

2019

ALABAMA MINE RESCUE CONTEST



DAY 2



BEVILL STATE
COMMUNITY COLLEGE

2019 ALABAMA MINE RESCUE CONTEST

DAY 2 TEAM STATEMENT

Thank you for coming to our assistance. You are located at the mouth of the north panel of the Roll Tide Mine No. 2. This mine has a history of high methane levels and bad roof. Our eight (8) man day shift crew entered the mine this morning to mine coal. After they started mining the section belt broke at the belt conveyor drive. Three (3) of the crew traveled to the belt drive to repair the belt. While they were repairing the belt, the remainder of the crew stayed on the section to clean and rock dust the section.

While working on the belt, the three miners were knocked down by a strong rush of air and debris. They also stated that they heard a loud noise that sounded like a freight train coming. They called out to the surface and we activated emergency and evacuation procedures. The three miners working on the belt came to the surface. We continued to try and make contact with the remaining miners located on the section. No contact has been made.

Rescue teams have explored up to this point and a fresh air base has been established at this location. The ventilation has been established up to the FAB location.

The mine map is up-to-date. A backup mine rescue team is on standby. State and Federal agencies are in the command center and in communication with the briefing officer and command center attendant.

The exhausting fan cannot be reversed, stalled or turned off.

You can begin when you are ready. Good luck and be safe!

PROBLEM

**ACCOUNT FOR ALL MISSING
MINERS AND BRING SURVIVORS
TO THE F.A.B. IF IT CAN BE DONE
SAFELY**

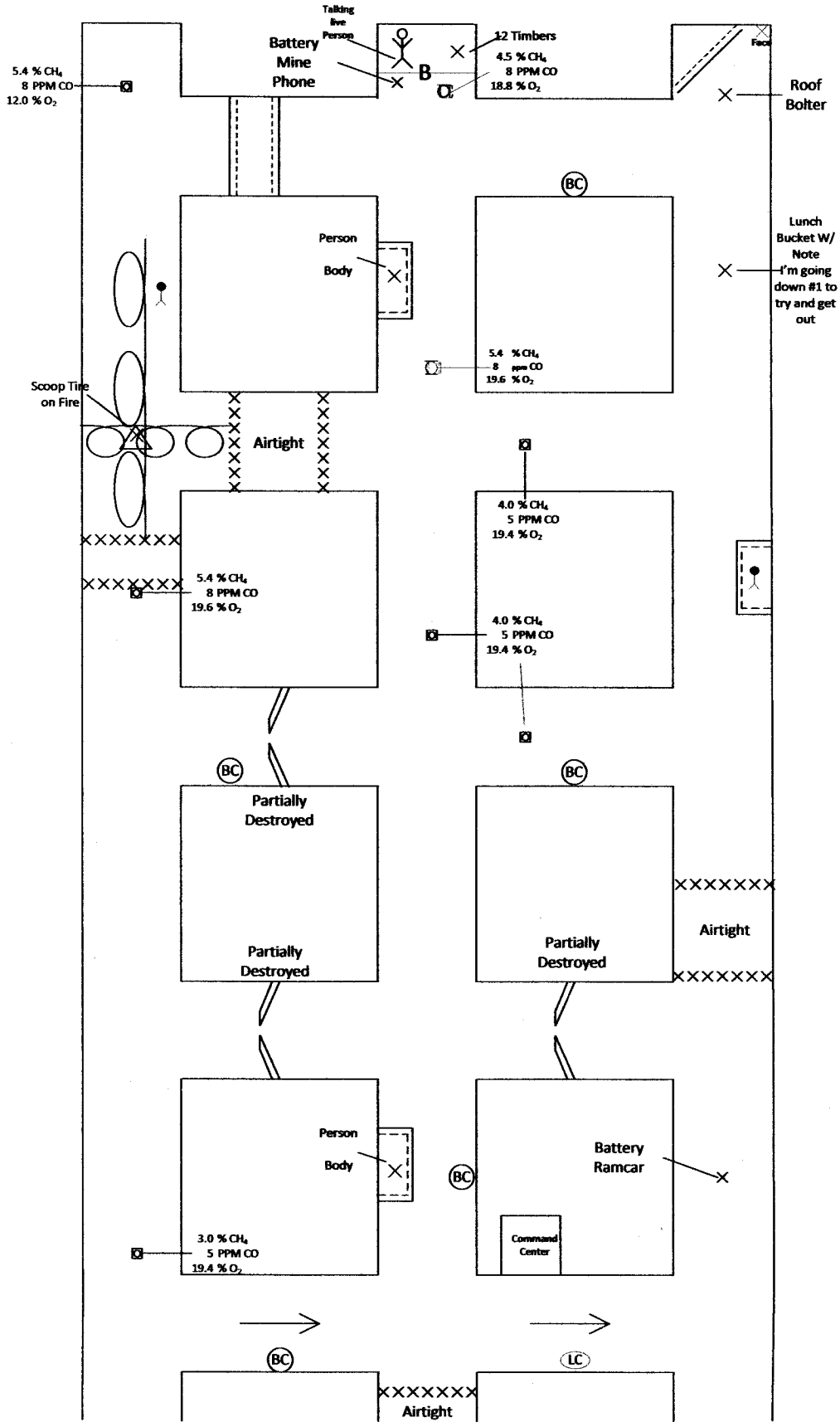
**EXPLORE ALL AREAS OF THE MINE
THAT CAN BE DONE SAFELY**

**TEAMS CAN ONLY CARRY FOUR (4)
TIMBERS WHILE ADVANCING OR
RETREATING**

**YOU HAVE 70 MINUTES TO
COMPLETE THE PROBLEM**

Patient #1 Statement

**Help Me! I have
a solid face
behind me and
it is airtight.**



Scale: 1"=10'

TEAM EXPLORATION

Before advancing into the mine, gas tests will be taken in each opening. The captain, if he chooses, can do a roof and rib test on the unsafe roof in the No. 2 entry and D&I the person located in the unsafe roof and the unsafe roof. The person cannot be reached until the team finds timbers. The captain will find a battery ramcar in the No. 3 entry.

TEAM STOP #1

After the team checks all 3 openings, the team will advance up No. 1 or No. 2 entry, since a contaminant is located in No. 1 entry, the team will likely travel up the No. 1 entry. The team should make their 50 foot apparatus check in the first intersection. Gas test will be taken inby the intersection and in the right crosscut. The captain will D&I the partially destroyed stopping.

TEAM STOP #2

The team will advance across to the No. 2 entry in the first intersection. The captain will do a roof and rib test of the unsafe roof outby the intersection if he did not do so when checking the openings. The captain will D&I the partially destroyed stopping in the right crosscut. Gas tests will be taken inby the intersection, in the right crosscut and outby the intersection in the No. 2 entry.

Team stops #1 and #2 can be reversed as per the rules.

TEAM STOP #3

The team will tie across to the No. 3 entry in the first intersection. The captain will have to do a roof and rib test of the entire intersection since the caved airtight is located at the corner of the opening. The captain will also D&I the caved airtight location. Gas tests will be taken just outby the caved airtight and outby the intersection.

TEAM STOP #4

The team can advance up either No. 1 or No. 2 entry. If the team advances up the No. 1 entry to the 2nd row of crosscuts, the captain will find a caved area inby the opening and also a gas placard with an explosive range of CH₄. The caved is not airtight. The captain will D&I the caved and the partially destroyed stopping in the right crosscut. Gas tests will be taken just outby the caved and in the right crosscut.

TEAM STOP #5

The team will tie across to the No. 2 entry. Team will gas test inby the intersection and in the right crosscut where they will find an irrespirable gas.

If the team advances in the No. 2 entry for team stop #4, the team will tie across into the No. 3 entry and then the No. 1 entry, in that order.

TEAM STOP #6

The team will now tie across to the No. 3 entry. The captain will find a caved airtight outby and an unsafe roof inby where he will do a roof and rib test for each and D&I each along with the body found in the unsafe roof. Gas test will be taken inby the intersection and at the caved airtight.

TEAM STOP #7

The team will advance to the third intersection in the No. 2 or 3 entry since there is a contaminant in No. 2 entry. If the team advances up the No. 3 entry, gas test will be taken inby the 3rd intersection and in the left crosscut where there is an irrespirable atmosphere in the crosscut. The extent of this gas is dependent upon which way the team advances. A lunch bucket with a note is found inby the intersection.

TEAM STOP #8

The team will tie across to the No. 2 entry in the 3rd intersection. The captain will find a caved airtight in the left crosscut and an unsafe roof inby the intersection which has a person located in it. The captain will conduct a roof and rib test at each location and will D&I each location and also the person. No timbers have been found and the team cannot reach the person. Gas tests will be taken at the caved airtight and inby the intersection.

TEAM STOP #9

The team can advance in either the No. 2 or 3 entry. If the team advances in the No. 2 entry, the captain will find a barricade inby with a person talking. He will D&I the barricade. The captain will find an unsafe roof in the left crosscut and conduct a roof and rib test and D&I the location. Gas test will be taken at the barricade, unsafe roof, and the right crosscut.

TEAM STOP #10

The team will tie across into the No. 3 entry. The captain will find a diagonal unsafe roof and face. The captain will conduct a roof and rib test for the unsafe roof and face. The captain will D&I the unsafe roof and the face.

At this point the team will have to do three (3) separate ventilations to be able to get in the barricade. See Ventilation #1, #2, and #3.

Ventilation #1 is to clear the irrespirable gases located at the opening of No. 1 entry, inby the 2nd intersection of No. 2, and in the crosscut between No. 2 & No. 3 to protect the persons located in the unsafe roofs.

Ventilation #2 will clear the explosive gas in No. 2 entry inby the 3rd intersection.

Ventilation #3 is to clear the barricade of the irrespirable gas in front of the barricade without the gas passing by the persons in the unsafe roofs.

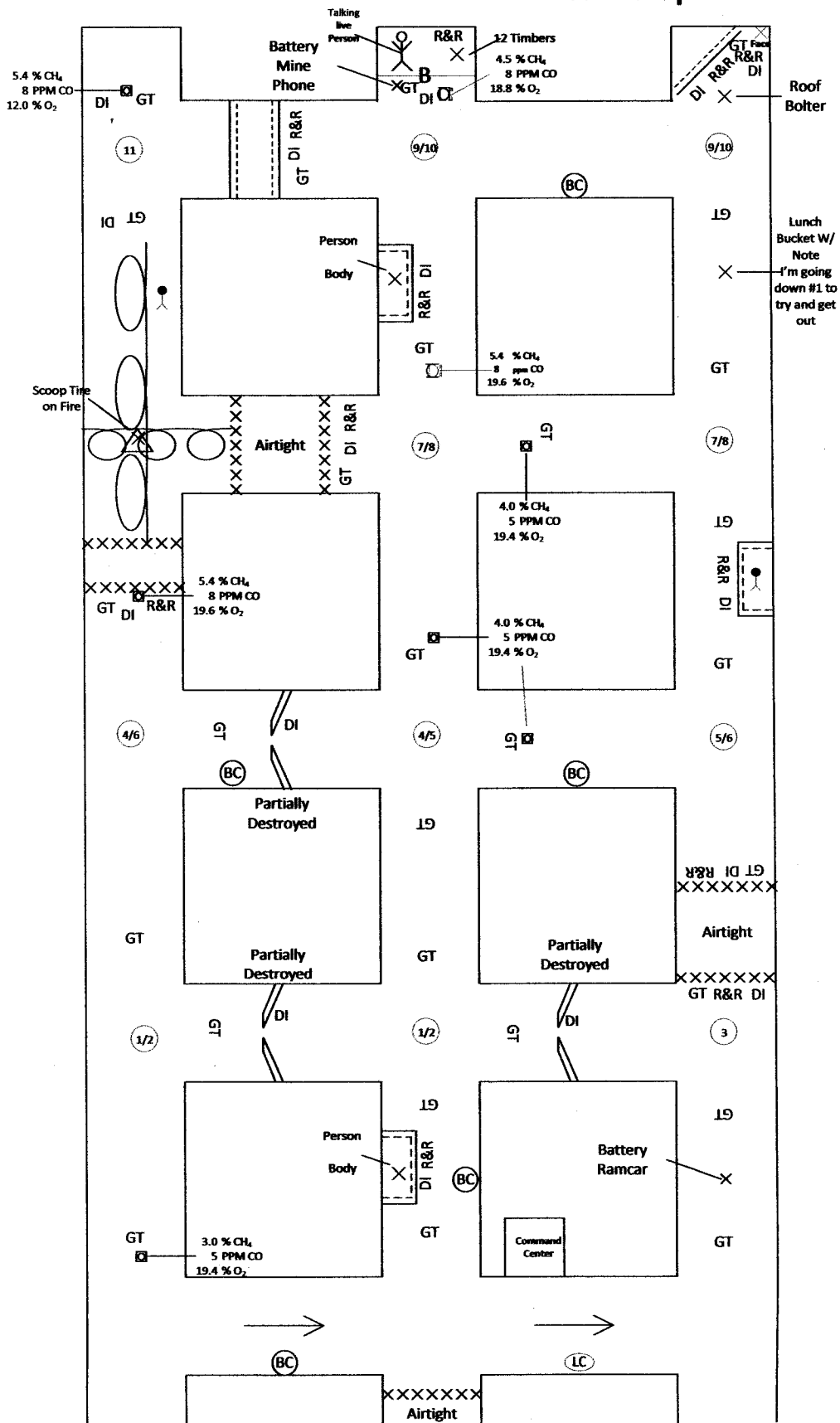
At this point the team can enter the barricade without airlocking. Before leaving the barricade the captain will D&I the patient's location and

conduct a roof and rib test of the face and D&I the location. The team will take the person to the FAB. The team will find 12 timbers and will take enough timbers with them so that after they take the talking live person to the FAB the team will travel to the first unsafe roof to check the person which will be found to be a body. The captain will set either 2 or 4 timbers and D&I the body.

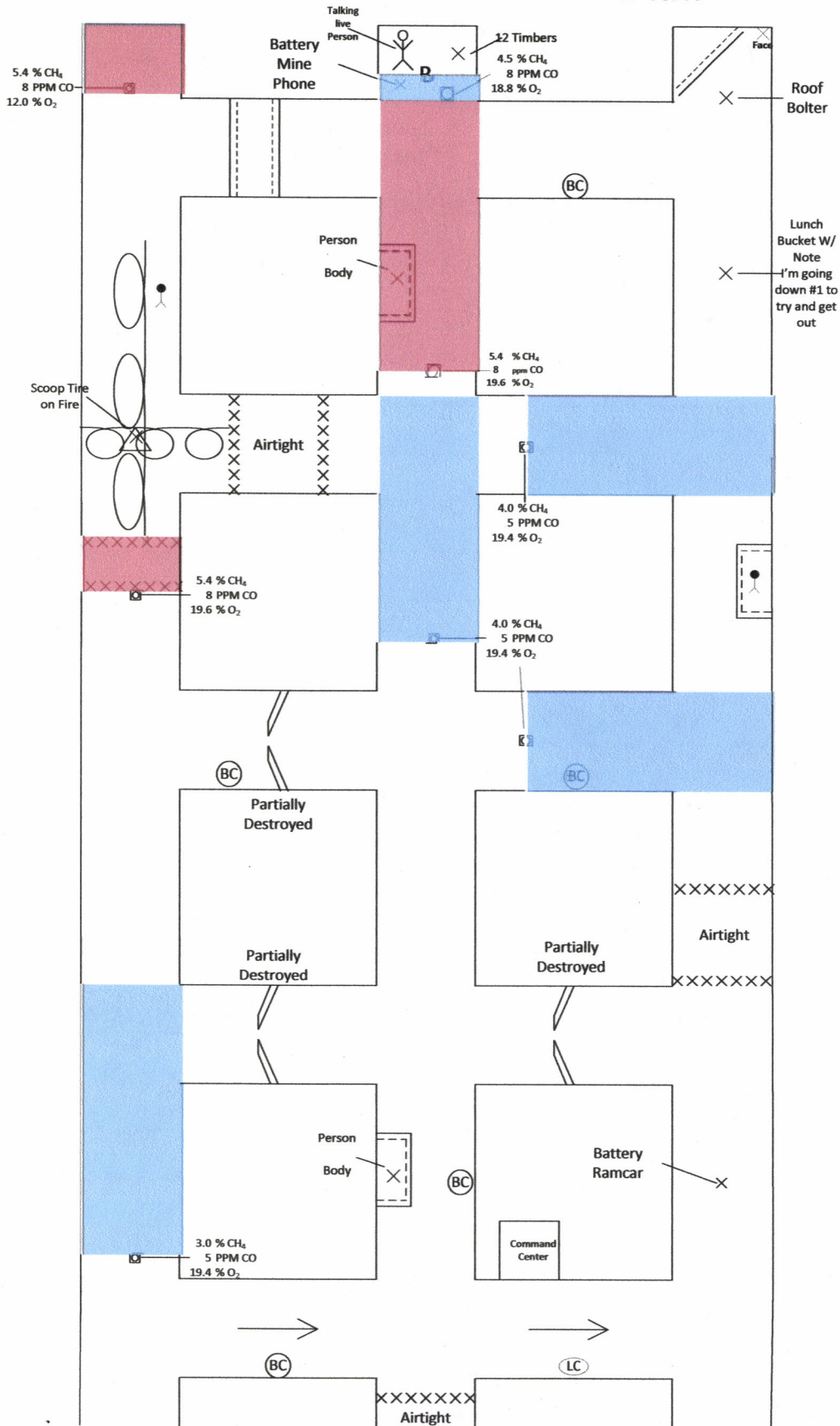
The team will travel to the second unsafe roof and the captain will set either 2 or 4 timbers and find a body which he will D&I the location.

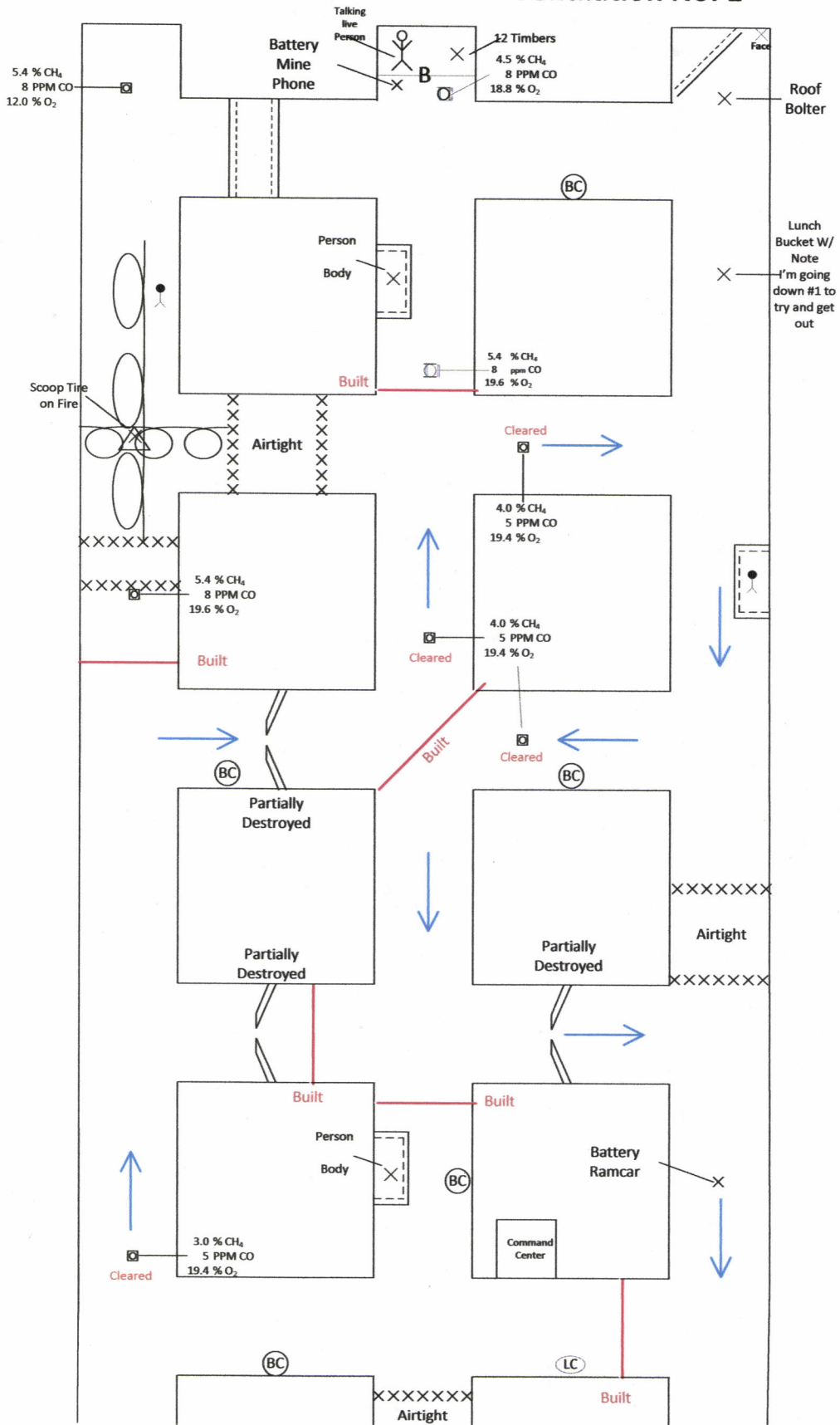
Team Stop #11

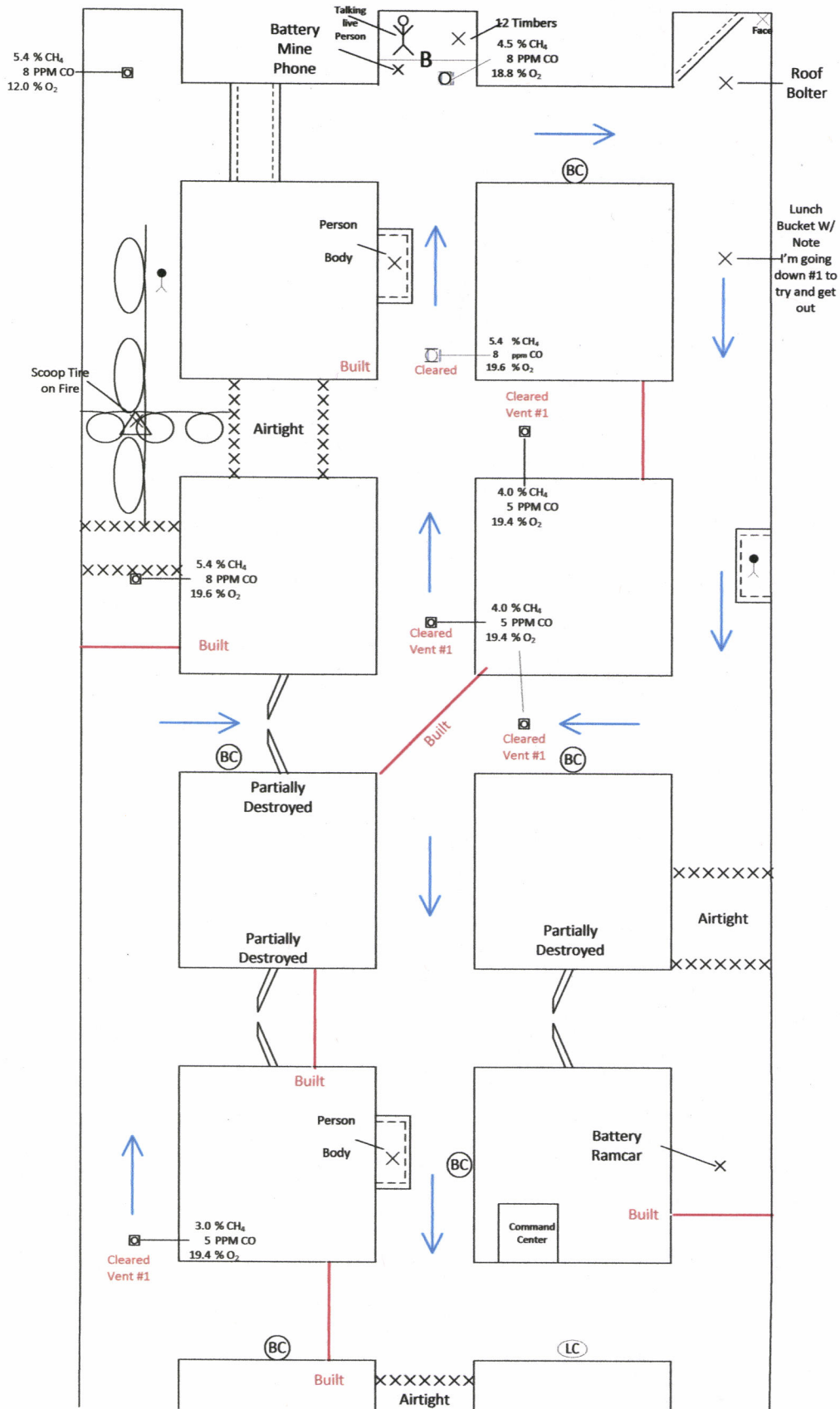
After the team has rescued the live person and timbered into both unsafe roof, the team will travel back to team stop #10 and the captain will timber the unsafe roof in the crosscut between No. 1 and No. 2 entries. The team will then travel across into the No. 1 entry in the last crosscut. They will find an explosive gas inby and find smoke outby. Gas test will be taken at each location. No matter when the team finds the smoke, when they do, they now have an imminent danger and must leave because of the explosive gas at the caved area outby and the smoke has no clear air separation and will explode. The team should not make it to the body or the fire outby. If they do they have endangered the team. The captain will D&I his stopping points and return to the FAB and stop the clock.



Scale: 1"=10'

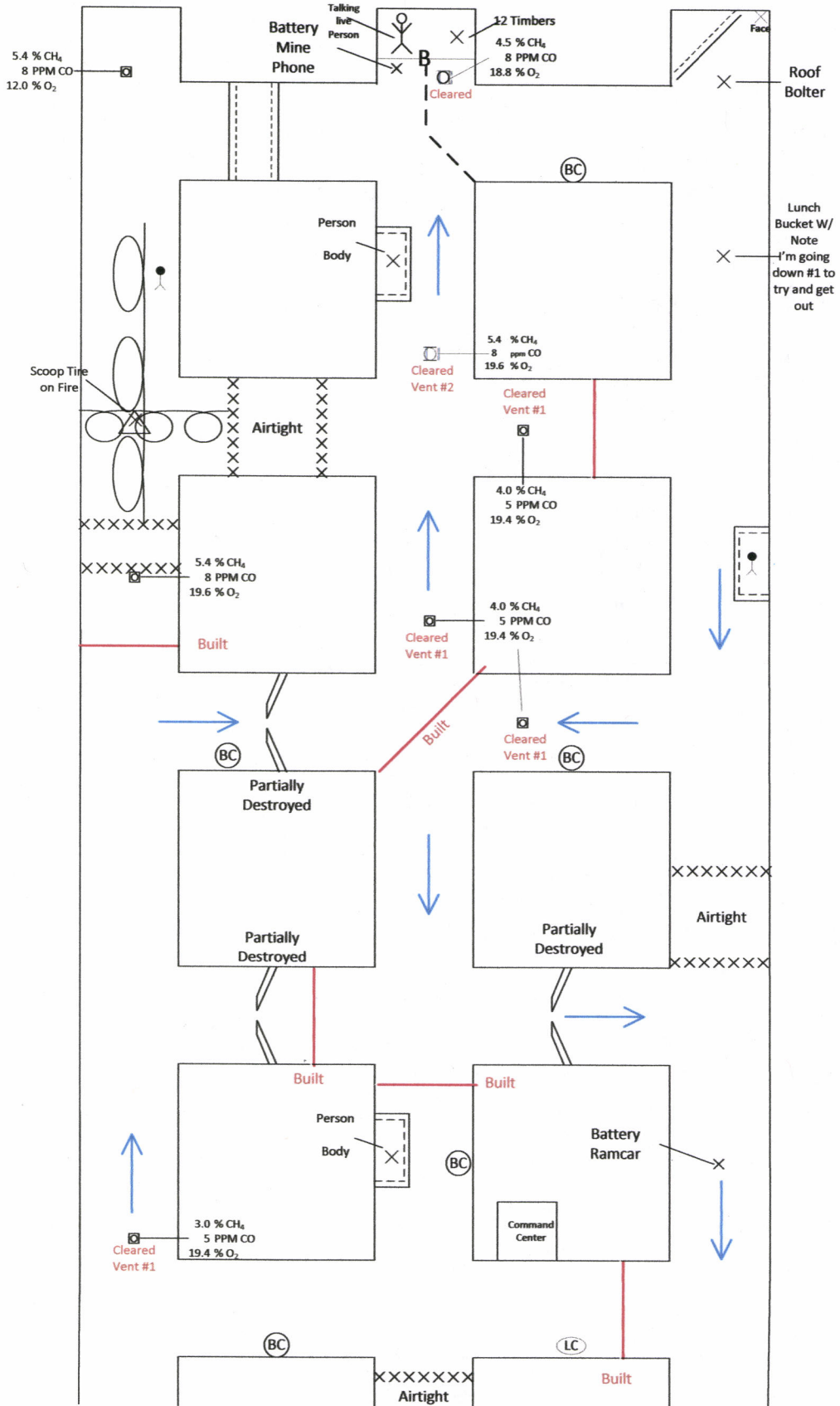






Scale: 1"=10'

Ventilation No. 3



Scale: 1"=10'