND KNOWLEDGE TO BE TESTED:

- Sheet metal repair
- Piston engine task
- Weight & Balance Report

PROJECT DESCRIPTION

Tasks that may be performed during the contest

- **Sheet metal repair (4 hours)**
 - Fabricate sheet metal parts.
 - Pattern fasteners.
 - Install fasteners.
- **Piston Engine Task (2 hours)**
 - Using Maintenance manuals preform a typical maintenance activity in the time provided.
- **Weight & Balance Report (2 hours)**
 - Complete and/or amend a Weight & Balance Report and answer written questions relating to this subject.

Equipment and Material Supplied by the Competitor:

Basic hand tools	AC43.13 – 1B/2B
CSA approved safety glasses	
Hearing protection	

Equipment and Material Supplied by the Committee:

Computer with internet (2)	Chairs (4)	Power bars (4)
Workbenches with vices (2 – 3'X6')	Tables (2, foldable)	Duct tape (4 rolls)
Stools (4 – 30" high)	Extension cords (2 – 25' min)	Non-allergic nitrile gloves (1 box of each size)
Paper wipers	Hand cleaner	Barrier cream
Calculators (4)	Safety glasses	Ear plugs
AC 43 - 13	Calculator (non-programmable)	Sheet metal
Air compressor (electric 30 gallons – 10 CFM at 90 psi)	Sheet metal shear (1)	Sheet metal brake – rad 1/8" (1)
20 foot air hoses (4)	4 outlet air pigs (2)	3X rivet gun (2)
Bucking bar two types (2 of each)	#4 snap (2)	#3 snap (2)
Flush snap (2)	Center punches (2)	Pin punches (3/32, 1/8)
Cape chisels (2)	Micrometer (0" – 1")	Air fittings (various styles, all compatible)
Drilling blocks (wood – 2X6 blocks)	Cleco pliers (2)	Clecos (3/32, 1/8)
Rivet MS 20470--AD3--3 (4 oz.), Rivet MS 20470 AD3--4 (4 oz.), Rivet MS 20470 AD3--5 (4 oz.), Rivet MS 20470--AD4--3 (4 oz.), Rivet MS 20470 AD4--4 (4 oz.), Rivet MS 20470 AD4--5 (4 oz.)	• Anchor Nuts Floating/Fix , Anchor Nuts MS20426AD3--3 (4 oz.), Anchor Nuts MS20426AD3--4 (4 oz.), Anchor Nuts MS20426AD3--5 (4 oz.), Anchor Nuts MS20426AD4--3 (4 oz.), Anchor Nuts MS20426AD4--4 (4 oz.), Anchor Nuts MS20426AD4--5 (4 oz.)	7" x 7" aluminum sheet stock 2024--T3 .032" (10)
Fine single cut file, comes with handles	File card	Conversion charts
Spring divider	Dial Vernier caliper	Precision ruler – 12 in.
Fine point marker	1" masking tape, 2" masking tape	Drillbits - #10, #20, #30, #40, 1/8, 3/32
Countersink/De-burring tool	8 oz. Ball Peen Hammer	Air drill comes with key
Toggle clamp – suitable for sheet metal	Piston engine	



JUDGING CRITERIA

POINT BREAKDOWN	/100
Sheet metal	60
Piston Engine Task	20
Weight and balance	20

TIE BREAKING PROCESS

Tie Breaker will be based on time calculation followed by a set of questions if required.

Clothing Requirement

Appropriate work clothing must be worn to compete. All clothing must be neat and clean and free of rips and tears. Casual wear such as shorts and open toed shoes/sandals will not be permitted. No loose fitting clothes or jewelry.

SAFETY

The health, safety and welfare of all individuals involved with Skills Canada Alberta are of vital importance. Safety is a condition of participation with Skills Canada Alberta and shall not be sacrificed for the sake of expediency. At the discretion of the judges, technical committees, and/or Skills Canada Alberta any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

Competitors are to be dressed in a clean and safe manner. No jewelry on neck, fingers, hands or wrists.

ADDITIONAL INFORMATION

Skills Canada Alberta Regional and Provincial Rules and Regulations

[2016-17 Regional and Provincial Rules and Regulations](#)

Lunch

Lunch for competitors will be provided by Skills Canada Alberta.

Parking & Venue Maps

<http://edmontonexpocentre.com/attend/parking/>



Awards Ceremony

The Awards Ceremony will take place on Thursday May 11, 2017 at 6:30pm in Hall D of the Edmonton EXPO Center. Admission is free and everyone is welcome to attend. The Awards Ceremony will be shown live at <http://skillsalberta.com/>

Team Alberta Information

Team Alberta will be selected at the Provincial Skills Canada Competition (PSCC) on May 10-11, 2017. Gold medalists will then be eligible to compete at the Skills Canada National Competition (SCNC) on May 31 – June 3, 2017 in Winnipeg, MB. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at <http://www.skillscanada.com/>.

During the PSCC Awards Ceremony on Thursday May 11, 2017 all students who earn a medal will be escorted backstage after we photograph their onstage moments of success. Gold medalists will be given their Team Alberta information package and will confirm their participation in the SCNC.

Students must be present at the Awards Ceremony to claim their position on Team Alberta. If the Gold medalist is not able to attend SCNC, the next top ranking individuals will be asked to participate. If a student is not able to attend the Awards Ceremony a letter confirming the student’s interest in Team Alberta participation must be emailed to gordk@skillsalberta.com prior to the start of competition on May 10, 2017.

Please prepare your students in advance to accept a position on Team Alberta and outline how your school will support their participation.

COMMITTEE MEMBERS

Chuck Luehr – chuck_luehr@sait.ca	Matt Kresina – mark.kost@sait.ca
Lynda Holden – Lynda.holden@sait.ca	Mark Kost – matt.kresina@sait.ca
Rod Deneve – rod.deneve@sait.ca	