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| EVENT: Aerospace Technology | LEVEL: Post-Secondary |
| WORLDSKILLS TRADE #: 14 | LOCATION: Hall C, Edmonton Expo Centre, Edmonton |
| DURATION: 12 Hrs. (Two Days) | |
| COMPETITION SCHEDULE: May 8: Orientation: 8:00am Competition Start: 8:30am | |
| May 9: Orientation: 8:00am Competition Start: 8:30am | |

Please Note: This document is subject to change as competition information is updated. Competitors are responsible for staying up to date with the most recent information. Check the footer for last updated date. Changes will be highlighted in yellow.

CONTEST INTRODUCTION

To assess the contestant’s skills and knowledge in performing basic aircraft maintenance procedures.

SKILLS AND KNOWLEDGE TO BE TESTED:

- Sheet metal repair
- Engine task
- Weight and balance task

PROJECT DESCRIPTION

Tasks that may be performed during the contest

- **Sheet metal repair (4 hours)**
 - Fabricate sheet metal parts.
 - Lay-out Pattern fasteners.
 - Install fasteners.
- **Engine Task (3 hours)**
Using Maintenance manuals preform a typical maintenance activity in the time provided.
- **Weight & Balance Task (3 hours)**
 - Complete and/or amend a Weight & Balance Report and answer written questions relating to this subject.



Equipment and Material Supplied by the Committee:

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| 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) 2024--T3 .040" (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 | Drill bits - #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 | Aircraft engine | |

JUDGING CRITERIA

| POINT BREAKDOWN | /100 |
|-------------------------|------|
| Sheet metal | 40 |
| Engine Task | 30 |
| Weight and balance task | 30 |

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 the neck, fingers, hands, or wrists.



ADDITIONAL INFORMATION

Skills Canada Alberta Regional and Provincial Rules and Regulations

[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/>

Opening Ceremonies / On-site Provincial Competitor Registration

Opening Ceremonies for the PSCC will take place on Tuesday May 7, 2024, at 6:00 pm in Hall D of the Edmonton EXPO Centre. Admission is free, and everyone is welcome to attend. It is important to note that competitor registration will open immediately following the Opening Ceremony.

Awards Ceremony

The Awards Ceremony will take place on Thursday May 9, 2024, at 6:30 pm in Hall D of the Edmonton EXPO Centre. 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 PSCC Awards Ceremony. Gold medalists will then be eligible to participate at the Skills Canada National Competition (SCNC) on May 27- June 1, 2024, in Quebec City, QC. 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 9, 2024, 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 javierad@skillsalberta.com prior to the start of competition on May 8, 2024.

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



Questions?

Please contact Whitney Koop at whitneyk@skillsalberta.com if you have any questions regarding the Contest Description.

COMMITTEE MEMBERS

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