INTERNATIONAL
MINES RESCUE COMPETITION
2020
September 13-15, 2022
SMOKE TUBE AIR MEASUREMENT

The following are examples of performance checklists (scoresheets) with merit/penalty values (scoring points). This document is being provided to the teams in advance of the 2022 IMRC for training purposes. These rule interpretations were agreed upon by Simulation Lead Judges and Simulation Judges in advance of the event.
These provided interpretations of the rules and scoring examples are for Section 9, Mine Rescue Skills Scenario/Simulation Rules
Not all scoring examples provided in this document will be used in the 2022 IMRC problem design.

TEAM NAME: _____

SCENARIO

- **Teams will be required to take an air reading using a smoke tube.**
- **Contest will provide the Smoke Tubes and Aspirating Bulb**
- **Contest will provide Tape Measure**
- **Contest will provide the pen or pencil**
- **Contestant(s) will provide a Timing Device that complies with the General Contest Rules**

Judges Instructions

Merit Point Scoring:

      0 = not done
    +1 = poor attempt
    +2 = needs improvement
    +3 = excellent meets all requirements

1. Every line must be scored.
2. A score of 0, 1 or 2 **must be explained** by the judges.
3. When a score of 3 is applied, comments are encouraged

Rough Handling
1. Rough handling demerits will be deducted from the total score
2. Judges can deduct 1 to 5 points per incident of rough handling of equipment
3. Rough handling demerits will have a maximum of 10 points
4. Rough handling deductions must be explained by the judges

International Mines Rescue Competition
Since 1999

1. **SMOKE TUBE REQUIRMENTS**

Teams will be separated into two person teams to complete this segment of the skills exercise.   0 1 2 3

Judges Remarks: _____

_____

2. Contestant(s) will verbally explain how smoke will be released and timed through each of the four quadrants (The contestant(s) **will not** "break" the smoke tube).

0 1 2 3

Judge's Remarks: _____

_____

3. Measure off a distance in a relatively straight and uniform airway. Ten (10) feet will be the distance for this measurement. Contestant(s) will determine the area to be tested in square feet.

0 1 2 3

Judge's Remarks:_____

_____

4. Contestant(s) with the smoke tube will stand at the upwind point of the measured distance, and station one person with a stopwatch at the downwind point.

<div align="right">0 1 2 3</div>

Judge's Remarks: _____

_____

5. Contestant(s) with the smoke tube then simulates releasing a smoke cloud at each quadrant point within the airway.

<div align="right">0 1 2 3</div>

Judge's Remarks: _____

_____

6. The Contestant with the timing device then must time each cloud from the moment it is released until it reaches the downwind point. The measurements are taken separately for each of the quadrants until all 4 quadrants have been completed.

<div align="right">0 1 2 3</div>

Judge's Remarks:_____

_____

7. Contestant(s) will calculate smoke air reading for the area

0 1 2 3

Judges Remarks: _____

_____

SMOKE TUBE TOTAL MERITS _____

LESS DEMERITS _____

SMOKE TUBE TOTAL SCORE _____

WORKING TIME _____

Judge's Name: _____

Judge's Name: _____