

CONTEST DESCRIPTION / DESCRIPTION DE CONCOURS

AEROSPACE TECHNOLOGY TECHNOLOGIE AEROSPACIALE

POST-SECONDARY / NIVEAU POSTSECONDAIRE





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1 THE ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY

SCC is currently working with Employment and Social Development Canada (ESDC) in order to bring awareness to the importance of Essential Skills that are absolutely crucial for success in the workforce. Part of this ongoing initiative requires the integration and identification of Essential Skills in contest descriptions, projects, and project documents. The next phase and very important aspect of our Essential Skills (ES) initiative is to provide an ES report card to each competitor at the Skills Canada National Competition. The purpose of the ES report card is to inform the competitor about their current level of essential skills based on their competition scores. With this knowledge, the competitor will be made aware which essential skill may require improvement. Full implementation is expected in the 2017 Skills Canada National Competition.

The following 9 skills have been identified and validated as key essential skills for the workplace in the legend below:

¹Numeracy, ²Oral Communication, ³Working with Others, ⁴Continuous Learning, ⁵Reading Text, ⁶Writing, ⁷Thinking, ⁸Document Use, ⁹Digital

These essential skills have been identified with in section 2.4 and/or 3.2 of your Contest Description. The top three Essential Skills for your area of competition have been identified on your Project and all other supporting project documents.

2 CONTEST INTRODUCTION

- **2.1** Description of the associated role(s) or occupation(s). http://skillscompetencescanada.com/en/careers/transportation/aircraft-maintenance/
- **2.2** Purpose of the Challenge.

To assess the contestants skills and knowledge in performing tasks in the aerospace industry.

2.3 Duration of contest.

12 hours



3 CONTEST DESCRIPTION

3.1 List of documents produced and timeline for when competitors have access to the documents.

DOCUMENT	DATE OF DISTRIBUTION VIA WEBSITE
No other documents will be produced prior to the competition	

3.2 Tasks that may be performed during the contest

- Structural repair (2 hours)
 - Read and interpret technical documents.⁸
 - Determine repair requirements.⁷
 - Fabricate repair parts.
 - Install fabricated repair parts.
- Aircraft Electrical (2 hours)
 - Read and interpret technical documents. 5, 8
 - Determine repair and/or modification requirements.⁷
 - Perform the required repair and/or modification as applicable.
 - Perform functional tests as appropriate.
- Aircraft Maintenance (2 hours)
 - Read and interpret technical documents.⁸
 - Perform required maintenance activites
 - Perform functional tests as appropriate.⁷
- Engine Maintenance (2 hours)
 - Read and interpret technical documents. 5,8
 - Perform required maintenance activites
 - Perform functional tests as appropriate.⁷
- Weight & Balance (2 hours)
 - Read and interpret technical documents. *
 - Perform required activites
 - Complete documents as required.⁶
- Rigging
 - Read and interpret technical documents.⁸
 - Perform required maintenance activites
 - Perform functional tests as appropriate.⁷

Essential Skills – ¹Numeracy, ⁶Writing ⁷Thinking (Critical, Problem Solving), ⁸Document Use



4 EQUIPMENT, MATERIAL, CLOTHING

- 4.1 Equipment and material provided by Skills/Compétences Canada
 - Specialized hand tools Mac Tools
 - Cleaning supplies
 - Shop supplies / equipment
 - Printer
 - Non programmable calculator
 - Chairs
 - Power bars
 - Recycle bins
 - Extention cords
 - Tape
 - 8 oz Ballpeen Hammer Mac Tools model : E150107
 - Torque wrench Mac Tools
 - Precision ruler 6" and 12" non metric Mac Tools
 - Vernier caliper Mac Tools
 - Wire Strippers and Crimpers Mac Tools
 - Volt/Ohm Meters Mac Tools model : EM600
 - Cushon Clamp Mac Tools
 - 1/4 drive 12-point socket set SAE include 9/32 and 11/32 Mac Tools Model : SM192BR
 - 12-PT. Combination Wrench Set Mac Tools model : SCB15K2KS
 - Combination Screwdriver Set Phillips Mac Tools model : SDRB24APT
 - Reversible Wire Twister 6" Mac Tools model : WTR6
 - Long Nose Pliers with Cutter 6" Mac Tools model : M326G
 - Diagonal Cutter 6" Mac Tools model : P6DCA
 - Soft Face/Brass Head Hammer Mac Tools model : CH15DFB
 - Telescoping Inspection Mirror 36-3/8" Mac Tools model : MHTC2
 - LED Flashlight Mac Tools model : FL432R
 - 1/4 drive torque wrench Mac Tools
 - Crow foot wrench Mac Tools
 - Mulit use tool bag Mac Tools model : TB505
 - Plier Wrenches 12" Mac Tools model : P12WR
 - Files Kit Mac Tools model : SMF4KB
 - Pin Punch Set Mac Tools model : PC12PTSS
 - Pick Set Mac Tools model : PSM4
 - Measuring Tape Stanley/Dewalt

COMPETITORS WILL BE REQUIRED TO USE THE MATERIAL AND EQUIPMENT PROVIDED BY SCC. ALL OTHER MATERIAL AND EQUIPMENT WILL BE REMOVED FROM THE SKILL AREA.



- **4.2** Equipment and material provided by the <u>competitor</u>
 - 1/4" inch Drive Socket Set 12 pt
 - Combination Wrenches (1/4" to 7/8" including 9/32" and 11/32")
 - Set of Screwdrivers (Phillips, standard)
 - Duckbill and/or Lock-Wire Twisters
 - Needlenose Pliers
 - Diagonal Cutters
 - Soft Face Hammer
 - 12" Steel Ruler
 - Inspection Mirror
 - Flashlight

Notes:

- Tools required in accordance to this list <u>may</u> be available on site for competitors who fail to provide them, with a corresponding penalty.
- Specialty tools will be assessed on an individual basis.

4.3 Required clothing (Provided by competitor)

- Approprite work place clothing
- No shorts allowed on site

5 SAFETY REQUIREMENTS

5.1 Safety workshop

Upon arrival at the Skill area, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any Competitor breaking any health, safety and environment rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

5.2 List of required personal protective equipment (PPE) provided by <u>Skills/Compétences Canada</u>

- Hearing Protection McCordick
- Safety Glasses McCordick
- Nitrile Gloves McCordick

5.3 List of required personal protective equipment (PPE) provided by competitors

• CSA approved Safety shoes



6 ASSESSMENT

6.1 Point breakdown

POINT BREAKDOWN	/100
Structural repair	20
Aircraft electrical	20
Aircraft maintenance	20
Engine maintenance	20
Weight and balance	20

7 ADDITIONAL INFORMATION

7.1 Consecutive translation

If consecutive translation is required on site, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service might not be guaranteed.

7.2 Tie (No ties are allowed)

In the event of a tie, the competitor with the lowest overall time in all assessment will be declared the winner.

7.3 Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, NTC shall change a maximum of 30% of the work content. Please refer to the Competition Rules.

7.4 Competition Rules

Please refer to the competition rules of the Skills Canada National Competition.

Member Organization	Name	Email address			
British Columbia	Rick Johnstone				
Manitoba Chair	Brian Deane	brian.deane@hotmail.com			
Ontario	Bernard Wurster				
Québec	Daniel St-Jean				
Nova Scotia	Ryan Leedham				
Saskatchewan	Ryan Gillis				
Alberta	Chuck Luehr				

8 NATIONAL TECHNICAL COMMITTEE MEMBERS