

2020 International Mines Rescue Contest September 13th-15th 2022 Underground Mine Simulation Final Score Sheet



TEAM NAME: Furia Esmeraldera

TEAM NUMBER: 6

DATE OF COMPETITION: 9/14/22

TOTAL MERITS: 185

MINUS ANY DEMERITS: 0

TOTAL MINE RESCUE SCORE: 185







IMRC USA 2022

Beaver, WV September 9-16, 2022

Team Name: Furia Esmeraldera			
Team number: 6			
Team clock (working time) at completion of problem: 73:09			
Timekeeper's watch time at completion of problem: 73:09			
Was there a team clock failure or problem? : YES : NO			
If answer is "yes" remarks:			
Initial apparatus test completion time: 4:10			
1 st 20-minute test completion time: 20:40			
2 nd 20-minute test completion time: 41:20			
3 rd 20-minute test completion time: 58:26			
4 th 20-minute test completion time:			
5 th 20-minute test completion time:			
6 th 20-minute test completion time:			
Apparatus checks			
 Rule 3 Team completes all 20-minute apparatus checks as required. 			
2-Team went over on one 20-minute test,			
2 Points earned			
Apparatus checks			
 The team or groups conduct proper apparatus examinations. 			
2-<3 times a group did not conduct a proper exam of their apparatuses,			
2 Points earned			



Surface

- Rule 1
 - Team has on all required PPE.
 - 3-Team met all requirements for the task
 - , 3 Points earned

Surface

- Rule 5
 - Team visually checks the communication/radios for safe operating condition & battery level before going underground.
 - 3-Team met all requirements for the task
 - 3 Points earned
- Stretcher
 - One of the groups takes the stretcher inby the Fresh Air Base and keeps it with them as the groups explore the mine.
 - 2-Team took stretcher in mine but left unattended while continuing to explore,
 - 2 Points earned

Team stops and tasks

- 1. Mine opening-----(gas readings 0.0%Ch4, 500ppmCO, 20.0%O2, 0.00ppmNO2)
 - Rule 7 Team checks gas concentrations at all openings to areas to be explored.
 - 3-Team met all requirements for the task
 - ?3 Points earned
- 2. Spad#103-----(gas readings 0.0%Ch4, 500ppmCO, 20.0%O2, 0.00ppmNO2)
 - Rule 8 Team checks gas concentration at all intersections encountered.
 - 3-Team met all requirements for the task
 - Points earned
- 3. Spad#102-----(gas readings 0.0%Ch4, 500ppmCO, 16.5%O2, 0.00ppmNO2)
 - Rule 8 Team checks gas concentration at all intersections encountered.
 - 3-Team met all requirements for the task
 - 3 Points earned

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	Rule o realification atmosphere to the IC/BO or assistant 16.5%O2.
	3-team met all requirements for the task
	Points earned Rule 2 Team dons' apparatuses if not already, first encounter of an IDLH atmosphere 16.5%O2.
	3-Team met all requirements for the task
	3 Points earned
	 <u>Rule 4</u> Team conducts an apparatus check, first encounter with a respiratory contamination (IDLH) 16.5%O2.
	0-Team skipped task,
	0 Points earned
4.	 X-cut 101 to 102(gas readings 0.0%Ch4, 500ppmCO, 16.5%O2, 0.00ppmNO2) Rule 14 Team block/chock wheel of scoop prior to any team member passing scoop.
	3-Team met all requirements for the task
	Points earned Rule 9 Team checks gas concentration prior de-energizing scoop.
	3-Team met all requirements for the task
	Points earned
	 <u>Rule 15</u> Team de-energize scoop prior to any team member passing scoop. 3-Team met all requirements for the task
	3 Points earned
5.	 Spad#101(gas readings 0.0%Ch4, 500ppmCO, 16.5%O2, 0.00ppmNO2) Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	3 Points earned



6.	Spad#100(gas readings 0.0%Ch4, 500ppmCO, 16.5%O2, 0.00ppmNO2)
	 Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	3 Points earned
	 <u>Rule 26</u> The team will now explore the areas of the lower-level smoke free in 2, 2, and groups.
	3-Team met all requirements for the task
	3 Points earned
	 Rule 28 each group will now report to IC/BO their intentions to stop or advance.
	3-The team met all requirements for the task
	[•] 3 Points earned
	 Rule 28 groups must stay within one crosscut of an adjacent group when exploring.
	3-Team met all requirements for the task
	3 Points earned
7.	Spad#104(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
	 Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	9 Points earned
	 Rule 14 Group block/chock wheel prior to any group member passing mini-trax.
	3-Team met all requirements for the task
	3 Points earned
8.	 Spad#105(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2) Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	¹ 3 Points earned

2



Rule 25 team must come together to fight the fire. 3-The team met all requirements for the task **'**3 Points earned Rule 16 Team members cannot pass the location of the fire in entry encountered prior to extinguishing. 3-Team met all requirements for the task Points earned Rule 22 Team verbally indicates checking for loose roof/ground at the fire location prior to and after putting out, and each time returning through fire area. 0-Team skipped the required task, Points earned Rule 10 check gas concentration at fire prior to extinguishing and after fire is put out. 3-Team met all requirements for the task 3 Points earned Rule 27 after fire is extinguished the team must immediately return to groups of 2's for further explorations. 3-Team met all requirements for the task 3 Points earned 9. Spad#106-----(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2) Rule 8 Team checks gas concentration at all intersections encountered. 3-Team met all requirements for the task **3** Points earned Rule 14 block/chock wheel prior to group passing mantrip. 3-Team met all requirements for the task Points earned



10.	Spad#107(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
	Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	[•] 3 Points earned
11.	Spad#108(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
	 Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	3 Points earned
12.	Spad#109(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
	 Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	3 Points earned
13.	Spad#110(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
	 Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	3 Points earned
	 <u>Rule 24</u> team member must verbally indicate checking loose roof/ground at the location of caved/rock fall.
	0-Team skipped the required task,
	0 Points earned
14.	Spad#111(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
	 Rule 8 Team checks gas concentration at all intersections encountered.
	3-Team met all requirements for the task
	9 Points earned



 <u>Rule 24</u> team member must verbally indicate checking loose roof/ground at the location of caved/rock fall.
0-Team skipped the required task,
O Points earned
15. Spad#112(gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
 Rule 8 Team checks gas concentration at all intersections encountered.
3-Team met all requirements for the task
3 Daints agreed
Points earned
16. Rescue chamber (gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2)
• Rule 30 team must enter RC when reaching 111 & 112 intersections.
3-Team met all requirements for the task
3 Points earned
 Rule 25 team must come together when entering the RC.
3-Team met all requirements for the task
3 Points earned
 <u>Rule 11</u> team member entering RC must check gas concentration inside airlock.
3-Team met all requirements for the task
3 Points earned
• Rule 29 member entering RC must purge to clear the IDLH.
3-Team met all requirements for the task
Points earned



Rescue chamber

• Rule 12

1st gas check in airlock, gas readings 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2), 2nd gas check in airlock after purging gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2, 0.00ppmNO2,

3rd gas test inside inner door <u>(gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2, 0.00ppmNO2)</u>

- 3-Team met all requirements for the task
- Points earned
- Rule 31 the two persons found live in the RC must be properly protected from the IDLH atmosphere outside the RC. (Team must ventilate due to only having one CARE-vent).
- 3-Team met all requirements for the task
- 3 Points earned
- Rule 32 team must evacuate persons to the FAB that were found in the RC by utilizing shortest route to the surface through previous explored areas.
- 3-Team met all requirements for the task
- ¹3 Points earned
- Rule 25 the entire team must remain together when removing any persons from the mine.
- 3-Team met all requirements for the task
- 3 Points earned
- 17. <u>Ventilating to clear IDLH atmospheres the teams has encountered on the lower level to properly remove, and rescue persons found in RC.</u>
 - Rule 33 The team must build a temporary stopping on one side of the caved area located between 110 & 111 due to the caved area is an inaccessible area.
 - 0-Team skipped the required task,
 - 0 Points earned



- <u>Rule 23</u> prior to erecting a team built stopping a team member must verbally indicate checking for loose roof/ground.
- 0-Team skipped the required task,
- O Points earned
- Rule 36 to be consider airtight a temporary must have at least 8 of 9 clips across top clipped and 3 of 4 clips on each side clipped.
- 0-Team skipped the required task,
- 0 Points earned
- <u>Rule 33</u> The team must ensure the upper level is not affected by a ventilation change by
 closing the door located at the bottom of the ramp leading to the upper level due to the
 upper level is consider as an unexplored area.
- 0-Team skipped the required task,
- O Points earned
- <u>Rule 34</u> the stopping may be built, and the door may be closed by either a group of two
 or by the entire team but afterward prior to a vent change, the entire team must all be
 together prior to starting the fan.
- 3-Team met all requirements for the task
- 9 Points earned

Ventilating to clear IDLH atmospheres

- Rule 35 prior to starting the fan the team must receive permission from the control group through a request from the IC/BO.
- 3-Team met all requirements for the task
- 9 Points earned
- <u>Rule 13</u> team must recheck gas concentrations after the ventilation change at their location (if in mine) and at all intersections traveled through immediately after the change occurred.
- 3-Team met all requirements for the task
- 2 Points earned



- 18. Advancing to upper level via ramp (gas readings bottom of ramp 0.0%Ch4, 1250ppmCO, 16.5%O2, 0.00ppmNO2) -- (gas readings top of ramp 0.0%Ch4, 1700ppmCO, 16.5%O2, 0.00ppmNO2 and smoke)
 - Rule 11 when entering the ramp check gas concentrations on ramp leading up to upper level.
 - 0-Team skipped gas check at bottom of ramp,
 - 0 Points earned
 - Rule 11 check gas concentrations at first appearance of smoke at top of ramp.
 - 3-Team met all requirements for the task
 - 3 Points earned
 - Rule 38 team must attach their lifeline in clear air prior to advancing.
 - 3-Team met all requirements for task
 - Points earned
- 19. spad# 200-----(gas readings 0.0%Ch4, 1700ppmCO, 16.5%O2, 0.00ppmNO2 and smoke)
 - Rule 8 Team checks gas concentration at all intersections encountered.
 - 3-Team met all requirements for the task
 - 3 Points earned
 - <u>Rule 24</u> team member must verbally indicate checking loose roof/ground at the location of caved/rock fall and faces.
 - 0-Team skipped the required task,
 - 0 Points earned
- 20. spad# 203---(gas readings 0.0%Ch4, 1900ppmCO, 16.5%O2, 0.00ppmNO2 and smoke)
 - Rule 8 Team checks gas concentration at all intersections encountered.
 - 3-Team met all requirements for the task
 - 3 Points earned
 - <u>Rule 24</u> team member must verbally indicate checking loose roof/ground at the location of caved/rock fall.
 - 3-Team met all requirements for the task
 - 3 Points earned



21. Spad#204--- (gas readings 0.0%Ch4, 1700ppmCO, 16.5%O2, 0.00ppmNO2 and smoke)

- Rule 8 Team checks gas concentration at all intersections encountered.
- 0-Team skipped gas check in intersection,
- O Points earned
- Rule 11 check gas concentration at location of victim/casualties.
- 0-Team skipped gas check at victim/manikin,
- 0 Points earned
- Rule 11 check gas concentration at closed door/airtight structure.
- 3-Team met all requirements for the task
- 3 Points earned
- Rule 32 team must evacuate person/manikin to the FAB that was found at this team stop by attempting to utilizing shortest route to the surface through previous explored areas but will find the route infeasible due to being blocked by a roof collapse.
- 3-Team met all requirements for the task
- 3 Points earned
- Rule 25 the entire team must remain together when removing any persons from the mine.
- 3-Team met all requirements for the task
- Points earned
- 22. Air locking to breach closed door
 - Rule 37 before breaching an airtight separation/closed door an airlock is required.
 - 3-Team met all requirements for the task
 - 3 Points earned
 - <u>Rule 23</u> prior to erecting a team built stopping a team member must verbally indicate checking for loose roof/ground.
 - 3-Team met all requirements for the task
 - 3 Points earned



- Rule 36 to be consider airtight a temporary must have at least 8 of 9 clips across top clipped and 3 of 4 clips on each side clipped.
- 3-Team met all requirements for the task
- 3 Points earned
- 23. Breaching door---(gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2, 0.00ppmNO2)
 - Rule 11 check gas concentration on back of side of door after breaching.
 - 3-Team met all requirements for the task
 - 3 Points earned

24. Find next door closed.

- Rule 37 before breaching an airtight separation/closed door an airlock is required.
 The team may close outby door they just breached or if the airlock is still in place just outby the door then no additional airlock is needed by the team to breach this door.
- 3-Team met all requirements for the task
- Points earned
- Rule 11 check gas concentration at closed door/airtight structure.
- 3-Team met all requirements for the task
- 3 Points earned

25. Breaching door

- Rule 11 check gas concentration on back of side of door after breaching.
- 3-Team met all requirements for the task
- 3 Points earned
- 26. Spad# 210-----(gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2, 0.00ppmNO2)
 - Rule 8 Team checks gas concentration at all intersections encountered.
 - 3-Team met all requirements for the task
 - 3 Points earned
- 27. Spad# 211-----(gas readings 0.0%Ch4, 0.0ppmCO, 20.9%O2, 0.00ppmNO2)
 - Rule 8 Team checks gas concentration at all intersections encountered.
 - 0-Team skipped gas check in intersection,
 - O Points earned

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Mapping and note taking tasks.

Map rule 1: /

The prepared map by the IC/BO must use proper map symbols that are shown in the 2020 IMRC rules.

- 1-IC/BO (>5) times did not use proper symbols shown in the IMRC rules
- Points earned

Map rule 2:

The IC/BO prepared map must record accurately/verbatim all gas concentration readings and other information required to be reported by the team.

- 1-IC/BO (>5) times did not accurately record gas readings or other information
- Points earned

Map rule 3:

The IC/BO must record the time at the completion of each team apparatus test + the lowest gauge reading during each required apparatus test.

- 3-Team met all requirements for task
- Points earned

Map rule 4:

There will be no visually comparing of maps during working of the problem by any team member located inside the designed command center/ FAB.

- 3-Team met all requirements for task
- Points earned

Discounts for disturbing or destroying competition field components 0

Total score from all tasks: 185

Final Score 185

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2020 International Mines Rescue Contest September 13th-15th 2022

Mine Rescue Teams Skills Final Score sheet



SEPTEMBER 13TH THRU 15TH 2022

TOTAL SCORESHEET

TEAM NAME: Furia Esmeralders-Columbia

DATE OF COMPETITION: 09/14/2022

ANEMOMETER SCORE: 17

SMOKE TUBE SCORE: 15

MAGNEHELIC SCORE: 11

GAS DETECTOR SCORE: 12

AIR LIFT BAG SCORE: 27

TEAM CHALLENGE TIME: 34:14

MINUS ANY DEMERITS: 0

TOTAL MINE RESCUE SKILLS SCORE: 82

TOTAL WORKING TIME: ___58:22_

JUDGE'S NAMES: Dean Blair

Dave Crafton







September 13-15, 2022

AIR LIFT BAG SKILL

TEAM NAME: Furia Esmeralders-Columbia

SCENARIO

• Teams will be required to <u>SAFELY</u> lift an object using Compressed Air and Air Lift Bags:.

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
- 4. Rough handling demerits will have a maximum of 10 points
- 3. Rough handling deductions must be explained by the judges

IMRC will provide:

- "Mat-Jack" High Pressure Air Lift Bag
- Compressed Air Cylinder
- Regulator
- Hoses with Connections
- Flow Controller

Team Safety:

If at any time the Simulation Lead Judge feels that a team member's safety may be compromised, the action will be stopped and re-direct negative (penalty) points will apply

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

1. Team will properly connect the regulator to the compressed gas cylinder. 3

Judge's Remarks:

2. Team will properly connect the air lift bag hose to the regulator.

3

Judge's Remarks:

3. Team will properly connect the hose from the flow control bag.	ller to the air lift
Judge's Remarks:	3
4. Team will properly connect the hose from the flow controller bag.	
Judge's Remarks:	to the air lift
Team will properly connect the hose from the flow controller to the bag.	ne air lift
Judge's Remarks:	:

6. Team will properly connect the hose from the flow controller to	the air lift
bag.	3
Judge's Remarks:	
7. Team will properly place blocking under the object being lifted	l.
	3
Judge's Remarks:	
8. Team will properly deflate the bag.	3
Judge's Remarks:	

9. Team will properly rem	ove the bag from under the object being lifted.
	3
Judge's Remarks:	
	TOTAL AIR LIFT BAG MERITS 27
	LESS DEMERITS
Judge's Remarks:	
	TOTAL AIR LIFT BAG SCORE 27

September 13-15, 2022

AIR MEASUREMENTS - ANEMOMETER

Team name: Furia Esmeralders-Columbia

SCENARIO

- Teams will be required to take a reading using an anemometer.
- Contest will provide the required anemometer
- Contest will provide the required tape measure
- Contest will provide required pen or pencil
- Contestant(s) will provide their own timing device

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 <u>must be explained</u> 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
- 4. Rough handling demerits will have a maximum of 10 points
- 3. Rough handling deductions must be explained by the judges

TEXT REQUIRING I	1.	ANEMOMETER REQUIRMENTS
------------------	----	------------------------

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

2. Contestant will give a b Judge's Remarks:	7.17				
	131	1 : 1 : 1		h	
3. Contestant(s) will take a the height of the area muthe area.	measurement o	f the area to i	be tested. B	oth the width	and
the area.	×		cter mine th	e square 100ta 3	age o
ludge's Remarks:				3	
Judge's Remarks:				J	
Judge's Remarks:	-			J	
Judge's Remarks:				J	
Judge's Remarks:				3	
	ometer	77		3	
4. Correctly zero the anemo	ometer.			3	
	ometer.				

5. Stand with contestant's back to one rib and hold the anemometer	in a vertical
position in front of contestant	3
Y. J. D. D. anders	
Judge's Remarks:	
6. Properly traverse the entry	3
Judge's Remarks:	
7. Take a 1 minute (60 seconds) reading in the area:	2
Judge's Remarks:	
Did not do test for one complete minute	
to the anomameter	0
8. At the end of one minute, turn off the anemometer	
T. J. J. Domonika	
Judge's Remarks: Did not show on or off during simulation	
Did Hot show out or our again.	

9. <u>Contestant(s) will now calculate to calculated and submitted to the ju</u>	he air reading for the area (air reading must be
	0
Judge's Remarks:	
Incorrect calculation	
	ANEMOMETER TOTAL MERITS17
	LESS DEMERITS
Judge's Remarks:	
time 00:08:27	
	ANEMOMETER TOTAL SCORE:17_





September 13-15, 2022

Mine Rescue Skills Gas Detector

TEAM NAME: Furia Esmeralders-Columbia

SCENARIO

- Teams will be required to take a reading using an anemometer.
- Contest will provide the Industrial Scientific MX-6
- Contest will provide the required calibrating hood and hose
- Contest will provide required pen or pencil
- Contest will provide the required testing gas
- Contest will provide any required replacement sensors, etc

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









Mine Rescue Skills Gas Detector Scoresheet 2020 International Mines Rescue Contest National Mine Health & Safety Academy Beaver WV. U.S.A.

1. GAS READINGS REQUIRMENTS

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

2. Contestant will give a brief description of how a MX-6 functions	3
	s 3
Judge's Remarks:	
to be a supplied to	
3. Contestant(s) will take the gos toot in the	
3. Contestant(s) will take the gas test in the proper order	3
Judge's Remarks:	O
O	
4. Contestant(s) will follow proper procedure when testing with gas audge's Remarks	detectors 3
5. Contestants will determine gas concentration within the prescribed detector. Correct readings will be within 20% (inclusive) of the gas the test cylinder and observed on the analytical instruments	concentration within
	3
dgo ² g Domesti	
dge's Remarks:	









GAS CONCENTRATIONS

1/1	\mathbf{F}^{γ}	ГН	AN	IF.

% CH 4 in cylinder Min. Accepted Max.Accepted % by Examiner 2.5 2 3 2.46	
CARBON MONOXIDE	
ppm CO in cylinder Min. Accepted Max. Accepted ppm by Exam 100 80 120 102	
OXYGEN DEFICIENCY	
%O 2 in cylinder Min. Accepted Max. Accepted % by Examin 18 14.4 21.6 18	er
NITROGEN DIOXIDE	
ppm NO2 Min. Accepted Max. Accepted ppm by E 5 4 6 5.2	
Judge's Remarks: GAS DETECTOR TOTAL MERIT	
LESS DEMER	RITS
GAS DETECTOR TOTAL SO	
WORKING '	TIME:: 20
Judge's Name: Dean Blair	
Judge's Name: Dave Crafton	







September 13-15, 2020

MAGNEHELIC

SCENARIO

- Teams will be required demonstrate the proper use of a Magnehelic gauge.
- Contest will provide the Magnehelic gauge and hoses
- Contest will provide a device for zeroing the Magnehelic gauge

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 <u>must be explained</u> 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
- 4. Rough handling demerits will have a maximum of 10 points
- 3. Rough handling deductions must be explained by the judges

1. MAGNEHELIC GAUGE REQUIRMENTS

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

2. Contestant(s) failing to explain what a Magnehelic gauge measures 3	
Judge's Remarks:	
3. Contestant(s) will demonstrate how to zero the Magnehelic gauge. 3	
Judge's Remarks:	
	الـ
4. Contestant(s) will connect the hoses to Magnehelic properly and simulate the reading.	
Judge's Remarks:	7
the proper reading of the Magnehelic to the	ne
5. Contestant will give and explain the proper reading of the Magnehelic to the judge (positive or negative pressure should be included in the explanation)	•
2	
Judge's Remarks:	
Wrong reading	

	MAGNEHELIC TOTAL MERTITS11
	LESS DEMERITS
Judge's Remarks: time 00:02:18	

TOTAL MAGNEHELIC SCORE ____11

September 13-15, 2022

SMOKE TUBE AIR READING

TEAM NAME: Furia Esmeralders-Columbia

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 <u>must be explained</u> by the judges.
- 3. When a score of 3 is applied, comments are encouraged

- 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
- 4. Rough handling demerits will have a maximum of 10 points
- 3. Rough handling deductions must be explained by the judges

1. SMOKE TUBE REQUIRMENTS

Teams will be separate 1:	AT 10 March 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
skills exercise	two person teams to complete this segment of the
10150.	omplete this segment of the

2.	Contestant(s) we through each of the smoke tube).	ill verbally explain how smoke will be released and ti he four quadrants (The contestant(s) will not "break"	imed' the

Judge's Remarks:		3
211 Ed - 2 19 pm - 2 1	2011 - 11 - 1 - 1 - 1 - 1 - 1	

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

3

Judge's Re	marks:		

4. Contestant(s) with the smoke tub measured distance, and station or	e will stand at the upwind point of the ne person with a stopwatch at the downwind
point.	3
Judge's Remarks:	
5. Contestant(s) with the smoke tule each quadrant point within the a	be then simulates releasing a smoke cloud at irway.
	3
Judge's Remarks:	
moment it is released until it rea	ely for each of the quadrants until all 4
	3
Judge's Remarks:	

		0
Judges Remarks:		
Incorrect final answer		
	SMOKE TUBE TOTAL MERITS	15
	LESS DEMERITS	
Judges Remarks:		
time 00:05:49		
	SMOKE TUBE TOTAL SCORE	15

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



September 13-15, 2022

MINE RESCUE TEAM CHALLENGE

Team Name: Furia Esmeralders-Columbia

SCENARIO

 Any necessary subject matter and reference manuals used for "Mine Rescue Skills" are posted on the Competition Page of IMRC2020.com. □of MSHA's IG 7(a) manual.

Judges Instructions

Team Safety:

If at any time the Simulation Lead Judge feels that a team member's safety may be compromised, the action will be stopped and re-direct negative (penalty) points will apply

The Challenges will not be scored but will be timed. The cumulative time of the challenges will be added to the cumulative time for the other Mine Rescue Skills for a total time for the Mine Rescue Skills segment of the competition:

Each member of the six (6) person team will compete in the following challenges

Log Sawing Challenge

The Timing Device will be started when Team Member #1 begins the Log Sawing Challenge and will continue to run until the final Team member completes the Sledge Hammer Challenge

1. Each Team member (1-6) will saw a log in half with a handsaw

Carry Challenge

2. Each Team member (1-6) will carry (2) forty one (41 lbs) pound items (Dragersorb Kegs) for a distance of fifty (50) feet and return to the starting point while carrying the items







Fire Hose lay out Challenge

3. Each Team Member (1-6) will Roll out two (2) sections of fire hose from the designated starting point, Connect the two sections of fire hose, Un-connect and reroll the fire hose and Return the fire hose to the starting point

Sledge Hammer Challenge

4. Each Team Member (1-6) will use a sixteen (16) pound sledge hammer to move an 8 inch wide by 8 inch thick by 4 foot long log a distance of 4 feet.

	CUMULATIVE TIME 34:14
Judge's Name: Dean Blair	
Judge's Name: Dave Crafton	







2020 International Mines Rescue Contest September 13th-15th 2022 First Aid Final Score sheet

Sheet

2022 IMRC FIRST AID SEPTEMBER 13^{TH} THRU 15^{TH} 2022 TOTAL SCORESHEET

TEAM NAME: FURIA ESMER	RALDI	ERA
DATE OF COMPETITION: 09/15	5/2022	
CASUALTY ONE MERITS:		79 0
CASUALTY TWO MERITS:	ici viv	<u>95</u> <u>5</u>
CASUALTY THREE MERITS:CASUALTY THREE DEMERITS:	park su park n	<u>85</u> <u>2</u>
CASUALTY FOUR MERITS: CASUALTY FOUR DEMERITS: _	.gariy	<u>19</u> 0
WORKING TIME: <u>38:12</u>	e i ber	
TOTAL FIRST AID MERITS: TOTAL CPR AED SCORE: MINUS FIRST AID DEMERITS: _	278 82 7	(Transfer total CPR AED score from scoresheet)
TOTAL FIRST AID SCORE:	353	







FIRST AID COMPETITION

SCENARIO

When the mine rescue team is at the Firefighting site they are told the following:

- An accident has happened at a surface site.
- The site is located at the Blue Falcon Mining Maintenance Shop.
- Their help is needed immediately.
- Emergency services have been notified.
- Emergency services estimate their response time will be forty-five minutes.
- A fully equipped first aid kit, AED and rescue basket is located at the Blue Falcon Mining Maintenance Shop.
- The team will arrive at the Maintenance Shop.
- The team will determine which one of the three patients that will require immediate transport.

When the team arrives at the Blue Falcon Mining Maintenance Shop they will;

- Gather their first aid kit and rescue basket.
- They will see smoke as they walk to the Maintenance Shop.

At the site the mine rescue team finds three injured workers and one obviously dead worker. It appears an explosion has taken place at an air compressor located in the shop. In the confusion that follows:

- Worker #1 (Bob) he suffers a crushing injury to the LLE from a bulldozer blade.
- Worker #2 (Al) he has electrical burns to the R hand and L shoulder, develops V-fib from the shock, conscious for about three minutes then goes unconscious and requires CPR/AED.
- Worker #3 (Jane) Walking wounded. She has a nail in the eye/safety glasses, confused, trying to help the burn victim, wanting to pull the nail out to see better so she can help. she will also have a foreign body in their leg.
- Worker #4 (Tina) Obvious Deceased worker. Her head is amputated from her body with pool of bright red blood. It appears that a piece of metal became air born from the explosion of the air supply tank connected to the air compressor.

Patients

- 1. Patient #1 (Bob) is lying on the ground with his left leg under a bulldozer blade. He is yelling in pain. Bright red blood is coming out from the leg.
- 2. Patient #2 (Al) was working at the breaker box when the air compressor exploded. The mine rescue team finds the patient lying beside the station box dazed, holding out his hands. He has electrical burns to the R hand and L shoulder, develops V-fib from the shock, conscious for about three minutes then goes unconscious and requires CPR/AED.
- 3. Patient #3 (Jane) (walking wounded) has a nail protruding from her safety glasses involving the eye. She also has a foreign body in their leg. She seems oblivious to either injury as she goes back and forth between the injured co-workers trying to aid. She has blood coming from both injuries.
- 4. Patient #4 (Tina) Obvious Deceased worker. Her head is amputated from her body with pool of bright red blood. It appears that pieces of metal became air borne from the explosion of the air supply tank connected to the air compressor

INTERNATIONAL MINE RESCUE COMPETITION 2020

FIRST AID COMPETITION

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

4. If a team runs out of time a score of 0 will apply to remaining actions

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 for each patient
- 4. Rough handling demerits will have a maximum of 10 points
- 3. Rough handling deductions must be explained by the judges

Team Safety:

If at any time the Simulation Lead Judge feels that a team member's safety may be compromised, the action will be stopped and re-direct negative (penalty) points will apply

INTERNATIONAL MINE RESCUE COMPETITION 2020

FIRST AID COMPETITION

TEAM: FURIA ESMERALDERA	
Patient—#1 (Bob) is lying on the ground with his left leg under a bulldozer blade. He pain. Bright red blood is coming out from the leg.	is yelling ir
Merits Points	
SCENE SURVEY	
1. <u>Assess Hazards</u> Securing the environment. Assure the stability of the blade.	3
Judge's Comments:	
2. Use examination gloves	
Examination gloves must be used before contact with patient occurs	3
Gloves must be removed and disposed of properly	3
Judge's Comments:	
Page 1 Merits Sub Total 9	
1 age 1 Monto out Total	

3. The team members must identify themselves and ask the patient	t if they want help. 3
Judge's Comments:	
Assess Breathing	
1. The team must assess the airway.	3
To assess the airway the team should talk to the patient. The patient there is a good airway.	nt will be able to speak clearly indicating
Judge's Comments:	
Assess Circulation	
1. The team must assess circulation	
To assess circulation teams must check;	
Pulse	3
Skin Condition	3
Skin (Cool, Clammy, Dry)	3
Judge's Comments:	

Page 2 Merits Subtotal ____15

Rapid Body Survey Teams must check; 3 1. The head and neck Judge's Comments: 3 2. The chest Judge's Comments: 3 3. The abdomen **Judge's Comments:** 4. The pelvis and buttocks 3 Judge's Comments: 3 5. The legs Judge's Comments: Page 3 Merits Subtotal ____15

6. The shoulders and arms.	3
Judge's Comments:	
Secondary Assessment The team must obtain a complete history of the patient by using SAMPLE.	
1. Signs and Symptoms What the patient can tell you. What the rescuer can see.	0
Judge's Comments: Team did not do this.	
2. Allergies Is the patient allergic to any medications or anything else?	0
Judge's Comments: Team did not do this.	
3. Medication Is the patient taking any medications?	0
Judge's Comments: Team did not do this.	
4. Pertinent Medical History Does the patient have any medical history the teams should know about?	0
Judge's Comments: Team did not do this.	
Page 4 Merits Subtotal3	

5. Last Oral Intake What and when did the patient last eat?	•	0
Judge's Comments:		
Team did not do this.		
6. Events leading to the Injury/Illness What were the events that led to the incident?		0
Judge's Comments:		
Team did not do this.		
7. To treat for shock teams must;		
Reassure patient		3
Keep patient warm		0
Keep patient at rest		3
Judge's Comments:		
Did not cover with a blanket.		
Treatment of Injuries		
1. Apply tourniquet to leg Teams must apply tourniquet appropriately and label.		2
Judge's Comments:		
No tape on forehead for tourniquet.		
B. 5 Marita Subtatal 8		
Page 5 Merits Subtotal		

2. Apply dressing to leg Apply dressing to crushing injury of leg.	1	
Judge's Comments:		
Did not treat fracture to leg - no splint		
3. Appropriately package the patient for transport. Load and secure the patient in the rescue basket.	1	
Judge's Comments:		
Had to reposition on board after body straps were applied; did not leave patient with a blanket; took backboard straps loose - covered straps left loose.	cove	red
4. Reassure until emergency services arrive	3	
Judge's Comments:		
6. Monitor until emergency services arrive	3	
Judge's Comments:		
7. Fill out casualty care report with the following information		
Date	3	
Time	3	
Team number (identity)	3	
Location	3	
Patient's Name	3	
Vital Signs	0	*
Page 6 Merits Subtotal23		

Treatment	S
Injury Location on Body Outline	3
Judge's Comments: No vital signs on the card.	
8. Rough Handling Deductions	Minus
Judge's Comments:	
Page 7 Scenario #1 Total Merits 79 less Total Demerits 0	_Total Score79
Judge's Signature: Harvey Farrell and Kim Boyd.	

INTERNATIONAL MINE RESCUE COMPETITION 2020

FIRST AID COMPETITION

TEAM: FURIA ESMERALDERA	
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<u>Scenario</u> - Patient #2 (Al)This patient was working at the breaker box when the air compressor exploded. The mine rescue team finds the patient lying beside the breaker box dazed, holding out his hands. He has electrical burns to the R hand and L shoulder. After three minutes (or the team completes all treatment, they are going to perform) the patient becomes unconscious and unresponsive, CPR is required. Will be required to do two sets of CPR and utilize the AED.

Merits Points

3

SCENE SURVEY

1. Assess Hazards

If the team looks for live wires, debris around area they will have demonstrated assessing and correcting hazards

Judge's Comments:

2. Use examination gloves

Examination gloves must be used before contact with patient occurs

Gloves must be removed and disposed of properly

Judge's Comments:

Page 1 Merits Subtotal 9

3. Rescue	0
The victim will be lying on the ground moaning. The team will avoid will be patient will not speak will only moan for the first three minutes.	ires until assurance they are not live.
Judge's Comments:	
Do not score	
4. Identify Themselves as Emergency Responders	3
The team members should identify themselves and ask the patient if he v	vants help.
Judge's Comments:	
,	
1. Assess Breathing The Level of Consciousness of Patient #2 changes 3 minutes after the completes their treatment). Patient's Level of Consciousness change unconscious	e scenario begins (or the team s from non-responsive to
To reassess breathing teams must: Look for the rise and fall of the chest	3
Feel for air movement	3
Listen for air movement	3
Judge's Comments:	
•	
•	
Page 2 Merits Subtotal 12	

Assess Circulation

Assess Circulation	
2. The team must assess circulation	
Pulse	3
Skin Condition	3
Skin (Cool, Clammy, Dry, Moist)	3
Judge's Comments:	
3. When the patient becomes unconscious teams must place patient in the sup Judge's Comments:	oine position. 3
4. Begin CPR Teams must run two sets of CPR and utilize the use of an AED.	1.
Judge's Comments: Did 249 compressions at 46% accuracy on depth, 56% accuracy on raseven minutes after patient stopped breathing	te; began CPR
Page 3 Merits Subtotal 13	

Rapid Body Survey	
Teams must check;	
1. The head and neck	3
Judge's Comments:	
2. The chest	3
Judge's Comments:	
3. The abdomen	3
Judge's Comments:	
4. The pelvis and buttocks	3
Judge's Comments:	
5. The legs	3
Judge's Comments:	
6. The shoulders and arms	3
Judge's Comments:	
Page 4 Merits Subtotal18	

Secondary Assessment The team must obtain a complete history of the patient by using SAMPLE.	
1. Signs and Symptoms What the patient can tell you. What the rescuer can see.	3
Judge's Comments:	
2. AllergiesIs the patient allergic to any medications or anything else?Judge's Comments:	3
3. Medication Is the patient taking any medications? Judge's Comments:	3
4. Pertinent Medical History Does the patient have any medical history the teams should know about? Judge's Comments:	3
5. Last Oral Intake What and when did the patient last eat? Judge's Comments: Did not use blanket until ready for transport.	3

Page 5 Merits Subtotal 15

6. Events leading to the Injury/Illness What were the events that led to the incident?	3
Judge's Comments:	
7. To treat for shock teams must;	
Reassure patient	3
Keep patient warm	1
Keep patient at rest	3
Judge's Comments: Did not use blanket until ready for transport.	
8. Teams must transport patient #2 to the evacuation area first	0
Judge's Comments: Do not score	
Page 6 Merits Subtotal10	

Patient Care Report

1. Teams to fill out casualty care report with the following information	
Date	3
Time	3
Team number (identity)	3
Location	3
Patient's Name	3,
Vital Signs	0
Treatment	0
Injury Location on Body Outline	3
Judge's Comments: No vital signs or treatment on card.	
2. Rough Handling Deductions Minus	5
Judge's Comments: Tagged incorrectly	
Page 7 Scenario #2 Total Merits95less Total Demerits5Total Score90	<u> </u>
Judge's Signature: Debbie Combs and Ray Cartwright	

INTERNATIONAL MINE RESCUE COMPETITION 2020

FIRST AID COMPETITION

TEAM: FURIA ESMERALDERA	
Scenario - #3 Patient #3 (Jane)This patient has a nail protruding from her safety glasses also has a foreign body in her leg. She appears oblivious to either injury as she goes be injured co-workers trying to aid them. She has blood running from both injuries.	involving her eye. She back and forth between
SCENE SURVEY	
1. <u>Assess Hazards</u> Asses for live wires, standing water, loose rubble.	3
Judge's Comments:	
2. Use examination gloves	
Examination gloves must be used before contact with patient occurs	3
Gloves must be removed and disposed properly	2
Judge's Comments: One team member left patient #2, came over to patient #3 and went to patient # without changing gloves.	2
Page 1 Merits Subtotal 8	

3. Identify Themselves as Emergency Responders 3 The team members should identify themselves and ask the patient if he wants help. **Judge's Comments:** 1. The team must assess the mental status of the patient. Ask about the incident 3 Ask if patient aware of day, time **Judge's Comments:** 2. Stabilization of foreign bodies. Applies dressing that stabilizes both foreign bodies Controls the bleeding. 5 Judge's Comments: Left alone for a long time before he was given any treatment. When the treatment was given the eye was not padded under the cup; no stabilization used; cup was eventually used but no stabilization of nail to prevent movement. Page 2 merits subtotal 15

Assess Circulation

1. The team must assess circulation To assess circulation teams must check;	
Pulse	0
Skin Condition	0
Skin (Cool, Clammy, Dry)	0
Judge's Comments: No treatment given for any of the above.	
Rapid Body Survey	
Teams must check;	
1. The head and neck	3
Judge's Comments:	
2. The chest	3
Judge's Comments:	
3. The abdomen	3
Judge's Comments:	

4. The pelvis and buttocks Judge's Comments:	0
Not checked - left sitting	
5. The legs	0
Judge's Comments:	
Not checked - left sitting	
6. The shoulders and arms	3
Judge's Comments:	
Secondary Assessment The team must obtain a complete history of the patient by using SAMPLE.	
1. Signs and Symptoms What the patient can tell you. What the rescuer can see.	3
Judge's Comments:	
2. Allergies Is the patient allergic to any medications or anything else?	3
Judge's Comments:	
Page 4 Merits Subtotal 9	

3. Medication Is the patient taking any medications?	3
Judge's Comments:	
4. Pertinent Medical History	3
Does the patient have any medical history the teams should know about?	
Judge's Comments:	
5. Last Oral Intake What and when did the patient last eat?	3
Judge's Comments:	
6. Events leading to the Injury/Illness What were the events that led to the incident?	3
Judge's Comments:	
7. To treat for shock teams must;	
Reassure patient	2
Keep patient warm	0
Keep patient at rest	2
Judge's Comments: Once they finally arrived at patient they stayed and reassured him the entire Patient was sat down - should be laid down and covered with blanket.	time;
Page 5 Merits Subtotal 16	

Treatment of Injuries

1. Treat both foreign body areas	
If team tries to remove foreign body rough handling will apply Fully expose injury without removing the foreign body	3
Maintain areas for position of comfort	3
Apply dressing(s)	3
Pad above and below wound	3
Apply a bandage	3
Apply bandage to support the foreign bodies	0
Cover both eyes	1
Patient Care Report	
ratient Care Report	
1. Teams to fill out casualty care report with the following information	
Date	3
Time	0
Team number (identity)	0
Location	3
Patient's Name	2
Vital Signs	0
Γreatment	1
njury Location on Body Outline	3
Judge's Comments:	

Eye injury not supported by bandage under the cup; uninjured eye was not covered. Information was not recorded on the card.

Page 6 Merits Subtotal 28

2. Rough Handling Deductions	Minus	2
Judge's Comments: Delayed physical treatment of patient; patient was moved prior to securir	ng the nai	l in his
eye.	3	
Page 7 Scenario #3 Total Merits 85 less Total Demerits 2 Total Sc	ore <u>83</u>	
Judge's Signature: Shaun Dando and Becky Newberry	_	

INTERNATIONAL MINE RESCUE COMPETITION 2020

FIRST AID COMPETITION

TEAM: FURIA ESMERALDERA	
Scenario - #4 Patient #4 (Tina) Obvious Deceased worker. Her head is amputated from he bright red blood. It appears that pieces of metal became air borne from the explosion of connected to the air compressor.	er body with pool of f the air supply tank
SCENE SURVEY	
1. <u>Assess Hazards</u> Securing the environment. Assure the stability of the blade.	2
Judge's Comments:	
Did not assure equipment was checked	
2. Use examination gloves	
Examination gloves must be used before contact with patient occurs	3
Gloves must be removed and disposed of properly	3
Judge's Comments:	

Page 1 Merits Sub Total 8

Assess Breathing 1 1. The team must assess the airway. To assess the airway the team should talk to the patient. Obviously deceased amputated head. Judge's Comments: Identified casualty as deceased but did not do a closer inspection. **Assess Circulation** 1. The team must assess circulation To assess circulation teams must check; 1 Pulse Judge's Comments: Didn't go down to patient. **Patient Care Report** 1. Teams to fill out casualty care report with the following information 3 Date 0 Time 0 Team number (identity) 3 Location Patient's Name 0 Vital Signs 0 Treatment 0 Injury Location on Body Outline Judge's Comments:

Data was not recorded on the card

Page 2 Merits

Sub Total 11

Judge's Signature: Shaun Dando and Becky Newberry					
Page 2 Scenario #4 Total Merits	19	less Total Demerits	0	_Total Score _	19





FURIA ESMERALDERA

INTERNATIONAL MINES RESCUE COMPETITION 2020 FIRST AID COMPETITION CPR AED

Judges Instructions

TEAM:

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 <u>must be explained</u> by the judges or the Chief Judge will remove the demerit.
- 3. When a score of 3 is applied, comments are encouraged
- 4. If a team runs out of time a score of 0 will apply to remaining actions

Rough Handling

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

Scenario

The team will transport the patient with the highest priority from the accident scene to the receiving area (sea containers). Upon arrival at the receiving area the patient will be told the patient is vital signs absent.

The team will be required to begin CPR, provide ventilations with a pocket mask and use an AED. A CPR mannequin in a stretcher will be located in the receiving area. When five team members have completed CPR and ventilations the competition will be completed.

CPR/AED Total Merits	37	less Total Demerits	5	_ Total Score	82









INTERNATIONAL MINE RESCUE COMPETITION 2020 FIRST AID COMPETITION CPR AED

TEAM: FURIA ESMERALDERA	
Team Approach	
1. Captain calls in and provides an update	
Team must update control centre	3
Judge's Comments:	
2. Initial Response	
A team member	
Assesses patient	2
Prepares to start CPR	2
A team member	
Sets up personal pocket mask	2
A team member	
Gets the AED	3
Sets up the AED	3
Judge's Comments	
Initially tagged as delay and left patient until 7 minutes later to begin C	PR.

Page 1 Merits Subtotal _____15







Page 2

3. Use examination gloves		
Examination gloves must be used before contact with patient occurs	3	
Airway check	3	
Breathing check	3 3	
Circulation check	v	
Judge's Comments:		
4. Rescuer #1 to start CPR Immediately (without delay)	0	
Proper hand placement, place the heel of one hand on the idle of the pe	rson's chest. 3	
Place the other hand on top.	3	
Do 30 compressions. (Compression depth 5cm (2 inches)	1	
Allow the chest to recoil after each compression.	1	
Compression Rate 30 compressions in about 18 seconds at a rate of 100	- 120 1	
Judge's Comments:		
7 minutes delay before beginning CPR (tagged delayed worked on other patient); 46% accuracy in depth and 56% on rate.		
5. Rescue breather #1 with a Resuscitation Mask (pocket mask)		
Place the mask so that it covers the person's mouth and nose.	3	
Position the lower rim of the mask between the person's lower lip and c	hin. 3	
The opposite end of the mask should cover the nose	3	
	Page 2 Merits Subtotal	30_









		Page 3
When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place.	3	
Maintain an open airway using head tilt chin lift.	3	
Give two breaths	1	
Watch to see if chest is rising and falling.	3	
Repeat 2 breaths every thirty compressions	2	
Judge's Comments:		
Delayed in beginning breaths		
6. AED arrives		
Open and turn on the AED	3	
Remove any clothing or objects (including Jewelry) from the person that may come in contact with the pads.	3	
Remove any medical patches, including nitroglycerin, nicotine, or hormone.	3	
Ensure that the chest is dry and free of hair so the pads can stick.	3	
Properly place the AED Pads (follow the diagrams on the pads)	3	
Pads must be at least 2.5cm (1") between pads when placed on the chest.	3	
Follow the AED's automated prompts	3	
Judge's Comments:		

Page 3 Merits Subtotal 33









Page 4 When the AED prompts you to give a shock the team should: Stand clear Say "I'm clear, you're clear, everybody's clear." Make sure that no one is touching the person in cardiac arrest during analyze and shock modes. Judges' Comments: 7. Two-Rescuer CPR Switch quickly with another rescuer every two minutes (between cycles) to maintain the 0 quality of CPR. Feel for carotid pulse No signs of circulation continue CPR Judge's Comments: Did 249 compressions and did not switch rescuers. **CPR Rescuer #2** Proper hand placement, place the heel of one hand on the idle of the person's chest. Place the other hand on top. Do 30 compressions. (Compression depth 5cm (2 inches)







Page 4 Merits Subtotal __



Page 5 Allow the chest to recoil after each compression. Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120 Judge's Comments: Never switch rescuers Rescue Breather #2: Set up personal pocket mask Place the mask so that it covers the person's mouth and nose. Position the lower rim of the mask between the person's lower lip and chin. The opposite end of the mask should cover the nose When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place. Maintain an open airway using head tilt chin lift. Give two breaths Watch to see if chest is rising and falling. Repeat 2 breaths every thirty compressions Judge's Comments: Never switch rescuers

Page 5 Merits Subtotal 0







Page 6 0 Follow the AED's automated prompts When the AED prompts you to give a shock the team should: 0 Stand clear Say "I'm clear, you're clear, everybody's clear." Make sure that no one is touching the person in cardiac arrest 0 during analyze and shock modes. Judge's Comments: 8. Two-Rescuer CPR Switch quickly with another rescuer every two minutes (between cycles) to maintain the quality of CPR. Feel for carotid pulse No signs of circulation continue CPR Judge's Comments: **CPR Rescuer #3** Proper hand placement, place the heel of one hand on the idle of the person's chest. Place the other hand on top. Do 30 compressions. (Compression depth 5cm (2 inches)

Page 6 Merits Subtotal _____







Page 7 Allow the chest to recoil after each compression. Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120 Judge's Comments: Rescue Breather #3 Set up personal pocket mask Place the mask so that it covers the person's mouth and nose. Position the lower rim of the mask between the person's lower lip and chin. The opposite end of the mask should cover the nose When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place. Maintain an open airway using head tilt chin lift. Give two breaths Watch to see if chest is rising and falling. Repeat 2 breaths every thirty compressions Judge's Comments:

nal Mines Pess







		Page 8
Follow the AED's automated prompts	0	
When the AED prompts you to give a shock the team should:		
Stand clear	0	
Say "I'm clear, you're clear, everybody's clear."	0	
Make sure that no one is touching the person in cardiac arrest during analyze and shock modes.	0	
Judge's Comments:		
9. Two-Rescuer CPR		
Switch quickly with another rescuer every two minutes (between cycles) to maintain the quality of CPR.	0	
Feel for carotid pulse	0	
No signs of circulation continue CPR	0	
Judge's Comments:		
CPR Rescuer #4		
Proper hand placement, place the heel of one hand on the idle of the person's chest.	0	
Place the other hand on top.	0	
Do 30 compressions. (Compression depth 5cm (2 inches)	0	
Page 8 Merits Sub	otal_	0









Page 9 Allow the chest to recoil after each compression. Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120 Judge's Comments: **Rescue Breather #4** Set up personal pocket mask Place the mask so that it covers the person's mouth and nose. Position the lower rim of the mask between the person's lower lip and chin. The opposite end of the mask should cover the nose When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place. Maintain an open airway using head tilt chin lift. Give two breaths Watch to see if chest is rising and falling. Repeat 2 breaths every thirty compressions Judge's Comments:

Page 9 Merits Subtotal ____0







Page 10 Follow the AED's automated prompts 0 When the AED prompts you to give a shock the team should: Stand clear Say "I'm clear, you're clear, everybody's clear." Make sure that no one is touching the person in cardiac arrest during analyze and shock modes. 0 Judge's Comments: 10. Two-Rescuer CPR Switch quickly with another rescuer every two minutes (between cycles) to maintain the quality of CPR. 0 Feel for carotid pulse 0 No signs of circulation continue CPR Judge's Comments: **CPR Rescuer #5** Proper hand placement, place the heel of one hand on the idle of the person's chest. 0 Place the other hand on top. Do 30 compressions. (Compression depth 5cm (2 inches) Page 10 Merits Subtotal _









Page 11

Allow the chest to recoil after each compression.	
Compression Rate 30 compressions in about 18 seconds at a rate of 100 - 120	0
Judge's Comments:	
Rescue Breather #5	
Set up personal pocket mask	0
Place the mask so that it covers the person's mouth and nose.	0
Position the lower rim of the mask between the person's lower lip and chin.	0
The opposite end of the mask should cover the nose	0
When giving rescue breaths, maintain a good seal by using both hands to hold the mask in place.	0
Maintain an open airway using head tilt chin lift.	0
Give two breaths	0
Watch to see if chest is rising and falling.	0
Repeat 2 breaths every thirty compressions	0
Judge's Comments:	

Page 11 Merits Subtotal ____0







		Page 12
Follow the AED's automated prompts	0	
When the AED prompts you to give a shock the team should:		
Stand clear	0	
Say "I'm clear, you're clear, everybody's clear."	0	
Make sure that no one is touching the person in cardiac arrest during analyze and shock modes.	0	
Judge's Comments:		
		_
Rough Handling Deductions		5
Judge's Comments:		
Incorrectly tagged (delayed) / delayed treatment for seven minutes.		
Page 12 Merits Sub	total	0
CPR/AED Total Merits87 less Total Demerits5 Total Sc	ore _	82
Judge's Name: Debbie Combs and Ray Cartwright		
Judge's Name:		









2020 International Mines Rescue Contest September 13th-15th 2022 Fire Fighting Final Score sheet



2022 IMRC FIRE FIGHTING SEPTEMBER 13^{TH} THRU 15^{TH} 2022 TOTAL SCORESHEET

TEAM NAME: FURIA ESMERALDERA	1 1 1 1 1
DATE OF COMPETITION: 09/15/2022	f was in a mass
FIRE HOSE HOOK UP SCORE:	14
FIRE HOSE and NOZZLE MANAGEMENT SCORE:	15
LIVE FIRE/REMOTE MONITOR SET UP SCORE:	27
MINUS ANY DEMERITS:	4
TOTAL FIRE FIGHTING SCORE:	52







2020 International Mines Rescue Competition

Fire Fighting Scenario Scoresheets

September 13th – 15th 2022

TEAM NAME: FURIA ESMERALDERA

COMPETITION DATE: 09/15/2022

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
- 4. Rough handling demerits will have a maximum of 10 points
- 3. Rough handling deductions must be explained by the judges

Team Safety:

If at any time the Simulation Lead Judge feels that a team member's safety may be compromised, the action will be stopped and re-direct negative (penalty) points will apply

Fire Hose Hook Up

1. Did the team flush the fire hydrant?	2
Judge's Remarks:	
Left side didn't fully flush the hydrant.	
2. Did a team member remain at the fire hydrant until are hoses were established?	3
Judge's Remarks:	
Fire Hose Lays	
1. Was fire hose lay properly flushed?	3
Judge's Remarks:	
	_
2. Was open end of fire hose secured during flushing process?	3
Judge's Remarks:	
3. Were connections properly hand tightened?	3
Judge's Remarks:	

Fire Hose and Nozzle Management

1. Were te	eams split up equally on each hose lay?	3
Judge's Rema	rks:	
2. Did tear	m flush the fire nozzle?	1
Judge's Remai	rks:	
Nozzles on bot	h sides were not in the proper flush position.	
ż		
3. Did fire and strai	hose team maintain an arm's length spacing at all times and keep ght?	the hose level
Judge's Remar	ks:	
	aintain an arm's length spacing at all times. Hose was not	kept level and
-		· 9
4. Did the n	nozzle man open the flow to the nozzle slowly, and deliberately?	3
Judge's Remark	ks:	. =
		er e i sgn [i]

5. Did the nozzle man dictate terms of advancement and maintain control of stream?	3 ′
Judge's Remarks:	
	3 /
6. Did the team complete the pattern in the time allotted?	0 /
Judge's Remarks:	
Live Fire/Remote Monitor Set Up	
1. Did team members correctly don their apparatus?	3
Judge's Remarks:	
2. Did fire team advance with full fog pattern to designated point?	3
Ludania Damauka	
Judge's Remarks:	
	- Williams
3. Were team members positioned along the inside of the hose lays?	3
Judge's Remarks:	

4. Did trailing persons retrieving equipment maintain contact with the hose line?	3
Judge's Remarks:	
5. Was monitor properly set up?	3
Judge's Remarks:	
6 Did the team utilize proper techniques in transitioning from the pozzle to the mo	nitor?
6. Did the team utilize proper techniques in transitioning from the nozzle to the mo	nitor?
Judge's Remarks:	
Team didn't shut down the nozzle on either side before clamping the hose.	
7. Did the team flush the monitor after it was established?	2
Judge's Remarks:	
Team didn't fully flush the monitor after it was established.	- 14
8. Did the team adjust the monitor to a fire fighting pattern?	3
	3
Judge's Remarks:	

9. Did team members all maintain hand contact with he	ose on retreat to fresh ai	r base?
		3
Judge's Remarks:		
10. Did team bring out nozzle and hose clamp?		3
Judge's Remarks:		
ouding 5 xtm.		
Burn Pad Time15:40		
Burn Tunnel Time 23:20		
Total Time39:00		
		56
	Total Merits:	- 50
	Minus Demerits: _	4
	Willius Dements	
Judge's Remarks:		
Worked great together as team. Rough handling. Team dropped charged hose line1		
Poor hose management1		
Team members broke position while in dynamic on two occas	ions2	
		F O
	Total Score	52





INTERNATIONAL MINES RESCUE COMPETITION 2020

September 13-15, 2022

BG 4 TECHNICIAN TOTAL SCORE and WORKING TIME

TEAM NAME: FURIA ESMERALDERA			
TECHNICIAN NAME: Alfonso Lopez Cacere			
DATE: 09/13/2022			
TOTAL MERITS: 21			
TOTAL DEMERITS: 0			
TOTAL POINTS: 21			

WORKING TIME (IN Minutes and Seconds) 30:00

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
- 4. If the Technician runs out of time a score of 0 will apply to remaining actions

Rough Handling or abuse of Equipment:

- 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
- 4. Rough handling demerits will have a maximum of 10 points
- 3. Rough handling deductions must be explained by the judges







SCENARIO

When the Technician arrives, they will find;

- A fully assembled BG 4 Breathing Apparatus.
- A kit of tools
- An isolation test kit
- An RZ 7000
- Liquid for Detection of Leaks
- All spare parts that are necessary to carry out the task

Merits Points

Visual Inspection

1. TECHNICIAN MUST VISUALLY CHECK THE FOLLOWING:

3

FACEPIECE, HOSES AND REFILLABLE CANISTER.

Judge's Comments:

Benchman did a good job on exam, however he did not remove the canister to check sealing edges.

2. Insert O2 Cylinder

Cylinder Pressure <u>Must</u> be greater than <u>2,600</u> psi Check the Hydrostat check date

3

Judge's Comments:

Benchman did a great job checking cylinder and stating cylinder pressure on gauge, hydrostat date and that cylinder had enough pressure to perform all tests.







3. Low Pressure Warning

Zero Adjust (Automatic) Connect Hose Coupler Set to Positive Pressure Pumping (Low Pressure Warning should Activate at less than 1.4 mbar

3

Judge's Comments:

4. Inhalation Valve

Set to Positive Pressure Pumping (Tightly pinch exaltation hose And pump slowly until 10 mbar is indicated

3

Judge's Comments:

5. Exhalation Valve

Set to Negative Pressure Pumping (Tightly pinch inhalation hose And pump slowly until -10 mbar is indicated

3

Judge's Comments:









6. Drain Valve:

Set to Positive Pressure Pumping
Fit sealing cap over relief valve & pump until the Drain Valve Opens
The Drain Valve Should Open between 10 mbar and 18 mbar

3

Judge's Comments:

7. Leak Test w/Positive Pressure

Set to Leak Test

Press Button to Reduce Pressure to 7.5 mbar

Press OK Button to Activate Timer

Pressure Should **NOT** change by more than **1 mbar** in 1 minute

Vent Tester

Remove Sealing Cap

0

Judge's Comments:

Benchman did a good job isolating different parts of the apparatus looking for leaks, however he ran out of time before he could find all leaks. Did not complete.

8. Relief Valve

Set to Positive Pressure Pumping

Pump until Relief Valve Opens. It should be between 2 & 5 mbar

0

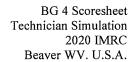
Judge's Comments:

Did not complete.











9. High Pressure Leak Test

Set to Leak Test

Open cylinder valve. (Cylinder pressure must be greater than 2,600 psi) Sentinel Displays the **CLOSE CYLINDER ICON**: Close Cylinder Valve Sentinel Displays the **OPEN CYLINDER ICON**: Open Cylinder Valve

Vent Tester

Breathing Bag will deflate

0

Judge's Comments:

Did not complete.

10. Constant Metering Valve

Set to Positive Pressure Pumping

Fit Sealing Cap over Relief Valve & Pump until Breathing Bag is Inflated

Dosage L/min

Constant Dosage should lie between 1.5 and 1.9 L/min

0

Judge's Comments:

Did not complete.

11. Minimum Valve

Set to Negative Pressure Pumping

Gently Pump & Remove Sealing Cap from Relief Valve Pump slowly until hissing sound is heard Minimum Valve should Open Between 0.1 % 2.5 mbar

0

Judge's Comments:

Did not complete.







12. Bypass Valve	
Set to Leak Test Press red bypass button, oxygen must be heard flowing into the circuit Breathing Bag Inflates)
Judge's Comments:	
Did not complete.	
13. Residual Pressure Warning Set to Leak Test Close Cylinder Valve. Watch Sentinel Display Unit Warning should be generated at approximately 700 psi Unplug coupling from RZ 7000 & Replace Sealing Cap on Plug In	
Coupling when Pressure reaches 0 psi 0)
Judge's Comments:	
Did not complete.	
14. <u>Battery Test</u> On Activation & Deactivation the Sentinel automatically checks & Displays Battery Capacity Battery Warning 1: When Benching REPLACE BATTERY Battery Warning 2: REPLACE BATTERY BEFORE ANY NEW OPERATION Turn off Unit by simultaneously pressing right & left buttons	
Judge's Comments:)
Judge's Comments:	







15. <u>BG 4 Fully Assembled and Ready for Use:</u> Facepiece Defogged	
Facepiece Connected	0
Judge's Comments:	
Did not complete.	
16. BG 4 Problems:	
Wrong Nosecup	0
Damaged Drain Valve	0
Damaged Drain Valve Disk	3
Damaged Relief Valve	0
Readout Cover Missing	0
Judge's Comments:	
Did not complete.	
Davel Handling Indon's Comments	
Rough Handling Judge's Comments:	Total Merits 21
	less Total Demerits0
	Total Score <u>21</u>
	Working Time: 30:00
Judge's Name: David Stepp	
Judge's Name: Thomas Stefansky	







		•	



Theory Assessment Total Scoresheet IMRC 2020 National Mine Health & Safety Academy Beaver, WV, U.S.A.

THEORY ASSESSMENT TOTAL SCORESHEET

TEAM NAME: Columbia 1 Furia Esmeraldera

DATE OF COMPETITION: 09/13/2022

TOTAL SCORE: 6	TIME: 3	8.57
QUESTION NUMBER	R NUMBER OF ATTEMPTS	SCORE
1.	1	3
2.	1	3
3.	1	3
4.	1	3
5.	2	2
6.	2	2
7.	1	3
8.	1	3







			A)
	•		



Theory Assessment Total Scoresheet IMRC 2020 National Mine Health & Safety Academy Beaver, WV, U.S.A.

QUESTION NUMBER 9.	NUMBER OF ATTEMPTS 1	score 3
10.	2	2
11.	1	3
12.	1	3
13.	2	2
14.	2	2
15	1	3
16.	1	3
17.	1	3
18.	1	3
19.	1	3







			£	



Theory Assessment Total Scoresheet IMRC 2020
National Mine Health & Safety Academy Beaver, WV, U.S.A.

QUESTION NUMBER	NUMBER OF ATTEMPTS	SCORE
20.	1	3
21.	1	3
22.	1	3
23.	1	3
24.	1	3







			4



High Angle Rope Rescue Total Scoresheet 2020 International Mines Rescue Competition National Mine Health & Safety Academy Beaver, WV. U.S.A.

INTERNATIONAL MINES RESCUE COMPETITION 2020

September 13-15, 2022

High Angle Rope Rescue

TEAM NAME: 09/13/2022 furin camealda	
TEAM NAME: U9/13/2022 Turia come da	
WORKING TIME: 1:00	
	TOTAL MERITS:11
	MINUS DEMERITS: 0
	TOTAL SCORE: 11
1. CAPTAIN:	MERITS 2
	Minus Demerits0
	TOTAL 2
2. ANCHOR POINTS:	MERITS:1
	Minus Demerits:0
	TOTAL:1
3. LOWERING/HAULING SYSTEM:	MERITS:1
	Minus Demerits:0
	TOTAL:1









High Angle Rope Rescue Total Scoresheet 2020 International Mines Rescue Competition National Mine Health & Safety Academy Beaver, WV. U.S.A.

4. BELAY/SAFETY:	MERITS: _	3
	Minus Demerits: _	0
	TOTAL:	3
5. KNOTS:	MERITS: _	1
	Minus Demerits:	
	TOTAL	
6. PATIENT PACKAGING:	MERITS: _	2
	Minus Demerits	0
	TOTAL:	2
7. SAFETY:	MERITS: _	0
	Minus Demerits: _	0
	TOTAL:	0
8: OTHER:	MERITS: _	
	Minus Demerits:	0
	TOTAL:	1





INTERNATIONAL MINES RESCUE COMPETITION 2022

September 13-15, 2022

High Angle Rope Rescue

TEAM: 09/13/2022

SCENARIO

When the Mine Rescue team arrives they will find;

- Rope rescue equipment and anchor points.
- Tripod
- Class III harnesses and various sized tubular webbing
- Access holes for ascending and descending
- A dummy with a simulated back injury

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
- 4. If a team runs out of time a score of 0 will apply to remaining actions

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

Team Safety:

If at any time the Simulation Lead Judge feels that a team member's safety may be compromised, the action will be stopped and re-direct negative (penalty) points will apply

INTERNATIONAL MINES RESCUE COMPETITION

2022

September 13-15, 2022

High Angle Rope Rescue

	TEAM: 09/13/2022
	TIME: 1:00
Y N V	
Y N ✓ □ ✓ □ Judge's Com	ANCHOR POINTS SCORE: 1 Appropriate Anchor Points Selected Proper Rope Protection Utilized From Anchor to Edge ments:
Tripod instab	ility / not secure

LOWERING/HAULING SYSTEM SCORE: 1 Y N Little To No Slack In System Good Communication Between Edge Attendant, Lowering/Hauling Team, and Belay Was The System Shock Loaded Appropriate Mechanical Advantage Chosen Judge's Comments: Lots of slack (NPD) BELAY/SAFETY

Y N SCORE: 3 Little To No Slack In System Was The System Shock Loaded If Tripod Is Utilized, Will Belay Function Independently

Judge's Comments:

Y N SCORE: 1 Y N Knots Tied Properly, Dressed, And With Safeties When Applicable Appropriate Knot For The Job Approved Rescue Knots

Judge's Comments:

Knot not dressed appropriately.

PATIENT PACKAGING

Y N V V V Judge's Co Confusion	Consider Patients Medical Needs (NO TREATMENT) Patient Packaged In Safe & Efficient Manner Protects Patient From Further Injury mments: while packaging patient.
	SAFETY
	SCORE: 0
Y N	1
	Did Rescuer Perform In Unsafe Manner
✓	Was Equipment Treated With Care
	Means Of Retrieval Readily Available
lacksquare	Was The Team Stopped Due To Unsafe Practices
Judge's Co	omments:
Tripod was	s not stable.
Rescuer s	tepped on rope multiple times at the bottom.
	O.T.Y.Y.Y.
	OTHER SCORE: 4
Y N	SCORE: 1
✓	Did the Captain Demonstrate Knowledge Of Rope Rescue
	Did The Team Demonstrate Knowledge Of Rope Rescue
	During Lowering/Hauling Could The "Whistle Test" Be Performed Safely
	Were Hazards Mitigated Appropriately
	Other (Please Describe Below)
	.

- Judge's Comments:
- 1. 13 minutes before they got to the hole.
 2. No paitient contact from the top.

Rough Handling Comments:	
Judge's Name: Adrian Gordon Andrew Burt	
Judge's Name: Robert Andrew	
Judge's Name: Jaime Calapuya	
Judge's Name: Andrew Garland	

3 1 1 c