

# 2015 TENNESSEE REGION

## Mine Rescue Contest

### Team Exploration Solution

Captain must mark date and team position number on the board at FAB and start the timing device.

*If captain fails to DI, dock under Surface judge #1 item 8.*

#### **First Exploration:**

Teams will examine all openings; conduct gas tests (GT) and the captain must D&I the permanent stopping in the #2 Heading.

*Failure to make necessary gas test where required, each gas, each infraction.*

*Under UG Judge #2 item 1. (1 dock x each omission). If captain fails to DI, dock under UG Judge #1 item 9. (2x each place)*

At the FRESH AIR BASE the captain will find BRATTICE MATERIAL WITH FRAMES, and the GAS TESTING STATION and will have to "hood" the detector and put the gas on the detector. The captain will give the readings from the detector to the #2 judge who will write the individual gas readings down on the judge's map.

*If team does not make the "hooded" gas check on the detector, dock them under Underground Judge #2, Item 4 for each incorrect reading other discounts may exist. 15 docks X 4 = 60 docks.*

#### **Team Stop #1**

*Note; team can airlock into the TEMPORARY STOPPING, in the #1 heading or either the TEMPORARY STOPPING in #3 heading. The PERMANENT STOPPING in the #2 heading cannot be removed.*

For this scenario, the teams will air lock into the #3 heading, TEMPORARY STOPPING.

*If the team does not build an airlock, dock them under UG Judge #2, Item 10 (10 discounts).*

*If the captain doesn't check the roof and rib prior to building airlock, dock them under UG Judge #1 Item 8b3 (5 discounts) other discounts may exist. known)(15 discounts).*

*if the captain does not D&I's the build dock under UG Judge #1 item 9. (2x each place)*

### **Team Stop #2 (A-3)**

The team will breach the temporary stopping (a gas check must be made thru the breach before the team advances north to A3 and will find a gas placard showing O<sub>2</sub> = 14% CO = 1200ppm. Team will make the necessary exploration gas test as shown on the map. The captain must D&I, R&R and a gas test must be made north at the unsafe roof. The captain will find 20 TIMBERS. The team can carry all the timbers with them or decide to set timbers to the caved area. (They can set as little as 3 timbers)

*If captain does not verbally indicate he/she is checking the back or roof upon passing through any stopping or at the unsafe roof, dock them under, Under Ground Judge #1, 8 (b) (4), 5 docks each occurrence. Failure to make necessary gas test where required each gas, each infraction. Under UG Judge #2 item 1. (1 dock x each omission). If the captain does not D&I's the unsafe roof dock under UG Judge #1 item 9. (2x each place)*

The team will make an apparatus check within 50 feet of the fresh air base.

*Failure of team to stop within 50 feet of the fresh air base or at the shaft station to perform personnel and apparatus checks, upon their first entry into the mine. (dock them under Underground Judge #1, Item 3, = 4 docks total.*

### **Team Stop #3 (A2)**

The team will advance west to A2 and will find a gas placard that shows O<sub>2</sub> = 14% CO = 1200ppm. The team will take the necessary exploration gas test as shown on the map. Stretching south the captain will D&I the PERMANENT STOPPING in the #2 heading. The team will make necessary gas test at the permanent stopping. Stretching north the captain will D&I, R&R and gas test will be made at the unsafe roof. The captain may decide to set timbers in the intersection and they must be set as shown below.

Team must simulate setting support and then place placard on the floor in the proper location.

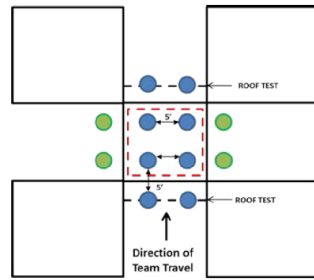


Figure 3

Note: If the team decides to travel through the intersection to the east or the west, additional supports will need to be installed (as shown in green on the illustration).

*If the captain does not D&I's the permanent stopping, dock under UG Judge #1 item 9. (2x each place)*

*Failure to make necessary gas test where required, each gas, each infraction.*

*Under UG Judge #2 item 1. (1 dock x each omission).*

### **Team Stop #4 (A1)**

The team will advance west to A1 and will find clear air. Team will take the necessary exploration gas test as shown on the map.

Stretching south the captain will find the **TEMPORARY STOPPING** and the team will make necessary gas test.

*Failure to make necessary gas test where required, each gas, each infraction.*

*Under UG Judge #2 item 1. (1 dock x each omission).*

### **Team Stop #5 (B1) & #5A(B2)**

The team can advance north in the #1 heading toward B1 intersection. Team will take the necessary exploration gas test as shown on the map. Stretching east the captain will find the unsafe roof and he will D&I, R&R and gas test the area. At this point the captain/team should set the timbers. Please see map on how the timbers should be set and how the caved area inside the unsafe roof should be examined. *If any team member moves or steps into the unsafe roof before timbers are set or into the caved area, dock them under UG Judge #1 Item 10, 15 docks each team member, each occurrence.*

The team should set timbers and tie across in the B xcut, except the caved area before advancing north in by B1 in the #1 heading.

### **Team Stop #6 (C1) and #6A and #6B**

The team will advance north to C1 and will find a gas placard that shows O<sub>2</sub> = 14% CO = 1200ppm. (If the team did not set timbers in the B2 intersection, the team cannot advance 3 feet in by the C1 intersection (2x3 systematic rule) until timbers are set in all the areas in the B intersection and out by.) *If they advance north in the #1 heading more than 3 feet past the intersection of B1 dock them for unsystematically under UG Judge #1 item 11. 4 docks each occurrence.* The team will take the necessary exploration gas test as shown on the map. Stretching east the captain will check the temporary STOPPING and will make necessary gas test. The team is in clear air and should decide to airlock into the area. (The captain must RR before the build and DI the build. They will do a gas test when they open the temporary and they will find a barricade. Captain will D&I the barricade and try to get a response from the barricade (there is no response). The team is still in clear air so they can airlock into the barricade. In the barricade (gas test) they will find the body and they will D&I the body and the Barricade. The team will advance north up the #1 heading and as the captain reaches the Front end loader, the judge will stop the captain and show the placard "The captain has lost his balance and can no longer stand up. He must be transported to the FAB." The team will put the captain on the stretcher on his side and strap him to the stretcher. *If the team does not properly protect the captain while transporting to the FAB dock them under UG Judge #1, item 10.(15 docks)*

### **Team Stop #7 (airlock)**

The team will retreat south toward the FAB with the captain on the stretcher. They will airlock out. (either thru #1 or #3 heading) *If the acting captain does not call out or otherwise properly retreat the team, stop the team, R&R the roof, build an airlock, D&I the temporary and airlock out, deliver captain to FAB, dock the team under .....*

### **Team Stop #8 (FAB)**

After the team has delivered the captain to the mine manager, the team will be given the placard which tells them that "Another team member will have to take the captain's place. The captain must remain at the FAB and can only assist as an alternate at the FAB. His apparatus can be used by a team member or as the spare apparatus."

The team must appoint a new captain and advance back into the mine by airlocking back into the mine. The team will travel back into the mine either thru the #1 heading or #2 heading thru the timbered area. If the team airlocks, no ventilation change has occurred and checking placards where the team has already explored is not necessary.

**Team Stop #9** (Team must count off when they encounter smoke and remain on the lifeline whether they advance to D1 or C2 intersection.) The team will take the necessary exploration gas test as shown on the map.

The team must not advance more than 3 feet inby the D intersection until all the areas outby have been explored in the C2 & C3 intersections team stops. *If the team advanced north in the #1 heading to D1 (and has not made the areas in C2 & C3) more than 3 feet past the intersection of D1 dock them for unsystematically under UG Judge #1 item 11. 4 docks each occurrence.*

*Please see both Exploration #1 & #2 maps depending how the team advances.*

**Team Stop #10 thru #14** (Team must remain on the lifeline) Judges must show the team stops on their maps to assist appeal judge. After the exploration is complete, the team will ventilate. See ventilation map.

*If the captain or team member advances beyond (3) feet of the intersection before tying across to the #1 heading dock them under, Under Ground Judge #1 Item 11 for failure of team to explore or examine working systematically and thoroughly, (4 docks) each omission*

Exploration is complete.

