



## 2012 Nova Scotia Skills Competition

Official Competition Name: **Aircraft Maintenance**  
 Competition Level: **Post Secondary**  
 Competition Location: **NSCC Dartmouth Gate**  
 Competition Date: **March 29, 2012**

### Purpose of Challenge:

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

### Number of Stations/Competitors:

4 stations/ 6 competitors

### Specific spots allotted to Campuses and Apprentices:

School/Campus/Apprentice	Number of available spots
Halifax Campus	
Institute of Technology Campus	
Kingstec Campus	
Lunenburg Campus	
Marconi Campus	
Pictou Campus	
Shelburne Campus	
Strait Area Campus	
Truro Campus	
Dartmouth Gate	6 max
Apprentices	
Universities	
Private Career Colleges	

### Skills and knowledge to be tested:

#### SKILLS AND KNOWLEDGE TO BE TESTED

- Sheet metal fabrication project \* 2.0 hours
- Control cable rigging, tensioning and safetying. \* 2.0 hours
- Canadian Aviation Regulations (CARS) Exam 1.0 hours
- Weight & Balance Report 1.0 hours

\*Includes Clean-up of area

\*Competition hours 8:30am to 4:00pm Thursday March 29, 2012

## THE MODULES SHALL CONTAIN THE FOLLOWING:

### 1. Sheet metal fabrication project.

- Fabricate sheet metal parts per drawings provided.

### 2. Control cable rigging, tensioning and safetying.

- Determine proper tension for cable from graph provided.
- Tension cables using a tensiometer.
- Safety cables.

### 3. Canadian Aviation Regulations Exam.

- Complete the CAR's exam in the time provided.

### 4. Weight & Balance Report.

- Complete and then amend a Weight & Balance Report & answer written questions relating to this subject.

## Prerequisites:

- Second Year Students Enrolled in a post-secondary Aircraft Maintenance program

## Equipment, tools, supplies, clothing:

### Supplied by the contestant:

- Basic hand tools
  - o 1/4" inch Drive Socket Set
  - o Combination Wrenches (1/4" to 3/4")
  - o Set of Screwdrivers
  - o Duckbill and Needlenose Pliers
  - o Diagonal Cutters
  - o 6-oz Ballpeen Hammer
  - o Soft Face Hammer
  - o 12" Steel Ruler
  - o Cable Clamps (optional)
- Safety glasses
- Hearing protection
- Safety footwear
- Calculator

### Supplied by the organization:

- Air Compressor (electric 10 gallon)
- Workbenches c/w vices (as per site layout)
- 20 foot air hose (qty 6)
- Center punches (qty 4)
- Pin punches (3/32, 1/8, qty 4 each)
- Cape chisels (qty 4)
- Air Fittings (various styles)
- Drilling blocks (wood, qty 4)
  - Cleco Pliers (qty 4)
- Clecos (3/32, 1/8, qty 40 each)
- Rivet MS 20470-AD4-3 (8 oz.)
- 8" x 8" aluminum sheet stock 2024-T3 .032" (qty 36)
- Sheet metal brake (qty 2)
- Fine single cut file, c/w handles (qty 4)
- File card (qty 4)
- Stools (as per site layout)
- Conversion charts
- Spring divider (qty 4)
- Vernier caliper (qty 4)
- Precision ruler (qty 4)
- Fine point marker (qty 10)
- Masking tape 1" (2 rolls)
- #30 Drill bits (qty 10)
- #40 Drill bits (qty 10)
- 1/8 Drill bits (qty 10)
- Countersink/ De-burring tool (qty 4)
- Air drill c/w key (qty 4)
- Toggle clamp (qty 16)
- Control Cable frames (qty 2)
- Cable Clamp (Third Hand) (qty 2)
- Tensiometer (qty 2, Pacific Scientific)
- Lockwire .041" (qty 1 can)
- Lockwire .032" (qty 1 can)
- Thermometer (qty 1)
- Tire Gage (qty 2)
- Torque Wrench 3/8 drive (qty 2, alternate 1/2" drive )
- 7/8" Deep socket 3/8 drive (qty 2, alternate 1/2" drive)
- 3/8" Drive socket set (qty 2, alternate 1/2" drive)
- 3/8" Drive Crowfoot wrench set (qty 2, alternate 1/2" drive)
- Chairs (as per site layout)
- Tables (as per site layout)
- Lockbox
- Flashlights (6)
- Safety Tape
- Extension cords (qty 4)

**Point Breakdown:****POINT BREAKDOWN /400 TOTAL**

Module 1 – 100 points

Module 2 – 100 points

Module 3 – 100 points

Module 4 – 100 points

**Technical Committee Member and Judges:**

John Meider

Todd Lintaman

Judges

Competition Coordinator

Competition Coordinator

TBA

Nova Scotia Community College

Nova Scotia Community College

Various Industry Related Businesses